HE STORY OF OUR ITY SINCE 1945 1945年以來我們的港口故事

香港海事博物館 Hong Kong Maritime Museum 此展覽圖錄《**香江泛洋奇蹟:1945 年以來我們的港口故事**》配合同名展覽,為香港海事博物館策展籌劃, 展期為 2022 年 6 月 24 日至 2022 年 10 月 30 日。

Hong Kong's Maritime Miracle: The Story of Our City since 1945 accompanies the exhibition of the same name which ran from June 24, 2022 to October 30, 2022, organised and curated by the Hong Kong Maritime Museum.

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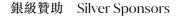








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前言

張亮 香港賽馬會慈善及社區事務 執行總監

「香江泛洋奇蹟:1945年以來我們的港口故事」特備展覽 香港賽馬會慈善及社區事務執行總監張亮先生獻辭

香港由昔日一個小漁港, 蜕變成今日享譽盛名的國際金融、海運、貿易及物流中心,當中「海」絕對是不可或缺的元素。因此,香港賽馬會很高興支持香港海事博物館,舉辦「香江泛洋奇蹟:1945年以來我們的港口故事」特備展覽,提升市民對本港海事歷史文化的知識,從而探討海事世界如何連繫我們的過去、現在和未來。

這次展覽所呈獻的展品,均彌足珍貴,也別具意義;同時配合藝術科技、多媒體互動裝置及微電影體驗,帶領觀眾探索香港如何從第二次世界大戰餘灰中崛起,體現香港人靈活多變、堅毅拼搏的精神,並展望這個港口城市的未來發展新機遇。

適逢今年是香港特別行政區成立 25 周年,馬會撥款 6.3 億港元,支持包括本展覽 在內的一系列慶祝活動,盼能為社會注入源源不斷的正能量。

過去 25 年,馬會與香港一同成長,成為本港標誌性的國際品牌之一,不但位居世界前列的賽馬機構,也位列全球十大慈善捐助機構之一。馬會一直貫徹致力建設更美好社會的宗旨,與社會同行。

馬會在推動藝術、文化及保育發展向來不遺餘力,積極為香港注入藝術文化活力,豐富生活,推動創意共融。其中由馬會與香港特區政府合作保育及活化而成的「大館」一古蹟及藝術館,自 2018 年開幕至今已錄得超過 900 萬人次到訪,實在令人鼓舞。馬會得以支持各類型慈善項目,有賴其獨特的綜合營運模式,透過稅款及慈善捐款,將博彩及獎券收入回饋香港。

我衷心感謝香港海事博物館為演繹香港的成功故事所付出的努力與心血。祝願這次展覽圓滿成功,各位觀眾享受奇妙難忘的海洋之旅。

FOREWORD

Leong Cheung
Executive Director,
Charities and Community
The Hong Kong Jockey Club

Hong Kong's Maritime Miracle: The Story of our City since 1945 Message from Mr Leong Cheung Executive Director, Charities and Community, The Hong Kong Jockey Club

Hong Kong has progressed from a small fishing port to a world-renowned financial, maritime, trading and logistics centre. The "sea" is an integral part of this evolution. Given this, The Hong Kong Jockey Club is delighted to support the Hong Kong Maritime Museum in presenting the "Hong Kong's Maritime Miracle: The Story of our City since 1945" exhibition. The showcase aims to raise public understanding of local maritime history and culture, and demonstrate how the maritime world is connected to our past, present and future.

The extravaganza will feature much-cherished and meaningful exhibits. Additionally, through the application of art tech and multimedia interactive installations, alongside a series of short movies, audiences can explore Hong Kong's rise from the ashes of the Second World War, experience the versatility and "can-do" spirit of Hongkongers, and glimpse into new development opportunities for this port city in the future.

As this year marks the 25th anniversary of the establishment of the Hong Kong Special Administrative Region, the Club will support a series of celebratory initiatives, including this exhibition, with approved donations of HK\$630 million. These programmes are intended to instil a stream of positive energy in our society.

Over the last 25 years, the Club has grown together with the community, creating one of Hong Kong's most iconic and global brands. Being a world-leader in the sport of horse racing and also one of the ten largest charitable donors in the world, the Club is resolute in pursuing its purpose of acting continuously for the betterment of our society, all in support of creating stronger communities together.

The Club has spared no effort in promoting the development of art, culture and conservation in the city. We are dedicated to building a culturally vibrant Hong Kong, enriching lives and promoting social inclusion. One such example is Tai Kwun – Centre for Heritage and Arts, which has been conserved and revitalised by the Club in partnership with the Hong Kong SAR Government. It is encouraging to see that since opening in 2018, Tai Kwun has welcomed over nine million visitors. The Club's support for all of its charity donations is made possible by its unique integrated business model, through which betting and lottery revenue are returned to the community in the form of tax payments and charitable donations.

My heartfelt gratitude goes to the Hong Kong Maritime Museum for its efforts and commitment to sharing Hong Kong's achievements. I wish the exhibition resounding success, and every visitor a fantastic, memorable maritime journey.

序言

盧偉民 現代貨箱碼頭有限公司 集團董事總經理





我們在企業或個人層面,很自然會展望將來,放眼於新的機遇及未來成就。 但是,在另一方面,不時回顧過往歷程、認清如何達成今日的成就亦同樣重要, 這正是我們慶祝周年紀念的原因。

今年,作為廣大香港市民一份子,我們一起慶祝香港特別行政區成立25周年。

2022 年現代貨箱碼頭亦同時慶祝 50 周年誌慶,我們於半個世紀前開始營運在香港首個專門建造的貨箱碼頭。1972 年 9 月 5 日清晨,載貨容量 2,300 個標準箱的「東京灣號」緩緩駛進一號碼頭的情景,對當時在場的人士而言仍歷歷在目。

自50年前這歷史蜕變的一刻開始,香港貨櫃港口不斷發展,由只有一個泊位,發展成為擁有24個泊位,每年處理能力達2千萬標準箱的國際航運樞紐。「東京灣號」泊岸,卸下200個貨箱已成歷史,在2022年的今日,香港港口可以在同一日處理8艘可承載18,000至24,000個標準箱的超大型貨箱船。

香港港口由發展初期至今,一直為香港帶來重大經濟貢獻,生產總值達數百億港元,並為數以十萬計的家庭提供生計。另外,全球百分之九十貨物是經水路運輸,我們的港口發展與香港市民的生活提升可謂息息相關。

我們很榮幸成為香港貨櫃港首個碼頭的營運商,時至今日,香港在大灣區發展 擔當著重要角色。我們深明大灣區發展龐大,因此在深圳作出多項投資,包括 興建位於深圳西的大鏟灣碼頭,成為主要股東及營運商,以及擁有蛇口集裝箱 碼頭及赤灣集裝箱碼頭的股權。

大灣區發展對現代貨箱碼頭業務增長非常重要,我們將與各持份者緊密合作, 充分發掘區內豐富的發展潛力。

「最佳夥伴 以客為先!」是我們公司的座右銘,意旨我們致力做到最好,夥拍優秀夥伴提供高質素服務。在此,我們很高興與香港海事博物館合作,成為《香江泛洋奇蹟:1945年以來我們的港口故事》大型展覽的圖錄贊助商,為大家呈獻這別具意義的活動。

這個展覽及圖錄,記載著香港在過往77年的歷程,我們希望各位可細心欣賞。 我們相信您會和我們一樣,在這段歷史裏找到您所擔當過的角色,和我們一起 迎接更光輝的一頁。

FOREWORD

Horace Lo

Group Managing Director Modern Terminals Limited As a business or as an individual, we are naturally inclined to look forward. To look ahead to emerging opportunities and new achievements. But from time to time it is important to look back, to see where we came from - and how we got to where we are today. It is the primary reason we celebrate anniversaries.

This year, as citizens of Hong Kong, we celebrate the 25th anniversary of the Special Administrative Region.

Meanwhile, for Modern Terminals, 2022 marks the 50th anniversary of our operations at the Hong Kong container port, and our opening of the first purpose-built container terminal half a century ago. There are those alive today who can still recall the morning of 5 September 1972, and the arrival of the 2,300-TEU Tokyo Bay as she hove into Berth One.

Since that transformative moment 50 years ago, the Hong Kong container port has grown from a single berth to a renowned 24-berth international transportation hub with an estimated annual capacity of 20 million TEUs. The arrival of Tokyo Bay with its 200 containers to be offloaded is now a distant memory. In 2022, in a single day the port may handle eight mega vessels each carrying some 18,000-24,000 TEUs.

Since those early days, the Port of Hong Kong has made an important contribution to the economy of Hong Kong - amounting to tens of billions of dollars to the city's GDP – supporting hundreds of thousands of families. Moreover, with 90% of goods being transported by sea, we have helped enrich the lives of all the people of Hong Kong.

Today, Hong Kong plays an important role in the development of the Greater Bay Area (GBA). Modern Terminals is honoured to be the first dedicated container terminal operator in the Port of Hong Kong. In recognition of the enormous growth in what is now known as the GBA, we have subsequently developed a multiple foothold in Shenzhen through our majority shareholding in, and our management of DaChan Bay Terminals in Western Shenzhen, and investment holdings in Shekou Container Terminals and Chiwan Container Terminal.

Modern Terminals envisages the GBA as a key area of growth and keenly anticipates working closely with stakeholders in the Area to fulfil its rich potential.

PARTNER WITH THE BEST! is our company motto. Put succinctly, we are dedicated to best quality and working with quality partners to deliver the best services. As such we are delighted to partner with the Hong Kong Maritime Museum as catalogue sponsor of the exhibition "Hong Kong's Maritime Miracle: The Story of our City since 1945" and bring this meaningful event to the people of Hong Kong.

We hope that you enjoy the exhibition and the informative catalogue as together they showcase the long road Hong Kong has travelled in the last 77 years. Like Modern Terminals, you might be prompted to recognise your own unique role in this history and look forward to the next bright chapter.

前言

肖猷思教授 博物館總監 香港海事博物館 各位嘉賓:

歡迎!

是次展覽由香港海事博物館團隊為慶祝香港特別行政區成立 25 週年而策劃。 這次展覽講述的是希望、堅韌不拔、「做得到」的思維、奇蹟般的成就以及 互聯互通,都是我們希望能傳達給各位觀眾的關鍵信息。

我們策展的目的,是要向眾多為了建設我們今天所熟知的香港而辛勤工作與 付出巨大犧牲的男男女女,表達敬意與感謝。他們創造了一個集合金融、文化 與海上貿易的環球樞紐。本展覽將述説這樣的成就是如何達到的。

展覽分為五個章節,將帶領參觀者瞭解這 77 年來的城市歷史。當中一些非凡的成就包括:二戰結束後僅用了一年時間,便把在維多利亞港的數百艘沉船清理並重新開放使用;把這座城市建設成一個航運中心,使香港在第一個貨櫃碼頭建成後僅 20 年間,便成為全世界最大的貨櫃港口。

我們希望透過這個展覽,提高人們對航運在我們日常生活中的重要性的認識 (沒有航運,便無法購物),讓人們瞭解航運界與香港人之間的聯繫,以及航運 與海濱發展對我們城市未來的影響。

本地的傑出設計師與電影導演利用香港海事博物館的文物,為參觀者創造了具感染力的展覽設計及沉浸式的藝術科技體驗,對於他們達致的成果,我們深以為傲。同時,我們非常感謝香港特別行政區民政事務局、香港賽馬會以及我們慷慨的海事與企業贊助商。我們亦感謝外界專家顧問提供的寶貴意見,他們的名字可在展覽圖錄及展品說明上找到。他們對我們即將揭幕的展覽——「香江泛洋奇蹟:1945 年以來我們的港口故事」展現了堅定的支持。衷心感謝每位香港居民為打造這個璀璨城市而作出的共同努力。

FOREWORD

Prof Joost Schokkenbroek
Museum Director
Hong Kong Maritime Museum

Dear Guests,

Welcome!

This exhibition has been produced by the Hong Kong Maritime Museum team to celebrate the 25th anniversary of the establishment of the Hong Kong SAR. Our story is one of 'hope'; 'resilience', 'a can-do mentality', 'miraculous achievements' and 'connectivity' are just a few of the key messages we try to convey to our audiences.

Our presentation is a testimony to our respect for, and gratitude to, the many men and women who have worked so hard and endured so many sacrifices to build the Hong Kong we know today. These people have created a city that is a global hub for finance, culture, and of course maritime trade. Our displays illustrate how this has been accomplished.

Five chapters guide our visitors through 77 years of urban history. We highlight some extraordinary achievements, such as the clearing of hundreds of shipwrecks in Victoria Harbour after the end of World War II, which rendered it operational again just a year later; and the building of the city into a maritime centre, which made it the world's largest container port in less than 20 years after the construction of the city's first container terminal.

Through this exhibition, we hope to raise people's awareness of the vital importance of shipping in our daily lives ('no shipping, no shopping'), of the connectivity between the maritime community and Hong Kongers and of the impact of shipping and waterfront developments on our city's future.

We are proud of our local talents in design and film directing, who have created an appealing exhibition design and an immersive Art-Tech experience using our museum artefacts. We are also most grateful to the HKSAR's Home Affairs Bureau, the Hong Kong Jockey Club, and our generous maritime and corporate sponsors. We also want to thank the external experts who have shared their expertise so kindly and generously. Their full names are listed on the catalogue, their initials can be found in the many entries. They have shown unwavering support for the narrative that we are about to unfold – *Hong Kong's Maritime Miracle: The Story of Our City Since 1945*. Many members of the Hong Kong community worked together to tell this fascinating story of our city.

策展説明

陳麗碧博士 香港海事博物館首席館長

緣起

「香江泛洋奇蹟:1945年以來我們的港口故事」特備展覽的策展計劃,要由兩年前說起。香港海事博物館一直希望能夠策劃一個展覽,傳達香港的海事發展不但與本港市民息息相關,而且是與時並進這個主題。為此,我們曾經探索不同的策展角度和時間線,譬如展覽能否始於宋代,還是由更早的年代說起?¹抑或是從十九或二十世紀開始説香港故事?本館的策展團隊經過多番的研究和討論,並諮詢藏品委員會及相關專家的意見後,²決定將是次展覽從二十世紀中期開始一以1945年8月日據時期結束,9月二次大戰終結,這重要轉捩點作為起點,探討香港這座城市是如何在戰火餘灰中復甦、崛起,並經歷了人口猛增、經濟起飛,從而躍身為國際城市這個視角出發,來檢視這七十七年來四代香港人與海事的緊密聯繫。

重生

到底仗打完了。乍一停,很有一點弄不慣,和平反而使人心亂, 像喝醉酒似的。看見青天上的飛機,知道我們儘管仰著臉欣賞它而 不至於有炸彈落在頭上,單為這一點便覺得它很可愛……第一, 時間又是我們的一白天、黑夜,一年四季——我們暫時可以活下去 了,怎不叫人歡喜得發瘋呢?就是因為這種特殊的戰後精神狀態, 一九二零年在歐洲號稱「發燒的一九二零年」。

一 張愛玲, 〈燼餘錄〉3

戰爭完結後,「可以活下去了」,戰後的香港是如何在世界眾多城市中重建、崛興起來呢?4 這必須從個人、社會、文化、經濟、歷史及地緣政治等多角度,去了解香港的獨特角色,而這些均離不開海事發展作為這座城市的基礎,這正正是本次展覽的基調。引用張愛玲在香港的親身體會的預言:戰爭結束後就算盟軍飛機飛過,也不至於炸彈落在頭上了,而大家能夠活下去的心情,促使整個城市向前高速進展一是發燒的、快速的、歡喜的。1945 年 8 月以後,香港人口劇增,這除了是因為 1940 年代末國共內戰,促使大量人口避難南遷另闖天地外,香港的戰後嬰兒潮所反映的高出生率,與戰後社會人們「發燒的」精神狀態不無關係。這份動力,充分體現在二十世紀下半葉香港各方面的高速增長,創造出一個又一個的奇蹟。

敘事與創新

是次展覽跳出純粹讓展品說故事「以小見大」的傳統手法,一方面嚴選出 25 件/組具代表性的海事展品,以誌慶香港特別行政區成立 25 周年;另一方面採用平行時空的手法,將 25 件/組展品聯繫到二十世紀出生的四代香港人,即 1920年出生,二戰前成長的是第一代,依次直到 1990 年誕生的第四代。5 展覽設計以 1997年出生,具水上人背景的廿多歲香港年輕女性蘇嘉敏為主角,發展成一連五齣微電影,由電影製作人麥曦茵執導。五齣微電影均以香港戰後的時代發展為背景,串連了蘇嘉敏、其父母、祖父母及曾祖父母在工作、生活、愛情經歷等各方面的生活日常中,如何與海事聯繫。同時,展覽中的 25 件/組標誌性展品也在電影中穿插。例如「行船」的安排,反映香港早年以海員作為職業的普遍性。影片中又出現社會基建的發展軌跡,如 1960、1970 年代的公共屋邨、1990年代的交通運輸基建,如葵涌貨櫃碼頭等。與此同時,展覽亦説明航運業界如何與我們的生活息息相關,緊密聯繫,尤其是 2021 年全球航運供應鏈中斷,香港麥當勞快餐店的雞翼也因缺貨而要停售一段時間。

香港奇蹟、泛洋奇蹟

事實上,香港今天的成就的確是個奇蹟。而這個稱為海事奇蹟的,可說是與經濟成就密不可分,背後則全因港人的獨特素質及自1940年代起的香港「經濟」奇蹟,海事發展為其中流砥柱。展覽以五個不同時代發展階段串連成香港故事。每個階段都凸顯戰後我們的海事未來與共同記憶,以航運業為主,擴展至與海事相關的行業與事物的泛洋故事。展覽的五部分包括:「浴火重生(1945-1948年)」、「商業重啟(1949-1970年)」、「高增長期(1960年代-1980年代)」、「貨櫃為尊(1972年-現今)」以及「展望未來」,記錄這座城市的蜕變,並展望一個可持續發展的未來。

多媒體、科技與考證

與此同時,展覽特別製作一共六組嶄新的沉浸式藝術科技體驗,全部與430 多媒體製作公司及顧問一同研發,著重真實性、趣味性及原創性。其虛擬實境 (VR) 重現盟軍戰機空襲太古船塢一幕。團隊從檔案、照片、報章中復原當時的情景,讓觀眾仿如置身戰火之中的船塢上,體驗浴火重生的震撼。另一個原創遊戲「仕組船」(Shikumisen)則以家傳戶曉的「大富翁」遊戲為基礎,透過多個船東會面對的情景,來介紹這個財務系統概念,別開生面。至於具資訊性的粵港澳大灣區發展、綠色航運等,均以不同形式的嶄新互動科技來呈現。



是次展覽端賴三個本地創意團隊,在展覽設計、多媒體製作及微電影方面 充分發揮嶄新理念,背後亦獲多位航運業界專家、香港史學者等顧問的 協助,以及本館各部門同事群策群力,及多個贊助鼎力支持。展覽中 的嶄新突破一微電影、展品與科技的結合,為觀眾呈現香港泛洋 奇蹟的關鍵時刻,並為可持續發展的未來提供想像和思考空間。

特別值得一提的是展覽的最後一項展品,是香港游泳選手何詩蓓(Siobhán Haughey)所獲的兩面獎牌,分別是 2020 年東京奧運會女子 200 米自由泳項目的銀牌及 2021 年第 15 屆國際游泳聯合會(FINA)世界短池游泳錦標賽女子 200 米自由泳項目的金牌。以香港水上運動的成就作結並展望未來,就如同何詩蓓在寫給香港人的家書中的註腳,也是香港泛洋奇蹟的未來。

親愛的香港人:「我非常幸運,能夠稱這個城市為我家。我希望您也能透過我們的運動成就,與我們的城市連繫起來。同時,我亦希望能啟發您以及我們的下一代,繼續努力地追求夢想,持之而行地去實現目標,就算當下看似不可能。」

---- 何詩蓓

- 1 2021年香港海事博物館策劃了「帆橋匯港:世貿 千年」特備展覽,探索從新石器時代到今天的互 聯網年代,香港6,000年來海事歷史的轉變與發 展。
- 2 我們向戴偉思博士就此展覽使用25件展品及虛擬 人物這構想致以感謝。同時,特別鳴謝丁新豹博 士和高添強先生等有關專家,及祁敏鈿先生、宋 睿之先生、克士利先生、Phillip Milner-Barry先 生、Tim Smith先生和 Martin Stopford博士等航 運界顧問,以及圖錄中鳴謝的人士。

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- 3 〈燼餘錄〉先發表於上海《天地》月刊第5期, 1944年2月,後收入散文集《流言》。張愛玲, 〈燼餘錄〉,《流言》(香港:皇冠出版社(香港)有限公司,1995年),頁47。
- 4 因為戰爭直接死亡的至少有55,000人,大概100 萬人被迫離開香港,中途死亡人數則無法統 計。見Fan Shuh Ching, *The Population of Hong Kong* (Paris: The Committee for International Coordination of National Research in Demography, 1974), 2.
- 5 此四代人的分野参考了呂大樂對二十世紀香港人 的解讀。呂大樂,《四代香港人》(香港:進一 步多媒體有限公司,2007年)。

HONG KONG'S MARITIME MIRACLE: THE STORY OF OUR CITY SINCE 1945 香江泛洋奇蹟: 1945年以來我們的港口故事

CURATORIAL STATEMENT

Dr. Libby Lai-Pik Chan Chief Curator of the Hong Kong Maritime Museum

Initial Story

The curatorial plan for the special exhibition Hong Kong's Maritime Miracle: The Story of Our City since 1945 was conceived two years ago. The Hong Kong Maritime Museum has long hoped to put on an exhibition that conveyed the message that Hong Kong's maritime development is not only closely related to the citizens of Hong Kong but also has kept pace with the times. We considered many different curatorial angles and timelines. Should we start from the Song Dynasty or even earlier? Or should we tell the story of Hong Kong in the 19th or 20th century? After several rounds of discussion within our curatorial team and consultations with the Collections Committee and relevant experts,² we decided to narrate the story from the middle of the 20th century to the present. Visitors will see how Hong Kong, starting from the end of the Japanese Occupation in August 1945, rose from the ashes of World War II and the Fall of Hong Kong and then experienced rapid economic and demographic growth on its way to becoming a cosmopolitan city. This exhibition, covering 77 years, provides a good overview of the close relationship between four generations of Hong Kong people and maritime affairs.

Regeneration

The war was over, after all. It took time to get used to peace though, because it was confusing at first, like getting drunk. Looking up at a warplane in the blue sky, knowing that we could admire it without worrying about a bomb dropping on our heads, how could we not render it lovable? Time was ours again, daytime, nighttime, the four seasons—we could get on with living. What was more delightful than that? This unique post-war mental state must be why the 1920s came to be referred to as the "Roaring Twenties" in Europe.

— Eileen Chang, From the Ashes ³

After World War II, we were able to "get on with living". How did Hong Kong rebuild itself and distinguish itself from so many cities around the world affected by the war? The answer includes Hong Kong's unique characteristics in terms of its people, society, culture, economy, history, and geopolitics, all of which are based on the pillar of maritime development. This inseparable relationship is the keynote of this exhibition. As Eileen Chang said, after the war, even if a warplane flew over, people no longer had to worry about a bomb dropping on them. The cheerful belief that everyone could get on with living pushed the city forward in a fast and joyful manner. After August 1945, the population of Hong Kong increased dramatically. People flocked to the south for refuge during the Chinese Civil War in the late 1940s amidst the post-war baby boom and the "feverish" mental state of people at that time. This momentum was reflected in the rapid growth in every aspect of Hong Kong in the second half of the 20th century, a period that witnessed numerous miracles that are demonstrated in the exhibition.

Narration and Innovation

This exhibition consists of 25 carefully selected representative maritime exhibits that celebrate the 25th anniversary of the establishment of the HKSAR. One innovation is a parallel universe storytelling method that lets the exhibits tell

their own stories. We relate the 25 exhibits to the four generations of Hong Kong people born in the 20th century, that is, from the first generation born in 1920 before World War II to the fourth generation born in the 1990s. Visitors are guided through the exhibition by a fictional character named Carmen So (So Ka Man), a Hong Kong girl with an ancestral background of fishermen in her twenties. The character is featured in a series of five mini-movies produced by Hong Kong-based filmmaker Heiward Mak. Set in post-war Hong Kong, the movies weave stories of the work, lives, and loves of Carmen So, her parents, grandparents, and great-grandparents, and their everyday connections with the maritime world. The 25 exhibits appear in the movies. For example, a sailing scene in one of the movies reflects the ubiquity of sailors in Hong Kong in the mid-20th century. The movies also demonstrate Hong Kong's infrastructure development, from public housing estates in the 1960s and 1970s to transportation infrastructure in the 1990s, such as the Kwai Tsing Container Terminals. The exhibition shows visitors how the shipping industry is closely related to all of our lives. A representative instance is the disruption in the global shipping supply chain in 2021 that led to a shortage of McDonald's chicken wings in Hong Kong.

Hong Kong Miracle, Maritime Miracle

What Hong Kong has achieved is nothing short of a miracle. The so-called "maritime miracle" is closely related to the city's economic achievements. The unique quality of the Hong Kong people and the "economic miracle" that has occurred since the 1940s have been underpinned by maritime development. The exhibition connects five development phases to create one Hong Kong story. From the shipping industry to other maritime-related industries and affairs, each phase highlights our common memory and the fruits of post-war development. Using a story for each the five phases, *Regeneration* (1945–1948), *Back in Business* (1949–1970), *The High Growth Years* (1960s–1980s), *The Container Changed Everything* (1972–Now), and *The Future*, the exhibition records the transformation of this city and offers a glimpse of a sustainable future.













Multimedia, Art-Tech, and Immersive Experience

The exhibition offers six brand new immersive art and technology experiences, all of which were developed with the help of 430 Limited and independent consultants with the aim of providing visitors with an authentic, interesting, and innovative experience. The scene of warplanes attacking Taikoo Dockyard is recreated using virtual reality. To render the scene, the production team looked for information from archives, photos, and newspapers, striving to make sure that the audience would experience the shock of the event and the regeneration of the city from the flames of war. An original game, *Shikumisen*, based on the widely known *Monopoly*, innovatively introduces visitors to a maritime financial system by teaching how ship-owners handle different situations. The development of the Guangdong–Hong Kong–Macao Greater Bay Area, green shipping, and other information is presented using different interactive technologies as well.

This exhibition integrates the ideas from three local creative teams specialising in exhibition design, multimedia production, and movie making. It also benefits from the help of experts in the shipping industry, scholars familiar with the history of Hong Kong, and the concerted efforts of museum colleagues and the generous support of many sponsors. The innovations in this exhibition, including the mini-movies and the combination of exhibits and technologies, present the audience with key moments of Hong Kong's maritime miracle and leave them looking forward to a sustainable future.

The last exhibit of two medals won by Siobhán Haughey, a Hong Kong swimmer, is also worth mentioning. The exhibit consists of the silver medal in the women's 200 metre freestyle event at the Tokyo 2020 Olympic Games and the gold medal in the women's 200 metre freestyle event at the 2021 FINA World Swimming Championships (25 m). Concluding with the achievements of Hong Kong's water sports athletes is a way to herald the bright future of Hong Kong's maritime miracle, which is exactly what Siobhán Haughey wishes in her letter to the Hong Kong people.

Dear People of Hong Kong,

I am lucky to call this City my home. I hope you felt connected to our City through celebrating our sporting achievements.

I hope to inspire you and our next generation, to pursue your dreams and to persist with the quest to acieve your goals even if at times they seem almost impossible."

— Siobhán Haughey

- 1 In 2021, the Hong Kong Maritime Museum curated a special exhibition, Maritime Crossroads: Millennia of Global Trade in Hong Kong, which enabled visitors to embark on an exciting 6,000year voyage of maritime transformation and development from the Neolithic to the Internet era in Hong Kong.
- 2 We are grateful for the help of Dr. Stephen Davies who was instrumental in using only 25 objects and a virtual character for this exhibition. And special thanks go to the relevant experts including Dr. Joseph Ting, Mr. Ko Tim-keung, the shipping advisors Mr. Martin Cresswell, Mr. Richard Hext, Mr. Tim Huxley, Mr. Phillip Milner-Barry, Mr. Tim Smith, and Dr. Martin Stopford, as well as those acknowledged in the catalogue.
- 3 Eileen Chang, "From the Ashes," in Written on Water, (Hong Kong: Crown Publishing (H.K.)
 Ltd., 1995), 47. "From the Ashes" was first published in the 5th issue of Shanghai Tiandi Monthly in February 1944. It was later included in the prose collection Written on Water.
- 4 At least 55,000 people were killed directly by war violence, about one million were forced to leave Hong Kong, and an uncountable number died along the way. See Fan Shuh Ching, *The Population of Hong Kong* (Paris: The Committee for International Coordination of National Research in Demography, 1974), 2.
- 5 The division of the four generations is based on Lu Dale's interpretation of Hong Kong's demographics in the 20th century. Lu Dale, Four Generations of Hong Kong People (Hong Kong: Further Multimedia Ltd., 2007).

展覽介紹

香江泛洋奇蹟:1945年以來我們的港口故事

為慶祝香港特別行政區成立 25 周年,香港海事博物館特別策劃呈獻「香江泛洋奇蹟」 展覽。

此一具有重大意義的展覽,副題為「1945年以來我們的港口故事」,探討香港如何從第二次世界大戰的硝煙中迅速重生,並揭示航運業在推動城市經濟復甦過程中所扮演的重要角色,以及航運業當前的發展與未來的展望。「香江泛洋奇蹟」展示 25 件具有代表性與標誌性的文物,這些文物確切闡述了香港多年來的海洋故事。

香港在二戰前作為海上貿易樞紐的地位,使其能夠在戰後迅速重新崛起。再加上大批 湧入香港尋求新生活與工作的企業家,一舉將香港轉變為世界級的製造業中心。隨著 航運業的發展,中國船東的到來壯大了香港的航運業,而貨櫃化運輸與船舶專業化令 成本降低,貿易量迅速增長。隨著其他地方的勞動力成本下降,香港大部分的製造業 都轉移到粵港澳大灣區的其他地區。然而,航運業對香港的繁榮仍然至關重要。

展覽按時間順序分成五部分,講述香港的成功以及其蜕變為超現代經濟體的故事。每個部分都代表了戰後香港的重要時期:「浴火重生」(1945-1948)、「商貿重啟」(1949-1970)、「高增長期」(1960年代-1980年代)、「貨櫃為尊」(1972-現今)及「展望未來」。展覽透過藝術科技與沉浸式體驗,帶領參觀者踏上激動人心的海上旅程。微電影主角蘇嘉敏(Carmen So)將藉由虛擬和擴增實境等互動科技為參觀者導覽,細味四代人與海的故事。





EXHIBITION INTRODUCTION

Hong Kong's Maritime Miracle: The Story of Our City Since 1945

Hong Kong's Maritime Miracle, an exhibition organised and curated by the Hong Kong Maritime Museum, commemorates the 25th anniversary of the establishment of the Hong Kong Special Administrative Region.

This landmark exhibition, which is subtitled The Story of Our City since 1945, explores Hong Kong's rapid rebirth from the ashes of World War II and reveals the vital role played by the maritime industry in propelling the city's recovery and its current and future development. The exhibition showcases 25 representative and iconic artefacts that define Hong Kong's maritime story.

Hong Kong's pre-war status as a maritime trading hub enabled it to rebuild quickly after the war. This, combined with an influx of entrepreneurs seeking a new life and work in the territory, transformed Hong Kong into a world-class manufacturing centre. As the shipping industry grew, enlarged by the arrival of Chinese shipowners, and costs dropped thanks to containerisation and specialised ships, trade increased exponentially. In time, as labour costs declined elsewhere, much of Hong Kong's manufacturing industry was outsourced to other parts of the Greater Bay Area. However, the shipping industry remained vital to Hong Kong's prosperity.

The exhibition tells the story of Hong Kong's success and its transformation into an ultra-modern economy in five sections, arranged chronologically. Each section represents a significant period for post-war Hong Kong: 'Regeneration (1945–1948)'; 'Back in Business (1949–1970)'; 'The High Growth Years (1960s–1980s)'; 'Container Rules (1972–Now)'; and 'The Future'. The exhibition takes visitors on an exciting maritime journey based on an art-tech and an immersive experience. The movie character named Carmen So (蘇嘉敏) guides visitors through the exhibition using interactive technologies such as virtual and augmented reality introduce maritime stories of four generations in our city.

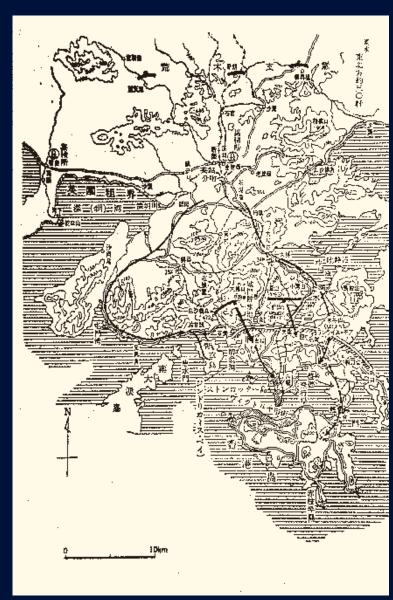




945年,僅僅數月內,香港便從一片頹垣殘壁中 復興起來。

日治時期的香港(1941年12月至1945年8月)是 日軍重要的海軍與後勤基地,曾多次遭受盟軍 空襲。猛烈的轟炸幾乎將城中的基礎建設 — 如 航運設施與主要的船場 — 摧毀殆盡,連帶對居住 區域也造成破壞。人口由戰前的164萬驟減至戰後 的60萬。

儘管如此,隨著日本於1945年8月無條件投降,香港迅即從劫後的餘灰中浴火重生。香港雖然面對全球原材料短缺與生活費用節節攀升之苦況,其經濟依然能夠快速復甦,這都有乃於香港穩健的幣值、法律與治安、大量移民湧入、人們勤苦工作等諸多因素,以及香港長期作為轉口貿易中心地位的緣故。



(1) 日軍第23軍於戰前一星期所擬定的作戰計劃。 The military plan proposed by Japanese 23rd Army a week before the war.



(2) 日本軍方於戰前拍攝的香港航拍照片。 An aerial photo of Hong Kong taken by the Japanese military before the war.



(3) 日治時期日本畫家筆下的維多利亞港。 Victoria Harbour painted by a Japanese artist during the Japanese occupation.

1945年11月23日,香港已正式重啟私營貿易。當時距離日本佔據結束尚不到三個月,甚至比1946年5月1日恢復民政統治還要早幾個月。由於優先考慮重建糧食供應、航運設施、交通網絡等措施,香港比其他任何的東亞國家或城市更快重啟貿易。

航運業在短短十個月內便回復正常運作, 更在兩年內從維多利亞港清理了兩百多艘 沉船。這些沉船不僅成為香港拆船業的 基礎,更是鋼材建材的來源,為重建香港 的基礎設施和建造公共房屋作出貢獻。 由於當時的日本及其他亞洲國家均極需 鋼材,這使本港的鋼材出口量蒸蒸日上。 各項設施的恢復賦予香港商界東山再起的 信心,促使轉口貿易量激增。經濟繁榮 持續,到了1947年,香港人口已增至 180萬。

LC, HC



(4) 1945年1月盟軍對太古船塢發動空襲。 An air raid by allied bombers over Taikoo Dockyard in January 1945.

The year 1945 saw Hong Kong's remarkable rise from a city in ruins to a city recovered in a matter of months.

Under the Japanese Occupation (December 1941 to August 1945), Hong Kong was a significant naval and logistics base for the Japanese military and endured numerous air raids by the Allied Forces. The severe bombing virtually destroyed the city's infrastructure, such as its shipping facilities and major dockyards, with collateral damage in residential areas. The population decreased from 1,640,000 pre-war to 600,000 post-war.

However, with the unconditional surrender of Japan in August 1945, Hong Kong rose from the ashes of war in record time. Despite the challenges of a worldwide shortage of raw materials and a rising cost of living, Hong Kong's economy recovered speedily, benefitting from a stable currency, law and order, immigration, sheer hard work, and its status as an entrepôt.



(6) 1944年B-25轟炸機在香港上空。 A B-25 bomber over Hong Kong, 1944.



(5) 1947年的油麻地,在快速復興下,已看不到戰爭的痕跡。 An air raid by allied bombers over Taikoo Dockyard in January 1945.



(7) 1947年的太古船塢已恢復正常運作。 The Taikoo Dockyard already back to normal in 1947.

Hong Kong was officially reopened for private trade on November 23, 1945, less than three months after the Japanese Occupation ended and months before the resumption of the civil government on May 1, 1946. By prioritising food supplies, shipping facilities, and transportation networks, Hong Kong was able to resume business faster than other East Asian countries and cities.

The shipping industry was back in operation in a mere ten months, and over two hundred shipwrecks were cleared from Victoria Harbour within two years. These wrecked ships were the foundation of Hong Kong's shipbreaking industry, which also provided the raw material – scrap steel – to rebuild the city's infrastructure and underpin public housing developments. Steel, so desperately needed in Japan and other Asian nations, became a growth export. The revitalised facilities gave the merchant community the confidence to begin again, and the volume of trade through Hong Kong's ports increased dramatically. The economic boom continued steadily for two years, and by 1947, Hong Kong's population had reached 1,800,000.

LC, HC



港島發現的二戰時期炸彈 SECOND WORLD WAR BOMB FOUND ON HONG KONG ISLAND 香港警務處爆炸品處理課借展 On loan from Explosive Ordnance Disposal Bureau, Hong Kong Police Force

這是一枚重達500磅,長140厘米,直徑45厘米的美國製AN-M64 炸彈。推測是日軍佔領香港島期間,由一架B-24轟炸機於空襲時投下,在2020年3月於跑馬地厚德里一處地盤發現,其後由警方拆除引信。1

香港偶爾會發現二戰時期遺留的炸彈、未爆彈、手榴彈等物件。 此枚炸彈應用作攻擊船隻、造船與修船的船塢及港口設施。由於 香港的港口及其附屬設施對日軍極具重要性,將其癱瘓是打擊日本 海上戰鬥力的必要手段。

This 500 lbs AN-M64 bomb measures 140 cm by 45 cm and was manufactured in the United States. It was probably dropped by a B-24 bomber on occupied Hong Kong during the Second World War. The bomb was found in 2020 at a construction site on Hau Tak Lane in Happy Valley and defused by the police bomb squad.¹

Bombs, unexploded artillery shells, and grenades from this period are sometimes found in Hong Kong. This bomb was one of many intended to attack ships, ship building and repair yards, and port facilities. As Hong Kong's harbour and port facilities were its most important assets for the Japanese, putting these out of action was essential to defeating the Japanese naval war effort.

大規模摧毀

這枚重達500磅的二戰時期炸彈在2020年3月於港島 跑馬地一處地盤被發現,是當年用以攻擊日軍船隻、造船 與修船的船塢和港口設施的眾多炸彈之一。² 自1942年秋 至1945年終戰,為了針對為日軍提供補給的船隻與設施, 盟軍頻繁地空襲香港。規模最大的一次空襲是1945年1月 15至16日,由美國海軍負責執行,總共出動了一整個機隊 的B-24與B-25轟炸機。一架B-24可攜帶總重8000磅(約 3600公斤)的炸彈。 到1945年年中,香港的船塢、碼頭、堤防、發電廠等基礎設施以及許多沿岸的民居均遭到嚴重破壞。維多利亞港中更是佈滿沉船。根據戰後負責打撈這些沉船的杜斯特 (W. Alec Doust)上校報告,在海港中共發現230艘沉船,其中16艘為商船。³日本佔領結束時,香港人口由戰前的160萬人鋭減至60萬人。⁴許多居民返回或逃難至內地,還有許多人死於戰火之中。

LC, MC



1.1 1945年1月16日在香港海港遭受美國海軍戰機空襲的日本船隻。 Japanese shipping in Hong Kong under attack by US Navy aircraft on 16 January 1945.

- 1 Charlotte Luo, "Bomb defused in gruelling 12-hour operation," *The Standard*. March 2, 2020, https://www.thestandard.com.hk/section-news/section/4/216805/Bomb-defused-in-grueling-12-hour-operation.
- 2 Steve K. Bailey, Bold Venture: The American Bombing of Japanese-Occupied Hong Kong, 1942– 1945 (Lincoln, Nebraska: University of Nebraska Press, 2019).

- 3 「我的初步調查顯示共有 230 艘各式船骸,其中包括 16 艘大型船隻。多數船骸受損嚴重,無法重新上浮。鄰近船塢、碼頭、起重吊機的船骸不能以炸藥爆破,以免對船塢及設備造成進一步損傷。因此,只能將其切割成 1,000 噸的散件以利打撈船搬運。」杜斯特:《木板上的海洋》(The Ocean on a Plank) (New York: Vantage Press, 1976/1978), 頁 117。
- 4 Fan Shuh Ching, The Population of Hong Kong (The Committee for International Coordination of National Research in Demography, 1974), 2, http://www.cicred.org/Eng/Publications/pdf/ c-c21.pdf.

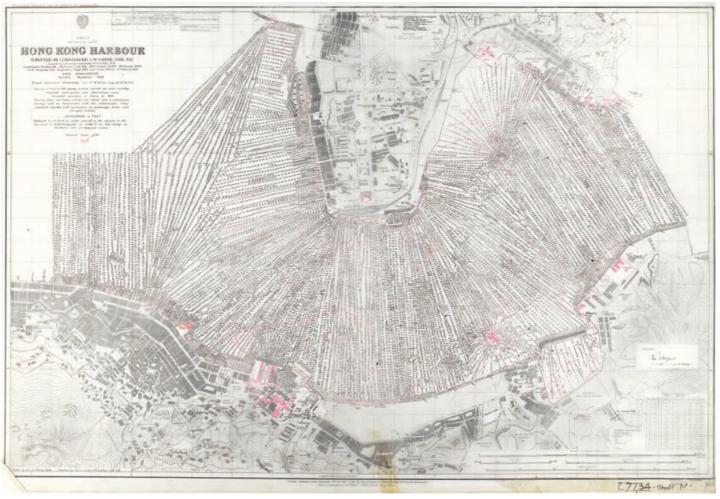
Mass Destruction

This Second World War–era bomb, weighing about 500 lbs, was found at a construction site in Happy Valley in 2020. The bomb was one of many intended to attack ships, ship building and repair yards, and port facilities in Japanese-occupied Hong Kong during Second World War.² The US Air Force made frequent raids on Hong Kong from the autumn of 1942 through to the end of the war, targeting ships and facilities that were supplying the Japanese occupying forces. The largest air-raids were carried out by the US Navy on January 15-16,1945 and involved a fleet of B-24 and B-25 bombers, with the B-24s able to carry a payload of up to 8,000 lbs (approx. 3,600 kg).

By mid-1945, Hong Kong's infrastructure, including its dockyards, wharves, piers, and power stations, and many residential buildings along the waterfront were badly damaged. Victoria Harbour was filled with sunken vessels. Captain W. A. Doust, who was responsible for salvaging these vessels, reported finding 230 wrecks in the harbour, 16 of which were merchant ships.³ By the end of Japanese occupation, Hong Kong's population had diminished to a mere 600,000, from 1.6 million before the war.⁴ The Japanese introduced forced repatriation to China and many were died between 1942 and 1945.

LC, MC

- 1 Charlotte Luo, "Bomb defused in gruelling 12-hour operation," *The Standard*, March 2, 2020, https://www.thestandard.com.hk/section-news/ section/4/216805/Bomb-defused-in-grueling-12hour-operation.
- 2 Steve K. Bailey, Bold Venture: The American Bombing of Japanese-Occupied Hong Kong, 1942– 1945 (Lincoln, Nebraska: University of Nebraska Press, 2019).
- 3 "My preliminary survey indicated about 230 wrecks of all kinds, including sixteen large ships. Most of them were too badly damaged to be refloated; those wrecked alongside docks, wharves or cranes could not be dispersed by explosive for fear of causing more damage to the docks and equipment, so would have to be cut into 1000-ton sections that lifting craft could manage." W. A. Doust, *The Ocean on a Plank* (New York: Vantage Press, 1976/1978), 117.
- 4 Fan Shuh Ching, The Population of Hong Kong (The Committee for International Coordination of National Research in Demography, 1974), 2, http://www.cicred.org/Eng/Publications/pdf/ c-c21.pdf.



1.2 港口沉船位置緊急通報圖。 Emergency chart of Harbour showing positions of wrecks.



日本海軍中將新見政一的座椅 ADMIRAL NIIMI'S CHAIR 香港警務處水警總區借展

On loan from Marine Region of the Hong Kong Police

這張辦公椅據說是大日本帝國海軍中將新見政一(1887-1993) 於1942年時曾經使用的座椅。新見是香港攻防戰期間的日本海軍司 令,任務是封鎖港口。新見存活到戰後,在1993年去世,享年106 歲,是最後一名離世的大日本帝國海軍高層軍官。

This battered office chair is reputed to have been used by Niimi Masaichi (1887–1993) in 1942, during his term of office as Vice-Admiral of the Imperial Japanese Navy. Niimi was the Japanese commander during the Battle of Hong Kong, when he was tasked with blockading and patrolling the harbour. Niimi survived the war and died in 1993, at the age of 106. He was the last high-ranking official of the Imperial Japanese Navy to die.

戰後復甦

這張辦公椅據說是大日本帝國海軍中將新見政一 (1887-1993)於1942年駐防香港時使用的座椅。新見是 香港攻防戰期間的日本海軍司令,並於佔領期間掌管近岸 巡邏任務。香港兩座主要的造船與修船設施,即太古船塢 與黃埔船塢,分別於1941年12月18日和26日被日軍佔領。 日軍接管後繼續修船與造船作業。其後,位於中環的海軍 船塢亦遭日軍接管並改名為第二海軍工作部。

日本於1945年8月15日投降,佔領時期隨之結束。 海軍少將夏慤 (Cecil Harcourt) 率領英國皇家海軍艦隊於 8月30日抵達香港。正式的受降儀式於9月16日在香港總督 府舉行。香港市區隨即展開重建工作,尤以受創嚴重的 基礎建設為第一優先,包括港口設施、道路、鐵路、電力 供應和無線電通訊等。

戰後的香港以驚人的速度復甦。至1945年11月,政府已解除大部分管制,讓市場恢復自由貿易。一套1946年發行以紀念香港勝利和平為主題的郵票,便以鳳凰浴火重生來比擬香港的快速復興。5

至1947年初,香港人口已由1946年的60萬人增加至約 180萬人,主要是戰前居民重回香港與內地大量移民湧至 香港尋求新生活所致。⁶

HL, SC



2.1 貼蓋有日本郵票及郵戳的信封, 郵戳日期為日本佔領終結的1945年8月31日。 鴻踪里借展。

Envelope with Japanese stamps and post chops at the end of Japanese occupation, August 31, 1945.

On loan from Claire & Francis Heritage Lane.



2.2 貼有香港勝利和平紀念郵票的首日封。 戳印日期為1946年8月29日。 Hong Kong Souvenir First Day Cover issued after the end of Japanese occupation, stamped August 29, 1946. (HKMM2005.0028.0001)

⁵ 此概念在 1946 年為紀念香港勝利和平所發行的 郵票設計上充分表現。其設計由鍾惠霖 (William E. Jones)以戰俘身份在赤柱戰俘營 關押期間完成。郵票中央下方印有 RESURGO 1941-1945 字樣,其上為一浴火鳳凰。Resurgo 即拉丁文「再起」之意。郵票左右各有豎行中文 四字,右為「鳳鳥復興」,左為「漢英昇平」。

⁶ 同上註。

Post-War Recovery

This battered office chair is said to have been used by Niimi Masaichi (1887–1993) while he was serving as Vice-Admiral of the Imperial Japanese Navy in Hong Kong in 1942. Niimi was the Japanese naval commander during the Battle of Hong Kong and oversaw offshore patrols during the subsequent period of occupation. The Taikoo Dockyard and Engineering Company of Hong Kong Ltd and Hong Kong and Whampoa Dock—the two major shipbuilding and repair facilities in the region—were captured by Japanese troops on December 18 and 26, 1941, respectively. Japanese shipyards took over the facilities and continued building and repairing ships. The Naval Dockyard in Central was also taken over by the Imperial Japanese Navy and renamed to the No. 2 Naval Working Department.

The occupation of Hong Kong ended after the Japanese surrender on August 15, 1945. On August 30, the Royal Navy under Rear Admiral Cecil Harcourt arrived. The formal surrender took place at Government House on September 16. The rebuilding of the city commenced immediately, with priority given to Hong Kong's heavily damaged infrastructure, including its port facilities, roads, railways, electricity supply, wireless communications, etc.



2.3 日據完結後不久,香港政府在1,000圓日本軍用手票上加蓋「ONE DOLLAR \$1 HONG KONG GOVERNMENT」字樣,讓市民繼續使用。

香港歷史博物館借展

Japanese military banknote with double signatures used in Hong Kong shortly after the war.

On loan from Hong Kong Museum of History.

- 5 This concept is best illustrated by the stamp design set launched in 1946 to celebrate the Liberation of Hong Kong. It was designed by William E. Jones during his internment as the prisoner-of-war in Stanley. "Resurgo 1941-1945" is printed in the middle of the stamp under the image of a burning phoenix Resurgo is a Latin word meaning "I rise again." There are also four Chinese characters depicted on the right of the stamp meaning "The revival of the phoenix" ("鳳鳥復興") and another four on the left meaning "The peace of China and the United Kingdom" ("漢英昇平").
- 6 Fan Shuh Ching, The Population of Hong Kong (The Committee for International Coordination of National Research in Demography, 1974), 2, http://www.cicred.org/Eng/Publications/pdf/ c-c21.pdf.

Hong Kong's post-war recovery was astonishingly swift. By November 1945, its economy had already recovered to the point that most government controls were lifted and the free market restored. A stamp set released in 1946 to celebrate the end of war in Hong Kong depicted the rapid recovery of the city as a phoenix rising from the ashes.⁵

By the end of 1947, the population had rebounded from 600,000 in 1946 to around 1.8 million, owing to the return of pre-war residents and the arrival of huge numbers of migrants from China in search of new opportunities.⁶

HL, SC



2.4 1941年12月28日日軍舉行「入城式」巡行。隊伍最前方為酒井隆 陸軍中將(右)與新見政一海軍中將。 Japanese Victory Parade on December 28, 1941, led by Lieutenant

General Sakai Takashi (right) and Vice-Admiral Niimi Masaichi.



潛水頭盔與手電筒 DIVING HELMET AND TORCH

倫敦西貝戈曼公司(Siebe, Gorman & Co. Ltd)製品。 Macalister Collection 借展 Siebe, Gorman & Co. Ltd, London On Loan from the Macalister Collection (HKMM2012.0040.0003,025)

頭盔在二戰期間由西貝戈曼公司(Siebe, Gorman & Co. Ltd)開發,因能吸收潛水員呼出的二氧化碳,回收未使用的氧氣,再添加氧氣以補充空氣,故被稱為「循環呼吸器」。此類硬殼潛水器能在水下持續作業數小時,當年用以清除德軍的聲響水雷與磁性水雷,在打撈業中亦獲普遍使用。

The Siebe, Gorman Mine Recovery Self-Contained Diving Apparatus (MRS) was developed during Second World War. The



3.1 杜斯特(W. Alec Doust)上校曾經使用同款式的潛水衣。 This is the type of diving suit used by Capt Doust's divers—The "Jake" diver suit in the HKMM is an example.

helmet is described as a "rebreather" apparatus because it absorbs the carbon dioxide of a diver's exhaled breath and recycles the unused oxygen and inert content. Oxygen is added to supplement the air. This type of hard-head diving equipment, which enables a person to work under water for several hours, was used to clear German acoustic and magnetic mines during the war, and was also in common use in the salvage industry.





3.2 全套潛水衣。 Complete diving suit.

重建城市與清理沉船

37

打撈作業是香港戰後重建至關重要的一環,只有清除 了維多利亞港內的沉船才能保障船隻的安全航行和碇泊 安排,並開通碼頭和船塢以裝卸貨物和維修船隻。

杜斯特 (W. Alec Doust) 上校於二戰期間擔任英國皇家海軍海上救援處 (Admiralty Salvage Department)的首席技術官。戰後,他領導清理維多利亞港沉船殘骸的龐大工程。打撈作業的一個主要挑戰是避免損壞鋪設在港口海床上的水管、電線和電話電纜。7

華籍的打撈承包商梁文廣為杜斯特提供了一批技術熟練的人員。工程於1946年2月展開,並由新加坡調派一艘日本製大型起重機船蜻州丸號 (Seishu Maru),赴港協助大件船骸的起重作業。部分大型船骸打撈後尚可修復,其餘的則售予中國。大部分較小型的沉船切割成數段後,會在新建的軋鋼廠內輾軋成鋼筋,用於重建香港的基礎設施。8

蜻州丸號同時負擔從船上卸載重型貨物的任務。特別是在1947年3月從貝珍妮號(Beljeanne)卸載47輛蒸汽火車頭及煤水車,每輛火車頭重約100噸。貝珍妮號隸屬聯合國善後救濟總署(United Nations Relief and Rehabilitation Administration,UNRRA)下的中國鐵路重建計劃。9

戰後首批需重新部署的船隻是渡輪、拖船和小型貨船。雖然大部分在日據期間頻繁地使用,或因缺乏維修保養而狀況極差,但它們在運載逃離戰火的居民回港,以及由內地輸入大批糧食與其他生活必需品等方面功不可沒。重建在戰時受損嚴重的船塢,如黃埔船塢和太古船塢等,是恢復香港航運的重要任務。1945年9月12日,亦即距離日本投降不到一個月,黃埔船塢的旱塢經已重新運作,恢復速度驚人。造船廠則於1949年11月完成重建,隨即展開造船作業。¹⁰

與戰後相約,戰前以香港和上海為據點的航運公司 船隻都在英國註冊。結果這些船隻在戰時被英國政府 徵用,許多因而沉沒。戰後許多失去船隻的船東獲得部分 賠償,或是金錢,或是以其他船隻相抵。船東們最初以 二手船隻重建其船隊,後來則使用新船。

LC, MC

- 7 Doust, Ocean on a Plank, 117.
- 8 到 1946 年聖誕節時,便已利用沉船鋼材重建新 的市中心。
- 9 有關 1947 年在香港卸載聯合國善後救濟總署蒸 汽火車頭的詳情,可參考: https://gwulo.com/ atom/37106。
- 10 Austin Coates, Whampoa Ships on the Shore (Hong Kong: South China Morning Post, 1980), 235.

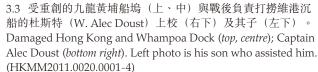
Rebuilding the City and Clearing the Wreckage

The salvage business was a crucial part of post-war recovery because the clearance of wrecks from Victoria Harbour was essential to safeguard navigation and mooring and to access wharves for cargo movement and dockyard ship repair.

Captain Alec Doust was Chief Technical Officer in the Admiralty Salvage Department of the British Royal Navy during Second World War. After the war he led the massive project of clearing shipwrecks from the harbour of Hong Kong. A major challenge for the salvage operation was to avoid damaging the network of water mains and electric and telephone cables that lay on the floor of the harbour.⁷













A

39





В



D

3.4 貝珍妮號(Beljeanne)(A、B)專為運載火車而設計製造。蜻州丸號(Seishu Maru)起重機船(C、D)與47輛屬於中國善後救濟總署(Chinese National Relief and Rehabilitation Administration,CNRRA)所擁有的蒸汽火車頭。火車頭由美國捐贈,卸載到尖沙嘴九廣鐵路總站旁的路軌上,準備運往中國。

The *Beljeanne* (*A*, *B*), specifically designed and built for transporting trains, *Seishu Maru* (*C*, *D*) and 47 CNRRA locomotives were donated by the US and discharged onto a railway siding at the KCR station in Tsim Sha Tsui for use in China.

The Chinese salvage contractor Leung Man Kwong provided Doust with a highly qualified crew. The work began in February 1946, when a large Japanese floating crane, *Seishu Maru*, was brought in from Singapore to assist in lifting large sections of sunken ships, cut up underwater by the divers. Some of the larger salvaged ships were repairable and others were sold to China. Most of the smaller wrecks were cut into small pieces and rolled in newly built steel rolling mills, where they were made into steel reinforcement bars for use in rebuilding Hong Kong's infrastructure.⁸

The *Seishu Maru* was also used for discharging heavy cargo from ships, notably in March 1947 when it was used to discharge 47 locomotives, each weighing about a hundred tons, and tenders from the *Beljeanne*. The ship was part of the United Nations Relief and Rehabilitation Administration's (UNRRA) China railroad rebuilding programme.⁹

The first ships to be re-deployed after war were ferries, tugs, and small cargo vessels. Although many of these were in terrible condition due to their heavy use or lack of maintenance throughout the Japanese occupation of Hong Kong, they were essential for bringing home the population that had fled Hong Kong during the occupation and for transporting food and other necessities from China. Rebuilding the badly damaged main shipyards, such as the Hong Kong and Whampoa Dock and Taikoo Dockyard, was a crucial task to restore shipping in Hong Kong. This was carried out with amazing speed: by September 12, 1945, less than a month after the Japanese surrender, the drydock at Hong Kong and Whampoa Dock were back in operation. The yard had been completely rebuilt by November 1949 and resumed shipbuilding soon after. ¹⁰

As in most of the pre-war period, shipping lines based in Hong Kong and Shanghai registered their ships in the United Kingdom after the war. As a result, these vessels were requisitioned by the British government for the war effort, and many were lost. Shipowners did receive some compensation, however, either in money or replacement ships, and were then able to rebuild their fleets, initially with second-hand vessels and eventually with new ships.

LC, MC

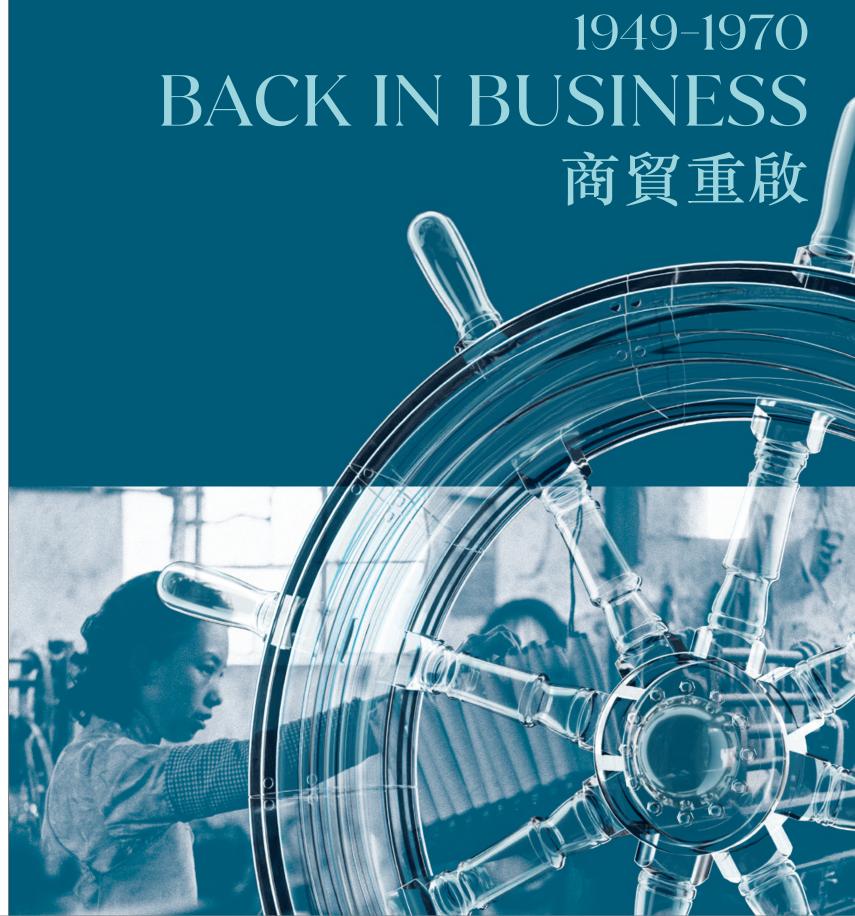


3.5 破舊大宅腳下的灣仔市景,燈籠洲附近有一艘沉船(左中方),其船桅凸出水面。一排排的是唐樓,每排各有後巷方便倒夜香。樓房色彩單調,在戰後陪顯悽惶。山下荒涼的空地是修頓遊樂場。

Wanchai harbour view. Wan Chai is seen here below a derelict mansion. A sunken ship (*centre left*), its mast protruding above the water, lies near Kellett Island. Scavenging lanes, used to remove human waste—"nightsoil"—divide the rows of tenements, drab and forlorn after the war. The stark space beneath the slopes is Southorn Playground.

- 7 Doust, Ocean on a Plank, 117.
- 8 By Christmas 1946, a new city centre had been built from the steel of scrapped wrecks.
- 9 For the full story on the discharge of UNRRA locomotives in Hong Kong in 1947, see https:// gwulo.com/atom/37106.
- Austin Coates, Whampoa Ships on the Shore (Hong Kong: South China Morning Post, 1980).
 235.



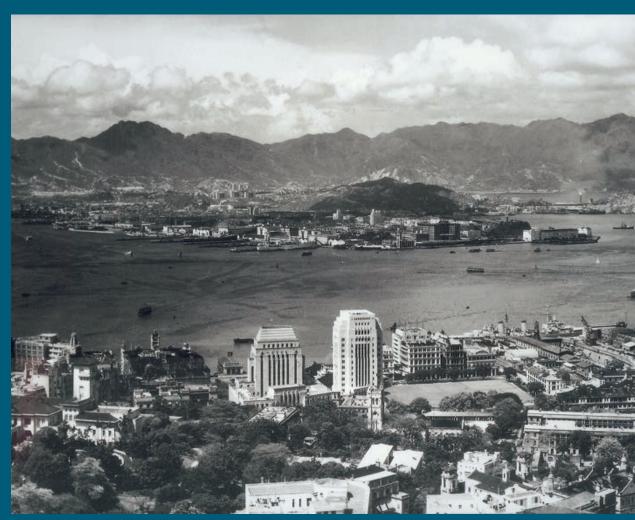


940年代末至1950年代,香港各大航運公司均重建其 船隊與港口設施。1947年,包括太古船塢與黃埔船塢 在內的香港最大造船廠,總共僱用了14,484名員工,佔當 時總勞動人口的四分之一以上。這説明了當時香港從事 航運業的人口比例之高。

據1954年聯合國中國難民調查報告指出,到了1950年,香港的人口已因由內地湧至的70萬移民而大幅膨脹。這些人為了逃避內戰戰火,或已失去家園財產而流落香江。是故,商賈、企業家、文人和大量的勞動人口等從此落戶香港。他們所帶來的技能、資金和勞力孜孜矻矻,重建新生。

由上海輾轉抵港的人士當中,有一群人視航運為安身立命之道。其中,顧宗瑞、董浩雲、程餘齋、曹文錦、鄭孫文淑等人抵港時已是船東。其他如包玉剛、趙從衍與吳氏家族則否,但亦視航運為其未來志業。這些人士不約而同地均以低價購入二手船隻起家,且大多數在初次購船時得到華林公司與會德豐公司協助貸款。此時,重建中的日本經濟為互利的「仕組船」融資交易帶來了新商機,這令華人船東很快便能購置新船隻,為香港的經濟起飛作出貢獻。至於抵港的內地移民帶來了許多技術,其中尤以製造業為最。於是,許多新的出口工業就此肇基,包括紡織、玩具、電子、塑膠製品等等。在極短的時間內,香港便搖身成為世界工廠,成為亞洲不可撼動的工業中心。

LC, MC



(1) 從太平山道維多利亞港及中環, 1950年。 Victoria Harbour and Central from the peak, 1950.

The major shipping companies in Hong Kong rebuilt their fleets and port facilities in the late 1940s and 1950s. In 1947, the largest shipyards in Hong Kong, including the Taikoo Dockyard and Engineering Company and the Hong Kong and Whampoa Dock Company Limited, employed 14,484 workers, over a quarter of the total industrial labour force at the time. This illustrates the enormous percentage of the population working in the maritime industry in Hong Kong.

By 1950, Hong Kong's population had swelled from the influx of some 700,000 immigrants from mainland China, according to the 1954 United Nations Survey of Chinese Refugees. They were seeking refuge from the Chinese Civil War and the loss of their homes and livelihoods. Businessmen, entrepreneurs, intellectuals, and large numbers of ordinary workers made Hong Kong their home, bringing skills, capital, and labour along with a fervent desire to rebuild their lives.



(2) 1960年代至1970年代香港製造的輕工業出口產品。 Light industrial items produced in Hong Kong for export during the 1960s and 1970s.

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(3) 長沙灣拆船作業,1963年5月。 Ship breaking in Cheung Sha Wan, May 1963.

Amongst those who relocated to Hong Kong from Shanghai were a group who saw shipping as the way to make their living. C. S. Koo, C. Y. Tung, Robert Chen, Frank Tsao, and Mrs Cheng Suen Man Shook, among others, were already shipowners when they arrived. Others such as Y. K. Pao, T. Y. Chao, and the Wu family were not, but saw shipping as their future. They all began by buying second-hand tonnage at low cost, many assisted by Wallem and Wheelock Marden who helped many buy their first ships with loans secured from their own funds. As Japan began to rebuild its economy, it offered new opportunities for mutually beneficial Shikumisen deals, and the Chinese shipowners were soon able to buy new ships, making their own contribution to Hong Kong's growing economy. The Chinese refugees brought many skills, particularly in manufacturing. New industries were established including the production of textiles, toys, electronics, and plastic goods for export. In a very short time, Hong Kong became the workshop of the world and an unrivalled industrial centre in Asia.

LC, MC



鋼筋混凝土 CONCRETE REINFORCED WITH STEEL BAR

在建築行業中,鋼筋用於加固混凝土。 戰後的香港與亞洲其他地區建築業所使用 的鋼材中,有大部分原料都是從香港打撈 的船隻中回收的。原本擔心重建計劃會因 建築用鋼材短缺而嚴重受阻,因為戰後所 能取得的數量微乎其微,但香港一家公司 發展出以舊船殼(可由香港水域內的大量 沉船取得)輾軋鋼材的技術並改良所需之 機器。在1948年,該公司以每年18,000噸 的速度生產,並期望到1949年時能提升至 28,000噸。¹¹

Steel reinforcing bars are used in the construction industry for strengthening concrete. Much of the raw material for the steel used for this purpose in post-war Hong Kong and elsewhere in Asia was



recycled from ships salvaged in Hong Kong. It had been feared that the building programme would be seriously impeded by shortage of building steel, which had been obtained only in negligible quantities since the end of the war, but a Hong Kong firm innovated a technique for rolling building bars from old ship's plates (of which a plentiful supply was available from sunken vessels in Hong Kong waters) and improvised the necessary machinery. During 1948 they were producing at a rate of 18,000 tons a year and hoped to increase to 28,000 tons in 1949. ¹¹

從船到家:香港的拆船與造船業

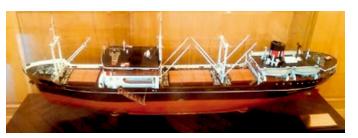
拆船業:香港的基石

由海港內受損船隻回收的鋼材,為香港的重建作出重大貢獻。戰後的快速重建,特別是大規模公共房屋建設計劃,對軟鋼筋的需求大幅增長,而廢棄船隻的鋼材正是理想的原料。由於日本及其他亞洲地區同樣對這種材料有高需求,廢鋼出口因而有所成長。12

到了1959年,香港的拆船業已被稱為世界最大,在長沙灣、牛頭角、觀塘、葵涌及荃灣20多處地點僱用了4,000多名員工。¹³ 當時鋼材的每月平均產量達10,000噸,而本地建築業用鋼的需求量每月已佔6,000噸以上。每月被拆毀的船隻有30多艘,¹⁴ 其中大部分的有色金屬材料已被本地的工業與製造商吸納,如船廠、鐘錶製造商以及暖水壺和電筒的生產商。¹⁵

拆船廠是一座永久性的建築物,但由於廢鋼的大量需求,仍然需要興建新的拆船廠以應付所需。1962年,當颱風溫黛吹襲香港時,兩艘載重量達8,000噸的貨船—巴爾博亞號 (Balboa) 與波哥大號 (Bogota) — 在吐露港擱淺。兩船吃水深,遠超潮水上漲所能到達的範圍,因而無法重新浮上水面。有見及此,就在兩艘船的擱淺位置建造拆船廠,將它們就地拆卸出售。¹⁶

隨著日本、南韓與中國鋼鐵業的發展,香港的鋼鐵業逐漸式微。今天,香港碩果僅存的一家軋鋼廠位於屯門,由紹榮鋼鐵有限公司經營。該公司1950年在葵涌成立,以拆船業起家。其後因港口發展而遷至將軍澳,是香港拆船業的最後一處據點。1970年代末期,隨著該地進行填海工程以發展將軍澳新市鎮,拆船廠關閉,紹榮鋼鐵有限公司遷至屯門。



4.1 亨里克號 (MV Henrik) 貨船模型 模型收藏於太古廣場一座34樓,太古股份有限公司總部。

亨里克號(MV Henrik)是挪威航運公司Bruusgaard Kiosterud & Co. 在太古船塢建造的一艘小型雜貨船,於1953年下水。

Model of MV Henrik cargo vessel

45

Model at 34/F Swire Pacific HQ, Pacific Place.

MV Henrik was a small general cargo vessel built at Taikoo Dockyard for a Norwegian shipping company, Bruusgaard Kiosterud & Co., and launched in 1953.



4.2 打撈者號 (Salvageman) 照片 英國國防部攝於福克蘭群島。

具有強大馬力與靈活性的打撈者號,多年來一直是英國最大的遠洋 拖輪,1982年曾參與福克蘭戰爭。

Photo of Salvageman

UK Ministry of Defence photo taken in the Falklands.

The powerful and manoeuvrable *Salvageman* was for many years Britain's largest ocean-going tug and took part in the Falklands War in 1982.

^{11 《1948} 年香港年報》(香港:政府印務局, 1949),頁 63。

¹¹ Hong Kong Annual Report 1948 (Hong Kong: Government Printer, 1949)

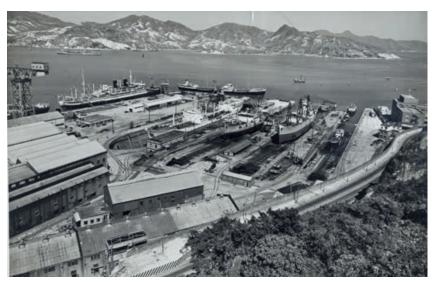


4.3 船塢、碼頭及倉庫。 Dockyards, wharfs, and warehouses. (HKMM2011.0016.0005)

修船業與造船業的重新崛起

二戰前,香港是亞洲主要的造船中心之一。太古船塢與黃埔船塢積極參與建造與維修商船,其中太古船塢從其姐妹公司—太古輪船公司—獲得源源不斷的工作。雖然這兩家造船廠經歷戰爭的摧殘後都已重建,但再也無法回到戰前的全盛時期。儘管如此,由於1946年的當務之急是重建轉口港貿易,因此與航運相關的重工業最先復甦。1947年,包括太古船塢及黃埔船塢在內的八家最大造船廠,共僱用了14,484名造船與修船工人,佔香港「註冊工業機構」51,338名勞工的28%。17

太古輪船在二戰期間損失了30艘船,一些替代船隻便在太古船塢建造,但香港的造船業則在戰後陷入衰退。 1966年,太古輪船接收快運貨輪「湖南號」(Hunan),是在太古船塢建造的最後一艘貨輪。



4.4 1950年代初的太古船塢,進行造船與修船作業。 Taikoo Dockyard, fully operational building and repairing ships in the early 1950s



4.5 下葵涌的一塊沙灘空地用作拆船工場。 Ship breaking in Ha Kwai Chung.

直到1980年代初期,香港仍維持較小規模的造船業,尤以油塘的中華造船廠為著。該廠由1938年移居香港的王華生先生創辦,主要從事建造貨船與內河貿易船。在1970年代初期,中華造船廠擴展到出口市場,並為英國海運貨櫃公司(Sea Containers)建造了一系列小型貨櫃船。該廠亦建造了當時最大的拖輪之一,著名的遠洋打撈船——「打撈者號」,並於1982年福克蘭戰爭中被英國皇家海軍投入使用。

香港造船與拆船業的貢獻,仍然可由依靠從船舶回收 的鋼材所建造的眾多建築物中看到。至於兩個主要的前 造船廠,現已改建為黃埔花園與太古城住宅區,為數以 萬計的香港居民提供完善配的住所。隨著造船業的衰落, 許多小型造船廠轉而為香港的建築業生產鋼鐵。其中, 青山發電廠及匯豐銀行中環總行,便是以中華造船廠生產 的鋼材所興建的幾座著名鋼結構建築之一。

TH, MC, LC

- 12 Winnie Fan and A. Shepherd, "Shipbreaking in Hong Kong," Journal of the Geographical, Geological and Archaeological Society, 24 (March 1961), reproduction in Hugh Farmer, "Ship Breaking in Hong Kong Post WW2," The Industrial History of Hong Kong Group, March 4, https://industrialhistoryhk.org/ship-breaking-hong-kong-post-ww2-to1961/.
- 13 同上註,頁30。
- 14 同註1,頁31。
- 15 同註1,頁30。

- 16 Anthony Hardy, Curiosities of A Lifetime, 48.
- 17 T. N. Chui, The Port of Hong Kong (Hong Kong: Hong Kong University Press, 1973), 94; Hong Kong Statistics 1947–1967 (Hong Kong: Census and Statistics Department, 1969), 49, 57. 在 1967年,香港的造船廠僱用了 10,917名工人,但這僅佔「註冊工業機構」所僱用的 431,973名勞工的 2.5%,而隨著商船建造業從 1970年代初開始減產,造船廠僱用的人數也持續下降。許多遠洋商船在 1950年代及 1960年代郡是在香港造船廠建造的,但從 1960年代起,香港本地工業無法跟上來自日本的競爭。見前註,頁 48、62。

From Ships to Homes: Hong Kong's Shipbreaking and Shipbuilding Industries

Shipbreaking: The Foundation of Hong Kong

The steel salvaged from damaged vessels in the harbour made a major contribution to the rebuilding of Hong Kong. The rapid reconstruction in the post-war era, particularly the building of large-scale public housing developments, created a huge demand for mild steel reinforcing bars, for which the steel from scrapped ships was the ideal raw material. As there was also a strong demand for this material in Japan and elsewhere in Asia, scrap steel exports grew.¹²

By 1959, Hong Kong's shipbreaking industry was reputed to be the world's largest, employing over 4,000 people at more than twenty sites in Cheung Sha Wan, Ngau Tau Kok, Kwun Tong, Kwai Chung and Tsuen Wan. Monthly production was 10,000 tons on average, and the local demand for steel for the construction industry ran to over 6,000 tons a month. Over thirty vessels could be dismantled at any one time. Much of the non-ferrous material was absorbed by local industries and manufacturers such as shipyards, clock makers, and producers of vacuum flasks and torches.

The shipbreaking yards were permanent structures, but necessity sometimes demanded the rapid establishment of new scrapyards. In 1962, when Typhoon *Wanda* hit Hong Kong, two 8,000 dwt cargo ships—the *Balboa* and *Bogota*—were driven aground in Tolo Harbour. As they were well beyond the reach of the tide, there was no

chance of refloating either vessel. A scrapyard was opened where the ships sat, and they were broken up for sale "as is, where lies." ¹⁶

However, as the steel industry grew in Japan, South Korea, and China, Hong Kong's steel industry declined. Today, Hong Kong's last remaining steel rolling mill is in Tuen Mun and operated by Shiu Wing Steel, founded in 1950 as a shipbreaking facility in Kwai Chung. The facility was relocated to Junk Bay to make way for port development, the last site for Hong Kong's shipbreaking industry. In the late 1970s, with the reclamation of Junk Bay for the development of Tseung Kwan O new town, the facility was closed and Shiu Wing Steel moved to Tuen Mun.

The Re-emergence of Ship Repairing and Shipbuilding

Before the Second World War, Hong Kong was one of the leading shipbuilding centres in Asia. Taikoo Dockyard and Whampoa Dock were busy with the construction and repair of merchant ships, with Taikoo Dockyard securing a steady stream of work from its sister company, The China Navigation Company. Although both shipyards were rebuilt after the destruction inflicted in the war, they never returned to their pre-war heyday. Nonetheless, as the immediate task in 1946 was the re-establishment of the entrepôt trade, the heavier industries associated



4.6 在醉酒灣進行的拆船作業,1960年。 Ship being dismantled at Gin Drinkers Bay in Kwai Chung, 1960.

with shipping were the first to recover. In 1947, eight of the largest shipyards, including Taikoo Dockyard and Whampoa Dock, employed 14,484 workers in building and repairing ships, accounting for 28% of the 51,338 strong labour force working in the "registered industrial establishments" of Hong Kong.¹⁷

China Navigation lost 30 ships during the war and some replacements were built at Taikoo Dockyard, but Hong Kong's shipbuilding industry went into decline after the war. When China Navigation took delivery of the bulk carrier *Hunan* in 1966, it was to be the last ship built at Taikoo Dockyard.

Shipbuilding on a smaller scale continued in Hong Kong until the early 1980s, notably at Cheung Wah Shipbuilding in Yau Tong. Founded by Wang Hua-sheng, who had moved to Hong Kong in 1938, Cheung Wah was primarily engaged in building cargo barges and river trade vessels. In the early 1970s, they expanded into the export market and built a series of small container vessels for Sea Containers. They also built the notable ocean-going salvage tug *Salvageman*, which was at the time one of the largest tugs ever built. It was put into service by the British Royal Navy in the Falkland War of 1982.

The legacy of Hong Kong's shipbuilding and shipbreaking industry remains in the numerous buildings relying on steel salvaged from ships. The sites of two major former shipyards are now the Whampoa Garden

and Taikoo Shing residential estates, which house tens of thousands of Hong Kong residents. As the shipbuilding industry declined, many smaller shipyards turned to steel fabrication for Hong Kong's construction industry. Castle Peak Power Station and HSBC's headquarters in Central are among the several well-known buildings with steel structures fabricated by Cheung Wah.

TH, MC, LC



4.7 太古船塢模型。 Taikoo Dockyard. (HKMM2012.0063.0005)

- 12 Winnie Fan and A. Shepherd, "Shipbreaking in Hong Kong," Journal of the Geographical, Geological and Archaeological Society, 24 (March 1961), reproduction in Hugh Farmer, "Ship Breaking in Hong Kong — Post Second World Wall," The Industrial History of Hong Kong Group, March 4, 2020, https://industrialhistoryhk.org/ ship-breaking-hong-kong-post-ww2-to1961/.
- 13 Ibid., 30.
- 14 Ibid., 31.
- 15 Ibid., 30.

- 16 Anthony Hardy, Curiosities of A Lifetime, 48.
- 17 T. N. Chui, The Port of Hong Kong (Hong Kong: Hong Kong University Press, 1973), 94; Hong Kong Statistics 1947–1967 (Hong Kong: Census and Statistics Department, 1969), 49, 57. In 1967, there were 10,917 workers in the shipyards but this was only 2.5% of the total labour force of 431,973 employed in registered industrial establishments, and as the shipbuilding of merchant vessels decreased from the early 1970s the numbers continued to decrease. Many oceangoing merchant ships were built in Hong Kong shipyards in the 1950s and 1960s but from the 1960s onwards the local industry could not keep up with Japanese competition. Ibid., 48, 62.



香港船東會牌區 HONG KONG SHIPOWNERS ASSOCIATION'S PLAQUE

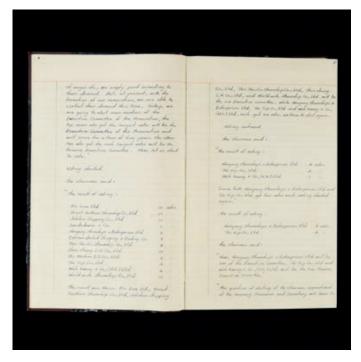
香港船東會借展 On loan from Hong Kong Shipowners Association



香港船東會第一年會議記錄, 1957年

HONG KONG SHIPOWNERS ASSOCIATION'S FIRST YEAR RECORDS OF MEETING MINUTES, 1957.

香港船東會借展 On loan from Hong Kong Shipowners Association



人才湧入

香港船東會於1957年由11名中國船東創立,他們都是在國共內戰期間離開中國內地移居香港的。當中一些人預計(並希望)搬到香港只是暫時性。1952年創立華光海運的趙從衍,從上海搭乘他擁有一半股份的「國興號」輪船到港, 並告訴家人他們只是渡假。¹⁸ 創辦萬邦航運公司—前身為大南輪船公司—的曹文錦,在抵港後不久便認為香港「在外觀和發展上都落後於上海」,一旦情況許可便返回上海。¹⁹ 但其他人則不那麼樂觀。

早期由移民建立的航運企業,往往會邀請上海的老朋友們合組一家航運公司。趙從衍、伍德鄰及鄭延益的成功合作,使他們日後能各自發展成獨立的公司:華光海運、泰山航運及平安輪船。德和輪船公司原本由吳氏、劉氏及盧氏等三個家族共同在上海成立。和合航業為許氏所擁有。

顧宗瑞長子顧國敏及幼子顧國和、顧國華新成立的萬利輪船,透過他們在上海的聯繫一會德豐馬登有限公司的協助下,購得公司的第一艘船「雷蒙娜號」(Ramona)。該船其後更名為「萬利號」(Valles),是在一次拍賣中以105,060美元的價格投得,其他競標者也是來自同一社群,中標價僅比次高標價高出60美元。²⁰

這些新船東最初購買的船隻,通常都是較舊的燃煤雜貨船或是戰爭後剩餘船隻。曹文錦的第一艘船一「埃博諾號」(Ebonol)—是一艘1908年建造的小型散貨船。華光海運首批船隻之一的「大衛王號」(King David),是1941年由英國政府建造的運兵船,後來改名為「香港冒險號」(Hong Kong Venture)。包玉剛也從上海搬到香港,由於無法繼續從事銀行事業,包氏成立一家進出口貿易公司,後來成為新太平洋發展公司。1955年7月,包玉剛與其商業夥伴成立環球航運公司,以200,000英鎊的價格收購一艘27年船齡的8,000載重噸燃煤雜貨船「金安號」(Golden Alpha)。在25年間,環球航運公司發展至擁有200艘船隻,是有史以來最大規模的私營船隊。

董浩雲於1948年移居香港,並開展一連串商業計劃。 他的遠洋海運企業包括散貨船、油輪、客船和當時全球 唯一一家在香港設立、管理和上市的集裝箱運輸公司。 董浩雲亦創立了中國航運股份有限公司,與另一船王 包玉剛競爭激烈。其他著名船公司包括:1966年由何兆豐 創立的東昌航運、1976年程餘齋的降星航業、顧國華離開 萬利輪船後於1983年與顧國和沿用他們父親於上海建立的品牌名稱,共同管理泰昌祥輪船。1987年Chris Buttery和Paul Over成立了太平洋航運。

日本戰後重建及韓戰爆發,促使對原料與物資的運輸 形成巨大的需求,這為香港船東帶來商機。即使船東間 存在着競爭,但他們共同持守的中華傳統,以及各自在 香港創業時所面對的困境,促使其中的11位船東企業家 於1957年聚首一堂,成立香港船東會。²¹

TH, SZ, MC

An Influx of Talent

The Hong Kong Shipowners Association (HKSOA) was formed in 1957 and supported by 11 Chinese shipowners, all of whom had left mainland China and moved to Hong Kong during China's civil war. Some shipowners expected (and hoped) that the move to Hong Kong would be temporary. T. Y. Chao, who founded Wah Kwong in 1952, sailed from Shanghai on the steamship *Kwok Sing*, in which he had a 50% share, telling his young family that they were going on holiday to Hong Kong. Frank Tsao, who founded Great Southern Steamship, the forerunner of International Maritime Carrier, felt Hong Kong was "lagging behind Shanghai in both appearance and development" and intended returning home as soon as conditions would allow. ¹⁹



5.1 黄浦江上大大小小的船隻載滿準備離開上海的人們及貨物,1949年。 Boats large and small were overloaded with people and cargo on the Huangpu River along the bund, trying to get out of Shanghai, 1949.



5.2 香港船東會60周年晚宴,2018年。 HKSOA 60th anniversary dinner, 2018.

Old friends from Shanghai joined together to form shipping companies. The successful partnership between T. Y. Chao, D. L. Wu and George Cheng allowed each to eventually set up his own company: Wah Kwong, Taiship and Ping An Steamship, respectively. Teh Hu Steamship was originally formed in Shanghai by three families: the Wus, the Lius and the Los. The Hsu family owned Oak Maritime. C.S. Koo, his eldest son K.M. Koo and younger sons K.H. and K.W. Koo acquired their first ship under their newly formed Hong Kong company, Valles Steamship, with the assistance of Wheelock Marden, an old Shanghai connection. Their first vessel, the *Ramona* (subsequently renamed *Valles*), was acquired for US\$105,060 at an auction where the rival bids were from their own community; the winning bid was just US\$60 ahead of the second bidder.²⁰

Initial ship purchases were generally older, coal-fired general cargo ships or war surplus ships. Frank Tsao's first vessel was the *Ebonol*, a small bulk carrier built in 1908. One of Wah Kwong's first ships was the *King David*, built in 1941 by the British government as a troopship and subsequently renamed *Hong Kong Venture*. When Y. K. Pao

moved from Shanghai to Hong Kong, he was unable to continue his banking career. He first established an import-export business and, in July 1955, formed World-Wide Steamship Co. Ltd with the acquisition of the *Golden Alpha*, a 27-year-old coal-fired 8,000 dwt general cargo vessel, for £200,000. Within 25 years, over 200 ships sailed under the World-Wide Shipping banner, the largest privately owned fleet ever assembled.

C.Y. Tung had moved to Hong Kong in 1948 and already had business interests there. His deep-sea shipping enterprises, which included bulk carriers and tankers, passenger vessels and the only global containerised carrier to be based, managed, and listed in Hong Kong, grew to rival those of Y.K. Pao.²¹ He also founded China Maritime Transport. Other successful ship owning companies set up later were Fairmont Shipping set up by Robert Ho in 1966; Robert Chen's Grand Seatrade in 1976; Tai Chong Cheang, set up in 1983 by K.H. and K.W. Koo who left Valles and revived their father's old Shanghai company name; Pacific Basin, formed by Chris Buttery and Paul Over in 1987.

Opportunities arose for Hong Kong shipowners with the rebuilding of Japan and the Korean War, both of which created a huge demand for the transportation of raw materials and supplies. Although they were rivals, their common Chinese heritage, and the difficulties each faced in establishing their businesses in Hong Kong brought 11 of these ship-owning entrepreneurs together in 1957 to form the Hong Kong Shipowners Association which represents the Hong Kong maritime industry to this day.

TH, SZ, MC

¹⁸ Stephanie Zarach, Changing Places. The Remarkable Story of the Hong Kong Shipowners, Places (Hong Kong: Hong Kong Shipowners Association, 2007), 49, 106.

¹⁹ Frank W. K. Tsao, My Sixty Years: Turbulent Sailing (Hong Kong: IMC Group, 2010), 15–17.

²⁰ Stephanie Zarach, To Catch a Goose if the World is Large (Hong Kong: Valles Steamship Company, 2017), 97–100.

²¹ 董浩雲除了「海上巨人號」(Seawise Giant) 外, 還擁有第一艘由華人全面擁有、管理及操作,能 橫跨大西洋及太平洋的輪船。

¹⁸ Stephanie Zarach, Changing Places. The Remarkable Story of the Hong Kong Shipowners, Places (Hong Kong: Hong Kong Shipowners Association, 2007), 49, 106.

¹⁹ Frank W. K. Tsao, My Sixty Years: Turbulent Sailing (Hong Kong: IMC Group, 2010), 15–17.

²⁰ Stephanie Zarach, To Catch a Goose if the World is Large (Hong Kong: Valles Steamship Company, 2017), 97–100.

²¹ As well as owning the *Seawise Giant*, C.Y. Tung had also owned the first steamship that was owned, managed, and crewed by Chinese to sail across the Atlantic and Pacific Oceans.



貨物裝卸鐵鈎、存放 「計數籤」的木架與 裝卸工人金屬名牌

CARGO
HANDLING BALE
HOOK, TALLY
STICK BOX AND
METAL PLATE OF
STEVEDORE

香港,20世紀 銅合金、木材 盧洪記 香港歷史博物館借展 Hong Kong, 20th century Copper alloy, wood Lo Hung Kee On loan from Hong Kong Museum of History (HKMM2013.0014.0015-23)

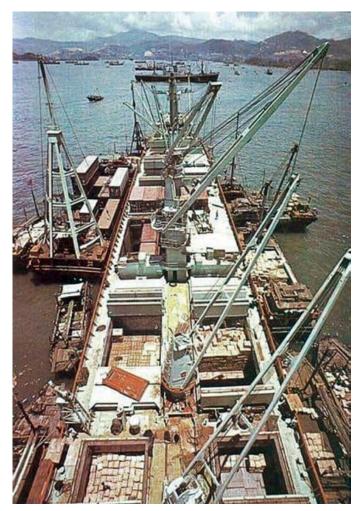
舊式分批散貨裝卸制度要求對裝卸工人 (苦力) 搬運的每一件貨物作檢查。每個裝卸工人都會佩戴一個金屬製的公司名牌以資識別。他們用鐵鈎拉動搬運貨物,並透過在木架中放置「計數籤」來記數。

手提式鐵鈎是在傳統貨輪 (非貨櫃) 上工作的碼頭裝卸工人必備的工具。在裝卸貨物時,他們需要抓取、提舉與搬動各種類型尺寸的布袋、木箱及捆包。他們用手牢牢抓住這些帶有木柄的鐵鈎,將其鈎在箱盒或袋子上以進行搬運。然而,這些鐵鈎會對貨物造成嚴重的損害。隨著1960年代後期貨櫃的引入,這個問題很大程度上得到解決。





6.1 米袋與木箱。 Rice bags and wooden box.

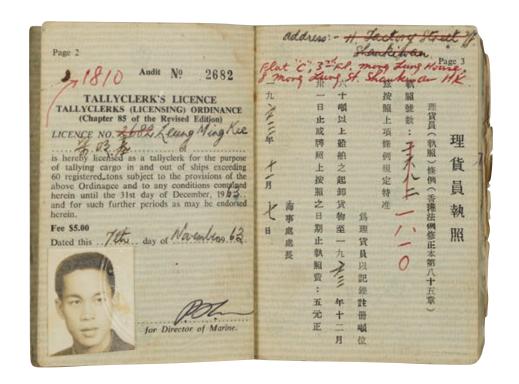


6.2 圖片中清楚顯示1970年代初期的貨艙、駁船和旁邊的貨船中的雜貨,而貨櫃被裝載到一個特殊的貨艙。 An early 1970's cargo liner vessel was being loaded at the midstream

in Hong Kong. It clearly shows the breakbulk cargo in the holds and in the barges and cargo junks alongside. It also shows containers being loaded into a special container hold.

The old system of break bulk cargo handling required keeping a check on every load moved by stevedores (or coolies). Each stevedore carried a metal company plate for identification. Their loads were shifted with bale hooks and "tallied" by depositing a tally stick in a wooden box for every load.

Hand-held cargo bale hooks were the indispensable tools of longshoremen working on conventional (non-containerised) freighters. While loading and discharging cargo they needed to grab, lift, and move various types and sizes of bags, boxes, and bales. These iron hooks with a wooden handle were held firmly by hand and hooked into the box or bag to be moved. However, the hooks caused significant damage to cargo and (in the wrong hands) even to people! This problem was largely resolved with the introduction of containerisation from the late 1960s.



6.3 梁明基先生於1963年考取的理貨員 執照。

Mr Leung Ming Kee's tally clerk licence, 1963.

(HKMM2011.0227.0001)

海旁碼頭的貨物裝卸

香港是一個被群山遮蔽的深水海港,是吸引航運業與 城市繁榮的主要原因。然而,本港的丘陵地貌與高城市 密度,令建造碼頭與倉庫的土地價格非常高昂。由於可供 貨船停靠的碼頭很少,大多數貨船都是寄碇於浮標上, 或停泊在西部港口。

在貨櫃化時代前,每當有貨船到達,一系列的工序隨即展開。貨船會立即被木船、駁船、苦力、工頭、理貨員及代理商團團圍住,對抵達的貨物進行點算卸運,並裝載新的貨物準備啟程。貨物裝卸是一件不停休、非常勞累且報酬低的工作,而且不是保證每天都會有的固定工作。裝卸工人必須每天清早在碼頭門口等候,希望能被選中開工。數百名苦力會被送到停泊在港口的多艘船隻上,在貨艙內面對漫長而艱苦的一天。這項工作有一定的危險性,不僅是因為裝備不足,也因為苦力中普遍存在幫派間衝突以致打鬥情況(詳見圖6.6)。

散裝貨物通常以麻包袋和紙皮箱裝運,因此難免會有貨物溢出,其中許多貨物在無人看管的情況下被偷走, 貴重貨物更經常成為盜竊的目標。這需要機智的幫派頭目 精心策劃,才能在不引起理貨員或船上官員注意的情況 下,將貨物迅速搬運上岸。²²

中流作業

香港的工業化與出口貿易在五、六十年代迅速擴大, 對航運服務與船隻產生巨大的需求。由於絕大多數的船隻 停泊在西部港口,中流作業的效率隨著貿易的增加不斷 成長,而且每週7天全天候運行,效率非常顯著。

為了滿足需求,業界建造了大量無動力的鋼鐵躉船。這些躉船被拖船拖到倉庫與船隻之間。許多木船也被改裝並配備引擎,以便使用者得以自給自足。大多數的木船和躉船都有船家居住。當時的倉庫全面運作,以接收和輸出貨物。這些貨物都屬散裝形式,因此需要數以千計裝卸工人搬運,並需要數百名理貨員清點。那時候的香港有一段繁榮的時光。



6.4 碼頭苦力,20世紀初。 Coolie at wharf, early 20th century.

隨著貨櫃革命於1960年代後期傳入香港,一切都發生變化。貨櫃船需要一座港口,其泊位需配備大型的岸邊起重吊機以吊運貨櫃,以及用於接收與儲存貨櫃的大片寬廣平地。香港政府在1960年代後期,曾劃撥西九龍附近的醉酒灣旁的地皮經營一座專門的貨櫃碼頭。在多家航運財團通力合作下,建造了葵涌貨櫃碼頭,並於1972年竣工。²³起初,碼頭主要為主流的貨櫃船服務,而缺乏處理小型分運船的能力。這些分運船仍舊由大型起重吊船進行貨物裝卸工作。隨著貨櫃碼頭擴大,為分運船提供更多空間,而這種做法在2010年左右結束。

MC, TS, SC

22 祁敏鈿回憶起 1970 年代初,在停靠香港的鐵行輪船公司 (P&O) 雜貨班輪上實習時發生的一件趣事。一個大桶在卸貨時從貨網中掉下來,跌落鋼鐵甲板後裂開,流出濃稠的黑色液體,船上人員都認為是柴油,急忙尋找水槽塞及吸水物料以清理柴油並防止其流入大海。然而,當他們帶著所需物料回來時,大部分的「油」已被清理乾淨。原來他們一離開,許多苦力就馬上拿空的啤酒瓶與和鐵罐從貨館走出來,迅速地將液體舀起。這讓船員們鬆了一口氣,因為海水若被污染,這艘船會被重罰。思想敏捷的苦力們就這樣化險為夷,每人提著好幾瓶「醬油」離船!

57

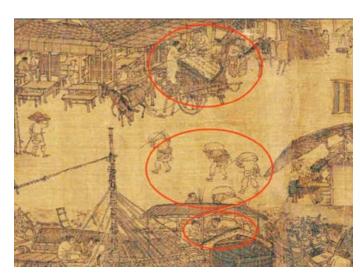
23 T. N. Chui, The Port of Hong Kong (Hong Kong: Hong Kong University Press, 1973), 124–127; Lau Chi-pang, "The Container Terminals," in History of the Port of Hong Kong and Marine Department, Marine Department, Government of the HKSAR, accessed October 29, 2021, https://www.mardep. gov.hk/theme/port_hk/en/index.html.

Cargo Handling on the Waterfront

Hong Kong's sheltered deep harbour is its main attraction for shipping and the genesis of its prosperity. However, the territory's hilly terrain and high urban density made land for building wharfs and godowns very expensive. With few wharfs available for cargo ships to dock, most were secured to buoys or anchored in the western harbour.

Before the era of containers, there was a flurry of activity whenever a cargo ship arrived, so it was immediately surrounded by junks, barges, coolies, foremen, tally clerks, and agents ready to account for the arriving cargo and to load new cargo for departure. Cargo work was continuous, back breaking, and poorly paid. Regular daily work was not guaranteed, as stevedores had to wait at the dock gates early each day, hoping to be chosen. Hundreds of coolies were transported to the many ships at anchor and then faced a long hard day's work inside the cargo holds. The work could be dangerous—not only because of inadequate equipment but also fighting between rival gangs, which was rife among the coolie population (see Fig. 6.6).

Break bulk cargo was often carried in cardboard boxes and hessian sacks, and there were inevitable spillages of goods, many of which found their way into a pocket or two when nobody was looking. Valuable cargo was often also targeted for theft, which required careful planning and much ingenuity on the part of gang leaders to have goods whisked ashore without drawing the attention of the tally clerks or the ships' officers. ²²



6.5 《清明上河圖》畫中描繪的「計數籤」。 Tally sticks depicted in the 12th century painting *Along the River During the Qingming Festival*.

Midstream Operations

Hong Kong's industrialisation and export trade expanded rapidly throughout the 1950s and 1960s, which created a huge demand for shipping services and vessels. With the vast majority of ships moored in the western harbour, the efficiency of the midstream operations that grew alongside the increasing trade and ran around the clock, seven days a week, was remarkable.

Increasing numbers of dumb steel barges were built to cope with the demand. These were towed between the godowns and the ships by tugs. Many wooden junks were also converted and fitted with engines so that they would be more self-sufficient. Most of the junks and many of the barges had families living on them permanently. The godowns were in full operation, receiving and exporting cargo. The cargo was break bulk and thus required thousands of stevedores to manhandle it and hundreds of tally clerks to count it. Hong Kong was bustling with activity.

Everything changed with the container revolution that reached Hong Kong in the late 1960s. Containerships needed a port, with berths equipped with large shore-side cranes to load and unload containers and large adjacent flat areas to receive and store them. The Hong Kong Government allocated Gin Drinkers Bay near West Kowloon to operate a dedicated container terminal in the late 1960s. Various shipping consortiums banded together to build the Kwai Chung Container Terminal, which was completed in 1972. Initially, the terminal adequately served the mainstream container ships but lacked the capacity to handle smaller feeder ships, which continued to be discharged and loaded by large derrick barges. This practice ended around 2010 as the container terminals were enlarged to provide more space for feeder ships.

MC, TS, SC

22 Martin Cresswell recalls an incident while serving as a cadet on a large P&O breakbulk liner ship at anchor in Hong Kong in the early 1970s. A large barrel fell out of a cargo net while being discharged, and split when it landed on the steel deck, spilling a heavy black liquid everywhere. The ship's officers and crew thought the liquid was diesel oil and rushed to find plugs for the scuppers and absorbent material to clean it up and prevent it flowing into the sea. When they returned with the equipment, however, most of the 'oil' had already been cleaned up. As soon as they had left many coolies had appeared out of the holds armed with empty beer bottles and tins and quicky scooped up as much of the liquid as they could. This was a great relief for the officers, as the ship would have received a heavy fine if the sea was polluted. Having thus saved the day, the quick-thinking coolies all left the ship carrying many bottles of soya sauce.

23 T. N. Chui, The Port of Hong Kong (Hong Kong: Hong Kong University Press, 1973), 124–127; Lau Chi-pang, "The Container Terminals," in History of the Port of Hong Kong and Marine Department, Marine Department, Government of the HKSAR, accessed October 29, 2021, https://www.mardep. gov.hk/theme/port_hk/en/index.html.

Coolies In Big West Point Fight

Fourteen coolies belonging to two separate gangs who were engaged in a clash at West Point yesterday morning were each sentenced to one month's imprisonment by Mr Latimer at Central this morning when they pleaded guilty to charges of disorderly conduct by fighting.

Another coolle, Nam Hee, 34, who sustained a fractured arm during the fight and is now detained in Queen Mary Hospital was discharged.

Det. Sub-Insp. K.S. Van attached to Western Police Station said the fight took place at about 9.30 a.m. in the New Market Street area. It was an organised fight between two gangs, the Tungkun and the Sun Wul, over a business dispute The Tungkun gang consisted of about 40 to 50 persons while the Sun Wul gang numbered over 100 men.

During the fight, from bars, bamboo poles and from cargo hook were used as weapons. Fortunately, the Police arrived in time to stop a fight that might have led to serious consequences.

Those ceolies who were convicted this morning were Tse Kau, 31, Tse Chun, 20, Tse Hung, 35, Tse Hang, 28, Tse Lal, 25, Tse Wan, 22, Tse Piu, 20, Tse Sum, 40, Tse Chiu, 39, Tse Kamchuen, 23, Tre Ping, 32, (cf Tungkun). Ho Shul, 31, Au Chi, 24, and Tse Chi, 32 (of Sun Wul).

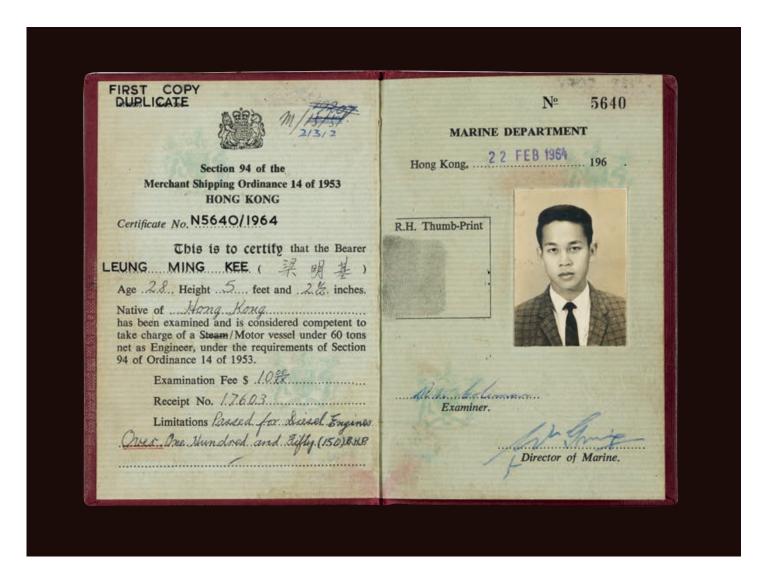
Eighteen bamboo poles, two fron bar and a fron cargo hook were seized by Police at the spot

6.6 《西環大歐鬥中的苦力》, 《德臣西報》,1951年8月9日。 "Coolies in Big West Point Fight", *The China Mail*, August 9, 1951.



香港本地船長適任證書 LOCAL CERTIFICATE OF COMPETENCY (MASTER) HONG KONG

1967年 1967



香港合格證書(工程師) CERTIFICATE OF COMPETENCY (ENGINEER) HONG KONG

1964年 梁明基先生捐贈。 1964 Gift of Mr Leung Ming Kee (HKMM2011.0026.0001-2)

61

梁明基先生於1964年取得合格證書(工程師),1967年取得本地船長適任證書,1963年及1978年分別取得理貨員執照。這些證書充分反映當時香港海員的勤奮努力與堅毅不拔的精神。

Mr Leung Ming Kee received his Certificate of Competency (Engineer) in 1964, his Local Certificate of Competency (Master) in 1967 and Tally Clerk's Licenses in 1963 and 1978. These certificates portray the diligence and spirit of perseverance among Hong Kong seamen in this period.

香港海員

蜑家漁民可說是香港水域的第一批海員,他們擁有 千百年來操作帆船的經驗。直到二戰之前,他們的技能 都是透過船上實踐傳承,毋須海事處的證書或其他形式的 審核。當香港政府決定大量使用引擎推動的漁船,能為 快速增長的人口帶來更多漁獲,於是取得船長與工程師 認證的需求與日俱增。香港政府在香港仔設立一所工業 中學,提供必要的培訓,當中包括識字。這所學校取得 巨大的成功,成千上萬的漁民在此接受了培訓。²⁴

從本地海員梁明基先生的執照證書中,可以瞭解當時的認證途徑。1963年,他取得理貨員執照,1964年取得合格證書(工程師),1967年取得本地船長適任證書,1978年再次取得理貨員執照。

隨著香港的航運業在六十至七十年代持續發展,遠洋輪船上工作的報酬比在岸上的同級工作高很多,因此大量香港海員選擇在遠洋輪船工作。這些海員具備相當好的外語能力及豐富經驗,為香港的繁榮與國際視野奠定了基礎。香港於1964年建立現代化的船員招聘制度後,在海事處登記的香港海員人數,達到80,000多人的高峰。當時,包括環球航運公司及東方海外貨櫃航運公司(OOCL)在內的許多香港著名航運公司,都選擇聘用香港海員。²⁵



7.1 船長制服,20世紀。 Captain's uniform, 20th century. (HKMM2013.0067.0012)



7.2 船長醫療箱內的聽診器。馮汝珍船長特藏。 Stethoscope from ship captain's medical chest. Captain Fung Yu Chun Collection. (HKMM2006.0154.0540)



7.3 航海學校和無線電訓練課程使用的六分儀,1968年。 Sea school and radio course sextant, 1968. (HKMM2008.0222.0003)





7.4 商船長官帽徽兩枚。馮汝珍船長特藏 Two merchant navy officer's cap badges. Captain Fung Yu Chun Collection. (HKMM2006.0154.0543-544)

隨著香港經濟在1980年代持續增長,以及其他職業的發展,海員與陸上工作之間的薪酬差距逐漸縮小。同時,由於航海市場競爭激烈,加上航運公司嚴格控制開支,導致香港轉而從菲律賓、印度、中國及印尼等國家招聘海員,從而造成香港的海員人數自1980年代中期後驟降。²⁶

HL, SC, MC

| 1956年船上與陸上薪資比較 | 27 |
|----------------|-----------------------|
| 工作 | 正常平均薪資 |
| 船上一水手 | 每月284港元 |
| 陸上一半熟練工人 | 每天5-8港元(每月≤150-240港元) |

| | 現今船上與陸上薪資比較 | |
|---|-------------|------------|
| | 工作 | 正常平均薪資 |
| • | 船上一水手 | 每月10,000港元 |
| | 陸上一工廠工人 | 每月15,000港元 |

- 24 Yip Yan Pik, "Development of the Career of Seafarers in HK," *Maritime Business Insight* 4, no. 2 (April 2016),: 3.
- 25 "Training of Young Seamen: New Buildings of Hongkong Sea School Opened Big Demand for Local Boys'," South China Morning Post, 11 May, 1956, p. 8.
- 26 Yip Yan Pik, "Development of the Career of Seafarers in HK," Maritime Business Insight 4, no. 2 (April 2016),: 4.
- 27 Annual Report 1956 (Hong Kong: Government Printer, 1956), p. 40.

Hong Kong Seafarers

The Tanka fishermen were the first seafarers in Hong Kong waters, with hundreds of years of experience in handling sailing junks. Until the Second World War, skills were passed down by training on the job and no certificates or other forms of approval were required from the Marine Department. When the Hong Kong government decided that motorised fishing boats were needed to bring in more fish for the rapidly growing population, a demand grew for certified masters and engineers. A technical school was set up in Aberdeen to provide the required training, which included literacy. The school was a great success and thousands of fishermen were trained there. ²⁴

The documents of Mr Leung Ming Kee, a local seafarer, illustrate the certification path. Starting as a trainee at the school, he obtained a Certificate of Competency (Engineer) in 1964, a Local Certificate of Competency (Master) in 1967, and Tally Clerk's Licenses in 1963 and 1978.

As Hong Kong's maritime industry continued to develop in the 1960s and 1970s, work on ocean-going vessels was generally much better paid than equivalent work onshore, which led to a good supply of seafarers from Hong Kong. These seamen, with foreign language skills and extensive travel experience, helped to lay the foundations for Hong Kong's prosperity and international outlook. The number of Hong Kong seafarers registered with the Marine Department reached a peak of more than 80,000 after the establishment of a modernised and centralised seafarer recruitment system in 1964. Many prominent Hong Kong shipping companies, including the World-wide Shipping Group and OOCL were employing Hong Kong seafarers at that time.²⁵



7.5 無線電定向儀。 Radio direction finder. (HKMM2012.0017.0001)



7.6 全球定位系統(GPS)接收器。 GPS receiver. (HKMM2006.0079.0001)

However, as the Hong Kong economy kept growing during the 1980s and other occupations opened up, the salary gap between seafarers and onshore jobs narrowed. Meanwhile, the highly competitive shipping markets and the need to tightly control expenditure led to the recruitment of seafarers from other countries, such as the Philippines, India, mainland China, and Indonesia, resulting in a sharp decline in the number of Hong Kong seafarers from the mid-1980s.²⁶

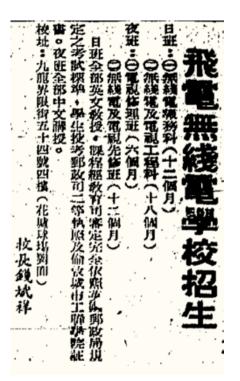
| Here is a salary | comparison betweer | n onboard and on | land from 1956. ²⁷ |
|--------------------|--------------------|---------------------|-------------------------------|
| Tiere is a saiding | companioon between | i one out a unia on | Idila IIoili Iyoo. |

| Job type | Average pay in normal periods |
|--------------------------------|-----------------------------------|
| Onboard - sailors | \$284 / month |
| On land - semi-skilled workers | \$5–8 / day (≤ \$150-240 / month) |

Salary comparison between onboard and on land, today

| Job type | Average pay in normal periods |
|---------------------------|-------------------------------|
| Onboard - sailors | \$10,000 / month |
| On land - factory workers | \$15,000 / month |

HL, SC, MC



7.7 無線電訓練課程招生廣告。 《工商日報》,1966年7月18日。 Advertisement for a radio training course. *The Kung Sheung Daily News*, July 18, 1966.

²⁴ Yip Yan Pik, "Development of the Career of Seafarers in HK," *Maritime Business Insight 4*, no. 2 (April 2016), 3.

^{25 &}quot;Training of Young Seamen: New Buildings of Hongkong Sea School Opened Big Demand for Local Boys'," South China Morning Post, 11 May 1956, p. 8

²⁶ Yip Yan Pik, "Development of the Career of Seafarers in HK," Maritime Business Insight 4, no. 2 (April 2016), 4.

²⁷ Annual Report 1956 (Hong Kong: Government Printer, 1956), p. 40.



摻繒漁船模型 MODEL OF THE FISHING JUNK *CHAAM TSUNG* 木製 Wood (HKMM2008.0131.0001)

掺繪是20世紀初珠江三角洲常見的一種漁船。漁船屬混合型,船體結構結合了完整框架的西方體系以及中國船隻的橫向實心框架。甲板下面的船體形狀更偏向西式,船頭鋒利。甲板平面保留中國傳統的方尾。圖中的模型與原型一樣,乃根據肉眼觀察和傳承而來的知識於1996年至1997年間製成,製作者是鴨脷洲的吳十七先生。其家族幾代以來都是香港造船與漁業界的一員。

The *Chaam Tsung* is an example of a type of fishing junk used in the Pearl River Delta in the early twentieth century. These junks were hybrids, with a basic hull construction combining the fully framed Western system with the transverse solid framing of Chinese boats. The hull shape below the deck was more Western in form, with a sharp bow. The deck plan retained the traditional Chinese squared ends. This model, made by eye and drawing on inherited knowledge, was made in 1996 to 1997 just as its full-sized original would have been by Mr. Ng Sup Chat of Ap Lei Chau, whose family has been part of Hong Kong's boatbuilding and fishing community for many generations.



養活香港人

摻繒漁船為20世紀初,於珠江三角洲常見的一種混合結構漁船。其船體結構,是結合了西方完整框架結構以及中國船隻橫向實心框架所組成。甲板下面的船體形狀更偏西式,船頭鋒利。甲板平面則保留了中國傳統的方尾。

隨著1950年代香港人口激增,加上農業資源有限,香港政府必須解決如何養活市民的問題。轉向海洋並擴大漁業,有助確保香港居民能有充足的新鮮食物供應。隨著捕魚船隊日益成熟,香港漁民能夠進一步承擔更大的風險,深入南海水域作業以增加漁獲量。

香港漁業在1950年代取得成功的關鍵,是基於漁船的機械化、批發系統與設施的改進、技術的提升以及私人與政府之間貸款的設立。漁業的繁榮亦促進了造船業的發展。在1950年代,香港仔、鴨脷洲及黃竹坑擁有50多家造船廠,每家都有超過100名員工。

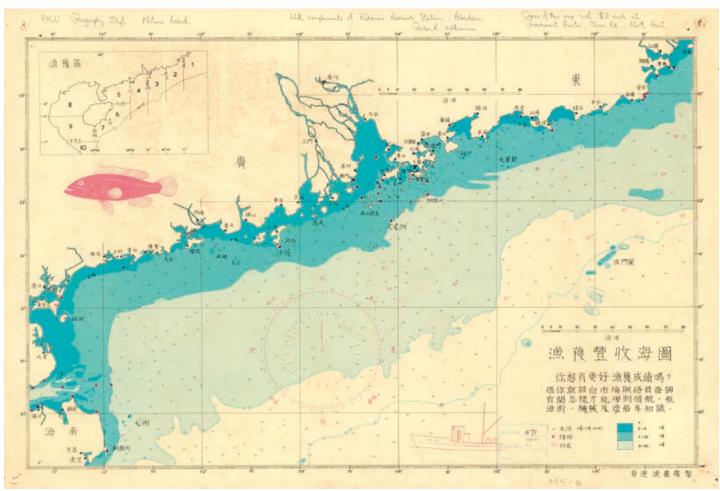
配備引擎的新型機動漁船讓漁民可以航向更遠的海域捕魚。停泊在香港仔的漁船數量幾乎增加一倍,從1950年的1,056艘增加到十年後的2,524艘。漁民人數也從1952年的10,456人激增至1960年的19,728人。

MC, HL, TH

Feeding Hong Kong

The model of the junk *Chaam Tsung* shows a hybrid structure that was common in the Pearl River Delta in the early twentieth century. The basic hull construction was a combination of the fully framed Western system and the transverse solid framing of Chinese boats. The hull shape below the deck was also more Western in form, with its sharp bow. The deck plan retained the traditional Chinese squared ends.

With the dramatic rise in Hong Kong's population in the 1950s and the limited agricultural resources, the problem of how to feed the populace had to be addressed. Turning to the sea and expanding the fisheries industry helped to ensure a sufficient supply of fresh food to Hong Kong. As the fishing fleet became more sophisticated, Hong Kong's fishermen were able to venture further out into the South China Sea and increase the size of their catches.



8.1 香港漁農處繪製顯示本地漁場的地圖,約1960年製作。 Map showing the fishing grounds of the area. Produced by AFCD, c. 1960.

The driving forces behind the success of the Hong Kong fishing industry in the 1950s were the mechanisation of fishing vessels, the improvement of wholesale systems and facilities, technological advances, and the establishment of private and public loans. The prospering fisheries fostered the development of fishing vessel construction in the shipbuilding industry. During the 1950s, Aberdeen, Ap Lei Chau, and Wong Chuk Hang hosted over 50 shipyards, each of which had over a hundred employees.

The new motorised fishing boats allowed fishermen to venture further out for their catches. The number of fishing boats moored in Aberdeen more than doubled from 1,056 in 1950 to 2,524 a decade later, and the number of fishermen surged from 10,456 in 1952 to 19,728 in 1960.

MC, HL, TH



8.2 位於香港仔的現代化香港機動拖網漁船。 Modern motorised Hong Kong fishing stern trawler in Aberdeen.



「香港製造」工業產品 "MADE IN HONG KONG" INDUSTRIAL PRODUCTS 香港海事博物館藏品。 Hong Kong Maritime Museum Collection

香港製造的消費品包括紡織品、假髮、電子設備(包括收音機、相機與光學設備)、電筒及乾電池塑膠玩具,涵蓋日常生活的各個方面。這些物品將「香港製造」的品牌廣泛傳揚至東亞、澳洲、北美洲及歐洲等地。

這裡展示的是1970年代紅A牌水晶塑膠賀年糖果攢盒,是由星光實業有限公司製造。星光實業在1949年只是一家小型家族企業,及後發展成家喻戶曉的標誌性品牌。星光實業多年來積極參與香港國際工業出品展銷會。

The scope of consumer products made in Hong Kong ranged across textiles, hairpieces, electronic appliances (including radios, cameras, and optical appliances), torches, and battery-powered plastic toys, covering many aspects of daily life. These objects spread the "Made in Hong Kong" brand widely across East Asia, Australia, North America and Europe.

The 1970s "Red A" plastic candy tray exhibited here was manufactured by Star Industrial Co., Ltd, which developed from a small family business in 1949 into an iconic brand that is still found in almost every local household today. The company was an active participant in the Exhibition of Hong Kong Products for many years.



「香港製造 |

作為一個既缺乏製造業所需的自然資源,又欠缺龐大國內消費市場的小 地方,香港製造業得以在五、六十年代蓬勃發展,完全仰賴高效可靠的原材 料進口及製成品出口。因此,香港航運業與港口在此期間的增長,對於促進 本港經濟的快速發展至為重要。從1960年代到1980年代,香港的本地生產總值 (GDP) 增長是全球最高的地區之一,平均每年增長近10%。

二戰後,來自中國內地的大量移民,為企業家與勞動人口提供了發展新 產業的機會。而香港作為一個穩定的東方基地,吸引了不少技術知識的傳入和 投資。

在政府提供廠房、住屋與重要基礎設施的支持下,湧現許多配備現代化機 械以製造各種商品的工廠。1947年,香港的註冊工廠有961家,共僱用了47,000 名工人。直到1959年,全港共有4.541家工廠,員工總人數超過170,000人。香港 製造的產品總值達22.8億港元,佔全港出口總值逾70%。28 1960年後,各式各樣 的工業如雨後春筍般湧現,包括生產紡織品、服裝、塑膠產品、電子產品、 手錶和玩具。29

玩具業是由香港成熟的塑膠業演變而來。1960年,香港有204家工廠出口 玩具,總值1.15億港元。1963年,香港已經超越德國,成為僅次於日本的世界 第二大玩具出口地。到了1970年,香港製造的玩具佔美國總進口玩具的四分之 一。香港更於1970年代中期取代日本,成為全球最大的玩具出口地,1977年 出口的玩具總值為30億港元,1979年為50億港元,1982年更達至91億港元。 香港的玩具產量在1986年達到頂峰,共有 2,264家玩具工廠,僱用超過56,000名 員工。



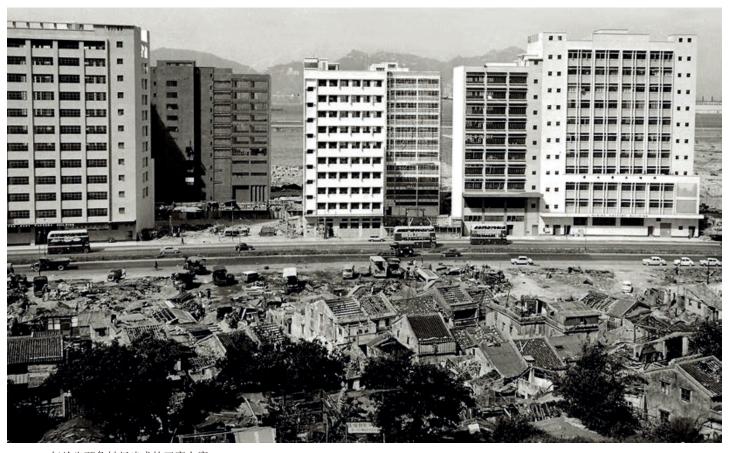
9.1 1960年代家庭式經營的製衣工場。 Family-run garment workshop, 1960s.

香港商品在1948年英國工業博覽會中的英聯邦國家展區展出,30當時佔香港 生產的商品總出口量10%。這個數字在1962年提升至25%, 31 這歸功於香港的 輕工業產品種類繁多、品質迅速提高及價格具競爭力有關。32

除了製造業的繁榮,香港也在這一時期發展成為金融中心。銀行為區域內 政府提供貸款,其股票市場與黃金市場也是全世界最活躍的市場之一。

1978年,鄧小平提出中國經濟改革開放政策,提供較低廉的勞動力與降低 土地成本,香港的輕工業旋即轉移至中國內地。今天的香港已幾乎沒有製造 業,經濟以服務業為主。然而,中國不斷增長的外貿出口仍然是通過香港進行 的,使航運業及港口受益匪淺。在20世紀的最後25年間,香港作為一個重要的 轉口港,將中國不斷成長的進出口貿易引向世界各地。

MC, LC, TH, TS



9.2 1966年於牛頭角村新建成的工廠大廈 New factory buildings rising above the villages of Ngau Tau Kok, 1966.

28 Chui, The Port of Hong Kong, 103.

- 29 Liu Shuyong, "Hong Kong: A Survey of its Political and Economic Development over the Past 150 Years," The China Quarterly 151 (1997), 589, https://doi.org/10.1017/S030574100004683X.
- 30 Stephen W. K. Chui, K. C. Ho, and T. L. Lui, "State Industry Relations," in City States in the Global Economy: Industrial Restructuring in Hong Kong and Singapore (Boulder: Westview Press, 1997).
- 31 同上註。
- 32 同註 17。

"Made in Hong Kong"

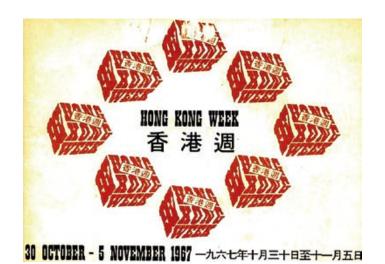
As a small place lacking both the natural resources for manufacturing and a large domestic market to consume the resulting goods, the vibrant growth of Hong Kong's manufacturing economy in the 1950s and 1960s relied completely on the efficient and reliable import of raw materials and the export of finished goods. The growth of Hong Kong's shipping industry and port during this period was therefore essential in facilitating its rapid economic development. From 1960s to 1980s, the growth in Hong Kong's GDP was amongst the highest in the world, averaging almost 10% per annum.

After the Second World War, mass migration from mainland China provided the entrepreneurs and labour to establish and operate new industries. As a stable enclave in the East, Hong Kong also attracted both technical knowhow and investment.

Many factories equipped with modern machinery to produce a wide variety of commodities appeared, supported by the government's provision of buildings, housing, and vital infrastructure. In 1947, there were 961 registered Hong Kong-based factories employing 47,000 workers. In 1959, there were 4,541 factories employing over 170,000 people and Hong Kong manufactured products to the value of HK\$2.28 billion, comprising over 70% of the city's total exports.²⁸ After 1960, a wide range of industries sprang up, producing textiles, garments, plastics, electronics, watches, and toys.²⁹

The toy industry evolved from Hong Kong's established plastics industry. By 1960, there were 204 factories in Hong Kong exporting toys worth HK\$115 million. By 1963, Hong Kong had overtaken Germany to sit behind Japan as the world's second-largest toy exporter. By 1970, it was the source for a quarter of all toys imported into the USA. Hong Kong overtook Japan as the world's biggest toy exporter in the mid-1970s, shipping toys worth HK\$3 billion in 1977, HK\$5 billion in 1979 and HK\$9.1 billion in 1982. Toy production in Hong Kong peaked in 1986 with 2,264 toy factories employing over 56,000 people.

Hong Kong commodities were displayed in the Commonwealth section of the 1948 British Industries Fair.³⁰ Hong Kong exported 10% goods of its total export volume in 1948; this rose to 25% in 1962,³¹ as the city gradually became world famous for its range of light industrial products and their rapidly improving quality at competitive prices.³²



9.3 1967年香港週活動節目表。 Programme of Events, Hong Kong Week, 1967.



9.4 紅A牌香港週紀念塑膠杯,1967年,型號 465。 "Red A" Hong Kong Week cup, 1967, no. 465.

In addition to its manufacturing boom, Hong Kong also developed into a financial centre in this period. Its banks made loans to governments in the region and its stock market and gold markets were among the world's most active.

When Deng Xiaoping opened up the Chinese economy in 1978, providing access to its lower labour and land costs, Hong Kong's light manufacturing industry rapidly relocated to the mainland. Today, Hong Kong's economy is dominated by service industries with little manufacturing. However, many of China's growing exports were routed through Hong Kong, benefitting the shipping and ports sectors. In the last quarter of the twentieth century, Hong Kong acted as a key entrepôt, channelling a significant part of China's growing import and export trade to the rest of the world.

MC, LC, TH, TS





9.5 1958年與1968年刊登於香港國際工業出品展銷會小冊子上的航運公司及造船廠廣告。 Advertisements for shipping and shipbuilding companies posted on booklets of the exhibition of Hong Kong Products, 1958 and 1968.

28 Chui, The Port of Hong Kong, 103.

- 29 Liu Shuyong, "Hong Kong: A Survey of its Political and Economic Development over the Past 150 Years," *The China Quarterly* 151 (1997), 589, https://doi.org/10.1017/S030574100004683X.
- 30 Stephen W. K. Chui, K. C. Ho, and T. L. Lui, "State Industry Relations," in *City States in the Global Economy: Industrial Restructuring in Hong Kong and Singapore* (Boulder: Westview Press, 1997).
- 31 Ibid.
- 32 Ibid.



《六月新娘》 電影錄影帶 VIDEO TAPE OF IUNE BRIDE 編劇:張愛玲 香港 1960年 Script by Eileen Chang Hong Kong 1960

國語電影《六月新娘》,由國際電影懋業有限公司出品,其製作涉及多位從中國內地移居香港的知識分子與名人,包括著名女演員葛蘭及中國知名小説家兼編劇張愛玲。《六月新娘》是張愛玲編劇的八部香港電影中的第四部。

華語電影中心轉移到香港,並向東南亞國家出口電影,在香港成為了新興的行業, 更在龐大的華僑與海外華人圈之間形成 一個非常強大的區域性及國際性娛樂產業 網絡。藉著鎖定在東南亞與西方國家的 龐大出口市場,香港逐漸發展成全球最大 的國語、粵語及其他中國語言、方言的 電影作品出口地之一。

香港是此重要國際產業的重心,也見證了 由海上貿易與移民流動所帶來的海外華人 網絡的蓬勃發展。 The Mandarin movie *June Bride* was released by the Motion Picture & General Investment Co., Ltd. The production involved many intellectuals and celebrities who had relocated from China to Hong Kong, including the famous actress Grace Chang (Ko Lan) and the important Chinese novelist and screenwriter Eileen Chang. *June Bride* was the fourth of the eight Hong Kong films scripted by Eileen Chang.

These events represented a definitive shift in the centre of Chinese-language cinema to Hong Kong. The export of films to Southeast Asian countries also became big business in Hong Kong. A very strong regional and international maritime entertainment industry network was formed, especially across the large Chinese expatriate and overseas Chinese communities. Serving the enormous export markets in Southeast Asia and Western countries, Hong Kong gradually developed into the biggest exporters of film productions in Mandarin, Cantonese, and other Chinese languages and dialects around the world.

Hong Kong was the international capital of this important international industry, which was a significant manifestation of the burgeoning network of overseas Chinese resulting from maritime trade and migration flows.

電影業

在香港拍攝電影的移民

1940年代後期,移居香港的中國內地民眾中,有不少政要、大亨、船東、實業家、名人、音樂家、演員、學者、醫生、教師以及許多受過良好教育的難民。他們大多從上海、天津、廈門及中國其他港口乘船抵港。數以千計的移民中,有些身無分文,有些則有資本投資或已經在香港投資。他們利用自己的才能、生活方式,在多方面促進香港發展,並渴求恢復他們以往的社會地位。

這股移民潮為香港帶來的其中一項改變,便是催生了 以國語電影為形式的新娛樂產業。國際電影懋業有限公司 是一家在香港成立的公司,總部設在新加坡,長城電影 製片有限公司在1950年代後期同樣享譽盛名。這些公司與 總部位於新加坡的邵氏父子有限公司在電影製作與發行 業務上展開競爭。

透過這些公司,華語電影的中心轉移到香港,香港 逐漸發展成全球最大的國語、粵語及其他中國語言和方言 的電影作品出口地,為東南亞及西方國家的華僑及華人 圈提供娛樂。由此可見,一個非常強大的區域性及國際性 的娛樂產業網絡因而產生。

國語電影《六月新娘》於1960年由國際電影懋業有限公司出品,製作涉及多位從中國內地移居香港的名人和知識分子。劇本由知名小説家兼編劇張愛玲於1960年撰寫。她在1952年從上海搬回香港,後於1955移居美國。《六月新娘》便是她編劇的八部香港電影中的第四部。該電影的女主角也是來自上海的移民——著名女演員葛蘭。33

電影中的香港

除了本地製作外,香港一直是許多國際電影取景的 地方。電影製作人均被維多利亞港以城市天際線為背景的 標誌性景觀所吸引。

1952年,朗奴·列根與荷里活女星朗達·佛萊明主演了電影《香港盜寶案》。由威廉·荷頓主演的浪漫愛情故事,兩部最著名電影《生死戀》(1955)及《蘇絲黃的世界》(1960),均以維多利亞港和天星小輪作為背景。

世界知名的間諜占士·邦曾三度造訪香港。《鐵金剛勇破火箭嶺》(1967)中,辛·康納利飾演的007在香港被「暗殺」,在維多利亞港舉行海葬。由羅渣·摩亞主演的《鐵金剛大戰金槍客》(1974),也以香港海港為特色,片中伊利莎白皇后號(Queen Elizabeth)郵輪的殘骸所在,正是現在的九號貨櫃碼頭。皮雅斯·布士南在《新鐵金剛之不日殺機》(2002)中飾演的占士·邦,從一艘停泊在維多利亞港的醫療船逃脱,當他從漆黑的海面浮出來時,看到的是香港天際線的壯麗景色。

HL, LC, TH



10.1《六月新娘》電影海報。 Film poster: *June Bride*.



10.2《生死戀之纏綿》華僑日報,1955年11月7日。 The Movie "Love Is a Many Splendored Thing", Wah Kiu Yat Po, November 7, 1955.

33 《情場如戰場 開鏡在本週》,《工商晚報》, 1956 年 11 月 13 日;New World Encyclopedia, s.v. "Eileen Chang," accessed 18 January 2022, www. newworldencyclopedia.org/entry/Eileen_Chang; Tin Wan Lum, 《張愛玲:電懋劇本集》,Hong Kong Film Archive, Leisure and Cultural Services Department, November 11, 2009, https://www. lcsd.gov.hk/CE/CulturalService/HKFA/zh_TW/ web/hkfa/rp-tv-film-veterans-06-1.html.

The Motion Picture Industry

Migrants Making Movies in Hong Kong

Migrants to Hong Kong in the late 1940s included dignitaries, tycoons, shipowners, industrialists, celebrities, musicians, actors, scholars, doctors, teachers, and many other well-educated refugees. They mostly travelled by sea from Shanghai, Tianjin, Xiamen, and other ports in China. Some of the thousands of migrants were penniless, having left everything behind, while others had capital to invest or had already made investments in Hong Kong. They transformed Hong Kong in many ways with their talents, lifestyles, and hunger to establish their previous standing in the society.

One of the crafts brought to Hong Kong by this wave of migrants led to the blooming of a new entertainment industry in the form of Chinese-language cinema. Motion Picture & General Investment Co. Ltd., a company established in Hong Kong with its headquarters in Singapore, and Great Wall Movie Enterprise Ltd were especially well-known in Hong Kong in the late 1950s. They competed in the film production and distribution business with the Singapore-based Shaw & Sons Ltd.

Through these companies, the centre of Chinese-language cinema shifted to Hong Kong Hong Kong gradually became the biggest exporter of film productions in Mandarin, Cantonese, and other Chinese languages and dialects around the world, serving the enormous markets of large Chinese expatriate and overseas Chinese communities in Southeast Asia and Western countries. An extensive regional and global entertainment industry network was therefore formed.

The Mandarin movie *June Bride* was released by the Motion Picture & General Investment Co., Ltd. Its production involved several intellectuals and celebrities who had relocated to Hong Kong from mainland China. The script was written in 1960 by the important novelist and screenwriter Eileen Chang, who moved back to Hong Kong in 1952 and then to the United States in 1955. It was the fourth of the eight Hong Kong films that she scripted. Another migrant from Shanghai, the famous actress Grace Chang (Ko Lan), featured in the film.³³

Hong Kong in the Movies

In addition to its home-grown productions, Hong Kong has been the setting for many international films, with filmmakers especially drawn to the iconic setting of Victoria Harbour with the city's skyline as a backdrop.

In 1952, Ronald Reagan starred in the movie *Hong Kong: Port of a Thousand Dangers* together with Hollywood starlet Rhonda Fleming. Two of the most famous movies set in Hong Kong are *Love is a Many Splendored Thing* and *The World of Suzie Wong*, both of which used the backdrop of the harbour and the Star Ferry to set the scene for romantic storylines starring William Holden.

The world's most famous secret agent, James Bond, has paid three visits to Hong Kong. You Only Live Twice (1967) features Sean Connery as 007 being "assassinated" in Hong Kong and given a naval burial at sea in the harbour. The Man with the Golden Gun (1974), starring Roger Moore, also features the harbour, with the wreck of the cruise liner Queen Elizabeth at what is now Container Terminal 9. With Pierce Brosnan in the role in Die Another Day (2002), Bond escapes from a hospital ship moored in the harbour, affording a great view of the Hong Kong skyline as he emerges from the murky water.

HL, LC, TH



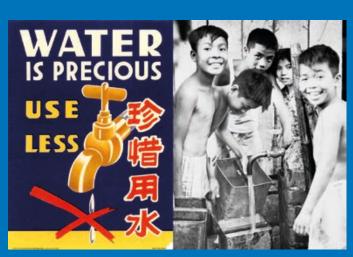
10.3 《六月新娘》電影劇照。 Film still: *June Bride*.

33 "情場如戰場開鏡在本週," The Kung Sheung Evening News, November 13, 1956; New World Encyclopedia, s.v. "Eileen Chang," accessed 18 January 2022, www.newworldencyclopedia. org/entry/Eileen_Chang; Tin Wan Lum, "張愛玲: 電懋劇本集," Hong Kong Film Archive, Leisure and Cultural Services Department, November 11, 2009, https://www.lcsd.gov.hk/CE/CulturalService/HKFA/zh_TW/web/hkfa/rp-tv-film-veterans-06-1 html





在人口增長、資金匯集、工業勃發、海外消費市場需 電水急增等因素影響下,香港的發展在1960年代達到 高峰。港府對工業發展採取不干預政策,但對都市規劃與 基礎建設卻頗見用心,主導了觀塘、新蒲崗、新界(特別是荃灣、沙田、大埔、屯門等新市鎮)各地區的工業 發展。香港的基礎建設開發包括公路、隧道、集體運輸 系統、航空與港口設施、水庫等項目;社會福利的改善則 包括公共房屋、學校和醫院的興建。香港人口在1960年 達到300萬,1979年達到500萬,其中半數未滿25歲,這些 基礎建設不可或缺。而在1973年全球石油危機爆發之前, 香港的本地生產總值(GDP)每年平均增長達 6.5%。



(1) 1963年香港政府「珍惜用水」宣傳 海報及兒童於公眾街喉排隊輪候食水的 照片。

Poster: "Water is precious, use less" Hong Kong government, and photo of children queuing up for drinking water from public standpipe, 1963. 基於低税率、自由貿易、資金自由流動、勞工法例寬鬆等因素,推動了香港進出口與航運業的快速成長。1960至1970年間,香港的出口貨物總噸數由1,800萬噸增至2,800萬噸,而本地生產總值也由13億美元增至38億美元。參與大型國際貿易展覽亦使香港的名聲更加響亮。

隨著香港的發展,經濟型態產生轉變。一些產業遷移到 更具競爭力的地區,正好釋出土地供都市發展之用。先前 屬於船塢的土地,如太古船塢和黃埔船塢位處宜人的海濱 地區,已被重新開發成住宅、商業和零售用地。香港經濟 轉型,躋身成為「亞洲四小龍」之一。

1973年石油危機、東亞各國製造業的強勢競爭,和1978年中國改革開放等因素影響下,香港的經濟再一次發生鉅變,由製造業中心轉型成為智能與金融中心。及至1981年,香港的金融服務業佔本地生產總值已超越製造業。

HL, SC



(2) 從九龍眺望維多利亞港及香港島,1971年。 View of the Victoria Harbour and Hong Kong Island from Kowloon, 1971.

ong Kong's development peaked in the 1960s with the combination of a growing population, capital investment, thriving industry, and a strong overseas demand for consumer goods. The government took a hands-off approach to industrial planning but a hands-on approach to urban planning and infrastructure, steering the development of industrial estates in Kwun Tong, San Po Kong, and new towns in the New Territories, notably Shatin, Tai Po, and Tuen Mun. Hong Kong's infrastructure development included roads, tunnels, mass transits, aviation and port facilities, and reservoirs, and its social welfare improvement included public housing, schools, and hospitals. These were needed to cater to a population that had grown to 3 million by 1960 and 5 million by 1979, half of which was under the age of 25. GDP growth averaged 6.5% per year until the onset of the oil crisis in 1973.

Low taxes, free trade, free capital movement, and relaxed labour laws turbocharged the growth of exports, imports, and shipping. Export tonnage increased from 18 to 28

million tonnes between 1960 and 1970, while Hong Kong's GDP rose from 1.3 billion to 3.8 billion USD. The branding of Hong Kong was further established through its presence at international trade fairs.

As Hong Kong developed, its economy evolved and changed. Some industries moved to more competitive locations, releasing land for urban development. Former shipyard properties such as the Taikoo and Whampoa dockyards, which occupied attractive waterside areas, were redeveloped into residential, commercial, and retail properties. As a result of the economic transformation of the city, Hong Kong became one of the four countries known as the Asian Tigers.

The combined challenges of the oil crisis in 1973, severe manufacturing competition from East Asian countries, and China's economic reforms in 1978 led to another big change in Hong Kong's economy, transforming it from a manufacturing hub into an intellectual and financial centre. By 1981, the financial services sector had surpassed manufacturing in its share of the city's GDP.

HL, SC



(3) 1950 年代,乘客在穿越維多利亞港時閱讀 晚報。這是一個幾十年來的標準旅行方式, 直到過海隧道建成。

Passengers reading the evening newspaper while crossing Victoria Harbour in the 1950s. This was the standard mode of travel for decades until the cross-harbour tunnel was built.



天星小輪售票處的旋轉閘門 STAR FERRY TURNSTILE

20世紀 木與金屬材料 天星小輪有限公司捐贈。 20th century Wood and metal Gift of the Star Ferry Company Ltd (HKMM2011.0068.0002)

這個用木和金屬製作的旋轉閘門是過去天星小輪乘客支付船費的地方。直到2014年6月以前,乘客只能把正確金額的硬幣投入旋轉門才能通過。現時安裝了新式入閘機,乘客可使用八達通卡或者透過自動販賣機購買代幣來支付船費。1902年,從尖沙咀到中環航線天星小輪上層的頭等艙船費為港幣1毫5仙,下層的露天二等艙則是1毫。而目前頭等艙和二等艙的平日收費分別為港幣3.2元及2.6元。

This wood and metal entrance gate acted as a payment till for people boarding the Star Ferry. Until June 2014, passengers could still pay by inserting the exact number of coins into the turnstile tray. Now, with the installation of mechanical ticketing turnstiles, passengers can only use Octopus cards or Jetons, which can be purchased at a self-service vending machine, to pay for the ride. In 1902, Star Ferry passengers who wished to travel in the first-class upper deck paid 15 cents, while the second-class open-air lower deck cost 10 cents. Today the equivalent fare for Tsim Sha Tsui to Central is \$3.2 for first-class, and \$2.6 for second-class on weekdays.



天星小輪模型,是黃埔船塢在 1956 年至 1965 年之間建造的 11 架柴油動力天星 小輪之一。 Model of Star Ferry. One of the eleven diesel powered Star Ferries built by the Hongkong and Whampoa Dockyard Co. between 1956 and 1965. (HKMM2007.0113.0001)

讓香港靈活運作

在1972年香港海底隧道及1980年第一條跨海鐵路隧道通車之前,市民渡海的唯一方法就是乘搭公共渡輪或私營的「嘩啦嘩啦」電船、街渡或舢舨。其中著名的天星小輪提供的渡海運輸服務價格最低廉,每日的載客量也最多。

直至2014年6月,這個用木和金屬製成的旋轉閘門一直設於碼頭向渡輪乘客收費,乘客必須投入足夠的硬幣才能通過旋轉門。現時渡輪公司安裝了機械式入閘機,乘客可使用八達通卡或者透過自動販賣機購買代幣付款。1902年,天星小輪從尖沙咀到中環航線上層的頭等艙票價為1毫5仙,下層的露天二等艙則是1毫。³⁴ 現時頭等艙和二等艙的平日收費分別為\$3.2和\$2.6。

1950年代,天星小輪每年的載客量介乎3,400萬至3,800萬之間。³⁵ 1953年6月慶祝伊利沙伯二世加冕期間,每日乘客量突破新高,錄得150,596人次。³⁶ 期後,規模更大的香港油麻地小輪船有限公司崛起,天星小輪必須改變才能留住乘客。









34 Hong Kong Statistics 1947–1967, 130.

- 37 香港人口從 1945 年的 60 萬人開始持續增長, 1951 年人口為 210 萬,1961 年 313 萬,1976 年 440 萬。同時的渡海人數也呈現穩定上升的趨勢, 從 1953 年的 130,000 人增長至 1958 年的 153,000 人。1957 年時天星小輪尖峰時段的班次間隔縮 短至 2.6 分鐘,而年度乘客數量也在 1961、1962 年突破新高,分別為 4,100 萬以及 4,600 萬。同 上註,頁 83、85、95。
- 38 同註3,頁98。
- 39 同前註,117。
- 40 "營運資料 (2020)" The 'Star' Ferry Company, Limited, accessed December 17, 2021, http://www.starferry.com.hk/en/operationalInfo。

1960年代天星小輪載客量的增長也反映了香港的人口增長。³⁷ 1969年,香港人口增長至370萬,年度載客量上升至5,400萬人,即每日平均有148,000人次使用渡輪服務,這是天星小輪歷史上最高的載客量紀錄。1972年8月第一條海底隧道開通後,天星小輪的載客量些微下滑,1974年更出現虧損。³⁸ 1980年2月,第一條跨海地鐵路線開通後,乘客有更多的選擇並加劇了各運輸服務的競爭。儘管如此, 1980年代後期天星小輪仍維持有10艘渡輪運作,每年約4,000萬的載客量,每日平均約114,000人次,來往中環與尖沙咀的乘客佔了95%。³⁹目前天星小輪的每年載客量為850萬人,每日平均約23,303人次。⁴⁰

天星小輪在香港社會史中佔有很重要地位,雖然有各種渡海的交通方式, 但天星小輪的渡輪服務對於許多想要欣賞維多利亞港以及城市美景的本地市民 和遊客而言,是價錢最低廉的交通方式。

MC, HL







11.2 汽車渡輪模型。 Model of vehicular ferry. (HKMM2021.0003.0004)

³⁵ Ibid.

³⁶ David Johnson, Star Ferry: The Story of a Hong Kong Icon (Auckland: Remarkable View Limited, 1998), 83.

Getting Hong Kong to Work

Before the opening of the Cross Harbour Tunnel and the first cross-harbour railway tunnel (established in 1972 and 1980, respectively), the only ways to cross the harbour were by public ferry or by private *walla-walla*, *kaito*, or *sampan*. Of these options, the iconic Star Ferry offered the cheapest cross-harbour transportation and carried most of the daily commuters across the harbour.

Until June 2014, this wood and metal entrance gate accepted payment from passengers boarding a ferry. Passengers would be allowed through the turnstile after inserting the required coins into the tray. Mechanical ticketing turnstiles have now been installed, and passengers use Octopus cards or Jetons, which can be purchased from self-service vending machines. In 1902, Star Ferry passengers wishing to travel in the first-class upper deck paid 15 cents, and those travelling in the second-class open-air lower deck paid 10 cents.³⁴ Today the equivalent cost for weekday travel between Tsim Sha Tsui and Central is \$3.2 for first-class and \$2.6 for second-class.

Passenger numbers in the 1950s were between 34 and 38 million per annum.³⁵ In June 1953, a new daily record of 150,596 passengers was set during the celebrations for Queen Elizabeth II's Coronation.³⁶ As the years passed, the Star Ferry Company had to work harder to retain their patrons due to competition from the much larger Hongkong and Yaumati Ferry Company.



11.3 1950 年代,乘客正在汽車渡輪上閱讀晚報。 Passengers reading the evening newspaper on a vehicular ferry, 1950s.



11.4 20 世紀中期天星小輪上使用的螺旋槳。 Propeller of Star Ferry in the mid-20th century. (HKMM2011.0068.0001)



11.5 1956 年天星小輪「天星號」(Celestial Star)所使用的船鐘。 Bell from the *Celestial Star*, 1956. (HKMM2006.0030.0004a)

In the 1960s, Star Ferry's passenger numbers reflected Hong Kong's population growth: when the population increased to 3.7 million in 1969, annual passenger numbers increased to 54 million and averaged 148,000 per day—a record that has not been broken.³⁷ Passenger numbers decreased slightly after the first cross harbour tunnel opened in August 1972, and the company ran at a loss in 1974.³⁸ In February 1980, further competition arrived with the opening of the first cross-harbour MTR line. Nonetheless, in the late 1980s, the ten Star ferries in operation still carried 40 million passengers per year—114,000 passengers per day—with 95% of the journeys between Central and Kowloon and 5% between Hung Hom and Central.³⁹ Star ferries now carry 8.5 million passengers annually, for an average of 23,303 passengers per day.⁴⁰

The Star Ferry Company is an iconic part of the social history of Hong Kong. Although there are other ways to cross the harbour, its ferries still serve as an affordable way for local people and tourists alike to enjoy the Victoria Harbour and city views.

MC, HL

³⁴ Hong Kong Statistics 1947–1967, 130.

³⁵ Ibi

³⁶ David Johnson, Star Ferry: *The Story of a Hong Kong Icon* (Auckland: Remarkable View Limited, 1998). 83.

³⁷ The population of Hong Kong grew from 600,000 in 1945 to 2.1 million in 1951, 3.13 million in 1961, and 4.4 million in 1976. In the meantime, the number of crossings increased steadily, from 130,000 in 1953 to 153,000 in 1958. Rush hour frequency was down to 2.6 minutes in 1957. Passenger numbers climbed to a record 41 million in 1961 and 46 million in 1962. Ibid, 83, 85, 95.

³⁸ Ibid., 98.

³⁹ Ibid., 117.

^{40 &}quot;Operational Information (2020)," The 'Star' Ferry Company, Limited, accessed December 17, 2021, http://www.starferry.com.hk/en/operationalInfo.



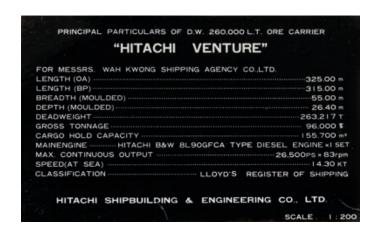
互利的産業策略: 仕組船 (しくみせん) INTERACTIVE GAME — SHIKUMISEN 「日立勇士號」(Hitachi Venture) 模型 華光海運控股有限公司借展

Hitachi Venture ship model

On loan from Wah Kwong Maritime Transport Holdings Limited

「日立勇士號」」(Hitachi Venture)是一艘載重263,658噸的礦砂運輸船,1982年交付華光航運,是當時全球最大的散貨船。「日立勇士號」在日本的建造費用是以長期租賃合約作為抵押,是仕組船融資制度的經典範例之一。

The *Hitachi Venture*, a 263,658 dwt ore carrier, was the largest bulk carrier in the world when it was delivered to Wah Kwong in 1982. Her construction in Japan secured against a long-term charter is a prime example of the *Shikumisen* financing system.



仕組船(しくみせん)融資制度以及香港 航運業的快速増長

仕組船(しくみせん)融資制度是一種「背對背」的 信貸形式,船東在購買船隻時除了直接向銀行借貸外, 亦可以船廠信用度,加上長期的船隻租賃合約作為貸款 抵押。

這種融資方式是由日本政府、造船廠、租賃商及銀行 共同提出,目的是協助日本在第二次世界大戰後能使經濟 復甦。當時的日本極需要外匯,政府透過鼓勵海外買家向 日本造船廠購買船隻來增加外匯儲備,同時亦促進了日本 造船廠在技術和科技上的發展。在船隻設計以及生產效率 上,很快便超越了歐洲的造船廠。

日本同期亦建立了自己的商船以滿足其工業對原材料 需求的快速增長。在日本註冊的船隻必須聘用薪金高昂 的日本船員,相較之下香港船東的營運成本則低廉很多。 受惠於此優勢,日本造船廠向香港船東提出新方案,只要 他們在日本建造船隻便可以享有長期的船隻租賃服務。

1950年代期間,日本造船廠代表拜訪在港的新進華人船東,並帶同日本輸出入銀行(Japan Export-Import Bank)提供給國外船東的信用貸款補助與融資條款方案,以及對長期租賃合約的未來展望。一般來說,日本銀行會以5%的利率提供等同船隻費用八成的借貸,這時外國銀行對船隻融資的態度會較為寬鬆,因此船東便可向外國銀行借貸餘下的15%。船東真正需要付出的金額只是5%。有些船廠甚至會代付這項費用。這項便利措施讓包玉剛、趙從衍、曹文錦、伍德鄰等香港船東有足夠資金購買他們的第一艘船,並透過與日本公司簽訂長期租賃合約所獲得的穩定收入持續擴充他們的船隊。

這類長期租賃合約也保護船東不受經濟衰退影響。 1970年代後期的世界石油危機使運油業蕭條,許多船東都被迫停止營運運油輪,因而沒有收入,但包玉剛的環球航運公司卻仍能繼續收取租賃費用。1976年3月6日的《新聞週刊》(Newsweek)以包玉剛為封面,稱他為「海洋大王」(King of the Sea),這位世界最大船東的成就清晰地反映了香港船業的茁壯發展。

隨著日本船隻必須聘用日本船員的規定被取消,以日本長期租賃合約作抵押進行船隻建造和融資的制度也隨之結束。1980年代初期,正值全球經濟衰退,航運業大蕭條,但世界各地造船廠仍在大量交付新船。香港不少大船東在這段時間需要進行財務重組,甚至被迫結束營運。41

SZ



12.1 船王包玉剛。 World's largest shipowner Y. K. Pao.

⁴¹ Zarach, Changing Places: The Remarkable Story of the Hong Kong Shipowners (Hong Kong: Hong Kong Shipowners Association, 2007), 111.

The *Shikumisen* Financing System and the Rapid Growth of the Shipping Industry in Hong Kong

The *Shikumisen* finance system was a form of "back-to-back" credit through which a shipowner could borrow most of the money to buy a ship from a bank or by using shipyard credits, with the loan secured against a long-term charter.

This finance scheme was developed by the Japanese government with its shipbuilders, charterers, and bankers to aid its economy in the aftermath of the Second World War. Japan was desperate for foreign currency and ships were bought in US dollars. By encouraging foreign buyers to buy from Japanese shipyards, the government achieved the twin advantages of increasing its foreign currency reserves and developing skills and technology in Japanese shipyards. Japanese shipyards soon overtook their European counterparts in design and efficiency.

Japan also needed to build up its merchant fleet to cope with the demand for raw materials from its rapidly growing industrialised base. Japanese-registered ships were required to operate with expensive Japanese crews, whereas Hong Kong shipowners operated at much lower costs. To take advantage of these lower costs, the Japanese offered Hong Kong shipowners long-term employment of the ships if they had them built in Japanese yards.

Several representatives from Japanese shipyards visited the fledgling Hong Kong Chinese shipowners in the 1950s with offers from the Japan Export-Import Bank of subsidised credit and finance terms to foreign shipowners and



41 Zarach, Changing Places: The Remarkable Story of the Hong Kong Shipowners (Hong Kong: Hong Kong Shipowners Association, 2007), 111.

the prospect of long-term charters. The bank typically lent 80% of the ship's price at 5% interest. Shipowners would raise a further 15% from foreign bankers, who were becoming more accommodating towards ship finance. The final 5% was the only cash contribution the actual owner had to make, assuming the owner could not convince the shipbuilder to put up the money. This arrangement gave many Hong Kong owners, including Y. K. Pao, T. Y. Chao, Frank Tsao, and D. L. Wu, the opportunity to buy their first new ships and grow their fleets through a stable income stream from the Japanese companies who provided them with long-term charters.

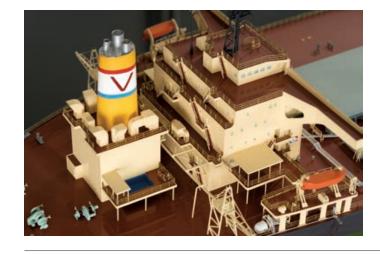
The long-term charters also protected the shipowners in a downturn. For example, in the late 1970s tanker recession, when many other owners were forced to lay-up their ships and received no revenue, Y. K. Pao's World-Wide Shipping continued to receive hire payment. The growth of the Hong Kong shipping fleet is best shown in a *Newsweek* magazine cover proclaiming Y. K. Pao the "King Of The Sea" when he became the world's largest shipowner.

The system of building and financing ships against long-term Japanese charters came to an end when Japanese ships were no longer required to have Japanese crews. This coincided with a global recession and major shipping downturn in the early 1980s, when a flood of new ships was delivered from shipyards around the world. Several of the leading Hong Kong shipowners were financially restructured in this period, and others disappeared altogether.⁴¹











<u>13</u>

香港旱災:在公眾 街喉前排滿的 水桶陣 DROUGHT IN HONG KONG: WATER CONTAINERS LINED UP BEFORE A PUBLIC STANDPIPE

1963年 HKRS365-1-110-1/ 政府檔案處歷史 檔案館 1963 HKRS365-1-110-1/ Public Records Office, Government Records Service

制水期間,家家戶戶帶備所有可以裝水的容器在街上排隊輪候取用乾淨的食水。 排隊的時候,心急如焚的市民少不免發生 衝突。

During the water restriction period, it was common to see whole families queuing up on streets to collect fresh water, carrying anything that could serve as buckets. Conflicts often broke out between individuals in the queues.



航運在香港水荒中扮演的角色

香港在20世紀時經歷了數次嚴重的旱災,最嚴重的一次發生在1962年10月至1964年5月期間,政府甚至要實施制水。42

1963年全年的降雨量只有901毫米,只及過往平均年降雨量的42%,⁴³ 水塘存水量更只有平時的2%。⁴⁴ 政府被逼實行制水措施,在5月剛開始時每天供水3小時,其後減至每2天供水4小時,6月時更改為每4天供水4小時。⁴⁵

為了解決水荒,香港政府考慮了數個方案,當中包括 從中國運水至香港。當時英國和中國政府達成協議,建 造一條輸水管從珠江的支流東江運水至香港。雖然這條輸 水管目前還在,也成功解決了香港長期的水荒問題。但因 當時急需在短時間內快速解決缺水問題,航運業便起了 關鍵作用。

香港政府於1963年連同海事處成立運水船租用委員會。來自華林船務的何安達先生率先向海事處提出解決水荒的方案並獲接納,他建議用清洗乾淨的運油輪以運送東江水。政府透過小組內三家船舶經紀公司(華林船務集團有限公司、Moller & Co. — Harley Mullim & Co. Ltd)的協助,於是租賃了30艘中型運油輪。草案限制運油輪的載重量不可超過15,000噸,每次運送珠江水的往返航程大約需要24小時。46

1963年6月24日至1964年6月14日期間,這些運油輪完成了1,371次的運送東江水的任務,共運送約42.88億加侖的淡水,⁴⁷約佔當時總用水量的三分之一。⁴⁸

其他獲取淡水的方式包含透過商船在正常商貿航程中 額外運送淡水,以及海軍船隻利用蒸餾設備淡化海水。 而運送東江水的費用則由香港船東承包。

這些安排雖然無法完全滿足香港人對食水的需求, 卻也凸顯了航運業的重要性。這次對於水荒的應變方案也 顯示了香港和廣州政府在面對人道主義問題時,能同心 協力解決問題。

HL, SC, AJH



13.1 1960 年廣東省寶安縣政府與香港政府代表簽訂第一份東江水供應協議。

Guangdong authorities and Hong Kong signing the first Agreement on Water Supply, 1960.



- 43 同前註,頁 285
- 44 Milestones of Hong Kong Water Supply—
 Book 2: Water: Learn & Conserve (Hong Kong:
 Water Supplies Department of the Government
 of the Hong Kong SAR, 2011), 26.
- 45 Hong Kong 1963, 241; 東江水供港 50 周年巡迴展覽(香港:香港特別行政區政府水務署), 2015, https://www.wsd.gov.hk/filemanager/en/ share/pdf/DJW_Leaflet-e.pdf。
- 46 包括往返時在桂山島(過去稱為垃圾尾)的 出入境管制站和海關的停靠時間。Anthony J. Hardy, "Coming of Age," in *Typhoon Wallem:* A Personalised Chronicle of the Wallem Group Limited (Cambridge: Granta Editions, 2003), 110–112。
- 47 Hong Kong 1964, 170.
- 48 同上註。



13.2 1963 年 6 月一艘運水船在港口碼頭卸下來自珠江口的淡水。 A tanker unloading brackish water from the Pearl River Estuary at the pier, June 1963.



13.3「伊安德號」運送珠江水來港。《大公報》,1963年6月27日。 *Ianthe* bringing water to Hong Kong, Ta Kung Pao, June 27, 1963.



13.4 1963 年香港政府「珍惜用水」宣傳海報。 Poster: "Water is precious, use less." Hong Kong government,

The Role of Shipping in Hong Kong's Water Crisis

Hong Kong suffered from several severe droughts in the twentieth century, some of which led to the government implementing water rationing. One of the worst of these droughts was a period of particularly dry weather between October 1962 and May 1964. 42

In 1963, the annual precipitation was recorded at only 901 mm, 42% of the historic average, 43 and reservoirs held less than 2% of the customary reserves. 44 The government was forced to implement water rationing. Water was supplied for three hours a day in May, then reduced to four hours every two days and finally four hours every four days in June.⁴⁵

To find a long-term solution to water shortages, the government explored various options, including sourcing water from China. An agreement was reached between the British and Chinese governments for a pipeline to be built to transfer water to Hong Kong from the Dongjiang (East River), a tributary of the Pearl River. The pipeline, which still exists, solved the problem in the long term, but an immediate temporary solution was also needed, and the shipping industry came to the rescue.

- 42 Hong Kong 1963 (Hong Kong: The Government Printer, 1964), 283,
- 43 Ibid., 285.
- 44 Milestones of Hong Kong Water Supply -Book 2: Water: Learn & Conserve (Hong Kong: Water Supplies Department of the Government of the Hong Kong SAR, 2011), 26.
- 45 Hong Kong 1963, 241; "Roving Exhibition for 50th Anniversary of Dongjiang Water Supply to Hong Kong," Leaflet (Hong Kong: Water Supplies Department of the Government of the Hong Kong SAR, 2015), https://www.wsd.gov.hk/ filemanager/en/share/pdf/DJW_Leaflet-e.pdf.

The Hong Kong government exploring options for buying and shipping water from other cities. The Kung Sheung Daily News, May 27, 1963.



13.5 香港政府考慮向亞洲各大城市購買淡水以 解決水荒。《工商日報》,1963年5月27日。

In 1963, the Hong Kong government formed a Tanker Chartering Committee with the Marine Department. Anthony Hardy of Wallem & Co. Ltd, one of the three shipbrokers on the government panel -(the others being Moller & Co and Harley Mullion & Co. Ltd,) proposed a solution to the water crisis. He suggested using cleaned out oil tankers for the transportation of water from the Pearl River and, accordingly, 30 medium oil tankers were taken on charter for the mission. Draft restrictions limited the size of tankers to about 15,000 dwt and each round trip took around 24 hours.46

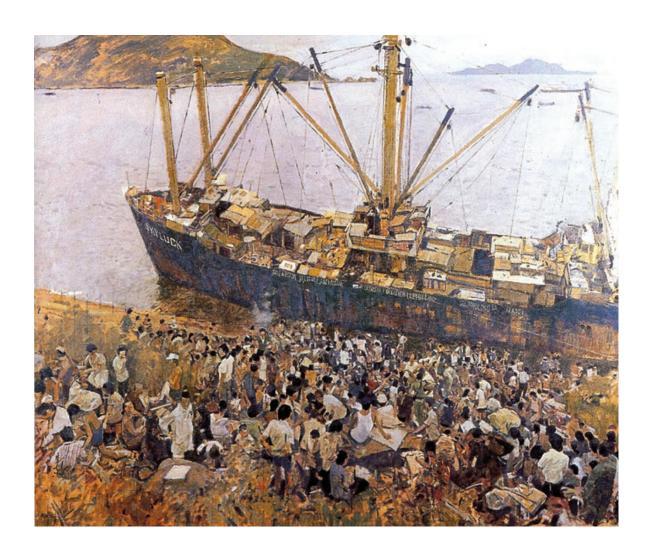
The tanker shuttle for the period completed 1,371 round trips from June 24, 1963 to June 14, 1964 and delivered a total of 4,288 million gallons of water,⁴⁷ almost one-third of the total water consumption during that period.⁴⁸

Additional supplies of potable water were brought in by merchant ships during their regular trading voyages and by Navy ships using their distillation equipment. Hong Kong shipowners carried the water freight without charge.

These arrangements did not satisfy all of Hong Kong's water supply needs, but they highlighted the importance of the shipping industry. The response to the crisis also illustrates how the Hong Kong and the Guangdong governments were able to cooperate to solve a humanitarian problem.

HL, SC, AJH

- 46 This included stops in both directions at Guishan Island (formerly known as Trash Tail or Lafsame Island垃圾尾) for immigration control and customs. Anthony J. Hardy, "Coming of Age," in Typhoon Wallem: A Personalised Chronicle of the Wallem Group Limited (Cambridge: Granta Editions, 2003), 110-112.
- 47 Hong Kong 1964, 170.
- 48 Ibid.



越南船民:「天運號」 (Skyluck) 在香港南丫島 擱淺下沉

VIETNAMESE BOAT PEOPLE: THE SHIP *SKYLUCK* AGROUND AND SINKING AT LAMMA ISLAND, HONG KONG Ken Howard, R. A. (1932年生) 1980年繪製、署名 布面油畫 Ken Howard, R. A. (b. 1932) signed and dated 1980 Oil on canvas (HKMM2009.0233.0001)

這幅油畫描繪了越南難民船「天運號」於1979年6月29日在南丫島 擱淺下沉的情況。

這艘船在1979年2月8日清晨時分闖入香港水域,近五個月後,船上仍有2,651名難民。因颱風逼近,他們切斷錨鏈,船隻開始慢慢漂流並在南丫島擱淺,船尾沉入海中。翌年,「天運號」被打撈,並拖至將軍澳拆解。

This painting depicts the refugee ship *Skyluck* stranded on Lamma Island on June 29, 1979. The ship had slipped unannounced into Hong Kong waters in the early hours of February 8, 1979.

Nearly five months later, with 2,651 still aboard, the refugees cut the anchor chains of the ship when a storm was approaching, resulting in the ship drifting until it run aground on Lamma Island and sank at the stern. The following year, the *Skyluck* was salvaged and towed to Junk Bay to be broken up.

香港與世界各地的越南難民

「天運號」是以偷渡難民聞名的一艘貨船。1979年 6月29日,載著數以千計越南與中國難民的「天運號」, 刻意在南丫島石角咀附近的岩石處擱淺。⁴⁹ 該船於2月8日 清晨時分在未經通知下闖入香港水域。近五個月後,船 上仍有2,651名難民,因颱風逼近,他們刻意切斷錯鏈, 船隻開始慢慢漂流至南丫島並擱淺,船尾沉入海中。 翌年,「天運號」被打撈後拖至將軍澳拆解。

船上人員及難民被送往大嶼山的芝麻灣羈留中心, 在香港政府的人道政策以及聯合國保護下,許多船民在 其他國家開始他們的新生活。⁵⁰

1975年4月30日,西貢 (現名胡志明市) 淪陷,歷經20年的越南戰爭 (1955-1975年) 終於結束。成千上萬的難民為了逃避越共政府的統治而逃往鄰近國家。如何安置這些在後來被稱作「船民」的難民成為國際社會的重要議題。

香港是越南難民其中一個主要的逃難地點。1975年5月4日,載著第一批3,743名難民的丹麥貨船「嘉娜馬士基號」(Clara Maersk) 駛入香港,⁵¹在得到丹麥政府表明會接收這些難民的保證下,香港政府允許他們短暫停留本港,直到獲得安置為止。⁵²

1975年至1978年期間來港的越南難民數量,與後來因中越關係於1978年惡化、越南政府決定驅逐華人和沒收其財產後湧來的難民潮相比,人數相差不多。這些越南華人被迫向保安部隊繳納保護費,否則便須離開越南。第一艘載著這些難民來港的船隻是「匯豐號」,於1979年1月19日載著超過3,380名難民駛入香港海域。53香港警方在船上發現總值港幣650萬元的黃金,54顯示這些來自越南的華人難民中有許多是非常富有的。

從1975年開始,有超過220,000名越南船民前往香港,其中超過143,000人得到外國收容,約75,000人被遺返,約16,000人獲得在港居留權。這些難民的故事大多是絕望、恐懼和令人悲傷的,但當中仍有令人振奮的例子。陳德是其中一名搭乘「匯豐號」逃離越南的華裔難民,及後定居美國。他在1980年代創辦匯豐食品公司並開始生產是拉差香甜辣椒醬,並親自將辣椒醬送至加州各地。這款美國製辣椒醬風靡全球,2018年匯豐食品公司的營業額高達1.538億美元。55

LC, HL, SC



14.1 「嘉娜馬士基號」模型。 Model of the *Clara Maersk*. (HKMM2005.0131.0001)



14.2 在「嘉娜馬士基號」上使戶的船鐘。 Bell from the *Clara Maersk*. (HKMM2014.03c.0001)

- 49 "Skyluck Runs Aground: Refugees Finally Land," South China Morning Post, July 1, 1979, 11.
- 50 同上註

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- 51 "Boat Refugee Goes to Sea as Danish Second Officer," Mærsk Post 25, no. 1 (1986): 32, https://www.maersk.com.cn/~/media_sc9/maersk/corporate/press/publications/files/1986-february-maersk-post-full-issue.pdf; Ian Lacy-Smith, "Vietnamese Refugees in Hong Kong, Encountering the First to Arrive," britishempire.co.uk, accessed October 29, 2021, https://www.britishempire.co.uk/article/vietnameserefugees.htm.
- 52 Yuen Hong Kiu, *Proxy Humanitarianism: Hong Kong's Vietnamese Refugee Crisis, 1975–79* (MPhil diss., The University of Hong Kong, 2014), 22.
- 53 同上註,頁46-47、65。
- 54 "Refugee Ship's Gold Hoard Totals \$6.5m," South China Morning Post, February 11, 1979.
- 55 Sophie Alexander and Randy Thanthong-Knight, "The Great Sriracha Battle Is Coming to America," *Bloomberg*, April 6, 2019, https://www.bloomberg.com/news/features/2019-04-06/thaitheparos-sriaja-panich-sriracha-comes-to-the-u-s-market.

HONG KONG'S MARITIME MIRACLE: THE STORY OF OUR CITY SINCE 1945 香江泛洋奇蹟: 1945年以來我們的港口故事

Vietnamese Refugees in Hong Kong and Around the World

Skyluck, a notorious refugee trafficking vessel with thousands of Vietnamese and Chinese refugees on board, was deliberately stranded on the rocks near Shek Kok Tsui on Lamma Island on June 29, 1979. The ship had slipped unannounced into Hong Kong waters in the early hours of February 8, 1979. Forced to remain at anchor for nearly five months later, the refugees cut the ship's anchor cable as a storm approached, resulting in the vessel drifting until it run aground on Lamma Island and sank at the stern. The ship was salvaged the following year and towed to Junk Bay where it was broken up.

The crew and refugees were taken to Chi Ma Wan Detention Centre on Lantau Island. Under the Hong Kong government's humanitarian policy and under the auspices of the United Nations, many of the passengers started a new life in other countries.⁵⁰

The fall of Saigon (now Ho Chi Minh City) on April 30, 1975 finally brought an end to the long-running Vietnam War (1955–1975). Thousands of refugees fled to neighbouring countries to escape the Viet Cong government. What to do with these "boat people," as they came to be called, became a serious issue for the international community.



14.3「天運號」影片,取自《香港大事回顧》(1967至1980年)。 Video of Skyluck from the Hong Kong Review (1967–1980).



14.4 是拉差香甜辣椒醬,最早由越南難民陳德引入 美國。 Sriracha hot chili sauce, first introduced to the Americans by David Tran, a Vietnamese refugee.

- 49 "Skyluck Runs Aground: Refugees Finally Land," South China Morning Post, July 1, 1979, 11.
- 50 Ibid
- 51 Ibid. "Boat Refugee Goes to Sea as Danish Second Officer," Mærsk Post 25, no. 1 (1986): 32, https://www.maersk.com.cn/~/media_sc9/maersk/corporate/press/publications/files/1986-february-maersk-post-full-issue.pdf; Ian Lacy-Smith, "Vietnamese Refugees in Hong Kong, Encountering the First to Arrive," britishempire.co.uk, accessed October 29, 2021, https://www.britishempire.co.uk/article/vietnameserefugees.htm.
- 52 Yuen Hong Kiu, Proxy Humanitarianism: Hong Kong's Vietnamese Refugee Crisis, 1975–79 (MPhil diss., The University of Hong Kong, 2014), 22.
- 53 Ibid., 46-47, 65.
- 54 "Refugee Ship's Gold Hoard Totals \$6.5m," South China Morning Post, February 11, 1979.
- 55 Sophie Alexander and Randy Thanthong-Knight, "The Great Sriracha Battle Is Coming to America," *Bloomberg*, April 6, 2019, https:// www.bloomberg.com/news/features/2019-04-06, thaitheparos-sriraja-panich-sriracha-comes-tothe-u-s-market.

Hong Kong was one of the main points of refuge. The first 3,743 refugees were brought in on the Danish freighter *Clara Maersk* on May 4, 1975.⁵¹ With the Danish government's assurance that they would take the refugees, the Hong Kong government allowed them to stay temporarily until their re-settlement was confirmed.⁵²

The number of incoming refugees between 1975 and 1978 was moderate relative to the much bigger wave of refugees that arrived after the deterioration of the Sino-Vietnamese relationship in 1978 and the Vietnamese government's decision to expel ethnic Chinese and confiscate their properties. These ethnic Chinese in Vietnam were forced to leave the country unless they paid protection money to the security forces. The first ship carrying these refugees to enter Hong Kong was the *Huey Fong*, which arrived on January 19, 1979, carrying more than 3,380 refugees. The Hong Kong Police found gold worth HK\$6.5 million on the ship, howing the great wealth of some of these overseas Chinese refugees from Vietnam.

From 1975 onwards, over 220,000 Vietnamese migrants arrived in Hong Kong. More than 143,000 of them were re-settled overseas, about 75,000 were repatriated, and about 16,000 were permitted to stay. Among their stories, which are mostly of despair, fear, and grief, is the uplifting tale of David Tran, who was one of the ethnic Chinese refugees from Vietnam aboard the *Huey Fong*. Tran, who eventually settled in the United States, launched a spicy sauce manufacturing business called Huy Fong Foods in 1980, delivering his products personally across California. This American-made *Sriracha* spicy sauce is now popular not only in the United States but across the world. In 2018, Huy Fong's revenue reached US\$153.8 million.⁵⁵

LC, HL, SC







14.5「天運號」照片、船舵、救生圈 Photos, wheel and buoy of *Skyluck*.



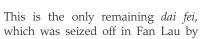


1990年代走私者 使用的「大飛」 DAI FEI, USED BY SMUGGLERS IN THE 1990s

香港警務處水警總區借展

On loan from Marine Region of the Hong Kong Police

這是僅存的一艘被水警截獲的「大 飛」。2000年2月12日於大嶼山企圖 走私一輛左軚的平治房車,被反走私 特遺隊查獲。該「大飛」其後被改裝並 復供小艇分區用作高速攔截訓練之用, 直至2021年「退役」。「大飛」有自己 的拖車,透過起重機將船體吊入水中。 船重約6噸,配備4台250匹馬力的水星 舷外發動機。





the Anti-Smuggling Task Force (ASTF) on February 12, 2000 with a new left hand drive Mercedes onboard. After the subsequent trial the *dai fei* was confiscated and modified to be used for training the small boat division of the police in high-speed interception. It has been in service until 2021. It has its own trolley and is lifted into the water by a crane. The boat weighs about six tonnes and has four 250 hp Mercury outboard engines.

「大飛」與走私

1978年中國經濟改革開放時,內地對奢侈品的需求 非常大,但民眾往往無法購買或需支付極其昂貴的價格, 因此走私罪行急劇增加,走私份子也開始大量建造新船以 擴展海上走私活動。

1990年代初期,走私活動持續猖獗。當時平治房車在中國非常受歡迎,走私集團利用大馬力快艇「大飛」來進行走私,其容量足以裝載一輛大型平治房車。「大飛」會配備4或5台250匹馬力的舷外發動機,最高速度可達55節,比當時水警船的速度快兩至三倍。

在1980年代末至1990年代初所建造的「大飛」數量估計數以百計。位於香港仔的新興船廠在香港水警總區的嚴格監督下,於1988至1990年間建造了80艘「大飛」,⁵⁶ 「大飛」的建造一直到香港政府下令禁止任何船隻配備超過2台250匹以上馬力的舷外機才停止。每艘「大飛」造價約100萬港元。

香港水警成功截獲數艘「大飛」,包括在這裏展示的 這艘「大飛」,其後被小艇分區於2001至2021年期間用作 進行高速攔截訓練之用。要截獲完好無損的「大飛」非常 困難,因為走私者為了逃避追捕會跳船離開、「大飛」 便會衝上岸或撞在岩石上。

1991年,香港政府聯同香港皇家警察、香港海關、皇家香港輔助空軍及駐港英軍成立反走私特遺隊,專門打擊走私罪行。特遺隊購入速度足以追上「大飛」的快艇,並將截獲的「大飛」用於高速追逐及攔截任務的戰術訓練,成功縮小了香港與中國內地之間的走私規模。

然而新型冠狀病毒病的爆發開啟了海上走私的新時代,走私份子利用速度更快、操控性能更強的快艇在中國內地與香港之間偷運奢侈品和食物(特別是凍肉)。 為了打擊罪行,香港水警和海關近期已添置速度更快的快艇以對付走私份子。

MC. SC



15.1《雷霆掃穴》電影海報。 Film poster: *Red Shield*.



15.2「大飛」影片。 Videotape: *Dai fei*.

56 2021年6月專訪新興船廠老闆祁敏鈿

When China opened up in 1978, there was a huge demand on the mainland for luxury goods that were unobtainable or extremely expensive. To meet this demand, smuggling increased dramatically and the smugglers built many new boats for their expanding business.

By the early 1990s, sea smuggling was rampant. Smuggling syndicates used high-powered vessels known as *dai fei*. They were large enough to carry one large Mercedes Benz, which was a much-desired car in China at the time. A *dai fei* was a motorboat equipped with four or five 250hp motors and capable of reaching speeds of 55 knots—twice as fast as the times faster than the police boats of the time.

It is not known how many *dai fei* were built in the late 1980s and early 1990s, but it is thought that their numbers ran into the hundreds. Sun Hing Shipyard in Aberdeen, under the close watch of the Hong Kong Marine Police headquarters, built 80 *dai fei* between 1988 and 1990,⁵⁶ only stopping when the Hong Kong government banned any boat with more than two outboard engines over 250 hp. Each boat cost around HK\$1 million.

The Hong Kong Marine Police did manage to catch a few *dai fei*, including the one exhibited here, which was used by the small boat division of the Marine Police for training its staff in high-speed interception from 2001 to



15.3 載著一輛被偷的平治房車全速駛往中國內地的「大飛」。 Dai fei at full speed on its way to China with a stolen Mercedes Benz.



15.4 反走私特遺隊用作訓練的「大飛」。 *Dai fei* being used for training.

2021 when it was decommissioned. It was rare to catch an intact *dai fei* because smugglers attempting to evade capture would often jump overboard and leave their boats to run ashore or into rocky outcrops.

An anti-smuggling task force was formed in 1991 as a joint arrangement between the Royal Hong Kong Police Force, Customs and Excise Department, Hong Kong government, Royal Hong Kong Auxiliary Air Force, and British Forces Overseas. High speed boats that could catch *dai fei* were purchased by the task force and captured boats were used for tactical training in high-speed pursuit and interception. The efforts were successful in reducing the extent of smuggling between Hong Kong and mainland China.

However, the outbreak of COVID-19 introduced a new era of smuggling by sea, with faster and more manoeuvrable speed boats carrying luxury goods and food (especially frozen meat) and recently even people across the border between Hong Kong and mainland China. The Marine Police and Customs and Excise Department have recently ordered even faster boats to keep up with the smugglers.

MC, SC





作 櫃的誕生在航運界掀起一場革命,更促進了自1970 年代以來亞洲作為新興經濟體的貿易成功。俗稱「箱子」(box)的貨櫃,它的出現使貨物從船隻到火車和卡車的運輸更為便利,操作過程也能標準化,這使全球物流更加順暢,港口面貌亦全面改變。

貨櫃由馬爾康·麥卡連(Malcolm MacLean)在1950年代發明,藉以減省船隻人工裝卸貨物帶來的不便。第一艘全艙格式貨櫃船於1972年駛抵新建成的葵涌貨櫃碼頭。到1973年,香港105條的定期船運航線中已有26%採用全艙格式貨櫃船,另有24%採用半貨櫃船。隨著葵涌貨櫃碼頭效率的提升以及輕工業產品出口增加,香港成為亞洲首屈一指的港口,更在1987年取代了荷蘭鹿特丹,成為全球最繁忙的貨櫃港。



(1) 帶扭鎖的集裝箱角鑄件。 Container corner casting with twistlock.

到1990年,葵涌的貨櫃碼頭共有七個泊位,一個屬於海陸聯運公司(Sea-Land)、三個屬於香港國際貨櫃碼頭公司(HIT)、兩個屬於現代貨箱碼頭公司(MTL),還有一個由香港國際貨櫃碼頭公司與現代貨箱碼頭公司共用。香港國際貨櫃碼頭公司亦開始投資中國境內的貨櫃港,包括深圳、上海、寧波和廈門。而其分別位於香港西、東兩側的深圳港與鹽田港,乘香港製造業轉移往工資水平較低的內地之便迅速增長。香港與華南地區的製造業在1990年代欣欣向榮,於是在1995年又新增兩處泊位,即中遠海運港口公司(COCSO)持有的八號東碼頭和現代貨箱碼頭公司持有的八號西碼頭。香港貨櫃的吞吐量,最終在2011年達到頂峰,達2,440萬個20呎標準貨櫃(TEU),並於2020年降至1,800萬個TEU。在這時候,幾乎所有香港的製造業經已轉移到華南地區,而大部分貨櫃均用於轉運貨物。

近年來,香港葵涌貨櫃碼頭進行大幅度升級。香港國際 貨櫃碼頭公司在這方面領先群倫,旗下的泊位已透過人工 智能與物聯網科技而半自動化。為達成國際海事組織讓 靠港的船隻都有泊位的目標,四大港口的營運商已經協商 共享泊位,並加強彼此間的商業合作。儘管過去數十年來 周邊港口的發展日趨興旺,香港作為港口城市的地位 有所消長,然而,香港的優勢乃在於其長期建立的自由港 地位,再加上其擁有經驗豐富及國際海事水平的海關、 銀行、保險、法律等部門為其後盾,令香港港口能穩健 發展。

MC, SC

The introduction of containerisation revolutionised shipping and contributed to the success of trade in Asia's emerging economies from the 1970s onwards. The container – or 'box' as it is often called – facilitated the movement of goods from ship to train and truck, standardising the operation to allow seamless movement across the globe and changing the face of ports.

The concept of containerisation was pioneered by Malcolm MacLean to circumvent the inefficient process of loading and unloading goods manually between ship and shore. The first fully cellular container ship called at the brand new Kwai Chung Container Terminal in 1972. By 1973, 26% of the 105 shipping lines that operated regular and scheduled services in Hong Kong were using fully cellular containerships, and 24% used semi-container vessels. With the higher efficiency of Kwai Chung Container Port and the growing output of its light manufacturing industry, Hong Kong became a leading port in Asia, overtaking Rotterdam as the world's busiest container port in 1987.

By 1990, there were seven container berths at Kwai Chung, Hong Kong International Terminals (HIT) – one owned by Sea-Land, three by HIT, two by Modern Terminals (MTL), and one shared between HIT and MTL. HIT began investing in container ports all over China, including Shenzhen, Shanghai, Ningbo, and Xiamen. Shenzhen and

Yantian, the two ports to the west and east of Hong Kong, underwent especially rapid expansion as Hong Kong's manufacturing started moving across the border to take advantage of the lower labour costs. Manufacturing of consumer goods in Hong Kong and south China flourished throughout the 1990s, and two more berths were created in 1995 – CT8E taken by COCSO and CT8W by MTL. Throughput in Hong Kong eventually peaked in 2011 at 24.4 million twenty foot equivalent units (TEU) dropping to 18 million TEU in 2020. By this point, most containers are transhipment as almost all manufacturing has moved to south China.

Hong Kong's Kwai Chung container terminal has been extensively upgraded in recent years. HIT is a leader in such development and their berths are now semi-automated using artificial intelligence and the Internet of Things. To meet the IMO goal of allowing ships to berth on arrival, the four port operators have agreed to share berths while ringfencing their commercial agreements. Although Hong Kong's role as a port city has changed over the decades as the surrounding ports have also prospered and grown, Hong Kong has the advantage of its long-established free port status backed up by highly experienced customs, banking, insurance, and legal sectors based on the international maritime standard.

MC, SC



(2) 葵青貨櫃碼頭。 Kwai Tsing Container Terminals.



半自動式扭鎖 TWISTLOCK -SEMI AUTOMATIC TYPE 香港國際貨櫃碼頭捐贈 Gift of Hong Kong International Terminals (HKMM2012.0064.0002)

扭鎖是用以固定貨櫃的標準旋轉連接裝置,它根據貨櫃上下四角,共八個相同的邊角鑄件大量生產。扭鎖利用角件可用以將貨櫃統一固定於貨櫃、船隻、卡車、火車等載具之上。

目前葵青港有九座貨櫃碼頭,共有24個貨櫃船泊位。碼頭總長度為8,500米,可裝卸 2,400萬個 TEU (20呎標準貨櫃)。貨櫃碼頭配備的最新碼頭起重機吊臂可跨越24個貨櫃,碼頭沿岸水深達15.5米,足以應付新一代的貨櫃船停泊。

香港港口有紀錄的最高貨櫃吞吐量為2011年的2,438萬個TEU,其中七成,約1,740萬個是由葵青貨櫃碼頭處理。餘下三成,約698萬個則用香港獨有的起重吊船在中游作業區裝卸。57

A twistlock and corner casting together form a standardised rotating connector for securing containers. All containers have eight identical steel corner castings, four on the bottom and four on the top, which are used to lock the container in place. Twistlocks are mass produced from identical corner casting and are used to connect containers onboard ships, to trucks, railcars, and so on.

Currently there are nine container terminals in the Kwai Tsing Port, with a total of 24 container berths. This provides a quay length of 8,500 metres and a total estimated capacity of 24 million twenty-foot equivalent units (TEU). Equipped with the latest quay cranes, which are capable of an outreach of 24 containers across and an alongside draught of 15.5 metres, Hong Kong's container terminals are able to handle the latest generation of container ships.

The peak of Hong Kong's container throughput was 24.38 million TEU in 2011, of which the Kwai Tsing container terminals handled over 17.4 million TEU, or roughly 70% of the total throughput.⁵⁷ The other 30%, 6.98 million TEUs, were handled in the midstream using Hong Kong's unique derrick barges.



1980年代的葵涌貨櫃碼頭模型 MODEL OF KWAI CHUNG CONTAINER TERMINALS IN THE 1980S





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57 Summary Statistics on Port Traffic of Hong Kong,

⁵⁷ Summary Statistics on Port Traffic of Hong Kong, November 2021 (Hong Kong: Transport and Housing Bureau, Government of the HKSAR), Table 7.

貨櫃的故事:香港與未來

美國貨運企業家馬爾康·麥卡連 (Malcolm McLean) 對在卡車與船隻之間裝卸貨物太過耗時感到沮喪,因而想 出製作標準貨櫃的方法,使貨物能在短時間內順暢裝卸。58 1956年,麥卡連成立泛大西洋汽船輪船公司 (Pan-Atlantic Steamship Company) ,即海陸聯運公司(Sea-Land) 的前身,購入一艘屬二戰時期,名為「理想十號」(Ideal X)的運油輪,並將其改裝為旗下的第一艘貨櫃船。59 這就是貨櫃革命的起源,從根本上改變航運業的操作, 大幅提升運輸效率。

其後,輪船公司紛紛成立並合組財團,以應付建造 新貨櫃船所需的巨大成本。這些貨櫃船在1970至1980年代 期間,取替了絕大多數的傳統貨運班輪,把原本需要工人 以人手裝卸的散裝貨物,直接以貨櫃形式處理。

貨櫃船的出現改變了物流業以人力操作的性質。港口 需要新的碼頭泊位讓貨櫃船停靠,亦需配備新的裝卸設 備與特製的貨櫃起重吊機,由熟練的人員負責裝卸工序; 更需撥出空間堆放轉口貨櫃,及更佳地連接公路和鐵路等 基礎建設。貨櫃的發明因而催生出全新的產業,利用新式 的數碼科技使貨櫃裝卸、貨物追蹤及通關等作業能順暢 進行。

貨櫃革命令玩具、紡織品、大型家電、汽車零件等 各式貨物,能夠以快速、低廉及可靠的方式運輸,為亞洲 四小龍的崛起以及中國經濟的騰飛奠下基礎。在貨櫃化貿 易的支持下,香港於八十年代後期發展成世界第一大港。

貨櫃港:香港崛起

麥卡連的海陸聯運公司在越戰期間,以合約方式從 美國運送軍用物資至越南。因為回程時貨櫃已清空,遂 開始在香港、台灣及日本等港口停靠,將亞洲生產的消 費品運回美國。該公司第一艘前來香港的貨櫃船「聖胡 安號」(SS San Juan),於1969年7月30日載著476個貨櫃 抵港。

為充分發揮貨櫃業的優勢,香港需要建設一座專用的 貨櫃港。1969年,即第一艘貨櫃船抵港的同年,香港政 府撥地於葵涌興建第一個貨櫃碼頭,日後發展成三個。 第一艘在一號貨櫃碼頭停泊的貨櫃船是箱運有限公司 (Overseas Containers Limited) 的「東京灣號」(Tokyo Bay)。該船由歐洲出發,於1972年9月5日抵港,目的地 為日本。「東京灣號」是當年最大的貨櫃船之一,載重 量高達47,342 噸,可運載 2,961 個TEU (20呎標準貨櫃), 其中95個具備冷藏功能。該船第一次訪港時,卸下200個 貨櫃,並在12小時內為相近數量的貨櫃裝載貨物。1973 年,世界各地的貨櫃運輸量估計達50萬個TEU。60 香港 最重要的集装箱營運者為董氏旗下的東方海外貨櫃航運 有限公司,1973年在香港證券交易所上市,1974年已持有 134艘貨輪。

香港自此成為貨物進出中國的主要轉口港,對1980年 代香港的發展作出重大貢獻。葵涌港在1987年成為世界 第一大貨櫃港,1990年代中期更進一步擴展為八個貨櫃 碼頭。最近一次擴建是位於青衣島東南沿岸的九號貨櫃



16.1 中流作業場景模型。在1970年代貨櫃革命以前,大部分貨物均在中流作業區進行裝卸,再運往 附近較小型的碼頭

Midstream diorama. Until the container revolution of the 1970s, most cargo was worked "mid-stream", loading and discharging to and from lighters berthed alongside. (HKMM2007.0119.0001)





碼頭,於2004年正式啟用。自此,葵涌貨櫃碼頭便改稱為 葵青貨櫃碼頭。香港港口的貨櫃吞吐量在2019年為1,830萬 個TEU。61 同年,全球經海路運輸的貨櫃數量為8億1,100 萬個TEU。62 2011年,香港港口的貨櫃吞吐量達到頂峰, 共處理了2,438萬個TEU。⁶³

葵青的九個貨櫃碼頭由五家私營公司共同擁有及合資 經營,分別是香港國際貨櫃碼頭有限公司、現代貨箱碼頭 有限公司、中遠國際貨櫃碼頭(香港)有限公司、亞洲貨 櫃碼頭有限公司和嘉民杜拜環球港務集團。這些營運商都 以高效率著稱,目各自與航運公司有獨立的商業往來。64



16.2 美國貨運企業家麥卡連攝於紐瓦克港,1957年。 American trucking entrepreneur Malcolm McLean at railing, Port Newark, 1975.

- 58 Arthur Donovan and Joseph Bonney, The Box that Changed the World, (New Jersey: Commonwealth Business Media, 2006), 4.
- 59 Marc Levinson, "The Trucker," in *The Box* (Princeton, NI: Princeton University Press, 2006).
- 60 海上運輸評論 1972-1973 (Review of Marine Transport 1972-1973) , (紐約:聯合國貿易 和發展會議,1975),頁 103,https://unctad. org/system/files/official-document/rmt1972-73_
- 61 香港港口貨櫃吞吐量,港口及海事統計,香港 海事處, https://www.hkmpb.gov.hk/document/ HKP_KTCT-stat.pdf o
- 62 海上運輸評論 2020, (紐約:聯合國貿易和發展 會議, 2020) ,頁 16, https://unctad.org/system/ files/official-document/rmt2020_en.pdf o
- 63 智鵬著:港口發展,摘自香港港口與海事處歷史: 香港海事處, 2021年10月29日, https://www. mardep.gov.hk/theme/port_hk/hk/p1ch8_1.html; 香港港口運輸統計摘要 2021 年 10 月 (香港:香 港特別行政區政府運輸及房屋局)
- 64 葵青貨櫃港/港口設施,香港貨櫃碼頭商會有限 公司, 2021年10月29日, http://www.hkctoa. com/facilities o
- 65 詳見展品 6: 海旁碼頭的貨物裝卸,頁 54。

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扭鎖

扭鎖的體積雖小,但在貨櫃的操作中扮演着重要 角色。扭鎖安裝在貨櫃邊角的鑄件上,令貨櫃得以在相疊 後扣在一起,保持穩定。所有貨櫃都有八個相同的邊角 鑄件,四角的上下方各一。扭鎖是根據邊角鑄件大量 生產,功能是將貨櫃固定在船隻、卡車、火車等載具 之上,此外亦可作為起重吊機與側載機吊掛貨櫃時之 吊耳。用作堆疊貨櫃時,只需把貨櫃放置在另一個裝有 四個扭鎖的貨櫃鑄件之上即可。扭鎖的錐體部分插入貨 櫃下方四個鑄件的孔洞,然後將把手轉動90度便可固定 貨櫃。為了加快操作速度,目前已開發出半自動式扭鎖。 半自動式扭鎖可自動鎖定,將彈簧把手向後拉時便可 解開,令貨櫃得以移動。最新型的是全自動式扭鎖,除能 自動鎖定外,將貨櫃往上吊升並稍微扭轉即能解鎖。

據估計,目前全世界共有約1.5億個扭鎖。這種細小 但巧妙的裝置在貨櫃的運作上不可或缺。它也可視為早年 透過人力以吊鈎將貨物固定於船上這種做法的進化版。65

MC, TS, HL



16.3 1969 年 7 月 30 日抵港的第一艘貨櫃船「聖胡安號 | The SS San Juan, the first container ship to call at Hong Kong on 30 July 1969.

The Container Story in Hong Kong and Beyond

Frustrated with how long it was taking to load and unload goods from his lorries onto a ship, the American trucking entrepreneur Malcolm McLean conceived the idea of a standard container that could be moved seamlessly from truck to ship.⁵⁸ He formed the Pan-Atlantic Steamship Company (which later became Sea-Land) in 1956 and bought the *Ideal X*, a Second World War oil tanker, which he converted into his first container-carrying ship.⁵⁹ This was the beginning of the container revolution, which fundamentally changed shipping and greatly improved the efficiency of transportation.

New liner companies, consolidated into consortia to offset the huge costs of building new containerships, were established. They replaced most of the conventional liner ships in the 1970s and 80s and containerised all the individual boxes and bags that had previously had to be manhandled.

Containerships changed the nature of logistics. Ports required new berths with new handling equipment and specialised container cranes with skilled operators to load and unload the containers, space to store containers in transit and better connections to road and rail infrastructure. An entirely new industry was born in the making of the containers themselves, and new digital technology was adapted to streamline the loading and unloading and tracking of containers and their contents and for channelling them through customs.

The container revolution underpinned the rise of the Asian Tiger economies and China's phenomenal growth because it provided fast, cheap, reliable transport for goods, ranging from toys and textiles to white electrical goods and car parts. On the back of this containerised trade, Hong Kong's port grew to become the largest in the world.

(Princeton, NJ: Princeton University Press, 2006)

(New York: United Nations Conference on Trade

and Development, 1975), 103, https://unctad.

org/system/files/official-document/rmt1972-73_

60 Review of Marine Transport 1972-1973

en.pdf.

The Rise of Hong Kong as a Container Port

Malcolm McLean's Sea-Land company was initially contracted to ship military cargo from the United States to Vietnam to assist the United States war effort. As they had empty containers on their returning vessels, they began a service calling at Hong Kong, Taiwan, and Japan and carrying consumer goods from Asia to the United States. The first dedicated Sea-Land container ship to call at Hong Kong was the *SS San Juan*, which arrived on July 30, 1969, carrying 476 containers.

To take full advantage of the container industry, Hong Kong needed a dedicated container port. In 1969, the same year the first container ship arrived, the government allocated land for the first three dedicated container terminals to be built at Kwai Chung. The first container vessel to berth at Terminal 1 was Tokyo Bay of Overseas Containers Limited, which arrived on December 5, 1972 on route from Europe to Japan. Tokyo Bay was one of the largest containerships at the time at 47,342 dwt and was capable of carrying 2,961 twenty-foot equivalent units (TEU), of which 95 were refrigerated. On the ship's first call, 200 boxes were unloaded, and a similar number were loaded in a matter of 12 hours. In 1973, the number of containers shipped worldwide was estimated at 500,000 TEU. 60 Hong Kong's own major container carrier, Orient Overseas Container Line (OOCL), part of the Tung Group, went public on the Hong Kong Stock Exchange in 1973 and owned 134 vessels in 1974.

Hong Kong became the main transhipment port for cargo to and from China, which fuelled its growth throughout the 1980s. Kwai Chung became the largest container port in the world in 1987 and was further expanded to eight terminals by the mid-1990s. After the most recent expansion of the port, with the opening of Terminal 9 on the south-eastern side of Tsing Yi Island in

- Arthur Donovan and Joseph Bonney, The Box that
 Changed the World (New Jersey: Commonwealth
 Business Media, 2006), 4
 Marc Levinson, "The Trucker," in The Box
 "Container Throughput of Hong Kong Port,"
 Port and Marine Statistics, Hong Kong Marine
 Department, https://www.hkmpb.gov.hk/
 document/HKP_KTCT-stat.pdf.
 - 62 Review of Marine Transport 2020 (New York: United Nations Conference on Trade and Development, 2020), 16, https://unctad.org/ system/files/official-document/rmt2020_en.pdf
- 63 Lau Chi-pang, "Port Development," in History of the Port of Hong Kong and Marine Department, Marine Department, Government of the HKSAR, accessed October 29, 2021, https://www.mardep.gov.hk/them/port_hk/en/p1chs_1. html; Summary Statistics on Port Traffic of Hong Kong. October 2021 (Hong Kong: Transport and Housing Bureau, Government of the HKSAR).
- 64 "Kwai Tsing Container Port/Port Facilities," Hong Kong Container Terminal Operators Association Limited, accessed October 29, 2021, http://www. hkctoa.com/facilities.
- 65 See object 6 : Cargo Handling at the Waterfront, P. 54.

2004, the name was changed from Kwai Chung Container Terminals to Kwai Tsing Container Terminals. The number of containers handled at the Hong Kong port in 2019 was 18.3million TEU;⁶¹ in the same year, the number of containers shipped by sea worldwide was 811 million TEU.⁶² In 2011, the container throughput of the port of Hong Kong peaked at 24,384,000 TEU.⁶³

The nine container terminals at Kwai Tsing are financed and owned by five private operators: Hongkong International Terminals Limited, Modern Terminals Limited, COSCO-HIT Terminals (Hong Kong) Limited, Asia Container Terminals Limited, and Goodman DP World. Renowned for their great efficiency, each terminal operator independently makes its own commercial arrangements with its shipping line customers.⁶⁴



16.4 1972 年 9 月 5 日第一艘在新建的葵涌一號貨櫃碼頭停泊的貨櫃船「東京灣號」。

Tokyo Bay, the first container ship to berth at the new Kwai Chung Container Terminal on 5 September 1972.

Twistlocks

Twistlocks are small but play a vital part in container operations. Twistlocks fit into the corner castings of shipping containers and enable containers to be locked together with one on top of another. All containers have eight identical steel corner castings, four on the bottom and four on the top. Twistlocks are mass produced out of identical corner castings and are used to connect containers to ship's decks, trucks, railcars, etc., and for the lifting of containers by container cranes and side lifters. To lock a container, it is placed over four corner castings into which four twistlocks have been placed. The twistlock cone fits into the corner casting of the container when lowered onto it, and a lever is then moved 90° to secure the container. Semi-automatic twistlocks have been invented to speed up the operation. These lock automatically and can only be released when a spring lever is pulled back, which allows the container to be lifted off. A further innovation is a fully automatic twistlock, which locks automatically and is released when the container is lifted and slightly twisted.

It is roughly estimated that there are now more than 150 million twistlocks in the world. This small but ingenious device is an essential component of container operations, and in some ways can be seen as the modern evolution of the process of using bale hooks to manually stow cargoes on ships in the earlier days of shipping.⁶⁵

MC, TS, HL



16.5 這張葵涌貨櫃碼頭高空照片以清晨強烈的光影襯托,遠處的荔景邨接近落成,由此可見是 1975 年左右拍攝。貨櫃碼頭於 1972 年啟用,正值貨櫃運輸在全球通行和香港經濟高速增長的年代。

Kwai Chung Container Terminal. This aerial photo of the Kwai Chung Container Port uses strong early morning light and shadows to etch the scene. It must have been taken about 1975 as the distant Lai King Estate is nearing completion. Opened in 1972, Hong Kong's container port reflected the global shift to containers and the rapid, local economic growth.





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內河貨船模型 MODEL OF RIVER TRADE CARGO VESSEL 2007年 纖維強化塑膠 2007 Fibre-reinforced plastic (HKMM2007.0111.0001)

內河貨船的穿梭來往-如早年的平底帆船-是香港港口活動的核心,為遠洋 航運的二至三倍。

The movement of river cargo vessels—like that of the junks in earlier times—is the heart of Hong Kong's port activity, outnumbering ocean shipping movements two- or threefold.

內河貨運:香港最有價值的珍珠?

珠江水系的經濟地位在全球舉足輕重。根據中國政府的數據,2019年珠江流域的貨運吞吐量超過十億噸,是全世界第二繁忙的水系。2020年,香港與沿河港口之間的貨物運輸量有一億多噸。66香港有許多設施處理這些貨物,其中之一便是屯門內河碼頭,它共有49個泊位,並與葵青貨櫃碼頭緊密聯繫。這個模型所展示的內河貨船便是停靠在屯門內河碼頭。

自19世紀中期年代,往來香港與珠江及其支流各港口間的內河航運便支撐着香港,肩負運載乘客、貨物和糧食的責任。二戰期間的內河航運雖然大減,卻仍維持服務。 戰後隨著香港居民的回歸和社會的重建,糧食與生活必須品的需求激增,內河貨運因而快速成長。

1949年中華人民共和國成立後,內河貨運再次放緩,特別是1951年聯合國禁止所有普通貨物運往中國時最為艱辛。雖然中港普通貨物的交易量所剩無幾,但糧食和食水的輸送仍持續進行,養活了香港因內地移民不斷湧入而日漸增多的人口。內河貿易同時也有助於降低生活成本,保持低工資水平,這對香港正在茁壯成長的工業發展至為重要。於中國而言,香港的出口貿易同樣是寶貴的外匯收入來源。

1978年12月,中國實施改革開放政策,引領香港進入一個新時代。此後,香港成為主要的商業與金融服務中心,透過日漸增加的國際貿易和投資與內地加強聯繫。在1978至1997年期間,香港與內地之間的有形貿易每年以平均28%的速度成長。香港公司把勞動力密集的工序轉移至工資低廉的內地進行,特別是在廣東一帶。一夜之間,香港的製造業被金融、旅遊和零售等服務業取代。67 此次經濟轉型既迅速又劇烈,但慶幸並沒有造成失業潮。

截至1997年底,香港在廣東的直接投資額達到480億美元,香港公司與合資企業在廣東的僱員人數多達500萬人。廣東的經濟迅速增長,本地生產總值(GDP)由1978年的110億美元(人均235美元)躍升至2019年的1.6萬億美元(人均13,651美元)。⁶⁸

香港人為廣東的經濟增長出了一分力。現時粵港澳 大灣區貨櫃處理量的增長,香港可與上海、寧波的長三角 地區並肩,雙雙在世界貨櫃吞吐量上居於領先地位。

RH, MC



17.1 2001 年,珠江流域主要內河港口分佈圖。 Map of the main river ports in the Pearl River area, 2001.

66 2020 香港港口運輸統計摘要(Summary Statistics on Port Traffic of Hong Kong for 2020),(香港: 香港特別行政區政府運輸及房屋局,2021)。

67 Catherine Schenk, "Economic History of Hong Kong," in EH.Net Encyclopedia of Economic and Business History, ed. Robert Whaples, March 16, 2008, http://eh.net/encyclopedia/economichistory-of-hong-kong/.

68 「2019 年廣東省國民經濟和社會發展統 計公報」,廣東省統計局,頁 2,檢索於 2022 年 4 月 25 日,http://stats.gd.gov.cn/ attachment/0/388/388463/2923609.pdf。

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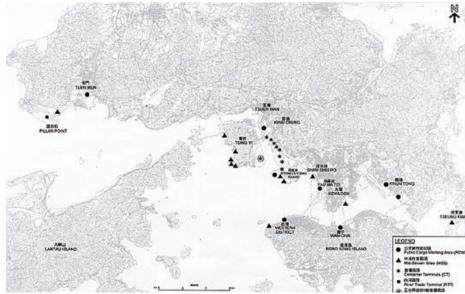
「廣東省統計局發布報告: 廣東 60 年 GDP 增長 254.9 倍」,中華人民共和國中央人民政府檢索於 2022 年 4 月 25 日,http://www.gov.cn/jrzg/2009-10/04/content_1432548.htm。

The River Trade: Hong Kong's Most Valuable Pearl?

The Pearl River is one of the most economically important river systems in the world. In 2019, according to Chinese government figures, it handled over one billion tonnes of cargo, making it the second busiest river system in the world by this measure. In 2020, some 100 million tonnes of cargo were transported between Hong Kong and ports along the river. Hong Kong has numerous facilities to handle this cargo, such as the Tuen Mun River Trade Terminal which operates 49 berths and has close links with Kwai Tsing Container Terminals. This model is of a representative river cargo vessel that would call at Tuen Mun.

River trade shipping between Hong Kong and ports in the Pearl River and its tributaries has been vital to Hong Kong since the mid-19th century, carrying people, goods, and foodstuffs. The river trade continued during the Second World War, albeit at a much slower pace. After 1945, trade picked up quickly as residents returned and the demand for food and basic goods for rebuilding soared.

Trade slowed again after 1949 with the formation of the People's Republic of China - especially in 1951, when the United Nations imposed an embargo on any general trading of goods between Hong Kong and China. Trade in goods was reduced to a trickle but imports of food and water continued and were vital to sustain a population growing from a continuous influx of immigrants from China. The trade also helped to reduce the cost of living and to keep wages low, which was important for Hong Kong's increasing industrial base. Imports to Hong Kong were also vital to China as they provided a valuable source of foreign exchange revenue.



17.2 2001 年,香港貨物裝卸設施與位置。 Map of Hong Kong's cargo handling facilities and locations, 2001.

China's opening-up in December 1978 marked the beginning of a new era for Hong Kong. Since then, Hong Kong has served as the main provider of commercial and financial services and interacted with the mainland through increased international trade and investment. From 1978 to 1997, visible trade between Hong Kong and mainland China grew at an average rate of 28% per year. Hong Kong companies relocated labour-intensive work to mainland China, particularly to Guangdong, to take advantage of much lower labour costs. In a short time, manufacturing in Hong Kong was replaced by service industries, including finance, tourism, and retail.⁶⁷ The transformation of the economy was rapid and dramatic but was achieved with minimal unemployment.

By the end of 1997, direct investment by Hong Kong in Guangdong had reached approximately US\$48 billion, and some five million people were employed there by Hong Kong companies and joint ventures. Guangdong's economy exploded, with its GDP rising from US\$11 billion (US\$235 per capita) in 1978 to US\$1.6 trillion (US\$13,651 per capita) in 2019.⁶⁸

The people of Hong Kong can take great pride in laying the foundations of Guangdong's stellar success. The growth of container traffic in the Greater Bay Area, for which Hong Kong was the model, competes with Shanghai/Ningbo for pole position in the world container rankings.

RH, MC



17.3 香港政府計劃把位於屯門的內河碼頭遷往龍鼓灘,以便把舊地段發展成一個新社區。 The Hong Kong government is considering a plan to move the River Trade terminal in Tuen Mun to Lung Kwu Tan to allow for the development of a new settlement.

- 66 Summary Statistics on Port Traffic of Hong Kong for 2020 (Hong Kong, Transport and Housing Bureau, Government of the HKSAR, 2021).
- 67 Catherine Schenk, "Economic History of Hong Kong," in EH.Net Encyclopedia of Economic and Business History, ed. Robert Whaples, March 16, 2008, http://eh.net/encyclopedia/economichistory-of-hong-kong/.
- 68 Guangdong Bureau of Statistics, "2019 nian Guangdong sheng guomin jingji he shehui fazhan tongji gongbao (2019 Statistical Bulletin of Guangdong Province's National Economic and Social Development)," Accessed April 25, 2022. http://stats.gd.gov.cn/ attachment/0/388/388463/2923609.

Zhonghua Renmin Gongheguo Zhongyang Renmin Zhengfu, "Guangdongsheng tongjiju fabu baogao: Guangdong 60 nian GDP zengzhang 254.9 bei," Accessed April 25, 2022. http://www.gov.cn/jrzg/2009-10/04/ content_1432548.htm.



亞勒維京號的 畫像

PAINTING OF JAHRE VIKING Robert G. Lloyd 繪 油畫 華林集團借展 Robert G. Lloyd (b. 1969) Oil on canvas On loan from Wallem Group Ltd. (HKMM2016.09b.0011)

「亞勒維京號」原名「海上巨人號」,是一艘超大型原油運輸船(ULCC),也是有史以來最大的船隻。該船由董浩雲的金山輪船國際有限公司向一家日本船廠購入,並把船身由377米加長至458.45 米,足以容下四個首尾相連的足球場,相當於九龍環球貿易廣場的高度,載重量增至564,762 噸。

「海上巨人號」主要用作儲存原油, 1988年5月14日在伊朗拉臘克島 (Larak Island) 外海碇泊時遭伊拉克戰機攻擊,起火後於淺海區域沉沒。該船被打撈後大規模改裝,最終服役達31年之久。

「亞勒維京號」的船錨由香港海事博物館收藏,目前於香港政府船塢展出。

Jahre Viking, originally named Seawise Giant, was an ultra large crude carrier (ULCC) and the largest ship ever built. Purchased from a Japanese shipyard by C.Y. Tung's Island Navigation Corporation Ltd, the Seawise Giant was extended from 377 metres to 458.45 metres increasing her cargo carrying capacity to a record 567,762 tonnes — the length of four football pitches laid end to end — and almost as long as Kownloon's ICC Tower is height.

Used mainly as a crude oil storage ship, the *Seawise Giant* was attacked by the Iraqi Air Force on May 14, 1988, while anchored off Iran's Larak Island. The ship caught fire and sank but was salvaged and rebuilt, eventually providing 31 years of service.

The Jahre Viking's massive anchor is in the Hong Kong Maritime Museum's collection and is currently displayed at the Hong Kong government dockyard.

「海上巨人號」與香港在船舶管理上的 領導地位

「亞勒維京號」的故事

「海上巨人號」(Seawise Giant)是一艘超大型原油運輸船(Ultra Large Crude oil Carrier, ULCC),也是有史以來最大的船隻。1979年由董浩雲的金山輪船國際有限公司購入,並把船身由377米加長至458.45米,足以容下四個首尾相連的足球場等,並差不多與九龍的環球貿易廣場(ICC)一樣高。該船延長後的載重量增至破紀錄的564,762 噸。

「海上巨人號」的龐大尺寸限制了它滿載時可以停靠的港口數目,因此該船主要來往日本與法國,或與墨西哥、中東等地履行儲油合約。在1988年5月14日,該船依儲油合約裝載伊朗原油,在伊朗拉臘克島(Larak Island)外海碇泊時遭伊拉克戰機攻擊,起火後於淺海區域沉沒。「海上巨人號」被推定全損並被拖至汶萊售予另一家香港企業——東方石油有限公司(Feoso),再轉手賣給挪威的諾曼國際公司(Norman International),其後在新加坡進行大規模修復改裝。1991年,該船更名為「快樂巨人號」(Happy Giant)後重新投入使用,再以3,900萬美元的價格售予另一位挪威船東約根·亞勒(Jorgen Jahre)。亞勒將該船改名為「亞勒維京號」(Jahre Viking)並將之帶回當時已是船舶管理中心的香港,由華林船舶管理有限公司(Wallem Ship Management,其母公司也是由挪威人創建)管理。

2004年,該船由第一奧森油輪公司 (First Olsen Tankers Pte. Ltd.) 購入並更名為「諾克·耐維斯號」 (Knock Nevis) 後作為儲油船停泊於波斯灣。歷經跌宕的31年服役生涯後,該船於2010年在印度拆解。⁷⁰ 其船錨由香港海事博物館收藏,目前於香港政府船塢展出。⁷¹

香港在船舶管理方面的領導地位

在香港眾多與海事相關的成就中,其中一項是成為 世界船舶管理業的領導者。隨著成本增高、具備專業技能 人才的減少和擁有船隻的大型企業無法或無意管理自家 船隻,船東們在考量經濟效益下,選擇將船隻交由第三方 管理。

1980年代中期的經濟衰退,香港船舶管理業的能力獲得社會認可。大量船隻因為船東無力償還貸款而遭金融機構沒收。這些金融機構因為缺乏船隻管理的專業知識,紛紛求助船舶管理業者以保護其新資產。香港目前已成為大型船舶管理產業的根據地,包括世界上最大的兩家船舶管理公司:中英船舶管理有限公司(Anglo-Eastern Ship Management)與Fleet Management Limited。兩間公司均在香港成立,而中英船舶則成立於1974年。

TH, MC, HL





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- 69 Zarach, Changing Places: The remarkable story of the Hong Kong Shipowners (Hong Kong: Hong Kong Shipowners Association, 2007). 114.
- 70 "Story of Seawise Giant The Largest Ship Ever Sunk," Cruise Ups, January 17, 2020, https:// cruiseups.com/seawise-giant-largest-ship-eversunk/
- CIANT CIANT
- 71 Anthony J. Hardy, *Typhoon Wallem* (Cambridge: Granta Editions, 2003) 173; Zarach, *Changing Places*. 114.

HONG KONG'S MARITIME MIRACLE: THE STORY OF OUR CITY SINCE 1945 香江泛洋奇蹟: 1945年以來我們的港口故事

The *Giant of the Sea* and Hong Kong's Leadership in Ship Management

The Story of Jahre Viking

The *Seawise Giant* was an ultra large crude oil carrier (ULCC) and the largest ship ever built. After being bought by C.Y. Tung's Island Navigation Corporation Ltd in 1979, the ship was lengthened from 377 metres to 458.45 metres—long enough to fit four football pitches end to end⁶⁹ and almost as long as Kowloon's ICC Tower is height. The extension increased the ship's carrying capacity to a record of 564,762 tonnes.

The size of the *Seawise Giant* limited the number of ports at which she could call when fully loaded, and the ship primarily visited Japan and France or had storage contracts in Mexico and the Middle East. On May 14, 1988, while anchored under a storage contract carrying Iranian crude oil at Larak Island in Iran, the ship was attacked by an Iraqi jet. Having caught fire and sank in shallow water, the Seawise Giant was declared a total loss and towed to Brunei, where she was sold to another Hong Kong company, Feoso, and then to a Norwegian owner, Norman International, which embarked on an extensive refit in Singapore. The vessel returned to service as Happy Giant in 1991 and was sold for US\$39 million to another Norwegian, Jorgen Jahre. Jahre renamed the ship the Jahre Viking and brought it back to Hong Kong—now the centre of ship management—and to Wallem Shipmanagement, the parent company of which was founded by a Norwegian.



18.2 環球貿易廣場高 484 $ext{ }$,是全球第 11 高建築物(ICC)。 ICC Tower is 484m high and is the $11^{ ext{th}}$ tallest building in the world.



18.3 「亞勒維京號」的船錨。 Anchor of *Jahre Viking*.

In 2004, the vessel was purchased by Fred Olsen Tankers Pte Ltd, renamed *Knock Nevis* and moored as a storage tanker in the Persian Gulf. She was scrapped in India in 2010 after an eventful 31 years of service.⁷⁰ The ship's anchor is now part of the collection of the Hong Kong Maritime Museum and is currently displayed at the Hong Kong government dockyard.⁷¹

Hong Kong's Leadership in Ship Management

Among its many achievements in the maritime field, Hong Kong has established itself as a world leader in ship management. Increasing costs, a declining pool of staff with the required technical skills, and the arrival of large ship-owning corporations unable or unwilling to manage their own ships has resulted in owners choosing to place their ships under third-party management, which can offer economies of scale.

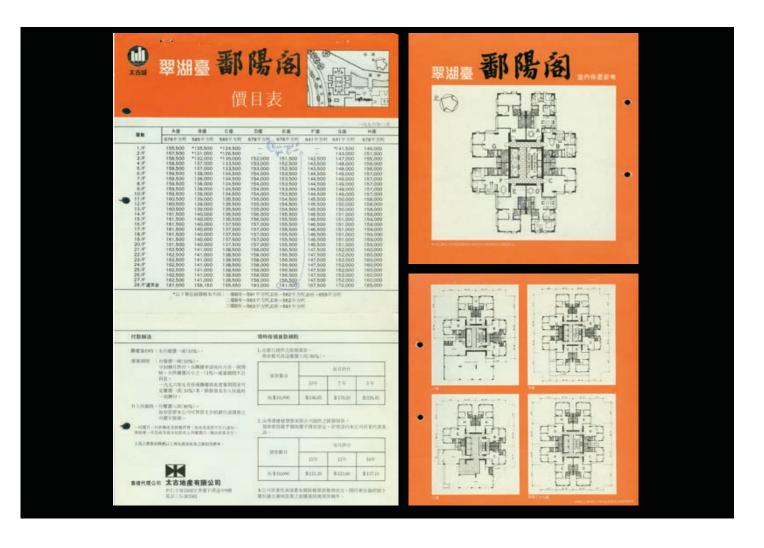
The recession of the mid-1980s provided a significant boost to the ship management sector in Hong Kong, as large numbers of ships were reclaimed by financial institutions from owners who could not service their loans. Without the technical knowledge to run a ship, these institutions turned to ship management companies to protect their new assets. Hong Kong is now home to a large ship management industry that includes the two largest ship management companies in the world—Anglo Eastern Ship Management and Fleet Management Limited—both of which were founded in Hong Kong, Anglo-Eastern dating back to 1974.

TH, MC, HL

⁶⁹ Zarach, Changing Places: The remarkable story of the Hong Kong Shipowners (Hong Kong: Hong Kong Shipowners Association, 2007). 114.

^{70 &}quot;Story of Seawise Giant – The Largest Ship Ever Sunk," *Cruise Ups*, January 17, 2020, https:// cruiseups.com/seawise-giant-largest-ship-ever-

⁷¹ Anthony J. Hardy, *Typhoon Wallem* (Cambridge: Granta Editions, 2003) 173; Zarach, *Changing Places*, 114.



太古城住宅樓宇價目表 TAIKOO SHING PRICE LIST

太古地產有限公司—— 太古歷史檔案部借展 On loan from Swire Properties Limited, Courtesy of Swire Archives

太古集團公司是太古煉糖廠與太古船塢的擁有者與營運者。1980年, 原位於鰂魚涌的太古船塢遷往青衣 島後,該地段改建成太古城大型住 宅區。其他船塢亦紛紛跟隨其做法。



太古城佔地53英畝 (21.5公頃) ,共有61幢住宅樓宇,每幢樓高28層,總計提供超過12,500個住宅單位,並附設名為太古城中心的大型購物商場。太古城於1986年全部落成,是香港眾多同類發展項目的早期範例。

John Swire and Sons, owners and operators of the Taikoo Sugar Refinery and the Taikoo Dockyard, redeveloped the site in Quarry Bay into a residential complex shortly after the dockyard was relocated to Tsing Yi in 1980. Other companies with similar sites did the same.

The site has 61 residential buildings, each of which has 28 storeys, housing over 12,500 apartments. Now called Taikoo Shing, the site spans 21.5 hectares, and includes a large shopping mall called Cityplaza. Completed in 1986, it is an early example of many such developments in Hong Kong.

從船塢到高樓

二戰結束時,香港人口只有60萬,其後迅速增至1948年的180萬, 1990年更達至586萬。⁷² 尋找足夠及合適的土地進行開發,以容納持續增長的人口,是當時政府的一項重大挑戰。

為了紓解居住需求的壓力並重新分配過度擠逼的市區 人口,香港政府於1972年頒佈「十年建屋計劃」,大量 興建公共房屋並於新界設立新市鎮(亦稱「衛星城 市」)。⁷³ 過去被認為過於偏遠或僅適合作工業用途的 地區轉眼變成富有魅力的都市發展地。

把工業設施改建為私人住宅與商業用地,往往需由土地擁有者策劃,此舉能容納並支援快速成長的中產階級。1980年太古船塢遷至青衣島成為香港聯合船塢(Hongkong United Dockyards,HUD)的一部分,原本位於鰂魚涌的舊址由地主太古集團公司(John Swire & Sons)發展成重要的商業與住宅區,一座「城中之城」

於1986年全部竣工。佔地53英畝(21.5公頃)的住宅區 共有61幢住宅樓宇,每幢樓高28層,總計超過12,500個 住宅單位。還附設一座大型購物商場,名為「太古城 中心」。整個建築群被統稱為「太古城」。

香港聯合船塢集團合併的前身為太古船塢與黃埔船塢,其船塢舊址亦發展成大型私人屋苑。黃埔花園於1985年興建,分為12期,共計有88幢住宅樓宇。由於鄰近當時的啟德機場,該區設有高度限制故各幢樓宇只有16層,整個屋苑於1991年竣工。

香港在規劃住宅用地的過程中,逐漸將所有的船塢、 倉庫、發電廠和工廠設施拆卸,並使香港快速成為世界 最大的私人房屋群。這些私人屋苑規劃良好、設計周詳、 設施齊全,並隨著地下鐵路的啟用而與香港其他地區緊密 連接。置業亦成為許多香港市民的願望,而香港現約有一 半人口擁有物業。

HL, SC, NB









^{72 1948} 香港年報,(香港:政府印務局,1949), 頁 9;Hong Kong 1991: A Review of 1990, (Hong Kong: Government Printer, 1991), 374。

⁷³ Hong Kong 1973: A Review of 1972 (Hong Kong: The Government Printer, 1973), 93–94.

From Dockyards to High Rises

After the end of the Japanese occupation and the Second World War, there was a rapid increase in Hong Kong's population, from 600,000 to 1.8 million in 1948 and to 5.86 million by 1990.⁷² Finding sufficient land suitable for development to accommodate the booming population was a major challenge.

To relieve the pressure on housing demand and to redistribute the overcrowded urban population, the government launched the Ten-year Housing Programme in 1972, under which a large amount of public housing was built and new towns, also called "satellite towns", were established in the New Territories. 73 Areas that were previously considered too remote or suitable only for industrial use became desirable locations for urban development.

19.2 太古船塢改建為住宅區。《工商晚報》,1976 年 1 月 17 日。 Tai Koo Dockyard to be transformed into a residential area. *The Kung Sheung Evening News*, January 17, 1976.

The conversions from industrial facilities to private residential and commercial developments were usually led by the site owners. The aim was to accommodate and support the rapidly growing middle class. Taikoo Dockyard was relocated and became part of Hongkong United Dockyards (HUD) at Tsing Yi in 1980, opening up its former site at Quarry Bay. The owners of the site, John Swire & Sons, transformed the area into a significant commercial and residential community—"a city within a city". Completed in 1986, the redeveloped site has 61 residential buildings on an area of 21.5 hectares. Each building has 28 storeys and there are over 12,500 apartments with a large on-site shopping mall, known as Cityplaza, the entire complex is called Taikoo Shing, literally meaning Swire City.



19.3 太古船塢,1960 年代。 Taikoo Dockyard, 1960s.

Whampoa Dockyard with whom Taikoo Dockyard merged to form Hongkong United Dockyard also developed their former dockyard site into a large private housing estate called Whampoa Garden. It was started in 1985 and comprised of 88 buildings in 12 complexes but with only 16 storeys due to Kai Tak airport height restrictions. It was completed in 1991.

Many other ex-industrial sites, depots, power plants factories and warehouses were all gradually taken over and incorporated into the redevelopment of Hong Kong's housing landscape, which, in a very short time, was turned into one of the cities that have the most private housing estates in the world. These private housing estates provide well-planned and designed compact accommodation that is well-served by amenities and, with the advent of the Mass Transit Railway, is well connected to the rest of Hong Kong. They also provided the incentive for many Hong Kong residents to purchase their home, with the result that over 50% of Hong Kong's population are now homeowners.

HL, SC, NB



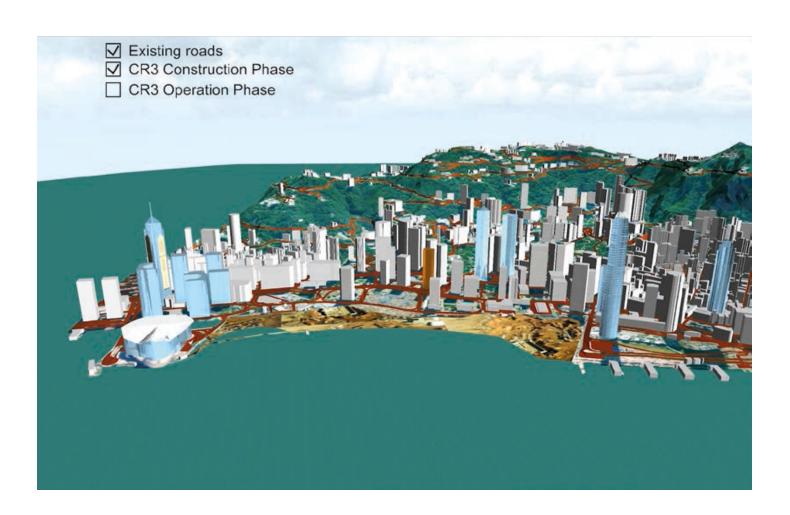
19.4 昔日太古船塢的所在地,1990 年代。 Former site of Taikoo Dockyard, 1990s.

72 Annual Report on Hong Kong for the Year 1948 (Hong Kong: The Government Printer, 1949), 9;









以地理資訊系統(GIS) 可視化技術製作的 維多利亞港填海工程短片

VIDEO OF LAND RECLAMATION IN VICTORIA HARBOUR UNDER THE GIS VISUALISATION 以粵語、英語、普通話循環播放,每段歷時7分鐘。 香港大學地理系提供。

Looping in Cantonese, English, and Putonghua, around 7 mins each.

Courtesy of the Department of Geography, The University of Hong Kong

填海工程是香港最常用的城市發展策略。中環的海岸線在過去百多年來不斷變化。《中環及灣仔填海計劃》於1980年代開始規劃,1990年代施工,2011年完成。公眾可透過引入三維地理資訊系統(3D GIS)可視化技術,瞭解在1990年代開始施工前備受爭議的中環填海工程。

Land reclamation is the most popular urban development strategy for Hong Kong. The coastline of Central has been evolving for the past 100 years. The Central and Wan Chai Reclamation Project was planned in the 1980s, commenced in the 1990s and completed in 2011. 3D GIS visualisation was introduced to help the public to understand the controversial Central reclamation before construction began in the 1990s.

維多利亞港今昔風貌

香港地少人多,開闢新土地以興建住宅區與商業區一直是香港的一大挑戰。維多利亞港兩岸因此經常成為目標,至2000年底,超過三分之一的海港被填平。

1996年,香港政府規劃在港島青洲與堅尼地城北端之間的區域,填海186公頃以興建新住宅區。⁷⁴ 然而,該計畫引起社會人士極大關注,促使以「反對進一步填海」為宗旨的保護海港協會發起「拯救我們的海港(Save Our Harbour)」行動並獲得空前成功。填海計劃被撤回,1997年更通過《保護海港條例》。⁷⁵ 該條例於1999年被修訂,將其涵蓋範圍擴展至整個維多利亞港。⁷⁶ 以填海作為土地發展的政策被推翻,該條例在法律上將海港界定為「香港人的特別公有資產和自然遺產」,必須加以保護和保存。⁷⁷

近年來,港府致力讓社會大眾親近海港。商用碼頭、船塢以及其他舊日的沿岸工業設施 逐一被關閉或遷移,這項工作仍會持續。在考慮海濱發展時,香港政府亦注意到環境問題, 對新落成建築物的高度設限,以提高天際線與海濱景致的融合。

海濱事務委員會(Harbourfront Commission)的前身是創立於2004年的共建維港委員會(Harbourfront Enhancement Committee),其宗旨為倡導和保護維多利亞港並監督其未來發展。海濱事務委員會的首要任務是「將市民帶到維港,將維港帶給市民」,確保公眾得以親近、欣賞和享用維多利亞港。該委員會正努力不懈,規劃更多海濱長廊以進一步保護海港廣闊的景觀並「締造朝氣蓬勃、綠化和暢達」的海濱環境。78

LC, NB, HL, SC



20.1 保護海港協會致香港政府的函件。 Letter from the Society for the Protection of the Harbour to the government.



20.2 2011 年復辦的維港渡海泳賽事。 Photo of the Hong Kong Cross Harbour Race, resumed in 2011.

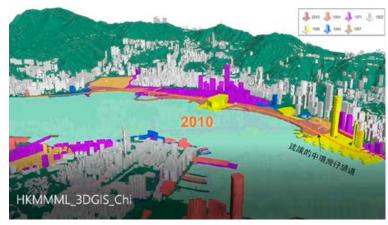
- 74 1998 香港年報(Hong Kong Yearbook 1998), (香港:政府新聞處,1999),"Urban Development Areas," https://www.yearbook.gov. hk/1998/ewww/13/1312/index.htm。
- 75 "Our History," Society for Protection of the Harbour, accessed October 29, 2021, https://www.harbourprotection.org/cn/about/history/index.html.

- 76 保護海港條例(修正)草案 1999,香港立法會, 2021 年 10 月 29 日,https://www.legco.gov.hk/ yr99-00/english/bills/c194_e.htm。
- 77 保護海港條例,電子版香港法例 第 531 章,2018 年 12 月 13 日,https://www.elegislation.gov.hk/ hk/cap531。
- 78 中環新海濱城市設計研究資料摘要,(香港: 香港特別行政區政府香港城市規劃委員會), 2011 年 7 月,https://www.pland.gov.hk/pland_ en/p_study/comp_s/UDS/chi_v1/images_chi/pdf_ paper/info_digest.pdf。

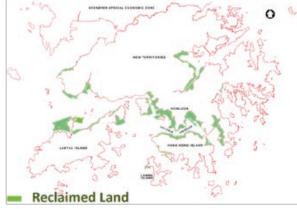
The Changing Face of Victoria Harbour

Creating new land for housing and commercial purposes in the urban area has always been a challenge in Hong Kong. Locations on either side of Victoria Harbour have frequently been a target. As a result, by the end of 2000, more than one third of the original harbour had been infilled and "lost".

In 1996, a new residential area was proposed for a further 186-hectare site to be reclaimed between Green Island and northern Kennedy Town. However, the proposal raised considerable concern among the community and the Society for Protection of the Harbour, which was formed to oppose further reclamation, conducted a successful "Save Our Harbour" campaign. This led to the withdrawal of the proposal and to the passing of the *Protection of the Harbour Ordinance* in 1997. The Ordinance was amended in 1999 to extend its scope of application to the entire Victoria Harbour. As a capstone to this fundamental change in urban development objectives, this Ordinance legally defined the harbour as a special public asset and a natural heritage of Hong Kong people.



20.3 介紹香港 1957-2010 年填海工程歷史的短片。 Video showing the reclamation of land Hong Kong from 1957 to 2010.



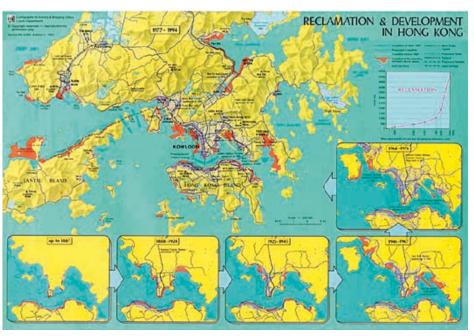
20.4 標示香港截至 2016 年的填海區域的地圖。 Map of Hong Kong showing land reclamation up to 2016.

- 74 Hong Kong Yearbook 1998 (Hong Kong: Information Services Department, 1999), "Urban Development Areas," https://www.yearbook.gov. hk/1998/ewww/13/1312/index.htm.
- 75 "Our History," Society for Protection of the Harbour, accessed October 29, 2021, https://www.harbourprotection.org/en/about/history/index.html.
- 76 Protection of the Harbour (Amendment) Bill 1999, Legislative Council, accessed October 29, 2021, https://www.legco.gov.hk/yr99-00/english/ bills/c194_e.htm.
- 77 Protection of the Harbour Ordinance, Cap. 531, Hong Kong e-Legislation, December 13, 2018, https://www.elegislation.gov.hk/hk/cap531.
- 78 "Urban Design Study for the New Central Harbourfront," *Information Digest* (Hong Kong: Planning Department, Government of the HKSAR), July 2011, https://www.pland.gov.hk/pland_en/p_study/comp_s/UDS/chi_v1/images_chi/pdf_paper/info_digest.pdf.

In recent years, the Government has been opening access to the harbour to the general public. This is expected to continue as commercial wharves, dockyards, and other old coastal industrial sites are closed or relocated. When considering coastal development, the Government takes note of the environment, with controls over building heights to allow better integration between the ridgeline and the waterfront.

The Harbourfront Committee, later to become the Harbourfront Commission, was established in 2004 to champion and protect Victoria Harbour and to monitor its future development. The prime objective of the Commission is to "bring the harbour to the people and the people to the harbour" and to make Victoria Harbour accessible to and enjoyed by all. The Commission's work is ongoing and includes plans for more promenades to preserve the visual permeability of the harbour and to create a "vibrant, green and accessible" waterfront.⁷⁸

LC, NB, HL, SC



20.5 標示香港截至 1994 年的填海與開發區域的地圖。 Map showing reclamation and development in Hong Kong up to 1994.



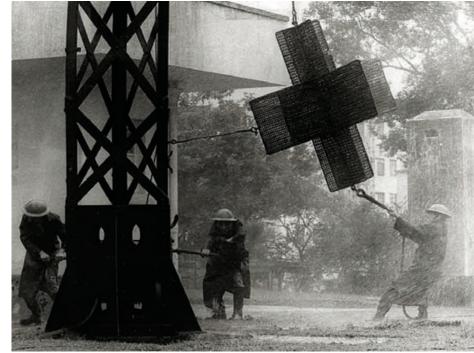
香港歷史博物館借展 Loan from Hong Kong Museum of History

十號颶風信號是香港最高級別的熱帶氣旋警告信號,代表風力現正或預料會達到颶風程度。自1946年迄今,十號颶風信號共發出16次。最近一次發出十號颶風信號是2018年9月16日襲港的颱風「山竹」,數以萬計的樹木倒塌並在多區造成嚴重水浸,使各區交通一度中斷。

The highest tropical cyclone warning signal in Hong Kong is Hurricane Signal No. 10, which means that hurricane force winds are expected or are already blowing. Since 1946, the No. 10 Signal has been issued 16 times. The most recent T10 typhoon to hit Hong Kong was Typhoon Mangkhut, which struck Hong Kong on September 16, 2018, felling tens of thousands of trees, causing severe flooding and damage, and bringing traffic to a standstill.

2

香港天文台的十號 颶風信號模型 HONG KONG OBSERVATORY'S TYPHOON SIGNAL NO. 10 MODEL



21.1 早年香港天文台職員懸掛十號颶風信號。 Hong Kong Observatory staff hoisted Typhoon Signal No.10 manually in the old days.

颱風的故事

香港位處北緯22度,屬於熱帶氣旋活躍地區。即使有現代預報技術的協助,熱帶氣旋仍經常造成損毀與傷亡,船隻亦是。

在1960年代啟用遠程雷達和1980年代使用衛星雲圖之前,天氣變化極難預測。1940年代,美國海軍甚至派遣軍機飛入熱帶氣旋中以測量其強度與走向,但此做法已於1987年停止。

自1946年迄今,香港共發出16次十號颶風信號。⁷⁹ 1962年9月1日襲港的「溫黛」是有記錄以來風速最快、最具破壞性的颱風,持續風力每小時133公里,最高陣風時速達259公里。⁸⁰ 在缺乏預報技術的情況下,大多數船隻無法躲避,致使2,053艘小型船隻受損、沉沒甚至摧毀至無法修復,其中大多數為舢舨與平底帆船。當中還包括了36艘遠洋輪船。⁸¹

颱風「愛倫」是有記錄上強度排名第二的颱風,在 1983年9月9日襲港。超過26艘大型船隻因而擱淺,其中 18艘更遭到結構性的損毀,另有360艘小型船隻沉沒或嚴重受損。遊艇奧士比號(Osprey)沉沒造成的嚴重人命傷亡,加上大量船隻損失促使香港於1989年成立海上救援協調中心(Hong Kong Maritime Rescue Coordination Centre)。 82 該中心令港府各部門以及與鄰近地區政府之間得以緊密聯繫,在海上的救援行動中彼此提供必要支援。合作形式包括海空聯合搜救、由消防船與潛水員執行救援任務以及救護車緊急送院服務等。

近數十年來,香港天文台的氣象預報準確度不斷提升,令傷亡人數逐步減少。提早發佈颱風預報,令市民有 更充分時間作預防措施。

颱風同時帶來風暴潮,會導致低窪地區嚴重水浸。 記錄上第三強的颱風「山竹」便於2018年9月16日帶來 極強的風勢與破紀錄的風暴潮,對香港廣泛地區造成 破壞。市區內暴風肆虐,岸邊巨浪滔天的景象令人難忘。 強烈的風暴潮令港內水位上升3.88米,大埔滘的水位更是 暴漲4.71米之多。83

現今,全球暖化導致海平面上升,颱風的來臨將使上述事件更加頻繁與嚴重。因南北極冰層融化與海洋變暖而上升的海平面預計將會帶來更強勁、更頻繁的熱帶氣旋並提高風暴潮發生的風險。一項由中國水風險公司(China Water Risk,CWR)的研究指出,香港在20個因為風暴潮與全球暖化而引致水浸危機的亞洲城市中,排名第五。⁸⁴ 聯合國政府間氣候變化專門委員會(Intergovernmental Panel on Climate Change)預測2100年的海平面將比現時上升0.5至1米,而颱風強度亦將增強。海港內如發生6至7米高的風暴潮會造成市區內多數地區水浸。⁸⁵政府必須採取預防措施以防範水災於未然。

MC, SC, HL

- 79 "自一九四六年起引致天文台發出十號颶風信號 的颱風(Typhoons Which Required the Hurricane Signal No. 10 Since 1946),"香港天文台網站, 2020 年 1 月 20 日最後更新,https://www.hko. gov.hk/tc/informtc/historical_tc/metinfo_wind. htm。
- 80 "引致天文台需要發出十號颶風信號的颱風,"香港天文台網站,2019年11月28日最後更新, https://www.hko.gov.hk/tc/informtc/historical_tc/ histtyn.htm。
- 81 "1962 年颱風溫黛造成的船舶失事及其他破壞 (Damages and Shipwrecks Caused by Typhoon Wanda, 1962),"香港特別行政區政府政府檔案 處,2021 年 4 月 12 日最後更新。

- 82 "海上救援協調中心 世界知名,"香港特別行政 區政府政府新聞處基建與物流,2003年1月 31日最後更新,https://www.news.gov.hk/isd/ ebulletin/tc/category/infrastructureandlogistics/ html/b673ec65-0aa1-4a72-be43-15df75c9498e.
- 83 " 令我們覺醒的「山竹」," 香港天文台網站, 2018 年 10 月 29 日,https://www.hko.gov.hk/en/ blog/00000216.htm。
- 84 Dharisha Mirando, Debra Tan, C.T. Low, and Ronald Leung, Waterproofing APAC to Avoid Atlantis, Report (China Water Risk, 2020), https://www.chinawaterrisk.org/wp-content/uploads/2020/11/CWR_2020_Waterproofing_APAC_to_Avoid_Atlantis.pdf.
- 85 Intergovernmental Panel on Climate Change, "Sea Level Rise and Implications for Low-Lying Islands, Coasts and Communities," in Special Report on the Ocean and Cryosphere in a Changing Climate (Intergovernmental Panel on Climate Change, 2019), https://www.ipcc.ch/srocc/chapter/chapter-4-sea-level-rise-and-implications-for-low-lying-islands-coasts-and-communities/; Intergovernmental Panel on Climate Change, "Regional Fact Sheet Ocean," in Sixth Assessment Report of Working Group I The Physical Science Basis, https://www.ipcc.ch/report/ar6/wg1/downloads/factsheets/IPCC_AR6_WGI_Regional_Fact_Sheet_Ocean.pdf.

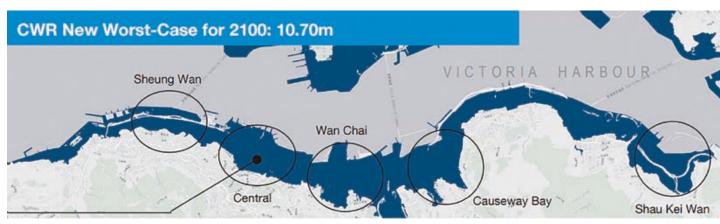
The Typhoon Story

At a latitude of 22°N, Hong Kong is located in an active area for tropical cyclones. Even with the help of modern forecasting technologies, they often lead to casualties and damage, especially to ships.

Before the use of long-distance radar in the 1960s and satellite images in the 1980s, the weather was highly unpredictable. From the 1940s, US Navy planes were flown into cyclones to gauge their strength and direction, but this practice ceased in 1987.

The Hurricane Signal No. 10 has been raised 16 times since 1946.⁷⁹ Typhoon Wanda on September 1, 1962 holds the record for destructive wind speeds, with sustained winds of 133 km/h and gusts of 259 km/h.⁸⁰ With little notice, most ships were unable to take evasive action, and 2,053 small craft, mostly sampans and junks, were wrecked, sunk, or damaged beyond repair. This figure also includes 36 ocean-going vessels.⁸¹

On September 9, 1983, Typhoon Ellen—the second strongest ever recorded—pounded Hong Kong. Over 26 large ships were driven aground, 18 of which were constructive losses, and 360 small crafts were sunk or severely damaged. The sinking of the yacht *Osprey* with high loss of life, alongside the extensive ship casualties, paved the way for the establishment of the Hong Kong Maritime Rescue Coordination Centre in 1989. This enables close contact between different Hong Kong government departments and between the Hong Kong government and neighbouring governments to provide necessary assistance in maritime rescue operations. Forms of cooperation include searches with aircraft, helicopters and launches, rescue missions by divers and fireboats, and emergency treatment on land in ambulances and hospitals.



21.2 中國水風險公司(CWR)研究報告中標示香港水浸高風險的區域。 Diagram from the CWR report showing areas at most risk of flooding.

- 79 "Typhoons Which Required the Hurricane Signal No. 10 Since 1946," Hong Kong Observatory, last modified January 20, 2020, https://www.hko.gov.hk/tc/informtc/historical_tc/metinfo_wind.htm.
- 80 "Typhoons Necessitating the Issuing of the Hurricane Signal No. 10," Hong Kong Observatory, last modified November 28, 2019, https://www.hko.gov.hk/en/informtc/historical_ tc/histvp.htm.
- 81 "Damages and Shipwrecks Caused by Typhoon Wanda, 1962," Government Records Service, Government of the HKSAR, last modified April 12, 2021, https://www.grs.gov.hk/ws/erp/wandaen.htm.
- 82 "海上救援協調中心 世界知名," Infrastructure & Logistics, Information Services Department, Government of the HKSAR, last modified January 31, 2003, https://www.news.gov.hk/isd/ebulletin/tc/category/infrastructureandlogistics/html/b673ec65-0aa1-4a72-be43-15df75c9498e.htm.
- 83 "A Wake up Call from Mangkhut," Hong Kong Observatory, October 29, 2018, https://www.hko. gov.hk/en/blog/00000216.htm.
- 84 Dharisha Mirando, Debra Tan, C. T. Low, and Ronald Leung, *Waterproofing APAC to Avoid Atlantis*, Report (China Water Risk, 2020), https://www.chinawaterrisk.org/wp-content/uploads/2020/11/CWR_2020_Waterproofing_APAC_to_Avoid_Atlantis.pdf.
- 85 Intergovernmental Panel on Climate Change, "Sea Level Rise and Implications for Low-Lying Islands, Coasts and Communities," in Special Report on the Ocean and Cryosphere in a Changing Climate (Intergovernmental Panel on Climate Change, 2019), https://www.ipcc.ch/srocc/chapter/chapter-4-sea-level-rise-and-implications-for-low-lying-islands-coasts-and-communities/; Intergovernmental Panel on Climate Change, "Regional Fact Sheet Ocean,' in Sixth Assessment Report of Working Group I—The Physical Science Basis, https://www.ipcc.ch/report/ar6/wg1/downloads/factsheets/IPCC_AR6_WGI_Regional_Fact_Sheet_Ocean.pdf.

The increasingly accurate weather forecasting by the Hong Kong Observatory have steadily reduced casualties over recent decades, because they can be made earlier, providing more time for preventive action.

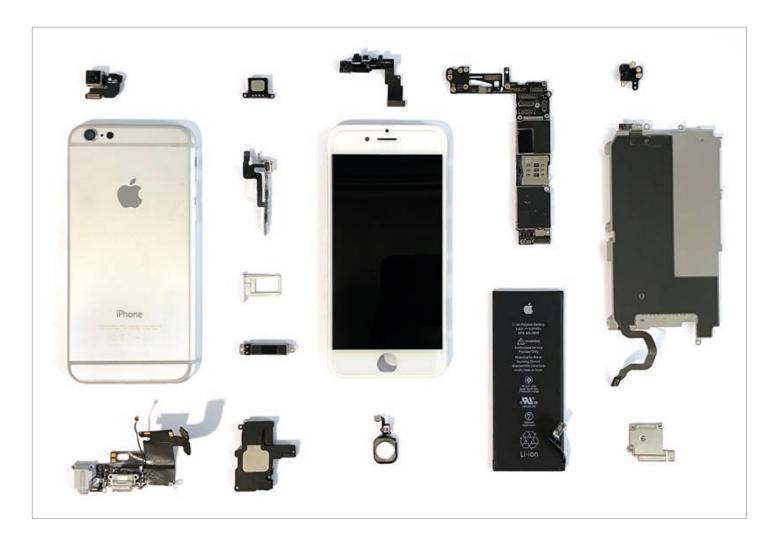
Typhoons also bring tidal surges, which can cause extensive flooding of low-lying areas. The third strongest typhoon, Mangkhut, brought extremely high winds and a record-breaking storm surge to Hong Kong on September 16, 2018, causing widespread destruction. The scenes of roaring high winds ravaging the city and huge waves smashing the shoreline are unforgettable. A severe tidal surge raised the water level in the harbour by 3.88 metres, and by 4.71 metres at Tai Po Kau. 83

It is anticipated that the increasing sea levels associated with global warming will make these events more frequent and severe. A combination of melting ice in the Arctic and Antarctica and water level rises due to expansion from warmer seas will bring stronger and more frequent tropical cyclones, and increase the potential for higher storm surges. A study by China Water Risk ranks Hong Kong fifth of 20 Asian cities for flood risk due to typhoon surges and global warming. The Intergovernmental Panel on Climate Change predicts a sea level rise of 0.5 to 1 metre by 2100, and stronger typhoons. Storm surges of 6 to 7 metres in the harbour will flood many areas of the city. The government will need to take preventive action to avoid future flood damage.

MC, SC, HL



21.3 颱風「山竹」對本港造成嚴重破壞。 Typhoon Mangkhut caused serious damage to Hong Kong.



一部被分解拆開的智能電話及其零件

A DECONSTRUCTED
APPLE IPHONE WITH ITS
VARIOUSLY LABELLED
COMPONENTS

蘋果公司的智能電話都由多個國家生產的零件組成,並在其他國家組裝, 再運至香港。

2020年全球汽車生產量約7,800萬輛。汽車製造商透過航運進口大量原材料和汽車零部件。

Each Apple iPhone is built from many parts that are sourced from several different countries, and are shipped to Hong Kong after assembly.

In 2020, around 78 million motor vehicles were manufactured worldwide. Car manufacturers need great quantities of raw materials and automotive parts to be brought in by ship.

你在早上使用的商品是由十多艘船隻 運來的!

全世界有九成的商品是透過船隻運輸的,我們每天都 受益於航運業。事實上,每天當你到達辦公室或學校時, 你可能已經使用了至少由十多艘船隻運來的貨物。枕頭、 床單、床墊、被子是由船隻運來的;清潔用品、衣服、 鞋子是由船隻運來的;早餐是由船隻運來的;巴士、 火車、汽車是由船隻運來的(它們的燃油也是)。要是 沒有船運,香港便會停擺。

此外,船運帶來的不僅是製成品,連同你所使用的各種用品的原材料,絕大多數也是經船運而來的。智能電話的數千個零件,包括微型晶片、屏幕、外殼、電池和相機等等,都必須經過對原材料的開採與加工而得來。看看下方的元素週期表(圖22.4),被標上紅色的元素都可以在智能電話裡找到,這些元素的來源遍及全世界。蘋果公司每生產10萬部智能電話所需的10種主要金屬與稀土材料數量,以及這些原材料的可能來源地列舉如下:

鋁,1,900公斤 (澳洲、中國、畿內亞)

鈷,770公斤(剛果、俄羅斯、澳洲)

銅,710公斤(智利、秘魯、中國)

鎢,93公斤(中國、俄羅斯、加拿大)

錫,42公斤(中國、印尼、緬甸)

稀土材料,11公斤(中國、美國、緬甸)

銀,7.5公斤(墨西哥、秘魯、中國)

鉭,1.8公斤(剛果、盧旺達、巴西)

金,0.97公斤(澳洲、中國、俄羅斯)

鈀,0.1公斤(俄羅斯、南非、加拿大)

大部分原材料都是經船隻運送,其他許多物品,包括 運動鞋、家具和汽車等也是。



22.1 一輛分解拆開的汽車。 A deconstructed car.

133

運動鞋

一隻鞋可以由來自世界各地的三十個部件所組成。每個部件各自完成後會被運到貨運樞紐的倉庫,再依鞋款分類包裝,用貨櫃以海運方式送到負責組裝的工廠。全球航運業的高效率令一雙運動鞋可以由來自世界各地的部件組成。在中國進行加工,再運到歐洲以零售價100歐元銷售,其運輸成本只需0.5美元。

家具:宜家家居 (IKEA)

宜家家居是一家銷量極高的家具零售企業,擁有超過9,500項商品,分別由50個國家超過1,800家供應商所提供。家具的部件以貨櫃裝運,送往世界各地的42個中央配送中心進行組裝與包裝,其後進一步運送至宜家家居在全球的600家分店。因此,其後勤管理須高度謹慎,確保滿載相應部件的貨櫃能準時運抵正確的配送中心。整個過程都以貨櫃運輸,船隻運送佔其中兩成,另外兩成以鐵路運送,其餘六成則以公路運送。

汽車

2020年全球生產超過7,800萬輛汽車,其中2,100萬輛在中國生產。汽車製造商需要大量的原材料,如鋼鐵、鋁、玻璃、橡膠、塑膠等。此外,許多汽車零件是在偏遠的地方進行次級組裝。因此,為確保每項零件準時送抵汽車裝配廠,運輸是尤其的重要環節。許多組裝完成的車輛亦須以特製的滾裝汽車運輸工具運送。許多在歐洲製造的高級房車運至美國與亞洲,而許多在日本、南韓生產的汽車亦運至美國與歐洲銷售。

香港對航運的依賴

香港的進出口數量在本地生產總值(GDP)中所佔的 比值,比世界上任何地方都要高。香港2020年的本地生產 總值是2.68萬億港元,而進出口業(極大部分仰賴海運) 總值則達8.18萬億港元。航運業向粵港澳大灣區的工廠 輸入原材料並運出製成品,為香港繁榮不可或缺的一環。

RH, MC, TS, TH

This Morning, You Used Goods From over a Dozen Ships!

Globally, 90% of all goods are transported by ship. Everyone in Hong Kong uses the shipping industry every day. In fact, by the time you arrive at work or school, you have probably already used goods brought in by at least a dozen ships! The pillows, sheets, mattress, and blankets on your bed came by ship; your cleaning materials, clothes, and shoes came by ship; your breakfast came by ship; the bus, train, or car you took to get there (and the fuel it burned) came by ship. Without ships, Hong Kong stops.

Furthermore, there is more to shipping than just the carriage of finished goods. Most of the raw materials needed to manufacture the items you use are also brought in by sea. The smart phone in your pocket contains thousands of components, including microchips, a screen, a case, a battery, and a camera. Raw materials had to be mined and processed to make these components. Take a look at the periodic table of the elements below (Fig. 22.4), the elements in red can all



22.2 2021 年蘇彝士運河阻塞事件。 Suez Canal obstruction, 2021.

be found in an iPhone, and they come from all over the world. The quantity of 10 key metals and rare earth materials Apple needs for every 100,000 devices it produces, and the likely provenance of these materials, are listed below:

1900 kg of Aluminium (Australia, China, Guinea);

770 kg Cobalt (Congo, Russia, Australia);

710 kg of Copper (Chile, Peru, China);

93 kg of Tungsten (China, Russia, Canada);

42 kg of Tin (China, Indonesia, Myanmar);

11 kg of rare earth materials (China, USA, Myanmar);

7.5 kg of Silver (Mexico, Peru, China);

1.8 kg of Tantalum (Congo, Rwanda, Brazil);

0.97 kg of Gold (Australia, China, Russia); and

0.1 kg of Palladium (Russia, South Africa, Canada).

Most of these raw materials are delivered by ship, and the story is similar for many other items, including sports shoes, furniture, and cars.

Sports Shoes

A single shoe can be made up of thirty parts sourced worldwide. Each part is shipped to large warehouses in shipping hubs to be sorted and packed by shoe type before being shipped by sea in containers to the factories that will assemble them. The efficiency of the world's shipping industry means that a pair of sports shoes with parts sourced from all over the world, manufactured in China, and sold in Europe for a retail price of 100 euro typically only costs US\$0.50 per pair for shipping.

Furniture: IKEA

IIKEA is a very high-volume furniture retailer with over 9,500 products that buys its stock from more than 1,800 suppliers in 50 countries. Furniture parts are shipped in containers to 42 central distribution centres around the world where they are assembled and packed before onward delivery to one of IKEA's 600 stores worldwide. Great care is needed to manage the logistics to ensure that the containers with the right parts are delivered at the right time to the right distribution centres. Containers are used throughout this process—with around 20% of shipments made by sea, 20% by rail, and 60% by road.

Cars

In 2020, around 78 million motor vehicles were manufactured worldwide, of which China produced 21 million. Car manufacturers need large amounts of raw materials, steel, aluminium, glass, rubber, plastic, etc., and many automotive parts are sub-assembled in remote locations. Shipping is the vital link to ensure that every part arrives at the car assembly factory on time. Many finished cars are also shipped abroad on specialised roll on/roll off car carriers. Many luxury cars made in Europe are shipped to the US and Asia, and many cars manufactured in Japan and South Korea are shipped to the US and Europe.



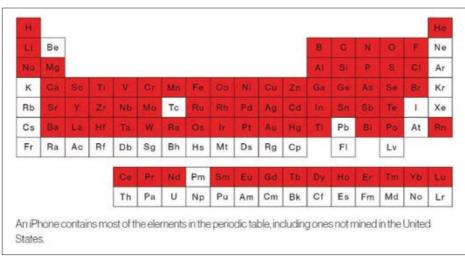
22.3 「各位 FANS,唔好意思!我班船遲咗,嚟唔到香港住。」麥當勞快餐店於 2021 年 9 月 10 日刊登的 廣告。

"Sorry, fans! My ship is delayed. I can't come to Hong Kong at the moment," McDonald's advertisement, September 10, 2021.

Hong Kong's Reliance on Shipping

Hong Kong's imports and exports are worth more as a percentage of its GDP than almost anywhere else in the world. In 2020, Hong Kong's GDP was HK\$2.68 trillion and the value of its imports and exports, much of which travelled by sea, was HK\$8.18 trillion. Shipping is a vital component in Hong Kong's prosperity, bringing in raw materials and exporting finished goods from its factories in the Greater Bay Area.

RH, MC, TS, TH



22.4 標示生產智能電話所需元素的元素週期表。

Periodic table of the elements (in red) used in making a smartphone.





港的優勢在於位處連接中國內地與世界門戶的戰略位 置。其低稅率、簡單稅制、法治,以及貨物、資金、 資訊和人員的自由進出等具商業吸引力。

長久以來,香港一直是國際貿易與物流的樞紐。自「一帶一路」的倡議公佈與「粵港澳大灣區」成立以來,由船東、經理、貿易商、工人等所組成的龐大航運產業,令香港在高附加值的海事服務強化起來,並能透過進一步的區域整合而獲得更多新的商機。

儘管如此,若要保持國際海事中心與物流樞紐的領導地位,香港仍須面臨多重挑戰,當中最主要的乃是欠缺經驗充足的人才。海事行業所需具備的專業知識並不容易從其他行業獲得。此外,新冠疫情所帶來嚴重的問題是,隔離檢疫的要求與飛機航班的縮減,促使全球各地能及時更換船組人員變得非常困難。疫情爆發所造成的不確定性,已有許多海員被迫放棄出海而另謀生計,這些都大大增加了航運業努力維持其可靠性的壓力,並威脅著全球供應鏈的穩定性。

此外,氣候變化乃是未來數十年,甚至幾個世代必須面對的長期議題。應對方法除了科技創新,尚需持續不斷的社會自覺,個人生活習慣改變,並教育和政府問合作等多方的配合。全球暖化是對地球最嚴重的長期威脅。事實上,國際航運業佔全球二氧化碳排放量的3%,每年約10億噸。航運界最近承諾要在2050年實現二氧化碳淨零排放。對此,更大的挑戰可能是航運業如何逐步減碳,以符合全球對減少溫室氣一尤其是二氧化碳的排放標準。考慮到航運業承擔了全球80%的貿易量,其減碳成本勢必轉嫁至消費者身上。

2021年,中國和香港已成為世界第四大的船舶註冊地, 更須積極克盡減碳之責任。為了要在2050年實現船隻二氧 化碳淨零排放的目標,船隻燃料必須由化石燃料改為零 排放能源,目前考慮的主要是綠色氫氣和氨氣。雖然香港 尚沒有足夠的綠能來源,或許日後可以自「粵港澳大灣 區」取得核能、風能和太陽能。「粵港澳大灣區」若能 生產足夠的綠色能源,為船舶提供綠色氫氣和氨氣,未來 此區有望成為主要的船隻加油中心之一。



(1) 深圳鹽田港。 Port of Yantian, Shenzhen.



(2) 粤港澳大灣區地圖。 Map of the Guangdong-Hong Kong-Macau Greater Bay Area.

另外,實現航運業的可持續發展時,社會議題不能忽視。 例如國際海事組織目前已採取策略性措施,以協助女性 打入這個傳統上以男性主導的航運業。

綜觀而言,建設一個智慧港口城市意味著我們將要積極把 香港的各行各業與海洋連結起來,包括貿易、商業、生活 方式、航運業、海濱發展、水產消費和水上娛樂等等。 在「讓市民和海旁更接近」的口號之下,香港仍須持續 重塑自身與海洋、港口設施和海濱沿岸的關係。

MC, LC

ong Kong has the advantage of its strategic location as a gateway between mainland China and the world. Its appeal includes its low and simple tax regime, the rule of law, and the free flow of goods, capital, information, and people.

Hong Kong has long been a leading international trade and logistics hub. The announcement of the Belt and Road initiative and the Greater Bay Area (GBA), along with the large local shipping community characterised by a strong presence of ship owners, managers, traders, and workers, allow Hong Kong to leverage its strengths in high value-added maritime services and gain new opportunities through further regional integration.

To maintain Hong Kong's leading role as an international maritime centre and logistics hub, there are challenges to face, the chief one being sufficiency of experienced manpower. Maritime businesses require staff with specialist knowledge not easily obtained from other

industries. Another more serious problem brought by the Covid-19 pandemic is the huge difficulty of rotating ship crews worldwide in a timely manner due to quarantine requirements and a lack of flights. In the face of such uncertainty, many seafarers are leaving the sea, which is increasing pressure on the shipping industry's ability to maintain reliability and threaten global supply chains.

Climate change is a long-term issue to be tackled in the coming decades, or generations. This will require not only technological innovations but also continual social awareness, changes in individual living behaviour, education, and coordination between governments. Global warming is the most serious long-term threat to planet earth, and international shipping is responsible for 3% of the world's CO2 emissions, about 1 billion tonnes per year. It has recently pledged to achieve net zero CO2 emissions by 2050. As shipping is a global industry that carries 80% of world trade, the costs to decarbonise will need to be passed on to the consumer.



(3) 海洋環保團Race of Water基金會船隻停靠在中環碼頭。 The boat of the Race for Water foundation, an ocean environment protection organisation, docked at the Central Pier.

To meet shipping's net-zero CO2 emission goal by 2050, ships must switch from fossil fuels to zero emission energy sources, the main ones under consideration are green hydrogen and ammonia. Although Hong Kong does not have sufficient sources of green energy, there is potential in the GBA for nuclear, wind, and solar energy. If the GBA can produce abundant green hydrogen and ammonia for ships, it could become a major ship bunkering centre in the future.

To achieve industrial sustainability, social issues must also be considered. The International Maritime Organisation has been taking a strategic approach to help the industry enhance the participation and contribution of women in this traditionally male-dominated industry.

Building a smart port city means connecting all walks of life in Hong Kong to the ocean — trade, business, lifestyle, maritime industry, waterfront development, seafood consumption, and water entertainment. Certainly, Hong Kong will continue to re-imagine its relationship with the sea, its harbour facilities and its harbour front under the slogan "Bring the Harbour to the People and the People to the Harbour".

MC, LC



(4) 維多利亞港。 The Victoria Harbour.



粤港澳大灣區 互動展示 INTERACTIVE DISPLAY OF THE GREATER BAY AREA

粵港澳大灣區包括廣東省的九個城市,以及香港和澳門兩個特別行政區,共同形成一個面積達5.6 萬平方公里的區域。海上聯通對粵港澳大灣區的發展起著關鍵作用。

這個互動裝置介紹香港海運業未來的發展方向,是如何得益於大灣區的經濟增長以及與各城市日益緊密的聯繫。

The nine major cities in the Guangdong province together with the two Special Administrative Regions of Hong Kong and Macau create the Greater Bay Area, occupying an area of 56,000 km². Maritime links play a crucial role in developing the wider Greater Bay Area.

This interactive introduces the future development of Hong Kong maritime service under the advantages of the economic growth and increase connections between cities in the area.

- 86 「灣區經濟分析 | 2021 年粵港澳大灣區經濟分析報告」,北京大學匯豐商學院,檢索於 2022 年 4 月 25 日,https://thinktank.phbs.pku.edu. cn/2022/jingjifenxi_0121/58。
- "China" The Observatory of Economic Complexity, 檢索於 2022 年 4 月 25 日,https:// oec.world/en/profile/country/chn。
- "Major Economic Indicators of the Guangdong-Hong Kong-Macao Greater Bay Area (2020)", Hong Kong Trade Development Council, 檢索於 2022 年 4 月 25 日,https://research.hktdc.com/ en/article/MzYzMDE5NzQ5。
- "Overview", Constitutional and Mainland Affairs Bureau, 檢索於 2022 年 4 月 25 日,https://www. bayarea.gov.hk/en/about/overview.html。
- 87 David Dodwell, *China's Greater Bay Area The Pearl River Delta Illustrated* (Hong Kong:
 Airphoto International Limited, 2021). 9.
- 88 同上註。

香港在粤港澳大灣區的地理環境

任何有關香港成就和未來的展覽都會提及粵港澳大灣區,但其對香港的重要性往往被低估。

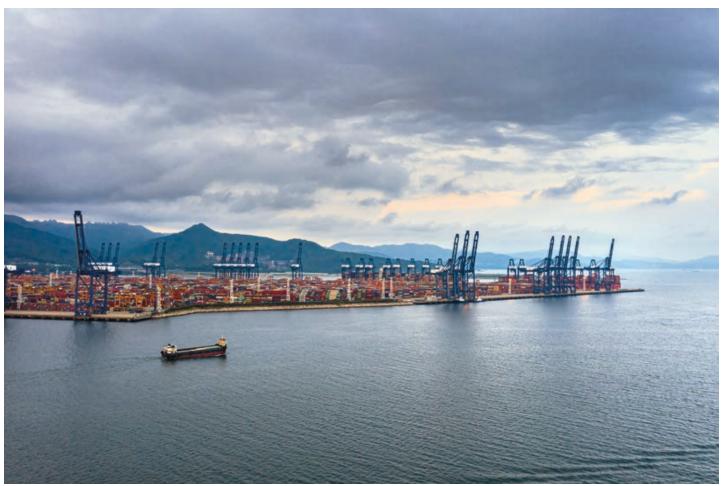
粤港澳大灣區所包括的內地九大城市中,以廣州和深圳最為重要。這九座城市與香港及澳門兩個特別行政區相連,形成一個面積為5.6萬平方公里的區域。雖然佔全中國面積不足1%,卻聚居了全中國6%的人口(8,600萬),其本地生產總值(GDP)佔全中國的11%,出口量則佔全中國的41.8%。86

自1978年鄧小平宣布中國對外開放以來,珠三角的經濟增長最為迅速。該地區不僅受益於自身經濟的多樣性,亦得益於來自香港的大量投資與北京的優惠政策。其部分願景是由現任中國國家主席習近平之父習仲勳在1978至1981年間擔任廣東省委書記與廣東省省長時所提出的。87

粵港澳大灣區如今已成為一個對全球舉足輕重的經濟區。其經濟規模達1.7萬億美元,與南韓及加拿大相若,並超越澳洲與西班牙(各為1.4萬億美元)。大灣區的經濟規模預計將於2025年超越英國(2.8萬億美元),及於2030年時追上德國(3.95萬億美元)。⁸⁸

與香港一樣,海上聯繫對粵港澳大灣區的發展起著關鍵作用。如前所述,粵港澳大灣區如今的出口量佔全中國的35%。香港以外的大灣區各港口所處理的貨物已從1980年的600萬個標準貨櫃(TEUs)增長到2020年的6,100萬個。這些貿易數據已清楚地說明香港的絕佳貿易機會,每一個滿載的貨櫃都代表著一個機會。

DD, RH



23.1 深圳鹽田港。 Yantian Container Terminals, Shenzhen.

Hong Kong's Geographical Setting in The Greater Bay Area

Any exhibition of Hong Kong's achievements and its future must have mentioned the Greater Bay Area, while the importance of which is often underestimated in Hong Kong.

The nine major cities in the Greater Bay Area, the most important of which are Guangzhou and Shenzhen, have been linked with the SAR governments of Hong Kong and Macau to create a region of 56,000 square kilometres. The land accounts for just 1% of China's area but 6% (86 million) of its population in 2020. It also accounts for 11% of the country's GDP and a stunning 41.8% of its exports in 2020.⁸⁶

The Pearl River Delta has recorded the most rapid economic growth since Deng Xiaoping announced the opening of China to the world in 1978. It has not only benefited from the diversity of its own economy, but also from massive investment from Hong Kong and favourable policies from Beijing. Part of the vision for the region was realised by Xi Zhongxun, father of China's current President Xi Jinping, while he was the Party Secretary and Guangdong's provincial governor between 1978 and 1981.⁸⁷



23.2 港珠澳大橋。 Hong Kong-Zhuhai-Macao Bridge.

The Greater Bay Area is now an economic region of global importance. Its economy of US\$1.7 trillion is equal in size to those of South Korea and Canada, and larger than Australia and Spain (both US\$1.4 trillion). It is expected to surpass the UK (US\$2.8 trillion) by 2025 and draw level with Germany (US\$3.95 trillion) by 2030.⁸⁸

Maritime links play a crucial role in the development of the wider Greater Bay Area, just as they do for Hong Kong. As noted above, ports of the Greater Bay Area now handle 35% of China's exports. The amount of cargo handled at ports in the region excluding Hong Kong has grown from 6 million TEUs in 1980 to 61 million TEUs in 2020. Those trade figures speak very loudly of the extraordinary trading opportunities on Hong Kong's doorstep. Inside every loaded container is one such opportunity.

DD, RH



23.3 廣州港 · 廣州。 Guangzhou port, Guangzhou.

- 86 The PHBS Think Tank. "Wanqu jingji fenxi 2021 nian yue gang'ao da wan qu jingji fenxi baogao." Peking University HSBC Business School, accessed April 25, 2022, https://thinktank.phbs.pku.edu.cn/2022/jingjifenxi_0121/58. html.
- "China" The Observatory of Economic Complexity, accessed April 25, 2022, https://oec.world/en/profile/country/chn.

- "Major Economic Indicators of the Guangdong-Hong Kong-Macao Greater Bay Area (2020)", Hong Kong Trade Development Council, accessed April 25, 2022, https://research.hktdc. com/en/article/MzYzMDE5NzQ5.
- "Overview", Constitutional and Mainland Affairs Bureau, accessed April 25, 2022, https://www.bayarea.gov.hk/en/about/overview.html.
- 87 David Dodwell, *China's Greater Bay Area The Pearl River Delta Illustrated* (Hong Kong: Airphoto International Limited, 2021). 9.
 - 88 Thid



24

綠色航運牆 GREEN SHIPPING WALL 航運是運輸原材料和貨物最有效的方法。沒有其他運輸方式在消耗極少能源的同時,能提供如此龐大的運輸量。儘管如此,航運業仍然致力減少溫室氣體排放量。目標為2030年代中期,二氧化碳排放量比2008年水平降低40%。

「綠色航運牆」介紹現時國際廣泛使用的環保技術,和香港在實現全球減碳目標的重要 地位。

Shipping is the most efficient method of transporting raw materials and manufactured goods. No other means of transport can deliver such large volumes whilst consuming such little energy. But the maritime industry is nonetheless committed to reducing emissions, which set a target to reduce CO_2 emissions by 40% from 2008 levels by the mid-2030s.

The green shipping wall introduces new technologies widely used globally, and how Hong Kong plays a prominent role in limiting pollution from shipping.

邁向航運業的綠色未來

減少排放

航運是運輸原材料和製成品最有效的方法。沒有其他運輸方式可以在消耗極少能源的的情況下,能提供如此龐大的運輸量。航運業每年的二氧化碳 (CO₂) 排放量約為全球排放量的2.5%,即燃燒約3億噸化石燃料。與農業、林業及土地利用所造成的二氧化碳 (CO₂) 排放量 (18.4%) 相比,航運的排放量佔很少。儘管如此,航運業仍然致力於減少其二氧化碳 (CO₂) 的排放量。

自蒸汽機發明以來,航運業最大的目標是引入零排放燃料。由於目前尚未有此類燃料,航運業則已設定減碳目標,在2030年代中期的二氧化碳排放量要比2008年的水平降低40%。⁸⁹ 為實現此目標,現有船舶均須透過提高船體與引擎的效率,或單純透過減速與減少燃料消耗,以達到日益嚴格的綠色目標。

香港在限制航運污染方面一直扮演重要角色。《乘風約章》最初是一項自願協議,鼓勵遠洋船舶在停靠香港時改用低含硫量的柴油燃料,後來在2015年成為強制性的規定。2020年,國際海事組織強制要求所有船舶使用含硫量只有0.5%(原為3.5%)的燃料,或安裝廢氣洗滌器以脱硫。90

2020年,在天星小輪有限公司旗下,於1965年建造的「曉星號」(Morning Star)成為第一艘在香港營運的低排放環保渡輪。在環境保護署的新能源運輸基金資助下,改用柴油——電力驅動系統。⁹¹ 香港政府還設立額外的獎勵措施,以協助其他本地渡輪公司改用綠色創新運輸技術。⁹²





24.1 配備弗萊特納輪子的船隻。 Ships fitted with Fletner Rotors.

- 89 《削減航運業的溫室氣體排放一強制規定的十年》新聞稿,國際海事組織,2021年7月 15日,https://www.imo.org/en/MediaCentre/ PressBriefings/pages/DecadeOfGHGAction.
- 90 《防止船舶的空氣污染》,國際海事組織,檢 索於 2021 年 10 月 29 日, https://www.imo.org/ en/OurWork/Environment/Pages/Air-Pollution. aspx;《2019 年環境報告》,香港特別行政區 政府海事處,頁 9, https://www.mardep.gov.hk/ en/publication/pdf/coer.pdf。
- 91 經過柴油電能推進系統(DEPS)改造後,「曉星號」如今使用符合國際海事組織二級(Tier III)排放標準及美國環境保護署三級(Tier III)標準的低硫燃料及發電機。見《香港首次採用以柴油電能推進系統為動力的綠色環保天星小輪投入服務》新開稿,天星小輪,2020 年 7 月9 日,http://www.starferry.com.hk/sites/default/files/200709%20Morning%20Star%20Postevent%20Press%20Release_c.pdf。
- 92 《政府為電動小輪作準備》,香港特別行政區政府新聞處,2021年7月7日,https://www.news.gov.hk/chi/2021/07/20210707/20210707_155908_673.html。
- 93 《航運業向全球監管機構提出大膽計劃,到 2050 年實現零排放》新聞稿,國際海運商會,2021 年 10 月 5 日,https://www.ics-shipping.org/pressrelease/shipping-industry-sets-out-bold-plan-toglobal-regulator-to-deliver-net-zero-by-2050/。
- 94 船舶的正常使用年限為20至30年,而目前尚未 有達到此一目標的深海環球貿易船舶。大約有 12%的船舶使用液化天然氣為燃料,其二氧化碳 排放量比傳統船舶少約20%,但污染的減少程度 尚不足以達到排放目標。儘管這是一項改進,但 並無法達到目標。
- 95 《削減航運業的溫室氣體排放》,國際海事 組織,2021 年 7 月 15 日,https://www.imo. org/en/MediaCentre/PressBriefings/pages/ DecadeOfGHGAction.aspx。
- 96 另一個建議是使用風力作為推進力,正如19世紀末動力船問世前所使用的方法。然而,與早期的帆船不同,這些船舶將以新型的風帆駕馭風力,並配置一台小型柴油發電機備用。考慮到深海船舶的尺寸與重量,一般認為電池動力並不適用於該類船舶。

船長桌: COP26 與日後的計劃

自2021年底在格拉斯哥舉行的第26屆聯合國氣候變化大會(COP26)以來,航運業對於2050年實現淨零排放二氧化碳目標的支持度越來越高。⁹³ 自2023年起,船舶將需要逐步實現更嚴格的排放目標,並每年公布每噸英里的碳排放量,⁹⁴ 以協助實現於2030年把排放量從2008年的水平降低40%的目標。⁹⁵

目前尚未有實現淨零排放的單一解決方案。儘管已經 提出了氨氣、氫氣等其他替代方案,但仍須證明它們在 深海船舶上使用的安全性。為產生效益,這些燃料必須 以環保能源製作,例如風能、% 太陽能、潮汐能、水能或 核能。%

建設零碳燃料的基礎設施也是一項艱鉅的任務。需要 對儲存及配送燃料的設備進行投資,特別是需要液化的 燃料。⁹⁸ 目前正在研究的項目包括繼續使用化石燃料, 但要收集從煙囱排放的二氧化碳並儲存在船上,以便日後 在岸上的設施中進行安全處理。⁹⁹ 政府也可能徵收碳税,以資助轉向更環保科技所需的 研究。此舉可能會迫使較舊和經濟效益不高的船隻停運。 有鑑於生產零排放燃料的成本比化石燃料增加很多,業界 目前正在探討如何鼓勵供應此類燃料。

改進能讓港口運作變得更有效率,從而降低在港口 之間來回的航行成本。為了實現此目標,便需要對科技與 人工智能進行大量投資。

展望未來,由香港主導的計劃例如船長桌(The Captain's Table)向更廣闊的全球市場提供平台,以提供減碳解決方案。與此同時,Clearbot等香港公司正在展現人工智能在海洋領域日益重要的角色,包括已開發零排放船隻來清理海上垃圾及油污。¹⁰⁰

MC, TH



24.2 裝有大型風帆的船隻 Ship fitted with a kite.

- 97 另一個方法是為船舶開發 5-100 兆瓦的小型核電站。熔鹽反應堆看似是一種有潛力的方法,但距離實際應用至少還有 10-15 年的時間。熔鹽反應堆非常安全,不會產生可用於武器的核燃料,並且由於它們不需要補給燃料,可以運行 30 年以上。Harry Valentine:《用於海上推進的模塊化熔鹽核動力》,《海事執行官》,2021 年 5月 14 日,https://www.maritime-executive.com/editorials/modular-molten-salt-nuclear-power-for-maritime-propulsion。
- 98 Jonathan Saul: 《太冷了,無法處理?開拓氫 氣運輸的競賽》,路透社,2021年5月12日, https://www.reuters.com/business/sustainablebusiness/too-cold-handle-race-is-pioneershipping-hydrogen-2021-05-11/。
- 99 此方法目前正以各種系統進行試驗。若試驗成功,它可能會提供一個很好的解決方案,因為生產環保的氫氣或氦氣需要大量的綠色能源,而陸地上的工業與家庭使用將對這種能源有大量的需求。
- 100 香港貿易發展局:《香港初創公司 Clearbot 將徹底改變海洋垃圾的收集》廣告,《南 華早報》,2020年2月4日,https://www. scmp.com/presented/news/hong-kong/topics/ tackling-pollution/article/3120341/hong-kongstart-clearbot-set; 《雷蛇協助設計垃圾收集機械 人來清理塑膠污染》,CNET YouTube 頻道, 2021年8月13日,https://www.youtube.com/ watch?v=2lbgBvtvpeg。
- 101 "International Journal of Hydrogen Energy, Hydrogen from Wind Farms", Volume 46, Issue 48, 13 July 2021, Pages 24620-246, https:// www.sciencedirect.com/science/article/pii/ S0360319920316438

Towards a Green Future for Shipping

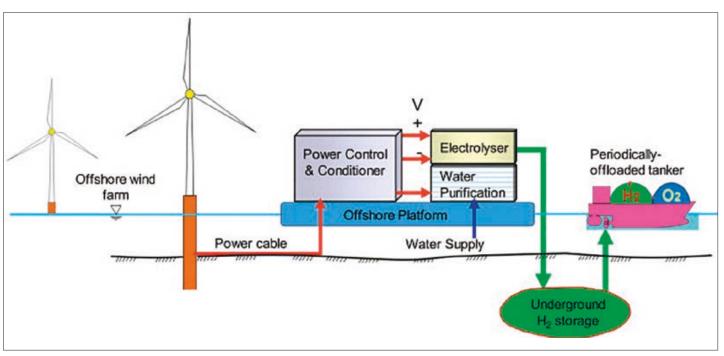
Reducing Emissions

Shipping is the most efficient method of transporting both raw materials and manufactured goods. No other means of transport can deliver such large volumes whilst consuming such little energy. Shipping is responsible for about 2.5% of annual global carbon dioxide (CO₂) emissions and burns around 300 million tonnes of fossil fuels each year. These emissions are small when compared to the 18.4% of global greenhouse gas emissions associated with raising animals for meat, eggs, and milk, but the maritime industry is nonetheless committed to reducing emissions.

The eventual introduction of zero emission fuels would mark the biggest change in shipping since the invention of the steam engine. With such fuels unavailable at present, the shipping industry has set a target to reduce $\rm CO_2$ emissions by 40% from 2008 levels by the mid-2030s. To meet this goal, existing ships must meet progressively stricter green targets by improving hull and engine efficiency or simply by slowing down and burning less fuel.

Hong Kong continues to play a prominent role in limiting pollution from shipping. The Fairwinds Charter was originally a voluntary agreement that vessels would switch to low-sulphur fuel when berthing in Hong Kong; this became mandatory in 2015. In 2020, the International Maritime Organization made it compulsory for all ships to burn fuel with 0.5% sulphur (down from 3.5%) or to install exhaust gas scrubbers to remove the sulphur.⁹⁰

In 2020, Star Ferry Co.'s *Morning Star* became the first low-emission ferry to operate in Hong Kong. The ferry, which was built in 1965, was converted to diesel electric propulsion with funding from the Pilot Green Transport Fund of the Environmental Protection Department.⁹¹ Additional government incentives are in place to assist other local ferry companies to switch to electric propulsion.⁹²



24.3 利用風生產氫氣作為燃料。¹⁰¹ Using wind to produce hydrogen as fuel.¹⁰¹

The Captain's Table: COP26 and Beyond

Since the 26th UN Climate Change Conference of the Parties (COP26) meeting held in Glasgow in late 2021, there has been growing support within the shipping industry to aim for net zero CO₂ emissions by 2050. 93 Ships will meet progressively tougher emission targets from 2023 and make an annual declaration of the amount of carbon emitted per ton mile 94 to help meet the 2030 target of lowering emissions by 40% from 2008 levels. 95

No single solution for reaching net zero emissions has yet emerged. Ammonia, hydrogen, and other alternatives have been proposed but must be proven to be safe for use on deep-sea ships. To derive any benefits, these fuels must be made from green energy sources, such as wind, ⁹⁶ solar, tidal, hydro, or nuclear power. ⁹⁷

Building the infrastructure for carbon-free fuels is also an enormous undertaking. Investment will be needed for storage and distribution facilities, particularly for those fuels that need to be liquified. One idea being investigated is to continue using fossil fuels but to capture the $\rm CO_2$ being emitted from the funnel and store it onboard for later discharge to shore facilities for safe disposal. One

Carbon taxes are likely to be imposed to fund the research needed to switch to greener technologies, and this will probably force older and less economical ships out of business. Discussions are ongoing on how to encourage the supply of new zero emission fuels given that they will be much more expensive than fossil fuels.



24.4 全球第一艘全電動渡輪 — 「安培號」 (MV Ampere)。 MV Ampere, the world's first all-electric ferry.

- 89 "Cutting GHG Emissions from Shipping 10 years of Mandatory Rules," Press Release, International Maritime Organization, July 15, 2021, https://www.imo.org/en/MediaCentre/ PressBriefings/pages/DecadeOfGHGAction. aspx. Ships are normally in use for 20 to 30 years, and there are no deep sea worldwide trading ships that meet this goal at present. About 12% of ships are operating on LNG, which emits about 20% less CO₂ than conventional ships but does not reduce pollution enough to meet the emissions target.
- 90 "Prevention of Air Pollution from Ships,"
 International Maritime Organization, accessed
 October 29, 2021, https://www.imo.org/en/
 OurWork/Environment/Pages/Air-Pollution.aspx;
 Environmental Report 2019 (Marine Department,
 Government of the HKSAR), 9, https://www.
 mardep.gov.hk/en/publication/pdf/coer.pdf.
- 91 After a DEPS retrofit, *Morning Star* now uses low-sulphur fuel and generators that comply with the Tier II emission standards of the International Maritime Organization and the Tier III standards of the US Environmental Protection Agency. "Green Star Ferry in Service Powered by Diesel-Electric Propulsion System, First Ever in Hong Kong," Press Release, The 'Star' Ferry Company Limited, July 9, 2020, http://www.starferry.com. hk/sites/default/files/200709%20Morning%20 Star%20Post-event%20Press%20Release_e.pdf.
- 92 "Government Preparing for Electric Ferries," Information Services Department, Government of the HKSAR, July 7, 2021, https://www.news. gov.hk/eng/2021/07/20210707/20210707_155908_ 673.html.
- 93 "Shipping Industry Sets Out Bold Plan to Global Regulator to Deliver Net Zero by 2050," Press Release, International Chamber of Shipping, October 5, 2021, https://www.ics-shipping.org/press-release/shipping-industry-sets-out-bold-plan-to-global-regulator-to-deliver-net-zero-by-2050/.
- 94 Ships normally last between 20 to 30 years. There are currently no deep sea worldwide trading ships that are able to meet this goal. About 12% of ships are operating on LNG, which emits about 20% less CO2 than conventional ships. This is an improvement but will not achieve the target



24.5 瑞典正在開發的實驗性汽車運輸船。¹⁰¹ Photo of an experimental car carrier under development in Sweden.¹⁰¹

A universal improvement would be for ports to become more efficient, thus reducing the cost of voyages between them. Large investments in technology and artificial intelligence will be needed to make this happen.

Looking to the future, Hong Kong-led initiatives such as *The Captain's Table* have provided a platform

for showcasing decarbonisation solutions to the wider global market. Meanwhile, the increasingly important role of artificial intelligence in the marine sector is being demonstrated by Hong Kong companies such as Clearbot, which has developed emissions free vessels to undertake oil recovery and waste clearance.¹⁰⁰

MC, TH

- 95 "Cutting GHG emissions from shipping." The International Maritime Organization, July 15, 2021, https://www.imo.org/en/MediaCentre/ PressBriefings/pages/DecadeOfGHGAction.aspx.
- 96 Another proposal is to use wind for propulsion, as was done before powered ships arrived in the late nineteenth century. Unlike earlier sailing ships, however, the wind would be harnessed by new types of sails and the ships would have a small diesel engine for backup. Battery power is not considered viable for deep sea ships because of their size and weight.

- 97 Another idea is to develop small 5 MW to 100 MW nuclear power plants for ships. Molten salt reactors appear to be a promising approach but are at least 10 to 15 years away from practical use. Molten salt reactors are very safe, do not create nuclear fuel that can be used in weapons and, as they do not need refuelling, could run for more than 30 years. Harry Valentine, "Modular Molten Salt Nuclear Power for Maritime Propulsion," Maritime Executive, May 14, 2021, https://www.maritime-executive.com/editorials/modularmolten-salt-nuclear-power-for-maritime-propulsion.
- 98 Jonathan Saul, "Too Cold to Handle? Race is on to Pioneer Shipping of Hydrogen," *Reuters*, May 12, 2021, https://www.reuters.com/business/ sustainable-business/too-cold-handle-race-ispioneer-shipping-hydrogen-2021-05-11/.
- 99 Various systems are being proposed for trialling this method. If the trials are successful, it might present a good solution, as considerable green energy is needed to create green hydrogen or ammonia and there will be huge demand for this energy for industrial and domestic use on land.
- 100 Hong Kong Trade Development Council, "Hong Kong Start-up Clearbot Set to Revolutionise Marine Trask Collection," Advertisement, South China Morning Post, February 4, 2020, https://www.scmp.com/presented/news/hongkong/topics/tackling-pollution/article/3120341/ hong-kong-start-clearbot-set; "Razer Helped Design a Trash Collecting Robot to Clean Up Plastic Pollution," CNET YouTube Channel, August 13, 2021, https://www.youtube.com/ watch?v=2lbgBvtvpeg.
- 101 International Journal of Hydrogen Energy, Hydrogen from Wind Farms, Volume 46, Issue 48, 13 July 2021, Pages 24620-246 https:// www.sciencedirect.com/science/article/pii/ S0360319920316438.



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2020年東京奧運會銀牌 2020 OLYMPICS SILVER MEDAL

何詩蓓借展 On loan from Siobhán Bernadette Haughey 在2020年東京奧運會上,何詩蓓贏得女子200米自由泳與100米自由泳的銀牌,成為有史以來第一位在奧運會贏得獎牌的香港游泳運動員,也是首位獲得兩枚奧運會獎牌的香港運動員。

2021年12月,在國際游泳聯合會 (FINA) 的世界短池游泳錦標賽上,她在同樣的項目中獲得兩枚金牌,並成為首位打破世界紀錄的香港運動員。

憑藉著決心、專注與積極的態度,何詩蓓為香港泳界創造奇蹟。



2021年國際游泳聯合會世界 短池游泳錦標賽金牌 2021 FINA WORLD SWIMMING CHAMPIONSHIPS GOLD MEDAL

何詩蓓借展 On loan from Siobhán Bernadette Haughey

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At the Tokyo 2020 Olympic Games, Siobhán Bernadette Haughey won silver medals in both the women's 200 metre freestyle and 100 metre freestyle. She became the first swimmer from Hong Kong ever to win a medal at the Olympic Games and the first athlete from Hong Kong to win two Olympic medals.

In December 2021, at the FINA World Swimming Championships, she won two gold medals in the same events and became the first Hong Kong athlete to break a world record.

With Siobhán's determination, focus, and positive attitude, her achievement in the water sports showcases this extraordinary spirit of Hong Kong people that created the city's Maritime Miracle.

香港的水上運動

李麗珊在1996年亞特蘭大奧運會上奪得女子滑浪風帆金牌,是香港有史以來第一枚水上運動的金牌。

經過幾代選手在各類水上運動(如帆船、划艇、游泳 與滑浪)領域的多年努力,香港選手在各種地區性及國際 性的比賽中均取得亮眼的成績。

香港游泳界奇蹟

何詩蓓(Siobhán Bernadette Haughey)於1997年在香港出世。四歲時,她在南華體育會第一次參加游泳班,但每次下課後都哭著離開游泳池。嚴苛的訓練並沒有讓她抗拒游泳,反而產生強烈的熱忱。每天早上4時45分起床,練習到早上7時才回到聖保祿中學上課。

16歲那年,何詩蓓在杜拜贏得國際游泳聯合會 (FINA)世界青年游泳錦標賽金牌後,獲得2013年全年 最傑出青少年運動員大獎,成為其他年輕人的榜樣。

2016年,何詩蓓入讀美國密西根大學並繼續游泳訓練。同年,她參加里約熱內盧奧運會,成為史上第一位晉級奧運會準決賽的香港女子游泳運動員。2017年,她在臺北世界大學運動會女子100米與200米自由泳中奪得兩枚金牌。

在2020年東京奧運會上,何詩蓓在女子組200米自由 泳與100米自由泳均獲得銀牌,成為有史以來第一位在 奧運會贏得獎牌的香港游泳運動員,也是首位獲得兩枚 奧運會獎牌的香港運動員。

2021年12月,在阿布扎比舉行的國際游泳聯合會 (FINA) 世界短池游泳錦標賽中,何詩蓓在女子100米與 200米自由泳中奪得兩枚金牌,並在200米自由泳的決賽中 打破世界紀錄,為香港游泳界締造更輝煌的歷史。

憑著決心、專注與積極的態度,何詩蓓在香港,以至 世界游泳界的成就,展現出香港人創造泛洋奇蹟的非凡 精神。









Hong Kong's Water Sports

Lee Lai Shan won a gold medal at the Atlanta Olympics in 1996. It was Hong Kong's first ever gold medal in water sports.

Hong Kong's competitors have been highly successful in a variety of water sports, both regionally and internationally, such as sailing, rowing, swimming, and water skiing.

Hong Kong's Swimming Miracle

Siobhán Bernadette Haughey was born in 1997. She began her first swimming classes at the South China Athletic Association at the age of four but she ended up crying each time. Gradually, she developed a strong passion for swimming and took on a truly demanding training schedule, rising at 4:45 am and practising until 7 am before going to her classes at St Paul's Secondary School

At the age of 16, following her gold medal win at the FINA World Junior Swimming Championships in Dubai, she won the *South China Morning Post's* Student of the Year Sportsperson of 2013, becoming a role model for other young people.

In 2016, Siobhán enrolled at the University of Michigan to continue her studies and training. In the same year, she headed to Rio de Janeiro, where she made history as the first female swimmer from Hong Kong to qualify for an Olympic semi-final. In 2017, she won two gold medals at the 2017 World University Games for the 100 metre and 200 metre freestyle events.

At the Tokyo 2020 Olympic Games, Siobhán won silver medals in both the women's 200 metre freestyle and 100 metre freestyle. She became the first swimmer from Hong Kong ever to win a medal at the Olympic Games and the first athlete from Hong Kong to win two Olympic medals.

In December 2021, at the FINA World Swimming Championships in Abu Dhabi, Siobhán made another swimming history for Hong Kong by winning two gold medals in the 100 metre and 200 metre freestyle events and broke the world record in the 200 metre final.

With Siobhán's determination, focus, and positive attitude, her achievement in the water sports showcases this extraordinary spirit of Hong Kong people that created the city's Maritime Miracle.

HL, LC, MC



25.1 香港泳手何詩蓓。 Hong Kong swimmer Siobhán Bernadette Haughey.

Dear People of Hong Kong.

I received an enormous amount of support during and after the Tokyo Olympic Games last year. I never thought people would be watching my races on big TVs in shopping malls, or on their phone screens during MTR vides. I am incredibly grateful for the outpouring of positive support shown to me and other Hong kong athletes during our performances at the Olympics As athletes, we dedicate years and years to achieve our goals. It is therefore motivating to know that the City supports us and cheers for us every step of the way. So for this, I would like to say, "Thank You".

Bern and raised in the City, I'm lucky to call thing kong my home. Heng kong has its own unique culture, mindset, and complex history. During the Olympics, I saw how people united, and came together to cheer for the local athletes. It was inspiring to see the unifying power of sports, especially during a time when our society needed some good news. Representing thong kong and winning two silver medals gave me a deeper sense of belonging and pride. I hope you also felt more connected to the City through celebrating the sporting achievements, and learning more about our athletes.

Let us continue to uplift and encourage one another like we did during the Tokyo Olympic Games, so we can celebrate more good news from our City.

25.2 何詩蓓致香港人的一封信。 Siobhán Bernadette Haughey's letter to the people of Hong Kong. Once again. I would like to thank you for the generous support given to me in my swimming career. I hope to keep inspiring you, and our next generation, to pursue your dreams and to persist with the quest to achieve your goals even if, at times, they seem almost impossible.

Love, Sirbhan Hanghey 与詩稿 Hong Kong Olympian (Simming)

Fishen floughy



故事一 告別 Story 1 Ciao

創作理念

麥曦茵 @hkDumbYouth 東十八有限公司 微電影製作

四代人・海・故事

生於 1997 香港回歸之年的蘇嘉敏在幫忙前男友李日謙策劃香港海事博物館 展覽時,回顧母親、婆婆、太婆的愛情故事。每對戀人在時代裏分合聚散,卻與 香港海岸、港口故事環環相扣。

二次大戰後,維多利亞港一片狼藉,太婆陳桂梅的初戀情人李寶山是一艘打撈船的潛水員;後來他決定到南洋闖天下,桂梅卻無勇氣隨他漂洋過海,二人於港口告別,桂梅最終不等寶山回來,另嫁他人。

1960 年代,婆婆何美娟與公公王耀華一家四口住在寮屋區,耀華為了生計, 考獲船員證書及工程牌後,便踏上船員之路,留下她獨力照顧孩子,二人分隔 兩地,卻互相守望。



故事二 守望 Story 2 Crow's nest

1970 年代,美娟與耀華受盡相思之苦,只為改善生活;耀華在「行船」期間, 遇上越南難民船遇難,他協助拯救;回港後,終與家人團聚。

1990 年代,正值港人移民潮。媽媽王秀文與爸爸蘇子良於長洲宿營時遇上颱風 愛倫襲港,子良告知秀文將要留學移民,她本以為子良會一去不返,沒料到 子良卻為了她回流香港,許諾終生廝守,不再分離。

時代變,每代人的愛情觀、婚姻觀也在變,為生存和生活所作的抉擇各有不同, 但對「家」與「團聚」的期許卻相通;蘇嘉敏面對曾經相愛的前男友李日謙, 從回憶回到現實,思索自身如何面對當下。



故事三 散聚 Story 3 Canal



故事四 離合 Story 4 Clutch

ARTISTIC STATEMENT

Heiward Mak @hkDumbYouth East Eighteen Ltd. Film Production

Four Generations: Maritime Stories in Hong Kong

So Ka-man was born in 1997, the year of the Hong Kong handover. While helping her ex-boyfriend Lee Yat-him curate an exhibition at the Hong Kong Maritime Museum, she recalled the love stories of her mother, grandmother and great-grandmother.

Although each of her female relatives and their lovers lived in different periods, the stories of their relationships with the coast and harbour of Hong Kong were intertwined.

In the 1940s, after the Second World War, Victoria Harbour was in chaos, and Lee Po-shan, the first love of So Ka-man's great-grandmother Chan Gwai-mui, was a diver on a salvage ship.



In the 1960s, So Ka-man's grandmother and grandfather, Ho Mei-kuen and Wong Yiu-wah, lived in a shack with their two children.

In the 1970s, the love Mei-kuen and Yiu-wah had for each other deepened, and they were striving to improving their lives.

In the 1990s, Hong Kong experienced a wave of mass migration. So Ka-man's mother and father, Wong Sau-man and So Tsz-leung, were camping in Cheung Chau when Typhoon Ellen hit.



The views of each generation of So Ka-man's relatives on love and marriage changed with the times. They had to make a variety of difficult choices to survive and to improve their lives, but they all had similar hopes in terms of "home" and "reunion".

故事五 選擇 Story 5 Choice

劇照 STILLS







故事一 告別 Story 1 Ciao





















































故事五 選擇 Story 5 Choice













微電影花絮 BEHIND-THE-SCENES MAKING-OF OF SHORT MOVIES









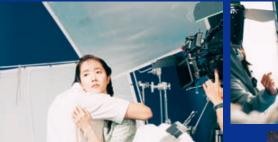


















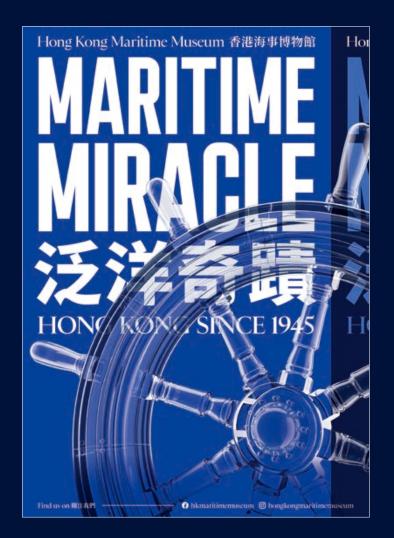














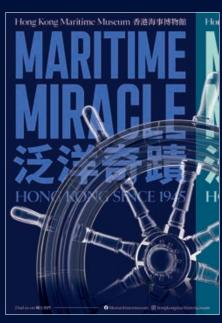


創作理念

Toby Ng Design 展覽設計 海洋一直以來都是香港城市的特徵。從一條小漁村到繁華的國際城市,香港 現在擁有豐富的景觀、產業和社群。或許有些人會說香港就是一個「石屎(水泥) 森林」,但香港人就會知道,我們的觀念和經驗是由渡輪、船舶、港口和海洋 塑造而成的。「香江泛洋奇蹟:1945年以來我們的港口故事」展覽就從海洋 角度呈現香港的歷史蜕變。

本展覽所有的視覺化創作視覺元素都源自一個概念:海洋因素推動了香港的歷史與發展,使之成為國際樞紐。展覽的創意方向以一透明 3D 船舵作為視覺主軸一船舵控制船隻行進的方向,帶領船隻航向遠方。疊加在透明船舵上的旋轉式圖片及動態文字引導參觀者瞭解香港數十年來的海洋史。選用具設計感的透明船舵既實用又有象徵意義,不僅將船舵與關鍵的視覺形象完美結合,同時也暗喻展覽係以現代的角度對海洋史進行詮釋。色彩的使用也使展覽的視覺化特性視覺元素更添深意。主色調是亮麗的皇家藍色,代表香港豐富的航海歷史,而不同展區配搭深淺不一的顏色,分別象徵香港在歷史上所經歷的動盪與繁華。





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因為展覽規模較大,要展示 25 件主要展品和其他跨越 70 年歷史的海事文物,空間規劃與參觀動線是展覽設計中重要的一環。展間分為五個「島區」,各自代表一個時期。地面上有路線導引圖形,引領參觀者依照歷史順序進行參觀。同時,島嶼式的空間規劃也讓想要自主安排路線的參觀者能夠在整個展場內自由移動。主視覺元素的色彩區別讓參觀者能夠清楚分辨不同島區。每個島區都有專屬的顏色,代表其對應的歷史時期。每個展區的外牆都保持白色,內牆則塗滿顏色,在每個展區內創造出爆炸性的色彩視覺效果。每個展區入口上方會掛上對應顏色的標題橫幅,讓參觀者能夠清楚分辨並找到展區。展區中輔助圖形的使用與啟發都與海洋元素直接相關。地面上的路線導引圖形設計參考了航海圖中使用的符號和視覺語言,入口附近的地面指標設計也是以船隻使用的磁力羅盤為原型。

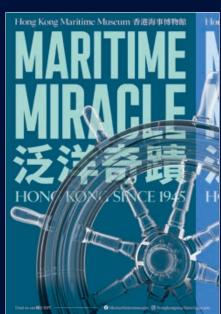
本展覽為實現令大眾認識到海洋史對香港的重要性,以及這段歷史如何影響港人現今生活的各個層面這一最終目標,進行了大量的思考和規劃工作。從歷史傳承、文化遺產到經常被忽略的事物,如仰賴海事基礎設施的複雜供應鏈,海洋史就是將我們串連一起的一幅豐富的織錦。此一核心概念縱貫整個展覽的敘述方式,並讓參觀者在旅程結束時,以沉浸式光影隧道的形式達到高潮,並以隧道出口一段「與你繼續旅程」的文字作結。「香江泛洋奇蹟」展覽就像「時間囊」一樣,引領參觀者一窺香港歷史,而且不但探索香港的海洋史,更記錄香港在現今這個世代值得自豪的面貌,也是對香港未來的指路明燈。未來固然未知,但充滿無限可能。這就需要香港的新世代為我們掌舵了。



ARTISTIC STATEMENT

Toby Ng Design
Exhibition Design

Maritime elements have long defined the city of Hong Kong. With it origin as a modest fishing village, Hong Kong has evolved into a bustling international city with a diverse terrain of landscapes, seascapes, industries, and communities. Some may call Hong Kong a concrete jungle, but a Hong Konger knows that our views and experiences are shaped by ferries, ships, harbours, and seas. Hong Kong's Maritime Miracle: The Story of Our City Since 1945 is an exhibition that visualises the evolution of Hong Kong's history through a maritime lens.



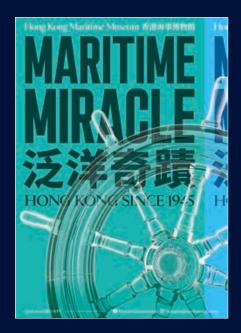




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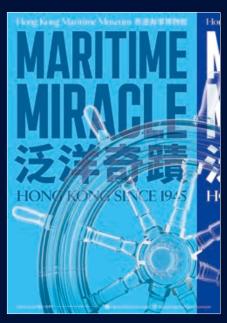
The creation of the exhibition's visual identity stems from the idea that maritime factors have driven Hong Kong's history and development as a global hub. The exhibition's creative direction is anchored in its main visual element, a three-dimensional transparent ship's wheel, which is used to steer a vessel and control the course of its journey. Rotating imagery and animated text are superimposed onto the transparent wheel, guiding the viewer through decades of Hong Kong's maritime history. The stylistic choice of a transparent wheel is both functional and symbolic—it seamlessly links the helm to key visual information and hints at a contemporary interpretation of maritime history. Colour adds an additional layer of meaning to the exhibition's visual identity: the main colour, a vivid royal blue, conveys the richness of Hong Kong's maritime history, while the supporting colours assigned to each section of the exhibition range from dark to light and represent both the tumultuous and prosperous periods of Hong Kong's history.





As the exhibition is ambitiously displayed over 25 main exhibits and a multitude of maritime artefacts spanning over seven decades of history, the arrangement and flow of the space is a crucial element of the exhibition's design. The exhibition space is divided into five 'islands', each of which represents a period. With the help of graphic floor guides, visitors are led on a chronological journey through the decades. At the same time, the island-like spatial arrangement also allows for free-flowing movement throughout the space for visitors who wish to chart their own routes through the exhibition. Colours in the key visual are used to categorise the islands, with a unique colour assigned to each island representing a specific period. The exterior walls of each section are kept white, while the interiors walls are fully painted, creating a visual explosion of colours inside each section. Title banners in corresponding colours are hung above each section entrance, allowing visitors to clearly distinguish and locate the sections of the exhibit. Supporting graphics are directly related to and inspired by maritime elements. The graphic floor guides echo the symbols and visual language used in nautical maps, and the design of the floor directory placed near the entrance is inspired by a ship's compass.





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Much thought and planning have gone into the exhibition work to achieve the ultimate mission of enhancing awareness of the significance of maritime history in Hong Kong and how it affects many aspects of our lives daily. From our heritage and legacy to matters often overlooked—such as our complex supply chains that rely on maritime infrastructure—maritime history is a rich tapestry that connects us all. This core notion is woven throughout the entire narrative of the exhibition and culminates at the end of the visitor's journey in the form of an immersive light tunnel with a single message at the end that reads 'The Journey Continues With You.' Hong Kong's Maritime Miracle is a time capsule for Hong Kong that goes beyond maritime history—it is a celebratory marker of Hong Kong in this day and age and hopes to be a beacon of what is yet to come. The future is unclear but full of exciting possibilities, and it is up to the next generation of Hong Kongers to steer our helm.



創作理念

430 展覽互動技術 香港人依水而居,向海而生。過去 200 年來,香港的航運業及造船業急速發展, 更成為國際重要的轉口港,使我們走向世界。開埠 100 年後,香港經歷二次 大戰的無情洗禮,港口、船塢遭受重創,卻亦成為後來重建的契機。

430 有限公司創作的新媒體藝術作品,為「香江泛洋奇蹟:1945 年以來我們的港口故事」展開序幕,以互動的虛擬實境(VR)配合博物館內實體展品的融合互動,呈現二戰時期被炮火摧毀的船塢以及港口重建的發展故事,並展示21世紀海上貿易的發展及前景。

展覽首個裝置讓參觀者通過轉動虛擬水晶船舵進行操控,將多件海事遺物及 航海文獻以互動方式展示眼前,闡述自二戰至今的香港航海故事。

太古船塢

二戰期間,太古船塢落入日軍手中,被用作維修日本軍艦、建造艦隊。因此船塢亦不能倖免,成為盟軍戰機轟炸的目標。430有限公司以3D虛擬實境創作,重塑太古船塢。參觀者以第一身體驗置身戰場的一刻,還原這段海事歷史。



仕組船

戰火過後,鳳凰重生。被戰火摧殘的人們,竭力促成香港航運業在戰後復甦。 商人亦看準戰後航運業的發展潛力,開拓日本市場。1980年代,香港航運公司 高層以「仕組船」方式,為日本船廠提供外國資金來建造新船,再將船隻長期 租給日本公司營運,向其收取租金。展覽中的「仕組船遊戲」利用體感屏幕及 觸控裝置,拉近參觀者與歷史的距離,讓參觀者在體感互動遊戲中,成為航運 公司管理人員,遇到危險和機遇,學習及了解這段重要航海貿易歷史。

調和世界、環保與綠色航運

國際海事組織發現,全球航運業在2018年排放超過10億噸二氧化碳。隨著貨運的需求,溫室氣體排放與日俱增。作為國際海事組織的準會員,香港航運界一直致力推行環保措施。透過觸控式屏幕投影的引領,呈現航運業一系列新的技術,改良運輸模式以提升效率,為可持續發展的航運提供方向。並向參觀者展示整個航運物流過程,以及環環相扣的環保理念、實踐和前景。



ARTISTIC STATEMENT

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Exhibition Interactive Technology

Residents of Hong Kong live along the coast and are dependent on the ocean. Over the past two hundred years, Hong Kong's shipping and shipbuilding industries have experienced rapid growth. Hong Kong has even become an essential international entrepôt, putting the city on the international stage. One hundred years after Hong Kong opened its port, the city endured the ruthless episode that was World War II, in which ports and dockyards were destroyed. However, this terrible era created opportunities for massive reconstruction.

The new media artwork by 430 Ltd was created for "Hong Kong's Maritime Miracle: The Story of Our City since 1945." Embedded amongst the physical objects, the interactive virtual reality artwork presents stories about the dockyards being wrecked by gunfire during World War II and the port's reconstruction in the post-war era. It also shows the development of Hong Kong's maritime trade and its prospects in the twenty-first century.

Visitors can interact with numerous maritime relics and nautical documents. For example, the first installation features a crystal rudder that visitors can control to travel through time. Stories of Hong Kong's maritime history from World War II to the present day are represented.



Taikoo Dockyard

During World War II, the dockyard fell into the hands of the Japanese army and was used to repair Japanese warships and build new ships for their fleet. Therefore, it was not spared by the Allied forces and became a bombing target. 430 Ltd created a 3D virtual reality version about the reuilding of Taikoo Dockyard. Visitors experience the war zone virtually through the re-creation of the blooming in Hong Kong's maritime history.

Shikumisen charter arrangements

The war is over; the phoenix is reborn. After being battered by war, the people strived to restore the Hong Kong shipping industry in the post-war era. Those in the industry saw its potential and approached the Japanese market. During the 1980s, Hong Kong shipping company executives used the shikumisen charter approach to provide foreign capital for Japanese shipyards to build new ships and then collected rent from the Japanese companies on a long-term basis. In the exhibition, the "Shikumisen Game" uses sensory screens and touch devices to bring visitors closer to history. Through the interactive game, visitors become shipping company executives, encounter the threats and opportunities of the business, and gain an understanding of this important maritime trade history in an educational and entertaining way.

Harmonising the world, eco-friendly and green shipping

The International Maritime Organization (IMO) reported that the world's shipping industry emitted more than one billion tons of carbon dioxide in 2018. Shipping needs and greenhouse gas emissions increase daily. As an associate member of the IMO, Hong Kong's shipping industry constantly promotes eco-friendly measures. Touch screen projections present a series of new technologies that improve transportation modes and the efficiency of the shipping industry. Such technology is the way forward for future sustainable shipping. The entire shipping logistics process and its associated eco-friendly ideals, practices, and prospects are also presented.



參考書目 BIBLIOGRAPHY

- Alexander, Sophie, and Randy Thanthong-Knight. "The Great Sriracha Battle Is Coming to America." *Bloomberg*. Last modified April 6, 2019. https://www.bloomberg.com/news/features/2019-04-06/ thaitheparos-sriraja-panich-sriracha-comes-to-the-u-s-
- Bailey, Steve K. *Bold Venture: The American Bombing of Japanese-Occupied Hong Kong, 1942–1945.* Lincoln, Nebraska: University of Nebraska Press, 2019.
- Chiu, Stephen Wing-kai, Kong-Chong Ho, and Tai-Lok Lui. *City States in the Global Economy: Industrial Restructuring in Hong Kong and Singapore.* Boulder: Westview Press, 1997.
- Chiu, Patricia, and Edward Stokes. *Lee Fook Chee's Hong Kong*. Hong Kong: The Commercial Press (H.K.) Ltd., 2015.
- Chiu, Tzu-Nang. *The Port of Hong Kong: A Survey of its*Development. Hong Kong: Hong Kong University Press, 1973.
- Coates, Austin. *Whampoa Ships on the Shore.* Hong Kong: South China Morning Post Limited, 1980.
- Constitutional and Mainland Affairs Bureau. "Overview." Accessed April 25, 2022. https://www.bayarea.gov.hk/en/about/overview.html.
- CNET. "Razer Helped Design a Trash Collecting Robot to Clean Up Plastic Pollution." *YouTube* Video, 8:40. August 13, 2021. https://www.youtube.com/watch?v=2IbgBvtvpeg.
- Cruise Ups. "Story of Seawise Giant The Largest Ship Ever Sunk." Last modified January 17, 2020. https://cruiseups. com/seawise-giant-largest-ship-ever-sunk/.
- Cudahy, Brian J. *Box Boats How Container Ships Changed the World.* New York: Fordham University Press, 2007.
- Dick, Howard, and Stephen Kentwell. *Beancaker to Boxboat*. Canberra: The Nautical Association of Australia Inc., 1988.
- Dinh, Van Nguyen, et al. "Development of a viability assessment model for hydrogen production from dedicated offshore wind farms." *International Journal of Hydrogen Energy*, Volume 46, Issue 48 (July 2021): 24620-24613. https://www.sciencedirect.com/science/article/pii/S0360319920316438
- Dodwell, David. *China's Greater Bay Area The Pearl River Delta Illustrated.* Hong Kong: Airphoto International Limited, 2021.
- Donovan, Arthur, and Joseph Bonney. *The Box that Changed the World*. New Jersey: Commonwealth Business Media, 2006.
- Doust, W. A. The Ocean on a Plank. New York: Vantage Press,
- Fan, Shuh-Ching. *The Population of Hong Kong*. Paris: The Committee for International Coordination of National Research in Demography, 1974. http://www.cicred.org/Eng/Publications/pdf/c-c21.pdf.

- Farmer, Hugh. "Ship Breaking in Hong Kong Post WW2". *The Industrial History of Hong Kong Group.* Last modified March 4, 2020.
 https://industrialhistoryhk.org/ship-breaking-hong-kong-
- Government Records Service. "Damages and Shipwrecks Caused by Typhoon Wanda, 1962." Last modified April 12, 2021.

https://www.grs.gov.hk/ws/erp/wanda-en.htm.

廣東省統計局: 《2019 年廣東省國民經濟和社會發展統計公報》,檢索於2022年4月25日。 Guangdong Bureau of Statistics. "2019 nian Guangdong sheng guomin jingji he shehui fazhan tongji gongbao (2019 Statistical Bulletin of Guangdong Province's National Economic and Social Development)." Accessed April 25, 2022.

http://stats.gd.gov.cn/attachment/0/388/388463/2923609.

Hardy, Anthony J. Curiosities of A Lifetime. 48

post-ww2-to1961/.

- Hardy, Anthony J. *Typhoon Wallem: A Personalised Chronicle of the Wallem Group Limited.* Cambridge: Granta Editions, 2003.
- Hong Kong Census and Statistics Department. *Hong Kong Statistics* 1947–1967. Hong Kong: Census and Statistics Department, 1969.
- Hong Kong Container Terminal Operators Association Limited. "Kwai Tsing Container Port/Port Facilities." Accessed October 29, 2021. http://www.hkctoa.com/facilities.
- Hong Kong e-Legislation. "An Ordinance to protect and preserve the harbour by establishing a presumption against reclamation in the harbour." Last modified December 13, 2018.

 https://www.elegislation.gov.hk/hk/cap531.
- Hong Kong Government. *Hong Kong Annual Report 1948*. Hong Kong: Government Printer, 1949.
- Hong Kong Government. *Hong Kong Annual Report 1956.* Hong Kong: Government Printer, 1957.
- Hong Kong Government. *Hong Kong Annual Report 1963*. Hong Kong: Government Printer, 1964.
- Hong Kong Government. *Hong Kong Annual Report 1964.* Hong Kong: Government Printer, 1965.
- Hong Kong Government. *Hong Kong 1973: A Review of 1972.* Hong Kong: Government Printer, 1973.
- Hong Kong Government. *Hong Kong 1991: A Review of 1990.* Hong Kong: Government Printer, 1991.
- 香港特別行政區政府政府新聞處,《海上救援協調中心世界知名》,2003年1月31日最後更新。

Hong Kong Information Service Department "Haishang jiuyuan

xietiao zhongxin shijie zhiming." Last modified January 31, 2003. https://www.news.gov.hk/isd/ebulletin/tc/category/infrastructureandlogistics/html/b673ec65-0aa1-4a72-be43-15df75c9498e.htm.

- Hong Kong Information Services Department. "Hong Kong Yearbook 1998: Urban Development Areas." Accessed May 27, 2022. https://www.yearbook.gov.hk/1998/ewww/13/1312/index. htm.
- Hong Kong Marine Department. "Environmental Report 2019." Accessed October 29, 2021. https://www.mardep.gov.hk/en/publication/pdf/
- Hong Kong Maritime and Port Board. "Container Throughput of Hong Kong Port." Accessed May 28, 2022. https://www.hkmpb.gov.hk/document/HKP_KTCT-stat. pdf
- Hong Kong Observatory. "Typhoons Necessitating the Issuing of the Hurricane Signal No. 10." Last modified November 28, 2019. https://www.hko.gov.hk/en/informtc/historical_tc/histtyp.

htm.

- Hong Kong Observatory. "Typhoons Which Required the Hurricane Signal No. 10 Since 1946." Last modified January 20, 2020.
 https://www.hko.gov.hk/tc/informtc/historical_tc/metinfo_ wind.htm.
- Hong Kong Observatory. "A Wake up Call from Mangkhut." Last modified October 29, 2018. https://www.hko.gov.hk/en/blog/00000216.htm.
- Hong Kong Planning Department. "Urban Design Study for the New Central Harbourfront." Last modified September 26, 2011.

 https://www.pland.gov.hk/pland_en/p_study/comp_s/UDS/chi_v1/images_chi/pdf_paper/info_digest.pdf.
- Hong Kong Trade Development Council. "Hong Kong Start-up Clearbot Set to Revolutionise Marine Trask Collection." *South China Morning Post*. Last modified February 4, 2020. https://www.scmp.com/presented/news/hong-kong/topics/tackling-pollution/article/3120341/hong-kong-start-clearbot-set.
- Intergovernmental Panel on Climate Change. "Regional Fact Sheet – Ocean." Last modified April 21, 2022. https://www.ipcc.ch/report/ar6/wg1/downloads/factsheets/ IPCC_AR6_WGI_Regional_Fact_Sheet_Ocean.pdf.
- Intergovernmental Panel on Climate Change. "Sea Level Rise and Implications for Low-Lying Islands, Coasts and Communities." Special Report on the Ocean and Cryosphere in a Changing Climate. Switzerland: Intergovernmental Panel on Climate Change, 2019.

 https://www.ipcc.ch/srocc/chapter/chapter-4-sea-level-rise-and-implications-for-low-lying-islands-coasts-and-communities/.
- International Chamber of Shipping. "Shipping Industry Sets Out Bold Plan to Global Regulator to Deliver Net Zero by 2050." Press release, October 5, 2021. https://www.ics-shipping.org/press-release/shipping-industry-sets-out-bold-plan-to-global-regulator-to-deliver-net-zero-by-2050/.

- International Maritime Organization. "Cutting GHG Emissions from Shipping 10 years of Mandatory Rules." Press release, July 15,2021.

 https://www.imo.org/en/MediaCentre/PressBriefings/pages/DecadeOfGHGAction.aspx.
- International Maritime Organization. "Prevention of Air Pollution from Ships." Accessed October 29, 2021. https://www.imo.org/en/OurWork/Environment/Pages/Air-Pollution.aspx.
- Information Services Department. "Government Preparing for Electric Ferries." News release, July 7, 2021. https://www.news.gov.hk/eng/2021/07/20210707/2021070 7 155908 673.html.
- Johnson, David. Star Ferry: The Story of a Hong Kong Icon. Auckland: Remarkable View Limited, 1998.
- 高添強:《彩色香港 1970s 1980s》。香港:三聯書店(香港) 有限公司,2014年。
- Ko, Tim-Keung. *Caise Xianggang 1970s 1980s.* Hong Kong: Joint Publishing (Hong Kong) Company Limited, 2014.
- 高添強:《黑白香港1990s》。香港:三聯書店(香港)有限公司,2016年。
- Ko, Tim-Keung. *Heibai Xianggang 1990s*. Hong Kong: Joint Publishing (Hong Kong) Company Limited, 2016.
- 高添強、黎健強:《彩色香港 1940s 1960s》。香港:三聯書店 (香港) 有限公司,2013年。
- Ko, Tim-Keung, and Lai Kin-Keung. *Caise Xianggang* 1940s 1960s. Hong Kong: Joint Publishing (Hong Kong) Company Limited, 2013.
- 高添強、唐卓敏:《香港日佔時期》。香港:三聯書店(香港)有限公司,1995年。
- Ko, Tim-Keung, and Tong Cheuk-Man. *Xianggang rizhan shiqi*. Hong Kong: Joint Publishing (Hong Kong) Company Limited, 1995.
- Lacy-Smith, Ian. "Vietnamese Refugees in Hong Kong, Encountering the First to Arrive." The British Empire. Accessed October 29,2021. https://www.britishempire.co.uk/article/ vietnameserefugees.htm.
- Lau, Chi-Pang. "The Container Terminals." Marine Department. Accessed October 29, 2021. https://www.mardep.gov.hk/theme/port_hk/en/p1ch7_1.html.
- Lau, Chi-Pang. "Port Development." Marine Department.

 Accessed October 29, 2021. https://www.mardep.gov.hk/
 theme/port_hk/en/p1ch8_1.html.
- Legislative Council. "Protection of the Harbour (Amendment) Bill 1999." Accessed October 29, 2021. https://www.legco.gov.hk/yr99-00/english/bills/c194_e.htm.
- Levinson, Marc. *The Box: How the Shipping Container Made the World Smaller and the World Economy Bigger*. Princeton, NJ: Princeton University Press, 2006.

- Liu, Shu-Yong. "Hong Kong: A Survey of its Political and Economic Development over the Past 150 Years." *The China Quarterly* 151 (1997): 583–92.

 Doi:10.1017/S030574100004683X.
- 藍天雲:《張愛玲:電懋劇本集》,2009年11月11日最後更新。 Lum, Tin-Wan. "Eileen Chang: MP & GI Screenplays." Last modified November 11, 2009. https://www.lcsd.gov.hk/CE/CulturalService/HKFA/zh_ TW/web/hkfa/rp-tv-film-veterans-06-1.html.
- Luo, Charlotte. "Bomb defused in grueling 12-hour operation." The Standard, March 2, 2020. https://www.thestandard. com.hk/section-news/section/4/216805/Bomb-defused-in-grueling-12-hour-operation.
- Mirando, Dharisha, et al. *Waterproofing APAC to Avoid Atlantis*. Hong Kong: China Water Risk, 2020.
- New World Encyclopedia. "Eileen Chang." Accessed January 18, 2022.
 www.newworldencyclopedia.org/entry/Eileen_Chang.
- 《情塲如戰塲 開鏡在本週》,工商晚報,1956年11月13日。 "Qingchang ru zhanchang kaijing zai benzhou (Love is like a battlefield, opening shot this week)." *Kung Sheung Evening News*, November 13, 1956.
- "Refugee Ship's Gold Hoard Totals \$6.5m." South China Morning Post, February 11, 1979.
- Saul, Jonathan. "Too Cold to Handle? Race is on to Pioneer Shipping of Hydrogen." *Reuters*. Last modified May 12, 2021. https://www.reuters.com/business/sustainable
 - https://www.reuters.com/business/sustainable-business/too-cold-handle-race-is-pioneer-shipping-hydrogen-2021-05-11/.
- Schenk, Catherine. "Economic History of Hong Kong". EH.Net Encyclopedia. Last modified March 16, 2008. http://eh.net/encyclopedia/economic-history-of-hong-kong/.
- Siberg, Einar. "Boat Refugee Goes to Sea as Danish Second Officer." Maersk Post 25, no. 1 (1986): 32. https://www.maersk.com.cn/~/media_sc9/maersk/corporate/press/publications/files/1986-february-maersk-post-full-issue.pdf.
- "Skyluck Runs Aground: Refugees Finally Land." South China Morning Post. July 1, 1979.
- Society for Protection of the Harbour. "Our History." Accessed October 29, 2021.
 https://www.harbourprotection.org/en/about/history/index.html.
- Sohmen, Anna Pao. *Y K Pao My Father*. Hong Kong: Hong Kong University Press, 2013.
- South China Morning Post. "Typhoon Mangkhut smashes through Hong Kong." *YouTube* video, 3:00. September 16, 2018. https://www.youtube.com/watch?v=AeLYre_yCA8.

- Stopford, Martin. Maritime Economics. London: Routledge, 1997.
- 中華人民共和國中央人民政府:《廣東省統計局發布報告:廣東 60年GDP增長254.9倍》,檢索於2022年4月25日。
- Zhonghua Renmin Gongheguo Zhongyang Renmin Zhengfu. "Guangdongsheng tongjiju fabu baogao: Guangdong 60 nian GDP zengzhang 254.9 bei." Accessed April 25, 2022. http://www.gov.cn/jrzg/2009-10/04/content_1432548.htm.
- The Hong Kong Trade Development Council. "Major Economic Indicators of the Guangdong-Hong Kong-Macao Greater Bay Area (2020)." Accessed April 25, 2022. https://research.hktdc.com/en/article/MzYzMDE5NzQ5.
- The Observatory of Economic Complexity. "China." Accessed April 25, 2022. https://oec.world/en/profile/country/chn.
- 北大滙豐智庫宏觀組:《灣區經濟分析 2021年粵港澳大灣區經濟分析報告》,北京大學匯豐商學院。檢索於2022年4月
- The PHBS Think Tank. "Wanqu jingji fenxi 2021 nian yue gang'ao da wan qu jingji fenxi baogao." Peking University HSBC Business School. Accessed April 25, 2022. https://thinktank.phbs.pku.edu.cn/2022/jingjifenxi_0121/58.html.
- The 'Star' Ferry Company Limited. "Green Star Ferry in Service Powered by Diesel-Electric Propulsion System, First Ever in Hong Kong." Press release. July 9, 2020. http://www.starferry.com.hk/sites/default/files/200709%20 Morning%20Star%20Pofst-event%20Press%20Release_ e.pdf.
- The 'Star' Ferry Company, Limited. "Operational Information (2020)." Accessed December 17, 2021. http://www.starferry.com.hk/en/operationalInfo.
- "Training of Young Seamen: New Buildings of Hongkong Sea School Opened Big Demand for Local Boys." South China Morning Post. May 11, 1956.
- Transport and Housing Bureau. Summary Statistics on Port Traffic of Hong Kong for 2020. Hong Kong: Transport and Housing Bureau, 2021.
- Transport and Housing Bureau. Summary Statistics on Port Traffic of Hong Kong, October 2021. Hong Kong: Transport and Housing Bureau, 2021.
- Transport and Housing Bureau. Summary Statistics on Port Traffic of Hong Kong, November 2021. Hong Kong: Transport and Housing Bureau, 2021.
- Tsao, Frank Wen-King. My Sixty Years: Turbulent Sailing. Hong Kong: IMC Group, 2010.
- United Nations. *Review of Maritime Transport 1972–1973*.

 New York: United Nations Conference on Trade and Development, 1975.

 https://unctad.org/system/files/official-document/rmt1972-73_en.pdf.

- United Nations. *Review of Maritime Transport 2020*. New York: United Nations Publications, 2020. https://unctad.org/system/files/official-document/rmt2020_en.pdf.
- Valentine, Harry. "Modular Molten Salt Nuclear Power for Maritime Propulsion." *The Maritime Executive*. Last modified May 14, 2021. https://www.maritime-executive.com/editorials/modular-molten-salt-nuclear-power-for-maritime-propulsion.
- Water Supplies Department. *Milestones of Hong Kong Water Supply Book 2: Water: Learn & Conserve.* Hong Kong: Water Supplies Department of the Government of the Hong Kong SAR., 2011.
- Water Supplies Department. "Roving Exhibition for 50th Anniversary of Dongjiang Water Supply to Hong Kong." Last modified July 13, 2015.

 https://www.wsd.gov.hk/filemanager/en/share/pdf/DJW_Leaflet-e.pdf.
- Yip, Yan-Pik. "Development of the Career of Seafarers in Hong Kong." *Maritime Business Insight* 4, no. 2 (April 2016): 3-4.
- Yuen, Hong-Kiu. "Proxy Humanitarianism: Hong Kong's Vietnamese Refugee Crisis, 1975–79." MPhil diss., The University of Hong Kong, 2014.
- Zarach, Stephanie. *Changing Places: The Remarkable Story of the Hong Kong Shipowners*. Hong Kong: Hong Kong Shipowners Association, 2007.
- Zarach, Stephanie. *To Catch a Goose if the World is Large*. Hong Kong: Valles Steamship Company, 2017.
- 鄭玫:《顧宗瑞傳》。香港:凌天出版社,2017年。 Zheng, Mei. *Gu Zongrui Zhuan.* Hong Kong: Onsky Limited, 2017
- 張愛玲:《流言》。香港:皇觀出版社(香港)有限公司, 1995年。

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Hong Kong Week, October 30 – November 5, 1967, Hong Kong : Hong Kong week committee, 1967.

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 "Development of a viability assessment model for hydrogen production from dedicated offshore wind farms,"

 International Journal of Hydrogen Energy 46, issue 48, 2021.
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