

Patrick Chiu



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Porcelain *Vase de montre* (Watch Vase) with two handles on wooden vase stand, St. Paul's Hospital Pharmacy. @ 1920. *Courtesy* St. Paul's Hospital, Hong Kong. The front face of the pharmacy vase features two oval-shaped crests of arms, each adorned with a crown on top. The left crest of arms displays three lily flowers, known as *fleur-de-lis* in French, was a national symbol of France in the early 20th century. On the right crest of arms, the royal coat of arms of Edward, Prince of Wales (1884–1972) is displayed, consisting of four quadrants. The top left and bottom right quadrants showcase three lions each, representing England, while the top right quadrant depicts a lion, symbolizing Scotland. The bottom left quadrant features a harp, which is the emblem of Wales. The base of the vase shows two images related to modern pharmaceutical production. St. Paul's Hospital's *Vase de montre* was specially designed and ordered from France and was displayed centrally on the wall shelves of its pharmacy as a symbol of healing.

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To My Loving Wife, Helen

Foreword by Dr. Stuart Anderson

Pharmacy history in its international context—relations between east and west, between imperial powers and colonies, and between neighbouring countries—has been a neglected field for too long. Only now is it receiving the attention it deserves. My own interest in the subject began in the 1990s as a result of informal discussions that took place at International Congresses for the History of Pharmacy and other conferences. Pharmaceutical historians came together from many countries, including several former British colonies and Dominions. Those conversations revealed—amongst other things—that British pharmaceutical colonialism had left a lasting legacy, and that experiences in former colonies were very different as a result of local contexts, climates, and cultures.

It soon became clear that little had been written about many of these issues, and efforts were made to explore the subject further. Detailed histories of pharmacy for some countries had been written, such as Reg Coombes's history of New Zealand pharmacy, Greg Haines's history of pharmacy in Australia, and Mike Ryan's history of pharmacy in South Africa. But these were essentially national accounts which only referred to other countries including Great Britain in passing, although some of Harkishan Singh's work prompted wider discussions with his account of the 'imperialization' of the British Pharmacopoeia in the late nineteenth century.

Some pharmaceutical histories of former British non-Dominion colonies have been published. These include Andrew Egboh's volume on pharmacy in Nigeria, John Joseph Borg's studies on the history of pharmacy in Malta, Thomas Paraidathathu's book on the history of pharmacy in Malaysia, and Ellen Grizzle's work in Jamaica. Together these provided a basis for an analysis of pharmacy professionalization across the British Empire and of the relationship between metropole and periphery. Fortunately, I was able to begin work on such a project alongside my duties as Associate Dean of Studies at the London School of Hygiene and Tropical Medicine.

By this time, I had already published a number of articles on the subject of pharmacy and Empire, and it was through one of these that the work of Patrick Chiu first came to my attention. Patrick had read one of my articles, 'Outposts of Empire: the Dawn of Pharmacy in the Straits Settlements, 1786–1867,' which had been published in the *Pharmaceutical Historian* in 2012. He contacted me to say

that he had been researching the history of pharmacy in Hong Kong, and wondered if I might be willing to read through a draft of his findings and advise about how to present them. I was delighted to do so, and we have been in regular contact ever since.

Patrick's scholarship, thoroughness and attention to detail were clear from the beginning. We have since shared a stage on a number of occasions, at meetings including annual conferences of the British Society for the History of Pharmacy and International Congresses on the History of Pharmacy. We both gave presentations at a Workshop organised by the Shanghai Pharmaceutical Association when I was leading a pharmacy tour group to China in 2016. It was clear even then that Patrick had an impressive knowledge of the impact of western medicine on Traditional Chinese Medicine (TCM) and the impact of TCM on western medicine.

Over the last few years Patrick has been a prolific researcher and writer on the history of pharmacy in Hong Kong and China. His first article, on the 'First 100 years of Western pharmacy in colonial Hong Kong,' was published in the *Pharmaceutical Historian* in 2016. As its editor, I have been delighted to publish his subsequent work on this subject in a series of eight articles. Patrick has since brought the story up to date with an account of the development of pharmacy in Hong Kong in the post-colonial period, 1997–2022. I was delighted to hear that a book on the subject has since been published in Chinese.

Patrick has also been instrumental in persuading some of his Chinese colleagues to research and write about aspects of western pharmacy and medicine in English, and I have been very pleased to publish one or two of these in *Pharmaceutical Historian*. Patrick's own interests led to researching the history of the global retailer, A.S. Watson's, and to publication of his book *Transformation from Colonial Chemist to Global Health and Beauty Retailer* in 2022. Amongst his many commitments he is also the founder and president of the Hong Kong Society for the History of Pharmacy.

In this his latest book Patrick has taken on his largest project to date, the history of western pharmacy in China. He set himself some ambitious goals: to stimulate further debate about the movement of people, materia medica, and ideas between China and its neighbours in Central and South Asia in the period between 200 BCE and 1500 CE; and to explore China's interactions with the wider western world, starting with Europe around 1500, including Britain from the late 1600s, and the United States from the early 1800s. In addition, he aimed to explore China's relationship with her eastern neighbours, particularly with Japan in the late nineteenth century.

At the heart of this book, then, is the exchange of medical and pharmaceutical practices between Chinese, Western, and Japanese cultures, which reached its peak during the relatively brief Republican era between 1912 and 1949. Those with little knowledge of the subject often suppose that TCM and western medicine developed independently of each other, with little overlap and few external influences. In meeting his goals, Patrick unmaskes the complex relationship between the two systems, exploring how each was influenced by the other, and how the relationship changed over time.

The story is told against a background of Chinese imperial and political history and within its wider social, economic, and religious frameworks. The opening of the Silk Roads between the Western Han and its northern neighbours followed the Emperor's expeditions to Central Asia between 135 and 115 BCE. The beginnings of western influences on Chinese medicine go back to at least 200 BCE, with knowledge and practices reaching China through Buddhist monks, Muslim imams, and later Jesuit missionaries. The arrival of Ayurvedic medicine and Buddhism enriched Chinese medicine and prompted Chinese medical philosophers to experiment with non-Chinese materia medica; Ayurvedic medicines from India underwent a process of sinification.

Traders originating from Arabia, India, Java and Europe introduced 'exotic' items from overseas markets, with many being incorporated into Chinese medical practice. Separate systems were initially recognised for Islamic medicine and TCM but attempts to introduce Islamic medicine into China in the late fourteenth century failed. After 1500 western influences became stronger as the Columbian exchange extended to China. The arrival of Portuguese traders in Macau in 1557 opened a new phase in relations between China and western nations. Macau became the main gateway for trade with Canton, attracting British, European, and later American traders. The first western hospital was opened in Macau in 1569. Dutch gifts to the Emperor in 1656 to help open trade links included cloves, cinnamon, and sandalwood; Christianity was approved by the authorities in 1692.

The Opium Wars, the First Sino-Japanese War, and the Boxer Movement in the late nineteenth and early twentieth centuries played decisive roles in China's adoption of western medicine and pharmacy. The first half of the twentieth century witnessed increased tensions between supporters of TCM and western medicine, with some advocating a complete move from one to the other. A conference on TCM in 1930 and the subsequent publication of a Chinese Pharmacopoeia were clearly defining moments prior to the Revolution in 1949 and the eventual implementation of the 'one country, two pharmacy systems' that exists today.

This book thus brings together a wide range of information covering a vast range of themes drawn from a wide variety of sources. It includes several biographies of important individuals, companies, and organisations, and is lavishly illustrated with a large number of figures, tables, and charts. Other themes include trade wars, establishment of the Peking Union Medical College, the rise of western chemists in China, and pharmaceutical manufacturing, along with opium cures, proprietary medicines, and soda water preparations. But discussion also extends to pharmaceutical education and manpower development, pharmacy laws, and the development of the Chinese Pharmacopoeia. Patrick is probably the only pharmaceutical historian able to do so.

The book represents an important contribution to the field as it is the first to provide a detailed account of the interaction between Chinese and western medicine from a pharmacy perspective. None of the existing historiography on the relationship between TCM and western medicine has so far explored pharmaceutical aspects in detail. This book therefore fills an important gap in the literature and is likely to

become a key resource for further study. It will be of interest to a wide audience, including pharmaceutical, imperial, and business historians, and should be essential reading for pharmacy students. But it will also be of interest to a general readership curious about the history of pharmacy in China and of western influences on Chinese medicine.

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Foreword by Dr. Lucas Richert

I first encountered Patrick Chiu in Washington, D.C. during the International Society for the History of Pharmacy (ISHP) biennial meeting in 2019. Intrigued by his paper title, “*The Beginnings of Western Pharmacy Practice in Modern China, 1910–1941: A Case Study of the Peking Union Medical College Hospital Pharmacy Department*,” I attended his talk and was immediately struck by how he exemplified the modern hybrid pharmacist-historian. His podium presentation combined technical knowledge of plants and medicines, insider knowledge of the healthcare and pharmaceutical industries, and a focus on significant historical characters. I was also struck by the originality of his presentation, which represented robust analysis of Western-Chinese pharmacy practices, institutions, and actors—but was recounted from the Chinese perspective, using Western and non-Western sources.

Now, years later, I am privileged to help introduce and contextualize *A History of Western Pharmacy in China*, a book that was more than a decade in the making and which broadens that 2019 paper both temporally and thematically. At the American Institute of the History of Pharmacy, where I serve as the Executive Director, and as one of the editors-in-chief of *History of Pharmacy and Pharmaceuticals* as well as *The Social History of Alcohol and Drugs*, I am lucky to have a birds-eye view of new scholarship; and I have tracked closely how the history of pharmacy and pharmaceuticals subfield has engaged with East-West interactions. To put it bluntly, the subfield has—for several reasons—lagged behind the larger history of science, medicine, and technology community when it comes to the topic of China-Western pharmacy. Chiu’s book addresses that problem head on.

Since leaving the pharmacy and pharmaceutical space, Chiu has positioned himself as an authority in pharmacy history. Throughout his career as a pharmacist-historian, he has sought to explore the exchange of medicinal and pharmacy practices and substances within China during ancient times as well as assess the influence of Europe and the United States on those internal practices from the 19th century onwards. His intellectual and academic influences have ranged widely, but in Jimin Wong’s and Lien-teh Wu’s *Chinese History of Medicine*, we see an early model and shades of Chiu’s work. First published in 1932, *Chinese History of Medicine* marked an early historical intervention into the nature of syncretical Chinese-Western

medicine and, moreover, it was presented by two Chinese physicians in the English language. *A History of Western Pharmacy in China* ably builds on that foundation.

Readers of this book, to Chiu's credit, will be exposed to the nuanced cultural, medico-scientific, and business interactions that shaped Western pharmacy in China. Chiu puts a spotlight on the various materials, techniques, and processes of drug formulation and mass manufacture—and he rightly illustrates how pharmacy was substantiated as big business and mass manufacture. In analyses that incorporate materia medica and so-called dangerous drugs, such as opium, Chiu also articulates the complicated entangled histories of the movement, circulation, and translation of both pharmacy knowledge and goods. Yet, he appropriately acknowledges and evaluates non-Western epistemologies and practices that intermingled with Western ideas to create a novel type of pharmacy and pharmaceutical industry in China.

By his own admission, Chiu has been driven to write and share *A History of Western Pharmacy in China* for many years. Over a decade ago, while at Cambridge University taking a summer course, his desire to write this book was amplified. I am thankful he did write it. We now have a deeper understanding of how pharmacy theory and practice, knowledge, and technique was mediated and reshaped over time. We can, with greater certainty, identify how pharmacy has operated as a “science” and part of a bounded medical structure, but simultaneously as an art and craft tradition in early human communities.

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Preface

The shifting relationship between Chinese medicine to modern biomedicine is a complex story. My research of the transition of Chinese materia medica (本草, “bencao”) to modern biologicals and chemical drugs is a long journey. In following the footsteps of Zhang Qian (张骞, 164–113 BCE), an official and diplomat of the Western Han period, to Kashgar, a border town near Krygystan of the Silk Road in 2000, I was fascinated by the display of decorated bottle gourds (葫芦 “hulu”, *Lagenaria siceraria*) in several bazaar stalls managed by Chinese Muslim Uyghur traders. The gourd, reportedly originated from Africa, has been used as a container for water or alcohol in East Asia for a couple of millennia. The gourd is also a symbol of Chinese medicine carried by apothecaries when visiting households with sick patients in ancient China. As a pharmacy practitioner who has transcended the multiple sectors of community, hospital and industry in the past four decades, I began researching why are animal and plant products imported for medicinal purposes? What are the origins of these exotic materia medica or non-Chinese materia medica from faraway lands (海药, “haiyao”) after my first trip to Kashgar.

My particular interest is the transition period from 1800 to 1949 when European and North American missionaries and traders brought the gospel, opium and “opium cures” to China, and Japanese educators who began teaching pharmacy courses in the two military academies of medicine in Guangzhou and Tianjin in the early-1900s. Many scholars have published excellent papers on western medicine in China. However, few books or publications have addressed the interactions between the stakeholders, such as opium traders, ship surgeons, chemists and druggists, medical missionaries, pharmacy educators, philanthropists, politicians, and public health policy makers. These pioneers have left undeletable marks in their contributions to modern China’s pharmacy practice and the development of its pharmaceutical industry in the first hundred years of Shanghai’s opening up to the outside world, soon after the first Sino-British War (1839–1842) had ended.

The main objective of this book is to stimulate discussions surrounding the movement of people, materia medica, and ideas between China and its neighbours in Central and South Asia from 200 BCE to 1500 CE. The book’s scope will then expand to include interactions with Europe starting in 1500, Britain in the late

1600s, the United States in the early 1800s, and Japan in the late 19th century. Western traders and medical missionaries introduced various items as tributary gifts to the imperial courts. These gifts included tobacco, opium, American ginseng, and other exotic elements of materia medica, as well as consumer and industrial products such as clocks, watches, scientific instruments, and textiles. Furthermore, the expansion of western medicine in the coastal ports of Macau, Canton, Hong Kong, Shanghai, Ningbo, Tianjin, and beyond is extensively discussed. One focal point of the book will be the significant exchange of medical and pharmaceutical practices between Chinese, Western, and Japanese cultures, which reached its pinnacle during the relatively brief Republican era from 1912 to 1949.

When I started to write this book, three questions came across to me, as were often asked but without an answer. First, what events led diplomats, religious men and traders to export exotic materia medica to China from faraway lands over the past two millennia, particularly in the 19th and 20th centuries? Second, what sparks occurred when western chemists clashed with Chinese medicine apothecaries in the nineteenth century? Third and finally, what drove the shifting relationship between Chinese materia medica and biologicals, alkaloidal extracts, and chemical drugs during the late Manchu Qing dynasty to the early Republican period in China.

The book offers a comprehensive exploration of the history of western pharmacy in China, utilizing diverse sources such as original research works, biographies, corporate records, and oral histories. Chapter 1 takes a chronological approach, tracing influential arrivals from Buddhist monks who transmitted Ayurvedic Medicine to Jesuits who brought cinchona bark to China, spanning 200 BCE to 1800 CE. Subsequent chapters adopt a thematic approach, examining various topics from 1800 to 1949. Multiple chapters address the interplay of the retail, wholesale, and manufacturing sectors, providing an in-depth study of individuals, companies, and medical institutions. Their collective efforts profoundly shaped the adoption of western medicine in modern China, leaving a lasting impact on today's healthcare system. The book also traces the evolution of China's pharmaceutical industry, from local Chinese medicine dispensaries to an industrial exporter, during the period of European and Japanese colonialism from 1850 to 1949.

This book caters to a diverse audience, encompassing pharmaceutical, social, political, imperial, and business historians and general readers interested in the history of Western and Far Eastern influences on Chinese medicine, specifically focusing on the history of pharmacy. It is a valuable resource for researchers exploring Chinese medicine and pharmacy in contemporary China and the introduction of western medicine in China since 200 BCE. Additionally, the author aims to inspire graduate students to pursue doctoral theses by examining various sectors or periods within the history of pharmacy in modern China.

During my career as a pharmacist, I had the opportunity to work in various sectors of the pharmacy profession, including hospitals, retail chemists, and industrial pharmaceutical and consumer health companies, in the UK, Canada, and Asia. This diverse experience allowed me to gain a deep understanding of the actions of John Cameron at the Peking Union Medical College Hospital between 1921 and 1940, as described in Chap. 3. Furthermore, I could relate to the challenges faced by Henry

Humphreys, the pharmacist and managing director of A.S. Watson, who operated as the leading wholesaler and retailer of “opium cures”, proprietary medicines and soda water in China and Southeast Asia, as discussed in Chaps. 4 and 5. Moreover, the accounts of entrepreneurs promoting their proprietary medicines and generics in 1930s and 1940s Asia offer valuable insights into the astute navigation of the intricate and frequently nebulous realm of intellectual property laws, as detailed in Chaps. 7 and 8. In the concluding Chap. 9, a comprehensive review is conducted, highlighting the interconnected nature of trade conflicts, wars, and political decision-making. The analysis reveals a cyclical pattern in which trade conflicts frequently escalate into armed conflicts, leading to further trade disputes, and ultimately placing the power of decision-making in the hands of politicians.

From the 1870s onwards, both local entrepreneurs and expatriates began importing and marketing “opium cures” as a substitute for opium smoking, which had exacerbated narcotic addiction. By the 1910s, the production of new dosage forms such as tablets, pills, and injections of “opium cures” became widespread, catering to the needs of drug users and replacing traditional forms like laudanum liquid, powder, and tincture. Consequently, millions of drug addicts turned to equally addictive options such as morphine injections, “red pills,” and “white powders” at the turn of the twentieth century. Ironically, this development played a significant role in shaping the modern retail pharmacy and pharmaceutical industry in China.

With rapidly increasing trade and transshipments of bonded labourers and cargoes along the China coast in the late nineteenth century, import drug houses such as the British Dispensary, Koeffler Dispensary, Laou Teh Kee, A. S. Watson and others served as the drivers in the rapid transmission of western pharmacy. This book addresses the motivational factors for enterprising Chinese medicine owners to enter the western retail and wholesale drug market. Firstly, they learned business practices in marketing “opium cures” from western retail chemists in the 1880s. Secondly, retailing became wholesaling and local production of lucrative “opium cures” in the 1890s. Lastly, launching branded proprietary medicines in the 1900s eventually led to the modern pharmaceutical industry from the 1910s to the 1940s during the Nationalist Era.

When the China Medical Board (CMB) of the Rockefeller Foundation acquired the Union Medical College (UMC, Xiehe Yi Xuetang) and Hospital from the London Missionary Society in 1914, western medicine and pharmacy soon began to take root during the infancy of the Nationalist government. In 1921, the opening of the new Peking Union Medical College Hospital (Beijing Xiehe Yi Yuan) buildings turned a new chapter in the development of biomedicine in the young Nationalist government’s private hospital. Best practice management in clinical pharmacy, zero tolerance for dispensing mistakes, publication of hospital formularies, and control of poisons and dangerous drugs were a few of many measures implemented at the PUMC Hospital pharmacy department from the 1920s to 1940s.

Modern pharmaceutical education was initiated by Japanese pharmacy lecturers in the early-1900s and training of industrial pharmacists by Dr. E. N. Meuser, a Canadian pharmaceutical missionary, began at the West China School of Pharmacy in Chengdu (Chengtu) in 1918. The latter was a classic example of developing local

talents for China's modern pharmaceutical industry. Another classic example of this transition is the foundation of modern China's Central Epidemic Prevention Bureau to produce vaccines in 1919. The dissemination of vaccine production technology over the next century in mainland China and its mass immunization programme of children after 1949 led to the development of attenuated or inactivated SARS-CoV-2 vaccines in 2010 and COVID-19 vaccines, respectively, in 2020.

Today, China's bi-centennial journey to the modernity of pharmacy practice could date back to Dr. Alexander Pearson's variolation of smallpox in the British East India Company compounds in Canton and Macau in 1805. However, a story the global press has failed to cover is that the learnings in vaccine and pharmaceutical production technologies since the time of Dr. Pearson have enabled China's two largest vaccine manufacturers, Sinopharm and SinoVax, to produce five billion or 50% of the 11 billion vaccine doses to its home market and the Global South countries during the COVID-19 pandemic in 2021!

With the initiation of China's "New Journey for the New Era" in early 2023, the contemporary history of pharmacy in China, spanning from 1950 to the present, becomes a subject worthy of focused exploration. This period of pharmacy history will be extensively scrutinized in an upcoming open-access publication project titled "*Chinese History of Pharmacy: From Shennong to Tu Youyou*" jointly undertaken by Dr. Michael Shiyong Liu of Pittsburg University/Shanghai Jiaotong University and me. It aims to shed light on the crucial milestones that have shaped China's journey over the course of two millennia, as it navigates the transition from traditional medicine to modern pharmacy. Notably, a significant portion of this transformation has taken place in the past 70 years of the People's Republic of China.

Lastly, this book commemorates the remarkable centennial anniversary of Moody Meng's membership with the Pharmaceutical Society of Great Britain in 1924. Meng, a true pioneer in the realm of pharmaceutical education, also played a pivotal role in the creation of the first five editions of the Chinese Pharmacopoeia since 1930. His enduring contributions have withstood the test of time, spanning both the Republican and the People's Republic eras, and have left an indelible mark on the field of pharmacy. His remarkable legacy continues to shape and influence the discipline to this very day in China.

Hong Kong

Patrick Chiu

Acknowledgements

In my pursuit of researching the social history of pharmacy and the pharmaceutical market in Colonial Hong Kong and China's treaty ports, I have been fortunate to receive generous advice from Dr. Stuart Anderson, an esteemed authority on imperial pharmacy history. Dr. Anderson, the Editor-in-Chief of the *Pharmaceutical Historian*, has kindly agreed to write a foreword for this book and allowed me to incorporate materials from my previous publications in the *Pharmaceutical Historian*. I would also like to express my gratitude to Dr. Lucas Richert, a distinguished historian specializing in narcotic drugs and modern medicine, is the George Urdang Chair in the History of Pharmacy at the University of Wisconsin- Madison, for his gracious contribution of a foreword. Furthermore, I extend my thanks to Dr. Kazushige Morimoto, the president of the Japanese Society for the History of Pharmacy, for providing a kind book review.

As Britain, Japan, and the United States were the three most influential countries shaping China's modern pharmacy profession and pharmaceutical industry in the first half of the twentieth century, receiving personal forewords and reviews from these esteemed pharmacy historians on "*A History of Western Pharmacy in China*" is a great honour for me as a writer and pharmaceutical historian.

I am grateful to Dr. Fan Ka Wai, an authority in the history of Chinese Medicine, of The City University of Hong Kong who kindly reviewed my first manuscript draft and offered further insights, including the rationale for omitting the incorporation of Islamic Pharmacy in the "*Great Yuan Bencao Gangmu*" during the Mongolian rule of China from 1217–1368. Additionally, I would like to thank Dr. Arnab Chakraborty, an assistant professor at the Shanghai University Department of History, for his insightful feedback on my book. Three academics who have made significant contributions to the history of the transmission of Buddhist, Christian, and Islamic faiths and medical knowledge from India, West Asia and Europe to China via the ancient Silk Roads have kindly provided their book reviews: Dr. Vijaya Deshpande, a renowned Sanskrit scholar and historian of Ayurvedic medicine, Dr. Halil Tekiner, an authority on Islamic pharmacy, and the President of the International Society for the History of Pharmacy, and Rector Stephen Morgan, a theologian and philosopher and Rector of the University of St. Joseph of Macau, which traces

its history back to St. Paul's College since the Portuguese traders settled there in the mid-16th century. Additionally, three internationally acclaimed historians specializing in Western medicine, narcotic drugs, and Chinese Medicine in modern China, namely Dr. Zhang Daqing of Peking University, Dr. Zhang Yongan of Shanghai University, and Dr. Pi Kuo-li of National Central University in Taiwan, have shared their respective his views on the transformation of medical culture from the late Manchu Qing to the Republican era.

Apart from conducting visits to archives and libraries in Beijing, Hong Kong, Shanghai, and Taipei, the essence of this book also stems from my oral history sessions with individuals or their immediate family members who lived during the pre-Communist era. These individuals include the late Dr. Thomas Cochrane, Chen Lifu, Moody Meng, and Dr. Minglu King. Their contributions have indelibly shaped China's healthcare system on both the mainland and Taiwan. I would also like to express my gratitude to Roy Delbyck, and Kate Petrusa for granting me permission to use images of original antique pieces, publications, and posters from the 19th and early 20th centuries, which are preserved in their respective museums in Hong Kong, Shanghai, and Vancouver. Lastly, but certainly not least, I want to extend my appreciation to Ms. Floor Oosting, the editorial director, and Mrs. Alex Campbell, the senior editor of social sciences and humanities at Springer Nature, for granting me the opportunity to publish this book.

Book Reviews

In his seminal work, *A History of Western Pharmacy in China*, Patrick Chiu furnishes an unparalleled investigation into the intricate relationship between China and the Western world through the lens of pharmaceutical history. This book traces China's transmogrification from the opening of the ancient Silk Road by Zhang Qian in Han Dynasty in 138 BCE with the pinnacle of her interactions with the West during the late Qing Dynasty, leading up to the intercourse of Eastern and Western medicine and pharmacy. Rapid transformation of modern China's pharmacy systems evolved during the short Republican period which gave rise to the birth of the People's Republic of China in 1949.

Emphasizing an array of subjects from the transmission of Ayurvedic medicine from India, Islamic pharmacy from West Asia, medical missionaries from Europe and North America, trade wars and institutional transformations to the foray into modern medicinal practices, Chiu's narrative offers an incisive understanding of the labyrinthine developments in Chinese pharmacy during the past two millennia.

The manifold roles enacted by medical missionaries, naval medical officers, and local apothecaries from Ningbo in the 19th century are examined scrupulously. Chiu inspects the multifaceted challenges and prospects that unfurled as Western medical methodologies—such as variolation and opiate-based therapies—found their place alongside indigenous practices. These Western interventions were not limited to therapeutics but extended to revolutionary pharmaceuticals like arsphenamine, insulin, and penicillin, forever altering China's pharmaceutical landscape.

One of the most enlightening aspects of Chiu's work is its multidimensionality. The book isn't confined to purely medical perspectives but encompasses broader socio-economic and industrial implications. It delves into the entrepreneurial ambitions of Chinese businesspersons in the Western pharmaceutical sphere, the shift from retail to wholesale pharmaceutical trade, and the nascent stages of China's contemporary pharmaceutical industry. Moreover, it reveals important facets of clinical governance, toxicological regulation, and the standardization of hospital formularies between the 1920s and 1940s. In doing so, it identifies pivotal moments in history that expedited the institutionalization of Western pharmacy in China.

Geographically, the spotlight is directed towards key urban centers like Hong Kong and Shanghai. Here, Western apothecaries capitalized on the narcotic trade, notably with “opium cures” and other proprietary formulations. This commercial success fuelled not just business expansion but also instigated the construction of an organized, modern supply chain within China. Equally noteworthy is the scholarly attention Chiu pays to the evolution of pharmacy education in the early 20th century, marking a pedagogical paradigm shift toward a more systematized and modernized approach.

An intriguing dimension of Chiu’s narrative revolves around the coexistence and at times, contentious interaction, between Traditional Chinese Medicine (TCM) and Western pharmacology. The book enters the disputed terrains of language and culture in medical education, highlighting debates over the medium of instruction. Furthermore, the consecration of the Chinese Pharmacopoeia and the formal recognition of TCM as a standalone healthcare paradigm are treated with nuanced understanding.

What sets Chiu’s work apart is its contribution to the relatively underexplored scholarship on the interaction between Western and Chinese pharmacy. Far from a simplistic account, the book adopts an interdisciplinary methodology that assimilates various cultural, economic, and sociopolitical factors. It surpasses mere chronology, offering a rich tapestry of cross-cultural adaptations, negotiations, and confrontations among an ensemble of actors including merchants, diplomats, clergy, maritime medical practitioners, and policy architects.

The book serves as a microcosm of the greater narrative of East-West interaction, epitomizing the complex interplay of awe and skepticism, engagement and restraint. From the magnanimous outlook of the Kangxi Emperor and his intercourse with Portuguese Jesuits to the persevering legacy of indigenous Chinese medicine in the face of early 20th-century challenges, Chiu’s work is a crucible of insights that will satiate both academic and lay audiences.

In summary, *A History of Western Pharmacy in China* is an academically rigorous and intellectually fulfilling discourse that significantly broadens our comprehension of pharmaceutical history and Sino-Western relations. Its novelty lies in its ability to unpack two millennia of continuous negotiation between disparate pharmacological paradigms, and in doing so, enriches our understanding of medical humanities, social history, and international relations. This is a pivotal contribution that addresses a lacuna in existing scholarship, marking it as an indispensable read for those interested in the confluence of medicine, culture, and geopolitics.

Prof. Dr. Halil Tekiner, President of the International Society for the History of Pharmacy. Head of the Department of the History of Pharmacy and Ethics, Erciyes University, Turkey

Patrick Chiu’s book, *A History of Western Pharmacy in China*, effectively presents an unbiased perspective when discussing the contributions of expatriate pharmacy academics towards the development of China’s pharmaceutical profession and the modern drug industry in the first half of the twentieth century. The author highlights the positive impact of formal pharmacist training, which became evident during the Second Sino-Japanese War (1937–1945). By the end of 1949, approximately

3000 pharmacists had been trained, with two thousand receiving education from local universities and colleges, and four hundred graduating from Japan's pharmacy vocational schools.

One notable example of progress highlighted in the book is the publication of the first edition of the Chinese Pharmacopoeia in 1930 and its subsequent release in 1931. However, Chiu also acknowledges the challenges faced in achieving consensus and compiling the pharmacopoeia, as senior doctors and pharmacists from various backgrounds, including British, European, Japanese, and American medical and pharmaceutical practitioners, held differing approaches to professional practice. Chiu's impartial approach and well-researched content make it a recommended resource for understanding the historical development of pharmacy in China.

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In *A History of Western Pharmacy in China* Patrick Chiu opens a new door into the complex history of the interaction between the West and East. Although concentrating on a particular scientific field, the story Chiu tells is in many ways paradigmatic of the encounter between China and the Western world: a tale of fascination and suspicion, of enthusiasm and caution. From the experience of the Kangxi Emperor, perhaps the most open of all Qing Dynasty rulers to the outside world, and his interaction with the Portuguese Jesuits, to the survival of Chinese medicine through the challenges of the early twentieth century, Chiu offers insights that should interest scholars and general readers alike.

Prof. Stephen Morgan, Rector, University of Saint Joseph, Macao

Patrick Chiu's book, *A History of Western Pharmacy in China*, thoroughly examines the journey of exotic elements of materia medica and modern drugs from the West to China. In contrast to the extensive research conducted by academics on the history of medicine, public health, and diseases, the study of modern drugs and pharmacy practice in China is still in its early stages. Chiu's book faithfully traces the historical process of offering exotic materia medica as tributary gifts from diplomats and traders hailing from Arabia, Java, and South Asia to the imperial courts of China via the Silk Roads. With a focus on the intricate relationship between commerce, trade, culture, and science, Chiu uncovers pivotal moments that accelerated the transition of Chinese medicine and materia medica into biomedicine and modern drugs in the modern period. The book provides a comprehensive and informative account through a wealth of historical events, supplemented by images, charts, and tables. For those interested in delving into the history of Western medicine and pharmacy in China, this research reference guide comes highly recommended.

Daqing Zhang, Ph.D., Director, The Center for History of Medicine,
Peking University

The exchange of medical knowledge between the East and the West, particularly the transmission of Western medicine to the East and Chinese Medicine to the West, has been extensively debated within the international academic community. However, the exploration of the history of pharmacy in the context of interactions and exchanges between China and the West is still in its nascent stages. Addressing this gap, Patrick Chiu's latest publication, *A History of Western Pharmacy in China* offers a comprehensive examination of the assimilation of foreign elements of materia medica, including the discovery of the silver Persian medicine box, introduction of poppy, leading up to the development of domestically produced drugs like neo-arsphenamine, throughout two millennia.

Chiu's work goes beyond mere documentation to analyze the gradual adjustment of diverse cultures, ideas, and behaviours that occurred as a result of contact, often leading to collision or even conflict, among key stakeholders such as merchants, diplomatic delegations, missionaries, ship doctors, western chemists, and policy makers. By adopting a unique research perspective, the book holds significant importance for studying pharmacy history, medical and social history, and exploring the historical dynamics of foreign relations and mutual learning between China and the West.

Yongan Zhang, Ph.D., Professor, Department of History, Shanghai University

This book is written by an eminent pharmacist and pharmacy historian Patrick Chiu. He covers the period from 200 BCE when western influence on China began and was manifest in all aspects including medicine and pharmaceuticals, up to 1800 CE. Western influence includes Indian as well since coming via silk route India is towards China's west. Medicine has always been a tool for the Buddhist missionaries since it went well with their benevolent spirit and expansion goals. When it came to western medicine and pharmaceuticals it became a tool for moneymaking and power too. Chiu's initial focus is on the times when the Europeans and Americans brought opium and opium cures to Chinese southern shores and established them on the coastal region. It is a story of exploitation although Chiu does not say it in as many words. He impartially judges what came out of it, how Chinese pharmaceutical industries evolved through these habit-forming opiate drugs; how a pharmaceutical movement took a turn through it and how western biomedical and alkaloid based medicines were introduced through this channel. Leaving temporary dislike for the westerners for their politics and western medicine that came through opium and opium cures; the author reviews how Chinese were introduced to modern science of biology and how in long run it was beneficial, ending in the grand finale of the Nobel laureate Chinese pharmacist Dr. Tu Youyou. The Japanese also played a role in teaching modern pharmacy and establishing medical and pharmaceutical institutions in China. Thus politics and medicine and pharmacy went hand in hand in their efforts to win over the Chinese.

Chiu narrates this fascinating story in very scholarly manner. He has made analytical study of a wide range of sources that provides the reader with quantitative data as well. Among the books published in this field; he has, for the first time, explored the role played by all the stakeholders, such as opium traders, ship surgeons, chemists and druggists, medical missionaries, pharmacy educators, philanthropists, politicians, and public health policy makers and the interactions between them. He discusses in details the transition from sole use Chinese traditional medicine to the useful integration of the two. This book will be of paramount interest for those interested in political and medical/pharmaceutical history and reveal how they influenced each other. I recommend this book to Indian scholars in particular since Indian medical and political history traversed a similar path.

Vijaya Jayant Deshpande, Ph.D., Historian of Science, and Life Member,
Bhandarkar Oriental Research Institute, Pune, India

Reading *A History of Western Pharmacy in China* by Patrick Chiu is truly an enlightening experience. The author's extensive research on the history of modern Chinese and Western medicine, coupled with the accumulation of new historical materials and perspectives, serves as the foundation for this remarkable book. It can be considered an outstanding piece of work within this specialized field, offering a comprehensive overview of the transformations in Chinese pharmacy throughout history, particularly with a global perspective on the modern era.

Previously, academic research predominantly focused on describing Chinese Medicine or the prevalence of Western medicine in modern Chinese society. However, there was a lack of books specifically analysing the contributions made by pharmaceutical knowledge and modern drugs exported from Europe, the United States, Japan, and other regions to the development of modern Chinese pharmaceutical material culture and manufacturing technology. The ability of this book to shed light on these connections and elucidate the transformations is a testament to its groundbreaking nature.

Pi Kuo-li, Ph.D., Director, Graduate Institute of History,
National Central University, Taiwan

Conventions

Hanyu Pingying romanization is used throughout this book which has been adopted nationally in China since 1958. The previously used Anglicised or commonly known as the Wade–Giles names and terms are listed in the open and closed brackets when used the first time such as Beijing (Peking), Qingdao (Tsingtao), Dr. Zhang Changshao (C. S. Jang) and Zhao Chenggu (T. Q. Chou). Notable exceptions included Anglicised historical names and terms still used commonly or currently in the English media or publications: Canton Dispensary, Chiang Kai-shek, Convention of Peking, Treaty of Nanking, Shun Pao, Dr. Sun Yat-sen, Chiang Kai-shek, Dr. Heng J. Liu, Moody Meng etc. While the names of the national and provincial capitals of Beijing, Nanjing, and Tianjin will follow the established Hanyu Pingyin system, the Anglicised geographical names of Canton, Hong Kong, Kowloon, and Macau have been used instead of Guangzhou, Xianggang, and Aomen throughout the book. Some geographical words, such as *Canton*, in the local dialect, pronounced as *Kwangtung*, could be dated back to the 16th century when first used by the Portuguese traders to denote the province of *Guangdong* as in the Hanyu Pingying. Earlier western traders used the word *Canton* interchangeably for both the city of *Guangzhou* and the region of *Guangdong*. As referred to in the Treaty of Nanking in 1842, Hong Kong grew to include the Kowloon Peninsula in the Convention of Peking in 1860 and grew to more than ten times its original size in the subsequent Second Convention of Peking in 1898. The name Peiping (Beiping, “Northern Peace”) was used from 1928 to 1949 when China’s capital was relocated from Peking (Beijing, “Northern Capital”) to Nanking (Nanjing, “Southern Capital”) during that period under the Nationalist government on the mainland. The original English names of Peking Union Medical College and Peking University, not *Beiing Xihe Yiyuan* or *Beijing Daxue* in Hanyu Pingying, have been used in the book.

The book utilizes the term “Chinese Medicine” instead of “Traditional Chinese Medicine” (TCM) to encompass a wide array of medical practices and systems originating from China. This term is commonly used by scholars residing in mainland China, Hong Kong, Macau, Taiwan, and the Chinese diaspora in Southeast Asia and other parts of the world. Chinese Medicine has been employed for thousands of years and encompasses various practices, distinguishing it from Western Medicine.