

**Accommodating the Chinese:
The American Hospital in China, 1880-1920**

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Thesis submitted for the degree of

Doctor of Philosophy

in the

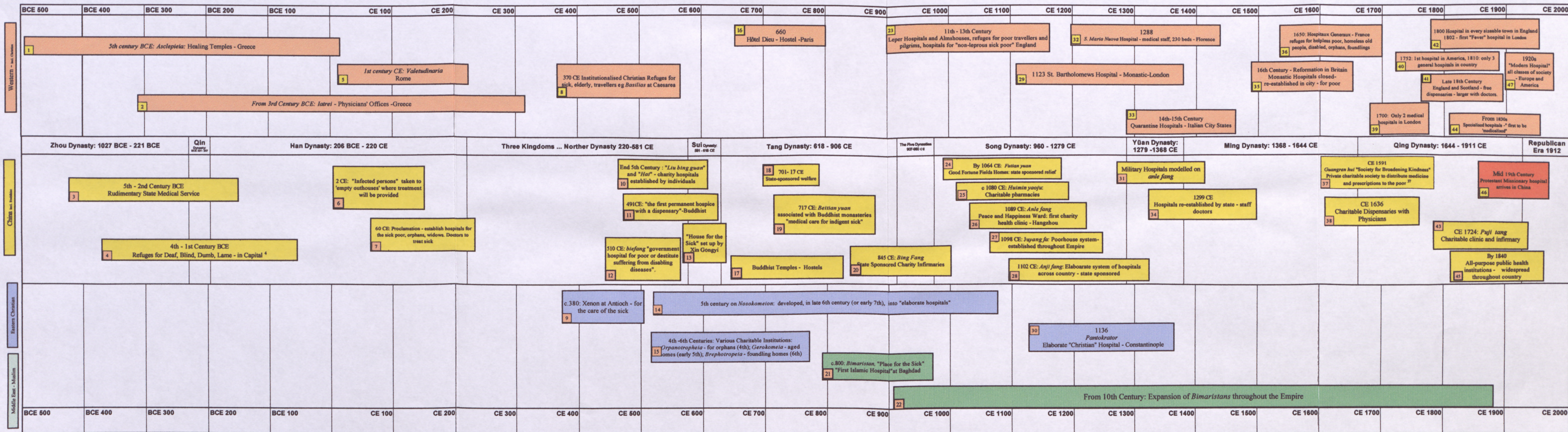
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COMPARATIVE CHRONOLOGY

FIGURE A



For

Marlis Tiersch (1916 - 1991)

and

Betty Yeatman (1913 - 2002)

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DECLARATION

This work contains no material which has been accepted for the award of any other degree or diploma in any university or other tertiary institution and, to the best of my knowledge and belief, contains no material previously published or written by another person, except where due reference is made in the text.

I give my consent to this copy of my thesis, when deposited in the University library, being available for loan and photocopying.

SIGNED:

DATE: 12/11/2003

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ABBREVIATIONS

ABCFM	American Board of Commissioners for Foreign Missions
ABFMS	American Baptist Foreign Missionary Society
ACM	American Church Mission (Domestic and Foreign Missionary Society of the Protestant Episcopal Church in the U.S.A.)
APM (N)	American Presbyterian Mission (North)
APM (S)	American Presbyterian Mission (South)
CCC	China Continuation Committee of the National Missionary Conference
C of EM (NC)	Church of England Mission, North China
CIM	China Inland Mission
CMMA	China Medical Missionary Society
CMB	China Medical Board of the Rockefeller Foundation
CMJ	China Medical Journal, The (from 1907)
CMMJ	China Medical Missionary Journal, The (1887-1907)
CMS	Church Missionary Society
EBM	English Baptist Mission
FCMS	Foreign Christian Missionary Society
LMS	London Missionary Society
MEC(S)	Methodist Episcopal Church (South) see MEM (S)
MEM(S)	Methodist Episcopal Mission (South)
MEM	Methodist Episcopal Mission
PUMC	Peking Union Medical College
SOAS	School of Oriental and Asian Studies, University of London
SPG	Society for the Propagation of the Gospel in Foreign Parts
WUMS	Women's Union Missionary Society
WMMS	Wesleyan Methodist Missionary Society

GLOSSARY

Other than when citing or directly quoting from primary sources I have used the Pinyin system in the text. The terms in parenthesis are the various spellings used in primary sources.¹

<i>Aiyutang</i> (Oi Yuk Tong)	爱育堂
<i>anji fang</i>	安济坊
<i>anle fang</i>	安乐坊
<i>Baoli yiyuan</i> (Pau li)	保黎医院
<i>Cixi baoli yihui</i>	慈溪保黎医会
<i>baoyi</i> (pau i)	包医
<i>beitian fang</i> (<i>Peit'ien fang</i>)	背田坊
<i>beitian yuan</i> (<i>Peit'ien yuan</i>)	背田院
<i>bie fang</i>	别坊
<i>Cixi baoli yihui</i>	慈溪保黎医会
<i>dili</i>	地理
<i>Fangbiansuo</i> (Fong Pin Sho)	方便所
<i>fengrenyuan</i>	疯人院
<i>fengshui</i> (<i>fengshuy</i>)	风水
<i>futian yuan</i>	幅田院
<i>gang</i> (kang)	缸
<i>Guangdong shanhou zongju</i> (Kwong Tung Shin Hau Tsung Kuk)	广东善后总局
<i>Guandong zhi</i>	广东志
<i>Guangren hui</i>	广仁会
<i>Guangren yiyuan</i>	广仁医院
<i>Houmen</i> (Ho Men)	后门
<i>Hua Mei</i> (Hwa Mei)	华美
<i>huimin yaoju</i>	惠民药局
<i>jian</i> (chien)	间
<i>juyang fa</i>	居养法
<i>kang</i> (k'ang)	炕
<i>Laoren yuan</i>	老人院
<i>Liubing guan</i>	六病馆
<i>Mafeng yuan</i>	麻风院
<i>matouqiang</i>	马头墙
<i>mingyi</i>	名医

¹ Sources used: Index of Geographical Names in Wong and Wu Lien-teh, "History of Chinese Medicine: Being a Chronicle of Medical Happenings in China from Ancient Times to the Present Period," (Shanghai: National Quarantine Service, 1936), pp. 860-64 ; "Alphabetical List of the Provinces, Departments, and Districts in China, with their Latitudes and Longitudes," (1844) and Couling, "The Encyclopaedia Sinica," (Shanghai: Literature House, Ltd., 1964,1917).

<i>Minzhengbu</i> (Minchengbu)	民政部
<i>neicheng guan yiyuan</i>	内城官医院
<i>Neiwubu</i>	内务部
<i>Puji yuan</i>	普济院
<i>qi</i>	气
<i>qiaojiao</i>	翘角
<i>ruyi</i>	儒医
<i>shiyi</i>	时医
<i>Shiyi gongu</i>	施医公局
<i>Tongren yuan</i>	同人堂院
<i>Tongshan hui</i>	同善会
<i>waicheng guan yiyuan</i>	外城官医院
<i>waike</i>	外科
<i>Wai Yuan</i>	外院
<i>Weisheng si</i>	卫生司
<i>wuxing</i>	五行
<i>Xiyi (Hsi yi)</i>	西医
<i>xiandai xiyi yiyuan</i>	现代西医医院
<i>yamen</i>	衙们
<i>yinyang</i>	阴阳
<i>Yanghang huiguan</i>	洋行会馆
<i>yangzi yuan</i>	养子院
<i>Zhong xi yiyuan</i> (Chung Si Yi Yuan)	中西医院
<i>Zhongyi</i> (Chung Yi)	中医
<i>zuchuan shiyi</i>	祖传世医

Place Names

Province

Anhui (Anhuei, Anwei)	安徽	
Anking (Anqing)	安庆	Anhui
Baodingfu (Paotingfu)	保定府	Hebei
Baofushan (Ponasang)	保福山	Fujian
Cangzhou (T'sang-chow, Ts'angchou)	滄州	Hebei
Changan	长安	Shaanxi
Changde (Changteh)	常德	Hunan
Changsha	长沙	Hunan
Changzhou (Chenchow)	长州	Hunan
Chengdu (Chengtu, Chen-tu)	成都	Sichuan
Chizhou (Chi-chou)	祁州	Shanxi
Chongqing (Chungking)	重庆	Sichuan
Chuzhou (Chuchow)	滁州	Anhui
Cixi (Tzeki, Tzu-chi)	慈溪	Zhejiang
Dalian (Dairen)	大连	Liaoning
Daye (Taye, Tayyeh)	大冶	Hubei
Dongwan (Tungkun)	东莞	Guangdong
Foshan (Fatshan)	佛山	Guangzhou

Fujian (Fukien, Fuhkien)	福建	
Funing (Fuh-ning)	福甯	Fujian
Fuzhou (Foochow)	福州	Fujian
Guangdong (Kwangtung, Kuangtung)	广东	
Guangxi (Kwangsi)	廣西	
Guangzhou (Canton)	廣州	Guangdong
Hangzho (Hangchow)	杭州	Zhejiang
Hankou (Hankow)	漢口	Hubei
Hanyang	漢陽	Hubei
Hebei (Hopei)	河北	
Hengzhoufu (Yungchowfu, Hengchowfu)	衡州府	Hunan
Haikou (Hoihow)	海口	Guangdong
Huaiyuan (Hwai-yuen)	懷遠	Anhui
Huangxian (Hwang-hien, Hwanghsien)	黃縣	Shandong
Hubei (Hupeh, Hupei)	湖北	
Hunan	湖南	
Jiangbei (Kiang-peh)	江北	Sichuan
Jiangsu (Kiangsu)	江蘇	
Jiangxi (Kiangsi)	江西	
Jieyang (Kieh-yang, Kit-yang)	揭陽	Guangdong
Jinan (Tsinan)	濟南	Shandong
Jinzhou (Chinchow)	錦州	Liaoning
Jiujiang (Kiukiang, Chiu-chiang)	九江	Jiangxi
Leling (Laoling)	樂陵	Shandong
Linqing (Linch'ing)	臨清	Hebei
Lianzhou (Lien-chow)	廉州	Guangdong
Linqingzhou		
(Lintsingchow, Linch'ing chow)	臨清州	Hebei
Luzhoufu (Lu-cheo fu, Luchowfu)	廬州府	Anhui
Nanjing (Nanking)	南京	Jiangsu
Ningbo (Ningpo)	寧波	Zhejiang
Pangjiazhuang		
(Pangjiachwang, P'ang Chuang)	龐家庄	Shandong
Pingyin (Ping-yin, P'ing Yin)	平陰	Shandong
Qingdao (Tsingdao, Tsingtau)	青島	Shandong
Qingjiangpu (Tsingjkiangpu)	清江浦	Jiangsu
Qingzhoufu (Ch'ingchowfu)	青州府	Shandong
Qizhou (Chi-chou, Chichow)	祁州	Anhui
Quanzhoufu (Chuanchowfu, Chinchewfu)	泉州府	Fujian
Shanghai	上海	Zhejiang
Shaowu	邵武	Fujian
Shaoxing (Shaohsing)	紹興	Zhejiang
Suidingfu (Sui-ting-fu)	綏定府	Sichuan
Suzhou (Soochow)	蘇州	Jiangsu
Tianjin (Tientsin)	天津	Shandong
Tongchuanfu (T'ungch'uang fu)	潼川府	Sichuan

Tongzhou (Tungchow)	通州	Hebei
Wanxian (Wanhsien)	万县	Sichuan
Weixian (Weihsien)	卫县	Shandong
Wenzhou (Wenchow)	温州	Zhejiang
Wuchang	武昌	Hubei
Wuzhou (Wuchow)	梧州	Guangxi
Wuhu	芜湖	Anhui
Wuxi (Wusih, Wusieh)	无锡	Jiangsu
Xiamen (Amoy)	厦门	Fujian
Xianyou (Sing-iu, Sienyu)	仙游	Fujian
Xiaogan (Hiau-kan)	孝感	Hubei
Xinghua (Hinghwa)	兴化	Fujian
Yangzhou (Yangchow)	扬州	Jiangsu
Yanping (Yen-ping)	延平	Fujian
Yantai (Chefoo)	烟台	Shandong
Yichang (Ichang)	宜昌	Hubei
Yizhoufu (I-chow-fu)	沂州府	Shandong
Yongchun (Engch'un, Engchhun)	永春	Fujian
Zhangpu (Chang-poo)	漳浦	Fujian
Zhenjiang (Chinkiang)	镇江	Jiangsu

People

Chen Xiating	陈夏堂
Hu Jinying (Hü King-eng)	胡金英
Huizong	徽宗
Jin Yunmei (Kin Yamei)	金韵梅
Kang Aide (Ida Kahn, Kang Cheng)	康爱德
Li Deyu	李德裕
Lin Wenqing	林文庆
Qianlong	乾隆
Shi Meiyu (Shih Ma-yu, Mary Stone)	石美玉
Song Jing (Sung Ching)	宋景
Su Shi	苏轼
Tang Jian	唐堅
Wu Weiyu	吴为雨
Wu Lianting	吴莲艇
Xie Kangyou	谢康尤
Yongzheng	雍正
You Jingsen	游敬森
Zhu Xianhua	朱先华
Zuo Runqing	奏润卿

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ABSTRACT

In 1921 a medical missionary to China, Harold Balme, wrote:

prior to the introduction of modern medicine into China there was nothing in the whole country that was at all analogous to the western hospital.²

Ralph Crozier's view, that "the most conspicuous institution brought by the medical missionaries was, of course, the hospital" was echoed by Karen Minden thirty years later in the 1990s.³ All imply that the transfer of the hospital was both one-way and complete; that is, it was transplanted and flourished like an exotic species of flora. This dissertation argues that this was not the case. Firstly, there was no such thing as a typical missionary hospital: each had its own distinctive character. Secondly, missionary hospitals differed from their European and American counterparts in many significant respects. Thirdly, even when an institution is imposed (as it may be in a purely colonial context) the transfer always involves varying degrees of negotiation, persuasion and adaptation by both parties. It is rarely simple or exclusively one-way. And lastly, the late-empire hospitals established under Chinese auspices (government and local charity), rather than being inspired exclusively by missionary models as is implied in the statements above, also had indigenous precursors.

This dissertation takes as its subject matter the history of Protestant missionary hospitals in China during the period of most rapid expansion of the missionary enterprise: c1880 to c1920. The focus, rather than being on the medicine practised in them, is on those aspects of the hospital which have been largely overlooked to date: their architecture, financing, staffing and administration.

The aim of this study is to discover in what respects the late nineteenth-century American

² Harold Balme, *China and Modern Medicine: A Study in Medical Mission Development* (London: United Council for Missionary Education, 1921), pp. 82-3.

³ Ralph C. Crozier, *Traditional Medicine in Modern China: Science, Nationalism, and the Tensions of Cultural Change*, Harvard East Asian Series; 34 (Cambridge: Harvard University Press, 1968), p. 43, Karen Minden, *Bamboo Stone: The Evolution of a Chinese Medical Elite* (Toronto: University of Toronto Press, 1994), p. 16.

hospital in China was different from its counterpart in America; in particular, the differences that can be attributed to it being in China, among the Chinese. The notion of sinicisation – the adoption and sponsoring of Chinese culture and institutions – provides the main theme of this thesis. I seek to answer the question, to what extent, and in what ways, was the Western hospital sinicised?

The history of hospitals in China remains largely unexplored to date so, rather than centring on a single source, person or institution, this study is both broad and comparative: broad, to provide a structure for putting together and telling a large story and comparative so that the distinctiveness of the hospital in China is made clear.

INTRODUCTION

Prior to the introduction of modern medicine [by missionaries] into China there was nothing in the whole country that was at all analogous to the western hospital ... There was no Chinese institution that undertook to receive and treat the sick poor".¹

This statement by medical missionary to China Harold Balme² is typical of the commonly expressed view that the hospital, as a concomitant element of Western medicine, was introduced into China by Protestant missionaries in the nineteenth century.³ The implication is that the transfer was both one-way and complete. Further, it implies that there were no institutions in China which were in any way comparable to the hospital in the West, that is, the transfer was into virgin soil. If this were so one would expect a number of consequences to be evident in the historical record. Firstly, one might expect that the hospital the missionaries introduced would have been essentially the same hospital that existed at home in Britain or America. Secondly, if the introduction had been a straightforward transfer from the West then one might expect that hospitals established by the Chinese would be closely modelled on the Western example. It was the reproduction of a rough sketch and brief description of a hospital established by the Chinese government in 1906 that first ignited my interest in the history and place of the Western hospital in China. The hospital in question, the *Minzhengbu yiyuan* 民政部医院 bore little resemblance physically to anything in the Protestant missionaries' home countries. Neither was it managed in the same way. For example, patients could choose between two forms of medicine: traditional Chinese and Western. A number of questions arise from an examination of this hospital. Firstly, if this late Qing hospital was modelled on the hospital introduced into China what

¹ Harold Balme, *China and Modern Medicine: A Study in Medical Mission Development* (London: United Council for Missionary Education, 1921), pp. 82-3.

² Dean of the School of Medicine and later, President of Shantung Christian University, Balme was previously in charge of the American Presbyterian Hospital at Jinan, Shandong.

³ See, for example Ralph C. Croizier, *Traditional Medicine in Modern China: Science, Nationalism, and the Tensions of Cultural Change*, Harvard East Asian Series; 34 (Cambridge: Harvard University Press, 1968), P. 43 ; Karen Minden, *Bamboo Stone: the Evolution of a Chinese Medical Elite* (Toronto: University of Toronto Press, 1994), p. 16; and K C. Wong and Wu Lien-teh, *History of Chinese Medicine: Being a Chronicle of Medical Happenings in China from Ancient Times to the Present Period*, 2nd. ed. (Shanghai: National Quarantine Service, 1936), p. 137.

was the nature of the template hospital? In what ways, if any, did it differ from its prototype at home in America or Britain? Secondly, to what extent was this Chinese hospital in fact modelled on the Western example and to what extent did it owe its character to indigenous Chinese institutions? In other words, what was *its* provenance? This thesis attempts to answer these questions.

Neither Western nor Chinese historians of medicine in China have considered the hospital *per se* worthy of close scrutiny. There is no history of 'the hospital' in China which approaches the scope of Guenter Risse's grand survey of Western hospitals from pre-Christian houses of mercy and refuge to the late twentieth century temples of medical technology. Lindsay Granshaw and Roy Porter's collection of studies, *The Hospital in History*, which ranges from medieval England through Renaissance Italy to twentieth-century America, also has no parallel dealing with hospitals in China.⁴ Nor is there anything comparable to Charles Rosenberg's or Elizabeth Stevens' studies of the history of America's hospital system.⁵ This is not surprising since it has been the accepted wisdom that the hospital, as a new concept and concrete reality, was introduced into China from the West: mainly by Protestant missionaries who arrived in increasing numbers from the middle of the nineteenth century onwards. Medical missionaries themselves certainly held that view and, from a review of the literature, so too it seems have those few scholars who have written of the *medical* missionary enterprise in China. Harold Balme is just one example of the former. In their pioneering work on the history of medicine in China, K.C. Wong and Wu Lien-teh, whilst acknowledging that "the germ of the hospital idea may have

⁴ Lindsay Patricia Granshaw and Roy Porter, *The Hospital in History*, Wellcome Institute Series in the History of Medicine (London ; New York: Routledge, 1989) ; Guenter B. Risse, *Mending Bodies, Saving Souls: A History of Hospitals* (New York: Oxford University Press, 1999). For an earlier general survey of history of the hospital see, Eliot Freidson, ed., *The Hospital in Modern Society* (London: Free Press of Glencoe, 1963). A number of general histories and encyclopaedias of medicine deal, *inter alia*, with the history of hospitals, for example W.F. Bynum and Roy Porter, eds., *Companion Encyclopedia of the History of Medicine*, 2 vols., vol. 1 and 2 (London: Routledge, 1993) ; Steven Cherry, *Medical Services and the Hospitals in Britain 1860-1939* ed. Michael Sanderson, New Studies in Economic and Social History (Cambridge: Cambridge University Press, 1996) ; Peregrine Horden and Richard Smith, *The Locus of Care : Families, Communities, Institutions, and the Provision of Welfare since Antiquity*, Studies in the social history of medicine. (London ; New York: Routledge, 1998).

⁵ Charles E. Rosenberg, *The Care of Strangers: the Rise of America's Hospital System* (New York: Basic Books, 1987) ; Rosemary Stevens, *In Sickness and in Wealth: American Hospitals in the Twentieth Century* (Baltimore: The Johns Hopkins University Press, 1999).

existed in China from the earliest times” went on to assert that the “development of such establishments had never been marked and could not be compared with those of Europe or America which were organized on an elaborate and extended scale”.⁶ In his 1968 treatment of traditional medicine in modern China, Crozier commented, “the most conspicuous institution brought by the medical missionaries was, of course, the hospital”.⁷ His view was echoed by Karen Minden almost thirty years later in her study of the development of western medical training at Chengdu 成都 in Sichuan.⁸ Once established, it is easy for such a scholarly tradition to be accepted at face value and not interrogated – particularly where different cultural values and presumptions are involved – and where, even among careful scholars, ethnocentrism may play a part.

What follows from such a premise is, first, there will be no 'history' of the hospital in China to investigate up to the time of the missionaries arriving. The Western hospital, on the other hand, has a continuous early history within Western scholarship. Every instance of institutional – that is away from the family home – care is routinely cited as an element in a slow evolution into the highly specialised health care facility we now call a hospital. By contrast, an institution deemed to have been introduced has, by definition, no local antecedents. It follows then, that its history will be the same as that from which it was copied.

Even if we accept this blindness on the part of scholars, it is more difficult to account for the almost total neglect of the ‘introduced’ hospital in China. Harold Balme did include an interesting chapter on the hospital in his 1921 study of medical missionary development⁹ and, in the 1930s, Wong and Wu documented the establishment of missionary hospitals.¹⁰ A number of Chinese medical historians, relying on missionary sources, have done the same

⁶ Wong and Wu Lien-teh, *History of Chinese Medicine: Being a Chronicle of Medical Happenings in China from Ancient Times to the Present Period*, p. 137. This work, now superseded by contemporary scholarship, provides facts of contemporary events but their extrapolations from ancient texts (see later) are to be treated with scepticism.

⁷ Crozier, *Traditional Medicine*, p. 43.

⁸ Ibid, p. 43 ; Minden, *Bamboo Stone*, p. 16.

⁹ Chapter IV “The Evolution of the Hospital”, Balme, *China and Modern Medicine*, pp. 82-106.

¹⁰ Wong and Wu Lien-teh, *History of Chinese Medicine: Being a Chronicle of Medical Happenings in China from Ancient Times to the Present Period* .

but these works are little more than simple chronologies and contribute hardly at all to an understanding of the nature of these hospitals.¹¹ The various early histories of the missionary enterprise in China usually included some details of *medical* missionary work but the authors paid scant attention to the hospitals in which that medicine was practised.¹² Early biographies of several of the more prominent medical missionaries tend to fall into the category of hagiography but are useful for their descriptions of conditions in the hospitals.¹³ It is the hospitals of nineteenth-century Shanghai with which we are most familiar and for this we are indebted to Kerrie MacPherson who devoted a chapter of her book dealing with the history of public health in Shanghai to the facilities and operation of the London Mission Hospital, better known as the Chinese Hospital.¹⁴ This hospital, established under the auspices of the London Missionary Society in 1844, provided medical services to the Chinese population of the Settlement. MacPherson also deals with the controversies surrounding the establishment of two other hospitals whose purpose was to treat foreign, rather than Chinese, patients. The Shanghai General Hospital served the visiting naval and military personnel and foreign residents of Shanghai and the relatively short-lived and troubled Shanghai Lock Hospital was established to treat foreign sufferers

¹¹ See for example, a text book designed for use throughout the whole country *Zhongguo yixue shi (History of Chinese Medicine)*, (Shanghai: Beijing zhongyi xueyuan (Beijing College of Chinese Medicine): Shanghai kexue zhishu chubanshe, 1982); Yu Shenchu, *Zhongguo yixue jian shi (A Brief History of Chinese Medicine)* (Fuzhou: Fujian kexue jishu chubanshe, 1983) and *Zhongguo yixue baikequanshu*, (Shanghai: Shanghai kexue jishu chubanshe, 1987). Within recent Chinese scholarship a small number of hospitals, which started out under missionary auspices, have been the subject of articles. See Zhu Deming, "Zhejiang guangji yiyuan yu shengliyiyaoy zhuanke xuexiao shilue (A Brief History of the Zhejiang Central Hospital and Provincial School of Medicine)" *Zhonghua yizshi zazhi* 25, no. 1 (1995); Chen Fenglin, Liu Shiyong, and Liang Jun, "Beijing daoji yiyuan kaolue (The Dow Hospital in Beijing)" *Zhonghua yizshi zazhi* 28, no. 3 (1998).

¹² For example see Norman Goodall, *A History of the London Missionary Society, 1895-1945* (Oxford: Oxford University Press, 1954); Kenneth Scott Latourette, *A History of Christian Missions in China* (New York: Russell & Russell, 1929); Gustav Warnek, *Outline of a History of Protestant Missions from the Reformation to the Present Time* (Edinburgh and London: Oliphant Anderson & Ferrier, 1901); Irwin T. Hyatt, "Protestant Missions in China, 1877-1890: The Institutionalisation of Good Works" in *American Missionaries in China: Papers from Harvard Seminars*, ed. Liu Kwang-Ching (Cambridge, Mass.: East Asian Research Center, Harvard University, 1966) and Sidney A. Forsythe, *An American Missionary Community in China, 1895-1905* (Cambridge, Mass.: East Asian Research Center, Harvard University, 1971).

¹³ For example see Mary Isabella Bryson, *John Kenneth Mackenzie: Medical Missionary to China* (London: Hodder and Stoughton, 1891); Dugald Christie, *Thirty Years in the Manchu Capital, 1883-1913. Being the Recollections of Duguld Christie CMG, FRCS, FRCP Edin., edited by his wife* (London: Constable and Company, 1915); Kingston De Gruche, *Doctor Apricot of "Heaven Below": The Story of the Hangchow Medical Mission (C.M.S.)*, Third ed. (London & Edinburgh: Marshall Brothers, Ltd., 1910); Anne Walter Fearn, *My Days of Strength: A Woman Doctor's Forty Years in China* (London: Robert Hale Ltd., 1940).

¹⁴ Known as the Shantung Road Hospital after the erection of a new building in 1861. Wong and Wu Lien-teh, *History of Chinese Medicine: Being a Chronicle of Medical Happenings in China from Ancient Times to the Present Period*, p. 379.

of venereal disease and monitor and treat the prostitutes who served in brothels frequented by foreigners.¹⁵ A few Protestant missionary hospitals have been the subject of individual histories¹⁶ and others have made incidental appearances in recent scholarship dealing with various facets of Western medicine in China. For example, the Canadian Methodist hospital is part of the setting for Karen Minden's study of western medical education in West China and Paul Howard's analysis of medical missionary responses to opium addiction includes mention of the hospitals where treatment was offered.¹⁷ Missionary hospitals make fleeting appearances in Caroline Reeves' history of the Red Cross in China¹⁸ as they do in Carol Benedict's work on the plague and State Medicine.¹⁹ Ho Tak Ming weaves the role of medical missionaries into his study of the encounter of Western medicine with Chinese Traditional Medicine but the hospitals the missionaries established are not dealt with in any detail.²⁰ Hospitals, under both missionary and Chinese auspices, occupy quite a substantial place in Ruth Rogaski's examination of public health in Tianjin. Both the Hospital at Tientsin for the Treatment of Sick Chinese, established by the British Army in 1861, "the first hospital of Western medicine, and arguably the first "hospital" in Tianjin's history",²¹ and the Mackenzie²² Hospital established in 1880 under the auspices of the London

¹⁵ In particular see Chapter 7, "A Charitable Enterprise: The Chinese Hospital" in Kerrie L. MacPherson, *The Wilderness of Marshes: The Origin of Public Health in Shanghai, 1843-1893* ed. Wang Gungwu, East Asian Historical Monographs (Hong Kong: Oxford University Press, 1987), pp. 143-71.

¹⁶ William Warder Cadbury and Mary Hoxie Jones, *At the Point of a Lancet: One Hundred Years of the Canton Hospital, 1835-1935* (Shanghai: Kelly and Walsh Ltd., 1935) ; Sara Waitstill Tucker, "The Canton Hospital and Medicine in 19th Century China, 1835-1900." (PhD, Indiana University, 1983) ; Edward Gulick, *Peter Parker and the Opening of China* (Cambridge, Mass.: Harvard University Press, 1973) ; Connie Anne Shemo, "'An Army of Women': The Medical Ministries of Kang Cheng and Shi Meiyu, 1873-1937 (China)" (Ph.D., State University of New York at Binghamton, 2002) ; and Yuet-wah Cheung, *Missionary Medicine in China: A Study of Two Canadian Protestant Missions in China before 1937* (Lanham, Md.: University Press of America, 1988).

¹⁷ Paul Howard, "Opium Suppression in Qing China: Responses to a Social Problem, 1729-1906 (Qing Dynasty)" (PhD, University of Pennsylvania, 1998).

¹⁸ Caroline Beth Reeves, "The Power of Mercy: The Chinese Red Cross, 1900-1937" (PhD, Harvard University, 1998).

¹⁹ Carol Benedict, "Policing the Sick: Plague and the Origins of State Medicine in Late Imperial China" *Late Imperial China (Ch'ing - Shih Wen-t'i)* 14, no. 2 (1993)

²⁰ Ho Tak Ming, *Doctors in the East: Where West meets East* (Subang Jaya, Malaysia: Pelanduk Publications, 2001).

²¹ Ruth Rogaski, "From Protecting Life to Defending the Nation: The Emergence of Public Health in Tianjin, 1859-1953" (Ph.D., Yale University, 1996), p. 62.

²² John Kenneth Mackenzie, a Scottish doctor and "devout Christian" was 29 years old when he was transferred from Hankou to establish medical work in Tianjin. He received financial support from the viceroy, Li Hongzhang, who gave him the use of "the recently built Zeng Guofan temple" to set up his initial medical

Missionary Society (LMS), receive her attention.²³ Her discussion of the British Army Hospital under Dr Rennie provides a clue as to a possible reason for the relative absence of interest shown by scholars in the detailed operation of Western hospitals in China. Citing as evidence a single description by the chief medical officer of the symptoms of a patient suffering from hydrophobia and drawing on the work of Michel Foucault, Rogaski claims that the “Tianjin hospital allowed British military doctors to apply a detached clinical gaze upon on the sufferings of the Chinese body.”²⁴ She states:

The Hospital for the Treatment of Sick Chinese introduced a new and radically different site for cure. The sufferer who stayed at the hospital became an individual, removed from the context of the family and the mediating role the family played between the patient and the practitioner. The sufferer became the patient, defined solely through his relationship vis-a-vis the doctor. Within the institutional setting of the hospital, the doctor had constant access to the patient as an object of study.²⁵

Here, she appears to be adopting the *a priori* argument that because the hospital was Western it was directly comparable to the eighteenth-century French clinic as characterised by Michel Foucault in his *Birth of the Clinic*.²⁶

If one follows Rogaski’s example and assumes that the Western hospital the missionaries brought to China was the same as the one in America or Britain then one may well presume that its subsequent history would also be the same: there would therefore be no point in investigating its history in China. It is my intention to examine and challenge these two assumptions.

I want to discover in what respects and to what extent the Western hospital in China was

clinic and provided funds to build a new hospital and later, an associated medical school. Ibid, pp. 114-120. See also, Bryson, *John Kenneth Mackenzie: Medical Missionary to China* and Ma Kanwen, “East-West Medical Exchange and their Mutual Influence” in *Knowledge Across Cultures-Universities East and West*, ed. Ruth Hayhoe (Hubei: OISE Press, 1993), p. 169.

²³ She also describes the failed attempts by the Chinese Chamber of Commerce to establish a western-style municipal hospital in Tianjin in 1911 in response to fears of the Manchurian plague. Rogaski, “From Protecting Life”, pp. 233-36.

²⁴ Ibid, p. 65.

²⁵ Ibid.

²⁶ Foucault, “The Birth of the Clinic: An Archaeology of Medical Perception,” (London: Routledge, 1997 (1973)).

different from its counterpart in the West. In particular, I am interested in the differences that can be attributed to its being in China, among the Chinese. How did Chinese culture, customs, institutions, and political and economic environment influence the form the hospital took and how it changed over time? In other words, I am interested to what extent and in what ways the Western hospital was sinicized.

In 1967, the Professor of History at the University of Chicago, Ho Ping-ti, put forward the proposition that a significant factor in making the Qing “the most successful dynasty of conquest in Chinese history ... was the adoption by early Manchu rulers of a policy of systematic sinicization”.²⁷ By ‘sinicization’ he meant the adoption and sponsoring of Chinese culture and institutions by a conquering ethnic minority who were vastly outnumbered by Chinese.²⁸ Although the “sinicization of all earlier alien conquest states [which] has been so generally taken for granted by the scholarly world”²⁹ is usually employed when discussing the political realm I have found it to be a more appropriate framework within which to analyse the mission hospital than the commonly adopted American or British “cultural imperialism” model. Although she does not employ the notion of sinicization, Gael Graham discovered, while examining American Protestant educational work in China, that her initial focus, “the issue of American cultural imperialism”, was overtaken by a story of “cultural exchange and interaction, of borrowing back and forth across a selectively permeable cultural border”.³⁰ Evelyn Rawski defines the sinicization thesis thus: “that all of the non-Han peoples who have entered the Chinese realm have eventually been assimilated into Chinese culture”.³¹ She speaks of the Manchu rulers of the Qing as ‘adopting’, ‘synthesising’, and ‘adapting’ Chinese customs but these

²⁷ Ho Ping-ti, "The Significance of the Ch'ing Period in Chinese History" *The Journal of Asian Studies* 26, no. 2 (1967): p. 191.

²⁸ Ibid: p. 191-92.

²⁹ Ho Ping-ti, "In Defense of Sinicization: A Rebuttal of Evelyn Rawski's "Re-envisioning the Qing"" *The Journal of Asian Studies* 57, no. 1 (1998): p. 128.

³⁰ Gael Graham, *Gender, Culture, and Christianity: American Protestant Mission Schools in China, 1880-1930* (New York: Peter Lang Publishing, Inc., 1995), p. 1.

³¹ Evelyn S. Rawski, "Re-envisioning the Qing: The Significance of the Qing Period in Chinese History" *The Journal of Asian Studies* 55, no. 4 (1996): p. 842.

are apparently not enough to constitute 'sinicization', in her view.³² In my opinion, for sinicization to be a useful explanatory tool it is not necessary to prove that the foreigner *became* the Chinese he wished to govern or influence. Nor does the imported institution, in this case the hospital, need to be indistinguishable from a Chinese institution. Rather, evidence of the selective adaptation, adoption or synthesis of Chinese forms, customs, or beliefs by the foreigner, is sufficient. It is this notion of sinicization that informs this thesis. In my view, it leads to a more nuanced reading of the history of the Western hospital in China than a blanket adoption of the imperialism or orientalism³³ models favoured by others.³⁴ Arthur Schlesinger Jr. pointed out, in the early 1970s, the missionaries in China were not agents of classically defined Western economic or political imperialism.³⁵ In his view, a more fruitful line of inquiry might be to engage, and develop, the notion of cultural imperialism, which he defined thus:

... purposeful aggression by one culture against the ideas and wishes of another. The mere communication of ideas and values across national boundaries is not in itself imperialism ... it becomes aggression only when accompanied by political, economic or military pressure.³⁶

But, although missionaries were happy to be protected by gunboats and to call on the extraterritoriality clauses of the various treaties between the European powers and China, they were as much changed by China as they influenced the Chinese. Or, as Andrew Porter

³² Rawski has challenged the longevity of the notion of sinicisation and referred to it as "a twentieth-century Han nationalist interpretation of China's past". Ho Ping-ti came out of retirement in 1998 to comprehensively rebut her claim and in a long article provided a wealth of evidence, spanning Chinese history "millennia before the Han dynasty came into being" to the present day, to defend his thesis that "sinicization has ... perennial significance".³² He criticised Rawski's "monothematic bibliographic survey" as "nebulous and evasive" and accuses her of distorting his argument and not always truthfully representing "the more balanced views of the authors [she] relies on. Ho Ping-ti, "In Defense of Sinicization": pp. 124, 152.

³³ See for example David Arnold, *Colonizing the Body: State Medicine and Epidemic Diseases in Nineteenth Century India* (Berkeley and Los Angeles, Ca.: University of California Press, 1993) who applies the orientalism critique to the colonial India situation.

³⁴ The essays in John K. Fairbank, ed., *The Missionary Enterprise in China and America* (Cambridge, Mass.: Harvard University Press, 1974) explore the missionary enterprise in general from a variety of viewpoints and, for a more recently published survey of the history of the approaches taken to the history of China and the West, see Robert Bickers, *Britain in China: Community, Culture and Colonialism 1900- 1949* ed. John M. MacKenzie, *Studies in Imperialism* (Manchester: Manchester University Press, 1999), pp. 6-10.

³⁵ Arthur Jr. Schlesinger, "The Missionary Enterprise and Theories of Imperialism" in *The Missionary Enterprise in China and America*, ed. John K. Fairbank (Cambridge, Mass.: Harvard University Press, 1974), p. 363.

³⁶ *Ibid*, pp. 363-64.

has more recently demonstrated, “highly effective as missions were in promoting cultural change, they were among the weakest agents of ‘cultural imperialism’.³⁷ Anyone who left America to go as a missionary to China, as Paul Cohen has observed, was transformed from a “Westerner pure and simple [into] a Westerner-in-China”. The missionary learnt the language, adopted some Chinese customs and interacted with his environment and “was metamorphosed in the process of encounter”.³⁸ So too was the hospital he brought with him.

My Approach

Because the field has been largely unexplored to date, this study of the Western hospital in China, rather than centring on a single source, person or institution, is deliberately broad. It is not so broad however so as to encompass all medical work undertaken by Westerners in China. For example, a handful of Jesuits missionaries to China in the seventeenth and eighteenth centuries had practised some medicine and a number set up dispensaries from which they distributed medicines but they did not establish anything which could be described as a hospital.³⁹ Some Roman Catholic missionaries engaged in medical work in the nineteenth century but they never embraced the notion of “making the practice of medicine an auxiliary in introducing Christianity to China”⁴⁰ to the same extent as the Protestant Churches. Other hospitals, as MacPherson has described, were established to treat foreigners in the Treaty Ports and these too are excluded from this study. I have limited this study to Protestant Mission Hospitals serving Chinese patients.

The most rapid expansion of the Protestant Medical missionary activity in China took place between the years 1880 and 1910 and, of the one hundred and twenty-six Protestant missionary hospitals I have been able to identify which were established during that period, the ratio of American to British societies was almost two to one. The timing of this arrival

³⁷ Andrew Porter, "'Cultural Imperialism' and Protestant Missionary Enterprise, 1780-1914" *Journal of Imperial and Commonwealth History* 25, no. 3 (1997): p. 388.

³⁸ Paul A. Cohen, *Discovering History in China: American Historical Writing on the Recent Chinese Past* (New York: Columbia University Press, 1984), pp. 13-14.

³⁹ See Wong and Wu Lien-teh, *History of Chinese Medicine: Being a Chronicle of Medical Happenings in China from Ancient Times to the Present Period*, pp. 263-72.

⁴⁰ *Ibid*, p. 315.

of medical missionaries from America in large numbers coincided with the period in which hospitals in the West were undergoing a period of most rapid change. Just as there was no 'typical hospital' in Britain or America there was even less chance of there being one in China. Thus, I will draw on information from a wide range of institutions in terms of their size, clientele, missionary society auspices, location in China, time of establishment and stage of development although there will, perforce, be a preponderance of examples from American societies. These American mission societies, ranging as they do from Southern Baptist to New England Presbyterian, afford the opportunity to make generalisations about the "American" hospital which would not be possible in a more restricted study. Secondly, my approach will be comparative so that both differences and similarities between the Western hospital in China and its counterpart in Britain or America can come into focus.

Medical missionaries have left us a rich repository of primary sources since they wrote and published prolifically. They did not confine themselves to medical matters but discussed all aspects of their time in China. They exchanged ideas about learning the language, translating medical terms, the nature of Chinese medicine, administrative and clerical systems they had found useful, methods of financing hospitals and designs for hospital buildings. I will draw on the words of these medical missionaries published in the organ of their Association, the *China Medical Missionary Journal (CMMJ)* established in 1887⁴¹ as well as memoirs and biographies of individual physicians. They also communicated with each other, and the wider public in China, via missionary-run journals such as the *Chinese Repository* and the *Chinese Recorder and Missionary Journal*⁴² as well as the newspaper, the *North China Daily News*. Another rich source of information comes from the annual reports which most hospitals published for the benefit of their colleagues and, more significantly, for their supporters in America and Britain.⁴³ I will base the study on evidence

⁴¹ After 1907, renamed the *China Medical Journal*.

⁴² Renamed the *Chinese Recorder*.

⁴³ One of the difficulties of working from South Australia, despite the internet, has been the comparative lack of access to Missionary Society archives. I was able to consult the London Missionary Archive in London and the Rockefeller Archive in New York but most useful was the comprehensive collection of pamphlets, annual reports, books and papers held by the Burke Library of the Union Theological Seminary in New York. The Mission Research Collection covers the work of a large range of American missionary societies including: American Board of Commissioners for Foreign Missions, Church Missionary Society, American Baptist Foreign Missionary Society, Society for the Propagation of the Gospel in Foreign Parts, Methodist Episcopal

provided by reports and photographs of what the medical missionaries actually built or did while they were in China. I will seek out their stated explanations for any adaptations they made and assess these explanations against a background of what we understand, with a greater depth of vision afforded by time, to be unique about the hospitals being in China rather than in America. Paul Howard has noted that the work of *medical* missionaries has been “less thoroughly studied” than that of those involved in other aspects of missionary work.⁴⁴ I am aware that the hospital annual reports had to fulfil a multiplicity of purposes, not the least of which was to convince benefactors at home that medical missionary work enhanced the evangelical goals of the missions; as with all such propaganda tools they must be treated with caution as primary sources. However, Howard argues that,

the medical [as opposed to other] missionaries in particular were ... comparatively more reliable observers of Chinese society. As ‘men of science’ as well as ‘men of the cloth’, they were somewhat less likely than their non-medical counterparts to view the Chinese in purely moralistic terms.⁴⁵

Sidney Forsythe, on the other hand, concludes that the “missionaries in his sample were, on the whole, poor observers of the Chinese scene”. He implies that physicians would be even less reliable as he describes them as being, along with married women, the most “mission-centric” of the missionaries. That is they lived in “the highly organized structure of the mission compound, which resulted in their effective segregation – psychological as well as physical – from surrounding Chinese society”.⁴⁶ Forsythe’s study was narrow: he relied mainly on correspondence between a relatively small group of missionaries (based in one province, Shanxi) who wrote to their mission Board to assess missionaries’ knowledge of, and attitudes towards, events in contemporary China. His most prolific commentators were thirteen “ordained male ministers” who provided two-thirds of the comments. After examining hundreds of reports written by medical missionaries, both male and female, I am

Church (South), China Mission of the Presbyterian Church in the U.S and the Dutch Reformed Church in America.

⁴⁴ Howard, “Opium Suppression in Qing China: Responses to a Social Problem, 1729-1906 (Qing Dynasty)”, p. 17.

⁴⁵ *Ibid*, p. 119.

⁴⁶ Paul A. Cohen, “Foreword” in *An American Missionary Community in China, 1895-1905* (Cambridge, Mass.: East Asian Research Center, Harvard University, 1971).

inclined to agree with Howard and would argue that Forsythe's conclusion does not apply to most *medical* missionaries. A survey of the writings of physicians reveals men and women who did interact extensively with the Chinese in a number of capacities. Physicians all had to be able to speak Chinese; they visited people, when they could be expected to be at their most vulnerable – when they were sick or in labour – in their homes; they travelled the countryside dispensing medicines in villages and at fairs and corresponded with each other through their medical journal.⁴⁷ Many, as we shall see, built their own hospitals and personally let the contracts, sourced the materials and supervised the building by Chinese labour. In addition, single women, who Forsythe classifies as being moderately “mission-centric”, comprised a significant proportion of medical missionaries.⁴⁸ They were obviously not among the main correspondents with their mission Board but they were active members of the China Medical Missionary Society (CMMA⁴⁹) and frequent contributors to the *China Medical Missionary Journal (CMMJ)*.

For comparative purposes I will draw on annual reports of a number of hospitals in America covering a range of sizes, auspices, locations and times along with the wealth of secondary material available on hospitals in the West.

Hospitals, even the smallest, are complex institutions with a multiplicity of aspects each worthy of examination. I have decided to concentrate my efforts on those aspects of the American hospital in China that have been almost totally neglected to date. As mentioned earlier, scholars have investigated various aspects of the practice of Western medicine in China but have paid little attention to the sites and organisation of this practice. For example, as far as I am aware there is no published analysis of the ways hospitals were

⁴⁷ Peter Buck distinguishes between medical missionaries who arrived in China in the mid-nineteenth century and those that arrived in the 1880 and 1890s: the former “with certain notable exceptions ... concentrated the energies on dispensary and itinerant work whereas the latter, trained in medical colleges in New York, Philadelphia or Chicago, had left America when the “focus of medical philanthropy began to shift from dispensaries to hospital clinics”. With this change in emphasis, he asserts, the missionary physician became increasingly dependent on their missionary society: that is increasingly “mission-centric”. See “Chapter 2: Social Diseases and Contagious Disorders: Missionary Science and Medical Missionaries Peter Buck, *American Science and Modern China: 1876-1936* (Cambridge: Cambridge University Press, 1980), pp. 8-45.

⁴⁸ This phenomenon is discussed in detail at page 196 ff.

⁴⁹ Established in 1886, largely due to the initiative of Henry W. Boone. Buck, *American Science*, p. 17.

financed. Nor has there been, since a statistical survey carried out by Balme in 1919,⁵⁰ a comprehensive survey of the buildings used for hospitals or their architecture comparable to the one by Jeffrey Cody of mission educational buildings.⁵¹ I have been unable to locate any studies that attempt to describe the policies and administration of Western hospitals in China that would have had an impact on the experience of a Chinese patient and none which have examined the non-medical management of patients in relation to such things as their accommodation, diet and so on. The consequence of the well-known fact that the majority of Protestant missionaries to China were women (60% in 1900) has not been fully explored in relation to the practice of medicine. In short, there is a significant gap in the history of the American hospital: it does not include its history in China. Equally, there is a gap in the history of 'the hospital' in China. It is my intention in this work to address these omissions. I cannot hope to fill the gaps but by taking a broad approach I can demonstrate their existence, and by examining the early history of American Protestant hospitals in China, make a modest beginning and establish a rationale and the parameters for further study.

The thesis is arranged in five sections. In the first section (chapters 1 and 2) I attempt to place the hospital that the missionaries took with them to China in its historical context. I have surveyed the secondary literature dealing with the development of the hospital in Europe, the Roman East and the Middle East, and set it alongside comparable, but much less prolific, scholarship chronicling institutions in China. One result is the timeline (Appendix A) which demonstrates that institutions have existed throughout Chinese history which would have been included in a history of the hospital had they occurred in the West.

In the second section (chapters 3, 4 and 5) I start by summarising the state of contemporary Western thinking regarding the link between buildings and architecture and health at the time medical missionaries were establishing hospitals in China. I then trace the

⁵⁰ Harold Balme and Milton T. Stauffer, "An Enquiry into the Scientific Efficiency of Mission Hospitals in China," in *Annual Conference of the China Medical Missionary Association* (Peking: 1920).

⁵¹ Jeffrey W. Cody, "Striking a Harmonious Chord: Foreign Missions and Chinese-style Buildings, 1911-1949" *Architronic* 5, no. 3 (1996). See also Jeffrey W. Cody, *Building in China: Henry K. Murphy's "Adaptive Architecture", 1914-1935* (Hong Kong: The Chinese University Press, 2001).

development from the use of rented Chinese buildings to the advent of Western architects into the field of hospital design and construction of hospitals in China. The “doctor builders” who took on the task of designing and building their own hospitals dominated the period between these extremes. The China Medical Missionaries Association played a crucial role as a forum for exchanging information and advice about all aspects of hospital construction relevant to China. It did this by collecting photographs and plans which missionaries could consult when they wanted to build. Many of these were published in the *CMMJ* and have proved invaluable in this study as evidence of what was actually built rather than what was merely talked about. I am interested principally in the ways in which medical missionaries sought to integrate what they knew about healthy buildings with a desire to make the hospitals approachable by the Chinese they wanted to attract.

In the third section (chapters 6 and 7) I explore the issues relating to guaranteeing ongoing financial support for hospital work without being forever dependent on the home churches. Missionaries were faced with the dilemma of, on the one hand, balancing the desire to use medicine as an example of Christian benevolence, charity and science without deterring Chinese patients by charging fees, and, on the other, the belief that providing free treatment ‘pauperised’ their clients. What emerges is that a model of financing the hospital developed in China which varied substantially from that which pertained in America.

In the fourth section (chapters 8 and 9) I attempt to imagine the hospital from the point of view of a Chinese patient. Firstly, I follow a patient from their first contact with the hospital to their eventual release (or death) by and exploring what is known of hospital policies and the procedures in use. By comparing the policies and procedures in hospitals in America and in China I can draw some conclusion as to how they were influenced as a consequence of the hospital being in China serving Chinese patients. Secondly, a general picture of missionary hospitals emerges from an examination of their size in terms of beds, the patient mix (men and women, surgical and medical) and the staff – with a special emphasis on the role of women as physicians. Lastly, other aspects of life in hospital including the rules and regulations, hospital food, the role of friends and relatives, how long one stayed and one’s fellow patients are compared with the contemporary situation in America to further enhance

the portrayal of the experience of a Chinese patient.

I conclude the study with a discussion of the Chinese government hospital, mentioned at the beginning of this introduction (see page 1) which bore little resemblance to anything which existed in the missionaries' home countries. It can be interpreted as an example of syncretism where ideas from missionary hospitals have been borrowed and incorporated into a uniquely Chinese institution.

SECTION I – THE HISTORICAL CONTEXT

The sweeping charge against the Chinese, as having no notion of, and never providing means for relieving the poor and destitute, is unjust – it is unfounded ... it must be obvious, that the dictates of human instinct have been whispering in the hearts of the Chinese, long before China was open to foreigners, and have suggested schemes of philanthropy really judicious and appropriate.¹

The missionary, William Milne (1815-1863), arrived in China in 1842 and made the “existence, support, and objects of [Chinese] benevolent institutions [one of his] special topics of inquiry”.² He was not alone in attempting to counter the “sweeping charge” against the Chinese as not providing for the poor and needy. It is due to Milne and his colleagues that we have access to their views of the welfare-type institutions missionaries met with in China and hence some inkling of the effect on them when they set up their own dispensaries and hospitals. However, before considering the nineteenth-century Chinese institutions it is necessary to explore the idea of what is meant by the term 'hospital' and hence where these Chinese establishments fit into its history.

The Hospital – A Problem of Definition

According to the prominent historian of the hospital, Guenter Risse, there is no such creature as *the* generic hospital. It is merely an abstraction drawn from the set of individual hospitals each with its own staff, location, clientele, buildings, and policies.³ Equally, the *modern* hospital is not the creation of any one country, society or religion. Rather it belongs to a long tradition of welfare institutions, established in response to the needs, beliefs, economic conditions, technology, medical theories, and culture of the societies of which it is a part. It is not a static entity but is modified continuously in response to changing conditions, including ideas from elsewhere.

¹ William C. Milne, *Life in China* (London: Routledge, 1857), p. 72.

² *Ibid*, pp. 47-72.

³ Risse, *Mending Bodies*, p. 4.

It is difficult, therefore, to arrive at an unambiguous definition of the hospital and is somewhat easier to define it by what it is not rather than by what it is. It is not a dispensary or charity pharmacy where patients are seen and prescribed for; it is not a hostel which provides accommodation for people in need where sickness is incidental rather than a defining feature; it is not a hospice which can provide most of what a hospital does but whose central aim is to ease suffering rather than cure ills; it is not a convalescent home which provides medical care to those who are recovering from illness but, for whatever reason, are unable to return home; it is not an asylum where people, who may have some form of illness, are provided with sanctuary; it is not a clinic where patients can consult and be treated by professional (or para-professional), medically trained personnel but who do not require a bed; it is not an infirmary which does what a hospital does but for a specified group of people such as monks in a monastery, soldiers in the field or employees of an organisation; it is not a refuge, foundling home, orphanage or aged care home all of which might provide medical care, and even treatment, in addition to their primary purpose of providing accommodation, food and protection. A modern hospital is none of these but it has aspects of all of them and all of them have contributed to its evolution.

At its most basic, for a hospital to be recognised as such it has to have food and bedding, nursing care day and night and the ministrations of physicians *to people who are sick or injured*. What further distinguishes the *modern* hospital from other institutions is that it tends to be the focus of medical research and training.

History of Western Hospitals – The Antecedents

When reading histories of the hospital one is struck by the fact that those dealing with the West invariably start by discussing the very distant past and institutions not necessarily possessing a medical staff. The *Asclepieia*, or temples to the God of Medicine, *Asklepios*, originating in Greece in the fifth century BCE and found throughout the Mediterranean world by Roman Imperial times, are usually the first to be cited as having a place in its history.⁴ These temples, or shrines of healing, provided a place where the sick sought divine

⁴ In addition to Risse, histories taking these as their starting point include Lindsay Granshaw, "The Hospital" in *Companion Encyclopedia of the History of Medicine*, ed. W. F. Bynum and Roy Porter (London: Routledge,

intervention rather than secular medical treatment. Visitors could stay overnight, a process referred to as “incubation”, either in the temple itself or in a special building provided for the purpose. The god might cure them miraculously or, via dreams, instruct them to perform particular rituals or recommend a medical treatment.⁵

The elaborate infirmaries, *Valetudinarii*, provided by Romans for their soldiers at the front, or for their plantation slaves, are another type of institution that has earned a place in the early history of the hospital.⁶ The third category of institution of the ancient world to be dealt with by historians of the hospital comprises the *Iatreia*, or offices from which the physicians and surgeons of classical Greece and Rome operated. It is surmised that under some circumstances beds would have been provided for patients recovering from surgery. Although they are commonly mentioned, no one claims that any of these three types of institution were themselves hospitals as such and not all agree that they are legitimate antecedents of the hospital.

Risse, using a broad definition of hospital, recognises the *Asclepieia* and *Valetudinarii* as “forerunners” of the hospital on the grounds that they meet his criteria as places where healing is expected, the buildings are imposing and special and where rituals and companionship contribute to spiritual and physical recovery. They were also centres for medical advice, prognosis and sometimes, treatment.⁷ Timothy Miller, on the other hand, skirts the issue of whether or not these institutions should be included in the history of hospitals. For inclusion he requires a direct line of evolution from one form to the next. On this basis, he argues the case for the sixth and seventh-century Byzantine hospitals as being the true precursors of the early twelfth-century Byzantine *Pantocrator* – his first “modern”

1993) and Timothy S. Miller, *The Birth of the Hospital in the Byzantine Empire*, The Henry E. Sigerist Supplements to the Bulletin of the History of Medicine; New Series, no.10 (Baltimore: Johns Hopkins University Press, 1985).

⁵ For the most detailed description of the place of *Asclepieia*, or “healing temples”, in the history of hospitals, see Risse, *Mending Bodies*, pp. 15-38.

⁶ Risse reasons that the Romans were compelled by their feelings of familial responsibility to provide care for their soldiers and slaves who were away from home and their own families. *Ibid*, pp. 44-6. Others, identify a more economic imperative. For example, Thompson notes that slaves and soldiers were valuable assets worth preserving. John D. Thompson and Grace Goldin, *The Hospital: A Social and Architectural History* (New Haven: Yale University Press, 1975), p. 5..

⁷ See Risse, *Mending Bodies*, pp. 56-9.

hospital. He argues that *Asclepieia* and *Valetudinarii* were neither hospitals nor did they evolve into hospitals. He justifies ruling out the *Asclepieia* based on the source of healing: divine, rather than secular, intervention. While acknowledging the role of *Valetudinarii* in caring for and treating the sick, Miller excludes them on the grounds of their limited clientele: soldiers and slaves. He uses yet another criterion to dismiss the claim by some for the Greek *Iatreia* as a harbinger of the hospital: although surgery could be performed in them he claims there is no evidence that patients were provided with nursing care or a bed. He does acknowledge that *Iatreia* were subsequently transformed into institutions more recognisable as hospitals – providing food and board along with medical treatment – but only after the emergence of the Christian era.⁸ Depending on the aim, institutions can be ruled in or out of the history to suit the story. It will become clear that, although institutions analogous to these early Western examples existed in China's past, historians have not considered them worthy of inclusion in the history of 'the hospital'.

As can be seen from the foregoing, the hospital is not an easy concept to grasp. One knows when one is in one but it is hard to pinpoint the feature that sets it apart from an array of other institutions. It is this slippery and constantly changing concept whose evolution I needed to trace so that I could understand what it was the mid-nineteenth-century medical missionaries are said to have introduced to China. At the same time I wanted to seek out what is known about the history of *institutional* medical care in China. My intention was not to seek evidence that the hospital had either existed in China or that the modern hospital would have arisen spontaneously there without Western influence, but rather, to question the accuracy of the simple assertion that the "hospital was introduced into China". I needed to locate the hospital, as an institution, in time and space in China as well as in the West. Thus, the first chapter will set the Western hospital within its historical context alongside comparable, though not necessarily equivalent, institutions in other parts of the world, including China. In the second chapter of this section I introduce the reader to the range of

⁸ Miller, *Birth of the Hospital*, pp. 38-43. Dols, who defines a hospital as "a public charitable institution that affords care to the sick over an extended period of time", dismisses the institutions of the classical period arguing that they were "neither charitable nor public". On the other hand, he challenges Miller's definition of a medieval hospital as "an institution that possessed physicians or a medical staff" on the basis that in medieval hospitals "care is as important as cure". Michael W. Dols, "The Origins of the Islamic Hospital: Myth and Reality" *Bulletin of the History of Medicine* 61 (1987): p. 371.

Chinese welfare institutions Protestant medical missionaries encountered when they arrived in China in the mid to late nineteenth century.

CHAPTER 1: THE HOSPITAL – IN TIME AND SPACE

The comparative timeline (see Figure A and Appendix A), which I constructed to enable me to visualise the history of medical institutions across time as well as space, is based on a wide variety of sources. For the history of the hospital in the Eastern Roman Empire and the West (including continental Europe, Britain and, later, America) I have relied exclusively on secondary sources. Because most commentators consider the hospital to be essentially a Christian (Western) invention, there is a wealth of scholarship available in generic histories of the hospital¹ and I have used several of them, supplemented with specific studies.² Islamic medical institutions have received less attention from Western scholars with the exception of Michael Dols and Toby Huff on whose work I have drawn.³ As no history has been written of the hospital *per se* in China the question arises: which Chinese institutions should be included? I have resolved this issue by incorporating any which, had they occurred in Europe, would have been included by a historian of the hospital in the West. In fact, I have been more rigorous in the case of China by counting only those institutions that had some association with the provision of medical care.

¹ For example, Granshaw, "The Hospital"; Granshaw and Porter, *The Hospital in History* ; Risse, *Mending Bodies* ; George Rosen, "The Hospital: Historical Sociology of a Community Institution" in *The Hospital in Modern Society*, ed. Eliot Freidson (London: Free Press of Glencoe, 1963) ; Rosenberg, *The Care of Strangers* .

² Martha Carlin, "Medieval English Hospitals" in *The Hospital in History*, ed. Lindsay Granshaw and Roy Porter (New York: Routledge, 1989) ; Cherry, *Medical Services* ; John Henderson, "The Hospitals of Late-Medieval and Renaissance Florence: a preliminary survey" in *The Hospital in History*, ed. Lindsay Granshaw and Roy Porter (London: Routledge, 1989) ; Colin Jones, *The Charitable Imperative: Hospitals and Nursing in Ancien Regime and Revolutionary France*, Wellcome Institute Series in the History of Medicine (London ; New York: Routledge, 1989) ; Miller, *Birth of the Hospital* ; John Scarborough, *Roman Medicine* ed. Scullard, *Aspects of Greek and Roman Life* (London: Thames and Hudson, 1969) ; Owsei Temkin, *The Double Face of Janus and Other Essays in the History of Medicine* (Baltimore: Johns Hopkins University Press, 1977) ; Thompson and Goldin, *The Hospital*

³ Dols, "Origins of the Islamic Hospital"; Toby E. Huff, *The Rise of Early Modern Science: Islam, China, and the West* (Cambridge: Cambridge University Press, 1993). See also Lawrence I. Conrad, "Arab-Islamic Medicine" in *Companion Encyclopedia of the History of Medicine*, ed. W. F. Bynum and Roy Porter (London: Routledge, 1993), pp. 715-17. Unfortunately the contribution of Ehsan-ul-Haq, in a paper presented to a conference on the comparative history of hospitals, proved unhelpful. He extrapolates from the fact that the "code of Hammurabi (c.1950 BCE) has devoted sections to surgery" to assert: "isolation wards must have been required" and "once the isolation wards were built in the neighbourhood of each other or collectively, they virtually made for hospitals". Ehsan-ul-Haq, "Hospitals in the Islamic World with Reference to the Eastern and Western Caliphates" in *History of Hospitals - The Evolution of Health Care Facilities. Proceedings of the 11th International Symposium on the Comparative History of Medicine- East and West*, ed. Yosio Kawakita, Shizu Sakai, and Yasuo Otsuka (Susano-shi, Shizuoka, Japan: Division of Medical History, The Taniguchi Foundation, 1989), p. 24.

Regarding the Chinese institutions, there is a very limited scholarship in English or Chinese. I draw on three articles: one by Angela Leung, one of the most prolific chroniclers of Chinese welfare institutions, who has written about organised medicine in China in the Ming and Qing dynasties and another by Hugh Scogin who described the provision of, and analysed the impetus for, poor relief in the Song.⁴ Asaf Goldschmidt, who argues that Scogin's "charity system" is more properly a "public health system", has provided the most recent contribution to the literature in English on the medical institutions of the Song dynasty.⁵ Chinese scholarship, particularly for the earliest period, is scant and of variable quality and as such needs to be treated with a degree of scepticism. A number of imperial orders to build and staff buildings for the care of the sick were issued and this, Nathan Sivin says, has "satisfied most Chinese historians ... because they assume that the emperor's word automatically turns his will into reality".⁶ The result is that most general histories of Chinese medicine that mention hospitals are no more than simple chronologies. Similarly, I have found the few Chinese language articles purporting to deal with the history of Chinese medical institutions, with the possible exception of an article on the Song institutions by Song Jiong 宋炯,⁷ to be of limited value. It would seem that scholars have not yet taken up Sivin's 1988 call to investigate the history of the hospital in China in terms of whether they "actually operated and for how long they lasted", the therapies employed and nursing provided.⁸ Many do no more than present a series of (often poorly sourced) references to anything that could be interpreted as a medical institution or initiative.⁹

⁴ Angela Ki Che Leung, "Organized Medicine in Ming-Qing China: State and Private Medical Institutions in the Lower Yangzi Region" *Late Imperial China* 8, no. 1 (1987) ; Hugh Scogin, "Poor Relief in Northern Sung China" *Oriens Extremus* 25 (1978).

⁵ Asaf Goldschmidt, "The Systematization of Public Health Care by Emperor Song Huizong - Benefiting or Policing the Sick," in *The Tenth International Conference on the History of Science in East Asia* (Shanghai, China: unpublished, 2002).

⁶ Nathan Sivin, *Personal Communication*, (1998).

⁷ Song Jiong, "Liang Song juyang zhidu de fazhan - Songdai guanban cishan shiye chutan (The Development of the Poorhouse System during the Song Dynasty - Initial discussion of the Song dynasty government-operated charity organisation)" *Zhongguoshi yanjiu*, no. 4 (2000).

⁸ Nathan Sivin, "Science and Medicine in Imperial China - The State of the Field" *The Journal of Asian Studies* 47, no. 1 (1988): p. 71.

⁹ Zhen Zhiyi's treatment of the subject contains more detail than an earlier paper by Ren Yingqiu and both are useful as summaries of the various medical initiatives and institutions but lack analysis. Ren Yingqiu, "Yiyuande jianli - bingfang (The Establishment of Hospitals)" *Ming bao yuekan* 57, no. September (1970) ; Zhen Zhiyi, "Zhongguo gudaide yiyuan (Ancient Hospitals in China)" *Journal of Beijing College of*

The most striking thing that emerges from even a cursory examination of Figure A is that China is not absent. Chinese medical institutions, equivalent to those found elsewhere in the world, are found throughout the period from antiquity to the present. I must emphasise that I do not set out to claim that the hospital was indigenous to China, or that it would have arisen in China without foreign influence, but to demonstrate that it is simplistic to argue that ‘the hospital arose in Christian Europe and was transplanted into China’.

Four very broad categories of institution, based on the degree of their medicalisation, emerge from the data and the first three of them can be found in each part of the world under consideration, including China. There is the “hostel-type” which provided accommodation or refuge to travellers, pilgrims and the destitute. Hostels were the most ubiquitous and lasted longest but were not always the earliest. In Europe they emerged, associated with monasteries, in the fourth century and were still there, little changed, into the thirteenth and fourteenth centuries.¹⁰ In the early part of the Tang Dynasty (618-907 CE) in China comparable institutions, also associated with monasteries, existed and provided refuge or accommodation to similar groups of people.¹¹ In the Byzantine Empire, and in the West, the monasteries were Christian; in China they were Buddhist.¹² In these institutions medical care, if provided at all, was tangential to their main purpose.

The second type of institution, poor houses, existed by the sixth or seventh century in the

Traditional Chinese Medicine 2 (1980). For an account of the history of Chinese official medical institutions since ancient times, see Chen Bangxian, *Zhongguo yixue shi (History of Medicine in China)*. (Taipei: Yuandong tushu gongsi, 1956 (first ed.1919)).

¹⁰ See Figure A, number 8. There is a wealth of literature devoted to these early Christian institutions dealing with their architecture, modus operandi, clientele, and motivation. I have consulted Carlin, “Medieval English Hospitals”; Miri Rubin, “Development and Change in English Hospitals, 1100-1500” in *The Hospital in History*, ed. Lindsay Granshaw and Roy Porter (New York: Routledge, 1989) ; Eduard Seidler, “Medieval Western Hospitals: Social or Health Care Facilities?” in *History of Hospitals - The Evolution of Health Care Facilities. Proceedings of the 11th International Symposium on the Comparative History of Medicine- East and West*, ed. Yosio Kawakita, Shizu Sakai, and Yasuo Otsuka (Susano-shi, Shizuoka, Japan: Division of Medical History, The Taniguchi Foundation, 1989) See also general histories such as Granshaw, “The Hospital”; Risse, *Mending Bodies* ; Rosen, “The Hospital: Historical Sociology” .

¹¹ See Figure A, number 17.

¹² See Kenneth S. Ch'en, *Buddhism in China: A Historical Survey* (Princeton: Princeton University Press, 1964), pp. 263-4, for a description of Buddhist temples serving as hostels for monks, pilgrims, lay travellers, officials and students. For a first-hand account of the range of accommodation provided to travellers in Tang China, including Buddhist “monasteries and cloisters”, see Ennin and Edwin O. Reischauer, *Diary: The Record of a Pilgrimage to China in Search of the Law* (New York: Ronald Press Co., 1955) ; Edwin O. Reischauer, *Ennin's Travels in T'ang China* (New York: Ronald Press, 1955), pp. 143-52.

Byzantine Empire; at the turn of the ninth in the Middle East; in the late part of the Tang and early Song (960 – 1297 CE) in China; and the fourteenth century in western Europe. Although sickness was not a precondition for admission, medical care was among the services offered to the poor, homeless, or destitute. An example of such an institution in the West is found in Florence where the St Maria Nuova, established in 1288 to give “hospitality and sustenance to the poor and needy”, did not specialise in the care of the sick until the Black Death hastened its medicalisation. By the late 1320s it had six visiting physicians, a surgeon, and 230 beds for patients with acute illnesses who only stayed for short periods of eleven to fifteen days.¹³ By the fifteenth century Florence had 33 welfare-type institutions that provided some form of medical care for the poor, widows, orphans, or pilgrims. Only seven were hospitals devoted to the sick.¹⁴ In England at the end of the fourteenth century (1390s), although there were some 470 institutions, the majority administered variously by guilds, fraternities or parishes, most were small and barely medical.¹⁵ Chinese institutions with a minimal medical component that fall into this second category range from a number of isolated instances of individuals responding to a local natural calamity, such as famine or epidemic, through state-sponsored welfare initiatives¹⁶ to institutions, known as “fields of compassion” associated with Buddhist monasteries in the Tang dynasty.¹⁷

Thirdly, there was what I call the early-medical hospital where relatively sophisticated care, given the constraints of medicine at the time, was provided increasingly to people who were sick rather than merely poor. In Constantinople it was the Christian twelfth-century hospital attached to the monastery of the *Pantocrator* that represented the height of Byzantine medical care provided to lay patients, both men and women, in addition to sick clergy. Physicians were employed and, according to Miller, it was the world’s first

¹³ See Figure A, number 32.

¹⁴ Henderson, “Hospitals of Florence”, pp.70-1.

¹⁵ “Numbers of inmates varied from around two or three to about thirty, with an average of ten”. Granshaw, “The Hospital”, p. 1184.

¹⁶ See Figure A, number 18. The state-sponsored Tang relief homes sponsored by the state are discussed briefly at page 35.

¹⁷ See Figure A, number 19. These Buddhist institutions are discussed in more detail at 34 ff.

'modern' hospital.¹⁸ Meanwhile, in the Islamic world, by the tenth century a hospital in Baghdad had twenty-five physicians on the staff who, as well as treating patients, taught medical students.¹⁹ According to Huff, it was "with regard to hospitals that Islamic medical practice advanced beyond other cultures".²⁰ The tenth-century hospital at Baghdad was the descendant of the first *bimaristan* (in Persian literally "a place for the sick"²¹), the foundation of which Dols attributes to a member of the Barmakid family, a tutor to the Caliph Harun ar-Rashid, at the beginning of the ninth century.²² The model was not immediately emulated and hospitals emerged widely throughout the empire only in the tenth century but were well established in all major cities by the twelfth.²³ Huff cites two further "notable hospitals" in addition to the 'Abudi' hospital, founded in Baghdad in 987. The Nuri in Damascus (1154) and the Mansuri in Cairo (1284) were examples of the sophistication of Islamic hospitals; they separated patients depending on their ailment and had rooms equipped for specialists.²⁴ Dols distinguishes the Islamic hospitals from their Christian counterparts in some significant aspects. In particular, they were "exclusively medical" and secular, being administered by a "highly-placed government official" rather than by religious foundations. Although they were private, in the sense that they were supported by endowments, they enjoyed considerable imperial patronage, usually in the form of monumental buildings. Some served as sites for clinical teaching (apprenticeship) but were not integrated into the Islamic higher education system so that "doctors were relatively free to develop a professional institution far beyond the constraints of the

¹⁸ See Figure A, number 30. Founded by Eirene, the wife of John II Comnenos in 1112 and completed in 1136. Miller, *Birth of the Hospital*, pp. 12-21. See also Risse, *Mending Bodies*, Chapter 3 pp. 117-65 ; Rosen, "The Hospital: Historical Sociology", pp. 4-5; and Temkin, *Double Face of Janus*, p. 218.

¹⁹ See Figure A, number 22. Rosen, "The Hospital: Historical Sociology", pp. 5-6.

²⁰ See Figure A, number 21. Huff, *The Rise of Early Modern Science: Islam, China, and the West*, p. 171.

²¹ Dols, "Origins of the Islamic Hospital": p. 379.

²² Dols challenges the accepted wisdom (for example, see Risse, *Mending Bodies*, pp. 125-28) that the "first Muslim hospital" was founded at Damascus, Syria, in 707 CE under Umayyad Caliph al-Walid (705-715). Dols characterised this institution as a "shelter or hospice for lepers". Dols, "Origins of the Islamic Hospital".

²³ Dols, "Origins of the Islamic Hospital": p. 388.

²⁴ For details, see Huff, *The Rise of Early Modern Science: Islam, China, and the West*, pp. 171-2.

seminary infirmary”.²⁵

Although similar developments occurred in western Europe, it was not until the sixteenth or seventeenth centuries that the very few hospitals in London had medical staff. St Bartholomew’s had three surgeons in 1549 and a physician in 1568. As late as 1700 London had only two medical hospitals and there were none anywhere else in England.²⁶

In China, the Tang relief homes were further developed in the Song and culminated, at the beginning of the twelfth century, in a system of hospitals throughout the country.²⁷ Scogin provides textual evidence that physicians attended, patients were separated according to their illnesses, and food and drugs were provided.²⁸ There is no evidence that these hospitals matched the sophistication of those found in Constantinople or Baghdad but they mirrored the pattern of increasing medicalisation found elsewhere in the world and would appear to have had a greater medical focus than their contemporaries in western Europe.

Lastly, from early in the eighteenth century, but accelerating dramatically from the middle of the nineteenth, the number of hospitals in Europe and America not only increased greatly but hospital-based medicine began to occupy a central rather than peripheral place in society. Hospitals, especially those in major cities with large contingents of patients suffering a wide range of ills, started to become indispensable as sites of the new, scientific medical research and training.²⁹ Hospitals continued to cater for, in the main, the poor who

²⁵ Dols, "Origins of the Islamic Hospital": pp. 387-89. Huff takes a different view: because the hospitals were religious endowments teaching medicine was “constrained by religious law”. Huff, *The Rise of Early Modern Science: Islam, China, and the West*, p. 178.

²⁶ Roy Porter, *The Cambridge Illustrated History of Medicine* (Cambridge: Cambridge University Press, 1996), p. 212.

²⁷ See Figure A, numbers 24-28. I shall resist the temptation to speculate as to the extent of transfer of medical institutions, as opposed to medical knowledge, which may have occurred between the Arab world and China during the times of extensive contact between the two cultures, from the seventh century. See Jacques Gernet, *A History of Chinese Civilization*, trans. J.R. Foster (Cambridge: Cambridge University Press, 1985), pp. 287-90. At least two authors raise the possibility but do not pursue the topic Chen Haifeng, *Zhongguo weisheng baojian shi* (*History of China's Health Care*) (Shanghai: Shanghai kexue jishu chubanshe, 1993) ; Ma Kanwen, “East-West Medical Exchange and their Mutual Influence” .

²⁸ Scogin, "Poor Relief": p. 35.

²⁹ The modern hospital did not assume the same form in the various countries of Europe: in Germany, for example, research was mainly carried out in the laboratory whereas in Britain clinical research was favoured and ‘research material’, that is, patients, was amply supplied by the hospitals.

happened to be sick rather than the sick who happened to be poor.³⁰ They were potentially dangerous places to be avoided if possible and the medicine practised in them could be equally well provided in the homes of those who could afford to pay.³¹

Thus, just when Protestant medical missionaries arrived in China in the middle of the nineteenth century, hospitals in their home countries were poised for a dramatic increase in number, size, scope and reach. They were about to come into their own as the principal site for medical practice, research, training and professional advancement.

The Earliest Chinese Instances

Li Liangson sees the beginnings of the idea of a Chinese hospital in “bronze inscriptions dated 3350 years ago” which he, rather wildly, claims refer to keeping patients with infectious diseases in isolation wards.³² Most Chinese histories of medicine however start with reference to the utopian text, the *Zhouli* 周禮,³³ which details what purports to be the government and administrative structure of the royal state of Zhou – China’s ‘golden age’.³⁴ Tradition has it that the text is the work of the Duke of Zhou, brother of the first emperor of the Western Zhou (1066-771 BCE) and as such represents the orthodox tradition to which later dynasties have turned for inspiration and guidance. K. C. Wong in “Chinese Hospitals in Ancient Times” published in the *China Medical Journal* in 1923, translated the relevant section³⁵ thus:

³⁰ Or “pauvres malades (paupers who were sick) [in comparison to] malades pauvres (sick individuals who, incidentally, were poor). Jones, *Charitable Imperative*, p. 2.

³¹ Jones puts forward evidence from seventeenth and eighteenth-century French hospitals to counter the portrayal of the “pre-clinical hospital” as a “death-trap”. In his view many historians have relied too heavily on the rhetoric of hospital reformers rather than closely examining “the daily realities of hospital life” in making their claims. See *Ibid*, pp. 11-12 and Chapter II, “Hospital Nursing” pp. 89-208.

³² Li Liangsong, “Luelun zhongguo gudai dui zhuanran bingrende anzhi ji zhuanran bingyuan (A Brief Discussion on Ancient Chinese Infectious Hospital and Setting Down for Patients with Infectious Diseases)” *Zhonghua yizshi zazhi* 27, no. 1 (1997): p. 33.

³³ Sometimes referred to as the *Chou guan* or *Zhou guan li*. Michael Loewe, ed., *Early Chinese Texts: A Bibliographic Guide*, Early Chinese Special Monograph Series (Berkeley: The Society for the Study of Early China and Institute of Asian Studies, University of California, 1993), p. 24.

³⁴ *Ibid*, 24.

³⁵ D. C. Lau, *Guanzi zhuzi suoyin (A Concordance to the Guanzi)* ed. D. C. Lau and Zhen Fangzheng, ICS Ancient Chinese Texts Concordance Series: Philosophical Works: no. 37 (Hongkong: The Commercial Press, 2001), pp. 127-28.

Physicians attend to the sickness of the people. There are particular diseases in the four seasons of the year. Headaches and neuralgic affections are prevalent in spring, skin diseases in summer, fevers and agues in autumn, and bronchial and pulmonary complaints in winter. The patients are sent to the different departments to be treated.³⁶

He goes on to claim that this means “government free clinics were known as early as the tenth century BC”.³⁷ Here, Wong appears to be drawing rather a long bow. Firstly, concerning the antiquity of the idea: William Boltz’s analysis of the origin and authenticity of the text convinces him that, although the *Zhou li* is “a genuine pre-Han text” and was definitely in existence in its known form and scope by the middle of the second century, it most likely dates from the Warring States Period (480-222 BCE) rather than Wong’s “tenth century BC”.³⁸ Secondly, concerning Wong’s interpretation: Lu and Needham conclude from their reading of the same text that a medical service was envisaged for the general community as well as the imperial family but neither they, nor Ilsa Veith, go as far as describing the service as “free clinics”.³⁹ These uncertainties notwithstanding, what is significant about this quotation is that it provides evidence that the *ideal*, if not the manifestation, of the Chinese state being responsible for the medical welfare of its people existed in the second century BCE.⁴⁰ In common with other early commentators, Wong also cites a reference in the *Guanzi* (管子)⁴¹ to illustrate the antiquity of the notion of a ‘hospital’ in China, which he translated as:

³⁶ K.C. Wong, "Chinese Hospitals in Ancient Times" *CMJ* 37, no. 1 (1923): p. 77.

³⁷ See Figure A, number 3.

³⁸ William G. Boltz, “Chou li” in *Early Chinese Texts: A Bibliographic Guide*, ed. Michael Loewe (Berkeley: The Society for the Study of Early China and Institute of Asian Studies, University of California, 1993), pp. 25-26.

³⁹ Lu and Needham translate the term *jiyi* 疾医, as “State Physicians”. Lu Gwei-Djen and Joseph Needham, “China and the Origin of Examinations in Medicine” *Proceedings of the Royal Society of Medicine* 56, no. February (1963): pp. 63-64. Veith has translated the relevant section of the *Zhou li* and compared it with the Song dynasty “statesman and political and social reformer” Wang An-shih’s (王安石 (1021-1086) “New Interpretation of the Government of the Chou Dynasty” (周官新义). She translates *jiyi* as “the doctor of the common diseases”. All agree that they were “charged with attending to the diseases of the mass of the people”. Ilsa Veith, “Texts and Documents: Government Control and Medicine in Eleventh Century China” *Bulletin of the History of Medicine* 14, no. 2 (1943): p. 165.

⁴⁰ For example, see Croizier, *Traditional Medicine*, p. 28.

⁴¹ A pre-Han text attributed to Guan Zhong (d.645 BCE), but which Rickett describes as having been written by several unknown authors over a long period of time: between the fourth and first centuries BCE or “Warring States” period. W. Allyn Rickett, “Kuan tzu” in *Early Chinese Texts: A Bibliographic Guide*, ed. Michael Loewe (Berkeley: The Society for the Study of Early China and Institute of Asian Studies, University of California, 1993), pp. 244-49.

In the Capital there are institutions where the deaf, the blind, the dumb, the lame, the paralytic, and the insane are received [and] when ill they are cared for until they have recovered.⁴²

In a survey of the history of Chinese medicine published in the *Lancet* in 1929 Wong, again citing the *Guanzi*, makes the bold claim that hospitals “were established more than 600 years before the celebrated Basilian⁴³ monasteries”.⁴⁴ Wong’s interpretation implies the actual existence of facilities in the capital whereas Rickett, who has translated the complete text, stresses, “that such a program of social service ... ever existed in practise is, of course, highly doubtful”.⁴⁵ The relevant section, which Rickett thinks could date from the beginning of the fourth century BCE, forms part of a chapter of the *Guanzi* which deals with “a virtuous ruler’s compassion” towards the old, the young, the orphaned, the alone, the sick, the destitute and the distressed.⁴⁶ “Providing for the disabled” is one of the “nine compassions” which the new emperor, on entering the capital, should address. The text elaborates on what is meant, in practical terms, by the instruction issued by an emperor. For example, in the case of the disabled

‘Providing for the disabled’ means that in the capital and in all administrative centers, there shall be officials charged with looking after the disabled. The sovereign shall gather together and provide for those who are deaf, blind, dumb, lame, partially paralysed, or have deformed hands and are unable to live on their own. The disabled shall be placed in hostels so that they may be clothed and fed for as long as they live.⁴⁷

T.J. Preston, in 1907, also cited the *Guanzi* when he addressed his fellow missionaries on

⁴² Wong, "Chinese Hospitals in Ancient Times": p. 77 ; K.C. Wong, "Four Milleniums (sic) of Chinese Medicine" *The Lancet* (1929): p.158.

⁴³ See page 32 and fn. 55.

⁴⁴ Presumably Wong is distinguishing here between the 10th century BC ‘clinic’ mentioned earlier and a ‘hospital’. Wong, "Four Milleniums (sic) of Chinese Medicine": p. 158.

⁴⁵ Despite these reservations he does acknowledge, “the mere existence of such concrete ideas is an interesting reflection of social values”. W. Allyn Rickett, *Guanzi: Political, Economic, and Philosophical Essays from Early China: A Study and Translation.*, 2 vols., vol. 2 (Princeton: Princeton University Press, 1998), p. 227.

⁴⁶ See Figure A, number 4. D. C. Lau and Chen Fangzheng, *Zhouli zhuzi suoyin (A Concordance to the Zhouli)*, Chinese University of Hong Kong Institute of Chinese Studies the ICS ancient Chinese texts concordance series. Classics: no. 4. (Hong Kong: The Commercial Press, 1993), pp. 127-28.

⁴⁷ Rickett, *Guanzi*, pp. 227-9. Demieville, in his essay on the role of Buddhism in healing, cites the same section but describes the *Guanzi* as “work of purely utopian character ... largely apocryphal and this passage (about the hospitals) may be a late addition under the buddhist (sic) influence”. Paul Demieville, *Buddhism and Healing: Demieville's article "Byo" from Hobogirin*, trans. Mark Tatz (Lanham, Md.: University Press of America, 1985), p. 58.

the topic of Chinese benevolence. He considered it “manifestly unfair in looking for benevolence among the Chinese to expect to find such well-regulated and well-equipped charitable institutions, either in the past or at present, as are to be found in the cities of Western lands”. He interpreted the *Guanzi* as demonstrating that “early in their history the Chinese were seeking through public bureaus (sic) and institutions to alleviate suffering and distress among their people”.⁴⁸ In contrast to the *Zhou li* reference the *Guanzi* one is more clearly a reference to a specific place where people were not only treated but also taken in and cared for.⁴⁹

In the absence of either supporting textual or archaeological evidence there is no way of knowing whether or not these institutions actually did exist, much less have any idea of their operation. What is clear is that in China the notion of a place where the sick could be cared for away from their own home and family, that is, a hospital, was current around the time of the institutions of classical Greece and Rome, which are considered by many to form part of the history of the hospital.

That this idea was current in the early part of the Common Era is reinforced by a number of references in dynastic histories. For example, in the summer of 2 CE, in response to a drought and locust plague with its associated famine and disease, commoners stricken by epidemics were accommodated in empty guest-houses and mansions, medicines being provided for them.⁵⁰

K.C. Wong cites another proclamation, issued in 60 CE, which, according to his translation,

⁴⁸ T.J. Preston, "The Chinese Benevolent Institutions in Theory and Practice" *Chinese Recorder and Missionary Journal* 28 (1907): pp. 245-48.

⁴⁹ Elsewhere the text addresses a responsibility to “inquire after the sick”, which involves an official visiting sick persons, over ninety years old, daily; over eighty, every other day etc. See Rickett, “Kuan tzu (in Loewe)”, p. 230.

⁵⁰ See Figure A, number 6. Han Shu, (Zhonghua shuju chuban, 1975), p.353. This interpretation is taken from Joseph Needham, *Science and Civilization in China: Biology and Biological Technology* ed. Nathan Sivin, vol. 6 (Cambridge: Cambridge University Press, 2000), p. 54, who points out that “it seems, this was only a provisional measure, not the foundation of an institution”. Wong interprets the section as “Emperor Han Ping, issued a proclamation to the effect that “all infected persons should be sent to empty outhouses where treatment will be provided”. Wong, “Chinese Hospitals in Ancient Times”: p. 77. Li describes the reference as the first recorded account of a specialised institution set up to take in acutely sick people for treatment. Li Liangsong, “Ancient Chinese Infectious Hospital”: p. 33.

ordered the master of the Grand Banner to establish a hospital:⁵¹

There are orphans, widows and sick poor in the country and we do not take care of them. Is this our true intention in thus being the father and mother of the people? Therefore be it ordered that the Master of the Grand Banner shall establish a hospital in some suitable place and send all the suffering people there. Be it further ordered, that the Medical bureau shall assign doctors to treat them. Examinations will be held on the work of these physicians and promotion made according to the results shown.⁵²

The mere issuing of proclamations in no way proves that the orders were carried out widely, if at all, but does reinforce the belief that the concept at least existed in the first century.

The Hostel Era – the West

The characteristic that institutions of classical Greece and Rome (*Asclepieia* and *Valetudinaria*)⁵³ had in common was the existence in them of people who were sick. This is not the case for the Christian institutions. Although there is virtually universal agreement among historians that Christianity was pivotal to the development of hospitals the earliest Christian institutions, to be included in standard histories of the hospital, lacked both sick people and medical care. Granshaw, for example, after acknowledging the existence of healing shrines, infirmaries, and doctor's surgeries, states that

there is no evidence of buildings devoted to the reception, care, and treatment of the sick among the population at large until well into the Christian era, around 350 A.D.⁵⁴

He is referring to Christian institutions which first appeared in the western part of the Roman Empire where monasteries took in pilgrims, travellers and the poor. Medical care though was not their principal purpose. Monasteries had had infirmaries whose primary function was to provide care to sick monks and they developed these into medical facilities offering minimal care, and some treatment, to outsiders who happened to be there under

⁵¹ See Figure A, number 7.

⁵² Wong, "Chinese Hospitals in Ancient Times": p. 78. Because Wong fails to give the precise source, or the Chinese original, of this quotation it is difficult to assess the reliability of his interpretation.

⁵³ See Figure A, numbers 1 and 5.

⁵⁴ Granshaw, "The Hospital", p. 1181.

other circumstance. The earliest of these monastic infirmaries is said to be the Basiliads at Caesarea founded in the 370s CE.⁵⁵ By the sixth century, Christian hostels able to accommodate large numbers could be found in all the major pilgrim towns such as Rome, Antioch, Alexandria and Jerusalem.⁵⁶ Any medical care continued to be incidental, rather than central, to the services they provided.

The fact that people need not be sick to gain admittance to these institutions is noted by Henderson in his survey of the hospitals of late-medieval and Renaissance Florence:

The term 'hospital' covered a wide variety of institutions, and only some of these were intended to cater exclusively for the sick.⁵⁷

In the Byzantine Empire, where Christian charitable endeavour received the patronage of the first Christian Emperor, Constantine, a quasi-welfare-state developed, with a variety of specialist welfare institutions, between the fourth and sixth centuries CE. The majority of these institutions provided refuge or accommodation to a particular class of client. The first, *xenodocheia* or *xenones*, offered shelter to the homeless poor, clergy, widows or travellers; *orphanotrophos* looked after orphans (from the fourth century); the *gerokomeion*, dedicated to aged care, arose in the early fifth century and *brephotropeia*, or foundling homes, dated from at least the sixth century. The only ones devoted specifically to the care of the sick or injured were the *nosokomeia* (from *nosos* – disease and *komeo* –to care for).⁵⁸ In these, physicians conducted daily rounds of examination and recommended medicines, diets and regimens for individual patients, and nursing care was provided.⁵⁹ By the tenth century the term came to mean a place for people suffering “acute diseases as opposed to a refuge for those with some chronic problem”.⁶⁰

⁵⁵ By Basil the Great. Nurses and attendants provided medical care. Temkin, *Double Face of Janus*, p. 218.

⁵⁶ See Figure A, numbers 8 and 9.

⁵⁷ Henderson, “Hospitals of Florence”, p. 63

⁵⁸ See Figure A, numbers 14 and 15. Miller, *Birth of the Hospital*, p.22-23 ; Risse, *Mending Bodies*, p. 122 ; Rosen, “The Hospital: Historical Sociology”, p. 4

⁵⁹ Miller, *Birth of the Hospital*, p.22-5 ; Rosen, “The Hospital: Historical Sociology”, p. 4. For detailed treatment of the early Christian institutions see Risse, *Mending Bodies* , particularly Chapter 2; Miller, *Birth of the Hospital* , Chapter 2; and Rosen, “The Hospital: Historical Sociology”, pp. 4-5.

⁶⁰ Miller, *Birth of the Hospital*, p. 25. .

In Constantinople, the first of what Miller calls “elaborate hospitals” emerged during the late sixth or early seventh century.⁶¹ In these, men and women were segregated; separate wards were provided for patients depending on their disease (for instance those suffering from eye disease or requiring surgery); attendants kept watch at night and medical assistants worked alongside doctors, who were graded hierarchically. These hospitals though were an aberration: the phenomenon was confined to Constantinople and not imitated elsewhere.

In the West the most common institution continued to be the hostel and of these the most significant were the Hôtels Dieu, the most famous being the one established in Paris in 660 CE.⁶² It was not until much later that the distinguishing features of the institutions that preceded the modern hospital included the presence of sick people – much less – physicians.

The Hostel Era – China

There are any number of reasons why a society will offer medical care to its people but it is common to explain it in terms of charity or compassion, qualities which are often attributed almost exclusively to the Judeo-Christian tradition. But Christians have no monopoly on charity or compassion. Risse points out that the Egyptians’ emphasis on charity for widows, orphans, elderly, the homeless and wandering strangers was a consequence of Egypt’s hierarchical society where there was a clear distinction between the rich – pharaohs who owned land – and the rest of the population. The rich had an obligation to provide for the poor and temples offered hospitality, food and asylum. In Greece, on the other hand, citizens were considered equal and it was not considered necessary, or a virtue, to assist the poor: there, the key to assistance was reciprocity. Thus *xenones*, or guesthouses in private homes, were common.⁶³

Charity was not absent in Confucian China. Chinese history records a number of instances

⁶¹ See Figure A, number 14.

⁶² See Figure A, number 16.

⁶³ See Risse, *Mending Bodies*, pp. 44-47.

of individual charity related to medical care. According to Needham, “the first permanent hospice with a dispensary” was founded by a Buddhist king in 491 CE.⁶⁴ This was quickly followed by a government hospital, in 510 CE, in response to an imperial order to

select suitable buildings and attach a staff of physicians for all kinds of sick people who might be brought there.

Needham describes this institution, simply called *biefang* 别坊 (separate buildings), as having

a distinctly charitable purpose, being intended primarily for poor or destitute people suffering from disabling diseases.⁶⁵

A celebrated case of an individual responding to the Emperor's call, or on his own volition, is provided by Xin Gongyi 辛公义, a prefect in Min Zhou 岷州 during the Sui dynasty (581-618 CE).⁶⁶ The *Sui Shu* 隋书 records that he set up his own house as a refuge for the sick whose families had abandoned them during a summer epidemic. It is said that at times several hundred people whom he attended personally were crowded into his courtyard and that he hired physicians and spent his own income to buy medicines.⁶⁷

At times in China's past it was often Buddhists, who flourished and enjoyed their greatest influence under imperial patronage during the Tang dynasty (618-907 CE), who provided welfare.⁶⁸ Annexed to Buddhist monasteries, there were institutions that took care of the “old and decrepit, the poor, the famished, and the sick”.⁶⁹ These benevolent institutions were called variously *beitian yuan* 背田院 or *beitian fang* 背田坊, that is, “compassionate

⁶⁴ See Figure A, number 11.

⁶⁵ See Figure A, number 12. Needham, *Sc. and Civ.*, vol. 6, p. 54.

⁶⁶ See Figure A, number 13.

⁶⁷ *Sui Shu*. Wei Zheng (580-643). Beijing: Zhonghua shuju, 1973.. See also Needham, *Sc. and Civ.*, vol. 6, p. 54.

⁶⁸ Imperial patronage was given an initial impetus by Empress Wu who took over in 683 CE and in 691 decreed that Buddhism take priority over Taoism. She was forced to abdicate in 705 but, after a short period of decline, with the accession of Xuan Zong, in 712, Buddhism was returned to its previously privileged position, albeit with certain state controls. Ch'en, *Buddhism in China*, pp. 220-4.

⁶⁹ *Ibid*, p. 295.

fields home".⁷⁰ Ch'en explains that in Mahayana (later) Buddhism

instead of the laity offering gifts to the monastery and monks, it is the monks and monastery who are offering gifts, and the people are the recipients; the people are now the field of merit or compassion.⁷¹

Dispensing medicine for the sick among the people was one of seven avenues by which merit was earned. According to Ch'en, the abstract Indian concept of the people as a "field of compassion" was made concrete in China where actual fields, donated by benefactors and connected with a monastery, provided the funds for their altruistic work. Like the Christian hostels discussed above, *beitian yuan* provided food and lodging for pilgrims and travellers as well as medical care to the indigent sick; they also distributed rations to the poor. Ch'en relies on a memorial from Song Jing 宋景 to the Empress Wu to date the entry of Buddhists into medical care for the poor to 717 CE. The memorial advised that the relief homes, having been governed by officials since the *Chang-an* 长安 period (701-704), should be turned over to Buddhist monasteries to manage.⁷² Even after the transfer to the monasteries the state continued to play its part. In addition to the profits wrought from monastic fields, monasteries were subsidised by the early Tang government and, in 734, the state required them to take in beggars from the streets to be cared for at public expense.⁷³ According to a census, ordered by the throne, there were 4,600 Buddhist monasteries, more than 40,000 shrines and several hundred thousand monks and nuns, some of whom ministered to the sick, when Buddhism, feared as providing an alternative source of authority, was proscribed by the state in 845 CE.⁷⁴ Monasteries and their lands were

⁷⁰ See Figure A, number 19. The Tang government co-operated with, subsidised and helped administer the monasteries. See Scogin, "Poor Relief": p. 30.

⁷¹ Kenneth S. Ch'en, *The Chinese Transformation of Buddhism* (Princeton: Princeton University Press, 1973), pp. 295-6.

⁷² *Ibid.*, p. 297. According to Demieville, a "lay commissariat" created, between 701 and 705, by the Empress Wu had administered these "hospitals". Demieville, *Buddhism and Healing*, pp. 59-60. Needham, on the other hand interprets the memorial to mean "ever since Chang-an had been the capital (i.e. since the beginning of the Western Wei in 534). Needham, *Sc. and Civ.*, vol. 6, p. 54. Scogin has a slightly different interpretation. He reads the memorial as advising the closure of the institutions, which he describes as being operated already by Buddhists in co-operation with the state, because of corrupt practices and the fact that "small acts of charity" were not an alternative to "good government". Scogin, "Poor Relief": p. 30.

⁷³ Ch'en, *Chinese Transformation*, p. 300 ; Scogin, "Poor Relief": p. 31.

⁷⁴ Ch'en discusses the various political and economic forces that led to the restriction, from around 841, and the eventual proscription of Buddhism. Ch'en, *Buddhism in China*, pp. 226-33. See also Gernet, *Chinese Civilization*, pp. 294-96.

confiscated but, having been persuaded of their necessity and that charity was a traditional Confucian virtue, and on the advice of an official, Li Deyu 李德裕, the government took over the operation of the homes and continued the relief work.⁷⁵ These state-run ‘charity infirmaries or sick wards’, called *Bing fang* 病坊, or Patients’ buildings,⁷⁶ continued to use profits derived from the monastic fields but their administration was entrusted to “a respected elder”.⁷⁷ Scogin issues the usual caveat not to assume that, just because an edict was issued, it was implemented on a wide scale.⁷⁸ There is no mention of the role of physicians in these institutions and it is probable that the services were confined to providing food and shelter to the indigent sick. If this were the case they could be said to be analogous to the hostels in the West, and accordingly, have a legitimate place in the history of the hospital.

It is hardly surprising that medical care was not central to any of the hostel-type institutions discussed above, whether in China or the West. When family members and physicians can administer the current medical therapeutics in the home, society has no need for a institution whose *raison d'être* is medical treatment.⁷⁹ The type of welfare institutions needed were those that catered for people who had no family: the homeless, widows, orphans, foundlings and the aged, or those without access to their families, such as soldiers, pilgrims, and travellers. Thus inns, refuges, hostels, foundling homes, orphanages, widows’ homes and homes for the aged were found whether the society was predominantly Confucian, Judeo-Christian or Buddhist. Just as the family provided medical and nursing care to its sick members, so these institutions – surrogate families – provided some degree

⁷⁵ Scogin, "Poor Relief": p. 31.

⁷⁶ Needham, *Sc. and Civ.*, vol. 6, p.54.

⁷⁷ See Figure A, number 20. Scogin, "Poor Relief": p. 31.

⁷⁸ See Demieville, *Buddhism and Healing*, pp. 58-60 ; Leung, "Organized Medicine": p. 135 ; Scogin, "Poor Relief": p. 31 ; Wong and Wu Lien-teh, *History of Chinese Medicine*, p. 139.

⁷⁹ France led the way in using the hospital as the preferred site for the teaching of medicine but it was not until the 1790s that clinical practice was formally incorporated into French medical education. Jones, *Charitable Imperative*, pp. 16-17. For the most persuasive case for hospital teaching, put by a contemporary practitioner, see Phillippe Pinel, *The Clinical Training of Doctors: An Essay of 1793. Edited and translated, with an introductory essay by Dora B. Weiner*, trans. Dora B. Weiner, The Henry Sigerist supplement to the Bulletin of the History of Medicine; new series, no. 3 (Baltimore: The Johns Hopkins University Press, c.1980). Employing the hospital, and its patients, as a site for research was not to emerge America until the late nineteenth century. Rosenberg, *The Care of Strangers*, pp. 151-53.

of medical care. This might involve simple nursing care, the ministrations of a physician who visited regularly, the supply of medicines or other treatments.

Much has been made of the role of charity in the history of the hospital, particularly the Christian variety “expressed in commandments enjoining compassion, the foremost duties of compassion being to visit the sick, to help the poor, to feed the hungry, and to clothe the naked”.⁸⁰ Sometimes the reasons for organizations or states to provide welfare are more prosaic. Although compassion shown to the *poor* was seen in Jewish and Christian communities as being particularly worthy, by the later Middle Ages the poor began to be seen as more dangerous than holy: more of a threat to society than “Christ's poor” or *pauperes Christi*.⁸¹ Consequently the focus of institutional care for the poor changed from care to control. For example, the nationwide network of *Hôspitaux Généraux* was established in France to “confine a wide variety of paupers and social deviants” in late seventeenth-century France.⁸²

Just as in the West, where urbanisation, social dislocation, over-crowding and epidemic could all stimulate social action, Scogin suggests that political, social, economic and intellectual factors coalesced during the Northern Song in China to create the climate in which poor relief institutions could blossom; poverty amidst splendour, urbanisation, natural disasters, and fear of violence all played a role. The traditional Confucian bias was to seek to eliminate poverty through sound government rather than ameliorate its effects but it also included the notion that the state had a duty to look after its people, including their health. In the state ideology of the Song, Neo-Confucianism, the Confucian conception of state duty was wedded to a Buddhist belief in a man's moral duty to all people (not just family) arising out of compassion, that is, charity. So, while Confucianism contributed the notion of the bureaucratic state medical service, Buddhism supplied the institutional precedent – the state-sponsored charity infirmaries.

⁸⁰ Seidler, “Medieval Western Hospitals”, p. 8.

⁸¹ “The recipients of [medieval] charity were held to represent Christ himself, and indeed the whole movement of charitable giving was predicated upon the equation between Christ and the pauper”. Jones, *Charitable Imperative*, p. 1.

⁸² See Figure A, number 36. Ibid, p. 5. Jones does, however, warn against “over-estimating the judicial and repressive dimensions” of these institutions. Jones, *Charitable Imperative*, p. 8.

The Growth of 'Medical' Institutions in China

Scogin and Goldschmidt, and to a lesser extent Leung, provide us with a comprehensive survey of the Song poor relief system including its medical aspects. The Tang practices continued under the Song but with a new, still Buddhist, name, *Futian yuan* 福田院 or Good Fortune Fields Home, of which there were originally two in the capital.⁸³ They were initially small institutions (accommodating only twenty-four people) that catered for the aged, the sick, beggars and orphans. Rapid expansion in number and size, between 1064 and 1068,⁸⁴ saw accommodation in the capital rise to twelve hundred, in four establishments.⁸⁵ In addition, an empire-wide system of poor relief, *juyang fa* 居养法, with the "primary duty of providing food and shelter" but including the distribution of medicine, was in place by 1098.⁸⁶ The components of the system were set up and administered by local officials with the forms of aid varying according to local and seasonal needs. Poor relief in the capital and in the provinces thus followed different paths until 1105 when the Northern Song dynasty emperor Huizong 徽宗 (r. CE 1101-1129), decreed that the provincial poorhouse system should be emulated in the capital.⁸⁷

The earliest example of a specialised *medical* facility was the *anle fang* 安乐坊, or Peace and Happiness Hospital,⁸⁸ set up by "the famous scholar-official", Su Shi 苏轼(1036-1101) who arrived in Hangzhou in 1089 as governor of West Zhejiang province and commander of the military district".⁸⁹ Su Shi's *anle fang*, which Angela Leung referred to as the "first

⁸³ See Figure A, number 24. Goldschmidt translates the term as "Blessed Field Houses". Goldschmidt, "Systematization of Public Health," p. 2.

⁸⁴ The reign of Yingzong (英宗), during which Wang An-shi was most influential. For a summary of Ying Zong's life and work, see Veith, "Texts and Documents": pp. 159-61.

⁸⁵ Scogin, "Poor Relief": p. 31.

⁸⁶ See Figure A, number 27. Scogin appears to be basing this statement on the existence of a 1098 imperial edict issued by Zhezong (CE 1086-1100) which describes a "government charity system designed to provide shelter and health care for the poor and indigent". According to Goldschmidt the edict was not implemented until Huizong's reign (1100-1129) Goldschmidt, "Systematization of Public Health," pp. 5-6.

⁸⁷ For interpretations of the text, see *Ibid*, p. 8 and Scogin, "Poor Relief": p. 33.

⁸⁸ Translation according to Goldschmidt, "Systematization of Public Health," p. 7. Scogin uses the term "Peace and Happiness Ward".

⁸⁹ See Figure A, number 26. For a detailed account of Su Shih's public-health work in Hangzhou, where he "put through ... a clean water system and a hospital, dredged the salt canals, reconstructed West lake, successfully stabilised the price of grain ... and worked for famine relief, see Lin Yutang, *The Gay Genius: The Life and Times of Su Tungpo* (London: William Heinemann Ltd., 1948), Chapter 22 "Engineering and Famine Relief", pp. 263-76.

infirmary of the Song"⁹⁰ and Scogin described as "what may have been China's first specialist charity health clinic",⁹¹ treated over a thousand poor patients without charge over a three year period.⁹² Scogin claims that Su Shi relied on Buddhist monks to staff the clinic, but it is not clear in what capacity, whereas Wong and Wu say that he appointed "doctors and servants to dispense food and medicine to the people".⁹³

Alongside the poorhouse system, and based on the example set by Su Shi, the Song State sponsored the establishment of other, more specialised, poor relief institutions. The formerly *ad hoc* health care measures, which had been undertaken in the relief homes, were concentrated in a new institution called the *anji fang* 安济坊, Peace and Relief Hospital.⁹⁴ The first of these dates from 1102⁹⁵ and in Scogin's words, "the system actually involved the construction of elaborate hospitals across the country". He describes one, recorded as having many of the attributes we would associate with a modern hospital. It had

ten in-patient wards. Patients were separated on the basis of their illnesses, expressly for the purpose of preventing contagion. The clinics also included kitchens to prepare food for the patients and pharmacies to prepare drugs. Each physician was required to keep accurate records of the number of patients who were cured and the number who died.⁹⁶

Relying on the same source, the *Song huiyao* 宋会要,⁹⁷ Leung describes the *anji fang*, "in principle, infirmaries to segregate the seriously ill and minimize the spread of disease", as being set up in major towns.⁹⁸ As Leung notes, these may have been set up more to protect

⁹⁰ Leung, "Organized Medicine": p. 136.

⁹¹ Scogin, "Poor Relief": p. 32.

⁹² Based on "surviving records" Goldschmidt, "Systematization of Public Health," p. 7.

⁹³ Wong and Wu Lien-teh, *History of Chinese Medicine*, p. 139 ; Wong, "Chinese Hospitals in Ancient Times": p. 80.

⁹⁴ See Figure A, number 28. Literally, "Rest and Relief Office", Goldschmidt, "Systematization of Public Health," p. 5.

⁹⁵ In response to a memorial from "Wu Juhou (1037-1113), the governor of the capital prefecture". For a translation of the relevant section of the memorial, see *Ibid*, pp. 7-8.

⁹⁶ Scogin, "Poor Relief": pp. 34-5. Scogin here is basing his 'description' on the recommendations specified in Wu's memorial rather than of an actual institution. Goldschmidt, however, provides sources for the record of the establishment of "hospitals" at Hebei (in 1902) and Hangzhou (1904). Goldschmidt, "Systematization of Public Health," p. 8.

⁹⁷ Collected Administrative Documents from the Song, compiled by various authors between the years 978-1243 and edited by Xu Song (fl. 1781-1848).

⁹⁸ Leung, "Organized Medicine": p. 136. See also Goldschmidt, "Systematization of Public Health," p. 9.

the healthy than assist the sick but that has been the purpose of isolation and quarantine everywhere.

To these two types of organisation – poorhouses and public hospitals – Goldschmidt adds a third, a system of “paupers' cemeteries” (established by Huizong in 1104) to form what he describes as a “unique and innovative attempt by an emperor to employ his authority in order to install a government-sponsored and operated public health system”.⁹⁹ Paupers' cemeteries not only provided burial for the poor and friendless but also were instrumental in removing corpses, that posed a hazard to public health, from the streets.

Another important aspect of the Song system was the network of charity pharmacies, *huimin yaoju* 惠民药局 and the free distribution of medicines promoted by the state.¹⁰⁰ These were extensions of the Tang practices of publishing prescriptions, fixing and publicising prices for medicines, and giving money to the poor to buy them.¹⁰¹ It is worth noting that the combination of *huimin yaoju* and *anji fang* bear an uncanny resemblance to the later missionary practice of a large dispensary, or outpatient department, associated with inpatient wards in a hospital. This was not a deliberate ploy on the part of medical missionaries – the practice was common hospitals in Britain and America – but it would have meant that the model was not as alien to the Chinese as might be imagined.

Despite the scarcity of diverse sources for these early 'hospitals', it would appear that they satisfy even Miller's restrictive definition of a place which was available to the general population, providing accommodation, food and medical care. In a history of ‘the hospital’ they would seem to have qualified for a place at least as important as the Byzantine institutions of the sixth and seventh centuries and the monastic hospitals of the West.

During the Yüan Dynasty (1279 – 1368), according to Leung, the state-sponsored medical

⁹⁹ Excavations in 1985, 1993 and 1994 of “an ancient graveyard ... at Xiangyang in Shanxi province” unearthed 849 tombs “with records of burial dating to the years 1105-1116”. Goldschmidt, “Systematization of Public Health,” pp. 1, 10.

¹⁰⁰ See Figure A, number 25. According to the *Fujian shengzhi - Weisheng zhi* (*Gazetteer of Fujian - Public Health*), (Zhonghua shuju, 1995), p. 251, this generic name was not adopted in Fujian until the Ming dynasty. In the early Song they were called *maiyaoku* 卖药局 which was later changed to *hejiju* 和济局. Somewhat surprisingly, Goldschmidt does not include these agencies as part of his “public health system”.

¹⁰¹ Leung, “Organized Medicine”: p. 135.

system reached its height with medical bureaux, hospitals and benevolent dispensaries being established throughout the country.¹⁰² However the Ming (1368 – 1644) State, rather than extending its role of caring for its peoples' health in institutions, neglected it and allowed the system to deteriorate. Other than the initiatives of a few "energetic officials" the State's role was limited to distributing medicines, or the money to buy them, in times of epidemic.¹⁰³ The early Qing Dynasty (1644 – 1911) response to the welfare (including medical) needs of society was an acceleration of the trend, started in the late Ming, to increasingly turn to private philanthropic charitable organizations run by various guilds.¹⁰⁴

By the time the missionaries arrived in the mid-nineteenth century with a notion of the hospital, still principally an institution for the sick poor and only minimally medical, such institutionally-based medical care as existed in China was provided by charitable dispensaries and clinics with limited accommodation for patients.¹⁰⁵ Foundlings, orphans, widows, and the blind were cared for in a variety of homes, as were lepers, where some medical care was provided much as it had been in earlier times.¹⁰⁶

¹⁰² On the basis of an entry for 1284 in the *Xin Yuanshi*, Zhen Zhiya attests the existence of special hospitals for military men in the late Yuan. Zhen Zhiya, "Zhongguo gudaide yiyuan": p. 56.

¹⁰³ See Leung, "Organized Medicine": pp. 139-142 for a summary of the role of the Ming State in the provision of medical relief. Gong Chun has described the provision of medical aid to the military during the Ming. See Gong Chun, "Mingdai junyi zuzhide tedian (Characteristics of the Military Medical Organisation in the Ming Dynasty)" *Zhonghua yizshi zazhi* 17, no. 1 (1987).

¹⁰⁴ See Figure A, numbers 37 and 38. For an analysis of this phenomenon see Joanna F. Handlin-Smith, "Benevolent Societies: The Reshaping of Charity During the Late Ming and Early Ch'ing" *The Journal of Asian Studies* 46, no. 2 (1987). See also Leung, "Organized Medicine": pp. 139-40.

¹⁰⁵ See Figure A, numbers 43 and 45.

¹⁰⁶ See Leung, "Organized Medicine": p. 163, for a comprehensive list of welfare institutions established before 1840 that provided medical care.

CHAPTER 2: CHINESE INSTITUTIONS MET BY PROTESTANT MISSIONARIES

Early missionaries would have been aware of the existence and nature of Chinese charitable institutions through the writings of a number of their brethren who took a particular interest in the subject. As early as 1833, a missionary journal, the *Chinese Repository*, published cursory accounts of a number of establishments in Canton. In the 1840s these were followed by translations of almost complete institutional annual reports which provided the missionaries with an insight into the Chinese rationale for the range of services they provided and details of the financing, administration, physical plant and staffing. A foundling hospital in Canton, dating from 1698 and said to have accommodation for two hundred and three children, would seem to belie the description of charitable institutions as being “small in extent, and of recent origin”.¹ Also documented were the *Yangzi yuan* 养子院 a “retreat for poor, aged and infirm, or blind people, who have no friends to support them”, a hospital for lepers, the *Mafeng yuan* 麻风院 and a public dispensary, was rumoured to have existed “centuries ago”.² These institutions, the *Chinese Repository* noted, were financed not by

native contributions [but] every 'barbarian ship' which enters the port pays about nine hundred dollars towards their support, without even the pleasure of ever having been informed.³

William Milne, who wrote of his experiences in Ningbo during the 1840s, said that he had “not seen any *medical* charity in Ningpo” except for a dispensary associated with the Practical Benevolent Society but had been “assured they can be found in Hangzhou and other cities of first magnitude”.⁴ The benevolent society, for which he had found an 1836 report, had been set up in 1834 by “two influential gentlemen” with the aim of taking in “outcast infants”; to provide “raiment for the poor” during the cold winters; to furnish the

¹ “Description of the City of Canton” *Chinese Repository* 2, no. 10 (1833): p. 263.

² *Ibid.*

³ “Charitable Institutions” *Chinese Repository* 2, no. 8 (1833): p. 195.

⁴ William C. Milne, “Notices of Seven Months' Residence in the City of Ningbo, continued” *Chinese Repository* 16, no. 1 (1847): pp. 26-27.

poor with coffins; to bury those found dead and collect and rebury scattered bones. In addition they were to dispense medicine to the sick, distribute tea in summer and the firewood to prepare it.⁵

Shanghai

Detailed descriptions of Chinese benevolent institutions with a medical component were available through the publication of translations of annual reports of both the Foundling Hospital and Public Dispensary at Shanghai for 1842 and 1845 respectively. Members of the gentry⁶ had established the Foundling Hospital in 1710, when officials failed to act following an imperial edict directing them to “superintend the public contributions, and to await the voluntary subscriptions”.⁷ Angela Leung has observed that the “provision of medical aid to children had become one of the most widespread features of welfare in China from the nineteenth century on”.⁸ She identifies “special health care for the child [as] a *conspicuous new element* (my emphasis) of the nineteenth-century institutions”⁹ but it would seem that it had been the case in this Shanghai institution from its inception. According to the superintendent of the hospital since 1836, Wang Tsinchin, there were physicians and apothecaries involved because, along with keeping and examining the books an “overseer’s” duties included “superintend[ing] the physicians and apothecaries”.¹⁰ The hospital had had a chequered history and the quality of the care had deteriorated after the immediate successors to the founders died. New directors, with a brief to revive the institution, had been appointed in 1726. They had conducted a review of the regulations, which had “long been neglected”, particularly in relation to the physician and apothecary to

⁵ Ibid: p. 30.

⁶ For an explanation of what constituted the gentry in Qing China, see T'ung-Tsu Ch'u, *Local Government in China Under the Qing* (Cambridge, Mass.: Council on East Asian Studies, Harvard University Press, 1988), pp. 169-73.

⁷ Wang Mien, who wrote the preface to the 1842 report, described himself as “the promoted prefect of Suchau, assistant superintendent of the granaries, acting prefect of the independent prefecture of Taichang, formerly the acting prefect of Shanghai”. Wang Mien, “Preface to the Report of the Foundling Hospital at Shanghai” *Chinese Repository* 14, no. 4 (1845): 180.

⁸ Angela Ki Che Leung, “Relief Institutions for Children in Nineteenth-Century China” in *Chinese Views of Childhood*, ed. Anne Behnke Kinney (Honolulu: University of Hawaii Press, 1995)

⁹ Ibid, p. 263.

¹⁰ Wang Tsinchin, “Report of the Foundling Hospital at Shanghai” *Chinese Repository* 14, no. 4 (1845): pp180-1.

“see that the infants had aid in time of sickness”.¹¹ After being received, examined and having their details recorded, children were to be allocated by lot (to avoid collusion and partiality) to a wet-nurse. If a child was sick when received it was to be kept within the institution until “perfectly cured and afterwards sent out”.¹² Any who sickened, with “small-pox or other diseases”, were to have their details entered into a “sick register” and be issued with one ticket to request a visit from a physician who “upon seeing it will instantly come”, and a second ticket for the apothecary who, “upon seeing it will dispense the medicines required”.¹³ Listed among the officers of the institution in 1842, there were three apothecaries and five physicians. The accounts include an amount of 16,605 *cash* for “physicians’ fees”,¹⁴ and additional sums (relating to treatment or prevention of disease) were spent on “apothecaries bills – draughts, pills, powders and other medical ingredients”; 13,363 *cash* for “fire balls and medicine firing”; 23,880 *cash* for mosquito curtains; and 8,905 *cash* for “children’s rice cakes, shaving, smallpox [vaccination], lamp oil and medicines”.¹⁵

The Public Dispensary at Shanghai was of more recent origin, having been incorporated in 1844 as an aspect of the work of the *Tongren tang* 同人堂 or Hall of United Benevolence, which had been in existence since 1804.¹⁶ Medical care had not been included in the services provided by the original organisation but, as the committee explained:

That part of the country called San-woo-te (anciently denominated the Kingdom of Woo, and now corresponding to the southern part of the province of Keang-nan) is very damp, and that portion of it which lies near the sea is salt and still more damp than the interior, and in the summer and autumn, is much exposed to strong winds. In the Hwang-poo and Woosung rivers there are day and night tides, but in the brooks, streams and canals which join them, there being no flow and ebb of the tide, the water is still or stagnant, and acquires a greenish colour and brackish taste; the water of the wells is also affected in a similar manner,

¹¹ Ibid: p. 182. The 1842 Report contained financial and statistical information covering each year from 1839 to 1842 inclusive.

¹² Ibid: p. 188.

¹³ Ibid: p. 186.

¹⁴ See fn. 10 page 149 for an explanation of currency units used in hospital accounts.

¹⁵ Wang Tsinchin, "Report of the Foundling Hospital at Shanghai": p. 193.

¹⁶ "Regulations, etc., of Hall of United Benevolence for the relief of widows, the support of the aged, providing of coffins, burial-grounds, etc." *Chinese Repository* 20, no. 8 (1846): p. 402.

and as regards the people who live in these places, the dampness moistens them, the wind shrivels them, the stagnant water soaks them, and they are thus rendered liable to disease.¹⁷

The founders were concerned that, unlike those who had means, the “poor and destitute” among the people who worked long hours in cotton fields could not afford to consult a physician and “their disease [would] speedily become severe”.¹⁸ They decided to open a public dispensary, to be known as the *Shiyi gongju* 施医公局, or Establishment for Gratuitous Medical Relief, for three months during summer and autumn from the “18th day of the 5th month to the 18th day of 8th month”.¹⁹ The dispensary was to open every five days and physicians (who were forbidden to charge a fee) would see patients between 8 a.m. and noon in the order in which they arrived. “Surgical” patients, who “must attend in person” were given “powders and plasters” but to the rest were given prescriptions for sufficient medicine to last five days. Prescriptions were to be filled at a private pharmacy at the patient's expense unless a subscriber could be found to donate money for purchase of their medicine.²⁰ Medical practitioners were requested to attend at the institution on the set prescribing days and “not absent themselves on account of wind or rain”. In 1844 they reported that twenty-nine practitioners had responded to the call: 15 practitioners for internal diseases; 4 for infantile diseases; 4 for surgical diseases; 2 for ophthalmic diseases; and 4 for performing acupuncture”. If patients were too ill to last five days between visits the treating physician was required to see them, for no fee, at his own house.²¹ William Lockhart, who was in charge of the Medical Missionary Society's hospital at Shanghai at the time, did not consider this dispensary a threat to his own establishment as the “class of cases is different in great degree, and the patients in [his] hospital come chiefly from a distance”. He saw the *Shiyi gongju* as having been inspired by the example of missionary

¹⁷ Shin-ping-yuen, “Report of the Public Dispensary attached to the *Poo-yuen-tang* at Shanghai, for the 25th year of *Taoukwang*, (1845)” *Chinese Repository* 17, no. April (1848): p. 193.

¹⁸ *Ibid.*

¹⁹ William Lockhart, “Report of the Medical Missionary Society's Hospital at Shanghai. From 1st May, 1844, to 30th June, 1845” *Chinese Repository* 15, no. 6 (1846): p. 289.

²⁰ Over the 19 opening days in 1845, 13,519 men and women had seen and 6,199 prescriptions written. The dispensary had paid 265,710 cash to 8 apothecaries' shops; and spent another 169,335 cash on “pills, powders, boluses, and plasters”. Shin-ping-yuen, “Report of the Public Dispensary attached to the *Poo-yuen-tang* at Shanghai, for the 25th year of *Taoukwang*, (1845)”: p. 199.

²¹ *Ibid.*: p. 197-8.

work and expressed the hope that it would be extended to operate for the entire year describing it as

a most praiseworthy undertaking, and while in operation, was conducted with much spirit and energy, and were the medical men better informed in the principles of the healing art, a very large amount of benefit would be conferred on the patients.²²

Guangzhou

In Canton, it was John G. Kerr, who carried out the most extensive contemporary survey of benevolent institutions. He divided them into three classes: guilds, temporary or permanent companies and “public institutions supported by the government”²³ and identified homes for old men, *Laoren yuan* 老人院; old women, *Puji yuan* 普济院; the blind, lepers and foundlings. He thought that “these or similar establishments [had] existed in Canton and other Cities of the Empire for many centuries” but the first reference he could find to them in Canton was in the *Records of the Province (Guangdong zhi 广东志)* for the third year of Qianlong 乾隆, or 1739, which dated their establishment to the second year of Yongzheng 雍正, or 1724.²⁴ Kerr, who seems to have had a somewhat rosy recollection of home, was scathing about the physical condition of the Homes. He contrasted the

well-furnished and neatly kept rooms in Asylums at home [with the] hovels filled with rickety stools and tables, bedding, broken earthen vessels, furnaces for cooking, and rubbish, the accumulation of months or years [in Canton]²⁵

In addition, Kerr accused those who ran the institutions of corruption arising from the fact that government officials sold the right to manage the institution. It was said that the manager in 1873 had paid \$440 for the right to run the *Laoren yuan* for five years and that this gave him the opportunity to make money by charging men aged over 60 years old, with no near relatives and no means of support, for the right to live in the Home. He proceeded

²² William Lockhart, "Report of the Medical Missionary Society's Hospital at Shanghai. From 1st May, 1844, to 30th June, 1845" *Chinese Repository* 15, no. 6 (1846): p. 289.

²³ He described guilds as “more properly insurance companies, which give aid to their members if in distress” and “companies” as being “got up for special occasions, such as for the relief of poverty by famine, flood or war, and dispensaries for the poor in times of pestilence”. John Glasgow Kerr, "The Native Benevolent Institutions of Canton, part 1" *China Review* 2 (1873): p. 89.

²⁴ *Ibid*: pp. 89, 91.

²⁵ *Ibid*: pp. 94.

to provide the inmates with inferior rice and, in place of the 55 *cash* per day promised for the purchase of meat and vegetables, he distributed only 32 *cash* every five days. Instead of the regulation “wadded jacket” worth \$1.07, which should have been issued every three years, inmates were given 500 *cash* (45 cents) and the cheapest of coffins were supplied when they died. Selling the rights to practise to the physician (\$100 for life) and the same sum for right to supply water provided additional avenues for graft with the result that

in one way or another, either directly or indirectly, all concerned get a percentage of what has, by imperial decree, been devoted to charity ... and the inmates are under the necessity of begging in the streets or working at something by which they can earn the pittance needed to satisfy the wants of nature.²⁶

It is the medical aspect of these institutions which is of relevance here and the financial accounts reveal that there was provision to pay a physician and his servant at the foundling hospital; and a physician was employed at both the home for old men and that for old women but apparently medicines were not supplied. Beyond this Kerr gives no indication of the extent of medical care provided. He had suggested to his readers at the beginning of his article “we may find something worthy of imitation in their *modus operandi*” but by the end he was convinced that there was an “urgent need for reform in the management of these institutions”. Failing the best solution of being “put in the hands of suitable foreigners”, along the lines of the Customs Services, the Missionary Society should set up comparable institutions to act as models and to “shame the officials into some reformation of the abuses now practised under the cover of charity”.²⁷

It would seem that Kerr had mellowed by the following year when he described the operation of the *Aiyushan tang* 爱育善堂, or Hall of Sustaining Love, which comprised three service departments: the operation of free schools, the provision of coffins, the prescribing and dispensing of medicines; a department responsible for the observation of religious rites and another for general and financial administration. The dispensary department, which had been started in the *Yanghang huiguan* 洋行会馆 or old “Consoo House” using \$49,000 raised during 1871, was inspired, according to Kerr, by the example

²⁶ Ibid: p. 93.

²⁷ Ibid: pp. 94-5.

of the “native merchants and compradors” of Hongkong.²⁸ Two years later, in 1873, the Canton dispensary was transferred to the “princely residence of Pun-tin-qua (the last of the old hong merchants) which had been confiscated by the Government”.²⁹ Among the detailed regulations of the organisation seven rules were “devoted to the management of the dispensary”; a further seven “pertain to the distribution of medicines” and five “point out the duties of the physician”.³⁰ Patients were neither fed nor lodged but the dispensary was “open daily from 10 a.m. to 4 p.m.” and patients were examined by one of the three or four physicians on duty and given a prescription which they could have filled gratuitously at the “drug store employed by the institution” or by paying for it at a shop.³¹ Although he still thought the Chinese lacked the necessary “disinterested benevolence, and self-sacrificing devotion” needed to succeed and “won't do so until christianised” he was impressed by the attention to detail in the reports for 1872 and 1873. S. Wells Williams, writing twenty years later, agreed:

even badly managed establishments ...are praiseworthy, and promise something better when higher teachings have been engrafted into the public mind.³²

Few commentators on Chinese benevolent medical institutions were so encouraging. Kerr's own description of what he saw during the bubonic plague at Hong Kong is more representative of the reaction of most physicians who visited the establishments:

the Chinese rebelled against the measures of the government, and demanded that the sick be placed in Chinese hospitals and be under Chinese treatment. This was granted in measure, and the results showed the utter incapacity of the natives to deal with so terrible a visitation. a hundred patients lying on the floor, almost without attention, in the midst of the filth of their own discharges was a condition of things which did not commend native methods, even to their own

²⁸ They had initiated what Kerr considered the “first establishment, by natives, of a permanent institution for the treatment of the sick” John Glasgow Kerr, “Benevolent Institutions of Canton” *China Review* 3 (1874-5): pp. 112-3.

²⁹ Ibid: p. 112-3, 114.

³⁰ Ibid: p. 108.

³¹ Ibid: p. 112.

³² S. Wells Williams, *The Middle Kingdom: a Survey of the Geography, Literature, Social Life, Arts and History of the Chinese Empire and Its Inhabitants*, 2 vols., vol. 1, 2 (New York: Paragon Book Reprint Corp., 1895; reprint, 1966), p. 266.

people.³³

In 1889 he posed the rhetorical question: was another Canton charity, the *Fangbian suo* 方便所, established in 1873 to “provide a place in which to receive the homeless and friendless persons who are hopelessly ill”, an advance? Kerr provides only a summary of the 57 page report for 1888 and the sole reference to medical care is mention of “donations of medicines” being listed along with lists of subscribers and donors of bedding and clothing.³⁴

A number of influential observers were at pains to point out that, contrary to the view that charity, altruism and compassion were the exclusive preserve of Christianity, the Chinese could display these traits too. S. Wells Williams found their basis in Chinese culture:

Good acts are required as proofs of sincerity; the classics teach benevolence, and the religious books of the Buddhists inculcate compassion to the poor and relief of the sick [but that] charity is a virtue which thrives poorly in the selfish soil of heathenism.³⁵

Arthur Smith, in his classic 1890 work “Chinese Characteristics”, is more sceptical about Chinese altruism. He cites as an example of its absence, some literati, in “a large port”, blocking the acquisition of land for a dispensary and hospital to be run by Chinese “on the basis it was suggested by foreigners – apparently”. He appears not to have considered the possibility that their opposition could have stemmed from a range of reasons quite unconnected with any attitude to charity. He did acknowledge he had seen evidence of altruism among the Chinese such as a woman suckling “a motherless child” and he acknowledged the existence of foundling hospitals, refuges for lepers and the aged. But to him, Chinese charitable activities, like the setting up (by individuals or government) of soup kitchens and distributing clothing to the destitute in response to calamities, were “few in number and narrow in range ... and intermittent”. He had found hospitals, in particular, to be relatively rare and found only in “many of the large sea-ports, and perhaps in the great

³³ John Glasgow Kerr, “The Bubonic Plague” *CMMJ* 8, no. 4 (1894): p. 180.

³⁴ John Glasgow Kerr, “Is It An Advance?” *CMMJ* 3, no. 2 (1889): pp. 66-7.

³⁵ Williams, *The Middle Kingdom: a Survey of the Geography, Literature, Social Life, Arts and History of the Chinese Empire and Its Inhabitants*, p. 263-4, 266.

cities of interior along the routes of trade”.³⁶ Almost twenty years later, T.J. Preston provided a picture of the range of benevolent institutions and activities in one such city, Changde 常德 in Hunan in 1907: a Foundling Hospital, work houses for the poor and a Beggars' Refuge. Also, the United Benevolence Hall provided oil lamps for street lighting, a free ferry boat, the distribution of “healing ointment” plasters for the “sick or suffering”, padded winter clothing and coffins for the poor.³⁷

It is clear that these missionary observers, even while they acknowledged the charitable impulse and the medical aspects of these Chinese institutions, did not consider them comparable to their own dispensaries and hospitals. On the other hand, while historians such as Risse, Rosenberg, and Granshaw distinguish early institutions in the West from 'proper hospitals', all are treated and viewed as antecedents of the modern hospital. The modern hospital is seen as having evolved from them and they are accorded a legitimate place in its history. For example, Jones describes institutions which

offered hospitality ... to a wide variety of social types: short-stay entrants such as pilgrims, travelling clerics, itinerant workers, travellers and migrants, and longer-term cases such as resident paupers – the chronically infirm, the aged, abandoned or orphaned children.....³⁸

in medieval France as “hospitals” and treats them as having a legitimate place in the history of the hospital in Europe. But, while some of the chroniclers of Chinese welfare accept that there has been a history of charitable and state sponsored institutional medical care in China none of them see these indigenous institutions as forming any part of a general history of hospitals.

It does not follow that the mere presence of ‘welfare-type’ institutions in a society constitutes sufficient cause for the emergence of the modern, medically-based hospital. Just *because* analogous institutions can be found to have existed in China, one cannot say that

³⁶ For an overview of Chinese charitable and welfare activities see Chapter XV “Benevolence” in Arthur Henderson Smith, *Chinese Characteristics* (Shanghai: North China Herald and S.C. & C. Gazette, 1890), pp. 68-73.

³⁷ Preston, “Chinese Benevolent Institutions”: pp. 249-53.

³⁸ Jones, *Charitable Imperative*, p. 32.

the 'hospital' either existed or that it would have arisen there in its modern form without outside influence. What one can say is that the various welfare and medical institutions which have existed in China, at least from the Song dynasty onwards, are equally deserving of a place in the history of 'the hospital' as many in the West. One would also not be surprised if their existence and long history would have some influence on the nature of the 'foreign' hospital that the missionaries established.

SECTION II – THE HOSPITAL – ITS PHYSICAL MANIFESTATION

Introduction

Before the Civil War (1861-1865) the hospital, as a place specifically for the treatment of the sick rather than merely a refuge for the destitute, was rare in America. In 1810 there were no more than three general hospitals in the country.¹ By 1873 there were 149 “hospitals and related institutions”, of which one third were for the mentally ill, in the United States.² Most of these nineteenth-century hospitals, other than the few in large cities, were small and personal often in

rented buildings no different from many other private residences. If a building could house a healthy family it could house sick men and women. Running one was like running a boarding house.³

Rather than entering a hospital, the sick-poor more often joined the destitute, aged, orphaned, crippled and marginally criminal in the city almshouse. In some of these, separate ward accommodation was provided for those with chronic illness while in others, a physician merely visited the sick among the inmates but no special care was provided. In the years immediately following the Civil War the number of hospitals grew modestly to 178 by 1873, still limited to major cities and ports.⁴ Although many of those in the rapidly growing metropolises were designed to provide specialist services they continued to serve, almost exclusively, the same clientele as before the War.⁵ Americans who could afford it were treated by physicians and surgeons in their own homes: the small hospital offered them nothing special in the way of technology or therapeutics nor did it differ markedly, in appearance or layout, from their own home. By the end of the first decade of the twentieth

¹James Bordley and A. McGehee Harvey, *Two Centuries of American Medicine* (Philadelphia: W.B. Saunders Company, 1976), p. 57.

² Rosen, “The Hospital: Historical Sociology”, p. 25.

³ Rosenberg, *The Care of Strangers*, pp. 118-9.

⁴ *Ibid*, p. 5.

⁵ Hospitals included those that specialised in treating fevers; women; children; ophthalmic diseases; orthopaedic patients; and “lunatics”. See, *Ibid*, pp. 109-15, for a summary of hospital growth in America between 1848 and the mid 1870s.

century America had witnessed a dramatic rise in the number of hospitals: it is estimated that there were 4,359 in 1909, not including institutions for the mentally or chronically ill.⁶ Of these by far the most common were small proprietary hospitals established by surgeons who often set aside a few rooms, sometimes in their own homes, for paying patients.⁷ Bordley provides an excellent contemporary description of one such small private village hospital. Hertzler, a surgeon who set up his own small hospital in 1902, described the situation in Kansas at the end of the 1880s:

Usually half a dozen or fewer hospital beds found available space in these houses. The operating room was usually the bedroom of the former cook, selected for this purpose because it was not a desirable room for a hospital bed. The kitchen stove usually supplied the heat for the sterilization of the instruments and dressings. This made it necessary for the doctor to eat an early breakfast, so that the stove could be available as a sterilizer when it came time to prepare for the operation. Operating in such hospitals was but slightly removed from the kitchen surgery of any private residence ...⁸

If the proprietary, or 'stock' hospitals, were the most numerous, private, non-sectarian, charitable institutions run by a voluntary board of trustees were the most prominent.⁹ As well as being a consequence of rapid urbanisation and migration Rosenberg attributes the explosion in the number of hospitals to what he calls "a secular manifestation of a pious activism". Churches also operated hospitals along lines not dissimilar to those of the non-sectarian charities as did local, state and city governments.¹⁰ Members of the Episcopal Church, believing that "sickness was one of the means appointed by Divine Wisdom to prepare the heart for the reception of divine truth", were particularly active. They established major hospitals in New York, Philadelphia, Baltimore and Chicago. Just as the Episcopalians felt that their fellow church members should not have to enter a public

⁶ Bordley and Harvey, *Two Centuries of American Medicine*, p. 60.

⁷ Proprietary hospitals accounted up to 50% of the hospitals in 1910. Stevens, *In Sickness and in Wealth*, p.20.

⁸ A.E. Hertzler, *The Horse and Buggy Doctor* (New York and London: Harper & Bros., 1938) quoted in Bordley and Harvey, *Two Centuries of American Medicine*, p. 279.

⁹ It appears that figures are not available for the total patient population, including those in proprietary hospitals. It is known that 45% of patients treated during 1904 in the 1493, non-proprietary hospitals in America entered one of the 831 (56%) private charitable hospitals. Stevens, *In Sickness and in Wealth*, pp.23-4.

¹⁰ In 1904 there were 442 Church-run hospitals with 30% of patients and the 220 hospitals run by governments catered for the remaining 25% of patients. *Ibid*, p.23.

almshouse, Catholics and Jews set up hospitals to cater for their immigrant populations to protect them from charity and evangelising Protestants.¹¹ During this period the hospital moved from the periphery to occupy a more central place in the lives of Americans, both rich and poor. Hertzler credits the small proprietary hospitals with directly influencing the growing acceptance of hospital care:

One of the chief services of the hospital was that it broke the patients of hospital shyness. They learned to go to the hospital for relief of minor ailments and for the beginning of the more serious ones. Patients were much more willing to go to a hospital at home near their friends, under the care of a doctor known to them, than to go long distances to a city to be placed under the charge of a strange doctor and in strange surroundings. As patients submitted to operation earlier the mortality lessened, which in turn served to decrease the fear of hospitals. This in many cases enabled the small-hospital doctor to operate with lower mortality than the city surgeon.¹²

Medical missionaries started arriving in China in increasing numbers from 1880 and the rate accelerated again in 1900: between 1870 and 1880, an average of 3.8 arrived per annum; this increased to 13.2 per annum during the next 20 years and increased again, to

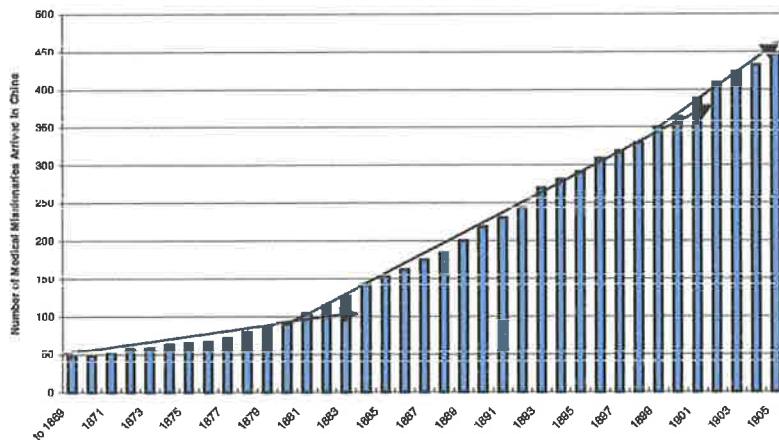


Figure 1: Accumulated Total of Medical Missionaries who had arrived in China, 1869-1905.

Sources: Compiled using Thomson (1887) *Medical Missionaries to the Chinese* and Notices in *CMMJ* (1887-1905) .

19.7 per annum, between 1900 and 1905. (see Figure 1) These surges in arrivals mirrored the pattern of hospital building in America where 80 percent of private and charitable hospitals in 1910 had been

built in the thirty years since 1880 and 32 percent in the ten years after 1900.¹³ (see Figure

¹¹ Rosenberg, *The Care of Strangers*, pp.110 -1.

¹² Quoted in Bordley and Harvey, *Two Centuries of American Medicine*, p. 280.

¹³ Stevens, *In Sickness and in Wealth*, p. 23.

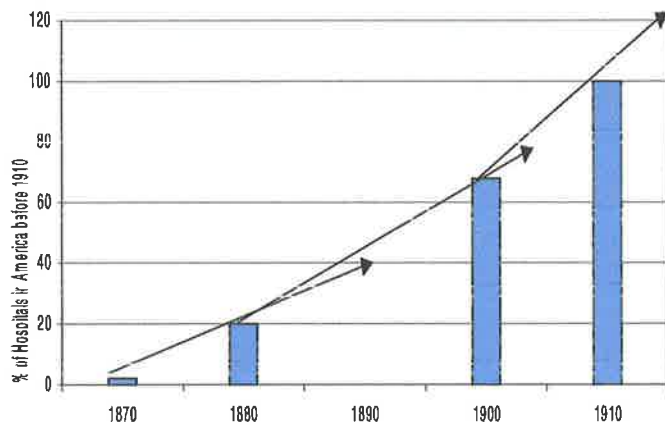


Figure 2: Growth of Hospitals in America, 1870-1910.

Sources: Stevens, Rosemary. *In Sickness and in Wealth: American Hospitals in the Twentieth Century*. Baltimore: The Johns Hopkins University Press, 1999: p 23.

2) The medical missionaries brought with them their ideas of what constituted a hospital, including the current thinking on the link between architecture and the health and safety of patients.

Hospital Architecture and Health

The mid-nineteenth-century city hospital in America was an extremely dangerous place. In the Bellevue Hospital in 1871 for instance, according to one of its resident surgeons, between forty and sixty percent of all amputations proved fatal.¹⁴ However important the roles of religious or secular piety, urbanisation, migration, appeal to private patients or increased familiarity were in the growth of hospitals, the acceptance of hospital care by a wider public between 1880 and 1910 would not have occurred except for the fact that the hospital became markedly safer. Anæsthetics such as ether, in 1846, and chloroform the following year were welcomed as a means to reduce trauma and death from the shock of surgical operations.¹⁵ However, rather than make the hospital a safer place, this innovation was accompanied by greater numbers of patients dying of post-operative infection. Up until this time a surgeon would hesitate to perform abdominal surgery except in an emergency or war situation when a patient was very likely to die without intervention. Thomson describes the period between the introduction of anæsthetics and the advent of antiseptic surgery as

¹⁴ W. Gill Wylie, *Hospitals: Their History, Organisation and Construction*. Boylston Prize Essay of Harvard University for 1876. (New York: Appleton & Co., 1876), cited in Bordley and Harvey, *Two Centuries of American Medicine*, p. 60. In the decade between 1860 and 1870, the death rate from amputations at the Pennsylvania Hospital was lower but still an "alarming" 27%. Rosenberg, *The Care of Strangers*, p. 122.

¹⁵ A Boston dentist, William T.G. Morton, is generally acknowledged as the discoverer of ether as an anaesthetic. Roderick E. McGrew, *Encyclopedia of Medical History* (London: Macmillan Press, 1985), p. 16. Chloroform, known since 1831, was put to use by James Young Simpson in his obstetric practice, in 1847, at Edinburgh. McGrew, *Encyclopedia of Medical History*, p.17.

“a horrible interregnum when operations were performed on the inner cavities of patients who felt no pain at the time but died of consequent infection”.¹⁶ A phenomenon, which was comprised of four specific infections – 'hospital gangrene', erysipelas, pyæmia and septicæmia – came to be referred to as 'hospitalism'.¹⁷ Even for relatively simple procedures, patients treated in hospital were frequently in greater danger from infection than those treated in a tent on a battlefield or at home, whatever the adequacy of that home.

Since the height of European colonial expansion in the eighteenth-century much had been learnt from military and naval medicine, including the management of infection, that had not always been translated into practice. Caroline Hannaway describes how Sir John Pringle, physician to the Earl of Stair, commander of the British Army in 1742, set out to investigate why, “during campaigns ... more troops died from sickness in camps, garrisons and military hospitals than in battles.” He concluded that the main causes were poor ventilation and sanitation along with overcrowding. He investigated the use of what he termed 'antiseptics' to prevent putrefaction and he also recognised a link between marshy locations and the incidence of 'intermittent fever'.¹⁸ This, and the lessons learnt from similar studies that followed, led to the adoption by military hospitals, from the end of the eighteenth century, of strict guidelines which emphasised cleanliness, isolation, and avoidance of overcrowding.

Ideally, buildings should be located on high ground, near a river, to gain the advantages of good drainage and clean, fresh air. This was consistent with the long held belief that disease was caused and spread by a general miasma that was thought to emanate from the ground, decaying matter and the bodies of the sick. The disease, thus spread, could take different

¹⁶ Thompson and Goldin, *The Hospital*, p. 188. See also Rosenberg, *The Care of Strangers*, pp. 144-45.

¹⁷ According to Traux, a name coined by James Young Simpson (see fn. 15). Gangrene was the rotting away of flesh while the person was alive; erysipelas – started as a skin infection and spread to the membranes of the heart, lung, and brain. Accompanied by high fevers and rigors, or shivering fits, it was frequently fatal and extremely contagious. Most hospitals had erysipelas wards. Because it seemed to occur more frequently at particular times of the year some hospitals did not perform operations during certain seasons. Rhoda Traux, *Joseph Lister: Father of Modern Surgery* (London: George G. Harrap & Co. Ltd, 1947) pp. 34-5, 116.

¹⁸ Caroline Hannaway, "From Private Hygiene to Public Health: A Transformation in Western Medicine in the Eighteenth and Nineteenth Centuries," in *5th International Symposium on the Comparative History of Medicine - East and West*, ed. Teizo Ogawa (Susono-shi, Shizuoka, Japan: Saikon Publishing Co. Ltd. Division of Medical History-Taniguchi Foundation, 1980), pp.120-23.

forms depending on the constitution, physiology and morality of the person afflicted. Because it was assumed that air was the source, not merely the carrier, of disease people needed access to 'fresh', as opposed to 'vitiating', 'expired' or 'burned' air; that is, they needed ventilation. The ideal site would also be away from the environmental sources of miasmatic emanations, such as low-lying marshes and 'morbid and dangerous' exhalations from sick people, and filth should be eliminated as far as possible.¹⁹

As well as the widespread belief in miasma as the source of disease it had also long been recognised that some diseases could be spread from one person to another through direct physical contact: that is, some diseases were contagious. The solution to this problem had been to isolate the infected person, sometimes forcibly, as in the case of leprosy, venereal diseases and bubonic plague. The nature of contagion was not sufficiently well understood for it to be considered relevant to hospital design apart from the provision of separate accommodation for obvious cases of infectious diseases. Civilian private hospitals could avoid the danger posed to hospital staff and other patients by refusing to admit those with obvious contagious diseases.²⁰ The problem *they* faced was how to deal with infections that broke out among patients once they were in the hospital. A hundred years later the architectural lessons learnt in the eighteenth century had not been extensively implemented in civilian institutions such as prisons and hospitals, nor in the Crimean military hospital which Florence Nightingale took charge of in 1854.

The Scutari Barrack Hospital in a suburb of Constantinople, an ex-Turkish barrack building, proved to be the death of Nightingale's patients. In the first winter of the war (1854-5), 5,000 of the 12,000 men sent there from the front died in the hospital. The majority of her patients were sick, rather than wounded, and they were crowded into the unventilated, filthy building with defective sewers. In the five months before the arrival (in March 1855) of a Sanitary Commission sent out with instructions to effect sanitary improvements in the hospital. In the words of one of her more recent biographers, Hugh

¹⁹ The miasma from sick people were seen as particularly morbid and dangerous as they were the body's way of ridding itself of disease by elimination noxious matter so that it may regain health Rosenberg, *The Care of Strangers*, p. 125.

²⁰ Admittance policies are discussed at page 183 ff.

Small, "Nightingale had not been running a hospital. She had been running a death camp".²¹ She attributed the high mortality rate to the fact that sick soldiers arrived at Scutari too late and 'already dying'. In her efforts to improve the hospital she had not paid much attention to environmental factors, preferring to concentrate on managing supplies and attending to soldiers' personal cleanliness.²² Members of the Sanitary Commission, influenced by Edwin Chadwick,²³ believed that simple engineering was more likely than medicine to prevent disease.²⁴ They arranged for drains to be fixed; openings made in the roof for ventilation; walls to be disinfected and the rows of patients sleeping in corridors to be reduced from two to one.²⁵ The death rate dropped, from 567 per thousand to 17 per thousand the following winter.²⁶

When she returned from the Crimea Nightingale worked with the statistician Dr William Farr, learning statistical methods and being influenced by his theories of disease causation and spread.²⁷ Farr believed that some "chemical product of putrefaction" which was spread through air and water and, unlike 'contagionism', did not require direct physical contact for infection, caused epidemic and infectious diseases. He coined the term 'zymotic' for this class of disease that was spread more efficiently where there was poor ventilation and overcrowding.²⁸ Nightingale became persuaded of the greater role sanitation and construction had played in the high death rate in her hospital than had the poor health of

²¹ Hugh Small, *Florence Nightingale, Avenging Angel* (London: Constable, 1999), p. 80.

²² *Ibid*, p. 43.

²³ Pioneer of public health in England, "architect of the New Poor Law", and author of the Report on the Sanitary Condition of the Labouring Population of Great Britain in 1842.

²⁴ Christopher Lawrence, "Sanitary Reformers and the Medical Profession in Victorian England," in *5th International Symposium on the Comparative History of Medicine*, ed. Teizo Ogawa (Susono-shi, Shizuoka, Japan: Saikon Publishing Co. Ltd. Division of Medical History-Taniguchi Foundation, 1980), pp. 146-8. The Commission comprised Robert Rawlinson (engineer), John Sutherland and Hector Gavin (both doctors). Small, *Florence Nightingale*, p. 41.

²⁵ Small, *Florence Nightingale*, p. 42.

²⁶ *Ibid*, p. 80.

²⁷ Farr, the Superintendent of the Registrar General's Office, 1837-1879, had studied hygiene at the Paris Medical School and as a journalist advocated the use of statistics to advance public health. He had "built an international reputation both for his skill with numbers and his ability to extract inspirational conclusions from them". *Ibid*, p. 75.

²⁸ *Ibid*, pp. 76-7; See also Rosenberg, *The Care of Strangers*, pp.129-30.

soldiers when they arrived. In a letter to a member of the supply enquiry²⁹ written in May 1857 she made her new position clear:

I do not hesitate to say that the causes of the great catastrophe at Scutari were want of ventilation, want of draining, want of cleanliness (too disgusting to detail further) and of Hospital comforts, frightful overcrowding. However good the construction and ventilation of the corridors, if you fill them with patients, it is the same as building two hospitals back to back. In all our experience, whether of healthy, or of sick men such a construction generates disease.³⁰

As Rosenberg has pointed out, Nightingale's ideas were "hardly original ... and much of their power lay not in novelty, but in their familiarity".³¹ In America these "familiar ideas" were also being confirmed in the field: both the Union and Confederate armies during the Civil War had remarkable success in their field hospitals.³² They found that hospitals consisting of temporary tents or more permanent pavilions, based on the design of the normal barrack, were relatively safe places in which to conduct surgery. This experience added to the already vigorous debate regarding the most appropriate architectural design for civilian hospitals.³³ The idea of hospitals consisting of a series of pavilions was not new. In France, large buildings in the late Middle Ages and early Renaissance had been of the "pavilion-plus-link system" and these formed the basis of the French Academy's (1788) recommendation for the "planning and construction of hospitals".³⁴ An early innovator in

²⁹ Known as the McNeill-Tulloch Commission, it had been sent out to the Crimea at the same time as the Sanitary Commission, with a brief to investigate the army supply system. Small, *Florence Nightingale*, p. 41.

³⁰ *Ibid.*, pp. 91-2.

³¹ *Ibid.*, p. 124.

³² For example, Joseph Jones M.D., Surgeon in the Provisional Army of the Confederate States, found that the key to avoiding 'hospital gangrene' was "free ventilation, good food, clean dressings, avoidance of all chances of contagion, etc.". "Reviews and Notices of Books: United States Sanitary Commission Memoirs - Surgical, Vol. ii - I" *The Medical Record* 6, no. June 15 (1871).

³³ The extensive survey of contemporary knowledge by Frederic J. Mouat, "On Hospitals: Their Management, Construction, and Arrangements in Relation to the Successful Treatment of Disease" *Lancet* (1881) represented the culmination of this debate.

³⁴ Harold N. Jr. Cooledge, *Samuel Sloane: Architect of Philadelphia, 1815-1884* (Philadelphia: University of Pennsylvania, 1986), p. 77. Cooledge's interpretation of events differs from that offered by McGrew, who tells how Louis XVI directed the French Academy of Sciences in 1788 to report on hospital reform, including planning and construction. One member, Jacques Tenon, had visited England and was most impressed by the Royal Naval Hospital at Plymouth, which was on the pavilion model. In McGrew's view the inspiration for the pavilion system was English rather than old French. Whatever the true source, the recommendations were not generally put into effect. The Paris Hospital was to be built on the plan but building was abandoned when the Revolution intervened and the recommendations were "generally ignored until the Crimean War." McGrew, *Encyclopedia of Medical History*, pp. 139-40.

American hospital design, Samuel Sloane, had designed a hospital for the Protestant Episcopal Church in Philadelphia in 1860 which “was widely praised for implementing in full – for the first time in America – the recommendations of the French Academy”.

³⁵Nightingale's *Notes on Hospitals*, published in 1863, popularised the approach and became influential among architects and physicians who were interested in hospital design, in America as well as in Britain.³⁶ There followed an era of rapid expansion of ‘new’ hospitals: designed and built specifically for the purpose – many using this pavilion design rather than the older ‘block’ type. Instead of a single building containing all hospital facilities a hospital was formed from a set of individual pavilions, each able to be thoroughly ventilated, and connected by a the “equivalent of a long gallery”.³⁷

Management, too, gained many practical advantages from this form of building: pavilions could be added to cope with increased demand in times of epidemic or war; the number of pavilions in use could be varied with variations in demand; and they could be closed periodically for disinfecting without disrupting the working of the rest of the hospital. The disadvantages were also many: it was expensive in terms of land, and inefficient in terms of staff, heating, and supervision.

The single-storey pavilion design, though, was really only suitable for broad acres and not for the limited sites available in cities. It was not always possible to establish “a system of ‘rational pavilion hospitals’ scattered around the city, rather than one ostentatious building”.³⁸ Nevertheless new hospitals built in cities in the late 1860s and 1870s combined a number of design elements with the aim of controlling hospitalism. The Roosevelt Hospital built during the 1870s in New York was one such building. It consisted of a central administrative area with attached lateral pavilions; a barrack-type ward connected to the main building only by an open corridor; and an isolation-hut in the garden. The administration block contained various offices, accommodation for officers and their

³⁵ Coolegge, *Samuel Sloane: Architect of Philadelphia, 1815-1884*, p. 76.

³⁶ Jeremy Taylor, *The Architect and the Pavilion Hospital: Dialogue and Design Creativity in England 1850-1914* (London: Leicester University Press, 1997), p. 43.

³⁷ Coolegge, *Samuel Sloane: Architect of Philadelphia, 1815-1884*, p. 78

³⁸ Rosenberg, *The Care of Strangers*, pp. 136-7.

families, a laboratory and apothecary's shop for the preparation and sale of drugs. There were also a number of small wards "for patients requiring special attention" and an operating theatre. The pavilion wards accommodated the majority of patients whilst the barrack ward was reserved for acute surgical cases and the isolation-hut for cases of erysipelas.³⁹

In 1858 Farr and Nightingale had used statistics to show that soldiers in barracks at home in peacetime Britain, despite being volunteers selected for their good health, were dying at twice the rate of civilians in the surrounding districts.⁴⁰ Their findings were corroborated, in 1872, when James Simpson,⁴¹ published an influential work in which he used statistics to demonstrate the efficacy of small, cottage hospitals over large institutions.⁴² Simpson sought to prove that the size of the hospital was a significant factor in the rate of hospitalism: the smaller the hospital, the fewer deaths from infection.⁴³ He recommended that hospitals be modelled on the cottage hospital, popular in small towns and villages. If this was not feasible he advocated building hospitals composed of a large number of separate small, two or three bed, pavilions. He recognised that this solution was not universally applicable and proposed the remodelling of those hospitals that already existed. The basement, in particular, was often seen as the source of 'foul' air as it frequently housed laundries, the 'dead house' or mortuary, and a sick-room for dying patients. The aim of any modification was to frustrate the free flow of air between the various floors and the different wards. He also advocated having separate exits for each ward, corridor and stairway that would enable ventilation and self-purification of each area.⁴⁴

Not everyone agreed with the Simpson solution. There were those with alternative design

³⁹ Description by journalist, W.H. Rideing, writing for Harpers New Monthly Magazine in 1878 quoted in Bordley and Harvey, *Two Centuries of American Medicine*, p. 277.

⁴⁰ Small, *Florence Nightingale*, p. 164.

⁴¹ See fn. 17 at page 56.

⁴² James Y. Simpson, *Anaesthesia, Hospitalism, Hermaphroditism, and a Proposal to Stamp Out Smallpox and other Contagious Diseases* ed. W.G. Simpson (New York: D. Appleton, 1872).

⁴³ Out of 2089 amputations performed in hospital practice 855 (41%) died, while a similar number of operations in private practice had resulted in only 226 (11%) deaths. Traux, *Joseph Lister: Father of Modern Surgery*, p. 116.

⁴⁴ Risse, *Mending Bodies*, p. 367.

approaches. One of these, surgeon and clinical professor at University College London, John E. Erichsen (1818-1896), in his 1874 lectures on hospitalism, noted that the majority of hospitals were just large houses of three or four storeys, with interconnected stairways and corridors. These did not lend themselves to simple modification as Simpson had suggested. Erichsen's solution to this problem was to move “ancillary facilities, such as kitchens, cellars, washing facilities and dead house, to separate buildings”. He also advocated the establishment of independent isolation wards for patients with erysipelas or suppurating wounds and regular closure of wards for disinfection.⁴⁵ As we shall see, this approach resembled the tradition in Chinese domestic dwellings of using a series of separate buildings for various purposes.

The history of the building of the first General Hospital in Lancaster, Pennsylvania, illustrates the problems inherent in using residences as hospitals. The first 'dwelling house' in North Queen Street the trustees rented in late 1893 for \$400 per annum and opened as a hospital at the beginning of 1894 was a case in point. (see Plate 1) The building was a substantial Georgian-style residence consisting of two storeys above what appears to be a double shop-front. It faced directly onto the street and shared party-walls with its neighbours on either side. It would appear that there were no grounds available for the patients' use or for expansion let alone for placing ancillary facilities away from the main building. In any event it was not long before this building proved too small for the trustees purposes. In late 1895 they purchased a larger 'plantation-style' residential property for \$12,500. This building was not much bigger although it had three storeys and a verandah at the front and was set apart from other buildings in what appear to be substantial grounds. (see Plate 2) Unfortunately the trustees discovered that it was “not well adapted for hospital purposes” nor did it lend itself to modification. There was space for expansion though and they decided to commission plans for a building they anticipated being able to erect “gradually as the conditions might render necessary and the funds allow”.⁴⁶

⁴⁵ Ibid .

⁴⁶ *The Lancaster General Hospital: Thirteenth Annual Report*, (Lancaster: Press of the New Era Printing Company, 1906), p.10.

That the design of a hospital was a panacea for hospitalism was not universally accepted. Although the role of ‘germs’ (bacteria) in disease causation was not yet understood, surgeons used a variety of empirically discovered methods to counteract infection; these included washing wounds, draining pus, and using antiseptics.⁴⁷ Joseph Lister, influenced by Pasteur's work on putrefaction in the early 1860s, but still speaking in terms of the miasma theory, had introduced a form of antiseptic surgery to the hospital at Glasgow in 1865. He operated in a mist of carbolic acid and sewed up wounds with antiseptic catgut demonstrating that he could greatly reduce the incidence of infection. He saw no value in the architectural solution.⁴⁸ In 1869, he published a paper wherein he noted that, despite the fact that his wards at Glasgow had been the least well-ventilated and that he had crowded patients in – children sometimes two or three to a bed and others on mattresses on the floor – his results had been excellent. He had not had a single case of pyæmia, erysipelas or hospital gangrene in the nine months he had been practising in his wards.⁴⁹ He encountered strident criticism from some of his colleagues and many in the medical profession did not follow his lead and, even when Pasteur demonstrated, in 1875, that living organisms (microbes) caused disease, many remained unconvinced.⁵⁰ Some anti-Listerians, including Erichsen, claimed the architectural approach could obviate the need for antiseptics and others vigorously campaigned against the ‘germ theory’ in general and Lister's methods in particular. But as Milburn, writing in the *Journal of the Royal Institute of British Architects* in 1913, pointed out “bacteriology has not discounted the value of fresh air and sunlight; it has explained and emphasised it”.⁵¹

It was a number of years before the bacterial agents that caused specific diseases were

⁴⁷ See Robert Liston, "The Dressing and Healing of Wounds" *Lancet* (1835): pp. 135-38.

⁴⁸ Simpson's plan (to erect small iron huts) had “won some powerful supporters, who were clamouring that infected hospitals should be destroyed, but Lister had never liked the idea” Traux, *Joseph Lister: Father of Modern Surgery*, p. 89. On Lister and antiseptic surgery, see Risse, *Mending Bodies*, pp. 373-78.

⁴⁹ “On the Effects of the Antiseptic System of Treatment upon the Salubrity of a Hospital”. Quoted in Traux, *Joseph Lister: Father of Modern Surgery*, pp. 144-5.

⁵⁰ Pasteur, in an address to a meeting of the International Medical Congress in London in 1881 expressed his satisfaction with the acceptance of the germ theory by the medical profession in England. In particular, he recalled “the lively feeling of satisfaction I experienced when your great surgeon Lister declared that that my publication in 1857 on milk fermentation had inspired him with his first ideas on his valuable surgical method. Louis Pasteur, "The Germ Theory" *Lancet* (1881): p. 271.

⁵¹ Quoted in Taylor, *Architect and the Pavilion Hospital*, p. 50.

positively identified: the first were the anthrax and tubercle bacilli by Robert Koch in 1876 and 1882 respectively.⁵² Throughout the 1880s and 1890s causative agents for erysipelas, diphtheria, tetanus, pneumonia, meningitis, plague, and bacillary dysentery were among those identified. Surgical practice was gradually adapted in light of these discoveries and Lister's antiseptic surgery was replaced, or augmented, by 'aseptic' surgery where everything that the patient came in contact with was sterilised.⁵³

Despite this concentration of scientific effort and the increase in knowledge during the last quarter of the nineteenth century the new disease theories, while influencing the practice of surgery, were not translated quickly into architecture. However, Johns Hopkins, the philanthropist who founded the eponymous model modern teaching hospital built between 1876 and 1885 in Baltimore, did recognise that the success of the hospital, as a place of healing, would greatly depend on the layout and construction of the buildings. Although the trustees sought advice and plans from experts (all physicians rather than architects) and insisted that they would adhere to their recommendations, they had already determined that the European block and corridor hospital was not an option. Ventilation, separation and segregation offered by the pavilion design dominated their thinking. John S. Billings, who was chosen as consultant to the project, understood the new germ theory of disease probably better than his fellow committee members. He appreciated that ventilation, while it might dilute the concentration of the living particles, would not eliminate them and hence remove the opportunity for infection. He recommended pavilion wards and limiting the maximum number of patients in a ward to twenty-four. He wanted smaller rooms for the estimated twenty-five percent of patients who, suffering from acute disease, would require some degree of isolation. He proposed housing the highly contagious patients in tents that

⁵² McGrew, *Encyclopedia of Medical History*, pp. 28-9.

⁵³ For changes in the practice of surgery around the turn of the twentieth century, see Ulrich Troehler, "To Resect, to Restore, to Replace and to Assess: The Development of Ideas in European Surgery, 1850-1990," in *History of Ideas in Surgery: 17th International Symposium on the Comparative History of Medicine - East and West*, ed. Shizu Sakai Yosio Kawakita, Yasuo Otsuka (Susono-shi, Shizuoka, Japan: Ishiyaku Euro-America, Inc., 1992) ; James R. Jr. Wright, "Relationship of Surgical Oncology and Pathology in Early 20th Century America," in *History of Ideas in Surgery: Proceedings of the 17th International Symposium on the Comparative History of Medicine-East and West*, ed. Shizu Sakai Yosio Kawakita, Yasuo Otsuka (Susono-shi, Shizuoka, Japan: Ishiyaku Euro-America, Inc., 1992).

could be erected as the need arose.⁵⁴

The Johns Hopkins hospital, which represented the most up-to-date teaching hospital design, was hardly a prototype for smaller community hospitals or for mission hospitals in China. Medical missionaries to China were more likely to look to hospitals like the Lancaster General for their model. The Lancaster Hospital trustees (having decided to build in 1897) proceeded in 1902 to put up an architecturally designed, block-style hospital of three storeys.⁵⁵ Two thirds of the building, first the northern accommodation wing (occupied in 1903) then the central administrative core, was completed by 1905. The building style chosen by the architect was a perfect example of the neo-colonial form of Georgian-Revival preferred at the time for public institutions. As can be seen in the architectural rendering (see Plate 3), the architect incorporated all the features common to this style: a rectangular plan; minimum minor projections; strictly symmetrical façade; hipped roof; eaves detailed as classical cornices; a central cupola; chimneys adding to the symmetry; rectangular windows with a double hung sash; the central part of the façade protruding slightly and topped with a pediment (with supporting pilasters); and a portico with free-standing columns.⁵⁶ With this design the architect had completely by-passed the pavilion concept. The general wards are relatively small and no special pains appear to have been taken to maximise ventilation and the east-west orientation does not allow for much sunlight into the rooms. It is clear from the floor plan that the emphasis was on fitting in as many private rooms as possible and there is little evidence of the special design features that we associate with a hospital (see Plates 4, 5, 6). For example, other than being provided with a dining room and a balcony, located as far as is possible away from the patients, nurses were not well catered for. The diet kitchen and communal toilet are adjacent to one another and open onto the same corridor. There was no provision for a special isolation area but this may have been deemed unnecessary since the rules of this hospital disallowed the

⁵⁴ The design process for Johns Hopkins is discussed in detail in Thompson and Goldin, *The Hospital*, pp. 175-87.

⁵⁵ The executive committee were authorized by the Board of Trustees to "confer" with an architect of the city, in early 1897. C. Emblan Urban did not produce the plans for the new hospital until June 1902. *Lancaster Hospital*, p. 10.

⁵⁶ Marcus Whiffen, *American Architecture Since 1780: A Guide to the Styles* (Cambridge, Mass.: M.I.T. Press, 1969), pp.159-60.

admission of patients with “infectious or contagious diseases” without the express permission of the Board of Directors.⁵⁷ Apart from the operating suite with its skylight over the operating room the plan resembles that of a rather grand residence.

Thus, when the second wave of medical missionaries began their assault on China in 1900 anything from a few beds in a back room to a substantial building designed for the purpose came under the rubric of ‘hospital’ in America. There was no such thing as a typical hospital. The situation most medical missionaries found themselves in China would have more closely resembled that of a doctor setting up in a village or small town in America than that encountered by the trustees of the Johns Hopkins or Roosevelt hospitals.

⁵⁷ The Lancaster General Hospital: Thirteenth Annual Report (1906), p. 53.



Plate 1: First Lancaster Hospital, 1894.

Source: The Lancaster General Hospital: Thirteenth Annual Report, Lancaster: Press of the New Era Printing Company, 1905: foll. p. 8.



Plate 2: Second Lancaster Hospital, 1895.

Source: The Lancaster General Hospital: Thirteenth Annual Report, Lancaster: Press of the New Era Printing Company, 1905: foll. p. 8.

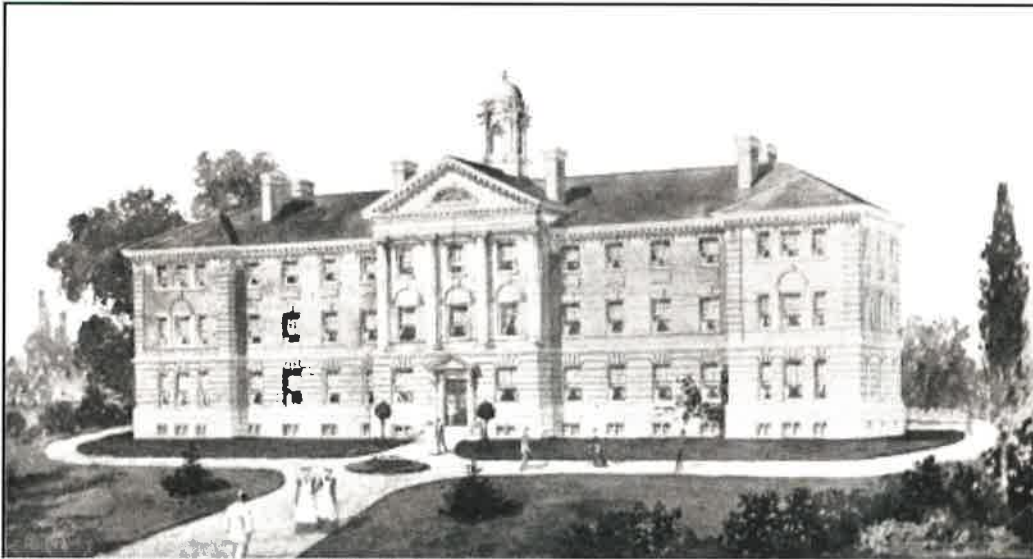
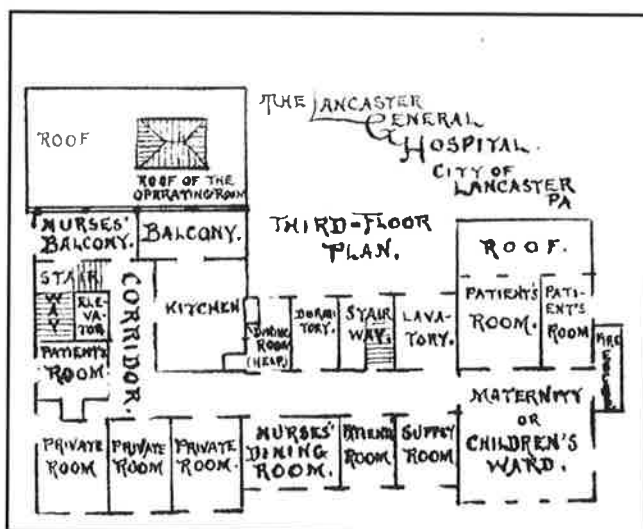
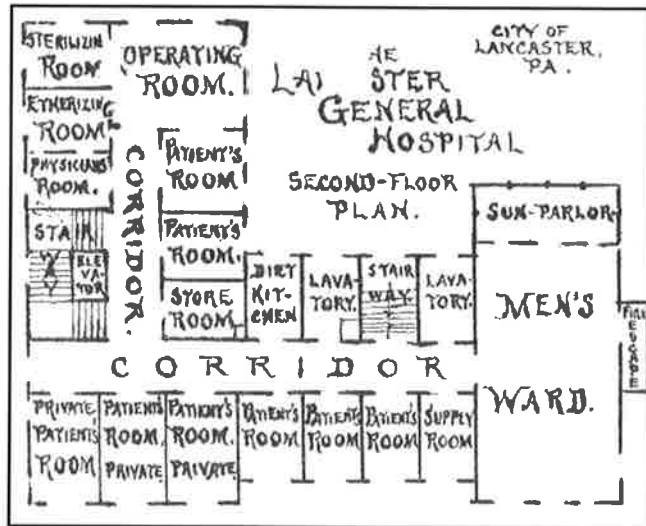
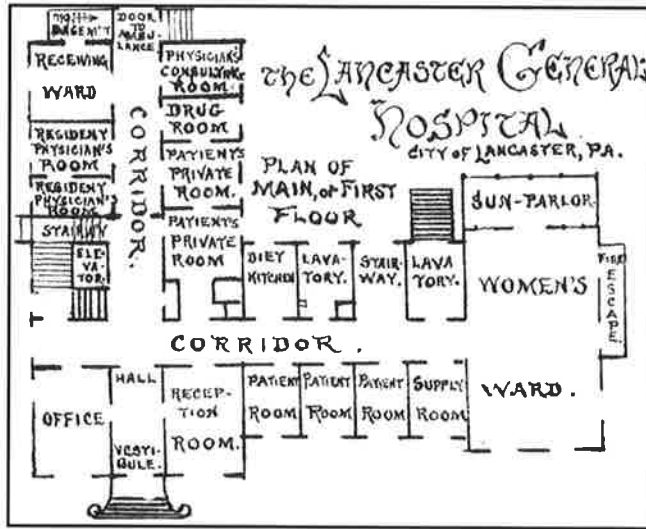


Plate 3: Final Lancaster Hospital, 1905.

Source: The Lancaster General Hospital: Thirteenth Annual Report, k: Press of the New Era Printing Company, 1905: foll. p. 40



Plates 4,5,6: Floor Plans, Lancaster Hospital, 1905
 Source: *The Lancaster General Hospital: Thirteenth Annual Report*, Lancaster: Press of the New Era Printing Company, 1905: foll. p. 56.

CHAPTER 3: IN THE BEGINNING

Sailing into any one of China's Treaty Ports at the turn of the twentieth century and judging by the skyline one could be forgiven for assuming China, like India, was a European colony. Building and town planning are often the most obvious symbols of colonialism and in China, as in India, the foreigners had indelibly stamped their presence in the country by this time. (see Plate 7: The Bund, Shanghai, 1876¹) China though, at the turn of the twentieth-century was not a colony of any European power.² That is, it was not a colony in the strict political sense: there had been no "establishment and maintenance, for an extended time, of rule over an alien people that is separate and subordinate to the ruling power".³ The European powers had entered China, and although they had fought and won military encounters and had exacted concessions under various treaties, the Chinese government remained in power. Similarly, the relationship between the European powers and China could not be branded simplistically as 'imperialism'. Foreigners were certainly living in China, by far the majority of them in foreign enclaves they had established in the so-called Treaty Ports protected by (mainly British) gunboats, and in a limited number of major cities. Doubtless the foreign powers, particularly Britain, had imperialist designs on China and may have hoped, and indeed anticipated, the situation developing along similar lines to that which they had experienced in India. It did not. According to Murphey, in his book comparing the British experience in India and China, this was due in large part to the fact that China had a more highly developed economy, system of management, cultural pride, and sense of self-sufficiency, than India. As well:

The Chinese proved themselves adept at both diplomatic negotiation and at resisting the implementation of concessions once granted because of their conviction that foreign incursion was something to be resisted.⁴

¹ Rhoads Murphey, *The Outsiders: The Western Experience in India and China* (Ann Arbor: The University of Michigan Press, 1977), between pp. 176 and 177.

² Except for Hong Kong ceded to Britain in 1842 under the terms of the Treaty of Nanjing.

³ Anthony D. King, *Colonial Urban Development: Culture, Social Power and Environment*. (London: Routledge & Kegan Paul, 1976), p. 17.

⁴ Murphey, *The Outsiders*, p. 103.

As Osterhammel points out, although in late nineteenth-century China a large number of political, economic, and physical phenomena that a wide variety of theorists would include under the heading of 'imperialism' were evident, the term does not adequately describe China's relationship with the West. He rejects the label 'semi-colonial' and opts for a model he calls "informal imperialism" which, he says, reached its high point in the twenty years between 1911 and 1931.⁵ Foreigners certainly stamped their presence on the built environment of treaty ports and superficially they resembled their Indian equivalents.

Murphey describes them:

physically, the cities looked like the alien transplants they were, a circumstance underlined by their orientation to the sea and, wherever possible to surrounding waterways, originally designed for defense.⁶

Chinese cities rarely, if ever, faced the sea but were built looking inward, surrounded by defensive and protective walls. The dominant foreign community in the various ports built in their national style. This tended to lend a particular character to each of the ports: Canton - British; Qingdao 青島 - German; Port-Arthur and Dalian 大连 - Russian; Tianjin 天津 - a blend of Russian, British and Japanese. Shanghai, although heavily influenced by the French and British, was "renowned for its international flavor".⁷ Anthony King, in his treatise on colonial urban development, concentrated his attention on India where he described the foreign enclaves, or "colonial urban settlements", as being "occupied, modified and principally inhabited by representatives of the colonising society".⁸ In contrast in China, while they looked the same, they were occupied by 'would-be colonialists' - mainly merchants. In China the foreigners' formal control was restricted both in space and in scope: *to* the area conceded and *of* their own nationals.⁹ As in India, foreigners, in the main, kept themselves separate from their 'hosts': both visually and

⁵ See Jurgen Osterhammel, "Semi-Colonialism and Informal Empire in Twentieth-Century China: Towards a Framework for Analysis" in *Imperialism and After: Continuities and Discontinuities*, ed. Wolfgang J. Mommsen and Jurgen Osterhammel (London: Allen and Unwin, 1986).

⁶ Murphey, *The Outsiders*, pp. 21-2.

⁷ Su Gin-Djih, *Chinese Architecture: Past and Contemporary* (Hong Kong: The Sin Poh Amalgamated (H.K.) Ltd., 1964), p. 127.

⁸ King, *Colonial Urban Development: Culture, Social Power and Environment.*, p. 17.

⁹ The exception was Hong Kong. When it became a crown colony Britain assumed control over all aspects of life, including the health of the Chinese population.

physically. They expressed pride in the straight wide streets in the foreign concessions of Shanghai and compared them to the traditional narrow streets of the Chinese quarter. (see Plate 8: Foreign Settlement Homes, Hankow¹⁰) Comprising the tools of imported western capitalism such as joint stock companies, trading houses, banks and insurance facilities; the settlements were, in Murphey's words:

working models' of western nationalism, the Protestant ethic, the sanctity and freedom of private property, and the virtues of individual enterprise.¹¹

Protestant missionaries, though, comprised a distinct class among the *metropolitan* population and did not necessarily live within the foreign enclaves. Few of them mixed socially with their compatriot traders or their government representatives at the Legation. Firstly, the missionaries were not necessarily admired nor their work approved of by other foreigners. Pat Barr quotes E.H. Parker, the American consul in Peking, as an example of the attitude taken towards missionaries. He considered the missionaries did some good, like teaching “poor children to be clean, [to] speak the truth and behave themselves chastely” and could be useful as interpreters for “those legations who have no proper staff of their own”. He thought that they discouraged vice but criticised their “vain endeavours to disrupt and discredit one of the world's richest and most ancient cultures”. In his opinion, missionaries should

minister to drunken sailors ... in the treaty ports who obviously require corrective discipline” and better still, they could “go back home and work among the thousands of lost ungodly souls that inhabit the slums of such cities as Manchester and Chicago.¹²

Secondly, and more significantly, the missionaries – whose purpose was, after all, evangelism – needed to interact with the Chinese they hoped to influence. Medical missionaries, in particular, needed to attract Chinese patients into their buildings so they had to establish themselves outside the foreign enclaves.

¹⁰ John Thomson, *China, the Land and its People: Early Photographs by John Thomson* ed. John Warner (Hong Kong: John Warner Publications, 1977 (1873)).

¹¹ Murphey, *The Outsiders*, pp. 21-2.

¹² Pat Barr, *To China with Love* (London: Secker & Warburg, 1972), p. 84.

Treaty Port Hospitals

Medical missionaries were not alone in thinking it advantageous to be near potential church members and apart from their countrymen. For instance, Charles Ewing of the American Board of Commissioners for Foreign Missions (ABCFM)¹³ at Tianjin 天津 (Shandong) in North China, wrote in July 1906 about his decision to move the mission to a “better location”; the new property, besides being larger, had the added attraction of being away from other missionaries. He argued:

in the beginning it was wise to be near the foreign concession for health reasons. Now we are too far from the Chinese residence sections and are four missions together.¹⁴

The new location was accessible to Chinese – being near two large villages and having a “public highway on one border and [being] just off the great road to Peking”. Not only would he be nearer to the Chinese but, living away from foreigners, he looked forward to being relieved of the “many demands on our time”.¹⁵

After considering the desired location the next task for a medical missionary was to find suitable premises. The earliest mission-based hospitals established in treaty ports used existing (Chinese) buildings, often outside any mission compound. For example, Peter Parker, the first medical missionary to China, in 1835 chose a warehouse in Canton for his first hospital in a street “not frequented by foreigners”.¹⁶ When John Kerr re-opened the Canton Hospital in 1858 (closed in 1856 because of the war and subsequently destroyed by fire) it was in a rented Chinese building in the southern suburbs. He stayed there for eight years.¹⁷ Similarly, Dr Dauphin Osgood and his wife, representing the ABCFM, “rented a

¹³ Headquartered in Boston, Massachusetts, the ABCFM entered China in 1830 when Rev. E.C. Bridgman (the first American missionary to China) arrived in Canton. Couling, *The Encyclopaedia Sinica*, pp. 15-7. For an analysis of the backgrounds and opinions of missionaries with the ABCFM in the period immediately following the focus of this study, see Janet Elaine Heining, “The American Board in China: The Missionaries' Experiences and Attitudes, 1911-1952” (Ph.D., University of Wisconsin - Madison, 1981).

¹⁴ E.G. Ruoff, ed., *Death Throes of a Dynasty: Letters and Diaries of Charles and Bessie Ewing, Missionaries to China* (Kent, Ohio: The Kent State University Press, 1990), p. 170.

¹⁵ Ibid

¹⁶ Peter Parker, started work in 1834. “Walks About Canton - Extracts from a Private Journal” *Chinese Repository* 4, no. May (1835): pp.45-5.

¹⁷ John Glasgow Kerr, “History of Medical Missionary Society's Hospital, Canton” *CMMJ* 10, no. 1, 3 (1896): p. 55.

small native building and received in-patients” when they arrived in the port of Fuzhou 福州 in Fujian Province on the south-eastern coast of China in 1870. Later that year they established a second dispensary in “that part of Foochow called Ponasang 保福山” and another “native building ...was rented for hospital use”.¹⁸

The accommodation situation facing newly arrived missionaries in treaty ports changed during the period under review. Although the earliest hospitals were housed in Chinese buildings the hospitals they later built in the port cities tended to be in either a ‘colonial’¹⁹ or modest, foreign style. The Gregg Hospital for Women and Children, built by the American Presbyterians²⁰ in 1903 at Canton, was a good example of the former. (see Plate 9²¹) The *Hua Mei* 华美 (literally the China-America) Hospital, operated by the American Baptist Foreign Missionary Society (ABFMS),²² that replaced the rented Chinese house that served as both residence and hospital accommodation for Dr D.J. McGowan, the first foreign medical missionary at Ningbo 宁波, was an example of the latter.²³ (see Plate 10²⁴)

An Early Exception: Soochow

The hospital established by the Board of Missions of the Methodist Episcopal Mission (MEM), at Suzhou 苏州 in 1883 was an interesting exception.²⁵ The most striking thing

¹⁸ H.T. Whitney, “Medical Missionary Work in Foochow” *CMMJ* 3, no. 3 (1889): pp. 85-6.

¹⁹ One particular colonial architectural style was particularly popular with the British and later the Americans. It had emerged in colonial India and the British brought it with them to China. Open verandahs with wide arches ran around the outside of the first one or two storeys and over-hanging roofs shielded the upper storeys. This early building style was common to all the nineteenth century treaty ports in Central and South China. It was referred to as “Compradoric”. Like the ‘compradore’, a person engaged by a foreign firm as a go-between between them and the Chinese hong merchants, it was a blend of Chinese with foreign methods.

²⁰ Headquartered in New York, the American Presbyterian Mission (North), the “largest denominational mission in China, started work in Macau in 1843 and in Canton in 1847. Couling, *The Encyclopaedia Sinica*, pp. 18-22.

²¹ *Hospitals in China*, Medical Mission Series (Philadelphia, Pa.: The Woman's Foreign Missionary Society of the Presbyterian Church, 1912), front cover.

²² Headquartered in Boston, Massachusetts started work at Hongkong in 1842 and canton in 1844. Couling, *The Encyclopaedia Sinica*, pp. 13-5.

²³ Built on the site, outside the North Gate, where McGowan started medical work in Ningpo in 1843. J.S. Grant, *Wha Mei Hospital Report for 1913* (Ningpo: American Baptist Foreign Missionary Society, 1914), p. 1.

²⁴ *Ibid*, frontispiece.

²⁵ The Methodist Episcopal Mission (South) had its headquarters in Nashville, Tennessee and entered China in 1842. For details of their work see Couling, *The Encyclopaedia Sinica*, pp. 364-65.

about the design (see Plates 11²⁶ and 12²⁷) is the human scale and the extent of coherence and integration of the buildings on the site. It is unmistakably Chinese while at the same time clearly influenced by western ideas. The hospital consisted of a series of buildings, all of similar proportions: long, low, and rectangular. All had simple tiled flush-gable roofs, identical square windows on the long sides and taller rectangular windows, with shutters, on the ends. (see Plate 13: Traditional Chinese Roof Designs²⁸) They were set on a grid and all the wards share the same orientation, at right angles to the main entrance and outpatient department. The whole was contained in a walled compound with a main gate into the dispensary and a small gate into the residential area. All the buildings were connected by covered walkways, forming a series of square courtyards. Buildings took up most, but not all, of the area within the walls and there is quite a large open space with trees in the northeast corner that was used as a kitchen garden. The hospital was described in the booklet published in 1933 to mark fifty years of medical work in Suzhou as:

most carefully planned and worked out along the most up-to-date ideas of the time. It was then among the best of mission hospitals. Dr. Lambuth aimed at giving the very best in scientific medicine.²⁹

The layout of buildings would have allowed air to flow freely around them and to expose them to sunshine. The rectangular plan of the wards leant the advantages associated with the pavilion design and covered walkways meant that access to all buildings was easy and safe from the weather. The ward buildings were raised above the ground and, with the chimney-like vents set into the roofs, ventilation would have been assured.

Why was this set of buildings so different from others built at this relatively early stage in the development of purpose-built hospitals? Probably the answer lies in the experience and history of the man who built it. He was different from most American medical missionaries in that he had been born in Shanghai in 1854 and spent his early life in China. He was

²⁶ *Soochow Hospital, 1883-1933: Fiftieth Anniversary*, (Board of Missions of Methodist Episcopal Church, South, 1933), n.p.

²⁷ "Soochow Hospital, Methodist Episcopal Church, South" *CMMJ* 18, no. 2 (1904): foll. p. 56.

²⁸ Liang Ssu-ch'eng, *A Pictorial History of Chinese Architecture: A Study of the Development of its Structural System and the Evolution of its Types*. (Cambridge, Massachusetts: M.I.T. Press, 1984), p. 11.

²⁹ *Soochow Hospital, 1883-1933: Fiftieth Anniversary*,]

educated in medicine in America and returned to China as a medical missionary in 1877.³⁰ He undertook further study in America before arriving in Suzhou in 1882 and building this hospital. The combination of growing up in China and receiving a medical education in America, particularly at the time when the debate about the link between healthy buildings and architecture was current, could explain this pleasant and practical complex. He would have been familiar with traditional Chinese building style and layout and the use of these principles in the design would have made his hospital fit comfortably into the Chinese landscape.

Moving into the Interior

The situation developed somewhat differently when the missionaries started to move into the interior of the country, after 1860. They, like their predecessors in the treaty ports, rented and adapted existing Chinese buildings as 'first' hospitals. When they did build hospitals, rather than using the architectural style of buildings to symbolise western superiority, science, or modernity, many builders of mission hospitals thought that the hospital should blend in with its surroundings.

Once China had signed the Treaties of Tianjin in 1860 foreigners were allowed, for the first time, to travel throughout the country and "reside and preach in the Chinese interior under treaty protection".³¹ As in America when a young doctor decided to set up a medical practice in a small town, the medical missionary arriving in a Chinese town or village made do with whatever he could find in the way of accommodation. In China this accommodation was invariably more humble and basic than he would have had in America. (see Plates 14: First Mission Dispensary at Ping-yin³², and 15: Hospital at Panjiachuang,

³⁰ Qualifications M.D., D.D. Left Suzhou in 1885 on account of family's health. 1898 became General Secretary of the Board of Missions and elected Bishop in 1910. Died in Yokahama in 1921. Ashes buried in Shanghai. Ibid

³¹ Cohen, *Discovering History in China*, p. 44. For a contemporary summary of the rights of foreigners, especially missionaries, under the various treaties see Gilbert Reid, "Chinese Law on the Ownership of Church Property in the Interior of China: Section I - The General Right Established" *Chinese Recorder and Missionary Journal* 20, no. 9,10 (1889): pp. 420-26.

³² Mary Moline, *A Threatened Hospital in China: Being the Story of St. Agatha's Hospital, P'ing Yin* (London: Society for the Propagation of the Gospel in Foreign Parts, 1933), foll. p. 6.

both in Shandong province³³) The anti-foreign sentiment and in particular, anti-Christian activity, which was at its height in the period 1860 to 1900 also constrained the choice of building and location.³⁴ Many missionaries describe the long and convoluted negotiations, (including subterfuge) they conducted to be allowed to rent buildings.³⁵ Chinese buildings, including inns, houses, factories and temples all figure as sites of 'first' hospitals.

First Hospitals – “Making Do”

When Henry T. Whitney, of the ABCFM, started visiting Shaowu 邵武, (250 miles from Fuzhou) he worked out of a “Chinese inn.” Three years later he build a “small half foreign house” from which he started dispensing.³⁶ Even as late as 1906 when Edward Hume settled in Changsha 长沙, in Hunan, on behalf of the Yale Foreign Missionary Society (YFMS) to establish the Yale Medical Mission, an inn was his first hospital. He describes it in his biography as having “outhouses at the back where pigs were fallowed for market” and wells in the front and rear courtyards, which provided “plenty of water”. He used insect powder, whitewashed the walls, replaced paper with glass panes in windows, and added new gutters and was ready for business.³⁷ This description is somewhat at odds with the one he furnished to the *CMJ* in 1908 when he reported on the official opening. Then it was “but a rented Chinese house, remodelled” which provided accommodation for fourteen patients (eighteen at “a stretch”); two wards with three patients, and four two-bed wards. There were also quarters for a missionary-trained Chinese doctor, a “good doctor's laboratory, a

³³ Francis F. Tucker, Emma Boose Tucker, and Myra L. Sawyer, *A Chinese Revolution in Physical Well-being at Pangkiachwang Shantung, China, 1911-1912* (Williams Hospital of the American Board, 1912), p. 13.

³⁴ Cohen, *Discovering History in China*, p. 44

³⁵ For example, J. Howie described the experiences of the English Presbyterian Mission at Zhangpu 漳浦 in Fujian: “for six or seven years earnest attempts were made to purchase ground for the erection of a chapel ... the first attempt to purchase land was met with wild opposition from the literary men and the Yamên people. The man who sold us the ground was seized and beaten, and for several months kept in prison; false witnesses were whipped up, who swore that the ground belonged to another man.” After the case went before a magistrate the mission ended up with a small piece of land, one quarter the size of the original. When, in 1889, they built a small house so quickly that “the wise old men of the place were only rubbing their eyes and looking around the wee cottage when we began to inhabit it”, they were surprised to encounter no “outcry.” J. Howie, “First Impressions and Experiences in Chang-poo” *CMMJ* 4, no. 1 (1890): p. 2.

³⁶ H.T. Whitney, “History of Medical work in Shaowu” *CMMJ* 2, no. 3 (1888). See also Osgood at page 70.

³⁷ Edward H. Hume, *Doctors East Doctors West: An American Physician's Life in China* (New York: W.W. Norton and Co., 1946), p. 41.

clean operating room, and good accommodation for the dispensary work.”³⁸ It may be that time had somewhat coloured his memory of that first building but there is no doubt that it was far from purpose-built. We have no ground plan for the Yale complex but from his description a picture emerges of a group of simple Chinese-style buildings set around a courtyard.

Elliott Osgood, who followed his father³⁹ who had died in 1880, as a medical missionary, wrote about the beginnings of medical work in 1899 in a relatively small town of 20,000 people: Chuzhou 滁洲, in Anhui. He described the first building used for a hospital as “a little thatched-roofed chapel”. This lack of sophisticated accommodation did not dissuade him from amputating a boy’s lower arm.⁴⁰ After returning to Chuzhou in 1901, having been driven away during the year when the Boxers were active, he built a small dispensary and another building to house sixteen inpatients. Unfortunately, we do not have a description of the style, plan or materials of these buildings beyond the fact that the dispensary measured 35 by 22 feet and with a verandah running for the entire length. He gives more details of his next venture: a mortgage⁴¹ on a set of sixteen buildings that had served as a grain *hang* 行 in which he could accommodate forty inpatients. The buildings ranged from four with (presumably timber) floors and brick walls to some that were no more than open sheds. Roofs were thatched or tiled and floors were dirt or brick. In his estimation, these buildings provided him with a “very poor place to do operations, but a very fair place for housing inpatients”. The first building that he considered a 'real' hospital was the two-storey building, with a “roomy attic and verandah the entire length”, which he put up next.⁴² Another who set up in makeshift accommodation, was the founder of the Hope Hospital in Huaiyuan

³⁸ Edward H. Hume, "Opening of the Yale Mission Hospital, Changsha, Hunan" *CMMJ* 22, no. May, No. 3 (1908): p. 184.

³⁹ Dauphin Osgood, see page 70.

⁴⁰ Elliott I. Osgood, "Tisdale Hospital, Chuchow" *CMJ* 25, no. 6 (1911): p. 413.

⁴¹ See Gilbert Reid, "Chinese Law on the Ownership of Church Property in the Interior of China: Section II - Special Limitations to the General Right" *Chinese Recorder and Missionary Journal* 20, no. 9,10 (1889) especially p. 455 where Reid explains that in the Chinese code and various Treaties when the word “sell” was used it was often accompanied by the words “to ‘lease’ or ‘mortgage’ “ so he advised missionaries to “adopt an expression which gives no offence”, for example “perpetual lease”.

⁴² He could house fifty patients in this building which was later incorporated into a larger complex built with funds sourced from philanthropists, Mr and Mrs James Tisdale of Kentucky. Osgood, "Tisdale Hospital, Chuchow": p. 414 -15.

怀远, Samuel Cochran of the APM (N), who carried out his first operations in “straw-roofed native houses”.⁴³

When Claude Lee, of the American Church Mission (ACM), established a dispensary in Wuxi 无锡 in Jiangsu in 1908, he described it as the “first Western style building ever erected in Wusih ... a model strictly of utility and not at all of beauty”.⁴⁴ The small grey brick building, described as being “well built and well planned, extremely neat, and in the very best of taste”, lacked any pretension and displayed none of the obvious characteristics of a modern hospital.⁴⁵(see Plate 16⁴⁶) Almost immediately he was faced with the problem of what to do with patients who required more care than he could provide in a dispensary visit. His novel solution was, for those who could afford it, to hire one of the numerous houseboats available and moor it on the canal in front of the hospital. For those so poor they could not afford the houseboat option he built the “Chinese equivalent of a tent” made from matting spread over bamboo frames in the space between his house and the dispensary.⁴⁷ His next move was to purchase a “tiny Chinese house” that he renovated to accommodate a few patients: three men and two women – in one room divided by a wooden partition. Unfortunately he makes no mention in his diary of any effect this change of accommodation, from the open air to a crowded room, had on the health of his patients. Two years later, in 1910, he was given the money to build a house and so added his own dwelling to the hospital stock.⁴⁸ By 1913 he was able to build “a real hospital” with four wards each of fourteen beds, an operating room and office and he was determined to “run this building along modern and scientific lines as far as I possibly can”.⁴⁹ He, like many

⁴³ W.E. Macklin, “Hwaiyuan Hospital Opening: Letter to the Editor” *CMMJ* 24, no. 5 (1910): p. 374.

⁴⁴ Claude M. Lee, *Leaves from the Notebook of a Missionary Doctor* (Shanghai: American Church Mission, 1932), p.11. The American Church Mission (full name Domestic and Foreign Missionary Society of the Protestant Episcopal Church in the U.S.A.), another Anglican organisation, had its headquarters in New York and had entered China in 1835 but the first “tentative” medical work was not started until 1845. Couling, *The Encyclopaedia Sinica*, pp. 144-46.

⁴⁵ A.M. Jefferys, “Formal Opening of St. Andrew’s Dispensary, Wusieh, Kiangsu” *CMMJ* 22, no. 3 (1908): p. 185.

⁴⁶ W. Hamilton Jefferys and James L. Maxwell, *The Diseases of China* (Philadelphia: P. Blakiston’s Son & Co., 1910), p. 668

⁴⁷ Lee, *Leaves from the Notebook*, p.13.

⁴⁸ *Ibid*, pp. 19-20.

⁴⁹ *Ibid*, p.20.

others, had joined the ranks of “doctor-builder” and had to become knowledgeable about theories of healthy buildings, plans, building methods and materials and skilled in contracting and supervising Chinese labour.



Plate 7: The Bund, Shanghai, 1876.

Source: Murphey, Rhoads. *The Outsiders: The Western Experience in India and China*, Ann Arbor: The University of Michigan Press, 1977: between pages 176-77.



Plate 8: Foreign Settlement Homes : Hankow

Source: Thomson, John. *China, the Land and its People: Early Photographs by John Thomson, ed. John Warner*. Hong Kong: John Warner Publications, 1977 [1873]: between pages 104-105



Plate 9: Maternity Ward, Gregg Hospital. Canton, 1903

Source: *Medical Mission Series: Hospitals in China*, 1912: front cover

Plate 10: Hua Mei Hospital (viewed from river, Ningbo), built in stages from 1902

Source: J.S. Grant (1914) *Wha Mei Hospital Report for 1913*, frontispiece.



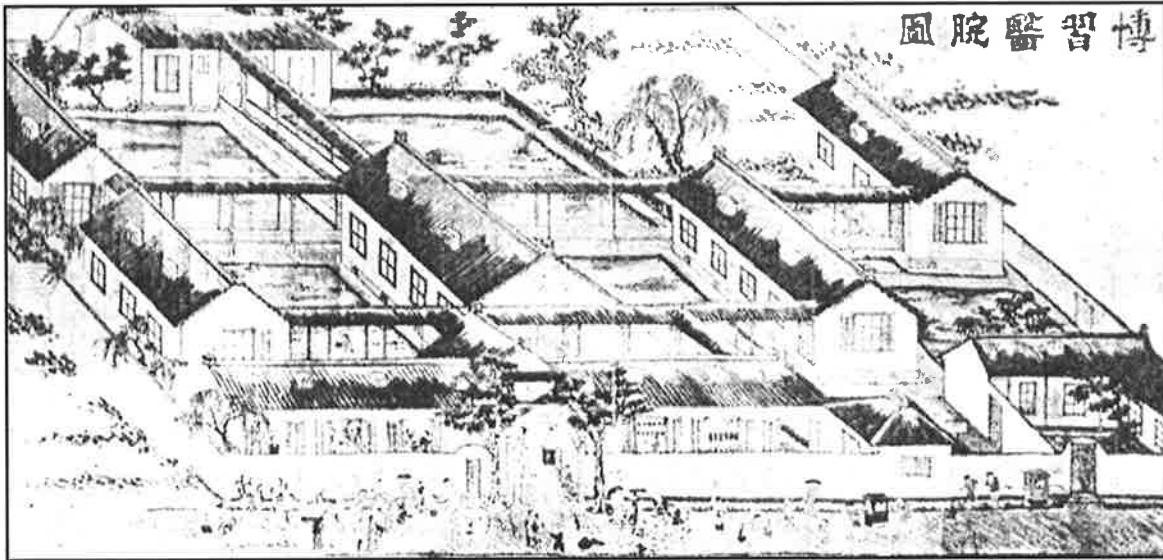


Plate 11: Drawing of Soochow Hospital as built in 1883

Source: *Soochow Hospital, 1883 -1933: Fiftieth Anniversary*: Methodist Episcopal Church, South, 1933: n.p.

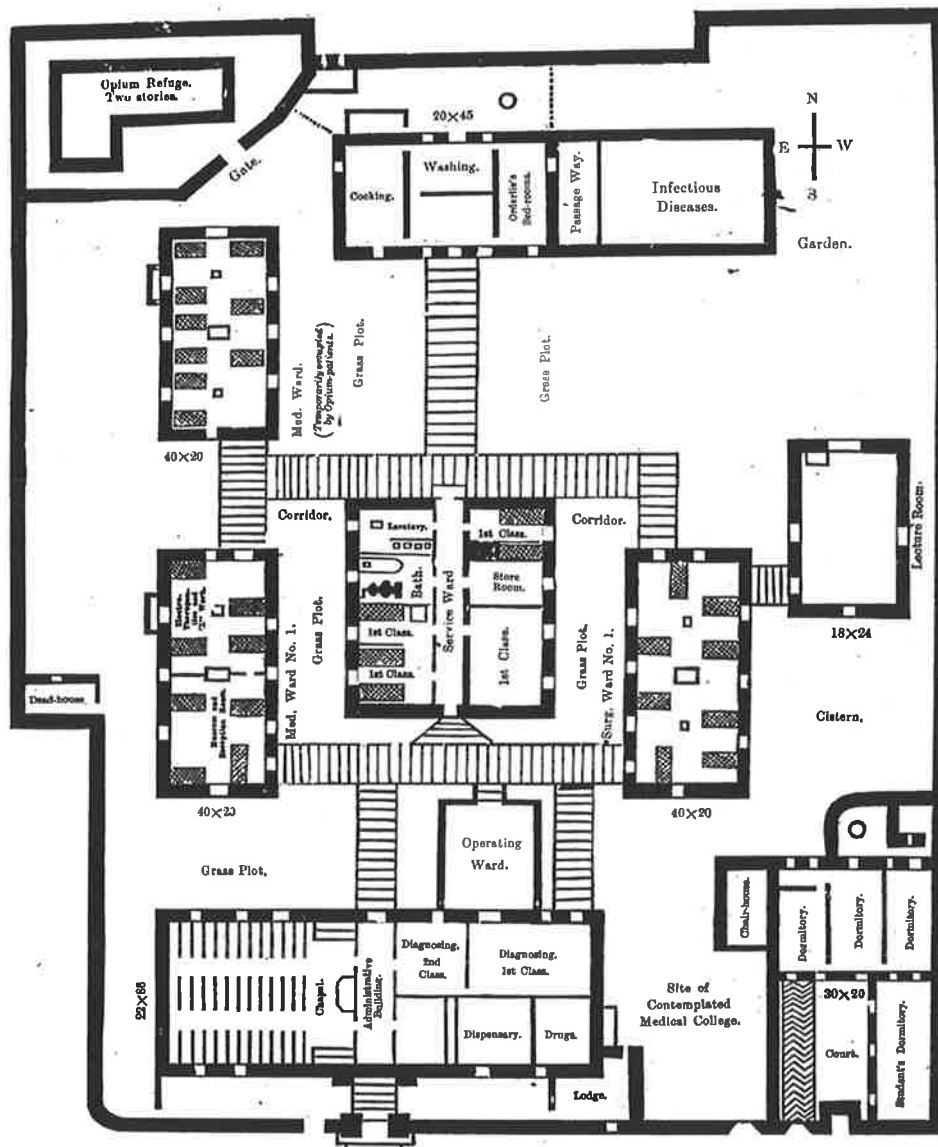
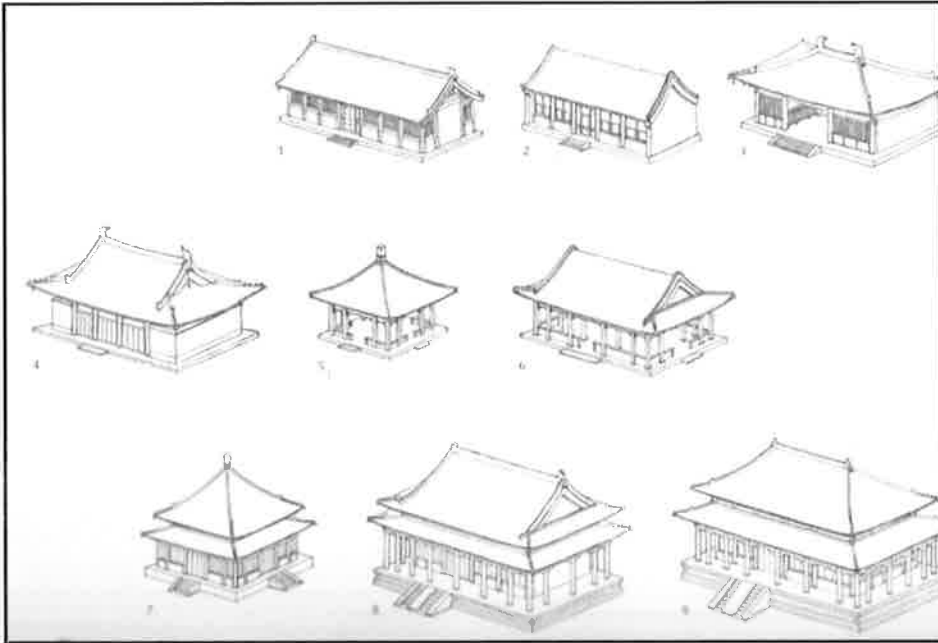


Plate 12: Ground Plan, Soochow Hospital, 1883

Source: *CMMJ*, Vol. 18, no. 2 (1904): foll.56.



**Plate 13:
Traditional Chinese
Roof Designs.**

1. Overhanging Gable
2. Flush Gable
3. Hip
4. Hip and Gable
5. Pyramidal

Source: Liang Ssu-ch'eng. *A Pictorial History of Chinese Architecture: A Study of the Development of its Structural System and the Evolution of its Types.*, Cambridge, Massachusetts: M.I.T. Press, 1984 : p. 11.



Plate 14: The First Mission Dispensary at Ping-Yin, Shantung, c. 1909

Source: Moline, Mary. *A Threatened Hospital in China*: London: Society for the Propagation of the Gospel in Foreign Parts, 1933: foll. p. 6.



Plate 16: St. Andrew's Dispensary, Wuxi, Jiangsu, 1908

Source: Jefferys, W. Hamilton, and James L. Maxwell. *The Diseases of China*, Philadelphia: P. Blakiston's Son & Co., 1910: p. 668.

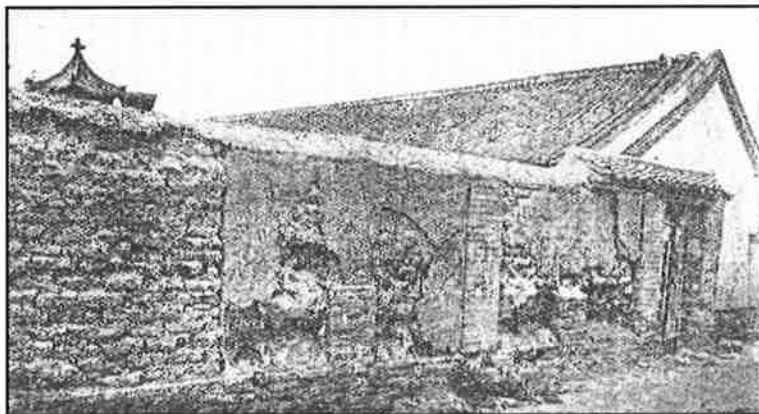


Plate 15: Hospital at Pangjiachuang in Shandong, c. 1880

Source: Tucker, Francis F., Emma Boose Tucker and Myra L. Sawyer. *A Chinese Revolution in Physical Well-being at Pangkiachwang Shantung, China, 1911-1912*: Williams Hospital of the American Board, 1912: p. 13.

CHAPTER 4: PUTTING DOWN ROOTS – THE DOCTOR-BUILDER

Whether propelled by a peculiarly western belief in progress and expansionism or by nothing more than the desire to provide a safer and more stable medical environment, most missions progressed from renting and adapting to building anew. Not only did they have to acquire the land;¹ they had to resolve a number of practical and theoretical questions. What was the optimum size, given their location, medical resources and clientele? Should the hospital be a general one catering for both men and women and providing a range of clinic, medical and surgical services? Once they had decided to build, the factors to be considered included selection of a suitable site and orientation; the design and layout; materials, methods and style of the buildings. Affecting these decisions were considerations of cost; the local environment in terms of climate and topography; and the availability of water, materials and craftsmen. The political environment, in relation to current attitudes to foreigners, could also influence these decisions as could local reaction to the design and siting of buildings because of their effect on *feng shui* 風水.²

As well, through their own and imported medical journals, they were aware of the on-going debate in the West linking hospital design and health. They sought out salubrious sites. H.N. Kinnear's description of the factors affecting his choice of a new site when he returned to Baofushan 保福山 in Fujian in 1902 was typical of many others. He had rejected the old missionary site for being "low" and had judged that the "proximity of a number of idol paper tin foil shops, from which the black, resinous smoke poured at intervals" also detracted from the site. He chose, instead, a site on a hill which "for

¹ "The willingness in China to sell is not by any means commensurate with the desire to buy." Jefferys and Maxwell, *Diseases of China*, p. 662. Accounts of the difficulties encountered in acquiring property (renting or buying) in the interior abound in the pages of the CMMJ and the Chinese Recorder. See fn. 35 page 74. See also a letter from a Chinese official (Chief officer, Li, of San T'ai Hsien, in T'ung Ch'wan" 潼川府) claiming that foreigners wanting to rent had to notify him, and he would investigate whether the local people agreed before granting permission. Any Chinese renting to a foreigner without notifying the local official was "to be punished". Li informed Davidson that he had been instructed by the "Governor General of Sz Ch'wan" to charge the person who had rented the property to the missionary "without notifying his superiors" and to inform the missionary to "withdraw the rental and leave the place without the slightest delay, lest you further violate the Treaty" R.J. Davidson, "Letter to the Editor" *Chinese Recorder and Missionary Journal* 20, no. 4 (1889): pp. 184-85.

² See page 104 for an explanation of feng shui

healthfulness ... is one of the best locations in the suburb. It is elevated and faces in a way to receive the prevailing summer breeze.”³ Their counterparts in America, who moved beyond the 'adapted residence' to a 'custom-built' hospital, faced similar questions but were rarely required, single-handedly and physically, to build their own hospital. In America, a new hospital building could symbolize many things: progress, philanthropy, civic pride or charity. Its style, often neo-classical, symbolized order, certainty, stability and science. In China too, missionaries had to consider how potential patients, whom they did not necessarily understand, would perceive the building: they had to take account of the nature of coded messages the building was sending.

The missionaries' need for information, advice and guidance about the design and construction of hospitals was catered for by their journal, the *CMMJ*, and it became a significant topic for discussion at conferences. At a meeting on 24 July 1903, the members of the CMMA unanimously agreed to ask the editors to collect together copies of plans, specifications and costs of every hospital in China so that they could be made available to newcomers. It was further suggested that they, “publish in each issue one or more ground plans of hospitals already in existence”.⁴ A call for papers for the planned 1907 conference drew attention to

that big subject which we failed to touch upon in our last meeting – hospital construction – with the discussion of plans, materials, ways and means. Of what vital interest it is to many who are looking forward to its future usefulness.⁵

A survey of the papers presented at medical conferences, letters to the editors of journals and descriptions of buildings reveals that they were aware of, and participants in, the ongoing international debate on hospital design.⁶ In 1887 Dr Kenneth Mackenzie, at Tianjin

³ H.N. Kinnear, *A Year of Waiting: The Thirty-First Annual Report of Ponasang Missionary Hospital for the Year Ending December 1902* (Foochow: American Board of Commissioners for Foreign Missions (A.B.C.F.M.), 1902), p. 18.

⁴ G.F. De Vol, “Resolution Endorsed By Kuling Medical Conference: Hospital Plans” *CMMJ* 17, no. 4 (1903).

⁵ “The Medical Conference of 1907” *CMMJ* 20, no. 1 (1906): p. 41. See also Samuel Cochran, “Letter to the Editors: Hospital Plans” *CMMJ* 20, no. 3 (1906) ; Lucy E. Harris, “T'ung-Chuan-fu, Szechuan” *CMMJ* 18, no. 3 (1904) ; W. Hamilton Jefferys, “Where are the Hospital Plans?” *CMJ* 24, no. 5 (1910) ; Richard Wolfendale, “An Ideal Medical Missionary Hospital” *CMMJ* 17, no. 1 (1903).

⁶ The most influential and comprehensive papers published during this period included: James Butchart, “Hospital Construction” *CMMJ* 15, no. 2 (1901) ; Kenneth J. Mackenzie, “The Construction of Hospitals”

天津 with the London Missionary Society (LMS),⁷ compared the peculiar problems faced by medical men in China when establishing a hospital with a rather romantic view of what their counterparts experienced at home. In America, he said

a committee of influential men is formed, plans are invited from several architects, sanitary engineers are consulted, and everything is done regardless of expense to ensure a handsome and perfect building.

In China, on the other hand, the medical missionary “generally has to be his own architect, and as to the sanitary engineer – well, his time has hardly come yet”.⁸

This aspect of the situation continued well into the twentieth century: the doctor, and in one case the nurse, acted as architect and builder. Charles Lewis of the APM, who arrived in China in late 1896, was one such doctor. In 1902 he built the Taylor Memorial Hospital at Baodingfu 保定府 in Hebei to replace one destroyed by Boxers in 1900. Despite having “no knowledge of architecture or of drawing” – he did both. He was more fortunate than many others to have some “assistance from one of the railroad engineers, who was also an architect and who drew the elevations”.⁹ Charles Lewis demonstrated his commitment to building again, in 1914, when he added an annex to the Taylor Memorial and “took a course in truss building, and one in engineering and surveying”.¹⁰ Not all the builders were men or doctors. A rare instance of a woman builder is found in Miss J.E.M. Lebens, “a graduate pharmacist and nurse of experience [who] was the architect and also superintended the building” of the Margaret Eliza Nast Memorial Hospital in 1905 for the MEM at Xianyou 仙游 in Fujian.¹¹ (see Plate 17)

CMMJ 1, no. 2 (1887) ; Edmund Lee Woodward, "Mission Hospital and Dispensary Construction in China" *CMJ* 21, no. 5 (1907). The collected wisdom was summarised by Jefferys and Maxwell, *Diseases of China*, pp. 661-97.

⁷ The London Missionary Society was interdenominational but the majority of missionaries belonged to the Congregational Church of Great Britain. See Couling, *The Encyclopaedia Sinica*, pp. 313-5.

⁸ Mackenzie, "The Construction of Hospitals": p.78.

⁹ Robert E. Speer, "*Lu Taifu*", *Charles Lewis M.D. A Pioneer Surgeon in China* (New York: The Board of Foreign Missions Presbyterian Church in the U.S.A., c.1930), p.47.

¹⁰ *Ibid*, p.65.

¹¹ Emma Betow, "Margaret Eliza Nast Memorial Hospital" *CMMJ* 20, no. 4 (1906): p.156. Emma Betow was the physician in charge. Wong and Wu Lien-teh, *History of Chinese Medicine*, p. 586. Details of the structure and work of the MEM (with headquarters in New York and in China from 1847) are to be found in Couling, *The Encyclopaedia Sinica*, pp. 362-64.

It was to men and women such as these that James Butchart, of the Foreign Christian Missionary Society (FCMS)¹² at Luzhoufu 廬州府 in Anhui, directed his paper, "Hospital Construction", read to the Shanghai MMA conference in January 1901. In it he addressed the decisions facing missionary builders when contemplating building a new hospital. He covered the full range from the choice of style, materials, building methods, plans and furnishing and he did so within a clearly defined philosophical framework. He cautioned his audience to consider the feelings of their Chinese patients so as not to alienate them and to make them receptive to Western medicine and, ultimately, the Christian message.

We must not forget that in the interior at least that we are building for the Chinese - whose feelings are often the opposite to our own. If in the construction of a hospital we can plan it to be convenient and clean and yet provide those things that they consider as comfort, we conduce to the number of cures and success with a good impression made on the minds of those that we meet.¹³

Translating this sentiment into bricks and mortar was left to individual builders. They took a range of approaches: paying attention to Chinese sensibilities when siting the hospital and ancillary facilities; incorporating Chinese design principles into the building; using local and familiar materials; and including facilities designed to appeal to Chinese patients or make them feel comfortable. Concomitant with these considerations hospital builders also aimed to make their hospitals conform, as far as possible, to the good health and sanitary requirements being introduced into hospitals in the West.

Considerations of Style

Despite the fact that medical missions had been operating in China since the mid-nineteenth century no comprehensive survey of hospital buildings was carried out until Harold Balme¹⁴ and Milton Stauffer conducted one during 1919. The researchers did not visit the hospitals but relied upon answers to a detailed questionnaire sent to some 289 hospitals for which

¹² According to Couling, members of this society "wished to be known as 'Disciples of Christ' or, more simply 'Christians'." Headquartered in Cincinnati, Ohio, it was a relatively late entrant to China but its first missionary was a (Canadian) physician, W.E. Macklin, who started the medical work at Nanjing 南京. Couling, *The Encyclopaedia Sinica*, p. 187.

¹³ Butchart, "Hospital Construction": p. 97.

¹⁴ Harold Balme, F.R.C.S., D.P.H., was in charge of the Union Medical College, which was run under the auspices of the APM and the (English) Baptist Missionary Society (BMS).

they had addresses. The final report was based on the 200 returns they received from 250 missionary hospitals found to have been operating in China during 1919.¹⁵ This survey, apart from one that William Lennox carried out twelve years later, is the only source of comprehensive, comparative information about the architecture of foreign hospitals in China.¹⁶ The history of foreign architecture in general in China is also very sparse. Chinese architects, Liang Ssu-ch'eng¹⁷ and Su Gin-Djih¹⁸ who write about the history of Chinese architecture, deal with the phenomenon in a broad sense but their emphasis is on traditional Chinese architecture.¹⁹ A search of the literature reveals that the only current scholarship specifically dealing with missionary architecture is that by Jeffrey Cody,²⁰ who confines his study to churches and educational institutions built during the Republican period (1911 to 1949). He concludes that many missionary architects and clients were

consciously trying to make their buildings superficially appear more 'indigenous' and less western. As they sought to educate, proselytize and convert Chinese, they tried to strike a culturally harmonious chord with their buildings.²¹

He dates this trend as starting, slowly, in 1911 and accelerating after the May Fourth Movement.²² It was led by, mainly, American architects who had set up practice in China after the fall of the Qing.²³

My research shows that, in the case of hospitals at least, this trend started much earlier and that it sprang from more than a simple desire to create a 'superficial' resemblance to Chinese building styles. As early as 1887 A.P. Peck, of the ABCFM at Pangjiazhuang

¹⁵ Balme and Stauffer, "Enquiry: Scientific Efficiency," .

¹⁶ William G. Lennox, "A Self Survey By Mission Hospitals in China" *Chinese Medical Journal* 46 (1932).

¹⁷ Liang Ssu-ch'eng, *A Pictorial History of Chinese Architecture: A Study of the Development of its Structural System and the Evolution of its Types*. .

¹⁸ Su Gin-Djih, *Chinese Architecture: Past and Contemporary* .

¹⁹ Andrew Boyd's book has a similar emphasis. Andrew Boyd, *Chinese Architecture and Town Planning: 1500 B.C. - A.D. 1911* (London: Alec Tiranti, 1962).

²⁰ Of the Department of Architecture at the Hong Kong Chinese University.

²¹ Cody, "Striking a Harmonious Chord": p.1.

²² The so-called May 4th Movement, grew out of disillusionment with the West after World War I and culminated with student demonstrations in Beijing on May 4th 1919. It involved attacking Confucianism; initiating a vernacular style of writing, and promoting science.

²³ For a detailed examination of one of the most prominent of these 'adaptive' architects, see Cody, *Building in China* .

庞家庄 in Shandong, was writing (in the first issue of the *CMMJ*) about the style of his hospital:

our aim is to keep the style of building and all arrangements as near to that of the vicinage, to which the people are all accustomed, as is consistent with needful sanitary precautions.²⁴ (see Plate 15)

He was not relying on the mere appearance of the building: he was attempting to make the 'arrangements', or procedures, as familiar as possible. In the same year that Peck described his situation others were encouraging readers of the *CMMJ* to consider the effect, of the design of their hospitals, on potential Chinese patients. Kenneth Mackenzie, in the second issue of the *CMMJ*, recommended a number of principles that should govern hospital building. As well as advocating the pavilion style, which as we have seen was considered the most efficacious design in America at the time, he paid particular attention to the appearance and the likely effect on the Chinese. Even when the hospital was to be built in a port city, where a foreign building style was normally preferred, he advised against pretension and for considering Chinese feelings.

When the mission is situated in a large port in close proximity to a foreign community ... aim to erect ... in the style of the less pretentious home hospitals, even though in these circumstances we think he should bring his western ideas as much in line with Chinese feeling as possible without sacrificing efficiency.²⁵

Mackenzie had no doubt about exactly what he hoped to achieve by practising medicine in China and believed that his success depended on attracting the Chinese. He counselled:

we are here to conciliate, to win confidence and to present western improvements in as attractive garb as we can; let us see to it that this garb does not startle them by its strangeness.²⁶

His description of his own hospital as "being erected in the best Chinese architecture [with] an extremely picturesque and attractive appearance" is borne out by the lithograph reproduced in his biography. (see Plate 18²⁷) The design of this hospital was more than

²⁴ A.P. Peck, "Concerning Williams' Hospital, P'ang Chuang Station, in Shantung, of the North China Mission A.B.C.F.M." *CMMJ* 1, no. 1 (1887): p.66.

²⁵ Mackenzie, "The Construction of Hospitals": p. 77.

²⁶ Ibid: p. 78.

²⁷ Bryson, *John Kenneth Mackenzie: Medical Missionary to China*, facing p. 379.

merely imitation or façade. The front building was enclosed within its own courtyard and was entered through a “covered gateway” and a verandah “with its massive wooden pillars running along its whole length”. The interior was distinctly Chinese: as well as a waiting room with benches there was the “usual Chinese reception-room ever to be found in a native building” and

the rooms were very lofty, without ceilings, leaving exposed the huge painted beams, many times larger than foreigners deem necessary, but the pride of the Chinese builder.²⁸

He gives the impression of admiring the Chinese architectural style and seems to have believed that trying to impress the Chinese with his ‘Western superiority’ would have been counter-productive. He also recognised the importance of taking account of Chinese feelings and advised those attempting to move into the interior, that

away in the interior the prejudices of the people have to be consulted before everything, and he may be compelled by the very exigencies of his position to utilize an ordinary Chinese dwelling as his hospital.²⁹

Dugald Christie was also very clear about his reason for choosing to build in the Chinese style in Moukden in 1887. (see Plate 19³⁰) As he explained:

to build a foreign house in those days would have been to court trouble; a two-story house would have meant a riot. So the *compounds* were Chinese to outward seeming, with massive gateways ...³¹

Robert Speer quotes Charles Lewis as describing the McIlvain Hospital, he built at *Jinan* 济南 in Shandong,³² as being “in Chinese style with good bricks”. On reflection, Lewis had concluded that the decision to use a Chinese-style building had been instrumental in making the hospital approachable by the Chinese.

... such buildings, though perhaps less efficient from our point of view, in connection with medical work, in those days were doubtless more effective in

²⁸ Ibid, pp. 379-80.

²⁹ Mackenzie, "The Construction of Hospitals": p. 78

³⁰ Christie, *Thirty Years*, facing p. 136.

³¹ Ibid, p. 23.

³² Where he was stationed before being transferred to Baodingfu.

introducing modern medicine into China, because the patients felt more at home than they would have felt in a typical western hospital building.³³

Lewis' observation is reminiscent of that made about the role played by the small hospital in America in the acceptance of hospital care.³⁴ Lewis' view was shared by Harold Balme, who wrote:

A hospital which looked exactly like their own Chinese house and in which they could live and eat and sleep very much as they did at home could not after all be such an uncomfortable or foreign place. Thus their apprehensions were allayed
...³⁵

H.D. Porter, writing about the medical aspect of missionary work in 1895, provided a colourful description of a Chinese building taken and adapted for use as a hospital in North China. The building had been a tea warehouse and the missionaries were not simply relying on the familiarity of the building-style and arrangement and furnishings to convey a message of welcome but had appropriated traditional Chinese scrolls to present their Christian message. He described a "courtyard with wooden pillars covered with crimson scrolls. On one the Ten Commandments are written, on another is the Lord's Prayer".³⁶

In the cases cited above it would seem that rather than, as Cody suggests, adopting a Chinese architectural style to harmonise with their surroundings these medical men aimed to beguile the Chinese. After all their principal aim was evangelistic, albeit through the medium of medicine, and unless they could persuade the Chinese to put themselves and their families into foreign hands they would have no opportunity to demonstrate Christian charity and Western (in their belief, Christian) scientific superiority.³⁷

Not every medical missionary shared the view, however, that a Chinese-style building would more readily, and positively influence the Chinese. W. Hamilton Jefferys and

³³ Speer, "*Lu Taifu*", *Charles Lewis*, p. 33.

³⁴ See page 54.

³⁵ Balme, *China and Modern Medicine*, pp. 88-9.

³⁶ H.D. Porter, "The Medical Arm of the Missionary Society" *CMMJ* 9, no. 4 (1895): p.267.

³⁷ This commonly held belief was expressed by S. Wells Williams: secular culture, in comparison with Christianity "never presents to the mind those sanctions for upholding and reverencing the truth which are alone found in the word of God". Christianity, in his view, is the foundation of the civilisations of the most advanced countries. Cited by Forsythe at Forsythe, *An American Missionary Community in China, 1895-1905*, pp. 20-1, fn 54, p. 99.

Edmund Woodward, for example, both considered native buildings inappropriate for adaptation. Jefferys thought that the Chinese recognised the hospital as a “foreign institution and there is no harm in living up to that reputation.” Nevertheless he did concede that a “concession could be made to Chinese ideas” by way of rooflines, decoration on walls of compounds and the external surfaces of the building.” He was also sensitive to Chinese geomantic ideas and had observed that tall buildings tended “to raise up the native prejudice” and recommended confining buildings to one or two storeys.³⁸ The designer of the two-storey CMS hospital at Hangzhou 杭州 was one who relied on the roofline to lend a Chinese appearance to his building. He appears to have used the “tail feather corner” style roof end which, according to Knapp, was peculiar to east central Fujian.³⁹ (see Plates 20⁴⁰ and 21⁴¹) Placed as it was, above an apparently, flat roof the overall effect is suggestive of the *matouqiang* 马头墙 (horses’ heads wall), which *was* common in Zhejiang where his hospital was. (see Plate 22⁴²) On the other hand Woodward, who built two hospitals at Anqing 安庆 in Anhui for the ACM, could see no reason to accommodate the Chinese as regards style of building or materials. He had had experience of both Chinese and Western buildings. The layout of his first buildings (1901) had been “all Western” but the architecture was “strictly oriental”, with an “imposing gateway [which] forms one of the features of the city.”⁴³ He had not been impressed with Chinese materials, tradesmen or building methods:

except for brick and mortar, local building materials are inferior and very dear ... constant supervision prevails but little with the local workmen to improve upon the ‘*c’ha puh to*’ (which is elegant Chinese for ‘jack-leg’) building methods of their immemorial forefathers.⁴⁴

When he was provided with adequate funds to replace this hospital he determined to use the

³⁸ Jefferys and Maxwell, *Diseases of China*, p. 670.

³⁹ Ronald G. Knapp, *China's Old Dwellings* (Honolulu: University of Hawai'i Press, 2000), pp. 141- 43.

⁴⁰ D. Duncan Main, *Story of the Hangchow Medical Mission: in connection with the Church Missionary Society*. (n.p., 1910), n.p.

⁴¹ Knapp, *Old Dwellings*, p. 142.

⁴² *Ibid*, p. 136.

⁴³ Edmund Lee Woodward, "St. James' Hospital, Ngankin, China" *CMMJ* 17, no. 1 (1903).

⁴⁴ Woodward, "Hospital and Dispensary Construction": p. 253.

Gothic style which, he thought, “embodies, as nothing else does in architecture, the noblest historical ideals of the Protestant Christianity which we endeavor to exemplify in China.” He disagreed with Jefferys and characterised the practice of “foreign buildings in China retaining the distinctive Chinese roof” as a departure from good taste. Also, in his view

the former prejudice against buildings of foreign architecture is rapidly passing away, as is shown by the frequency with which the better class Chinese residences are being built two story with various imitations of Western architecture.⁴⁵

In a report on the opening of a new hospital, St Agatha’s (for women and children) at *Pingyin* 平阴 in Shandong in 1909 by the Society for the Propagation of the Gospel (SPG), the granite building was proudly described as being:

constructed upon foreign lines, having a plentiful supply of foreign doors and windows, board floors, plastered white-washed walls, and plaster ceilings, which are all new to the Chinese around here.⁴⁶

Despite this description the photographs, which accompanied the announcement, tell a rather different story. The finishes may have been foreign but the walled compound, simple lines of the hospital, roof profiles, the entrance gate – “designed entirely by a Chinese workman” – and south facing orientation all conformed to Chinese design principles. (see Plates 23⁴⁷ and 24⁴⁸) Even in the most Western of hospital complexes the Chinese-style entrance gate served to acknowledge their location in China and their Chinese patients. (for example, see Plates 25 and 26: the Entrance Gates to Linqingzhou 臨清州 Hospital (Hebei)⁴⁹ and the Blythe Memorial Hospital, Wenzhou 温州⁵⁰)

⁴⁵ Ibid: p. 257. His rejection of Chinese building styles and materials did not extend to the plan of his hospital, which did allow for the complete separation of the sexes. See page 179.

⁴⁶ "The Opening of the Pingyin Hospital" *CMMJ* 23, no. 6 (1909): p.408. The Church of England Mission, North China (C of EM (NC)) was often referred to as the Society for the Propagation of the Gospel in Foreign Parts (SPG), which partly funded the operation. The society had its headquarters in London and although they had entered China in 1863 did not start work until twelve years later in 1875. Couling, *The Encyclopaedia Sinica*, pp. 117-8.

⁴⁷ "The Opening of the Pingyin Hospital": facing p. 407.

⁴⁸ Moline, *A Threatened Hospital*, front cover.

⁴⁹ Susan B. Tallmon, *Glimpses of Lintsingchow Hospital: Being an attempt to show briefly what has been done, what we are trying to do, and a hint of what may be done* (Lintsingchow: A.B.C.F.M., 1910), p. 10.

⁵⁰ Jefferys and Maxwell, *Diseases of China*, p. 666.

Similarly, when Stephen C. Lewis, the builder and physician in charge, announced the opening of a new hospital at Changzhou 长州 in Hunan for the APM, he described it as the “first hospital of foreign construction in the southern half of Hunan.”⁵¹ The accompanying photograph shows a two-storey brick building with (possibly concrete) pillars supporting a Chinese-style tiled overhanging roof covering a verandah. The materials may have been foreign but the style was not and is reminiscent of Chinese two-storey buildings, common in southern China.⁵² (see Plate 27)

Before 1910 Woodward, with his uncompromising views on Chinese building style, appears to be an exception among American medical missionaries. Both Cody and Gael Graham paint a different picture as regards attitudes to church and school buildings. For example, Cody summarizes his understanding of the situation: “Up until the end of the 19th century, Europeans sought to erect buildings that unequivocally felt and looked European.” Both quote the Rev. P.W. Pitcher, who

lambasted the 'rotteness of the whole scheme of Chinese architecture' [and urged his compatriots] to erect unabashedly Western edifices of several stories and with towering spires in order to destroy [this] nonsense about feng-shuy [or fengshui], the Chinese art of geomancy.⁵³

The available primary sources would seem to suggest that most *medical* missionaries followed Butchart's and Mackenzies' advice. In contrast to the situation today America did not see itself as either an unassailable world leader or an imperialist power in China. America, founded on a belief in religious freedoms and lacking a state religion, may have been expected to produce missionaries who were tolerant and understanding of Chinese beliefs and sensibilities. For instance Butchart advised modesty and the

avoidance of any display in excess of the actual working needs conducive to a good effect on the minds of the people that we seek to influence ... [because] it is the Christian influence for which the hospital work is carried on.⁵⁴

⁵¹ Stephen C. Lewis, "Opening of the American Presbyterian Hospital at Chenchow, Hunan" *CMMJ* 22, no. 4 (1908)

⁵² Knapp, *Old Dwellings*, pp. 223-24.

⁵³ Cody, "Striking a Harmonious Chord": p.4 ; Graham, *Gender, Culture, and Christianity*, p. 85.

⁵⁴ Butchart, "Hospital Construction": p. 97.

It was more than a desire to merely project an *image* of modesty and frugality. The availability of finance was obviously a significant factor. Charles Ewing⁵⁵ wrote to Judson Smith in November 1904⁵⁶ warning against making the same mistakes with new building at Tianjin and Linqingzhou that had been made at Peking and Tongzhou 通州. He was referring to mission buildings in general, rather than hospitals, and addressed “the whole question of the style in which the mission property should be rebuilt.”⁵⁷ Although he thought it “an excellent thing to have in a capital city a church building that is imposing” he did not doubt “there may be others who think the church building too fine”; he considered the mission houses as “modest as they should be.” However, at Tongzhou, fifteen miles from Peking, he thought that

the whole property is many times as large as it ought to be, and it would very likely be wise, even at this late date, to dispose of some of it, and that the houses are too large and pretentious.⁵⁸

His wife apparently agreed with him. She had spoken to the other women of the mission and reported: “the ladies wish that they might be back in the midst of more modest surroundings ... they regret the expenditure of so much money.”⁵⁹

There were exceptions of course. Some sought to impress and the Alden Speare Memorial Hospital, built by the MEM at Yanping 延平 in Fujian in 1906, was one such.⁶⁰ The photograph (see Plate 28) is of a building “located on an eminence in the very heart of the city of Yen-ping, and its gray brick walls and white verandahs give it an imposing and airy aspect”.⁶¹

How then is one to characterise the medical missionaries' attitudes? First, it is important to

⁵⁵ See page 70.

⁵⁶ Professor of Church History, Oberlin College, Ohio later to become secretary of the China division of American Board of Commissioners for Foreign Missions.

⁵⁷ In North China – following the destruction by Boxers.

⁵⁸ Ruoff, ed., *Death Throes of a Dynasty*, p. 128.

⁵⁹ *Ibid.*, p.128.

⁶⁰ For summary of the work of this mission, which had its headquarters in New York and had been working in China since 1847, see Couling, *The Encyclopaedia Sinica*, pp. 362-64.

⁶¹ C.M. Lacey Sites, “The New Methodist Hospital at Yen-ping, Fuh-kien” *CMMJ* 20, no. 4 (1906): p. 211. See also J.E. Skinner, “The Alden Speare Memorial Hospital, Yen-ping, China” *CMMJ* 18, no. 4 (1904).

take into account that these missionaries were the products of their time and place. It is clear from their writings and actions that American medical missionaries, along with their countrymen at home and their British counterparts in China, were what Ling Oi Ki describes as “encumbered by the cultural biases of their age”.⁶² They took for granted that western ideas, values, technology, and political and economic structures were superior to those of the rest of the world and this belief affected their perceptions of what they encountered in China. Most damned traditional Chinese medicine as 'unscientific'; folk medicine as superstition; and believed they were practising a superior, rational, scientific medicine. They equated science with civilization and both with Christianity. Second, it is clear that those who advocated building in the Chinese style were motivated by a desire to attract, and not repel, potential Chinese patients. They had no power to coerce and in this their situation differed from that of a colonial power seeking to introduce Western medical care or to impose Western sanitary measures. There is nothing in what they wrote to indicate that their advocacy of Chinese stylistic features in hospital buildings was born out of a deep respect for the Chinese, although several did admire Chinese architecture. Neither did it reflect disdain or disgust. Rather, it can be more simply characterised as pragmatic.⁶³

Choice of Building Methods

When it came to the method of building the builder had a choice between Chinese and Western. A traditional Chinese building method, common throughout China (but more so in the south), does not use the load-bearing walls of western building. Rather, timber columns and lintels form a frame that holds the roof up on a set of timber brackets.⁶⁴ In both the north and south of the country, regardless of the type of wall, the arrangement of internal

⁶² Ling Oi Ki, *The Changing Role of the British Protestant Missionaries in China, 1945-1952* (London: Associated University Press, 1999), p. 193.

⁶³ One could choose to adopt the stance that a medical missionary taking Chinese beliefs into account in his practice was, as Arnold expresses it, an example of: “Western medicine finding it expedient to Orientalise itself in order to gain cultural and social respectability.” Arnold, *Colonizing the Body*, p. 251. Such an approach begs the question: what could they have done to satisfy Arnold’s sensibilities?

⁶⁴ Although widespread, these non-load-bearing walls were not universal throughout China and “solid, load-bearing walls have a long history ... and are far more common ... than is generally acknowledged in studies of Chinese buildings”. They are more commonly found in North China where they are used for the back and sidewalls to provide a barrier to the “predictably steady and cold northwest winds”. Knapp, *Old Dwellings*, p. 170.

spaces is similar. Columns are set at standard centres producing a building that consists of modules, referred to as “bays”, the numbers and arrangement of which are varied depending on the purposes for which the building is intended.⁶⁵ Spaces are created using lightweight (often timber) movable screen-walls. This design principle is extremely flexible and is used for a wide range of purposes, from dwelling houses to temples. External spaces are designed with as much care as internal: the dimensions are varied according to the arrangement of building elements.

Butchart was even-handed in his approach *vis-a-vis* the foreign and Chinese approach:

there are two styles of wall - the solid brick of the foreign way and the hollow or *teu-tsiang* of the Chinese made with foreign sized brick. The latter may be used where there is only one story or where cheapness is desirable. In this style the roof and floors are entirely supported by a timber framework and the walls filled in. The hollow between the bricks can be filled, Chinese fashion, with broken brick and mud plaster, which makes it a solid wall and prevents any danger of a brick being driven in by a blow as one sometimes sees done for mischief in compound walls where this precaution has been neglected.⁶⁶

It was not “mischief”, when Claude Lee “pushed down one whole wall of the dispensary with his stick”. He blamed a “dishonest contractor [who had used] plaster made of simple mud”.⁶⁷ Peck, whose hospital at Pangjiazhuang was also of this construction, saw distinct medical advantages to be had from Chinese building methods. It enabled him to effectively implement the strategy of housing patients in temporary sheds or tents, which had been found so effective during the Civil War.

My surgical experience with the Chinese has convinced me that, notwithstanding their filthy habits, it is comparatively easy to secure good antisepsis. Our hospital buildings all have independent frames to support the roof, and the walls are filled in with adobe brick which can be torn out at any time if they become infected [and] these walls, we hope, with well limed surfaces inside and plastered ceilings will make healthful wards.⁶⁸

⁶⁵ The *jian* 间, or the “span between two lateral columns or pillars that constitutes a bay” is not a fixed length: in the south it typically varies between 3.6 and 3.9 metres and in the north, 3.3 and 3.6 metres.

⁶⁶ Butchart, “Hospital Construction”: p. 99. The walls of the St James Hospital at Anqing were “of the usual Chinese style – hollow – up to the level of the top floor being filled with rubble, clay, clay and mortar, making it a heavy wall”. “St James’ Hospital, Ngankin, China” *CMMJ* 18, no. 3 (1904): p. 133.

⁶⁷ Lee, *Leaves from the Notebook*, p. 20.

⁶⁸ Peck, “Concerning Williams’ Hospital”: p.66.

He improved ventilation by adapting and installing another Chinese device: “ventilating frames like Chinese windows in the north wall.” He did not eschew all foreign design features – the windows in ward buildings were of glass (rather than paper) with transoms over them.

Wards

It was knowledge of the current thinking about healthy hospital building rather than consideration of Chinese sensibilities that dominated the recommendations regarding ward design. Mackenzie, in line with the most up-to-date thinking in America and Europe, promoted the pavilion design for his ideal ward.⁶⁹ He could see advantages (beyond those discussed earlier concerning the ease of treating surgical cases safely at page 59 ff.) in this style of building. He saw it as appealing to the Chinese because it

adapts itself readily to Chinese taste, especially as the roof may be modelled after the native pattern, while the grounds around and between the wards can be planted with shrubs and trees⁷⁰

Chinese roofs, being supported on a series of brackets above the building frame, allowed additional ventilation by allowing air to pass out of the building through the space created.⁷¹ (see Plate 29) The plan also offered the flexibility important in an uncertain political climate: it was difficult to know whether a mission was to be allowed to grow or be hindered. He asserted that his plan

combines simplicity with economy - economy in that, instead of erecting a large block of buildings which will not be required in their full capacity for many years to come, you are able to add ward to ward as the needs of the work develop.⁷²

At Tianjin a large twenty-four bed ward and four, three-bed wards in buildings “entirely detached and separated by courtyards”,⁷³ set behind the main building, conformed to

⁶⁹ Mackenzie, “The Construction of Hospitals”: p. 78.

⁷⁰ Ibid.

⁷¹ For a detailed description of the methods of ventilation utilising “roof-top transoms” which take “advantage of differential pressure within the building”, and the “careful alignment of open doors” in Chinese building, see Knapp, *Old Dwellings*, pp. 240-43.

⁷² Mackenzie, “The Construction of Hospitals”: p. 78.

⁷³ Bryson, *John Kenneth Mackenzie: Medical Missionary to China*, p. 380.

Mackenzie's ideal ward which should be

single storied buildings, entirely detached; for example, wards of the following dimensions, 48x24x14 feet, with opposite windows in the sides, capped with transoms, and reaching nearly to the ceiling.⁷⁴

A couple of examples will serve to illustrate that Mackenzie's call did not go unheeded by those who were starting to build their own hospitals. One of the earliest examples of the pavilion design used in China for a new hospital building was the one James H. McCartney, of the American MEM, established at Chongqing 重庆 in Sichuan province. He had arrived as a "young physician" in Chongqing in 1891⁷⁵ and in 1893 moved from temporary Chinese buildings into a hospital consisting of two brick pavilions, 65 by 26 Chinese feet.⁷⁶ Each contained a public ward, and two private rooms, a medicine room, and clothes press. He also used a two-storeyed "native building" to house twelve wards and a bathroom.⁷⁷ In 1889 Mildred Phillips reported on the building of a hospital for women at Suzhou 苏州, for the MEM (South), to complement the men's hospital which had been opened six years earlier.⁷⁸ Again the pavilion was the preferred ward design, being "calculated to allow satisfactory separation of the sick, and to secure good ventilation." As she described them:

the buildings are of brick, plastered inside and out, and connected by open corridors. They are finished neatly inside with high ceilings and special ventilating pipes. [Then there are the] medical and surgical wards in two separate pavilions, each containing a bathroom and a room for special cases. [These] are single-storied, raised three feet from the ground, with good ventilation underneath and the ground beaten down with a cement of sand and lime.⁷⁹

⁷⁴ Mackenzie, "The Construction of Hospitals": p. 78.

⁷⁵ "Missionary News" *Chinese Recorder and Missionary Journal* 22, no. 7 (1891): p. 339.

⁷⁶ Established by the British Treaty of 1858, 1 Chinese foot = 14.1 inches. Julean Arnold, *China: Commercial and Industrial Handbook*, Trade Promotion Series - No. 38 (Washington: Department of Commerce, USA, 1926), p. 792.

⁷⁷ J.H. McCartney, "First (1892) Annual Report: Chungking Hospital, Methodist Episcopal Church, South" *CMMJ* 7, no. 4 (1893): p. 275.

⁷⁸ Anne Fearn, who served as a doctor at this hospital for 14 years from 1893, described the buildings as "close to the canal, spacious affairs, architectural hybrids of the East and the West." Fearn, *My Days of Strength*, p. 41. MEM(S), which was headquartered in Nashville, Tennessee had entered China in 1848 and medical work was their first initiative: first in Shanghai but later moved to Suzhou. Couling, *The Encyclopaedia Sinica*, pp. 364-5.

⁷⁹ Mildred M. Phillips, "The Hospital for Women at Soochow" *CMMJ* 3, no. 1 (1889).

When Butchart delivered his address in January 1901 (see page 81) he still recommended the pavilion:

wards should as far as possible be in separate buildings, but arranged as to be of convenient access. In other words, in the pavilion style ... by this arrangement, with the use of simple antiseptic dressings in order to isolate the wound, with plenty of fresh air and cleanliness of the ward, you are largely independent of tidiness in the person of the patient, and may have a ward full of surgical operation cases while the air is perfectly fresh.⁸⁰

Conscious that money for buildings was scarce, Butchart advised on how to save it. For example, the cost of roofs could be kept down by building two storeys rather than one. Space, and therefore money, could be saved by eliminating corridors and locating the stairway at one end of the verandah. Another advantage of this arrangement related to hygiene: hallways, where dirt tended to accumulate, were difficult to plan so “they shall not be dark”.⁸¹ Butchart's advice would also have been compatible with the plan and style of Chinese buildings which commonly used verandahs, connected by covered walkways or galleries, and lacked corridors.

Sanitation

The main consideration in the choice of building materials for internal finishes, beyond availability, should be the ease of maintaining cleanliness according to Butchart. He started with roofs. Chinese buildings had tiled roofs without ceilings but in his opinion corrugated iron, sufficiently lapped, was the “best roof by far”. He counselled against tiles unless either “board sheathing” or “flat tile with plaster” was used in any room that needed to be kept clean because “in windy weather great quantities of dirt will blow through the tile in those parts of the country that are dusty”. The roof design should follow the Chinese custom and have eaves that project eighteen inches to protect the wall from the weather.⁸² However, Balme's survey of hospitals, undertaken during 1919,⁸³ revealed that Chinese tiled roofs

⁸⁰ Butchart, "Hospital Construction": p.98.

⁸¹ Ibid: p. 97.

⁸² Ibid: p. 99.

⁸³ See page 81.

continued to be the norm, being reported in 72 percent of the hospitals.⁸⁴ A number of possible reasons for this choice suggest themselves: Chinese tiles were plentiful; Chinese builders were familiar with laying them; imported corrugated iron was in short supply; it was too expensive; or that the tiles used on familiar Chinese-style roofs would be attractive to the Chinese. All seem plausible explanations but none of the written sources I have found shed light on this issue.

For floors and walls, ease of cleaning was the key. Peck recounted that he suggested to Mackenzie the use of Portland cement for floors, which was less porous than the “native bricks” which were standard in Chinese buildings.⁸⁵ Mackenzie duly recommended it in 1887 and in 1901, according to Butchart the best floor was “oregon pine, or ... Portland cement” because it could be “swabbed over daily, and thus cleanliness will be ensured while absorption is prevented.”⁸⁶ Cement, with the advantage of hardness compared with porous bricks or simply tamped earth common in Chinese buildings, proved popular. It was recommended by Woodward for those parts of the dispensary “through which streams of patients must pass” to avoid damage wrought by the “nail boots of patients in wet weather”.⁸⁷ The ever enterprising Charles Lewis (see page 80 ff.), somewhat sacrilegiously, ground up a “great stone ancestral tortoise” and mixed it with cement to “get a perfectly smooth finish on the operating room floor”.⁸⁸

Many who described their new hospitals pointed with pride to the 'foreign flooring'.⁸⁹ Where timber floors were used they were often varnished with “the commonly used Chinese varnish”, that is, Ningbo 宁波 varnish, as described by Mildred Phillips at Suzhou:

the woodwork is of the best Chinese red-wood and camphor-wood, and the

⁸⁴ Balme and Stauffer, "Enquiry: Scientific Efficiency," p. 9.

⁸⁵ Peck, "Concerning Williams' Hospital": pp. 66-7.

⁸⁶ Butchart, "Hospital Construction": pp. 99-100; Mackenzie, "The Construction of Hospitals": p. 78.

⁸⁷ Edmund Lee Woodward, "The Practice of Asepsis in Mission Hospitals in China" *CMMJ* 18, no. 1 (1904): p. 256.

⁸⁸ Speer, "*Lu Taifu*", *Charles Lewis*, p. 70.

⁸⁹ For example, Osgood, "Tisdale Hospital, Chuchow": p. 415; Macklin, "Hwaiyuan Hospital Opening: Letter to the Editor": p. 374.

floors of foreign pine, – varnished with the commonly used Chinese varnish.⁹⁰

Butchart identified an interesting safety problem in the laying of timber floors in China. He exhorted builders to “insist on seeing that none of the floor timbers are run into the chimney and beneath the fire place, but at that point are separately supported.” He explained that “even good contractors are careless here, and fires are a consequence”. As a solution he recommended to “have the chimney built entirely outside the wall like the southern cabin, in which case it may be used to strengthen the wall and even be made ornamental”.⁹¹ It should not have surprised him that Chinese contractors had difficulty with this building technique: wooden floors were a novelty and chimneys were not a feature of Chinese buildings. Inexperience and unfamiliarity on the part of Chinese builders may have been a better explanation than carelessness.

Sewerage, of course, was a concern but many hospitals simply discharged waste into the river on whose banks they had conveniently located themselves. Jefferys noted that latrines were a serious problem

[i]n a land where running water is unknown and difficult to provide and where there is no sewerage water-closets are impossible (in Shanghai even forbidden by law).⁹²

Butchart considered it “next to the impossible” to achieve a clean latrine in a Chinese hospital. He suggested having a cement floor elevated three or four feet above the ground level with a drain for a urinal at one side and with oblong apertures opening into Chinese *gang*, or galvanized iron cans, below.

The Chinese can then adopt the natural squatting posture which they prefer and the floor having nothing on it, can be easily flushed with water and the *gangs* removed at the back and cleaned.⁹³

His suggested solution provides further evidence of his ability to come up with solutions that were both sensitive to Chinese custom while not sacrificing the hygiene he knew to be

⁹⁰ Phillips, "The Hospital for Women at Soochow" Varnish made from the sap of *Rhus vernicifera* with the peculiarity that it only hardens in a moist atmosphere. Couling, *The Encyclopaedia Sinica*, p. 587.

⁹¹ Butchart, "Hospital Construction": p. 100.

⁹² For his solution see Jefferys and Maxwell, *Diseases of China*, pp. 677-80.

⁹³ Butchart, "Hospital Construction": p. 102.

necessary.⁹⁴

Arrangement of Buildings

The other feature commonly found in mission hospitals, whether or not they adopted the pavilion ward, was the location of ancillary hospital functions in separate buildings. Most often these included the kitchen or cooking area, dining rooms, bathrooms, laundry, sometimes the operating theatre and, always, the morgue. McCartney's first Chongqing hospital provides a good example.⁹⁵ All non-ward facilities were located in a series of separate buildings. These included an operating room with instrument room attached. A two-storeyed building contained a dining room, kitchen, bathroom and room for the patients' cast-off clothing on the first floor and rooms for assistants and students on the second. St. Agatha's at Pingyin⁹⁶ was another that comprised a number of separate buildings within walled compounds. The main hospital building contained only wards, a dining room, the chapel and an operating suite. A kitchen and bathroom were located – as far away from the main building as was possible – in the northwest corner of the compound and the latrines were in the southwest corner. In an adjoining compound there were buildings for the outpatients department and guesthouses for those men who had accompanied their womenfolk to hospital.⁹⁷ (see Plate 30)

The separation of ancillary facilities could have been based on the belief that harmful vapours emanated from various activities and so was in tune with the recommendations of Erichsen discussed previously.⁹⁸ Certainly, the reason could also have been the practical one of adding a series of smaller buildings as time, money, expertise and need manifested themselves. Equally it could have been that, in China, it was traditional practice to build a series of buildings, each with a specific use, around a courtyard. For example, in a Chinese

⁹⁴ The problem was still apparent in 1918 when Nathaniel Bercovitz (with the APM on Hainan Island), in the absence of a method of rendering human waste from sick people safe to use, proposed a system of disposal into a septic tank that “does away with the use of faeces as fertilizer.” Nathaniel Bercovitz, “Studies in Sanitation in China: 1 The Disposal of Sewage in Institutions” *CMMJ* 31, no. 5 (1918).

⁹⁵ See page 93.

⁹⁶ See fn. 46 page 87.

⁹⁷ “The Opening of the Pingyin Hospital”: p. 409.

⁹⁸ See page 62.

domestic situation cooking was most likely to be done out in the open, on a verandah, or in an outhouse. Privies also, were located in separate sheds. Sewage was collected at night and taken for use as fertiliser. Chinese houses rarely had rooms set aside for bathing: those “well-to-do” who did bathe had water basins and tubs brought to them by servants.⁹⁹ It may be no more than serendipitous that congruence existed between the Chinese traditional arrangement, of separate buildings for different functions, and the separation recommended by Erichsen. If the reason McCartney located ancillary facilities in separate buildings was to avoid having 'contaminated air' circulate through the hospital wards, he did not articulate it. Certainly the practice would not have appeared at all strange to the Chinese and may in fact have served to make the hospitals more familiar.¹⁰⁰

Accommodation – Classes of Patient

Another related issue facing hospital designers was the proportion of total beds which should be set aside in private rooms. Medical missionaries made the same assumptions in China as their counterparts did in America and Britain, the poor could be herded together and the rich had to be provided with privacy. As Butchart expressed it:

... there are two classes of cases; one set that are poor and come perhaps with no friend. These like to be in the large ward, where they are not so much afraid of the magic of the foreigner. Others are used at home to retirement, and fret at being with the common herd. Private wards should be arranged for these, and are much appreciated and may be a good source of revenue to the hospital, as they are willingly paid for.¹⁰¹

A more sound reason for providing private rooms was the need to deal with patients with contagious diseases, particularly typhus. Butchart suggested using an isolation ward, “large enough to hold one patient, on the plan used in the separate pavilions in the women's hospital in New York”. He went on to describe its construction:

⁹⁹ Boyd, *Chinese Architecture and Town Planning: 1500 B.C. - A.D. 1911*, p. 83.

¹⁰⁰In the new Chongqing hospital, built by Dr Hall in 1902 the separate buildings were replaced by a single, four storeyed, “grey brick with white stone trimming” building in the shape of a cross. Those functions, which had been housed separately from the ward buildings: kitchen, wash house, dining room, store rooms, bathroom, and laundry were located in the basement and a strong room, morgue and gymnasium had been added. J.H. McCartney, *12th (1902) Annual Report of Chungking General Hospital of the Methodist Episcopal Church* (Shanghai: American Presbyterian Mission Press, 1903), pp. 1-2.

¹⁰¹ Butchart, "Hospital Construction": p. 98. H.W.

four corner posts with a floor, and the sides and roof are made of corrugated iron fastened to frames so as to be rigid and yet to be easily entirely re-moved, exposing everything to the sun and air...ventilation will be free under the corrugations of the roof. The aim being to protect only from rain and storm.¹⁰²

Given that he spoke of a one-person room he did not envisage significant numbers of people with contagious diseases being admitted. McCartney, Osgood and Lewis all mention that their hospitals had provision for isolating patients: the last two in buildings separate from the main hospital and McCartney, on the second floor of the main building.¹⁰³ Unlike in America, hospitals in China were not able to exclude those suffering from contagious diseases.¹⁰⁴

When Balme conducted his 1919 survey by far the majority of hospitals in China had been purpose-built as hospitals; a mere 10 percent operated in buildings adapted from Chinese houses. Given that, as we have seen, most missionaries started out in existing buildings there must have been something of a boom in building in the first two decades of the twentieth century. In fact, in 1919 Balme discovered that more than 80 percent (that is, 148 of the 177 for which details were provided) had been built since 1900: 72 in the first decade and a similar number, 76, in the second. Of the remaining 29, all but two had been built since 1880.¹⁰⁵

It was not until the middle of the 1910s that American and British architects entered the field of hospital design in China. Even then it was only in rare cases of medium to large hospitals, in major towns or cities, and often associated with new medical schools. For example, when formal medical classes were started in Jinan by the BMS "a small hospital, administered on native lines, seemed amply sufficient." By 1914, when a Union Medical College was established to consolidate the medical educational work carried out jointly since 1904 by the American Presbyterian and the British Baptist Missions, it had become "quite apparent that nothing less than a large modern hospital, built and equipped on

¹⁰² Ibid: p.102.

¹⁰³ Osgood, "Tisdale Hospital, Chuchow": p. 415 ; Speer, "*Lu Taiifu*", *Charles Lewis*, p. 48 ; McCartney, *The 12th (1902) Annual Report*, p. 2.

¹⁰⁴ For the admission policies adopted by the various hospitals at different times during the period, in both China and America, see page 183 ff.

¹⁰⁵ Balme and Stauffer, "Enquiry: Scientific Efficiency," p.4.

thoroughly up-to-date lines, could possibly suffice." A new hospital under the auspices of the Baptists and designed by Gilbert H. Perriman, one of the architects of the Shantung Christian University, was opened in September 1915.¹⁰⁶ Some smaller concerns, such as the Westminster Sunday School Hospital in Changde 常德 (Hunan), consulted an architect to solve particular æsthetic dilemmas. According to O.T Logan, who had initiated the medical work for the Cumberland Presbyterian Mission (CPM) in 1899 at Changde,¹⁰⁷

Mr. Stanley Wilson, Supervising Architect of the Yale Mission, who kindly furnished the drawings for the veranda, which in this case practically makes the front elevation [had succeeded in] diversifying the front of the building so as to give a pleasing appearance.¹⁰⁸

Given that sixty percent of all missionary hospitals operating in China in 1919 had been built before 1910 and architect-designed buildings are not mentioned before 1913, it is clear that the day of the doctor-builder in China lasted well into the twentieth century. It is likely that the understanding of Chinese preferences and customs these doctor-builders gained over the previous half-century would have influenced the architects' approach when *they* arrived on the scene.

¹⁰⁶ "Opening of the New Union Medical College Hospital, Tsinanfu" *CMJ* 30, no. 1 (1916): p. 49.

¹⁰⁷ The CPM was based in St. Louis, Missouri but united with the APM (N) in 1906 and the plant, staff and converts were transferred. Couling, *The Encyclopaedia Sinica*, p. 137.

¹⁰⁸ O.T. Logan, "Westminster Sunday School Hospital, Changteh, Hunan" *CMJ* 30, no. 5 (1916): p. 353.



Plate 17: Margaret Nast Hospital at Xianyou, Fujian, 1905

Source: "Margaret Eliza Nast Memorial Hospital, Sieng-iu." *CMMJ* 20, no. 4 (1906): p. 156.

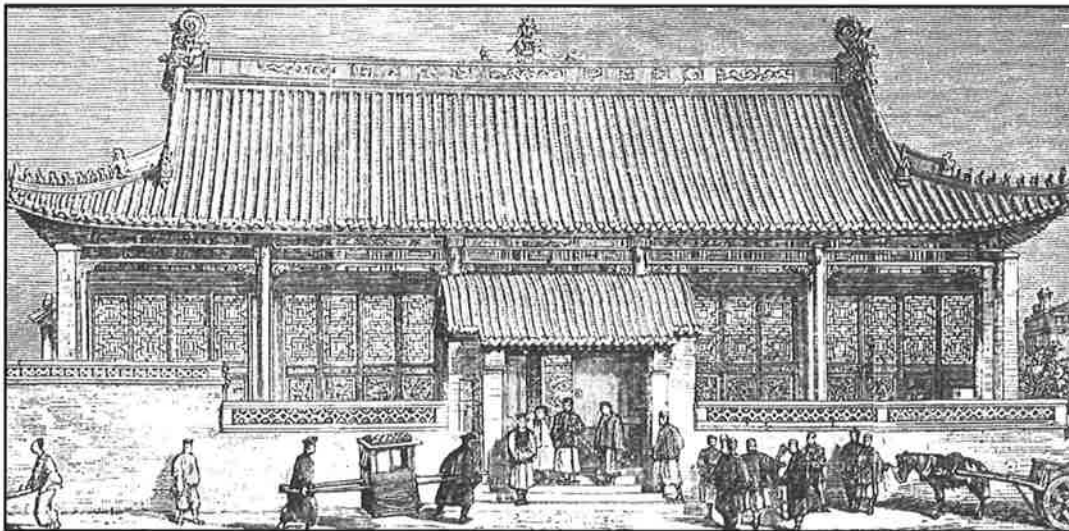


Plate 18: Mackenzie's LMS Hospital at Tianjin, Shandong, 1879

Source: Mary Isabella Bryson, *John Kenneth Mackenzie: Medical Missionary to China* (London: Hodder and Stoughton, 1891): facing p. 379.



Plate 19: "Moukden Hospital before the Boxers". Opened 1887

Source: Christie, Duguld. *Thirty Years in the Manchu Capital*. New York: McBride and Nast, 1914, facing page 136.



Plate 20: CMS Hospital, Hangzhou, Zhejiang, 1910

Source: Story of the Hangchow Medical Mission: in connection with the Church Missionary Society: n.p., 1910: p. 16.

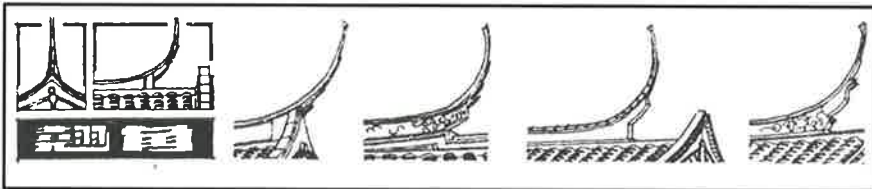


Plate 21: "Tail Feather" Roof End

Source: Ronald G. Knapp (2000) China's Old Dwellings, p. 142.



Plate 22: Matouqiang, Horse's Head Walls, Zhejiang

Source: Ronald G. Knapp (2000) China's Old Dwellings, p. 136.

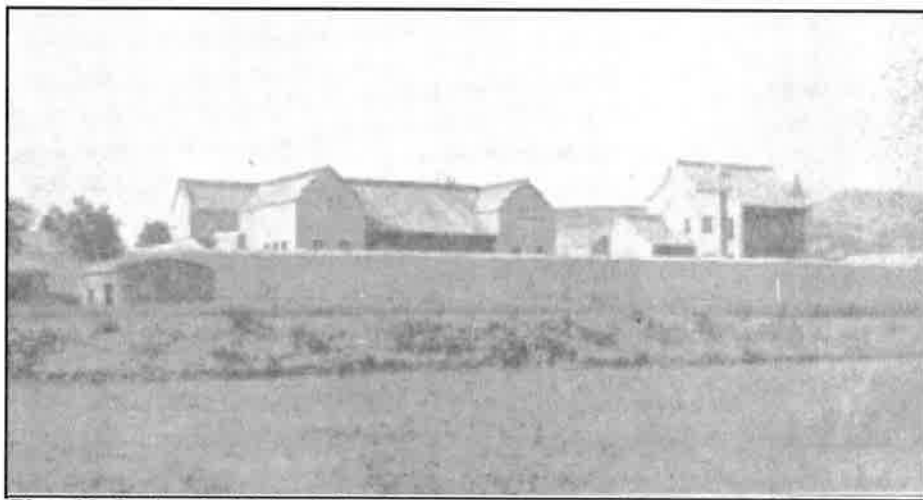


Plate 23: St. Agatha's Hospital and Doctor's House, Pingyin, Shandong, 1909

Source: *CMMJ*, Vol. 23, no. 6 (1909): Facing p. 407.



Plate 24: Main Entrance Gate and Gatehouses, St. Agatha's Hospital

Source: Moline, Mary. *A Threatened Hospital in China: Being the Story of St. Agatha's Hospital, P'ing Yin*, London: Society for the Propagation of the Gospel in Foreign Parts, 1933: front cover

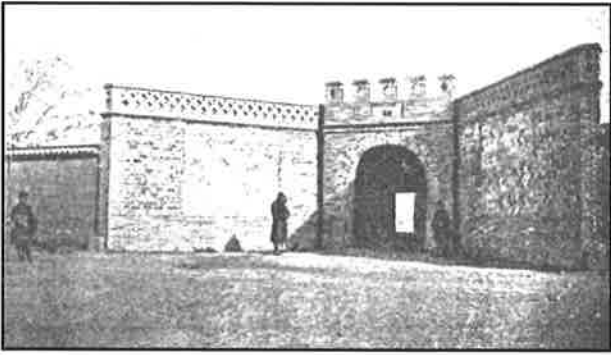


Plate 25: Entrance Gate, Linqingzhou Hospital, Hebei, c. 1910

Source: Tallmon, Susan B. *Glimpses of Lintsingchow Hospital*, Lintsingchow: A.B.C.F.M., 1910: p. 10.



Plate 26: Blythe Memorial Hospital Gatehouse, Wenzhou, Zhejiang, c. 1901

Source: Jefferys, W. Hamilton, and James L. Maxwell. *The Diseases of China*, Philadelphia: P. Blakiston's Son & Co., 1910: p. 666.



Plate 27: APM Hospital at Changzhou, Hunan, 1908

Source: Lewis, Stephen C. "Opening of the American Presbyterian Hospital at Chenchow, Hunan." *CMMJ* 22, no. 4 (1908): 257-8: p. 256.

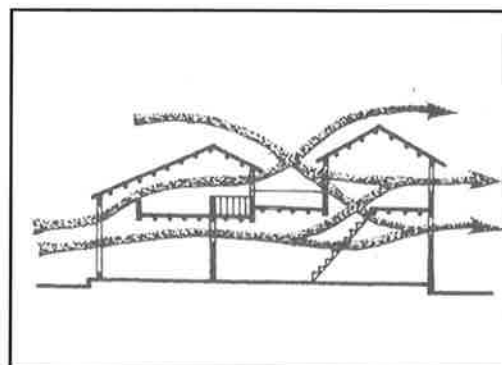
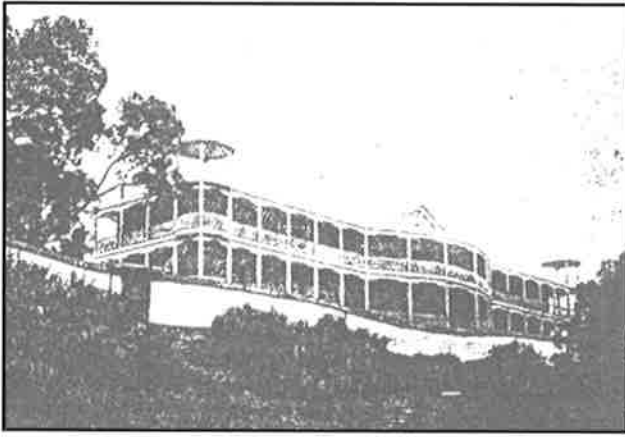


Plate 28: Air Flow through a Small Dwelling in Southern China

Source: Knapp, Ronald G. *China's Old Dwellings*. Honolulu: University of Hawai'i Press, 2000: p. 243.



**Plate 29: Alden Speare Hospital,
Yanping, Fujian, 1906**

Source: *CMMJ*, Vol. 20, no. 4 (1906): p. 212.

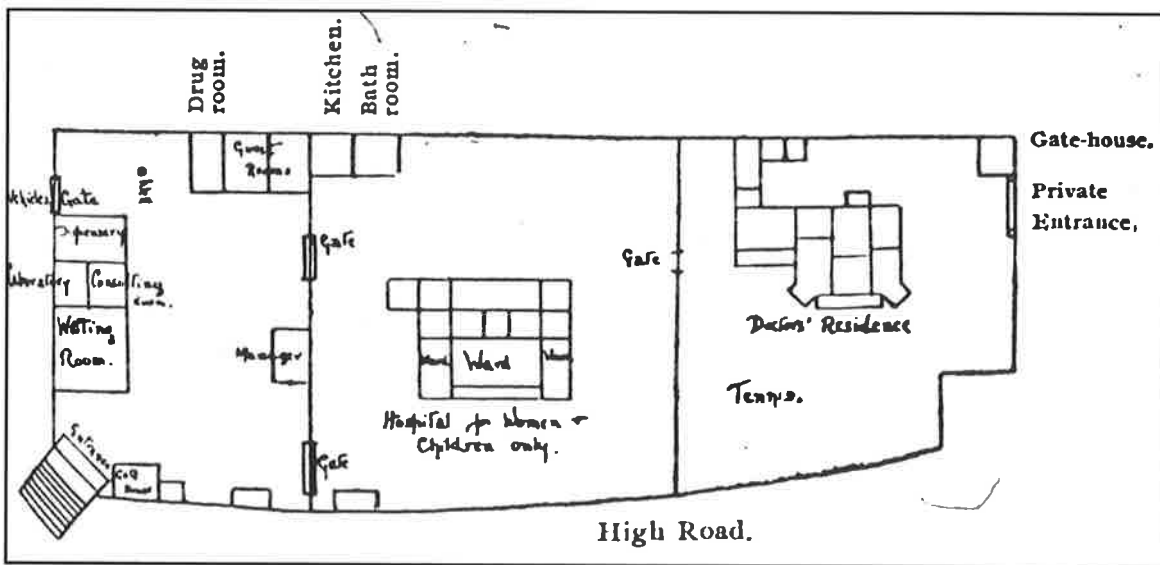


Plate 30: Groundplan, St. Agatha's Hospital, Pingyin

Source: *CMMJ*, Vol. 23, no. 6 (1909): p. 407.



**Plate 31: Hsiangya Hospital,
Changsha, Hunan, 1913**

Source: Hume, Edward H. *Doctors East Doctors West: An American Physician's Life in China*, New York: W.W. Norton and Co., 1946: p. 175.

CHAPTER 5: THE ARRIVAL OF ARCHITECTS

The arrival of private architects in China ushered in a new era in mission hospital building. According to Cody, by the end of the Qing there were “at least a dozen foreign architectural firms” operating from Shanghai.¹ These early architects were mostly British and none appear to have been involved in designing hospitals. One of the earliest examples of an architect-designed hospital was *Hsiangya*, the hospital component of the Yale-in-China (*Yali*) campus at Changsha 长沙 in Hunan, in 1913.² The medical school was established by the Yale Mission in partnership with the gentry of Hunan and administered by a committee with both American and Chinese members.³

Hsiangya for Yale-in-China, 1913

The architects chosen to design most of the campus were Americans, Henry Killam Murphy and his partner, Richard H. Dana, Jr. who were experienced in designing for American educational institutions but, at that time, had no previous experience in China. Murphy, though, wanted his buildings to reflect the philosophy of Yale-in-China: to balance “deference to Chinese history and adherence to scientific progress”.⁴ He could use his buildings to demonstrate to the Chinese that adopting modern plans and methods of construction did not mean that they had to abandon their architectural heritage. Also, according to Cody, members of the Yale-in-China Committee were anxious to “downplay *Yali*'s American roots by making some of the buildings appear as little ‘foreign’ as possible”.⁵ Murphy took as his inspiration for his Chinese-style buildings in Hunan the

¹ Cody, “Striking a Harmonious Chord”: p. 6.

² Named from the literary name for Hunan province, Hsiang and Ya from Yali (the transliteration of Yale) used from the time Hume established his first hospital in 1908, (see page 74), it was chosen to symbolise the co-operation envisaged between “the citizens of Hunan and the Yale University Mission.” Hume, *Doctors East Doctors West*, pp. 177-78.

³ For a summary of the history of this institution, see William Reeves, “Sino-American Cooperation in Medicine: The Origins of Hsiang-Ya (1902-1914)” in *American Missionaries in China: Papers from Harvard Seminars*, ed. Liu Kwang-Ching (Cambridge, Mass.: East Asian Research Center, Harvard University, 1966).

⁴ Cody, “Striking a Harmonious Chord”: p.10.

⁵ There had been “fierce [anti-missionary] riots in Changsha in 1910.” Cody, *Building in China*, p. 37. Yali yiyuan was the name Hume adopted for his first hospital, established in 1908.

Ming dynasty palaces constructed in Beijing during the fifteenth century.⁶ Murphy did not design the hospital component of the Yale complex however.

When Edward Hume, the physician sent to China to establish the Yale-in-China hospital, was on furlough in America he went to see his “good class-mate, the philanthropic Edward S. Harkness” to discuss his need for a new hospital.⁷ Harkness offered to provide the funds to build and equip a hospital on condition that he not be approached for recurrent funding, that it be a teaching rather than purely medical facility, and that the people of Hunan would consider it their own and manage and support it. He directed Hume to his own architect, John Gamble Rogers, who, armed with the information and samples of building materials available in China that Hume had brought with him, prepared plans for a four hundred-bed hospital. In his autobiography Hume described the plans as being “like nothing thought of in Hunan before”. It was to utilise reinforced concrete with “wards reaching out to the south toward the city, only a short distance away, like great arms beckoning the sick to come”.⁸ Hume makes no comment on the style of building but, as can be seen in the photograph (see Plate 31⁹), it is a rather monumental building very obviously built using foreign materials and building methods and relying almost exclusively on Rogers' interpretation of Chinese curved roofs to lend local character. Architect and historian, Su Gin-Djih, describes such foreign attempts at incorporating Chinese style as having the appearance of “a western building wearing a Chinese roof as a hat”.¹⁰ In his opinion this arose because the American architects' “knowledge of the Chinese treatise and proportion of unit module to elements of construction, and the method of obtaining the proper curvature of the roof was

⁶ Cody, “Striking a Harmonious Chord”: p. 10.

⁷ Hume, *Doctors East Doctors West*, p. 175. Edward Stephen Harkness (1874–1940, American philanthropist, b. Cleveland. He inherited a fortune from his father, a partner of John D. Rockefeller, Sr. His extensive philanthropies, many of them anonymous, were extended especially to colleges, hospitals, and museums. *The Columbia Encyclopedia*, Sixth ed. (New York: Columbia University Press, 2002).

⁸ Hume, *Doctors East Doctors West*, p. 176.

⁹ *Ibid*, p. 175.

¹⁰ This criticism is less harsh than that Gwendolyn Wright found among French colonial architects in Indochina, for whom “the worst architectural sin ... was any intrusion of Indochinese architectural motifs ... The result of such a merging of cultures, in architectural as in racial terms, was branded with the epithet “metis”. Gwendolyn Wright, *Politics of Design in French Colonial Urbanism* (Chicago: University of Chicago Press, 1991), p. 179.

pitifully lacking".¹¹ So, although the "Yale administrators were ... committed to using Chinese-style buildings" and the rest of the medical school (Library, Chapel, School and dormitories) echoed Ming palaces, this 'modified western-style' hospital sent "mixed stylistic signals" to the people of Changsha.¹²

Church General Hospital at Wuchang and the Peking Central Hospital, 1916.

Another foreign architect, Harry Hussey, went further than the roof artifice and incorporated basic principles of Chinese design and orientation into his hospital for the ACM at Wuchang 武昌 in Hubei. His model for parts of the Wuchang hospital was not a palace or temple but appears to be the more modest mud-brick, or rammed earth, buildings of the Chinese countryside.

Hussey was a Canadian, a principal of the Chicago-based firm Shattuck¹³ and Hussey, who had been in China since 1911, when the YMCA moved into China and brought him in as their architect.¹⁴ By 1915, when the ACM approached him to design a modern general hospital to replace their separate men's and women's hospitals (St. Peter's and Elizabeth Bunn Memorial¹⁵) at Wuchang, he was very familiar with building under Chinese conditions. His decision to establish an office in Shanghai in the autumn of 1915 had been welcomed by the China Continuation Committee (CCC) of the National Missionary

¹¹ Su Gin-Djih, *Chinese Architecture: Past and Contemporary*, p. 130. The curve of the traditional Chinese roof is not a mere decorative device. Buildings in China were commonly wooden structures and the overhanging eaves served to protect the walls from rain. The eaves were swept upwards to permit light to enter the interior, despite the overhang. The gap between the top of the wall and the roof also allowed cross-ventilation of the building. In addition, the concave curve of the roof meant that the Chinese semi-cylindrical tiles could be fitted together "snugly for watertightness." Liang Ssu-ch'eng, *A Pictorial History of Chinese Architecture: A Study of the Development of its Structural System and the Evolution of its Types.*, p. 12.

¹² Cody, "Striking a Harmonious Chord": p. 10.

¹³ Shattuck was Hussey's professor and the President of the Chicago Art Institute.

¹⁴ Hussey had undertaken commissions for the YMCA while still a student at the Chicago School of Architecture at the Art Institute after winning several design competitions. Harry Hussey, *My Pleasure and Palaces: An Informal Memoir of Forty Years in Modern China*, 1st ed. (New York: Doubleday and Company, 1968), pp. 46-50. The YMCA wished to avoid problems encountered by other organizations who had drawings prepared by architectural firms in America who were not familiar with Chinese landscape, conditions, skills or materials. Cody, "Striking a Harmonious Chord": p. 7.

¹⁵ The first ACM Wuchang hospital for men, started in rented premises in 1874, was replaced by a purpose-built hospital (St. Peter's) in 1894. A hospital for women was opened in 1883. "General Hospital American Church Mission, Wuchang, Hupeh" *CMMJ* 33, no. 1 (1919): p. 72.

Conference,¹⁶ which had been investigating ways to relieve missionaries of the burden of designing and overseeing the erection of mission buildings.¹⁷ Of all the foreign architects it appears that he became the most prolific in hospital design. Between 1916 and 1920 he was responsible for the design of at least three significant hospitals: the Peking Central Hospital for a Committee of Chinese Trustees¹⁸ (opened January 1918); the Church General Hospital at Wuchang (opened December 1918);¹⁹ and the Peking Union Medical College (PUMC) for the Rockefeller Foundation (opened September 1921).²⁰

The published plans for the Wuchang hospital reveal some of the ways Hussey was experimenting with incorporating Chinese design principles into his architecture. First, the orientation and massing of buildings. Four main principles govern the manner in which traditional Chinese buildings are arranged on a site and grouped within a complex. They can be summarised thus: orientation to the cardinal directions; inward-looking and introverted rather than extraverted; axiality; and side-to-side symmetry. In addition, buildings are commonly surrounded by a wall, intersected only by an entrance gate which emphasises the sense of seclusion, and they are arranged so as to form internal courtyards.²¹ Within the compound the most important buildings face south and are set hierarchically, one behind the other, along a N-S axis – the highest status building occupying the northernmost, most secluded and most private position. In the traditional residential compound lesser status buildings are built facing east and west. South facing orientation, with a solid

¹⁶ In particular, by the Special Committee on Business and Administrative Efficiency. The CCC was established in 1913, under the presidency of Dr John R Mott, to help carry out, inter alia, the recommendations of the Missionary Conference held in Shanghai, “promote co-operation and co-ordination among the Christian forces of China” and “serve as a clearing house for information”. Couling, *The Encyclopaedia Sinica*, pp. 97-8.

¹⁷ E.C. Lobenstine, "Letter to the Editor: Relief for Missionary Builders" *Chinese Recorder and Missionary Journal* 46, no. 9 (1915): pp. 578-79 and "A Missionary Architectural Firm" *Chinese Recorder and Missionary Journal* 46, no. 11 (1915).

¹⁸ Led by “His Excellency Chou Hsueh-hsi, Minister of Finance under President Yuan Shik-Hai” and Wu Lien-teh, For the others members, a description of the lead up to building and costs, see Wu Lien-teh, *Plague Fighter; the Autobiography of a Modern Chinese Physician* (Cambridge [Eng.]: W. Heffer, 1959), p. 460-46. See also Wu Lien-teh, "The Central Hospital of Peking" *CMMJ* 31, no. 4 (1917): pp. 352-54.

¹⁹ "General Hospital American Church Mission, Wuchang, Hupeh": p. 72.

²⁰ "Peking Union Medical College" *CMJ* 35, no. 4 (1921): p. 485. See W.W. Peter, "The Conference and Dedication at Peking" *CMJ* 35, no. 5 (1921) for a description of the formalities and the conference called to mark the occasion. Part of the complex had been opened since September 1919. "Peking Union Medical College": p. 457.

²¹ Knapp, *Old Dwellings*, pp. 62.

back wall to the north, not only protects the occupants from strong wind while opening the building to the winter sun but also has symbolic meaning. According to Peter Swann, the Chinese view the north as the “source of evil influences” and the emperor’s palace and, indeed, the emperor “corresponds to the Pole star in the heavens” round which all stars appear to turn. The palace, like the emperor, turns its back to the north and faces south with all subordinate buildings, or the world the emperor rules, lying to the south of it.²² The selection of sites and the arrangement of buildings are also influenced by geomantic considerations. Francesca Bray discusses the role of geomancy on health at some length in her article on Chinese health beliefs. She describes the landscape, as well as the body, as possessing *qi* 气 that can be manipulated to improve the well-being of its inhabitants. The Chinese science of siting is called, *dili* 地理 (the principles of the earth), “or in more vulgar terms” *feng shui* 风水 (wind and water). Firstly, a favourable location is determined by its orientation and the “configuration of streams, hills, boulders and trees” on and near the site. Then, the arrangement of buildings within the compound and the height of roofs and gates are “all designed to channel (not increase) cosmic *qi* for the benefit of the occupants and to exclude harmful influences”.²³

The orientation and plan of the Wuchang building conformed in large part to these principles. The first building patients encountered – housing the waiting rooms for men and women – was rectangular in plan and was oriented with its longest side facing south. The hospital-proper was symmetrical in design and was positioned, on a S-N axis, directly behind the dispensary. Both main buildings presented a long, low, rectangular elevation on the south that was perfectly symmetrical in every respect. When and if expansion became necessary, Hussey had anticipated that the multi-storey part of the building could be replicated immediately behind the first building – again in accord with the Chinese planning principle of “axiality”. (see Plate 32²⁴) The whole complex was set within a walled

²² Curator, collection of Eastern art, Ashmolean Museum, Oxford. Peter C. Swann, *Chinese Monumental Art* (London: Thames and Hudson, 1963), p. 232.

²³ Francesca Bray, “Chinese Health Beliefs” in *Religion, Health and Suffering*, ed. John R. Hinnells and Roy Porter (London and New York: Kegan Paul International, 1999), p. 200.

²⁴ Logan H. Roots, *Our Plan for the Church General Hospital, Wuchang: A Statement of the Most Urgent Needs in the District of Hankow*, Leaflet 211 (New York: The Board of Missions, c. 1916), p. 10.

enclosure and as one moved along the south to north axis one entered increasingly private space. Other than pagodas, Chinese buildings in the Ming, and to a greater extent in the Qing, were characterised by their “horizontality”²⁵ and both the hospital and the waiting rooms conform to this tradition. Still, there was no doubt that this complex was a western creation: the most obvious deviation from traditional Chinese principles was the absence of enclosed courtyards. In this three-storey building, without direct access for patients and staff to the grounds, some of the functions of courtyards would have been performed by the solarium and roof-gardens.

It is difficult to determine which hospital Hussey designed first, this one at Wuchang or the Peking Central. We know that he was engaged by a group of Chinese officials to prepare the Peking plans in the spring of 1915.²⁶ The design for the hospital at Wuchang must have been developed at about the same time because his drawings (an isometric rendition and plans of the three floors) were reproduced in a fund-raising pamphlet published by the Rt Rev. Logan H. Roots sometime in 1916.²⁷ Although the hospitals were of comparable size – around 150 beds – and shared a considerable number of design features they also differed significantly. Drawings and a photograph survive for one (Wuchang) and a detailed description and photographs of the other (Peking). It is on these that I rely for the following analysis.

The Wuchang hospital complex was set on land with a frontage of 400 feet and depth of 500 feet enclosed within the ubiquitous, in this case low, wall. (see Plate 33) The design called for two main buildings: a one-storey building housing separate waiting rooms for men and women and, directly behind it, the two-storey hospital proper with a roof garden. These buildings, both rectangular in plan, faced south with their long sides running east-west. A one-storey dispensary, running south-north, formed a link between the waiting rooms and hospital. The most striking thing about this design is the way Hussey clearly differentiated between the in- and outpatients' departments. The former was essentially

²⁵ Boyd, *Chinese Architecture and Town Planning: 1500 B.C. - A.D. 1911*, p. 45 ; Knapp, *Old Dwellings*, p. 22.

²⁶ Foundations were dug June 1916. Wu Lien-teh, "The Central Hospital of Peking": p.461.

²⁷ Roots, *Our Plan* .

western in appearance, suggestive of the neo-classical style common in America at the time. It was constructed with “ferro-concrete and brick” exterior walls, a simple hipped roof with chimneys, and lacked the characteristic Chinese curves or overhanging eaves. The outpatients' department, on the other hand, is housed in extremely simple, single-storey buildings with Chinese tiled, flush-gable, roofs in a style more reminiscent of rural Chinese adobe buildings. (see Plate 34) The department had two main components: waiting rooms (discussed above) and duplicate dispensaries, consisting of examining rooms, bathrooms, surgeries, and offices for Chinese and missionary doctors, one set for men, on the west, and a matching set for women, on the east. These dispensaries are, like the waiting rooms, single-storey with twin gable roofs – one over each section – continuing the low simple lines.

The number of patients attending the dispensary was always far in excess of those admitted to hospital and it was almost always to be the first point of contact between the Chinese patient and medical missionary.²⁸ If Hussey, or the medical missionaries he was working with, adhered to the principle of ‘not frightening the natives’ discussed earlier, it would be appropriate that the dispensary should be designed in keeping with local tradition. In Hussey's Wuchang hospital the entrances through matching gatehouses, waiting rooms, and dispensaries all conformed to this policy and would have been familiar and possibly even welcoming to potential patients. Presumably by the time a patient was admitted to hospital he or she would be sufficiently familiar with the situation to be undeterred by the foreign appearance of the hospital-proper. Hussey does not tell us in his memoir, nor is it mentioned in anything published at the time the hospital opened, what drove his overall design nor what thinking shaped this component of the complex.²⁹ Was it purely an æsthetic decision, governed by a wish that his building 'harmonise' with its surroundings; was he consciously trying to appeal to the Chinese; or was cost the deciding factor? It would seem that any or all of these might have been motivating factors. Unadorned Chinese-style buildings, constructed using traditional materials and methods, were less costly per square

²⁸ See page 184.

²⁹ See "General Hospital American Church Mission, Wuchang, Hupeh"; Roots, *Our Plan* .

metre than using foreign materials and adopting this style for the outpatients department would have freed scarce funds for the more expensive foreign-style hospital building. Hussey's ability to use local materials and provide the Chinese with buildings acceptable to them was demonstrated when he was commissioned by the Red Cross to solve the logistical problem of housing thousands of refugees from floods in North China at the end of 1917. With the help and advice of the man he had contracted to provide labour for building the hospital, Mr Liu, he designed a hut made of locally available and cheap materials. He used reeds bent over a framework, plastered inside and out with mud, sealed with waterproof lime – “a material ... known only in China” – and paper stretched over a light wooden frame formed the southern face. The huts not only let in light and heat from the sun but were also warmed in winter by a cooking stove, the smoke and fumes from which passed through flues under a brick *kang* 炕 and out through a chimney. His practical organisational skills and ability to work with Chinese tradesmen were also in evidence: he had taken the tradesmen who were to build the Peking hospital to Tianjin and there they built at least nine thousand “Hussey Huts” in the first seven weeks while teaching the local (refugee) farmers to build so that they could take over and complete the project.³⁰

I now turn now to the hospital-proper. It is clear, from an examination of the plans for the two main floors of the hospital, that Hussey was attempting to satisfy a number of conditions: efficiency of operation, segregation of the sexes, separation of medical, maternity and surgical patients, adequate ventilation and access to sunlight, a variety of classes of accommodation, and sensitivity to Chinese preferences. The desire for efficiency led to him placing common services centrally. For instance, the drug rooms on the ground floor served both the outpatients' department and the hospital, and were accessible from either. Certain aspects of efficiency, though, were compromised by the need to separate men from women. As Lewis had explained, he had built a hospital exclusively for men at Baodingfu in 1903 because “in the early days separate hospitals were built for men and women to meet Chinese ideas of propriety”.³¹ Hussey's early twentieth-century general

³⁰ Hussey, *My Pleasure and Palaces*, pp. 230-32.

³¹ Speer, “*Lu Taiifu*”, *Charles Lewis*, p.48. This aspect of hospital design and management is dealt with in more detail at pages 179 ff and 195 ff.

hospital was still effectively two hospitals. A central south-north axis split the hospital metaphorically and physically: a solid wall ran through the whole complex from the waiting rooms, through the dispensaries to the hospital-proper, on all floors, completely separating the west from the east thus separating the men from women and children. There was no way for staff to move from the men's 'hospital' to the women's except through the chapel which opened into both sections. Not only would this arrangement have been inefficient in terms of staff it also meant that every facility and its equipment, including operating theatres, had to be duplicated. Presumably the additional cost in capital and labour were considered necessary to accommodate the sensibilities of the Chinese. (see Plate 35)

The hospital appears to have been organised along departmental lines: there was separate accommodation for medical, surgical, and maternity patients as well as separate wards for children, 'eye' patients and those with tuberculosis. There were also two small isolation wards. This arrangement was similar to that recommended for contemporary, medium size, hospitals in America and is what the Board of the Lancaster hospital aspired to.³² A particular feature of this hospital was the accommodation for patients suffering from tuberculosis, using roof gardens – both open and covered. At the time 'open-air' treatment, involving exposure to fresh air and sunlight, was a popular response to tuberculosis and architects were advised, in 1913, of the advantages:

External heating is reduced to a minimum. ... patients are indeed trained to live in as cold a temperature as the resisting powers of their bodies will permit with safety.³³

The flat roofs of the wards and their solaria, at the extremes of the east-west axis, were used as open roof gardens. (see Plate 36). Above the main east-west corridor there was a hipped roof supported by columns that formed a covered roof garden – open on three sides and with a solid wall on the northern side. Facilities, such as the pair of isolation wards, diet kitchens, storerooms, bathrooms and an office for Chinese doctors, were located along this

³² *Lancaster Hospital*, p. 11 ; Risse, *Mending Bodies*, p. 469.

³³ Milburn, "A Comparative Study of Modern English, Continental and American Hospital Construction" *JRIBA* 8, no. 3 (1913): p. 271..

wall. The open, but covered, area provided accommodation for ten tuberculosis patients in separate cubicles: five men and five women. A further fourteen beds (seven men and seven women) lined the southern side.

Hussey's architectural solution to ventilation and sunlight within the building was also innovative. His design diverged radically from the commonplace central core with pavilion wards forming the U, or the equally common, H plan. On each of the first two floors a corridor ran from west to east but at either end it was split into a "bipartite wing with an intervening verandah containing the main...wards and their solariums". Wu Lien-teh explained the thinking behind this aspect of the design of the Peking Central Hospital, which shared a similar ground plan, as having been

decided upon in order to gain maximum of light with a minimum of exposure to northern winds in winter, and also to meet the objections of Chinese patients to rooms facing directly east and west.³⁴

The plan reveals that Hussey's solution had a number of practical advantages over the standard pavilion as well as accommodating Chinese sensibilities. The resulting eleven-bed wards were octagonal in shape, with two long sides and six shorter ones. (see Plate 37) The three short sides at one end formed (i) the attachment to the main building, (ii) entrances to the corridors and (iii) a short wall separating the wards. At the other end, breaking the wall into three was aesthetically pleasing and allowed for three windows instead of one. Thus each ward had five walls which could accommodate a total of eight windows and three sets of French doors. This arrangement had the ventilation advantages of the pavilion cleverly incorporated into the building without sacrificing efficiency of staff movement or supervision. All patients "requiring the sun treatment" had direct access to a solarium through French doors.³⁵

The plan of this building is that of a modern hospital, comparable to what was being built in America at the time: it was "piped for steam heat, hot and cold water, sanitary drainage, and

³⁴ Wu Lien-teh, *Plague Fighter*, p. 463. I have found no other reference to this objection and in traditional courtyard houses some buildings faced east and west.

³⁵ *Ibid*, p. 464.

... lighted by electricity".³⁶ Surgery was provided for in a pair of well-lit operating theatres, one male and one female, on the second floor on the northern side above the chapel and each with an atrium and skylight over half the room. The hospital fell short, though, in a number of respects. Firstly, the degree of separation was somewhat less than ideal: the bipartite wards were not isolated from one another, or from the corridor, since a door connected them and both opened directly onto the corridor. The toilet and bathroom also opened directly onto one of each pair of these wards. Secondly, compared to the facilities considered essential for the practice of 'scientific' medicine in a modern small-town hospital in America, the Wuchang hospital does not appear to have been well endowed.³⁷ Although there were plans for replacing the "crude and inconvenient" laboratory facilities, if \$1,400 could be raised, there is no evidence of provision for a laboratory or X-Ray department within the new hospital.³⁸ Nor do there appear to have been spaces set aside for administrative-type activities such as record-keeping and charting. The kitchen and laundry were apparently housed in the basement but there appears to have been a distinct lack of storage and other 'utility' spaces for, for example, the storage of clean and soiled bedding and clothing, cleaning equipment, food supplies or a work room for nurses. There is no indication, either, of the way death in the hospital would have been handled and there is no morgue shown on the plan.³⁹ There was little provision made for teaching space – just one small classroom the size of a single private room.⁴⁰ The emphasis seems to have been on providing beds for as many patients as possible with the needs of staff or any students taking a lower priority. There is no way, given the available material, to know whether this emphasis was a function of wanting to treat, and influence, the maximum number of people for the amount of money available for building – after all ancillary services and amenities for staff would have been very costly – or whether there were other ideological reasons.

³⁶ "Opening of the New Union Medical College Hospital, Tsinanfu": p. 72.

³⁷ See the specified minimum requirements for a small hospital set out in a design competition held by the publishers of the journal "The Modern Hospital" in 1923. *Architectural Designs for a Small Hospital*, (Chicago: The Modern Hospital Publishing Co., 1923), p. 104.

³⁸ Roots, *Our Plan*, p. 10.

³⁹ The issue of death in hospitals is dealt with in at page 242 ff.

⁴⁰ Teaching, both clinical and classroom, was carried on at this hospital as it predated a medical college at Wuchang.

A mix of standards of accommodation was provided in wards, single private rooms, and small four-bed wards. This mix mirrored the growth in private accommodation in hospitals in America to provide for the middle and upper classes. In China, though, mission hospitals had, from the beginning, tried to attract patients from the official and gentry classes. The motivation was two-fold: as a means of gaining official recognition and the opportunity to influence people in power as well as earning additional income. Consequently, in China, private rooms had been the norm rather than the exception.

While Hussey used the same basic plan and shape for the hospitals at Wuchang and Peking any concession to Chinese design principles, other than symmetry (which was, after-all, a feature of the Neo-Classical architecture popular for public buildings in America at the time) was abandoned in the Peking version. (see Plate 38⁴¹) The Peking Central Hospital, which Wu Lien-teh described as “thoroughly modern” and “distinctly American” in style, was far grander than the one at Wuchang.⁴² Gone was the modest human scale outpatients' department providing an unthreatening introduction; the hospital-proper stood alone on high ground with a sweeping circular driveway in front of an elaborate entrance at the top of a flight of steps.⁴³ There was a small outpatients' department but it was incorporated into the basement of the eastern wing of the principal building.⁴⁴ There does not appear to have been a wall surrounding this hospital, and Wu does not mention one. It is also taller than the Wuchang building, mainly due to having a basement floor with windows at least six feet above the ground. The Wuchang basement, where the kitchens and laundry were located, was small, occupying only a space projecting out from the north wall beneath the chapel. The façade of the Wuchang building was also altogether plainer. Its simple rectangular windows lacked ornamentation compared to those at Peking and its roofline

⁴¹ Wu Lien-teh, "The Central Hospital of Peking": p. 271.

⁴² Wu Lien-teh, *Plague Fighter*, pp. 462-63.

⁴³ Nearly three feet above the street level. *Ibid*, p. 463.

⁴⁴ A clinic, located in the “southern and more crowded section of Peking, where paying and non-paying patients were seen” fed the hospital. *Ibid*, p. 465.

was simpler, not having the elaborate roofed entrance.⁴⁵

The differences Hussey incorporated into the basic design can be explained in a number of ways. Firstly, the capital, Peking, was more cosmopolitan than Wuchang: Wuchang the “strategic center of China”, located where the Yangzi River crosses the railway from Beijing in the north to Guangzhou in the south, had been more recently, and less extensively, exposed to foreigners and foreign buildings.⁴⁶ The grander, more substantial-looking, building suited the capital city site whereas the more modest, but equally modern, hospital was more appropriate in a provincial centre. Secondly, the aims of architectural clients are always an important influence and it would appear to be the case here: Wu Lien-teh, the honorary medical director of the Peking Central Hospital, wanted a “thoroughly modern hospital ... as a reminder to America that her sister republic is forging ahead” and one which would act as “a model *civil* hospital of China ... to promote the interests of scientific medicine”.⁴⁷ The Wuchang ACM, on the other hand, expressed their aims rather less grandly and focussed more on the needs of the Chinese community to relieve suffering and afford a model which the Chinese may safely imitate.⁴⁸ Thirdly, Hussey’s personal ambition probably played a part. At the time he was building the Peking Hospital he was courting the Rockefeller Foundation executives who were looking for an architect to design the Peking Union Medical College (PUMC): an imposing modern hospital worthy of the capital would have been impressive and would have demonstrated his credentials.

Peking Union Medical College Hospital, 1920

Since arriving in China Hussey had developed a passion for Chinese imperial architecture. When he settled in Peking in early 1917 he purchased a home that he described as having been being built for the “Keeper of the Imperial Archives under the Manchu”. It was

⁴⁵ Interestingly, there are no chimneys shown on the drawing, which raises the question of whether they were simply omitted from the drawing, from the building altogether, or were somehow hidden to lend a Chinese look to the roofline.

⁴⁶ Mary Latimer James, "Mary Latimer James, M.D." *Medical Woman's Journal*, no. October (1945): pp. 55-6. James, a graduate of Bryn Mawr (1904) and the Women’s Medical College of Pennsylvania (1907) was appointed to the hospital in 1914 and stayed for 25 years.

⁴⁷ Wu Lien-teh, *Plague Fighter*, pp. 460-62.

⁴⁸ Roots, *Our Plan*, p. 4.

within the red wall of the Imperial City, a stone's throw from the walls of the Forbidden City, and a five-minute walk to the British and American legations ... a fine example of the Chinese architecture of the early Ming emperors, evidently designed by the architects who had built many of the palaces and public buildings in Peking.⁴⁹

He increased his understanding of Chinese architecture during the years he spent restoring it.

I tried to make it a good example of the best Chinese domestic architecture adapted to the requirements of modern life. It became the meeting place for the Oriental and the Occidental.⁵⁰

It was with the commission to build the PUMC that Hussey was able to indulge his passion for traditional 'grand' Chinese architecture. The Rockefeller Foundation had purchased a twelve-acre property, close to the Forbidden City, surrounded by a twenty-foot high wall.⁵¹ Hussey described the buildings he was to demolish to make way for the main buildings of the medical school and hospital:

the palaces with their beautifully carved, white marble balustrades and steps; the beautiful gardens with small lakes crossed by white marble bridges, and the great number of old trees, all in a remarkably good state of preservation.....in destroying Yu Wang Fu we destroyed greater and more beautiful and more important buildings than we built. It was vandalism; we should have built elsewhere and kept the beautiful Yu Wang Fu, equal to any residence in the imperial city, as a national monument.⁵²

Despite this regret and self-recrimination he was to describe the buildings for the PUMC as "the best I ever designed".⁵³

The Foundation had approached Hussey early in 1916 while he was back in America: "they wanted to look me over a few more times" before commissioning him as chief architect for

⁴⁹ Hussey, *My Pleasure and Palaces*, p. 216.

⁵⁰ Ibid .

⁵¹ Ibid, p.224. The PUMC was the result of a union of North China Education Union (comprising the ABCFM, LMS, and APM in Beijing) using the medical schools of the AMEM Peking University's and LMS. A new College had been opened in 1906. See Ernest J. Peill, "The New Union Medical College in Peking" *CMMJ* 20, no. 1 (1906): 122-24.

⁵² Hussey, *My Pleasure and Palaces*, pp. 224-5.

⁵³ Ibid, p.211.

all their buildings in China.⁵⁴ Eventually he was to agree to their request to take on the dual roles of architect *and* builder of the PUMC.⁵⁵ He moved to Baltimore, where he established an architectural office within Johns Hopkins Hospital, visited “all the new hospitals and medical schools in America” and, later, several in Europe”.⁵⁶ He was to draw up plans in consultation with Drs Winford Smith and William H. Welch of Johns Hopkins and consulting architect, Mr Charles A. Coolidge.⁵⁷ Never one to miss an opportunity or to fail to use his connections, so that he could understand the requirements of the various departments he was

given the privilege of attending all lectures, operations and autopsies held in the hospital. I took full advantage of this opportunity. The name of Rockefeller was a magic word at Johns Hopkins.⁵⁸

He also had access to all the hospital staff for advice. The hospital that Hussey designed would have the benefit of the latest findings on the best of contemporary hospital planning.⁵⁹ For the exterior, though, he decided to use “the same style of Chinese architecture as was used in the beautiful buildings of the Forbidden City”.⁶⁰ In this, according to his account, he was supported by the Rockefeller Foundation, Charles Coolidge, the American Ambassador to China (Dr Paul Reinsch) and officials in the Chinese government. He reported that Coolidge had spoken to Chinese officials who told him “they hoped the Rockefeller Foundation would not build another foreign city, like the Legation Quarter”. He also claimed that Coolidge recommended him to the Rockefeller Board not only because of his “connections with Chinese government officials” but also

⁵⁴ Ibid, p. 209.

⁵⁵ Ibid, p. 211.

⁵⁶ Ibid, p. 210.

⁵⁷ Mr Charles A. Coolidge of Shipley, Putnam and Coolidge of Boston, consulting architect to the Rockefeller Foundation, PUMC.

⁵⁸ Hussey, *My Pleasure and Palaces*, p. 210.

⁵⁹ Nowhere is it clear whether Hussey had had the advantage of this research and advice when he designed the earlier Wuchang and Peking Central hospitals. I have been unable to find out exactly when he prepared the plans for these but he was commissioned shortly before returning to America in early 1916 and it is possible that he produced them during this period.

⁶⁰ Hussey, *My Pleasure and Palaces*, p.237. Swann describes the Forbidden City as being “dominated by the red buildings whose tints are often toned down by sun and rain to brownish reds or greys and the whole crowned by yellow glazed tiles which glitter in the sunlight.” Swann, *Chinese Monumental Art*, p. 240.

because of his knowledge of Chinese architecture.⁶¹ The Minister for the Interior, an architect Chu Chi Ch'ien, whom Hussey flattered as “the greatest living authority on Chinese architecture [and] one of the greatest living architects and author of one of the finest books ever written on Chinese architecture,” apparently praised the Hussey design.

He told me how pleased he was with my designs; told me how relieved he was, as he had feared the buildings (so close to the beautiful Forbidden City) would be built in foreign style, the style of many ugly buildings the foreigners had already built in Peking.⁶²

George Kates described these ‘ugly buildings’, particularly in the Legation Quarter (built on land divided among foreign powers after 1901) as looking as though they had been lifted and set down in China; “a most oddly assorted juxtaposition of architectural *tranches de gateau*”.⁶³

Perhaps the culmination of the non-diplomatic buildings was the large, balconied, German hospital, in stern Teutonic Gothic, with an entrance doorway as for some hostel of Knights Templar.⁶⁴

By comparison, it is evident from his perspective of the complex, that the scale, massing and symmetry of Hussey’s buildings all conform to Chinese design principles. (see Plate 39) Support for Hussey’s design decision was not universal however and he cites missionaries as saying, on more than one occasion, that the “buildings should not be in Chinese architecture, they should have been designed like our American colleges to show the Chinese some good American architecture”.⁶⁵

Hussey did not concentrate, as others had, almost exclusively upon roof slopes, to lend a Chinese look to an otherwise Western building. His buildings for the PUMC resembled the temple and palace buildings of the Forbidden City. Not only did he use double-hipped, curved tiled roofs but he also incorporated Chinese lattice windows and the Chinese

⁶¹ Hussey, *My Pleasure and Palaces*, p. 216.

⁶² *Ibid*, p. 229.

⁶³ George N. Kates, *The Years that were Fat: The Last of Old China* (Cambridge, Mass.: The M.I.T. Press, 1976 (1952)), p. 76.

⁶⁴ *Ibid*, p. 77.

⁶⁵ Hussey, *My Pleasure and Palaces*, pp. 220, 230.

appearance of his buildings was further enhanced by his choice of materials, particularly bricks and roofs tiles. He found that the Chinese-manufactured bricks were not suitable. They were poorly made, too small, and too soft and he had

long before been converted to the idea of the Chinese architects that the bricks used in a building should be proportionate to the size of the building – small bricks for small buildings and large bricks for large buildings.⁶⁶

He found his answer in the two-hundred-year-old bricks used in the wall of the compound. The wall was to be demolished and it had been built of the “same bricks that were used in the Great Wall of Peking”. These were large, measuring sixteen inches by four and a half inches, and, although they were imperfect specimens, they were easily cut. He had them split and used the good faces.⁶⁷ When it came to roof tiles he planned to emulate the roofs of the nearby Forbidden City buildings. He found that the glazed imperial tiles, made from a special fine clay mined in “Men-t'ou-kai, a village in the Western Hills outside Peking”, had not been made in China for fifty years. He organised the re-opening of the mine and the rebuilding of kilns and then entered into a five-year contract for the supply of tiles.⁶⁸ His roof shapes and proportions also more closely resembled traditional Chinese roofs as he relied on Chu Chi Ch'ien to advise him on all aspects of roof design, including

the proper pitch of a Chinese roof, the amount of overhang for the cornice, the details of the huge ornaments on the ridge of the roofs, the proper design of the little figures (such as an emperor riding on a hen) on the eaves of the roof and the other mysteries of Chinese architecture.⁶⁹

Hussey's motivation for using the Chinese architectural style was not necessarily exactly the same as the medical missionaries' preoccupation discussed earlier. Nowhere does he, or anyone else, defend the use on the grounds that it would be more familiar and therefore less threatening to patients. Hussey's considerations were æsthetic and borne of a fascination with Chinese architecture. He was trying to “combine the best of Chinese art and

⁶⁶ Ibid, pp.234.

⁶⁷ Ibid, pp.234-35.

⁶⁸ Ibid, pp. 237-38.

⁶⁹ Ibid, p. 229.

architecture with present-day requirements for a modern ... hospital".⁷⁰ The PUMC buildings however, as is clear from photographs taken at the opening in 1920, did closely resemble the imperial buildings to which the people of the capital were accustomed and so blended with their surroundings. (see Plates 40 and 41⁷¹) The buildings were described in the *CMJ* as having "wonderful colour effects produced by the expanse of green tile edged by exquisite painting in many colours of the delicate patterns used by Chinese artists centuries ago".⁷² (see Plate 42: Entrance to the Anatomy Building⁷³) His earlier Peking Central Hospital, on the other hand, fitted in more with the other foreign buildings of the Legation Quarter.

Soochow Hospital, 1919-1922

Another example of a hospital designed by an architect, who appears to have been consciously using Chinese design principles, was the one built at Suzhou between 1919 and 1922 for the MEM to replace the one Lambuth had built in 1833.⁷⁴ The architect was another American, G. F. Ashley of China Realty Co. Ltd. In contrast to Hussey, who had sought ideas from America and Europe, during 1919 Ashley and the medical missionary in charge at Suzhou, John A. Snell, visited neighbouring countries where western medicine had recently been introduced – Korea and Japan – to study "hospital problems and plans".⁷⁵

Ashley's hospital complex, conforming to Chinese design principles, was built facing south with a larger, perfectly symmetrical, main hospital building set directly behind the dispensary on a north-south axis.⁷⁶ An aspect of his approach to the problem of building a modern hospital that would satisfy the needs of modern 'scientific' medicine and yet would harmonise with its environment was, like Hussey at Wuchang, to treat the two components

⁷⁰ "Entrance to the Anatomy Building" *CMJ* 35, no. 4 (1921): p. 416.

⁷¹ Peter, "The Conference and Dedication at Peking".

⁷² "Entrance to the Anatomy Building": p. 416.

⁷³ *View of the Peking Union Medical College, circa 1921*, (accessed 24th June 2003); available from <http://medicalarchives.jhmi.edu/welch/travelph.htm>.

⁷⁴ See page 71 ff.

⁷⁵ John A. Snell, *Report of the Soochow Hospital, Soochow, China* (Shanghai: The Oriental Press, 1919), p. 5.

⁷⁶ It is not obvious from either the drawing or photographs whether or not the whole was enclosed in a compound.

– inpatients' and outpatients' departments – differently. Both adopted a Chinese style for the building where the majority of people would first encounter western medicine. Hussey had used a simple Chinese building for his entrance – waiting rooms and clinics – whereas Ashley used a more formal, traditional Chinese style with a double-eaved, hip-and-gable curved roof for his outpatients' department. (see Plates 43⁷⁷ and 44) This two storey building, housing the outpatients' department on the first floor with accommodation for interns above, was designed to give the appearance of being constructed using the Chinese column and lintel method and conformed to the traditional practice of being built on a raised platform.

The main hospital building was a plain, rather severe, flat-roofed, three-storey brick building with a large U-shaped plan. The clean, simple lines symbolised the supposed modern scientific efficiency of Western medicine. As at Wuchang, the dispensary was connected to the hospital-proper but here Ashley used a gallery, as traditionally used in Chinese architecture to connect halls in both Buddhist and Taoist temples. This gallery, of brick columns supporting a roof of what appears to be round timber logs, tied the two very different buildings together and, with the east and west wings of the hospital, served to form a pair of rectangular courtyards. Thus it extended the Chinese feeling of the complex beyond the dispensary.

Entering the outpatients' department building one would be struck by its similarity to a temple hall or the main hall of a large house. As Liang Ssu-ch'eng points, out the internal planning of a traditional Chinese building rarely needs to be spelt out because the form is eminently flexible and can be readily adapted to any purpose by erecting partitions or screens between any of the columns on the grid. This principle applies equally to secular and religious architecture.⁷⁸ Ashley's dispensary building, despite using non-traditional building methods, took this traditional form: essentially a traditional “three *jian*” building with (typically) the central *jian* wider than the flanking bays.⁷⁹ Internally this was

⁷⁷ "Soochow Hospital: Architectural Drawing" *CMMJ* 34, no. 5 (1920): p. 467.

⁷⁸ Liang Ssu-ch'eng, *A Pictorial History of Chinese Architecture: A Study of the Development of its Structural System and the Evolution of its Types.*, p. 21.

⁷⁹ See Knapp, *Old Dwellings*, pp. 22-4.

experienced as a large hall with internal columns, rectangular in plan (the ratio of the sides being approximately 5:2) with small rooms, formed by partitions, around three sides. The central area was given over to a single large waiting room. (see Plate 45: Plan of Outpatient Building) In marked contrast to the arrangement at Wuchang, men and women were not strictly segregated in the clinic at Suzhou. The series of rooms, all of which led directly off the waiting area, housed a variety of examination, minor operating, and dressing rooms as well as offices, a laboratory and drug room. While patients would not necessarily have been able to observe everything that was going on in these rooms they were accessible and consequently not as mysterious as they may have been if a plan based on a corridor had been used. Several medical missionaries have commented on the importance of allowing waiting patients and visitors to see what was going on as a means to allay fear and counter rumours. For example, O.T. Logan, set out his "open door" policy of always encouraging visitors and friends to be present and his operating room included a "visitors' stand ... generally filled with friends and well-wishers of the patient who is under the knife." He believed that the policy prevented a "great deal of bad talk" and accounted for "a good deal of the confidence the people show us".⁸⁰

One section of the hospital-proper owed its character to Chinese style. This was the flat roof of the main building where patients with tuberculosis were accommodated. (see Plate 46) A low, lattice brick-wall ran around edge of the roof and a heavy wooden trellis, held up on wooden columns, appears to have been constructed using Chinese techniques. Like Hussey's at Wuchang, the rest of Ashley's building for the hospital-proper was obviously western in style. Internally it was laid out according to design principles, which had been established in America by that time, for a healthy efficient institution.

* * *

The attitude towards indigenisation, or sinicisation, displayed by the architects and missionaries discussed above whilst widespread was not, however, universal. The British Consul, J. T. Pratt, at the opening of the Union Medical Hospital at Jinan, (see Plate 47⁸¹)

⁸⁰ O.T. Logan, "Five Years' Experience in Aseptic Surgery in an Inland Hospital" *CMJ* 30, no. 1 (1916): p. 21.

⁸¹ "Opening of the New Union Medical College Hospital, Tsinanfu": frontispiece.

was quoted as commending the foreign building whilst acknowledging China's place in the world of the arts.

Whilst China is the home of the fine arts, architecture, one of the noblest of them all, can hardly be said to exist in the country ... the erection of such splendid buildings was in itself a fine piece of missionary work.⁸²

Balme's 1920 survey was silent on the prevailing attitudes amongst missionaries towards indigenisation of hospital buildings. He found that, of 177 hospitals, only eight were described as being of "pure Chinese style". There were 47 (26 percent) described as "modified Chinese" and the remainder as "foreign". These self-descriptions can be misleading however. As we have seen, in the examples cited earlier, many hospitals described as "foreign" by their builders reveal on closer examination to incorporate many Chinese features or adaptations. The impetus for any adaptations varied significantly: simple considerations of cost, availability of materials or skills, a wish to accommodate Chinese preference or custom, or an appreciation of Chinese materials, methods or architecture.

It is clear from the forgoing examples and discussion that, whether the hospital was in a modified Chinese building, was built by a doctor or was one of the few designed and built by architects, the 'western' hospital in China differed physically in significant ways from its counterpart in America or Britain. Within the restraints of available funds, materials and skills, builders did attempt to emulate the amenities that were considered important from the point of view of health and hygiene but, in other aspects, different considerations drove the decision-making. These included a desire to accommodate Chinese custom, preferences and sensibilities. The motives behind such desires were many and varied and are more difficult to discern but the significant thing is that such accommodations were made and were manifested in the physical hospital. Also, builders and architects adopted Chinese style and methods for many reasons ranging from pure pragmatism to admiration. Thus, while the physical hospital in America or China shared some visual characteristics where they differed was in the premise on which the designs were based. In China, medical

⁸² Ibid: p 52-3.

missionaries were doing more than adapting architecture in order to blend in: they were trying to practise, what they perceived as ‘modern (Western) scientific’ medicine, among a people who had their own medical tradition as well as a traditional architecture which had preserved its essence – symbolic and tangible – for more than two millennia. Consequently, although Americans would perhaps have recognised an institution as a hospital it would look and feel distinctly different from what they were used to in America. The physical hospital was not imported, ready-made, into China as implied in the simple statement that “Protestant missionaries introduced the hospital into China”.

Plate 32: Ground Plan, including possible future expansion, Wuchang General, 1916

Source: Roots, Logan H. *Our Plan for the Church General Hospital, Wuchang*, New York: The Board of Missions, c. 1916: p. 10.

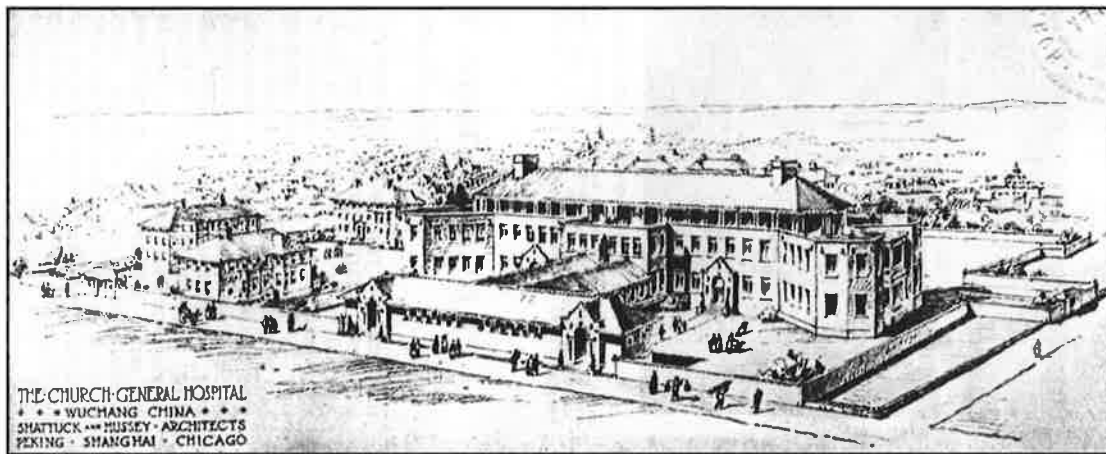
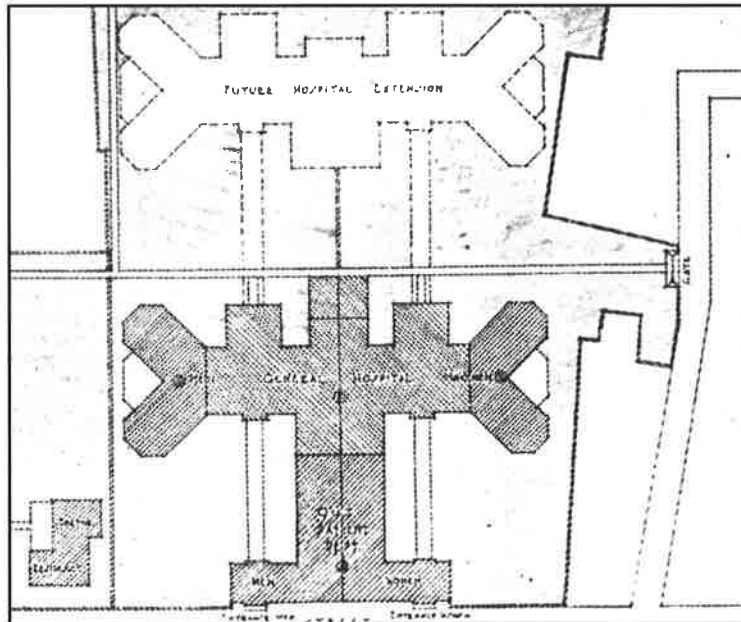


Plate 33: Architectural Rendering: The Church General Hospital - Wuchang, 1916

Source: Roots, Logan H. *Our Plan for the Church General Hospital, Wuchang*, New York: The Board of Missions, c. 1916: p. 2.



Plate 34: Wuchang General, Waiting Rooms and Entrances - Detail

Source: Roots, Logan H. *Our Plan for the Church General Hospital, Wuchang*, New York: The Board of Missions, c. 1916: p. 2.

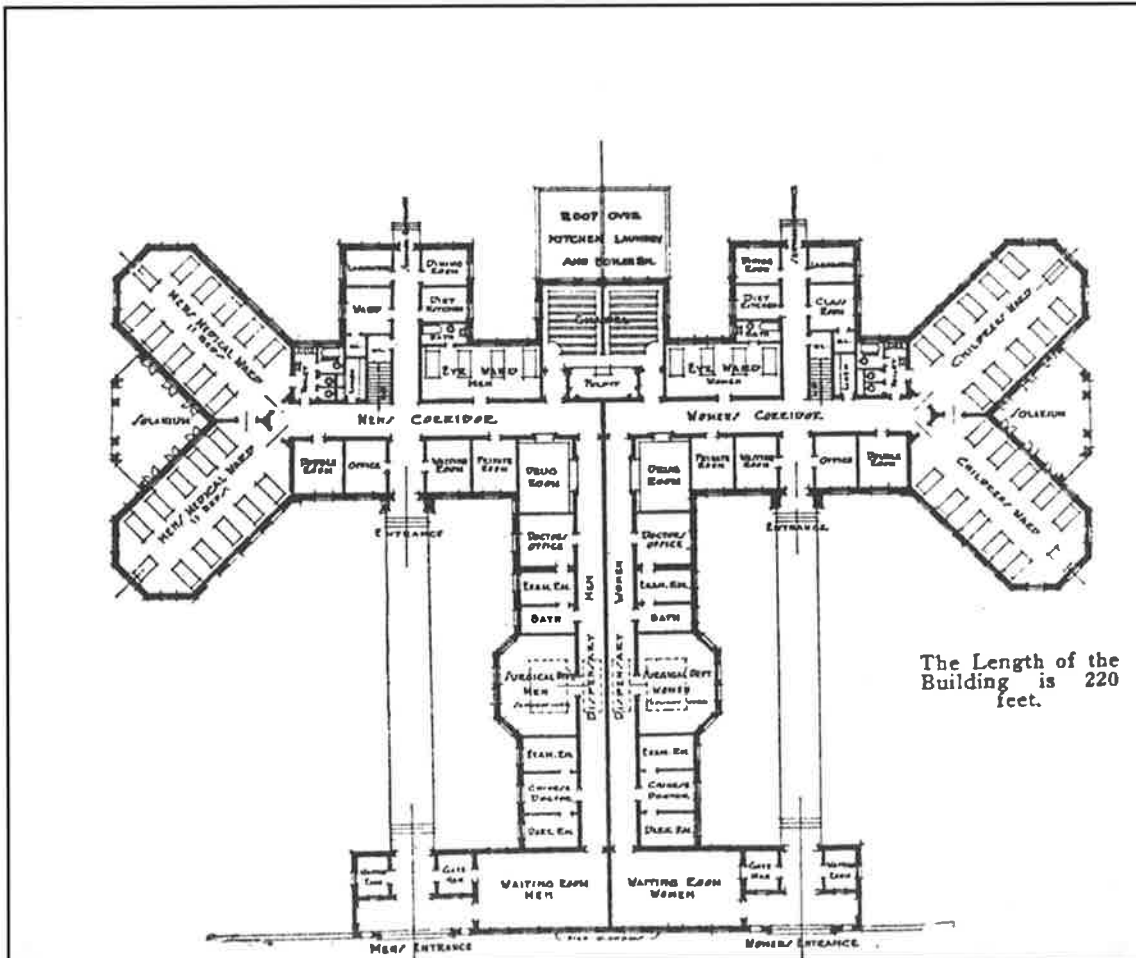


Plate 35: First Floor Plan, The Church General Hospital - Wuchang

Source: Roots, Logan H. *Our Plan for the Church General Hospital, Wuchang*, New York: The Board of Missions, c. 1916: p. 12.

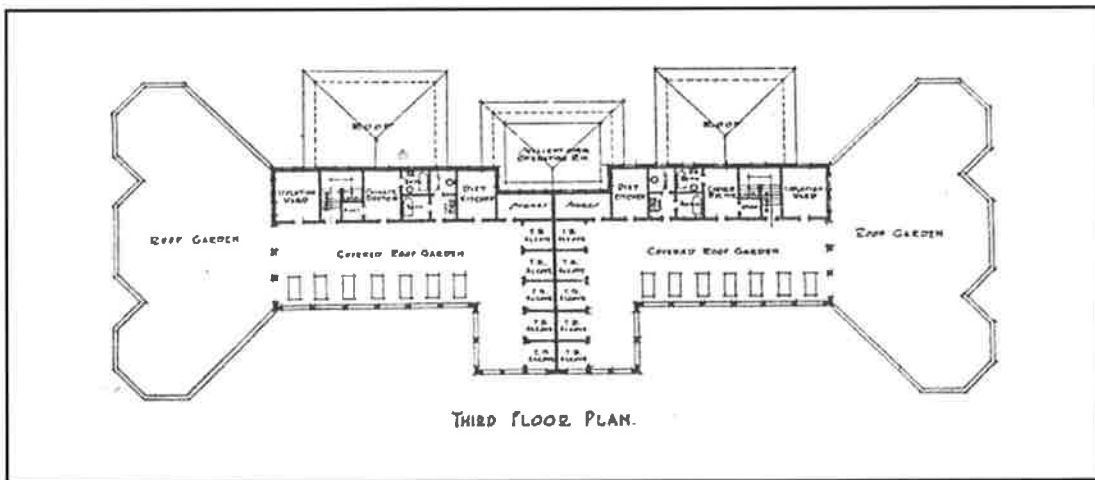


Plate 36: Third Floor Plan, The Church General Hospital - Wuchang (TB patients)

Source: Roots, Logan H. *Our Plan for the Church General Hospital, Wuchang*, New York: The Board of Missions, c. 1916: p. 12.

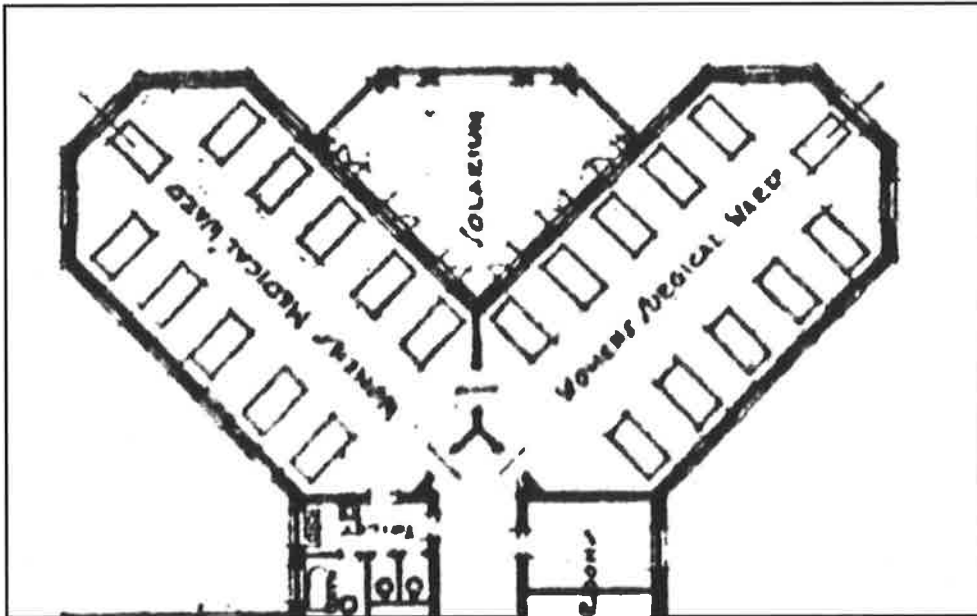


Plate 37: Detail of Plan, 'Bi-partite' Ward

Source: Roots, Logan H. *Our Plan for the Church General Hospital, Wuchang*, New York: The Board of Missions, c. 1916: p.12.

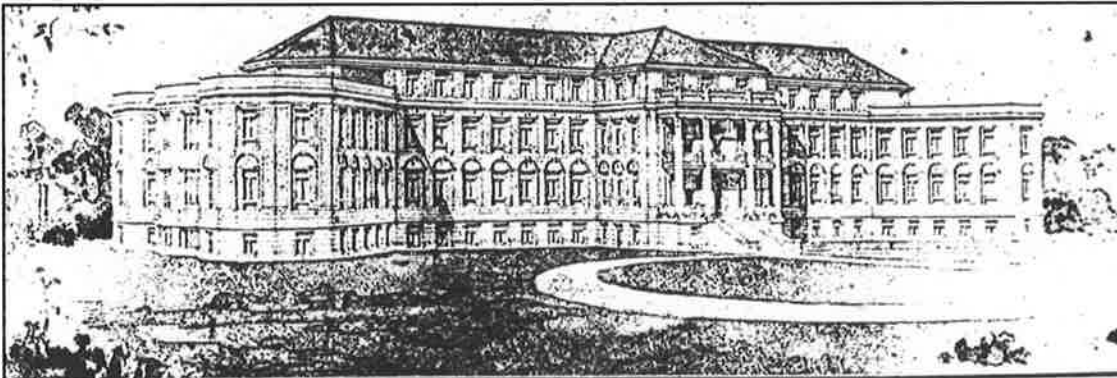


Plate 38: Front Elevation, Peking Central Hospital, 1916

Source: *CMMJ*, Vol. 31, no. 4 (1917): p. 271.

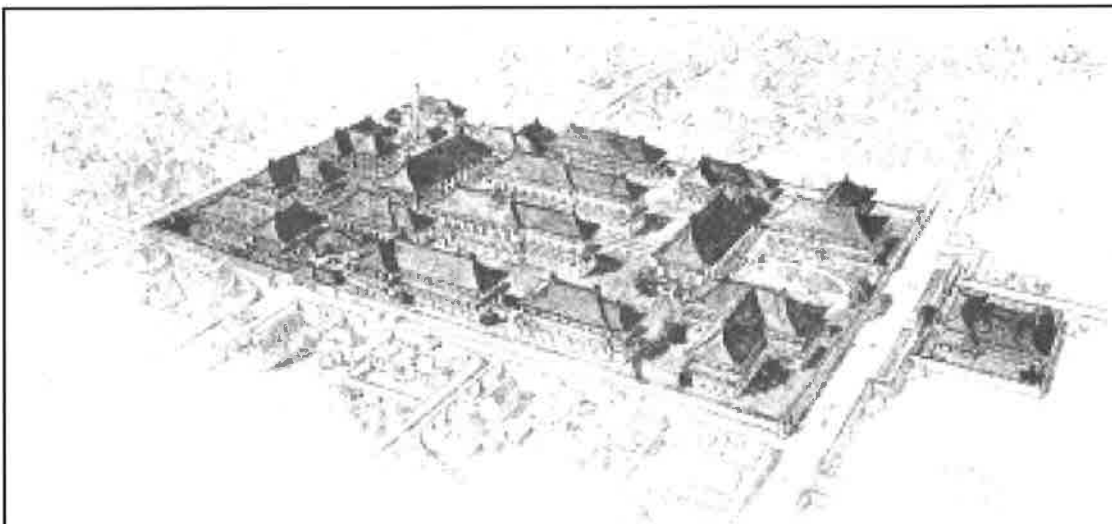


Plate 39: Peking Union Medical College, Perspective

Source: *CMMJ* 33, no. 5 (1919): frontispiece.



Plate 40: Detail of the PUMC Medical School.
Source: CMJ, Vol. 35, no. 5 (1921): between 486-7.

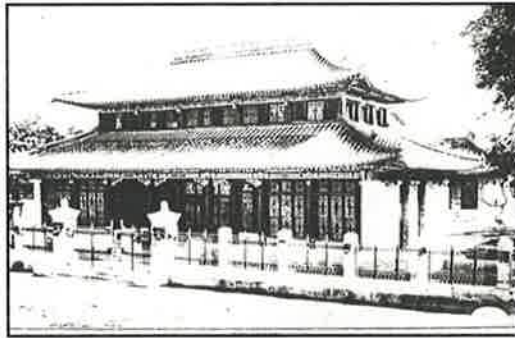


Plate 41: PUMC Chapel Building
Source: CMJ, Vol. 35, no. 5 (1921):between 486-7.



Plate 42: Detail of Entrance to the Anatomy Building, PUMC Complex, 1920
Source: Available from <http://medicalarchives.jhmi.edu/welch/travelph.htm>.

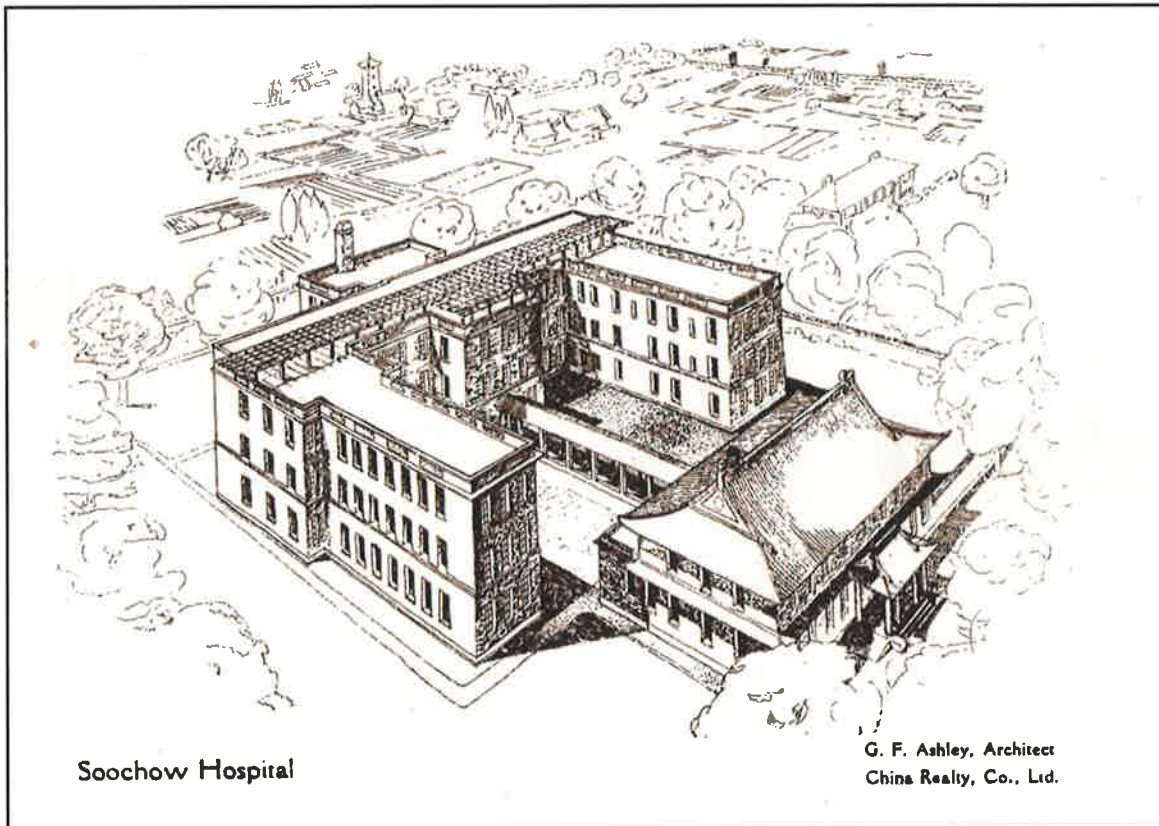
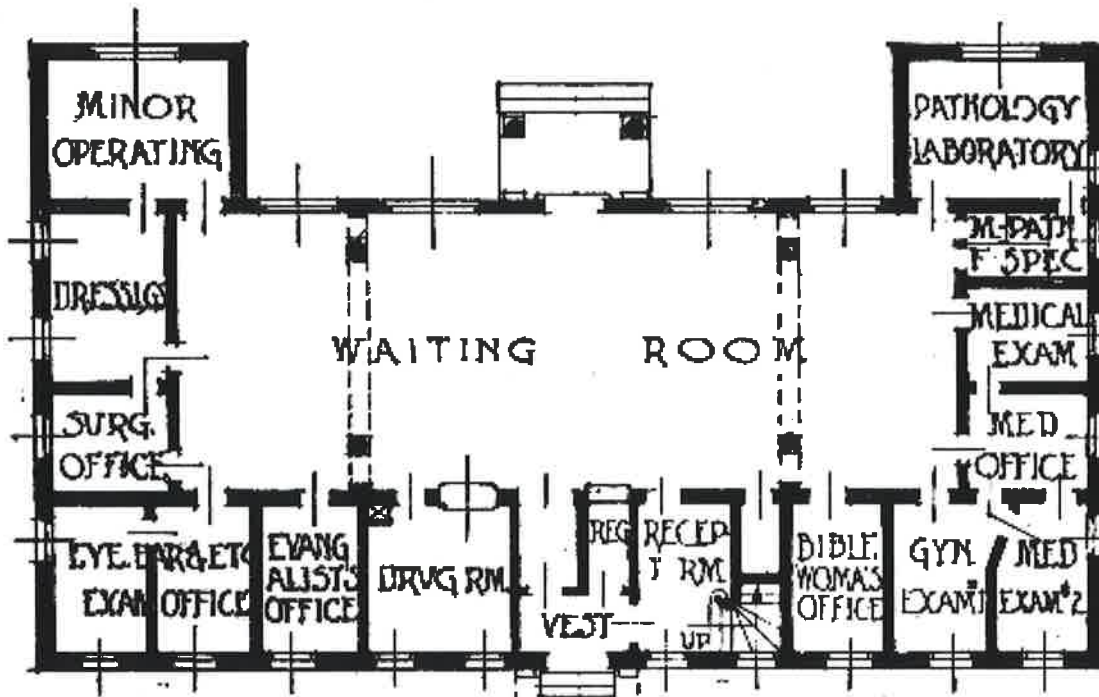


Plate 43: Architect's Perspective for Soochow Hospital, 1919
Source: CMMJ 34, no. 5 (1920): p. 467.



Plate 44: OutPatient Building, Soochow Hospital, 1919
Source: Soochow Hospital, 1883-1933: Fiftieth Anniversary. Board of Missions of Methodist Episcopal Church, South, 1933.

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The first floor of the out-patient building which is devoted to the clinic.

Plate 45: Plan of the Out-patient Building, Soochow Hospital

Source: *Soochow Hospital, 1883-1933: Fiftieth Anniversary*. Board of Missions of Methodist Episcopal Church, South, 1933.

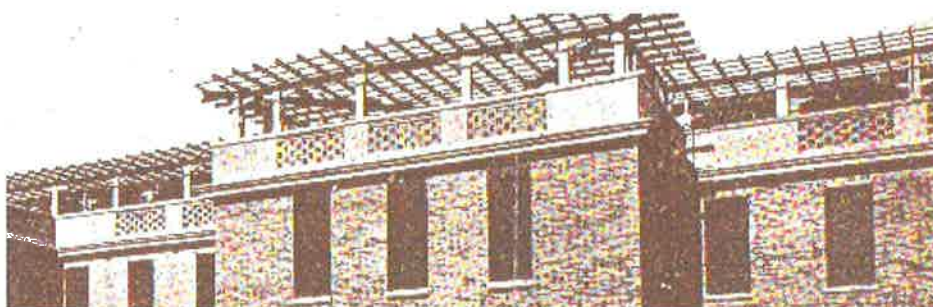


Plate 46: Tuberculosis Patients Accommodation, Roof of Soochow Hospital

Source: *Soochow Hospital, 1883-1933: Fiftieth Anniversary*. Board of Missions of Methodist Episcopal Church, South, 1933.



Plate 47: Union Medical College Hospital, Jinan, 1915

Source: *CMJ* 30, no. 1 (1916): frontispiece.

SECTION III – FINANCING THE HOSPITAL ENTERPRISE

The *one* object and *the* great object in having Mission Dispensaries is, as we all know, to enlighten these people concerning the Doctrine of Christ and point them to the True God. By making them pay to listen to a doctrine they do not care for, it looks as though we are laying a trap for them. And some may maintain that we ought to give them the medicines for listening to our preaching.¹

Introduction

One of the last missionary hospitals to become financially self-supporting was the Peking Hospital run by the American Methodist Episcopal Mission. In 1910, after forty years of operation, it recorded that this had been the first year in which it had not had to call on the Missionary Society for a financial contribution other than for salaries of foreign doctors.² Even at this late stage the hospital did not establish a set schedule of fees and charges but had put up a notice alerting its Chinese patients that contributions were expected from those who could afford it. Until this time it had charged only for medicines and doctors' home visits. The bulk of the hospital's funds had come from foreign and Chinese annual subscriptions and the proceeds of an optical department that assembled and sold spectacles. This blend of sources of finance – patients, benefactors, and customers – mirrored the state of affairs in the majority of hospitals in China by the end of the first decade of the new century. The story of how they arrived at this situation, particularly in relation to patients' contributions, forms the basis of this section. By the time the Peking Hospital announced its self-supporting status a long running debate, which had started in earnest as early as 1891 and reached its height in 1902, had essentially been settled. It had been won by those in favour of charging patients a set fee for most medical services including hospital outpatient care.

Firstly I will compare the policies of financing American hospitals in America with missionary hospitals in China. The purpose of this comparison is to determine how the

¹ Elizabeth Reifsnyder, "Methods of Dispensary Work" *CMMJ* 1, no. 2 (1887): p. 68.

² John J. Mallowney, "Report of the Peking Hospital, October 1910" *CMJ* 25, no. 3 (1911): p. 206.

policies differed and to what extent any differences were attributable to the hospitals being in China or, in other words, how China and the Chinese influenced the methods of financing. I will also consider which "American" methods were found to be most compatible with, and hence most easily transferred to, the Chinese environment. Thus, whilst this investigation may reveal significant similarities between the financing of the hospitals Americans established in China and those in America I will also demonstrate that such similarities were not simply the result of foreign imposition in the absence of indigenous traditions. In fact, indigenous traditions did exist. Lastly I examine the details of the implementation of these financing policies in mission hospitals in general and in a representative hospital, the MEM Chungking Men's General Hospital at Chongqing. Significant differences emerge between the extent to which missionary hospitals in China and hospitals in America relied on patients for their financial viability and on poor patients in particular.

CHAPTER 6: WHO SHOULD PAY?

First it is necessary to outline the funding of hospitals in America at the turn of the century. Rosemary Stevens, whose study focuses on the history of the twentieth-century American hospital as charity *and* business, classifies hospitals according to the nature of their ownership and control, viz. proprietary and non-proprietary. The first class comprised the purely private proprietary hospitals which were often owned by physicians or surgeons.

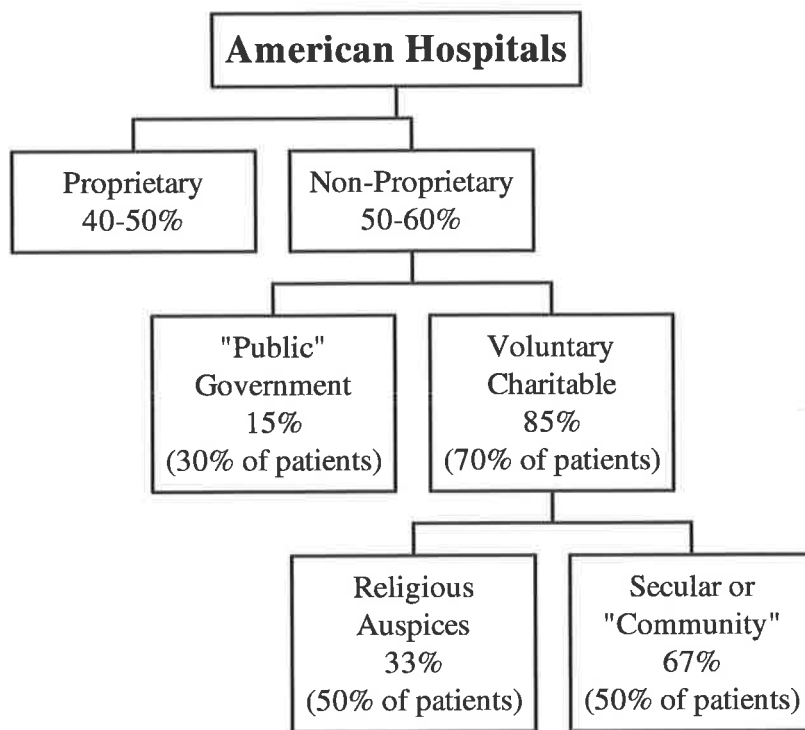


Figure 3: Hospital Ownership in America, 1904-1910.

Source: Constructed from data in Stevens, Rosemary. *In Sickness and in Wealth: America Hospitals in the Twentieth Century*. Baltimore: The Johns Hopkins University Press, 1999: pp. 20-24.

They charged patients for board and treatment and aimed to make a profit. It was estimated that these made up between 40 and 50 percent of all hospitals in 1910.¹ The second class, non-proprietary, included hospitals run by the various levels of government or by voluntary organisations.

Public, that is, local or state government²

hospitals were fewest in

number; 220 out of 1493 (or 15 percent), according to a 1904 survey.³ The non-government non-proprietary hospitals could be further divided into two types: secular and those that

¹ Stevens, *In Sickness and in Wealth*, p. 20.

² The Federal government provided a few hospitals, for example, for merchant sailors, the army, and "blacks freed from slavery after the Civil War". Ibid, p. 29.

³ Conducted by the U.S. Department of Commerce and Labor, Bureau of the Census. The report was entitled *Benevolent Institutions* (Washington D.C.: Government Printing Office, 1905). See Ibid, pp. 23-24.

were religiously based.⁴ (see Figure 3.)

In America the most numerous and prominent of these types were the secular private charitable hospitals. There were twice as many of these as there were religious hospitals. However, patient numbers were equal in the two systems.⁵ In other words, at the beginning of the twentieth century, when the largest contingent of American medical missionaries were establishing themselves in China, half of all the beds in non-proprietary American hospitals were being provided by bodies with religious affiliations. It would not be surprising if the medical missionaries took the prevailing philosophy of how these hospitals should be financed to China with them.

These, however, were not the only models available to medical missionaries. Stevens has put forward the suggestion, with reservations, that there could have been as many as 1,500 – 2,000 of the relatively new, private proprietary hospitals among the estimated 4,000 hospitals of all kinds in America around 1910-1.⁶ The hospitals established by the early medical missionaries were less likely to be modelled on the typical charitable general hospital than on these private proprietary hospitals where a single practitioner performed mainly surgical procedures in an existing, albeit modified, building. It would seem reasonable to suggest that, just as in America, the proprietary hospital offered an alternative organisational and, indeed, financing model for a ‘sole practitioner’ medical missionary establishing himself in China.

The American Models

Some large general hospitals in such cities as New York, Chicago and Philadelphia, financed through a mixture of substantial endowments and government grants and controlled by boards of management, continued to cater principally for the poor well into the twentieth century. However, in the main, local governments and secular and religiously

⁴ I have adopted the term “secular”, to avoid the confusion inherent in Steven’s use of “private-non-ecclesiastical”, for what are variously called voluntary, charitable, or community hospitals.

⁵ Stevens, *In Sickness and in Wealth*, p. 24.

⁶ Ibid, p. 20. According to Rosenberg this type of hospital only became widespread during the last decade of the nineteenth century and the first decade of the twentieth century. Rosenberg, *The Care of Strangers*, p. 402 n2.

based charitable hospitals provided the bulk of the medical care in relatively small hospitals. They relied on a variety of funding sources, including modest endowments, donations in cash or kind, annual subscriptions, contributions from various companies to provide care for their employees or from city and town governments on behalf of their citizens, fund-raising by hospital guilds, a variety of business enterprises and, lastly, fees from patients.⁷ The plans for the Lancaster General Hospital (see Plates 4, 5 and 6) clearly show the emphasis on maximising accommodation for private patients in the design of the building. Private rooms accounted for 57 percent of the total area allocated to patients and, indeed, patients' fees contributed a significant proportion, 35.7 percent, of the total income of \$16, 978 for the year 1905-6. Fees, together with a substantial grant from the government of Pennsylvania fees constituted 84 percent of revenues. A great deal of work was required to raise the remaining 16 percent: benefactors had to be courted, rummage sales organized and morning teas prepared. In addition to cash, the hospital received many donations in kind. For example, the 1906 list of gifts included "ice cream for the whole house" from Mrs. E.M. Cohn, seven dozen eggs from Mrs. John Eby, nine "garage cans" from the business of Shreiner & Stauffer and "83 jars of fruit, 8 cans of vegetables, groceries, 14 glasses of jelly, [and] 3 crocks of applebutter" from the energetic volunteer, Miss Alice Rengier.⁸ The Lancaster General was part of what Rosenberg terms "the private patient revolution" which occurred in America between 1880 and the First World War. The phenomenon has been well documented.⁹ All the studies canvass the strategies adopted by hospital boards to attract middle and upper income patients who could afford to pay for their care. Rosenberg, for example, argues that the increase in provision for private patients was as much driven by supply as it was a response to increased demand. The hospitals

⁷ In addition to the secondary sources, I draw on the following primary sources for patterns of income and expenditure in a representative range of contemporary American hospitals. *Auburn City Hospital: Thirty-first Annual Report of the Board of Managers (Year Ended September 30, 1910)*, (Auburn, N.Y.: Knapp, Peck & Thomson, Printers, 1910) ; *First Annual Report of the Elliot City Hospital, Keene, N.H. for the Year Ending, December 1, 1893*, (Keene: City of Keene, New Hampshire, 1894) ; *Lancaster Hospital, ; Report of the Babies' Wards Post-Graduate Hospital*, (New York: n.p., 1917) ; Sisters of Mercy, *Annual Report of St John's Hospital and Training School for Nurses: October 1913-September 1914* (St Louis, Missouri: 1915) ; *Sixth Annual Report of the Highland Hospital, Fall River, Mass.*, (Fall River, Massachusetts: 1915).

⁸ *Lancaster Hospital*, pp. 47-50.

⁹ For the most thorough examination of the history of the financial and administrative aspects of the American hospital system in the early twentieth century see Stevens, *In Sickness and in Wealth*, esp. chapter 2. See also Rosenberg, *The Care of Strangers*, esp. chapter 10 and Risse, *Mending Bodies*, esp. Chapter 9.

needed the money: endowments were no longer sufficient and costs were escalating. It was not simply that hospitals were becoming safer and thereby attracting other than the poor into hospitals.¹⁰ The well-off were courted because hospitals were becoming ever more costly to run: expensive medical technology, lighting and heating and specialized nursing all cost money. They consumed more and more funds and paying patients were seen as a permanent well to be tapped.¹¹ The 1904 survey, referred to above (see fn. 3 page 125), revealed that it was church-run hospitals in America that recouped the highest percentage (71 percent) of their costs of operation from patients and, not surprisingly, government recouped the least (7 percent). Private charities, on the other hand, relied on patient fees for 45 percent of their costs.¹²

Paying patients in a voluntary hospital were, in the main, “private patients” admitted and attended to by their personal physician. They were accommodated in small wards, or single rooms, and surrounded by the trappings of ‘home’. Often even the very poor who were admitted to charitable hospitals were not treated without payment. Their city or county which, rather than fulfil their responsibility to the poor by setting up public medical services, entered into arrangements with religious and charitable organisations to provide services for a fee.¹³ The government purchase of care for the indigent effectively reduced the amount of charitable care actually provided in terms of free beds in charitable hospitals. As the proportion of paying patients grew, the principle of paying for care became accepted, so that, by 1900 America could be described by a British hospital expert as the “home of the pay system”.¹⁴

In 1910 a municipal hospital, the Auburn City Hospital in the State of New York, had a similar range of income sources as the Lancaster General but, in addition to the payment by the city authorities for city folk, it was supported by a number of nearby towns and the county which paid the hospital expenses for the townspeople of Seneca, Mentz, Ledyard,

¹⁰ See page 55ff.

¹¹ Rosenberg, *The Care of Strangers*, pp. 244-45.

¹² Stevens, *In Sickness and in Wealth*, p. 24.

¹³ What would be termed “out-sourcing” today.

¹⁴ Stevens, *In Sickness and in Wealth*, p. 25.

Brutus and those of the County of Cayuga. They also had financial arrangements with five large employers to provide hospital care for their employees. In addition to charging private patients, this hospital board demonstrated its entrepreneurship by charging all patients additional fees for such extra services as the use of the X-Ray machine, the operating theatre, and the ambulance. The normal fees covered only “normal” nursing but special nursing could be had for a further charge. No amount was too small to be collected, as evidenced by the recording of \$2.25 received from the “sale of fats” and \$3.15 from selling “old boiler pipes”.¹⁵

Philanthropy and Entrepreneurship

One of the most popular avenues for generating a steady flow of funds was for hospital boards to encourage people to endow a bed, either by depositing an amount of money which would provide sufficient interest annually to cover the cost of a bed for the year, or by agreeing to make an annual contribution.¹⁶ The ‘Babies Ward Post-Graduate Hospital’ in New York City, was skilled at this method of fund-raising. It charged no fees yet in 1917 had thirty-five endowed beds, at approximately \$200 per bed per annum, which raised \$7,900 – or a little over half the hospital running costs for that year. The other half was made up from a much larger number of individual small donations and annual subscriptions and, in addition, there were many individual gifts in kind, all of which were acknowledged in the annual report.¹⁷

It should be noted that fees from patients applied only to those admitted into hospitals. By far the majority of patients, who could not afford to engage their own physician, relied on outpatient departments and dispensaries.¹⁸ In the main, dispensaries provided gratuitous

¹⁵ *Auburn City Hospital*, p. 12.

¹⁶ In the beginning people who endowed these beds could, if they wished, designate a particular, or class of, beneficiary. However, this practice gradually disappeared coinciding with the emergence of the policy of admitting patients based on medical grounds rather than on recommendation of a hospital benefactor.

¹⁷ *Report of the Babies' Wards Post-Graduate Hospital*, pp. 31-9.

¹⁸ According to an article in *N.Y Medical Journal*, of the total of 915,971 people, who received free medical treatment in New York city in 1895, a mere 8.5 percent were treated in hospital as opposed to charitable dispensaries. “Miscellany” *CMMJ* 11, no. 3&4 (1897): p. 263. In 1913, only 13 percent of the sick were admitted to a hospital according to an “authority on hospital management”. Rosenberg, *The Care of Strangers*, p. 316.

diagnosis, prescribing and supplying medicines and minor medical procedures. It was this model of medical care which the medical missionaries took with them to China. The establishment of a dispensary almost always preceded the hospital and the dispensary always dealt with the vast majority of patients after the establishment of that hospital.¹⁹

Transplanting the Model to China

Not only did missionaries take the models of proprietary and voluntary hospitals to China, they also took a belief in philanthropy, entrepreneurship and “user pays” which characterized both the profit-making *and* charitable institutions in America. The avenues for fundraising or business in China though, especially in the early days, were more limited. Unlike the sixteenth-century Jesuit missionaries to China, who favoured a ‘top down’ approach and who had sought to influence imperial officials and the gentry,²⁰ Protestant missionaries at the turn of the twentieth century concentrated their efforts on the lower, poorer classes. Thus, in the beginning, as far as donations were concerned the hospitals had to rely on their friends and supporters at home. Support from Chinese city and provincial authorities was not a possibility and neither were fees from ‘private’ inpatients.

In the initial phase of any medical mission almost all patients were treated gratuitously regardless of their status or their ability to pay. Firstly, medical treatment was always seen as the most potent tool in their Christianising armament: in order to gain access to potential converts nothing should be allowed to stand in the way. The *New York Medical Journal* and the *Lancet* had criticised the fact that medicine and hospital work in China were always accompanied by religious proselytising, but, as the editor of the *CMMJ* explained to his readers, they did not understand the missions’ purposes in being in China:

The prime object for which we are in China is to propagate the Christian religion and make it a power in the hearts and lives of these people ... much as we believe in the medical work for itself very few of us would be willing to endure

¹⁹ For example, according to the summary of the statistical returns from 126 hospitals in China for 1910 there were a little over 50,000 hospital in-patients compared to nearly or a total of 850,000 out-patients – 220,000 new, and at least 630,000 returning. “[Medical Mission] Statistics for the Year, 1910” *CMJ* 25, no. 5 (1911).

²⁰ See Waley-Cohen, “The Sextants of Beijing: Global Currents in Chinese History,” (New York: W.W. Norton & Company, 1999), pp. 64-70; Jacques Gernet, *China and the Christian Impact : A Conflict of Cultures* (Cambridge: Cambridge University Press, 1985), p. 15-6.

the isolation and the expatriation for it alone.²¹

Secondly, the missionaries wanted to impress upon the Chinese the unselfish and charitable nature of Christianity and believed that charging fees could damage their reputation in this regard. A pioneer medical missionary, John G. Kerr, expressed it thus in 1895:

In view of the fact that the work of the medical missionary is the evidence to the heathen of the exalted character of Christianity – the proof that it is a religion of love and mercy, and so differs from all other so-called religions – it is necessary that we should avoid everything which could in the least vitiate that evidence or weaken its force.²²

Neither did they have access to funds from city authorities nor from large employers like the Auburn hospital discussed above. They had to rely almost exclusively on funds sent from home, either through the various mission societies or from individuals and organisations, often from the hometown of the missionary. Raising these funds at a distance was a constant battle and required an enormous amount of effort on the part of the individual missionaries. For instance, whenever missionaries returned home on furlough a great proportion of their time seems to have been spent visiting people, showing pictures or speaking to groups soliciting funds. One of the most important functions of the annual reports issued by most hospitals was to keep in touch with benefactors so that they would continue to support the hospital with annual contributions, endowments or non-monetary gifts. At home often the most energetic fund-raisers were those groups of women who organised themselves into guilds and committees which fulfilled a social role while providing a stream of hospital funds. Such (foreign) women were scarce in a Chinese town and those among them who could organise fundraising functions were already busy enough. It was only in the older established treaty ports that sufficient men of means could be found among the foreign merchant and banking contingent able to imitate the level of philanthropy commonly found at home. In these circumstances, and despite the misgivings of some, many missionaries concluded that the only solution was to collect money from patients. Where the practice differed from that in America was that the patients they targeted were not the private inpatients but *all* patients, including those who attended as

²¹ "Why Medical Missionaries are in China?" *CMMJ* 14, no. 4 (1900): p. 279.

²² John Glasgow Kerr, "Self-Support in Mission Hospitals" *CMMJ* 9, no. 3 (1895): p.136.

outpatients at dispensaries.

The impetus for moving to a system of fee paying in China was not so much the increase in hospital costs (as it had been in America) as the paucity of alternative sources. If this phase in American hospital development can be characterized as the search for the 'paying patient' or at least 'someone to pay for the patient' then in China it was the era of the search for 'how to get most patients to pay'. The most significant result of this difference in emphasis was that dispensary visits, made by the most 'ordinary' of Chinese patients, were included in the range of services to which a fee might attach while in America dispensary services continued to be provided free of charge.

Fees – The Debate

To introduce a system of fee-paying for a medical service, when the primary motives were to demonstrate "Christian charity" and to allay hostilities,²³ was, however, controversial. The debate, which was carried on within the letter and editorial pages of the *CMMJ*, at various regional conferences and in the annual reports of individual hospitals, was multifaceted and nuanced. Any battle lines that were drawn were permeable and differences were mainly of emphasis and rationale.²⁴

One of the earliest sallies into the debate was made by Elizabeth Reifsnnyder,²⁵ who ran Shanghai's Margaret Williamson Hospital for Chinese Women and Children for the Women's Union Missionary Society (WUMS).²⁶ In a paper read before the Medical Missionary Association of Shanghai, in April 1887, she canvassed the majority of issues that would emerge in the coming debate. She proposed charging fees for ordinary, as

²³ A.P. Peck, "The Development of the Medical Department of a Mission Station" *CMMJ* 16, no. 1 (1902): p. 14.

²⁴ The participants in the debate on fees were overwhelmingly American. Of the sixteen who played the most prominent roles in print whose nationality I have been able to determine: ten were American, two Canadian, three British and one Chinese trained in America. Of the twelve Americans and Canadians only three took a stand against charging fees whereas two of the three British did. This section is based largely on the arguments put forward in significant articles published in the *CMMJ*, supplemented with material from the annual reports of a number of hospitals.

²⁵ See quotation which opens Section II at page 123.

²⁶ The hospital had been established just beyond the West Gate of Shanghai's Chinese city in 1885. Latourette, *A History of Christian Missions in China*, p. 456.

opposed to 'private' patients because, "in China it is not just the poor who come for treatment, as it is at home". She agreed that patients who were too poor should continue to be treated free and in her hospital she kept a "special stamp for charity patients". In her opinion most "prefer to pay ... no doubt the idea prevails that what is given for nothing is worth nothing". On the most practical level, she thought that charging ordinary patients for medicine containers encouraged them to actually take the medicine as directed and bring the containers back with them when they returned the next time. She advocated charging the rich the full cost of medicines. She mused that some dispensaries had "free days" for the poor but she thought it impractical, especially in the countryside where many had to travel long distances and would find it difficult to "keep track of the time". It could perhaps work in the cities but she worried that those who were not poor may take advantage of free days.²⁷ Reifsnnyder's concerns would echo over the next twenty years as the debate about fees was carried on.²⁸ The notion that providing treatment without charge would lead to "pauperisation" or abuse of the system was as commonly held in China as it was in America.²⁹

Although some participants in the debate opposed charging fees, few argued that money or gifts should not be accepted from Chinese patients. One outspoken advocate of charging fees advised strongly against allowing gifts in kind, such as "chickens and ducks, eggs and confectionery" in place of charges. He also advised doctors to make it plain that they preferred cash to "scrolls and inscriptions" which "generally do satisfy the native givers more than the foreign recipients".³¹ Most seemed quite happy to accept gifts and boasted proudly to their home missions about the scrolls and letters of praise received from patients.

²⁷ Reifsnnyder, "Methods of Dispensary Work": pp. 67-8.

²⁸ See for example, the summary of a symposium held in 1910. C.W. Service, "A Symposium on Methods of Raising Money Amongst the Chinese for Medical Work" *CMJ* 24, no. 1 (1910).

²⁹ For example, see Stevens, *In Sickness and in Wealth*, p. 42 for a description of the turn of the century new American hospitals' reluctance to accept "free" patients on the basis that to do so would pauperise them, that is create an underclass, or lead to "charity abuse".

³¹ Horace A. Randle, "How to Encourage the Chinese to Subscribe Toward the Support of Medical Missionary Work Among Them" *CMMJ* 13, no. 1&2 (1899): p. 16.

Even one of the most vigorous opponents of fees, John Kerr, was ambiguous on this score and agreed that those who benefited should aid the medical work, but any aid should be *voluntary* not *enforced*. In his opinion, based on experience, there was a “wide range for the exercise of judgment and tact in the methods which can be used to secure aid to medical work”.³² Although none argued for a shift to the American-style hospital catering largely for private patients, there was common agreement that private patients could be taken in, and provided for separate from the common herd, for a fee. Similarly, fees could be charged for visits made to the homes of the rich. At the other end of the scale, all agreed that the extremely poor or destitute should be treated free of charge. The main issue of contention centred on the routine charging of the ‘ordinary’ patient, either a dispensary outpatient or a hospital inpatient. In this respect the experience in China varied quite significantly from that in America at the same time. Although America could be referred to as the home of the paying patient, it was private patients who paid – not the common man, his wife or child. The debate in China was more wide-ranging: it concerned all patients, regardless of class, and the whole range of services, from dispensary visits, hospitals stays, particular medical procedures and the provision of food and medicines.

Chinese Perceptions

The main point of difference between those who supported and those who opposed charging ordinary, as opposed to private, patients centred on the issue of the presumed perceptions of the Chinese. If the missionaries charged fees would they be seen as commercial, grasping, greedy, or worst, uncharitable, and if so would it detract from their evangelical purpose? One of the earliest to take up the cudgel against fees, A.W. Douthwaite of the China Inland Mission (CIM),³³ argued in 1894 that “any charge degrades the mission from charitable institution to being seen as the meanest trading with the aim of making money while professing to do good”.³⁴ Kerr concurred and considered that the issue

³² Kerr, "Self-Support": p. 136.

³³ The only missionary society to have its headquarters in China (Shanghai) but with offices in Great Britain, USA, Australia and New Zealand, the CIM was started in England but was interdenominational and employed missionaries of any nationality. See Couling, *The Encyclopaedia Sinica*, pp. 98-100.

³⁴ A.W. Douthwaite, "The C.I.M. Hospital and Dispensary at Chefoo." *CMMJ* 8, no. 2 (1894): p. 137.

was beyond argument:

It needs no argument to show that practising for money, or fixing a price for services rendered, must of necessity present to the Chinese mercenary and selfish motives, thus taking away from the healing of the sick that which gives the missionary physician his power as a co-worker in Christian missions.³⁵

Sydney R. Hodge, who had entered the argument in 1891 as a representative of the British churches, agreed. He reasoned that the free treatment distributed to the poor and needy in the “large and wealthy cities of Europe and America” should be the least offered in “heathen lands where the hospital is professedly the practical expression of the Gospel”.³⁶

If, on the other hand, they did not charge fees would they be seen as fools, a ‘soft touch’ or to have an ulterior motive apart from the religious one? Omar Kilborn³⁷ was one of those who argued that charging for their services would increase respect for missionaries and lead to a more “enlightened understanding of the position of the foreign doctor”. Kilborn was concerned that not to charge might create the impression that the foreigners were amply supplied with funds and “under foreign imperial pay for some mysterious, and therefore sinister purpose”.³⁸ If this were so, rather than generating gratitude for missionaries’ efforts in the recipient, it could give rise to the opposite response: the patients might then become less tractable and more demanding. Rather than ask for favours, they might be

apt rather to demand their rights in the shape of free board and lodging and free treatment. They may become very independent in their demeanour, and under the circumstances see no particular cause for gratitude.³⁹

In 1897, the editor of the *CMMJ* invited discussion on the theory and practice of gratuitous treatment for patients in China. He outlined the main arguments put forward in “medical journals of America and Great Britain” relating to either the “the abuse of medical charity”

³⁵ Kerr, "Self-Support": p. 136.

³⁶ S. R Hodge, "The Church's Duty in Relation to Medical Missions, and the Principles upon which such Missions should be Conducted." *CMMJ* 5, no. 3 (1891): p.141.

³⁷ A medical missionary with the Canadian Methodist Mission at Chengdu in Sichuan, Kilborn wrote an exhaustive article on the issue of “self-support” in mission hospitals published at the height of the debate in 1901. Omar L. Kilborn, "Self-Support in Mission Hospitals" *CMMJ* 15, no. 2 (1901).

³⁸ Ibid: p. 94

³⁹ Ibid

by people who were able to pay or the “degradation” suffered by them if they were not allowed to pay. He reported the newly-elected President of the Board of Charities of New York City, Dr Steven Smith, as saying “that hereafter not one person who is able to pay for medical aid will receive free treatment at any of the city institutions”.⁴⁰ As the charitable institutions were not permitted to charge fees this decision meant that any patient able to pay would not be eligible to receive treatment at all from the city and would have to seek out and pay a private physician. H. A. Randle was the only one among the participants in the debate in China to argue against the very notion of using medicine in the cause of religious conversion. A very enthusiastic champion of charging fees, he was asked to give a paper, “How to Encourage the Chinese to Subscribe Toward the Support of Medical Missionary Work Among Them”, at a conference in Shandong in 1898. If he had had his way he would have chosen a word other than “encourage”. To his mind such subtleties would fail without external pressure. He advised that missionaries should simply charge everyone, except the “absolutely poor and helpless”, for *all* medicines and *all* operations. He had stopped giving free medicine himself, seeing his “kindness” as having been “trodden on”. He could have tolerated that “had the salvation of souls followed – but that has failed”. By giving the Chinese “secular and temporal advantages ... we have baited him instead, with almost every imaginable inducement to accept the Gospel” rather than simply preaching. He likened the Chinese to a fish, which takes the bait, but gets away. He attempted to clinch his argument for fees with a novel rationalization. He contrasted the situation in China with that at home. There, he argued, medicine was “both rightly and advisedly” given free because of the benefit afforded the medical profession who owed much to charity patients by way of “abundant opportunities to study the course of disease, and the effects of medicine or other treatment”. These advantages were not similarly available in China because the “Chinaman comes for his own benefit ... he can’t be trusted to give the whole truth or his full history. He will eat what he likes, leave when he likes and not do as he is told”.⁴¹

⁴⁰ “Miscellany”: p. 262-65.

⁴¹ Randle, “How to Encourage the Chinese”: p. 14. Evidence that he was at odds with his fellow medical missionaries in his views is provided in a news item in CMMJ in 1900 to the effect that Randle, formerly with

Moral Suasion

By far the most popular argument made by the proponents of fees was couched in terms of the “moral” effect on the Chinese. As in America, the proponents of fees argued that providing free treatment ‘pauperised’, or destroyed the self-respect, of patients. Some described it as positively evil in its effect. Roderick MacDonald of the Wesleyan Missionary Hospital⁴² at Foshan 佛山 (Fujian) expressed a commonly-held belief:

Indiscriminate charity – as everybody knows – is injurious and unjustifiable; nor does the excellence of the motive which prompts it abate anything from the evil consequences.⁴³

George Stuart, of the Wuhu 芜湖 General Hospital (Anhui) which was operated under the auspices of the MEM, identified the pauperising effect of free dispensing as causing the more well-to-do members of the community to avoid his mission. He also thought that it could lead to a lack of respect for the ‘scientific’ medicine the missionaries were promoting in competition with Chinese medical beliefs.

We may say that we have noticed that there has been no increase in the patronage of the wealthy and official classes, nor indeed of the ordinary, well-to-do merchant class. We feel this is, in a large measure, due to the pauperizing method of free dispensing, which we, following the lead of other missionary hospitals in China, have pursued. Free dispensing is as unjustifiable in China as it is in America or England. And further, it is suicidal to Western medicine, whether practised by foreigners or natives.⁴⁴

The missionaries eventually convinced themselves that they were doing their Chinese patients a favour by charging them a fee. Paying a fee would improve the patients’ self-

the China Inland Mission, and the American Southern Baptists was “constrained by the change in his theological views” to sever connection with the Mission – to do independent work. “News” *CMMJ* 14, no. 1 (1900): 71.

⁴² Wesleyan Methodist Missionary Society (WMMS) was headquartered in London and had been in China since 1852. After his time at Foshan, Roderick Macdonald was appointed to open medical work in Wuchow in 1898 but was murdered by pirates in 1906. Couling, *The Encyclopaedia Sinica*, p. 598.

⁴³ Roderick MacDonald, “Wesleyan Missionary Hospital, Fatshan, China, 1893” *CMMJ* 8, no. 2 (1894): p. 134. Another who put this view strongly was George Cox of the China Inland Mission who wrote that the pay system “lifted them [Chinese] from the moral beggary of which we see so much”. Geo. A Cox, “Out-Patient Department of Medical Work” *CMMJ* 16, no. 2 (1902): p. 129.

⁴⁴ George A Stuart, “The Wuhu General Hospital: 1891-1893” *CMMJ* 8, no. 2 (1894): p. 128.

respect: “he is not tempted to fawn upon us, or be hypercritical in his gratitude”⁴⁵ and, as Whitney⁴⁶ added, it would teach the Chinese “the value of favors and their obligation in connection with the reception of them”. That lesson could not be learnt “by promiscuous charity to the heathen ... their character is not bettered one iota thereby, nor have they learned from us a single higher motive to moral action.”⁴⁷ Further, the Chinese were to be taught the real meaning and value of charity:

True charity lovingly supplies these needs which are beyond a man's ability to supply for himself ... help to the very poor always secures commendation from all classes, but help to those who do not need it only leaves a doubt in the popular mind, either to our object, or as to our judgment.⁴⁸

Here George Stuart⁴⁹ was making a distinction between the person who only requires the assistance of someone who has a specialised (for example medical) skill, and another, who has the same medical need but has an additional financial need. *True* charity was providing a service, rather than a free service, according to Stuart and in using this term he reflected a view of charity described by Rosemary Stevens as being peculiarly American. The concept, which was developed by the, often Protestant, charitable organisation movement that arose in the wake of the Civil War, was referred to as “scientific charity”. Stevens describes this prevailing scientific charitable ethos of America at the turn of the century as “self-help rather than handouts, private efforts over those of government, and paternalism rather than egalitarianism”.⁵⁰ In particular, the essence of an act of charity was “*giving* per se rather than giving to a particular population. An organisation that provided useful services, for a fee, to self-reliant individuals could still be recognised as a public charity”.⁵¹

Aside from these general moral arguments, there does not appear to have been any disagreement among medical missionaries about using fees to reinforce other, more

⁴⁵ Kilborn, "Self-Support": p. 96

⁴⁶ See page 74 above.

⁴⁷ H.T. Whitney, "To What Extent is Charity Incumbent upon Medical Missionaries?" *CMMJ* 8, no. 4 (1894): p. 185.

⁴⁸ Stuart, "The Wuhu General Hospital: 1891-1893": pp. 128-29.

⁴⁹ See page 137 above.

⁵⁰ Stevens, *In Sickness and in Wealth*, p. 19.

⁵¹ *Ibid*, p. 25

specific, moral values. Those who detailed the range of fees they charged obviously expected no argument with the proposition that certain people could be charged, and some quite heavily. Patients were divided into *deserving* and *non-deserving* based on their ailment rather than their ability to pay. For example, according to Kilborn, "rich patients with venereal diseases should be made to pay well for services rendered". Even the poor with venereal disease should "be made to pay something, more than the twenty *cash*, even if it is only 100 *cash* a month".⁵² Kilborn's rationalisation for making this distinction between patients was unambiguous: not only would they be 'taught a lesson' but also it was easy money for the mission:

the fact of having to pay something will emphasize the doctor's timely warning to avoid such evils in the future. And furthermore it is usually easy to get them to pay, because we are often able to obtain satisfactory results by the appropriate treatment in such cases.⁵³

Another category of patients who, it was commonly believed, should pay were those with an addiction to opium.⁵⁴ Again it was Kilborn, who spelt out the case most clearly:

From one class of in-patients I believe it right to demand and receive in every case a fixed fee which shall be large enough to cover cost of food and leave a margin for medicine. I refer to those who come to break off the opium habit. My charge has been 2,000 *cash*, to be paid in advance, no portion of which shall under any circumstances be returned to the patient.⁵⁵

⁵² Theoretically 1,000 (copper) *cash*, the currency used by the common people, was equivalent to one *tael*. See fn. 10 page 149 for an explanation of the *tael* and its variations. The Yaoling 峽 Hospital in Shandong charged "all worm-patients and men with venereal disease" until they opened a new hospital and instituted a fee regime for all outpatients: "50 Shantung *cash* a visit; worm-patients and malarial cases paying fifty *cash* extra, and venereal patients 500 *cash*". "Report of the Lao-ling Medical Mission, 1905" *CMMJ* 20, no. 6 (1906): p. 270. Huntley "always charged for venereal diseases: two hundred *cash* per week or a compound fee of one thousand *cash*". George A. Huntley, "Our Out-Patient Work" *CMMJ* 16, no. 2 (1902): p. 113.

⁵³ Kilborn, "Self-Support": p. 93. Cox observed that all his Chinese syphilitic patients, who paid a deposit (\$2 Mex.) before being prescribed for, "pay readily and it has a good moral effect on them". Cox, "Out-Patient Department": p. 129.

⁵⁴ This did not necessarily apply to those patients who employed the popular contemporary method of committing suicide: eating opium. (McCartney treated 115 cases of "opium suicide" in 1898. J.H. McCartney, *Annual Report (1898) of the West China Medical Mission, Methodist Episcopal Church* (Shanghai: American Presbyterian Mission Press, 1899), p. 13). For example, Ida Kahn reported that she never charged "anything for the suicide cases which come to our dispensary, because such emergencies must be treated too spontaneously for determining charges". Ida Kahn, "Self-Supporting Medical Missionary Work" *CMMJ* 19, no. 6 (1905): p. 224.

⁵⁵ Kilborn, "Self-Support": p. 94. A Lyall reported that charged most opium-smokers \$1 on admission as they came in large numbers and "were very unsatisfactory patients". A. Lyall, "Swatow Medical Mission" *CMMJ* 4, no. 1 (1890): p. 28.

By contrast, in America, rather than use fees to teach them a lesson, hospital boards tended to adopt policies which refused admission to people suffering from contagious, including venereal, diseases.⁵⁶ The Lancaster hospital was one with such an admission policy and the 1906 report contained no mention of venereal cases.⁵⁷ In China it was more difficult for mission hospitals to adopt such exclusion policies. First, there was a lack of alternative facilities to which such patients could be referred. Second, the primary aim being evangelical meant that no potential convert should be turned away. Lastly, they saw their missionary role as including acting as the moral guardians of their Chinese patients.

Managing Supply and Demand

The most pragmatic of the combatants argued for the use of fees to control demand in general, demand for special privileges, or consideration, and to influence the class of patient who sought treatment. James McCartney at Chongqing said he had feared he would lose outpatients if he introduced fees, after seven years of providing free treatment, because of competition from two other free dispensaries in the city. Although dispensary attendances were cut by fifty percent in the first year of collecting fees, he recognised many advantages. He not only found that his patients were “willing to pay to get the best attention” but they were “more appreciative” of the help they did receive. This decrease in demand also served him well. Having fewer patients, he found that he was not so stressed and overworked: having 80-100 patients waiting “cause[d] him to behave in any thing but a Christian way”.⁵⁸

A universally-adopted dispensary procedure was for patients to be seen on a first come first served basis.⁵⁹ The demand from those who wanted preferential treatment, such as being seen “out of hours” or “out of turn”, could be controlled by a higher fee. The level of fees charged could also influence demand for home visits. For example, Philip B. Cousland reported that, although he had found taking fees “repugnant”, his newly instituted fee for all

⁵⁶ Admission policies in America and China are compared at page 183 ff.

⁵⁷ *Lancaster Hospital*, p. 53, 27-41.

⁵⁸ J.H. McCartney, "Medical Work" *CMMJ* 13, no. 3 (1899): p.98.

⁵⁹ See page 177 ff.

home visits according to the distance (\$1 per 3 miles) and for chair hire, regardless of the class of patient, lessened demand and also had an effect on the class of people who sought treatment. It had proved much better than the old plan of no fee: the number of visits was fewer but the “class of case better”. Further, an added moral victory was possible: if a patient was very poor he could create a “great impression” by returning all or part of the fee.⁶⁰ McCartney also reported that, in his experience, once a patient paid a fee he was more likely to return for follow up treatment. This not only increased the chance of a cure but also his chance to influence them religiously.⁶¹ Most missionaries thought that the best evangelistic results could be achieved with patients who were admitted to hospital and this belief influenced the setting of inpatient fees. Luella Masters, of the MEM at Fuzhou, charged the same five-cent fee for each visit to the dispensary as she did for entry to the hospital wards. Her aim was to encourage women and children to enter hospital where they would get the “attention of the physician; also to teach the doctrine”.⁶² Others made no charge for a hospital stay, other than for food in some cases, with the same proselytising purpose in mind.

Appealing to Chinese Custom

Many participants in the debate cited Chinese custom in support of their argument. As has been discussed earlier in Chapter 2, there were Chinese charitable medical organisations in existence when the missionaries arrived and some would have been familiar with their practices in relation to charging for services.⁶³ They were also aware that wealthy Chinese would engage a series of male physicians to treat them at home for a fee and the poor could visit the free dispensary and, after being examined by a doctor, receive either medicine or a prescription. According to Leung, these dispensaries and clinics shared many characteristics: “they were urban-based institutions where a certain number of doctors

⁶⁰ Philip B. Cousland, "Medical Training of Native Preachers" *CMMJ* 16, no. 1 (1902): p. 69.

⁶¹ McCartney, "Medical Work": p. 98.

⁶² Luella M. Masters, "The "Pay Doctor" in China" *CMMJ* 16, no. 1 (1902): p. 3.

⁶³ According to Leung, sick Chinese in late Qing had a range of options: the majority relied on “itinerant drug peddlers, mediums, ... members of religious orders ... and female practitioners”. (This is not to imply that the “females” were practitioners of “official” medicine as Leung elaborates: “even though in China “official” medicine was particularly difficult to define, all agreed women did not belong”.) Leung, "Organized Medicine": p. 153-4.

served in rotation, and they were financed and supervised by members of the local elite". She cites the regulations of one such institution, at Yangzhou 扬州 (Jiangsu) which paid

Confucian doctors to take turns treating patients; local pharmacists also prepared and distributed medicines. It was open to outpatients every morning, and those who were seriously ill and without families were accommodated in a sick ward at the rear of the building.⁶⁴

This sounds remarkably like the situation that pertained in most of the medical missionary outfits, which started life as simple dispensaries. It is thus hardly surprising that to Chinese patients, although they may have found the medicine strange, the organisation and principle would have been familiar. Similarly, one could expect missionaries to have looked to this Chinese institution for guidance if they wanted to appeal to Chinese patients. What becomes clear from a survey of the contemporary record of missionaries is that those who argued in favour of fees reinforced their case by looking to the example of the Chinese physician, whereas those who argued against fees cited Chinese benevolent institutions as their model.

After the 'pauperising' argument, the most commonly stated case *for* fees was that the Chinese were accustomed to paying their own doctors. Henry Whitney pointed out that the Chinese "have to pay a reasonable fee to a native doctor" and argued that it would be "an injustice to [those doctors] for foreigners to do such an extensive gratuitous work". He had observed that some "trouble and disaffection [had] arisen, in various parts of China, among native doctors".⁶⁵ Luella Masters spelt out in some detail her understanding, after ten years experience in China, of the Chinese attitude towards paying for medical treatment:

we have noticed, even in China if a member of a family meets with a serious accident or prolonged illness, that the patient's friends send for the doctor who charges for his services – the physician who charges the highest fee as a rule – and if the case gets well, the physician gets the credit; if he dies, they console themselves with the thought, "We did all for him that money could do; the best talent was procured that money could procure."⁶⁶

⁶⁴ Ibid: p.146

⁶⁵ H.T. Whitney, "The Self-Supporting System in Medical Work" *CMMJ* 8, no. 2 (1894): p. 94.

⁶⁶ Masters, "The "Pay Doctor" in China": p. 2.

Charles Wenyon, with the Wesleyan Missionary Hospital at Foshan 佛山, was another who took his lead from the Chinese payment system. He reported that self-support had been achieved in 1890⁶⁷ and described how it had been accomplished: “gratuitous treatment” was provided at the dispensary between six and nine o’clock each morning and thereafter “we receive patients precisely as Chinese doctors do”. That meant that a fee – five dollars – was charged for visits to private homes but nothing for “ordinary consultations” at the hospital – for which the doctor merely received “*Lai shi* (polite offering) which consists of a neat red paper packet containing a few cents worth of cash”. Where Wenyon differed significantly from other medical missionaries, and his contemporaries at home, was his early employment of another Chinese custom: “cures by contract” or “*Pau I*” 包医. He reported that when the missionaries were first asked if they were willing to “*Pau I*” they felt their professionalism to be compromised and had refused, but had lost patients. According to Wenyon

the people of Fatshan [Foshan] think it just as natural to get a doctor to contract for a cure of a disease, as it is to get a builder to contract for the repair of their home ... experience has led us to lay aside our scruples, and to conform to the native custom.⁶⁸

He saw several advantages in this system. The patient knew the total cost before commencing treatment – the contract fee was set with regard to the disease and the patient’s means – and if the cure was not effected the fee was refunded to either the patient or, if he died, his friends. As well it matched Chinese customary practice.⁶⁹

McCartney was another to advocate what he called the “Chinese method of contracting the case” if he was called into the city to see a patient “of means”. As he reported in 1899:

If the patient is sure to get well, we contract to cure; but if not, we simply contract. If they will not contract we never give any medicine, because in such

⁶⁷ The Wesleyan Missionary Conference had decided, in 1881, that all hospital expenses should be met from patient fees and subscriptions. MacDonald, “Wesleyan Missionary Hospital, Fatshan, China, 1893”: p.134. For a description of Chinese methods of paying doctors: fee wrapped in red paper; contract for a cure in a specified time; and paying to be kept in good health, see Jos. C Thomson, “Native Practice and Practitioners” *CMMJ* 4, no. 3 (1890): p. 33.

⁶⁸ Chas. Wenyon, “Wesleyan Missionary Hospital, Fatshan, South China:Report 1890” *CMMJ* 5, no. 2 (1891): p. 123.

⁶⁹ *Ibid*: p.123.

cases one dose will rarely do any good, and as is the Chinese custom they would call someone else as soon as our backs were turned. If patients are too poor to pay, we make no charge. The custom of contracting the case I believe to be a good one, as in most instances they never call until all Chinese means fail, and in very many instances we are unable to do anything for the patients. If we know we can cure, our reputation is safe, and if we do not, we lose nothing and gain considerable (sic), financially. We generally ask one-half down, and the rest when cured.⁷⁰

Others stressed their understanding of the attitude of the gentry to charity. They claimed that the “gentry prefer to pay” implying that not to expect payment would offend them. For example, McCartney claimed he had found that the “better class *prefer* to pay” and would pay up to five times the ordinary fee if they could be seen out of normal dispensary hours.⁷¹ In America the emphasis seems to have been on providing the facilities for which the rich would pay rather than any concern for their preference for paying. An American-trained Chinese woman doctor, Kang Cheng (Ida Kahn) 康爱德, who ran the Elizabeth Skelton Danforth Memorial Hospital for Women at Jiujiang 九江 in Jiangxi under the auspices of the Methodist Central China Mission with her compatriot, Shi Meiyu 石美玉 (Mary Stone),⁷² agreed: “the rich will appreciate more highly the services received” if they paid for them. To support her argument she cited a case where she had seen and prescribed for a sick child without the normal charge. The child’s parents administered the medicine “erratically” and had subsequently called in a succession of native physicians. She heard later that, in the mother’s words, she had “found a fine physician and that the one-thousand-cash doctor was really worth having”. Kahn pondered that had she charged her normal – five *tael* – fee the medicine she prescribed may have been given “a fair trial”.⁷³

⁷⁰ McCartney, "Medical Work": p.99

⁷¹ Ibid: p. 99

⁷² Gertrude Howe, educated at Michigan University, arrived in central China in 1872 to open a school. She adopted four Chinese girls, including Kang Cheng, known as Ida Kahn, and Shi Meiyu, (Mary Stone) and taught them English and science to prepare them for medical training at Michigan. Dana L. Robert, *American Women in Mission: A Social History of their Thought and Practice* ed. Wilbert R. Shenk, The Modern Mission Era, 1792-1992: An Appraisal (Macon, Georgia: Mercer University Press, 1997), p. 185. An early account of the work of Mary Stone is to found in Edward Carter Perkins, *A Glimpse of the Heart of China* (New York, Chicago: Fleming H. Revell company, 1911) and these two remarkable women are the subjects of a very recent study, Connie Anne Shemo, ““an Army of Women”: The Medical Ministries of Kang Cheng and Shi Meiyu, 1873-1937 (China)” (Ph.D., State University of New York at Binghamton, 2002).

⁷³ Kahn, "Self-Supporting Medical Missionary Work": pp. 223-4

Sydney Hodge⁷⁴ exemplified those who drew on the Chinese benevolent institutions for guidance to argue against charging fees. Whilst agreeing that there was some validity in the argument in favour of fees, he invoked the example of Chinese philanthropy and pointed out that “in China, where the native gentry support free dispensaries and benevolent halls, it is difficult for us to do differently without suffering by comparison”.⁷⁵ Another to put forward a similar argument was at pains to distinguish the missionary from the physician in private practice. B.C. Atterbury of the APM, claimed that Chinese benevolent institutions did not charge and that “charging fees for the treatment of the sick when the object is a religious or charitable one is contrary to native ideas as to how such work should be conducted”. He thought that charging fees would “occasion remark and suspicion of mixed motives if one whose avowed purpose is to do good puts himself on the same plane with an ordinary practitioner”.⁷⁶

Using Chinese custom as the basis for an argument was not always well received. Not all agreed that the Chinese had anything they could offer the foreigner by way of example. Whitney, for example, dismissed Atterbury’s case on the basis that “native ideas are no criterion ... for their ideas are all wrong in this matter” and that any attempt to allay the suspicions “of the heathen” was futile. Neither did he accept the comparison of the medical mission with “native benevolent work” which “would be a disgrace to Christianity”. Both Atterbury, who admitted at the beginning of his paper that he “dislike[d] to say anything against the plan [to charge fees]” and put the opposing view “partly for the sake of the discussion”,⁷⁷ and Hodge were in the minority and were to, eventually, lose the battle.

Mary W. Niles, one of the early women missionary doctors, worked with Kerr and taught obstetrics at Canton.⁷⁸ In 1890, she wrote an account of seven years’ experience of observing “native midwifery”. Of interest in this section is her description of the Chinese

⁷⁴ See page 135.

⁷⁵ Kahn, "Self-Supporting Medical Missionary Work": pp. 223-4

⁷⁶ B.C. Atterbury, "Gratuitous Treatment" *CMMJ* 8, no. 2 (1894): p. 121 Whitney, "To What Extent is Charity Incumbent upon Medical Missionaries?"

⁷⁷ Atterbury, "Gratuitous Treatment": p. 120

⁷⁸ Cadbury and Jones, *At the Point of a Lancet*, p. 188.

practice concerning fees for delivering babies

- The fee for the common classes is \$1.00 for a girl and \$2.00 for a boy; to the poorest class 50 cents for a girl and \$1.00 for a boy.⁷⁹

In addition to the Chinese method of contracting for medical care described above, MacDonald⁸⁰ accepted different fees in accord with this particular Chinese custom. He reported that in obstetrical cases he charged \$25 for delivering the mother and “if a living female child were born, \$5 extra would no doubt willingly be given, but if a son, \$10 of course”.⁸¹ Atterbury demonstrated that, although he cited Chinese custom to bolster his argument against fees, he did not accept all Chinese custom uncritically. He commented on a report of a doctor who had agreed with the relatives of a woman in labour that an amount would be added to the fee if a girl was born and a sum of twice that if a boy:

this estimation of one sex being half that of the other may be correct according to Chinese ideas, but if our friend should fall into the hands of some strong-minded women at home, his frankness would cost him a considerable portion of his crop of hair.

He pointed out that “Native doctors go one step better”: they wait “till the child is partially born then strike for higher pay”.⁸²

The majority of mission hospitals did not charge men and women differently but it was not unknown. Ida Kahn related that “men promise us any amount of money we might see fit to charge if we would only treat them” at their hospital for women and children at Jiujiang. In part explanation for the relatively low level of fee income at her own hospital she proffered the following opinion.

The physician who treats both men and women stands a far better chance of accomplishing self-support since the men hold the purse strings, and their own diseases influence the grasp more immediately”⁸³

⁷⁹ Mary W. Niles, "Native Midwifery in Canton" *CMMJ* 4, no. 2 (1890): p. 52

⁸⁰ See page 137.

⁸¹ MacDonald, "Wesleyan Missionary Hospital, Fatshan, China, 1893": p.135

⁸² Atterbury, "Gratuitous Treatment": p. 122.

⁸³ Kahn, "Self-Supporting Medical Missionary Work": p. 225

George Huntley, of the ABFMS, offered no explanation for his charging men forty *cash* and women twenty to register at his dispensary at Hanyang. Although Hodge made the case against charging fees in 1891, he was reported as charging similarly: fifty *cash* for men and ten for women.⁸⁴ Whether this practice should be construed as some missionaries conforming to their interpretation of a Chinese notion of the inherent inferiority of women; an acknowledgement that women had access to less money than men; an inducement to encourage women to attend or simply as a reflection of contemporary Western attitudes towards women, or any other explanation, I can make no definite judgement on the evidence I have to date.

The debate about fees ran for several years but by 1910 it was well and truly won by the advocates of charging for most services. The implementation of a fee-charging policy was not, however, uniform in all places. In the next section I will attempt to provide an overview of the range and nature of solutions that medical missionaries put into practice. To do this I will rely on, and analyse, statistics from one particular institution and on summary data collected by the CMMA between 1903 and 1910.

⁸⁴ Huntley, "Our Out-Patient Work": p. 113

CHAPTER 7: WHO DID PAY?

Sources - and a Caveat

From 1903, the China Medical Missionary Association conducted censuses of foreign hospitals in China by sending out “statistical blanks” to all known missionary hospitals.¹ Unfortunately, the published results of these surveys, whilst useful, are flawed. Firstly, the coverage of hospitals was incomplete. The Editor of the *CMMJ*, J.B. Neal, was concerned that the forty-seven 1903 returns represented “not more than half” of the hospitals and dispensaries in China. He named the delinquents, mainly from the larger centres, who failed to respond in an effort to shame them into participation.² Secondly, the information provided by hospitals was also incomplete. Detailed financial information was not featured at all in the first report although some was collected. A summary attached to the 1903 report stated that, of the forty-seven hospitals and dispensaries listed, only six required no fees or charges at all and four of these accepted donations.³ In the 1904, 1905 and 1906 surveys hospitals were asked about their policies related to fees for dispensary visits, home calls, medicines and hospital stays as well as income from sales and from foreign and “native” contributions.⁴ Although the majority did, not all hospitals responded to the questions relating to finance. From 1907, publishing any financial details was abandoned and from 1910 a summary only was included in the table of results.⁵

¹“Medical [Mission] Statistics for 1903” *CMMJ* 19, no. 1 (1905). Before 1903, lists of medical missionaries with variously, their missionary society, “station”, qualifications, dates of arrival and/or departure were published in the Journal. See Jos. C Thomson, “Medical Missionaries to the Chinese” *CMMJ* 1, no. 2 (1887); Thomson, “Native Practice and Practitioners” ; Robert Case Beebe, “The Medical Missionary Association of China: List of Members” *CMMJ* 11, no. 2 (1897); and “List of Members of the China Medical Missionary Association” *CMMJ* 15, no. 2 (1901).

²“Among the places which have not sent in reports are Chefoo, Chungking, Amoy, Peking, Tientsin, Chentu, cities where some of the larger hospitals in China are located ... other cities ... have failed to include some ... such as Shanghai and Foochow”. “Medical [Mission] Statistics for 1903”: p. 27.

³“Fees and charges” in this context was a loose term covering any payment at all which could include payments for board, for some medicines or for dispensary visits.

⁴“Medical [Mission] Statistics for 1904” *CMMJ* 19, no. 4 (1905) ; “Medical [Mission] Statistics for 1906” *CMJ* 21, no. 3 (1907) ; “Medical Mission Statistics, 1905” *CMMJ* 20, no. 6 (1906).

⁵The 1907 report provided only statistical information about patients and surgical operations and was not completely up-to-date, information having been compiled from that collected in 1907, supplemented with 1905 and 1906 data. “Medical Mission Statistics, 1907” *CMJ* 22, no. 3 (1908) and “[Medical Mission] Statistics for the Year, 1910” .

A third problem was that the data were not necessarily comparable across institutions or time. Any interpretation of the statistics contained within these returns, or the financial statements in annual reports that presumably formed their basis, must be undertaken with caution. The hospitals did not employ specialist administrative staff and it was the doctors, or their wives, who lacked any training in up-to-date account keeping practice who kept the records and compiled the reports. But standardised accounting was still a future phenomenon in the West. In America in 1887 two unconnected, but related, events occurred which should have had a defining impact on the practice of accounting: the American Association of Public Accountants was incorporated and the Commerce Commission Act, which provided for federal regulation of railroads, was passed.⁶ The Accountants Association, with no paid staff and run by volunteer labour, by 1892 still had only thirty-five members and their “technical meetings”, designed to develop “uniformity in practice” and model forms of reporting, apparently came to little.⁷ Despite the Commerce Act requiring a uniform accounting system, at the turn of the century, “there was no uniform adherence to standards of auditing or of account maintenance throughout the United States”.⁸ It was not until after the stock market crash in 1929 that the term “generally accepted accounting principles” was used for the first time.⁹ The difficulties associated with comparing financial information in China is exacerbated because hospitals in the various parts of China, sometimes depending on their national origins, reported in different currencies although the majority used Mexican dollars (\$ Mex).¹⁰

⁶ John L. Carey, “The First National Association” in *The U.S. Accounting Profession in the 1890s and Early 1900s*, ed. Stephen A. Zeff (New York: Garland Publishing, Inc., 1988), p. 389.

⁷ Ibid, pp. 397-8.

⁸ Mary E. Murphy, “Founding Fathers of the American Accounting Profession” in *The U.S. Accounting Profession in the 1890s and Early 1900s*, ed. Stephen A. Zeff (New York: Garland Publishing, Inc., 1988), p. 386.

⁹ Gary Giroux, *Great Events in Business and Accounting History* (accessed February 27 2002); available from <http://acct.tamu.edu/giroux/timeline.html>.

¹⁰ These included Taels, “real cash”, “cash”, “small cash”, Mexican dollars, cents, £ Sterling and \$ Gold. Taels were not coins but a weight in silver of a certain degree of fineness. They were used for accounting purposes only and were not consistent in weight, touch or value throughout the country. Particular taels, for example, the Huiguan, which was used to account for customs levies and the Kuping, used by treasury for all government taxes, were, in theory, uniform throughout the country. Although the charges were calculated and accounted for in terms of taels they were paid in the local currency. There were more than ten kinds of Chinese dollars in circulation at the turn of the century but, because they were most highly valued in the province which minted them and at a discount elsewhere, they were not popular. Various foreign currencies

The editors of the *CMMJ* were aware of the shortcomings of the reports they published. In 1907, instead of their usual appeal for members to furnish statistical returns and chastising those who had failed in the past, they complained about the standard of reporting and the difficulty in comparing results as “there seems to be as many ways of making statistical returns as there are doctors and hospitals”. In their view “fallacies occur all along the line” and it was “difficult to get such returns as are worth getting”. They noted, for example, that the calculated cost per bed could be misleading. The reason for this was that in some hospitals patients dealt directly with a cook who was not an employee of the hospital. Any monies paid by patients, or expenditure by the cook, did not pass through the doctor’s hands or records. Recorded operating costs in these hospitals necessarily appeared low. In the hospitals that employed a cook, and provided meals, all costs were included in the expenditure statement and produced apparently higher running costs.¹¹

The problems of comparability and accuracy persisted and, as late as 1915, the editor of the *CMJ*, responding to an article in *The Modern Hospital*, urged the adoption of truth in financial reporting and “uniformity in accounts and balance sheets in all our hospitals”. In particular, he drew the reader's attention to the fact that there was no common definition of terms such as “total cost” which to the

average missionary physician, thinking in terms of money grants from the Home Boards or gifts from sympathizing supporters, the total cost of running the institution is often unconsciously the result of a subtraction sum, viz. gross expenditure minus local receipts in fees, etc.¹²

Any survey of hospital annual reports for the period reveals the wide variation of forms in which financial information was conveyed. Rarely were separate balance sheets and income and expenditure statements prepared and consequently purchases of capital items such as

circulated throughout the country and the most commonly used was the Mexican dollar, which members of the Missionary Association used most frequently for reporting. Chinese silver coins, 5, 10 and 20-cent pieces were available, but like the dollars, varied widely against the tael. The common currency of the people was “copper cash”, minted in ten and one cash denominations. Theoretically there were 1000 cash to the tael but this was not consistent over time, for example between 1905 and 1912, the exchange rate decreased from 1100-1200 to 1700-1800 cash to the Shanghai tael. Montague H.T. Bell and H.G.W. Woodhead, *The China Year Book* (London: George Routledge & Sons, Ltd., 1912), pp. 273-7.

¹¹ “The Statistics Again” *CMJ* 21, no. 6 (1907). There was a third category of hospital: where patients were responsible for their own food. The arrangements concerning food are discussed elsewhere, see page 217 ff.

¹² “Missionaries and Accuracy” *CMJ* 29, no. 3 (1915).

land, buildings, furniture and fittings were included along with current expenses such as food, coal, wages and medical supplies. The format and terms used in statements not only varied between institutions but also varied within the set of annual accounts of the same institution. Despite the foregoing caveat, records and statistics do exist which are capable of interpretation and analysis. It is against this background that I will discuss the financial affairs of mission hospitals in general, and the Methodist Episcopal Men's Hospital at Chongqing in particular.

Chungking Men's Hospital – Case Study

The "Chungking Men's Hospital", founded by James McCartney (see Plate 48: Drs McCartney, Liao and Twan¹³) of the Methodist Episcopal Church in 1892 serves as an instructive case study of the changing balance, over time, in the source of funds for the operation of an American hospital in China. The reason for this choice is not only prosaic – annual reports are extant for ten of the twenty years (including financial details for nine) from the second report in 1893 through to 1912 – but also McCartney proved himself a leader in striving for financial self-sufficiency and the policies he developed set the pattern for those who came later. Whether his experience at Chongqing was representative of hospitals in different parts of the country run by different religious denominations will become clear when it is compared with the 1903–1910 survey data collected by the CMMA.¹⁴

It would seem from his first hospital report that McCartney, who had arrived at Chongqing in 1891, started dispensing medicine from rented Chinese premises sometime before establishing the first foreign hospital work in that city in 1892.¹⁵ In the beginning he provided all medical services gratuitously but within eight years he was able to announce that the hospital had succeeded in achieving the goal of complete self-sufficiency that he

¹³ McCartney, *Annual Report (1899)*, frontispiece.

¹⁴ See page 163 ff.

¹⁵ See McCartney, "First (1892) Annual Report:" . He described Chongqing in his 1912 report as being of some 400,000 people, located on a rocky promontory, linked by "one of the "main rock-paved roads" to the capital of the province, Chengtu, and thus "as a key to the inner province". He drew his patients from the city and surrounding countryside of "fertile valleys and coal-filled sandstone-hills". J.H. McCartney, *Chungking Men's Hospital (1912)*, (*Gouldy Memorial*) (Shanghai: Methodist Publishing House, 1912)

had set himself in his second annual report in 1893:

It is our desire to relieve the Missionary Society (as soon as possible) from the burden of our support and establish the hospital on a self-supporting basis, the principal support coming from the natives themselves.¹⁶

McCartney was particularly energetic and entrepreneurial. According to the Annual Report for 1899, he had started in 1891 with \$1,000 per annum from the Missionary Society and “this year, not one cent”.¹⁷ To analyse how he accomplished this is the aim of this section.

Early Days at Chunking – Free Treatment but the Income Flowed

Although his personal services were provided free, McCartney did collect some money from his patients from the very beginning.¹⁸ In his first year no fee was asked of people who attended his outpatient clinic. His second year started with a trial of charging twenty *cash* the first time a patient came to the dispensary. The trial only lasted three months because patients elected to attend free dispensaries operated by others in the city. Since his was the first foreign hospital established in Chongqing we can assume that he was referring to Chinese-run dispensaries which were common in most large cities in China at the time. However, he always charged fees for home visits and gave as examples of the type of case (with charges) he could be called out to attend: “500 *cash* for labor, and [for] opium suicides, 1000 *cash* and chair money”.¹⁹ In addition, most patients admitted to the hospital covered the cost of their board – two thousand *cash* a month in the public wards and three

¹⁶ J.H. McCartney, *Second (1893) Annual Report: Chungking Hospital of the Methodist Episcopal Church* (Chongqing: Methodist Episcopal Church, 1893), p. 10.

¹⁷ The accounts include amounts of 672.70 and 262.50 taels under revenue attributed to “medicines from the Missionary Society and Women’s Foreign Mission Society” respectively so we must assume that they donated medicines in kind rather than grants of money. As these amounts represented almost 20% of the total current expenditure (calculated by taking total listed expenses less “patient’s board” (which was fully covered by direct charges), “expenses under special gifts” (which are assumed to be for capital items), but including an amount of 859.98 taels, which was applied against the salary of the physician) the claim of “not one cent” was accurate but somewhat misleading. McCartney, *Annual Report (1899)*, p. 16.

¹⁸ Like most hospital reports of the period, the system of financial reporting for McCartney’s hospital was not consistent. It was only in 1908 that an attempt to standardise the categories of income and expenditure was made. Before that, the categories, currencies and terminology and extent of detail were constantly changing. I have made a number of assumptions by paying close attention to the text that accompanied any financial statements as well as other writings of the medical missionary in charge. I have elaborated on them in the footnotes dealing with the various graphs that accompany this text.

¹⁹ McCartney, *Second (1893) Annual Report*, p. 3 “Chair money” referred to the cost of hiring a chair to transport him from the hospital to the home he was visiting.

thousand in private rooms – but not for medical treatment.²⁰ Some inpatients, who could not afford to pay for food, were accepted but McCartney had adopted the policy of restricting the number of such charity patients to the extent of any excess of receipts over expenditure. In effect, any charity patients would be supported by other patients and not by funds from external sources. In 1893 he reported that the total collected from patients' board, sale of medicine and visits to homes netted 614.30 *Chongqing taels*.²¹ This was spent on "rice, vegetables, meat, and repairs on the hospital" leaving an amount of 124.94 *taels* to be added to endowments, the interest on which provided "support of poor patients who cannot pay their board".²²

To supplement revenue from patients McCartney supported the hospital substantially by his own efforts. In 1899 he took on the responsibility of performing the duties of Medical Officer at Chongqing for the Imperial Maritime Customs Office for which he was paid a salary.²³ This provided valuable support for the hospital, and its several dispensaries, for seven years until 1905.

Charging Outpatients

Outpatients, who always far outnumbered patients admitted to hospital, were an obvious funding source to be tapped.²⁴ A small charge fixed on a very large, and growing, number of people (10,775 new

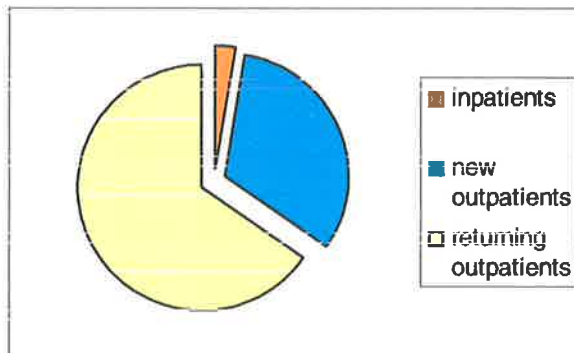


Figure 4: Ratio of Outpatients to Inpatients, Chungking Hospital, 1899

Source: McCartney, J.H. Annual Report (1898) of the West China Medical Mission, 1899: p. 2.

²⁰ For this sum patients' meals consisted of rice with two vegetables three times a day for five days a week with pork added on Saturdays and beef on Wednesdays. Ibid, p. 2.

²¹ For an explanation of the various forms of currency see fn. 10 page 149. Until 1908, when he conformed to the norm and reported in Mexican dollars, McCartney reported using the local Chongqing tael. The exchange rate between cash and the Chongqing tael varied between 1200 cash in 1897 and 1240 in 1905. See J.H. McCartney, *Sixth (1897) Annual Report of the General Hospital of the Methodist Episcopal Church, Chungking, China*: (Shanghai: American Presbyterian Mission Press, 1898) ; J.H. McCartney, *15th Annual Report (1905) of the Chungking General Hospital for Men of the Methodist Episcopal Church* (Shanghai: Methodist Publishing House, 1905). In most reports he gave sufficient information for the exchange rate to be ascertained and it was relatively stable at \$1.00 Mexican being equivalent to 0.70 taels.

²² McCartney, *Second (1893) Annual Report*, p. 10

²³ McCartney, *Annual Report (1899)*, p. 2.

²⁴ See page 184.

outpatients in 1899) could raise a substantial amount.²⁵ (see Figure 4)

Following the aborted 1893 trial McCartney was able to successfully introduce fees for outpatients in 1898 – twenty *cash* for the first visit. Although by then there were two foreign free dispensaries in Chongqing, McCartney “found no difficulty getting patients”.²⁶ Nevertheless, the numbers of patients did fall by about fifty percent from the 1897 figure. This was partly attributable to the fees but another factor in the fall-off in attendance was the “disturbed condition of the country”. He acknowledged that riots, which had been continuous between March 1898 and the beginning of 1899 in the eastern part of Sichuan Province, had arisen in response to his own Mission’s persistent efforts to open a branch dispensary and street chapel in the nearby town of Jiangbei 江北.²⁷ Despite the loss of customers McCartney discovered that charging dispensary fees provided more than money: it gave him “the satisfaction of knowing that those who applied for treatment really had something the matter with them”. Return visits trebled. Previously, when no fee was charged, the majority never returned. He was particularly pleased with a new fee introduced for out-of-hours consultation – one hundred *cash* – which worked “splendidly” and brought in “nearly as much as the dispensary”.²⁸

McCartney was one of the few doctors who, once they had established a reasonable sized hospital, managed to find time for itinerating (travelling into the countryside) to see patients and disseminate religious literature. Charging these patients a dispensing fee did not contribute to the hospital’s upkeep but he managed to cover his expenses so it was not a financial drain on the hospital. He reported a successful trip, taken during 1899, when he raised 13,000 *cash* in three or four days by charging twenty *cash* per patient. He collected

²⁵ McCartney, *Annual Report (1899)* .

²⁶ *Ibid*, p.6.

²⁷ *Ibid*, p.4. They eventually succeeded but only after one rented building had been burned down on instructions from the local gentry, another building, sublet to them by a Chinese resident of Jiangbei 江北, had been sacked and one of McCartney’s Chinese medical students murdered. The mission received compensation for the damage and the city officials handed over a large compound to them eight months later. McCartney, *Annual Report (1899)*, pp. 4 -5.

²⁸ McCartney, *Annual Report (1899)*, pp. 5-6.

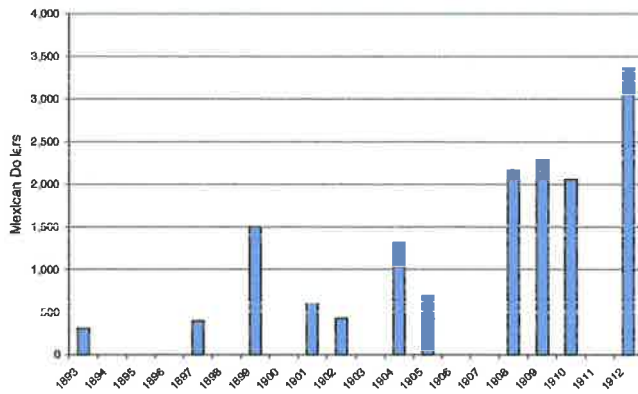


Figure 5: Total Fee Income from Chinese Patients, Chungking Hospital, 1893-1912.

Source: Extracted from Financial Data included in Annual Reports, Chungking Hospital, 1893-1912

those funds derived directly from outpatients in the annual financial statements and so, in preparing the data for Figure 5, I have brought together all fees from Chinese patients.

These variously included fees for visits to patients in their homes (from the beginning in 1893), dispensary visits (from 1899 on), funds characterised in two of the reports as being for “medical” and “dental” treatment and receipts from the sale of medicines (identified

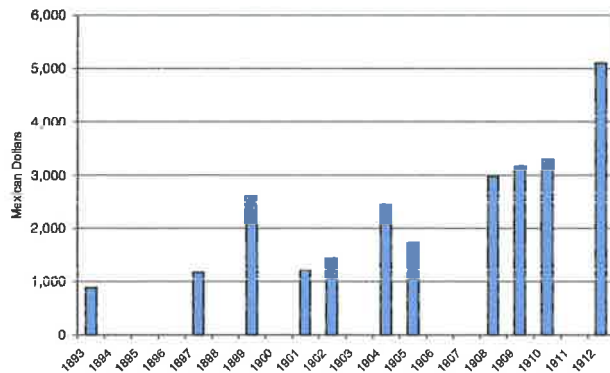


Figure 6: Total Fees and Board paid by Chinese Patients, Chungking Hospital, 1893-1912.

Source: Extracted from Financial Data included in Annual Reports, Chungking Hospital, 1893-1912.

additional funds from the sale of religious books.²⁹

The fact that McCartney’s financial reporting was not consistent throughout the period under review until 1908, when a more-or-less standard format was adopted, has

made a longitudinal analysis of dispensary fee income difficult. It has proved impossible to isolate

separately in two of the reports).³⁰ I have separated out any items classified as having been for inpatients’ board (which was the only item consistently reported for the entire period) and any identified as having been received from foreign patients. The picture emerges of erratic and relatively low levels of income in the early years, gradually

²⁹ Ibid, pp. 6-7.

³⁰ I have not been able to include the money spent by Chinese in the Drug store (see page 157) because, although references were sometimes made to the turnover, it was not included in the financial statements as a discrete item. As will be seen, the turnover was substantial and so the Chinese contribution to the hospital was more significant than would appear from Figure 5.

rising until 1908 when it stabilises at just over \$2,000 Mex. per annum before rising substantially again in 1912 to in excess of \$3,000 Mex. When combined with the money collected to cover their board the steady increase in Chinese patients' contribution to the enterprise over time is more obvious. (see Figure 6)

In the dispensary McCartney continued to treat the very poor but now they had to wait until everyone else had been dealt with before receiving free treatment. Along with the new practice of charging patients heavily if they wanted to be seen out-of-turn or out-of-hours, McCartney abandoned any pretence of equality of treatment.

Private Patients' Fees

Whilst most foreigners in China and wealthy Chinese preferred, like their counterparts in America, to be treated at home McCartney's hospital provided a minimum of private accommodation for those who needed its facilities. Instead of relying on this small number of private patients to support the running of the hospital, he charged the ordinary patient in the ward for his board. When appealing for donations of the \$15.00 per year he estimated to be the annual cost of financing a free bed McCartney pointed out to potential supporters that, according to the report of a large hospital in America, where beds cost \$500 per year to support, "nine-tenths of the inpatients during the year received free treatment". This was

by far a larger proportion than our mission hospital can do in a heathen land. We daily turn away many needing hospital treatment who are too poor, and we have not the means to supply their food.³¹

Thus, philosophically, he saw his hospital and his role as being more properly comparable to a public hospital, catering for the poor in America, than to the more prolific proprietary or voluntary hospitals with their emphasis on private patients. His hospital, however, had it been in America, would have certainly been classified as a religious voluntary hospital on the basis that (i) it was run under the auspices of a religious organisation, (ii) it was funded substantially from donations and subscriptions and (iii) it charged patients fees. The essential difference between the position of a patient in a voluntary hospital in America,

³¹ J.H. McCartney, *Annual Report (1901) of the General Hospital, Methodist Episcopal Church, Chungking, China* (Chongqing: The West China Missionary News Office, 1901), p. 7.

and one in Chungking, was that the American would have paid twice: a fee to the hospital for board and nursing and another to the physician who admitted them to hospital. The Chinese patient paid once: for board. They were not charged by the medical missionary for professional services because the missionary society, rather than the hospital or the patient, was responsible for the physician's salary.

Commercial Activities

1899 was a busy and significant year for the hospital. As well as implementing the dispensary fee policy, McCartney ventured into commerce: first targeting the foreign resident population of Chongqing. He entered into an arrangement with a British firm in Bristol (Ferris and Co.) from whom he could buy drugs at wholesale prices at 10-15 percent discount to the English prices and opened what he called a "foreign drug store" to

supply drugs and druggists' sundries to foreigners in West China, as well as giving the natives the chance to get pure drugs at a moderate price. The prices charged by natives selling foreign drugs are exorbitant.³² (see Plate 49³³)

All profits were to be available for running the hospital but they appear to have been applied to building up inventory until 1905 when stock was purported to be valued at more than \$17,000 Mex. From 1908 the store became a regular, reliable, increasing source of funds; turning over in excess of 8,000 *taels* (\$11,400 Mex.) in 1902³⁴ and \$33,400 Mex. in 1912 and contributing some \$1,385³⁵ and \$3,960³⁶ respectively to hospital running costs. The stock was steadily diversified to include such items as soap³⁷, post cards³⁸ and, when an aerated water plant was installed in 1905, they sold "several hundred dollars worth of

³² McCartney, *Annual Report (1899)*, p. 9.

³³ McCartney, *The 12th (1902) Annual Report*, p. 6.

³⁴ *Ibid.*

³⁵ *Gouldy Memorial Hospital, Methodist Episcopal Church, Chungking, West China, 1908*, (n.p., 1908), pp. 16-7.

³⁶ McCartney, *Chungking Men's Hospital (1912)*, p. 35.

³⁷ McCartney, *Annual Report (1901)*, p. 3. Introduced in 1901, they sold "300 cases" but McCartney noted that the soap had not yet made "any appreciable difference in the general appearance" of the potential 65,000,000 people in China. He lived in hope that the "300 may soon increase to 3000".

³⁸ *Gouldy Memorial Hospital, Methodist Episcopal Church, Chungking, West China, 1908*, pp. 8-9. Introduced in 1908 and the hospital would arrange for them to be sent to "people at home for \$1.00".

waters”.³⁹ By 1912 McCartney was referring to it as both a drug store and “partial grocery supply depot”.⁴⁰ His contemporaries did not necessarily applaud his entry into business and he responded to criticism from those who disapproved of his commercial activities.⁴¹ In his opinion, the Chinese who patronised the store appreciated the “one price store” where there was no haggling⁴² and the “middle and better classes” who patronised it preferred to buy their medicine than get it free.⁴³

Another commercial venture was the optical department he had opened earlier and which yielded “good revenue”. For example, in 1898 the hospital spent 68 *taels* on spectacles that were sold for 113 *taels*. One more of his enterprises, which, as far as I am aware, was not initiated in other places, was what he referred to as “Drawn Work”. Women patients were provided with materials from which they sewed small items for sale – whilst being read Bible stories –with any profit going to the hospital.⁴⁴

One commercial avenue that was not explored by McCartney was pursued by Charles Ewing,⁴⁵ at Tianjin Ewing described how it was the argument that it was “Chinese custom”

³⁹ McCartney, *The 15th Annual Report (1905)*, p.2.

⁴⁰ McCartney, *Chungking Men's Hospital (1912)*, p. 18.

⁴¹ The relationship between the missionary and commerce was the subject of continuing debate in the pages of missionary journals. For example, a call (in 1901) for business to support missionary work cited the advantages to be gained from the “curiosity of the Chinese” about the clothing worn, and watch or pocket knife carried by travelling missionaries which “prepare the way for the influx of foreign goods by and by”. Similarly with foreign goods used in missionary homes: glass for windows (to replace paper or oyster shell), stoves, “superior” Californian flour and foreign salt. “The Commercial Value of the Missionary” *North China Herald and S.C. & C. Gazette and S.C. & C. Gazette*, July 10 1901, p. 55. Arthur Brown outlined the many and various motives cited in support of missionary work which included, the commercial: the “missionary opens new markets and extends trade.” He acknowledged that the missionary did not “intend to” or “reap any personal profit” but had become “one of the most effective agents of modern commerce”. Arthur J. Brown, “The Motive of the Missionary Enterprise” *Chinese Recorder* 25, no. 9 (1904): p. 445. Isabella Bird, who recorded her solo travels through China in 1896, reported on comments by “Consuls Carles and Clement Allen” that missionaries “unconsciously help British trade by introducing articles for their own use, which commend themselves to the Chinese.” She commented on the demand created for foreign goods by the drug store operated by Dr Main at Hangzhou. Isabella Bird, *The Yangtze Valley and Beyond: An Account of Journeys in China, Chiefly in the Province of Sze Chuan and Among the Man-Tze of the Somo Territory* (London: Virago Press Ltd, 1985, 1899), p. 45. Not all correspondents agreed: Gillison represented those who warned that money was a hindrance to spreading the gospel, and against the dangers inherent charging for medicines and turning the hospital into a business. Thomas Gillison, “Charging for Drugs” *CMMJ* 16, no. 1 (1902): pp. 20-1.

⁴² McCartney, *The 12th (1902) Annual Report*, p. 6.

⁴³ McCartney, *Annual Report (1901)*, p. 4.

⁴⁴ *Gouldy Memorial Hospital, Methodist Episcopal Church, Chungking, West China, 1908*, p. 7

⁴⁵ See page 70 above.

that had persuaded him to adopt the idea of investing in real estate to provide a flow of rents for mission use:

it seems most natural for [the Chinese], when they have any money for the church, instead of using it at once, to invest it, preferably in land for rent, using the proceeds for the church from year to year.⁴⁶

Ewing's experience was not a happy one and, in a letter dated December 6, 1905, he complained about having to spend time going around the countryside collecting rents. He thought the only benefit to be financial and that it diminished the church to the level of a "financial corporation". Two months later he had found owning land to be "the most serious obstacle' to the mission work because the "money from rents ... goes to the local church and puts a damper on their self-support".⁴⁷

Appeal to Chinese Philanthropy

Alongside these initiatives McCartney continued the practice of soliciting funds in the form of donations – in money and kind – and subscriptions from his supporters at home and from the Chinese gentry and officials of Chongqing. The proportion of American donations and subscriptions was reasonably consistent and averaged 28 percent of current expenses between 1893 and 1912.⁴⁸ McCartney received his most consistent support from a number of branches of the Epworth League, a youth organisation of the Methodist Episcopal Church founded in Ohio in 1889.⁴⁹ Chinese donations over the same period averaged closer to 12 percent of current expenses.⁵⁰ The 1901 list of donations includes sums of 140 *taels* and 100 *taels* from the Governor of Sichuan and the Tao-tai respectively.⁵¹ In 1902 these

⁴⁶ Ruoff, ed., *Death Throes of a Dynasty*, pp. 154.

⁴⁷ *Ibid*, p. 160, 162.

⁴⁸ Current expenses did not include salaries for professional staff employed by the missionary society. I have also excluded any contributions made towards these salaries by the hospital. To calculate the average percentage I have omitted the foreign donations made in 1902 because the total foreign donation, \$6,900 Mex., was allocated to a special building fund and it has not been possible to isolate the sum of subscriptions used for hospital running costs.

⁴⁹ Epworth League (Methodist Episcopal Church), (accessed 21 February 2002); available from http://learn.union-psce.edu/timeline/Youth/epworth_league.htm

⁵⁰ Estimated from seven of the years for which Chinese subscriptions applied to current expenses can be determined. In 1901 and 1902 donations were included in the special building fund account.

⁵¹ Equivalent to \$200 Mex. and \$140 Mex.

were joined by the provincial treasurer (50 *taels*), Foo (35 *taels*), Tsentai (10 *taels*) and Pahsien (50 *taels*) and a number of individual members of the gentry. However, in September 1911 when all but three missionaries, of whom McCartney was one, were ordered to leave the province and go to Shanghai following

an “anti-dynastic uprising ... in Chentu” (成都), there were no official donations and a mere \$10 Mex. was received from a Chinese individual.⁵² Despite all his efforts to encourage donations, the funds he collected from patients (with one minor exception in 1899⁵³) always exceeded any he was able to coax out of local officials and the gentry.⁵⁴

McCartney explored every available avenue to secure his hospital’s viability and the extent to which he succeeded in these various endeavours is illustrated in the accompanying graphs, which show the changing blend of sources of funds between 1893 and 1912.⁵⁵ He attributed the fall in donations from America in 1912 to a perceived “fear that the revolution in China would upset things so badly that we would not be able to make use of the money”. He described the year as having been begun “under a rather shaky form of

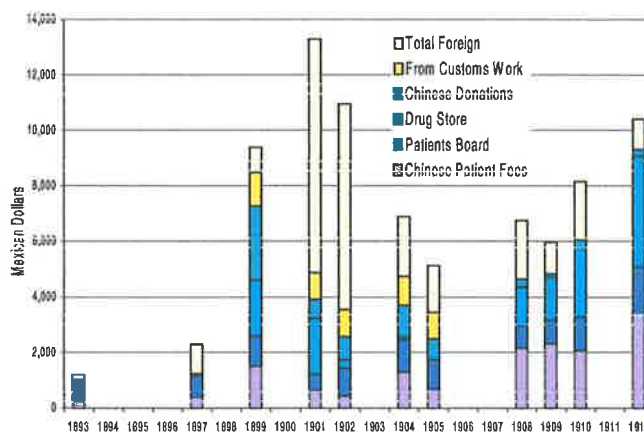


Figure 7: Mix of Sources of All Funds, Chungking Hospital, 1893-1912

Source: Extracted from Financial Data included in Annual Reports, Chungking Hospital, 1897-1912.

⁵² The American consular staff ordered the evacuation but McCartney recorded that the “revolution in the Chungking district has been noted for the quietness and lack of bloodshed with which it has taken place”. He had expected a large number of wounded but “considering the amount of gunpowder that has been set off we have had very few indeed” J.H. McCartney, *Report (1911) of the Chungking Men's Hospital, Gouldy Memorial* (Shanghai: Methodist Publishing House, 1912), pp. 1, 7.

⁵³ Due to a large, one-off, donation, of 1,000 Tls from the gentry of Jiangbei, partly in compensation for the loss of property and life and to establish a new dispensary. See fn. 27 on page 154.

⁵⁴ Sometimes McCartney listed donations from Chinese separately from his American supporters but in the main, I have had to rely on the names on the lists in his annual reports to identify the national source of the funds. Arthur Peill, at Cangzhou 滄州 in Hebei, had found that printing his annual report in Chinese and distributing them among officials and gentry had resulted in “considerable enlightenment and in an increasing number of donations for our work” Arthur D Peill, “Hospital Reports: Roberts' Memorial Hospital, T'sang-chow” *CMMJ* 20, no. 1 (1906): p. 45.

⁵⁵ The large foreign contributions raised in 1901 and 1902 coincided with a drive for funds for building of a new hospital.

Republican government” but assured them of the stability of “our government and the prosperity of the work”.⁵⁶ What is clear from Figure 7 is that the funds for the hospital were increasingly locally sourced – particularly from patients.

In McCartney’s hospital, where only five percent of rooms were for private patients, the Chinese patients’ contribution ranged from 31.6 percent in 1897 to 63.0 percent in 1912, with an average of 43.2 percent for the period.⁵⁷ (see

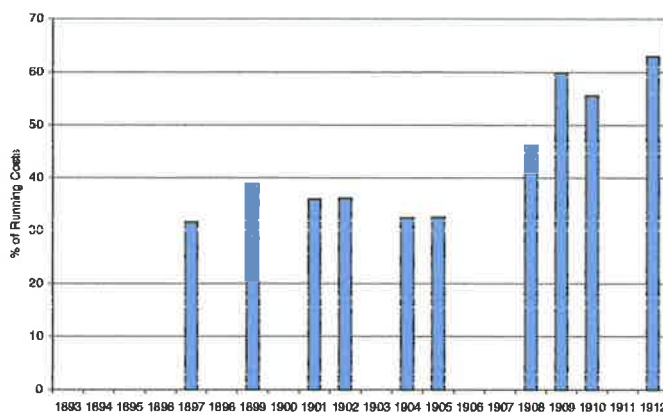


Figure 8: Percentage of Total Running Costs sourced from Chinese Patients, Chungking Hospital, 1897-1912
 Source: Extracted from Financial Data included in Annual Reports, Chungking Hospital, 1897-1912.

Figure 8) This contrasted with the Lancaster Hospital, with 57 percent of its patient area devoted to private rooms, which sourced only 34.5 percent of its running costs directly

from patients in 1905-6.⁵⁸ Except for the two years of most active hospital construction (1901 and 1902), the Chinese always provided the major part of the funds required to run the hospital. In fact, in four of the ten years, for which data are available, the total Chinese

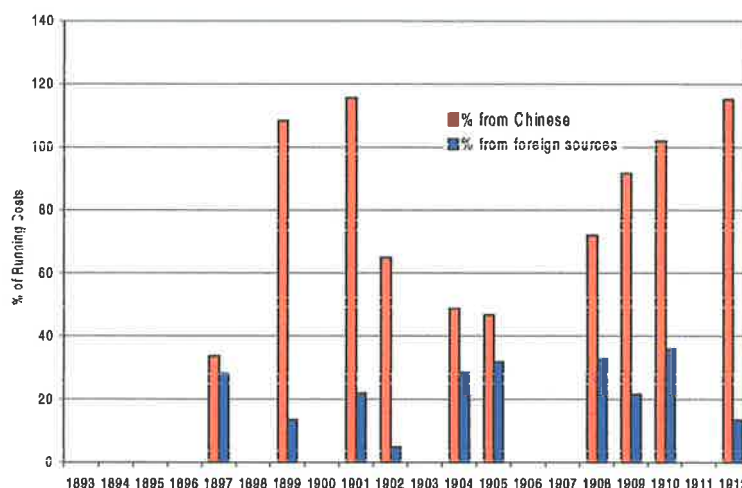


Figure 9: Comparison of Chinese to Foreign Contribution as percentage of Running Costs, Chungking Hospital, 1897-1912.
 Source: Extracted from Financial Data included in Annual Reports, Chungking Hospital, 1897-1912.

⁵⁶ McCartney, *Chungking Men's Hospital (1912)*, p. 9.

⁵⁷ Included patient fees plus board but not including purchases from the drug store.

⁵⁸ Calculated using information from Treasurer’s Report *Lancaster Hospital*, pp. 5-6. Thus, the Lancaster Hospital’s patient-fee income, in 1906, fell within the range of that for charity hospitals in America in 1904. (See page 128)

component of the income⁵⁹ more than covered the current expenses.(see Figure 9)⁶⁰

In summary, at Chongqing the Chinese paid fees for dispensary as well as home visits; they paid for their board in hospital and for their medicines; they bought drugs and other imported goods from the drug store; they subscribed annually and donated to building funds.

But the Chinese patients were not the equivalent of the middle class “private patient” who sustained the hospital in America. In his second annual report McCartney provided details of 445 of the 447 men and 48 women admitted to hospital (that is, excluding the 4,324 new patients who were seen as outpatients in the dispensary) in terms of their occupations. What emerges is a cross-section of “ordinary” Chinese. The two largest groups were farmers (79) and coolies (74) followed by 27 merchants, 25 housewives and 25 classified as “gentlemen”; there was an unknown number of beggars, 4 opium shopkeepers, 8 shoemakers, 16 street vendors, 13 cooks, the same number of both tailors and *yamen* runners and smaller numbers of wood carvers, barbers, butchers, millers, bakers, along with inn-keepers, a fortune teller, a coffin maker and a mechanic.⁶¹

The many thousands who made use of hospital outpatient services were even less likely to be of the upper and middle-income groups but they contributed substantially to the costs of the hospital through their registration and attendance fees along with their purchases

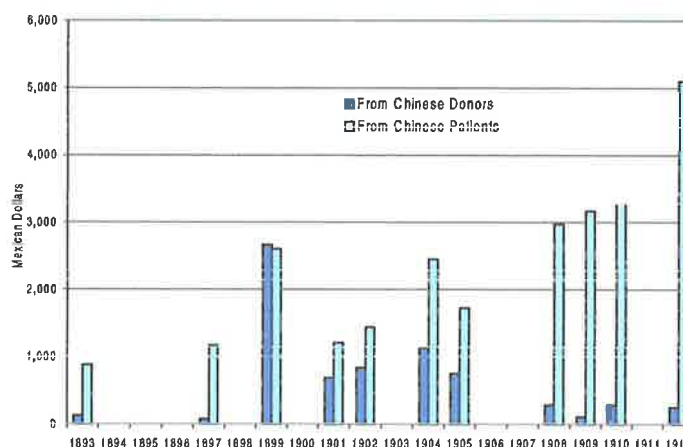


Figure 10: Comparison of the Contributions from Chinese Donors to that of Chinese Patients, Chungking Hospital, 1893-1912.

Source: Extracted from Financial Data included in Annual Reports, Chungking Hospital, 1893-1912.

⁵⁹ That is, patients’ fees, board, purchases and donations.

⁶⁰ The substantial foreign contributions specifically to the Building Fund” have been excluded from the 1901 and 1902 income.

⁶¹ McCartney, *Second (1893) Annual Report*, pp. 4-5.

from the drug store.

In conclusion, in a number of financial respects McCartney's hospital differed fundamentally from its counterpart at home. It was not simply transplanted but was adapted to suit a different economic and cultural environment. Not only did a greater proportion and a different class of patients pay fees but they did so for a wider range of services. Despite the Chinese reputation for philanthropy in respect of their own benevolent institutions and McCartney's best efforts to encourage the Chongqing officials and gentry to support the hospital, the proportion from this source was never substantial. In the last four years of the period under review, it was insignificant and always considerably less than donations sourced from patients. (see Figure 10)

The Wider Picture

How representative was McCartney's hospital? I will consider this first in relation to dispensary fees. One hundred and fifty two hospitals replied to at least one of the statistical surveys conducted by the CMMA between 1903 and 1910. (see page 148) Of these, ninety-six hospitals answered the question about fees, at least once between 1904 and 1906, and seventy-one of these (that is 74 percent) reported that they charged outpatients. The charges made for dispensary visits were mainly reported in *cash* and ranged from as low as two *cash* charged by the Rhenish Mission⁶² at Dongwan 东莞 in Guangdong to one hundred *cash* by the Danforth Memorial Hospital at Jiujiang and the Wuhu General Hospital in Anhui, both run by Methodist Episcopalians.⁶³ Although the majority of dispensary fees lay in a reasonably narrow range – twenty to sixty *cash* – there was considerable variety in the method of application. It would appear that by far the majority charged a flat fee per visit: 85 percent in 1904 and even more, 91 percent, in 1906.⁶⁴ Others charged a fee for a set number of visits or a set time: for example, the Yangzhou 扬州 Baptist Hospital in Jiangsu

⁶² A German missionary society which worked in Guangdong province.

⁶³ For a summary of the various currencies hospitals used for accounting, see fn. 10.

⁶⁴ It is difficult to make a definite statement about the application of fees because of obvious inadequacies in the design of the questionnaire. I have assumed that a response provided under the heading "charges for dispensary patients" of 10 *cash* means that the charge was made for each visit unless otherwise indicated. Twenty-three, out of twenty-seven that gave details of fees, charged for dispensary visits in 1904. Sixty-eight, out of seventy-four that gave details of fees, charged in 1906.

charged eighty *cash* for three visits and at the American Baptist Hanyang 汉阳 Hospital in Hubei a forty *cash* charge covered two weeks attendance. Still others charged one fee for the first visit and a lesser fee for subsequent visits: for example, St James Hospital at Anqing 安庆 in Anhui charged forty *cash* for the first visit and twenty thereafter. One – the MEM hospital at Suzhou – recorded that they divided patients into first and second classes and charged accordingly – fifty-six and twenty-eight *cash* respectively.⁶⁵ Another, the CMS hospital at Xinghua 兴化 in Fujian, charged men thirty *cash* and women twenty-five. The rationale for adopting these variable methods of charging lay in a perception shared by many missionary physicians. They had observed the Chinese custom of “doctor shopping” in the sense that patients routinely consulted a number of Chinese doctors, or other healers, in succession until they found one they considered sufficiently skilled in their particular disorder. This meant that patients would expect the initial treatment to work and, if it did not, would not return a second time. Charging a lower, or no fee for subsequent visits, or a set fee to cover a number of visits or weeks, was an attempt to encourage them to return. For Omar Kilborn, a strong advocate of self-support, the reasoning was more pragmatic:⁶⁶ his patients could not afford to pay for ongoing treatment. He wrote in 1901:

The vast majority of out-patients after the payment of twenty *cash* registration fee, should not be asked for anything further, even though they come for a month or more, for the simple reason that they are too poor to pay.⁶⁷

In 1906, according to his response to the surveys, he had varied his 1905 charge of twenty-five *cash* for the first visit and nothing after, to thirty *cash* for one month’s attendance. The survey returns reveal that the strategy of varying subsequent fees was implemented by only a tiny minority of hospitals (declining slightly between 1904 and 1906) but whether this was because they thought it would be ineffective or would involve too much of an administrative burden is not clear.

Some idea of the level of impost of these fees on the ordinary Chinese patient, particularly

⁶⁵ The foreign physician attended first class patients and “a native graduate with the foreign physician as consultant” attended the second class patients. “Soochow Hospital, Methodist Episcopal Church, South”: p. 56.

⁶⁶ See page 135 ff.

⁶⁷ Kilborn, “Self-Support”: p. 93.

if they were in the majority charged for each and every visit, can be gauged from the comment made in 1905 by Dr Francis Tucker. At his hospital in a village in Shandong, they had raised the dispensary registration fee from “thirty *cash* (1 cent)” to fifty, which was an “average half day's wage”.⁶⁸ It is unlikely that poor Chinese would have paid so much out of mere curiosity. It is more likely an indication of the value placed by the Chinese on the medical service they received from the dispensary that so many were willing to pay so handsomely.

A relatively common tactic which served to increase income while accommodating the preferences of some patients, and influencing the behaviour of others, was to charge heavily in certain circumstances. Most dispensaries were organized according to the principle of “first come first served” and a number of the early hospital reports described in some detail their strategy for ensuring the system was fair.⁶⁹ Inevitably there were among the patients those who did not want to wait their turn to be seen. Kilborn advised bluntly “see them at once and charge them 100 *cash*”. For those who came on “non-dispensary days, or out-of-hours on dispensary days ... charge them 300 *cash*.”⁷⁰ Many did. George Cox, of the CIM at Zhenjiang 镇江 in Jiangsu, where they charged sixty *cash* to register with the dispensary, reported that those who came “out of hours and cannot wait their turn pay 50 cents”.⁷¹ Another advised that at his dispensary, anyone who came before noon paid the full price for their medicine, that meant “a few will come then who would never enter with the crowd of poor people”.⁷²

An analysis of these statistical returns provides evidence that missionaries, far from merely importing their hospitals unchanged into China, adapted the financing in response to their environment.⁷³ As regards fees for outpatient services, hospitals in China had more in

⁶⁸ Francis F. Tucker, "Letter to the Editor: Record Forms" *CMMJ* 18, no. 2 (1904): p. 94.

⁶⁹ See page 178.

⁷⁰ Five and fifteen times his normal dispensary registration fee respectively. Kilborn, "Self-Support": p. 93.

⁷¹ Estimated to be equivalent to 350 *cash*. Cox, "Out-Patient Department": p. 129.

⁷² H.W. Boone, "How Can the Medical Work be made more Helpful to the Cause of the Church in China?" *CMMJ* 8, no. 1 (1894): p. 16.

⁷³ The figures that follow are calculated by combining the results of the 1904, 1905 and 1906 surveys. Twenty-seven of the ninety hospitals provided information on two occasions and twenty-six on all three. Of the remaining thirty-seven, ten responded only in 1904, one in 1905 and twenty-six in 1906 only. Not all who

common with each other than they had with their counterparts at home, whether in Britain or America. Of the thirty-eight British missions that provided financial information, fully twenty-eight charged fees, that is, 74 percent compared with the 79 percent of American hospitals which charged fees.

Based on this limited sample, it seems that the British were just as likely to charge fees as their American counterparts. (see Table 1⁷⁴)

The policy of fee charging was not closely correlated, either, with the length of time the hospital had been in

existence.⁷⁵ Whilst most hospitals waited until they had established rapport with the Chinese before introducing fees, some had still not introduced fees many years after their founding. For example, in 1905 there were four early American hospitals (established before 1890), each with a minimum of fifteen years experience, that still provided free dispensary consultations and treatment.

It was obviously neither simply a function of nationality nor of length of stay in China of origin which determined whether outpatient fees were charged or not. The practice differed from what one would expect if one were looking at a straightforward “colonial transfer” of an existing institution with its underlying national values and beliefs. However, there does appear to be some correspondence between the charging of fees and the denomination of the missionary society sponsoring the hospital. (see Table 2) Baptist Missions were the

Table 1: Fee Charging Practice by Country of Origin of Mission.

Country of Origin	Fees	Percent	No Fees	Percent
America	42	79%	11	21%
Britain	28	74%	10	26%
Canada	1	33%	2	66%
Germany	1	50%	1	50%
Total	72	75%	24	25%

responded gave information about dispensary fees. We could assume that the five that did not answer the specific question charged no fee, but I have excluded them from the analysis.

⁷⁴ Extracted from Medical Mission Statistical Surveys for 1904, 1905 and 1906 published in CMMJ.

⁷⁵ Based on an analysis of “duration of mission” and fee charging policy. The founding year of eighty-six of the ninety-six hospitals were determined using a variety of sources including “[Medical Mission] Statistics for the Year, 1910”; Latourette, *A History of Christian Missions in China*; Wong and Wu Lien-teh, *History of Chinese Medicine*.

least likely to charge fees and Methodists and interdenominational missions the most likely.⁷⁶ Of the twelve hospitals under the auspices of American Baptists, none charged fees in 1904 and six still provided free treatment in 1906 whereas of the five American Board (ABCFM) hospitals four charged fees in each of the years. The four China Inland Mission (CIM)⁷⁷ (international, but mainly British) hospitals all charged fees as did the fourteen Methodist-run hospitals: eleven American Methodist Episcopalian, two British and one Canadian.⁷⁸ All but one of the twelve of the London Missionary Society (LMS) hospitals charged fees. Presbyterian missions, which were the most numerous (twenty-nine of the ninety-two British or American hospitals), displayed the most variability in fee policy. American Presbyterians,⁷⁹ with fifteen hospitals, had eleven that charged fees and four that did not. Of the twelve British Presbyterian hospitals,⁸⁰ six charged and six did not. These figures would suggest that some missions (for example the CIM, the American Baptists, the LMS and the American

Methodists) decided policy centrally and others (most markedly the Presbyterians – both British and American) set policy locally and according to local conditions.

Table 2: Fee Charging Practice by Denomination of Mission.

Denomination	Fees	Percent	No Fee	Percent
Anglican	7	88%	1	12%
Baptist	7	50%	7	50%
Interdenominational	20	91%	2	9%
Methodist	14	100%	0	
Presbyterian	18	58%	13	42%
Other	6	86%	1	14%
Total	72	75%	24	25%

The foregoing analysis of fee

⁷⁶ The interdenominational Missionary Societies included: the London Missionary Society, The China Inland Mission, the American Board of Commissioners for Foreign Missions and the Yale Foreign Missionary Society which together accounted for twenty-one of the ninety-two hospitals. Only one did not charge a fee.

⁷⁷ The China Inland Mission, established by Dr Hudson Taylor who had been inspired by the work of the German born missionary to China with the Netherlands Missionary Society, Karl Gützlaff, was the only society with its headquarters in China. It was the most aggressive when it came to moving into the interior of the country. One of the principles laid down by Taylor is particularly pertinent to this discussion: it was “never go into debt: nor to solicit donations or subscriptions: nor to publish the names of its supporters”. See Couling, *The Encyclopaedia Sinica*, pp. 98-100.

⁷⁸ British Methodists included the English Methodists (New Connection) hospital at Yaoling in Shandong and the Wesleyan Methodist Church Men’s hospital at ... (Hankow) in Hubei.

⁷⁹ Included both the American Presbyterian Mission, headquartered in New York, which was the largest denominational mission in China and the American Presbyterian Mission (South), which had its headquarters in Nashville Tennessee. Couling, *The Encyclopaedia Sinica*, pp. 18-23.

⁸⁰ I have combined the results for seven English Presbyterian, two United Free Church of Scotland, two Irish Presbyterian and one Church of Scotland Mission hospitals.

income from outpatients provides evidence of the most striking divergence of practice in China from that in either contemporary America or Britain. Rosenberg describes free outpatient treatment, for those too poor to hire their own physician, as being an enduring feature of American hospitals since the late eighteenth century. Gratuitous treatment was the distinguishing characteristic of the American outpatient department but the needs of the patient was not its only *raison d'être*. The department's usefulness accrued equally to the hospital and its professional staff as to the patient: outpatients were a good source from which to select inpatients and as the subjects of clinical training for doctors and nurses.⁸¹ Stevens describes the American turn-of-the-century outpatient department as being "in theory at least, for those too poor (or ignorant) for private practice". Hospitals and dispensaries adopted different, local, definitions of poverty, often qualified by terms such as 'deserving', 'honest' or 'worthy', to justify access to free treatment and the rare hospital that charged a fee did so to propel those they deemed able to pay in the direction of the private physician.⁸² The outpatient department was never considered as a source of funds for hospital operations as I have shown that it was in China.

Outpatient departments in China differed markedly from the institutions with the same name in America in another respect. Although they, too, functioned as feeders to the hospital-proper and as providers of clinical material for teaching and research, in China they had a different, more important primary purpose: evangelism. Or, as expressed by Dr Robert Beebe in an address to the Ecumenical Conference in New York in 1900,

[w]hen we consider that medical missions are undertaken and conducted by societies of the church whose one great purpose is the evangelization of the world, whose revenues are secured on that plea and whose life and energies are due solely to that great vitalizing idea, it is evident that medical missions have this great purpose also ...⁸³

The greater the number of patients they saw, the greater their potential evangelising

⁸¹ In terms of numbers. See Rosenberg, *The Care of Strangers*, pp. 316-22 for an examination of the place of the outpatient department in America. Granshaw discusses the setting up of dispensaries by private practitioners in Britain in the eighteenth century at Granshaw, "The Hospital", pp. 1188-89.

⁸² See Stevens, *In Sickness and in Wealth*, pp. 48-9 and p. 373 fn. 87.

⁸³ Robert Case Beebe, "Hospitals and Dispensaries" *CMMJ* 15, no. 1 (1901): p. 7.

influence. The goal of medical missionaries was not so much to restrict access as to maximise it. At the same time, they were just as concerned about abuse of a free system by those who could afford to pay but, in contrast with their counterparts in America, they had more interest in diverting patients from, rather than to, private practice. First there were no, or very very few, foreign private practitioners of Western medicine in other than the largest and oldest treaty ports. The only alternative – Chinese private practitioners – practised either the Chinese traditional medicine or the sorcery that the missionaries were trying their best to replace. Medical missionaries were faced with the problems of balancing a complex set of competing aims: essential fund-raising, maximum contact with Chinese, avoidance of pauperisation and demonstration of their Christian charity. For most of them the solution was to set an affordable fee for the majority, allow free treatment for the destitute, and charge the rich, and those deemed morally degenerate, heavily.

Charges for Medicine

In America it was common practice for the gratuitous treatment given in outpatient departments to include the supply of medicine.⁸⁴ The system in China varied only marginally. According to the 1906 survey, fifty-nine (of a possible eighty) hospitals responded with information about charges they made for medicines in either the hospital, dispensary or outpatient department. Of these, a third made no charge, another third replied that they did charge but gave no details and the remainder responded that they charged only for a few drugs. The selection of medicines identified as attracting a fee was more indicative of the attitude of the prescribing physician than of its intrinsic cost: *potassium iodide*, commonly used with mercury, for the treatment of syphilis⁸⁵ and *santonin sulphur*⁸⁶

⁸⁴ An exception was the Pennsylvania Hospital where outpatients were given a prescription to be “compounded at a drug store”. The 1908 annual report attributes the relatively low level of medical versus surgical cases seen during the year to the cost of medicine being beyond many potential patients who went to other dispensaries in the city that supplied medicine free or at a nominal cost. *Report of the Board of Managers of the Pennsylvania Hospital comprising the Report of the Department for the Sick and Wounded and the Departments for the Insane, West Philadelphia*, (Philadelphia: J.B. Lippincott Company, 1908), pp.8-9.

⁸⁵ Jefferys and Maxwell, *Diseases of China*, p. 592.

⁸⁶ *Ibid*, pp. 169 notes that this is the most commonly administered treatment for round worms, *Ascaris lumbricoides*, but warns against indiscriminate use.

for worms.⁸⁷ Revenue from medicine sales was not a significant contributor to hospital funds other than for a few, like McCartney, who set up American style drug stores selling patent medicines and other requisites.

Private Patients

Since hospital historians see the paying patient as one of the most significant characteristics of American hospitals of the period, it is important to uncover this aspect of the American hospital in China. Unfortunately, it is not possible to separately identify funds collected from private patients in the published statistical returns. Information relating to private patients was not specifically sought but eighty of the ninety-six hospitals surveyed answered a question about inpatient fees. Regrettably there was no uniformity at all in the manner of reporting the level of fees: some hospitals specified a sum per day, others an amount per week or month, still others just stated an amount with no further detail. Only ten (12.5 percent) stated clearly that they charged no fee at all. Only four specifically mentioned private patients: St Luke's in Shanghai charged first class patients \$2.00 Mex. and fourth class 12 cents per day; a private room at Suzhou could be had for between \$3 and \$5 per day whilst ward patients paid 10 cents. The difficulty in interpreting the data in relation to private patients is exemplified by McCartney's response to the survey. It is clear from his annual reports, from 1893 on, that both Chinese and foreign patients were accommodated in private rooms for a higher fee than he charged ordinary patients. When he built a new, one hundred-bed hospital in 1901 he included eight private rooms: five for Chinese and three for foreigners, yet this aspect of his operation was not reflected in the survey results.⁸⁸

In the absence of specific information, an insight into the relative place that private patients played in hospitals in China and America can be gained by comparing plans for new buildings. The technical journal, the *Modern Hospital*, ran an architectural design

⁸⁷"Medical [Mission] Statistics for 1906" . Some specifically mention that they only charge for patients with venereal diseases.

⁸⁸ He answered "\$4 per month board"; "150-2000 cash a month" and " 80-2000 cash per day" to the question "Inpatient Fees?" in the 1904, 1905 and 1906 surveys respectively. "Medical [Mission] Statistics for 1904"; "Medical [Mission] Statistics for 1906"; "Medical Mission Statistics, 1905" .

competition for a small hospital in 1923. The rules stipulated that fifty percent of the accommodation should be in private, or semi-private (single or double) rooms.⁸⁹ Although this is some considerable time later than the period under review, the private accommodation in the Lancaster hospital, built in 1905, was already in line with this requirement.⁹⁰ The Highland Hospital in Fall River, Massachusetts, established in 1905 by a group of private practitioners, consisted solely of private rooms.⁹¹ By comparison, the five percent of beds for Chinese private patients in McCartney's hospital is negligible. Those who wrote about hospital construction in China generally advised that some provision be made for private patients who are

used at home to retirement, and fret at being with the common herd. Private wards should be arranged for these, and are much appreciated and may be a good source of revenue to the hospital, as they are willingly paid for.⁹²

However, the numbers of private patients were always comparatively low and they never contributed disproportionately to hospital finances. For example, the plan of St. Agatha's at Pingyin shows only two private rooms compared to accommodation for twenty-eight in three wards.⁹³ One of the highest private to ward bed ratios was to be found in the ABM Hospital at Shaoxing 绍兴 in Zhejiang where the seven private beds still represented only 17 percent of the total.⁹⁴ Although almost all missionary hospitals had some private rooms available none, among the more than three hundred I have been able to identify, relied to any extent on Chinese private patient fees for its conduct.⁹⁵

⁸⁹ *Architectural Designs for a Small Hospital*, p. 104.

⁹⁰ See floor plans: Plates 4, 5 and 6.

⁹¹ *Sixth Annual Report of the Highland Hospital, Fall River, Mass.*, .

⁹² Butchart, "Hospital Construction": p. 98.

⁹³ "The Opening of the Pingyin Hospital": p. 408.

⁹⁴ "The American Baptist Mission Hospital: Shaohsing, Chekiang" *North China Herald and S.C. & C. Gazette*, March 25 1910 The architects for the Alden Speare Memorial Hospital run by Methodist Episcopalians at Yen-ping in Fujian, anticipated the possibility that smaller rooms could become desirable and designed wards that they could be easily "divided at any time". J.E. Skinner, "The Alden Speare Memorial Hospital, Yen-Ping, China," *CMMJ* 18, no. 4 (1904): p. 163.

⁹⁵ Many hospitals make mention of their provision for any foreigners who could not be treated at home. For example, Richard Wolfendale, when describing the London Missionary Society's hospital at Beijing explains that the four small rooms are "special private wards for foreigners and the bluejackets of H.M.S. navy (the 'Upper Yangtse fleet' consists at present of three gun-boats). Foreigners everywhere were accommodated privately but this was a very minor aspect of a hospital's work and was not seen as a potential financial bonanza, as it would have been in America. Wolfendale, "An Ideal Medical Missionary Hospital": p. 21.

In conclusion, the ordinary Chinese patient, whether in hospital or using outpatient services, certainly was a paying, but not necessarily a private, patient. Many, like those in McCartney's hospital, paid for visits to the dispensary; medicines or, at least, medicine containers; admission to hospital; their food and, if they were unfortunate to suffer from a venereal disease or were addicted to opium, an additional amount. Compared with hospitals in America, the American hospital in China depended more on patients for its operation and those patients were amongst the poorest in the society rather than the better off. In many respects it would appear that Western hospitals in China, whatever their national or denominational origin, probably had more in common with each other than they had with the respective counterparts in Britain or America. McCartney's hospital at Chongqing, at least in matters financial, represented the norm. Looked at from the perspective of finances, then, the Western hospital in China could be said to have had a unique identity.

SECTION IV: THE PATIENTS' EXPERIENCE

In the home lands, hospitals, old and new, large and small, are clean.many of the patients when brought to the hospital are from dirty homes, and are as filthy as the most filthy Chinaman. But before they enter the hospital ward, they must be bathed and made clean, and why cannot this be done here?¹

Introduction

Having placed the American hospital in China in its historical context, examined its physical form and its financing I will now attempt to compare the experience of a patient entering a missionary-run hospital in China with one entering a small to medium sized hospital in America. For the American experience, I employ secondary sources supplemented by annual reports of a number of private, city, state, voluntary and religious hospitals. I have not been able to find any first-hand accounts by Chinese patients of their encounter with a Western hospital. Thus, I rely on, and draw inferences from, accounts by missionaries and other witnesses of the various policies, practices and physical conditions in hospitals. Although this method may fail to fully capture the subjective experience, I believe there is sufficient objective detail available to me to draw meaningful comparisons.

One could argue that any differences between the experience of a patient entering an American mission hospital in China and a hospital in America in the last decade of the nineteenth and the first decade of the twentieth century were merely differences due to an accident of timing. It could be assumed that the late nineteenth-century Western hospital in China was simply somewhat less developed than its counterpart in America: that the two hospitals shared a common history and would share a common future when the hospital in China 'caught up'. One purpose of this section is to test this assumption, in particular, from the point of view of a patient.

The conditions in China, both physical and in terms of personnel, would have been perfectly adequate for the practice of Western medicine had the medicine the missionaries brought with them been the essentially palliative care provided in the hospital's immediate

¹ R.G.K., "Editorial: Cleanliness" *CMMJ* 15, no. 2 (1901); p. 156.

forerunners, the almshouse and asylum. However, the introduction of the hospital, as a concept and a reality, into China coincided with a revolution in the theory and practice of Western medicine and, in particular, in the role of hospitals. At the end of the nineteenth century, what the missionaries offered was the curative, increasingly scientific, medicine which was developing out of an appreciation of the ramifications of the germ theory. The use of anaesthesia and aseptic surgery encouraged adventures into previously dangerous waters. Diagnosis, treatment and monitoring were aided by technological developments: the microscope (from the 1840s²) the medical thermometer (from the 1880s³), the X-Ray machine (1896⁴), all of which medical missionaries were able to acquire if they could raise the necessary funds.⁵ Medical missionaries were attempting to practise medical intervention on a similar scale and extent as they would had they been in America but, as we have seen in the earlier chapters on their hospital buildings, they were operating under conditions which could, by comparison, be called medieval. The best of American early twentieth-century hospitals have been described by Stevens as

models of cleanliness, efficiency, and expertise. Where only twenty or thirty years before there had been noise, dirt, and disarray, there was now control and organization: the rustle of the nurses' uniform, the bell of the telegraph, the rattle of the hydraulic elevator, the hiss of steam ...⁶

In China at the same time it was rare to have running, far less hot, water; there was no electricity and machines, such as the X-ray, had to be powered by batteries, and lighting provided by oil lamps.⁷ Also, there was a lack of trained staff, especially nurses, who had

² Porter, *Cambridge Illustrated History*, p. 140.

³ *Ibid*, p.140.

⁴ The phenomenon of X-Rays, described by Röntgen in 1896, were first used to examine bones, to locate fractures and foreign objects. Roy Porter, *The Greatest Benefit to Mankind: A Medical History of Humanity from Antiquity to the Present* (London: Harper Collins, 1997), p. 606.

⁵ For example, the Canton hospital reported in 1900 that they had acquired an X-ray machine for \$750 "through the liberality of some Chinese friends". "Hospital Reports: Summary" CMMJ 14, no. 3 (1900): p. 204.

⁶ Stevens, *In Sickness and in Wealth*, p. 18.

⁷ An X-ray machine, given by late "Tao tai of Ningpo" needed "accumulators" [batteries] which had to be taken to Shanghai regularly to be charged as they had no dynamo to make power. A.F. Cole, *Twentieth Annual Report: C.M.S. Hospital, Ningpo* (Ningpo: C.M.S. Medical Mission, 1906), p. 10. Balme's survey found, in 1919, that of the 188, who answered the question, 115 (61%.) hospitals still relied on kerosene oil for lighting and 2 used acetylene. Balme and Stauffer, "Enquiry: Scientific Efficiency," pp.19-20.

made such a difference to the safety of hospitals in America and Britain.⁸

Although there can be no 'typical' patient or hospital it is possible to speculate how a person may have experienced hospitalisation at the turn of the twentieth century in an American hospital in America compared to one in China. I will demonstrate how the timing of the arrival of medical missionaries, economics, the Chinese setting and patients, the lack of opportunities available to women physicians in America and the evangelistic ambitions of the physicians all combined to create a unique institution, quite distinct from its counterpart in America, at least from the point of view of a patient.

⁸ Stevens, *In Sickness and in Wealth*, pp. 18-9.

CHAPTER 8: ENTERING A HOSPITAL

The Policies and Processes

The American patient would be more likely to have entered the hospital through the agency of a private medical practitioner, who had admitting rights in a particular hospital, rather than via a public dispensary. In contrast, it would be most unusual for a Chinese patient to be introduced to the hospital other than by first attending a dispensary, most often within the hospital compound.¹

Public dispensaries had arisen in America in the late eighteenth century; staffed by unpaid, part-time, aspiring specialist practitioners. Their principal purpose was to provide primary health care for the very poor who could not afford to consult a private practitioner but also to supply suitable “clinical material” for teaching and research in hospitals. In China, dispensary patients were also considered the best method to “feed” the hospital but the emphasis was less on the quality of the “clinical material” than on the need to diminish the Chinese patients’ fear of, or antagonism towards, foreigners and foreign medicine. In America, ordinary (general practice) physicians, who viewed free dispensaries as a threat to their income, campaigned against them using the twin arguments that free medical care pauperised the recipients and encouraged abuse of the system by those who could afford to pay.² As Starr points out, had the nineteenth-century public dispensary in America made the transition from treating only the “sick poor” to “serving society as a whole” it, rather than the hospital, may have emerged as the “nucleus for community medical services”.³ In fact the stand-alone dispensary disappeared and was preserved only in the form of the outpatient department of a hospital.

In China, on the other hand, the dispensary was a familiar and long established component

¹ Many hospitals also ran “district” dispensaries in surrounding villages and some also held clinics in centres further away on a less regular basis. Both acted as avenues for admittance to hospital, as did physicians’ visits to patients’ homes.

² For a description of the forces involved in the demise of the public dispensary, see Rosenberg, *The Care of Strangers*, pp. 316-22.

³ See Starr pp. 181-4.

of the traditional medical market-place. As we have seen in Chapter I, public dispensaries, where doctors saw patients, prescribed remedies, supplied medicines and performed simple procedures, had existed in China since at least the Song. There were many operating in Chinese towns when the American medical missionaries arrived in the nineteenth century. There is no evidence to show that the medical missionary chose the dispensary model *because* it was acceptable, or familiar, to the Chinese, let alone that it was a conscious decision to adopt a Chinese approach. Rather it was a matter of economics and practicality. A large number of patients could be catered for at little cost and work could be started almost immediately upon the missionary's arrival. Once the physician had acquired sufficient of the local language,⁴ the only physical necessities were a room, or sometimes a courtyard, in which patients could congregate, a supply of the most basic drugs, a table and a stool. It would seem that the choice was fortuitous in that the model of a physician sitting in a room, examining and questioning a patient and prescribing medicine was very familiar to Chinese people throughout the country.

Sit and Wait

If it was the initial visit to the mission dispensary patients would first be registered, which usually entailed an assistant, or gatekeeper, recording their name, address, occupation and age and, if appropriate, collecting any fee. Each patient would be given a registration number, sometimes written on a piece of paper to be used as a ticket for future visits. George Huntley's hints on how to improve a dispensary service included encouraging the patient to remember his ticket number, "it being a Chinese superstition to destroy the ticket

⁴ Most mission societies required all their workers to undergo a minimum of one year's language study, and many required two. See Appendix II, "Information Regarding Medical Missionary Service in China", Note 7 in Balme, *China and Modern Medicine*, pp. 212-14. Many missionaries described their language learning, for example, Beebe, "Hospitals and Dispensaries": p. 14 ; A.F. Cole, Twenty-Second Annual Report: C.M.S. Hospital, Ningpo (Ningpo: C.M.S. Medical Mission, 1908), p. 1 ; J.W. Davis, "The Opening of the Tooker Memorial Hospital, Soochow" *CMMJ* 14, no. 1 (1900): p. 58 ; "Hospital Reports: Women's Medical Work at I-Chow-fu" *CMMJ* 19, no. 5 (1905): p. 207. "To attack a local dialect with eight tones, and no colloquial dictionary to assist one, is about enough for the first year's work one would think". Alfred Hogg, "Letter to the Editor: Wenchow Hospital" *CMMJ* 13, no. 1&2 (1899): p. 46. Charles Johnson, at Yizhoufu, spent his mornings in language study and, while prevented from work due to the Boxers, "read some medical books in Chinese so as not to forget". Charles F Johnson, "Hospital Reports: Medical Work at I-Chow-fu" *CMMJ* 19, no. 5 (1905): p. 209.

when the disease is well, as a retention of it would cause a return of the trouble".⁵ Along with the ticket the patient would be handed an identically numbered "prescription sheet" on which the physician, or their assistant if they had one, would record the date, case notes and details of the medicine to be collected from the pharmacy. These prescription sheets would be retained by the hospital and formed part of the patient's record. (see Plate 50⁶)

Most dispensaries had adopted some system so that patients could be seen by the physician on a "first come first served" basis.⁷ The most ubiquitous method was to hand out consecutively numbered bamboo strips to patients as they arrived. George Hadden⁸ praised the efficacy of the "humble bamboo tab" which he described, in 1917, as still being "the universal auxiliary of all". He had modified the system using colour: black for new patients, red for returnees, and red with a blue cap for a "privileged repeater, usually a daily dressing, who is entitled to be admitted as soon as he arrives irrespective of his order". This coding would give the treating doctor valuable information about the patient and, added to the lined-up collection on the desk after the consultation, "is rather impressive to the patients, a minor effect not altogether without its value".⁹

Patients at Duncan Main's CMS hospital at Hangzhou, say, would then sit and wait in a "large, clean, airy, well ventilated [room] provided with very *comfortable* seats" which gave Main the perfect opportunity to engage in what he called "button-hole" theology".¹⁰ Isabella Bird, who visited Dr Main in 1896, described the outpatients' waiting room and the attempt he had made to appeal to his Chinese visitors and patients as "large and handsome,

⁵ Of the American Baptist Missionary Union Hospital at Hanyang. Huntley, "Our Out-Patient Work": p. 113. Other missionaries did not report this practice and Huntley might have been referring to the ritual burning of paper with characters. The Chinese so revered the written word that people were employed by benevolent institutions to collect such paper. See William C. Milne, "Notices of Seven Months' Residence in the City of Ningbo, from December 7th, 1842, to July 7th, 1843" *Chinese Repository* 13, no. 1,2,3,7 (1844): p. 30.

⁶ Charles K. Roys, "Some Dispensary Methods" *CMMJ* 21, no. 3 (1907): p. 112.

⁷ An exception was Omar Kilborn at Chegdu who reported that the women, who constituted 20-30% of his patients, were all seen first before the first man. Omar L. Kilborn, *Heal the Sick: An Appeal for Medical Missions in China* (Toronto: Missionary Society of the Methodist Church, 1910), p. 189.

⁸ At Hengzhoufu 衡州府, Hunan.

⁹ George Hadden, "The Registration of Out-Patients" *CMMJ* 31, no. 1 (1917): pp. 27-8.

¹⁰ D. Duncan Main, "An Out-Patient Day at the Hangchow Hospital, 12th February, 1889" *CMMJ* 3, no. 4 (1889): p.113.

decorated with scripture pictures, in which patriarchs and apostles appear in queues and Chinese dress".¹¹

It would be while waiting to see the physician in China that an American patient would be most acutely aware that she was not at home. If the hospital were one that catered for both sexes she would most likely have entered by a separate gate or door and been directed to the women's waiting room or, at least, the women's side of the waiting room. A Chinese patient in an American hospital might have been quite discomfited by having to wait to see the doctor amongst patients of the opposite sex. In his summary of the collected wisdom on hospital construction in China, Jefferys recommended that a model dispensary should include either two waiting rooms, one for women and the other for men, or a larger single waiting-room divided by a railing: men on one side, women on the other.¹² The competition rules for the design of a small (thirty to forty bed) hospital in America made no mention of segregating male and female patients while waiting nor did any of the twenty published plans make any such allowance.¹³ The Lancaster General Hospital, for which we have the plans (see Plates 4, 5 and 6), had but one 'reception' room. In contrast, I have rarely encountered a design or description of a hospital or dispensary in China which did not have provision for some segregation of the sexes in waiting rooms. Most chose the option of separate rooms. For instance, special notice was made, in 1907, when the new ACM dispensary was opened at the St James' Hospital, at Anqing, that the separation of the sexes in the dispensary was "complete".¹⁴ Claude Lee's hospital at Wuxi, on the other hand, included a "large waiting room divided by a railing for men and women, each division opening into treatment rooms separated by a central drug room".¹⁵

¹¹ An inveterate traveller, Isabella Lucy Bird, (1831-1904), married Dr John Bishop in 1881 but he died five years later and she "set off on her travels" to Tibet, Persia, Kurdistan, Korea and, in 1896, the interior of China. Bird, *The Yangtze Valley*, p. 45.

¹² Jefferys and Maxwell, *Diseases of China*, p. 667. He did mention that Shanghai was the only city where such segregation of the sexes in the waiting room was unnecessary. Presumably, by 1910, the Chinese who lived within the foreign concessions were sufficiently used to the ways of western missionaries.

¹³ See page 170.

¹⁴ "The Opening of St James' Hospital, Anking" *CMJ* 22, no. 1 (1908): p. 117. This had not been the case in the original St. James, built in 1903. In that hospital women waited in a separate room but entered a common consulting room, albeit through a separate door. See plan at "St James' Hospital, Ngankin, China": p. 134.

¹⁵ Jefferys, "St. Andrew's Dispensary": p. 185.

American patients arriving at a hospital waiting room in China would be further reminded that they were not in America, because the hospital could be more realistically described as an evangelical tool than a medical facility. They would be harangued, often by a Chinese preacher. At Jinan they had found that Chinese Christians were wanting to address the patients for “an hour to two hours”. This did not seem to be “an ideal way of attracting men or women who, after all, had not come with any primary intention of listening to the Gospel” so they introduced system to limit preaching to half an hour.¹⁶ Missionaries were warned by some of the inadvisability of preaching by denigrating Confucianism and that to

undertake to substitute for that code [the code of ethics Chinese have lived by since before Christ] even the more ennobling ethics embodied in the Sermon on the Mount by attacking the former is a great error.

The writer likened speaking against Confucianism to denigrating the great thinkers of Europe to Christians and he reminded his readers that Christ had respected the opinions and prejudices of those to whom he spoke and had used persuasion rather than dogmatism.¹⁷ The irony of what they were attempting was not lost on missionaries and the 1893 editor of the *CMMJ* could not resist imagining “the immigration of a band of Chinese missionaries to rural England, and the reception they may meet with at the hands of our gentle country folk”.¹⁸

Nevertheless most, if not all, missionary hospitals adopted a policy of reading the Bible or preaching to patients before the dispensary was opened for business and in several the chapel served a double purpose as waiting room.¹⁹ Many missionaries were under no illusion about the effect of this preaching. Kilborn,²⁰ at Chengdu, described his own patients' reaction:

¹⁶ Any who did not wish to attend could “remain outside”. “Opening of the New Union Medical College Hospital, Tsinanfu”: p. 50

¹⁷ “Mistakes of Some Missionaries” *North China Herald and S.C. & C. Gazette*, 24 July 1901, pp. 171-72.

¹⁸ “The Medical Missionary and the Anti-foreign Riots in China” *CMMJ* 7, no. 2 (1893): p. 110.

¹⁹ For example, the Free Methodist Mission Hospital at Wenzhou 温州 in Zhejiang. Jefferys and Maxwell, *Diseases of China*, p. 677. In the Warren Memorial Hospital at Huangxian 黄县 in Shandong, the preaching was constant “during the clinic”. T.W. Ayers, “Warren Memorial Hospital, Hwang-hein, Shantung” *CMMJ* 20, no. 1 (1906): p. 49.

²⁰ See page 135 ff.

When the hospital evangelist steps upon the little platform and reads a portion of scripture there is never any opposition, there may be indifference, and perchance silent contempt for the foreign doctrines, but there is, at least, outward respect.²¹

Examined

The sheer numbers of patients, the absence of nurses and the impulse to influence as many patients as possible left many physicians unhappy with the level of medical service they were able provide in the dispensary. In 1906, A. F. Cole vividly described his professional dilemma.

The range of cases seen is very wide: one has to treat every manner of complaint: without a foreign colleague and without any nurses, we confess that lack of time for study tends to make one superficial and almost a quack: one almost necessarily becomes a mechanical instrument for inserting so much medicine into so many mouths; it is true that surgery occasionally lifts us out of the realm of quackery.²²

This was Cole's first year at the CMS Men's and Women's Hospitals at Ningbo during which, with three "native assistants",²³ he treated a total of 6,624 outpatients (in twice weekly sessions) and a further 256 on visits made to nearby towns. At the same time he had charge of both hospitals, through which over 500 patients (316 men and 187 women) passed; he performed 126 operations under general (chloroform) and 21 under local (cocaine and eucaine) anaesthetic; he also carried out 180 "minor" operations and extracted 181 teeth.²⁴

When their turn came a patient would enter a separate examination area sometimes partitioned off but often remaining in full view. This arrangement was commonly adopted so that Chinese who were waiting, and any friends or relatives who had accompanied the patient, could see what the doctor was doing. They hoped that this would inspire

²¹ Kilborn, *Heal the Sick*, p.189. Preaching was not necessarily confined to the period before the clinic opened. Ayers, with the Southern Baptists at Huangxian in Shantung reported that: "during the clinic there is constant preaching in the waiting room". Ayers, "Warren Memorial Hospital, Hwang-hein, Shantung": p. 49.

²² Cole, *Twentieth Annual Report: C.M.S. Hospital, Ningpo*, p. 8.

²³ From the beginning, medical missionaries tried to find young, preferably "Christian" Chinese men, to train as assistants. Some formalised the training and conducted classes in the rudiments of western medicine, anatomy and science. These formed the basis of the small medical schools which proliferated before the arrival of the Rockefeller Foundation into China, in 1914, after which larger, "Union" medical schools were established on a more substantial basis.

²⁴ Cole, *Twentieth Annual Report: C.M.S. Hospital, Ningpo*, p. 2.

confidence, allay fears and prevent rumours from arising.²⁵ Kilborn's approach to this problem was to invite patients into his consulting room in groups of ten at a time. They would sit on a bench while he called them individually to a chair next to his desk to be examined.²⁶ Although the large numbers of patients caused difficulties, Elizabeth Reifsnyder stressed that the medical aims were at least equally important as the evangelical, and asked:

Are we justified in having dispensaries with the two-fold object in view – the dispensing of that which *we* deem the most important, the healing balm for their souls, and yet slightlying care for their bodies which the Chinese consider of vastly more significance?²⁷

When it came to examining patients, for instance, Reifsnyder agreed with Jos. Thomson, who wrote articles about Chinese medical practice for the missionary's journal, when he advised physicians to adopt a Chinese approach and "always listen to both pulses".²⁸ As she expressed it:

questions must be asked, answers must be gotten, the tongue ought to be looked at, and to ease the mind of the patient, as well as for one's own gratification, the pulses must be felt.²⁹

George Cox drew even more on the expectations of the Chinese as a guide to how best examine patients: approach them on their own terms, he advised. He thought that if one took both right and left pulses, listened to the story of the cause of their problem, told them how wonderful the medicine was and how it would restore equilibrium, patients would have confidence in him.³⁰ Charles Roys was another concerned with Chinese sensibilities.

²⁵ See also page 120.

²⁶ He did have a special room for surgical dressing, a private room for "special examinations" and a dark room for eye patients. Kilborn, *Heal the Sick*, p. 188.

²⁷ Reifsnyder, "Methods of Dispensary Work": p.68

²⁸ Thomson, "Native Practice and Practitioners": p. 197. For a description of a typical consultation with a Chinese doctor, see S.M. Hillier and J.A Jewell, *Health Care and Traditional Medicine in China, 1800-1982* (London: Routledge & Kegan Paul, 1983), pp. 4-5.

²⁹ Reifsnyder, "Methods of Dispensary Work": p. 69. Edward Hume reports that he learnt much about traditional procedures of diagnosis from the first Chinese doctor to be appointed to the staff of the Hsiangya hospital, Dr Hou Kung-hsiao. He made a habit of feeling both pulses and told the story of his first "official" patient, a taotai, leaving in a huff when Hume felt only his left pulse and then stuck a thermometer in his mouth. Hume, *Doctors East Doctors West*, p. 56.

³⁰ Cox, "Out-Patient Department": p. 129.

He was seeking a way to “handle dispensary cases to secure rapidity and thoroughness, combined with the utmost possible deference to the laws of Chinese etiquette”³¹ He postulated a fundamental principle: “that every patient who comes to us should be met and treated as nearly as possible as a Chinese guest would be treated by a Chinese host”. He recognized that this would mean operating quite differently than they had at home where the assembly line style had meant that they could “go over rank after rank of patients ... with ease and rapidity”. Although they could teach Chinese assistants, he felt that the medical work would “lose a very large proportion of its influence” if they delegated “all the courteous observances which take such a prominent a place in Chinese life” to assistants. In his dispensary at Weixian 卫县 (in Shandong) he had made the consulting room, in orientation and furnishing, as close as possible to a Chinese guest room: “an entrance door in the centre of the southern side, table and two chairs opposite the door on the northern side of the room.” The patient, who had been given a “tally-card” by the evangelist in the waiting room, should be met at the door by the physician and shown to the “seat of honour” on the doctor’s left and politely asked questions as to “honorable name, venerable age and exalted residence”, followed by a standard set of questions about his disease in such a way as to elicit yes/no answers. The physician should spend at least five minutes with a new patient and an assistant, furnished with a copy of the questions, should take down the answers unobtrusively. For this purpose Roys had had a list “cut upon a wooden type-block of a size to fit the heading of the pages of an ordinary Chinese account-book, ruled with red lines”.³² (see Plate 51³³)

Admitted

The number of Chinese who had contact with Western medicine through the dispensary was many times greater than those who experienced a stay in hospital. In 1906 for example, about half of the 166 hospitals and 241 dispensaries in China responded to the statistical

³¹ In order to answer the question, he visited most hospitals in Shandong, Tianjin, and Peking as well as holding discussion with a “a dozen or more medical men sojourning at their summer retreat. Roys, “Some Dispensary Methods”: 110.

³² Ibid: pp. 110-12.

³³ Ibid: p. 114.

survey conducted by the CMMA. They reported that of the 913,200 new and returning patients treated (in hospitals, dispensaries, while itinerating and in peoples' homes) a mere 34,000 (3.7 percent) were admitted as inpatients.³⁴ Hospitals did not occupy a very significant place in the range of medical alternatives in America either. In 1910, it was estimated that only between seven and eleven percent of sickness in New York City resulted in hospital admittance: the great majority was cared for at home unless major surgery was necessary.³⁵

In both America and China, it was in the outpatient department that the potential inpatient would be categorised and dealt with in terms of his or her disease. Anyone suffering from venereal disease, contagious disease or a chronic condition would be unlikely to be admitted to a contemporary voluntary hospital in America. The Lancaster General Hospital rules for admission included the provision that "no person having any infectious or contagious disease shall be admitted, except by special permission of the Board of Directors."³⁶ Similarly, Auburn City Hospital ruled: "cases of pulmonary tuberculosis and venereal diseases are not to be received."³⁷ St John's Hospital, St Louis, went further and disallowed patients "suffering from mental aberration and alcoholics".³⁸ Such patients would have been referred to municipal hospitals that could not refuse them, such as the Pennsylvania Hospital. There were no rules for admission included in the 1908 annual report of this hospital but a survey of the medical statistics for that year reveals that they did indeed accept patients suffering from infectious diseases: over five hundred cases of typhoid and twenty seven of pulmonary tuberculosis for example. Patients with venereal diseases were treated in short-term "receiving wards", in the medical and surgical outpatient departments and in the gynaecological department.³⁹

³⁴ "Medical [Mission] Statistics for 1906" .

³⁵ Stevens, *In Sickness and in Wealth*, p. 33.

³⁶ *Lancaster Hospital*, p. 53.

³⁷ Auburn City Hospital: Thirty-First Annual Report of the Board of Managers (Year Ended September 30, 1910), (Auburn, N.Y.: Knapp, Peck & Thomson, Printers, 1910), p. 27.

³⁸ Sisters of Mercy, *St. John's Hospital*, p. 20.

³⁹ *Report of the Pennsylvania Hospital*, pp. 64-83.

Missionaries in China, on the other hand, did not have the luxury of choosing their patients. There was nowhere to refer them and a patient who was refused admittance represented a loss of a chance for religious influence. Their overriding aim was to reach as many as possible, and sinners even more so. If it were true, as experienced medical missionaries Jefferys and Maxwell asserted in their *Diseases of China*, that “syphilis is exceedingly prevalent among all classes. The impression one gets is that almost one-half of one's patients are syphilitic”, no one could have afforded to send so many patients away. Jefferys and Maxwell also reported that syphilis was, “on the whole, mild in type – superficial – and usually responsive to rational and aggressive treatment”. So the hospitals took them in and, as has been discussed earlier (see page 139 ff.), commonly charged them

a double fee or more because of the troublesomeness of their treatment, the necessity for extra precautions, and perhaps partly, because of the deliberate circumstances of their acquirement of the disease.”⁴⁰

A minority disagreed with overcharging them. For instance Jefferys himself, who worked at St Luke's at Shanghai, did “not clearly see the ethics of the physician's *quasi* attempt at punishing the sins of his patient ...the natural punishment fully and meetly fits the crime”.⁴¹

Patients with other contagious diseases did not evince a debate about morals and appropriate fees. The issue was merely one of practicality: how could doctors protect their other patients? One built

a small ward enclosed in glass, adapted for a few consumptive patients ... and at either end of the third floor, rooms which can be shut off from the rest for contagious diseases.⁴²

Another, the APM(S) hospital at Qingjiangpu 清江浦 in Jiangsu, relied on the arrangement of buildings:

The buildings are all Chinese style, one story, built around courts, with foreign windows and doors. The arrangement is similar to the pavilion plan now so much in favor in Western lands, and lends itself readily to thorough ventilation,

⁴⁰ Jefferys and Maxwell, *Diseases of China*, pp. 573-4.

⁴¹ *Ibid*, p. 576.

⁴² "A New Hospital in Central China, the Hospital of the American Baptist Mission at Hanyang Formally Opened" *CMJ* 21, no. 1 (1907): p. 123.

sanitation, and if necessary to isolation.⁴³

It is rare to find any direct reference in hospital reports to the exclusion of a class of patients. Given that an important function of reports was to encourage support from benefactors it was probably not in the interest of the writers to draw attention to any people being refused treatment and, hence, exposure to Christianity. That some discrimination was practised by some hospitals is revealed in an article about a matter that was of concern to the women in charge of the Tooker Memorial Hospital at Suzhou. One of their patients was a young girl who had been sold into a "life of shame" by her father. She was not the first and they were concerned that they might not be able to cope with the escalation in this aspect of the work. They attributed the growth to a number of factors: the obvious success of their treatment; their "proximity to the *Moh Lu*, where such dens of iniquity abound" and, significantly, the fact that the other hospital in town "does not take such patients". They did not appear to consider following suit; rather, they observed: "many things make it undesirable to admit these patients to the general wards, but with our present accommodations no other plan seems possible". In the meantime, they were praying for guidance.⁴⁴ Obviously policies on admission of patients were not uniform throughout the mission field but it is equally clear that patients in an American hospital in China would have come in contact with a greater range of contagious diseases than they would have had they been in America. Whether this made the hospital in China a more dangerous place for patients, either physically or morally, is beyond the scope of this study.

Admission Procedures

One of the most hotly debated issues surrounding patients entering hospitals was whether a bath should be compulsory. The majority, whatever their preference, did not implement the practice. Some simply lacked basic facilities, let alone hot water, but others argued that as Chinese did not customarily bathe, especially in winter, insisting on it would act as an unnecessary deterrent to patients. Claude Lee went so far as to identify being allowed to "refrain from admission baths" as a draw card. He hoped "they will in time appreciate the

⁴³ "Tsing-kiang-pu (Qingjiangbu) Hospital" *CMMJ* 19, no. 1 (1905): p. 33.

⁴⁴ Frances F. Cattell, "Work in and about Soochow" *CMMJ* 16, no. 2 (1902): p. 103.

advantages of baths, clean clothes belonging to the hospital, clean white beds with fresh sheets, and other ordinary hospital customs” but he was resigned to it taking a long time.

It is not likely that a conservative people like the Chinese who have for uncounted generations regarded a bath in winter as fatal will rush unadvisedly and lightly into a bathtub at the behest of a 'foreign devil'.⁴⁵

Doctors McCartney, at Chongqing, and Main, at Hangzhou, were two physicians who rejected this argument and insisted on patients being given a bath on admission.

We had been told that the Chinese would not take a bath or keep themselves clean, that they would not wear our clean cotton shirts ... we fear that those who gave this report had never tried the experiment, and we are glad to say that our experiment has proved a huge success.⁴⁶

Main might have insisted on an admission bath but in 1909 he complained:

As to the *daily bath* we can only say that this state of hygienic perfection is not yet attained to (sic) in our hospitals, except in summer, but we aim for it, and in time hope to have it where foreign nurses can superintend the male patients.⁴⁷

In 1901 Butchart recommended a “shower bath” which, he said, had been adopted universally by institutions at home. It was economical, clean and “entirely feasible”. He added that a stove should be used to warm the room and that the provision of another small room where “they can sit and drink tea and cool off before going out will be a benefit and suit the Chinaman's ideas”.⁴⁸

Cole, by 1910, had still not convinced his patients to bathe on admission, let alone on a regular basis. He reported that a bath “purchased some seven years ago ... has since been used for keeping our supplies of sawdust!”⁴⁹ Balme, almost ten years later, wanted to “lay to rest ...that time-honoured bogey, ‘the patients will not stand it,’” He was sure that

⁴⁵ Referring to when he built a new hospital in 1913. Lee, *Leaves from the Notebook*, p. 21.

⁴⁶ McCartney, "First (1892) Annual Report:" p.275. For the practice at Hangzhou, see D. Duncan Main, "Short Sketch of Work in the Hangchow Medical Mission" *CMMJ* 23, no. 1 (1909): p. 11.

⁴⁷ Main 1909 p. 11.

⁴⁸ Butchart p. 101.

⁴⁹ A.F. Cole, *Twenty-fourth Annual Report: C.M.S. Hospital, Ningpo* (Ningpo: C.M.S. Medical Mission, 1910), p.1. Even as late as 1920, 9.5% of hospitals replying to a survey question had no facility at all to bath patients; only 40% bathed patients on admission; and less than 20% of hospitals had baths with running water. Balme and Stauffer, "Enquiry: Scientific Efficiency," p. ?. pp. 21-2

patients would comply

provided it is introduced with patience and tact by someone who thoroughly believes in it himself. But of course no patient, in any country, likes to be offered a shallow, tepid bath in an unheated room, with the outside temperature at zero!⁵⁰

In America, by comparison, by the end of the nineteenth century standard hospital admission procedures included “a compulsory bath and, in many institutions, delousing”.⁵¹

Another common admission strategy adopted was to require all patients to have a “middleman” who could act as an intermediary and, when necessary, on their behalf. For example, he could give permission for treatment and operations and guarantee any unpaid fees. At Main's hospital in Hangzhou, having a middleman was insisted upon and his role included taking care of the patient's clothing when the patient was given hospital garments.⁵² The CMS Hospital at Ningbo made an exception only for emergency cases but all other patients were

expected to find a local man to go surety for them, otherwise, if they die, no one may come and claim the body, or if they steal, we have no means of recovering our property, for the police are of little use.⁵³

The practice was common but not universal and some advocated merely asking for a substantial deposit from any one admitted to the wards and only requiring a guarantor if the patient could not pay.⁵⁴ Most often the middleman would be a relative, a man on behalf of his wife or children for example, but not necessarily. The requirement would not have struck Chinese patients as odd because it was common in a society based on reciprocal relationships for all transactions to be effected through “contacts”. All medical missionaries would have had to become familiar with, and adept at, dealing with the Chinese through

⁵⁰ Harold Balme, "Efficient Mission Hospitals: The Irreducible Minimum" *CMJ* 33, no. 6 (1919).

⁵¹ Rosenberg, *The Care of Strangers*, p. 292.

⁵² Main, "Short Sketch of Work in the Hangchow Medical Mission" p. 11.

⁵³ *Twenty-sixth Annual Report: CMS Hospital, Ningbo*, (Ningpo: C.M.S. Medical Mission, 1912), p. 11.

⁵⁴ Jefferys advised his fellow medical missionaries to ask for a deposit (his was two dollars) before a patient could be admitted to the wards or find someone to act as guarantor. Jefferys and Maxwell, *Diseases of China*, p. 7.

middlemen in relation to their own need to rent or buy land, for instance.⁵⁵ Thus, the needs of the hospital for financial and legal certainty were met within the boundaries of Chinese custom.

Fellow Patients

In China, as elsewhere in the world, the pattern and nature of hospital admissions, and hence fellow patients, varied depending on the geographical location, the presence of various epidemics, time of the year and the weather. In addition, in China at that time there were other, more political, factors at work. Most hospital reports, whatever the year, make mention of the political conditions prevailing in their locality. When the situation was not described as “quiet” it was characterised as “unsettled” which could mean anything from riots, looting, banditry and arson, which were sometimes, though not necessarily, directed against foreigners in general and missionaries in particular. At these times, if the hospitals were not attacked and forced to close, the attendance at clinics could falter, but just as often they could be inundated with injured combatants or victims.⁵⁶

Hospitals in the countryside were also prey to the vagaries of the agricultural cycle. As William Wilson, reporting on the commencement of work at Suidingfu 绥定府 in Sichuan, pointed out the autumn harvest affected the rate of admissions: the hospital emptied when the harvest started and filled up again when it had been brought in.⁵⁷ The hospital for women run by the Irish Presbyterian Mission (IPM) at Jinzhou 锦州 in Liaoning experienced a dramatic drop in the number of outpatients in 1900. This was due not, as one may have expected, to Boxer activity but “mostly [to] robber and *wolf* scares of four months in the summer”.⁵⁸

⁵⁵ For example, Christie commented that “the settlement of quarrels by middlemen ...is universal”. Christie, *Thirty Years*, p. 61.

⁵⁶ For example, robbers and pirates were said to be active around Ningbo during 1911 and many wounded were treated at the CMS hospital. *Twenty-sixth Annual Report: CMS Hospital, Ningbo*, p. 2. The introduction of foreign machinery and weapons into the country also led to an increase in the number of accidents. “Hospital Reports” *C.M.M.J* 13, no. 1&2 (1899): p. 61.

⁵⁷ William Wilson, “Hospital Reports: Sui-ting-fu, Wan Hsien, via Ichang” *CMMJ* 19, no. 2 (1905): p. 122.

⁵⁸ “Hospital Reports: Summary” *CMMJ* 14, no. 3 (1900).

Class

It appears to be accepted wisdom that the patients treated in missionary hospitals were almost exclusively the very poor.⁵⁹ But the hospital population was more diverse than might be imagined.⁶⁰ The MEM Women's hospital at Zhenjiang 镇江 (in Jiangsu) reported that their patients were "principally from the middle and lower classes, with a sprinkling of ladies from the higher".⁶¹ Slave girls, brought "by wealthy owners, willing and able to pay for treatment [were a] large and important part of in-patient and out-patient practice" in the Church of Scotland hospital at Yichang 宜昌 (Hubei)⁶² and Lucy Saville (LMS Women's Hospital, Peking) reported that they had treated "several wealthy Mohomedan girls this year; such delightful girls, the daintiest of little ladies".⁶³ A.W. Douthwaite described his inpatients at the CIM hospital at Chefoo (Yantai 烟台, Shandong) as being "of a higher class than those who attend the dispensary, most ... being naval and military officers and tradesmen". His other patients could not be admitted to hospital as they were "too poor to contribute to their support" and he had no funds to supply food for them.⁶⁴ The physician in charge of the dispensary and hospital at Chengdu, associated with the West China Medical Mission of the MEC, reported "the official classes coming to us more freely" and the reassuring effect on the "common people" caused by the sight of

the provincial treasurer ... riding in his official chair, and accompanied by his tens of lictors bearing fasces, umbrellas, and lanterns ... [coming] for treatment⁶⁵

In the early days rich patients who consulted the medical missionary would expect the physician to attend them in their home. With the introduction of more complex surgery that required hospitalisation and private rooms for paying patients, separation based on class

⁵⁹ For example, "Most people attracted to missionary hospitals were poor" Nathan Sivin, *Personal Communication*, (2002)..

⁶⁰ See also McCartney's patients at page 162.

⁶¹ "Correspondence from Chinkiang" *CMMJ* 2, no. 1 (1888): p. 75.

⁶² "Hospital Reports: Church of Scotland, Ichang" *CMMJ* 20, no. 2 (1906): p. 99.

⁶³ Lillie E.V. Saville, "Hospital Reports: London Mission Women's Hospital, Peking, Annual Report, 1905" *CMMJ* 20, no. 4 (1906): p. 188.

⁶⁴ A.W. Douthwaite, "China Inland Mission Hospital and Dispensary, Chefoo: 1887 Report." *CMMJ* 1, no. 2 (1887): p. 83.

⁶⁵ H.L. Canright, "Chen-tu Report" in *Annual Report (1898) of the West China Medical Mission, Methodist Episcopal Church* (Shanghai: American Presbyterian Mission Press, 1898), p. 19.

became more visible. As early as 1888, it was reported that the new Women's Branch of St Luke's had a few private rooms for those patients who could afford to pay and a "separate structure is provided for the treatment of pauper sufferers, with whom it is found that the other classes of Chinese decline to mix".⁶⁶

Gender

According to Rosenberg, at the turn of the century in America "men far outnumbered

Table 3: Men and Women Admitted to Various American Hospitals

Hospital	Year	Average Occupancy	% Free	Auspices	M : F	Comment
Maine General	1887	60	44% ¹	Secular Voluntary	1.1:1	
Elliot City	1894	Unknown	Minimal	City Council Voluntary	2.3 : 1	M/F-Medical 1 : 1 M/F-Surgical 4.2: 1
Pennsylvania	1908	236	95%	State Endowed	1.7 : 1	est. 1752.
Pennsylvania : Insane	1908	457	100%	ditto	0.7 : 1	average, from 1841 1.1 : 1
Auburn City	1910	42	13%	Secular Charitable	0.9 : 1	
Highland, Fall River	1906 -15	20	0%	Proprietary	0.5 : 1	"group practice" set up by physicians.
St John's	1915	90	10%	Catholic	1.0 : 1	

women" as hospital patients".⁶⁷ He provides no data for this claim and, while it may be true for the American hospital population as a whole, data taken from a sample of hospital reports covering the years from 1887 to 1915 casts doubt on the universal applicability of the assertion. (see Table 3)

All these hospitals catered for both men and women; they varied in size from large (for example, Pennsylvania) to small (Auburn City) and include examples of each of Rosemary Stevens' categories.⁶⁸ In only two of the hospitals was the number of men significantly more than women; in three hospitals the number of women admitted matched the number of men and in the last two women predominated.⁶⁹ Taken as a whole, in these seven

⁶⁶ Refers to outpatients. "Notes and Items: St Luke's Hospital, Shanghai" *CMMJ* 2, no. 3 (1888): p. 120. Provision for private patients has been discussed at pages 98 ff. and 170 ff.

⁶⁷ Rosenberg, *The Care of Strangers*, p. 298.

⁶⁸ See page 125.

⁶⁹ Most dramatically, women outnumbered men in the private hospital by two to one.

hospitals, the ratio of the average occupancy rate of men to women was approximately 1 :1.⁷⁰

The situation in China was very different. Although the published statistics from 1903 onwards listed the total number of beds available in the various hospitals it was not until 1910 that the CMMA published information about the number of hospital beds available for men as opposed to those for women in China.⁷¹ Of the 99 hospitals that provided data on the number of beds in 1910, it would appear that 31 catered exclusively for men, 13 for women (and children) and 55 for both men and women, "although not as a rule in the same building".⁷² The smallest of these, run by Wesleyans (WMMS) at Daye 大冶 in Hubei, had but two beds, both for men. The

largest was the oldest, the Canton Missionary Hospital started by Peter Parker in 1835, which had beds for 200 men and 120 women. In all, the 99 hospitals reported having 4,268 beds for men and just less than half that, 2,024, for women: that is, a ratio of two male beds to each female bed.

When the number of patients

admitted is compared, however, a different picture emerges: the number of inpatients

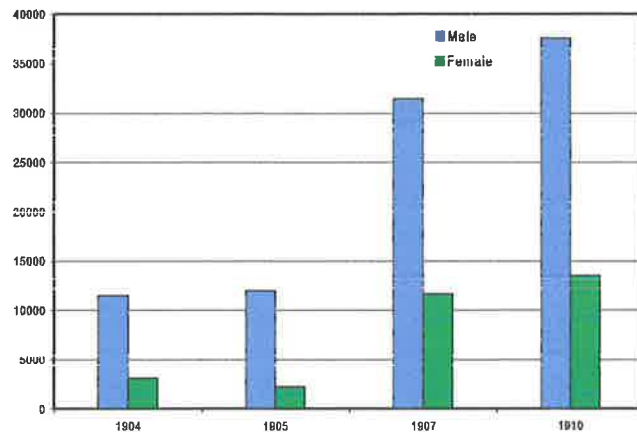


Figure 11: Ratio of Male to Female Inpatients in Mission hospitals in China, 1904-1910.

Source: Constructed from data included in Medical Mission Statistics, 1904-1910

⁷⁰ Whilst acknowledging that the figures from these hospitals is not directly comparable as data are drawn from different years and, making the reasonable assumption that the average occupancy rate for the Elliot City Hospital was ten patients, there were, on average 447 men and 468 women in these hospitals.

⁷¹ Women and children were generally accommodated together.

⁷² "[Medical Mission] Statistics for the Year, 1910". A number of the fifty-five hospitals which reported having beds for both men and women had them in separate hospital buildings or compounds. If a hospital reported beds under one heading only it has been assumed that this was a single sex hospital. The statistics compiled by Balme in 1920, from information provided by almost twice as many hospitals (195 hospitals), showed that a larger majority, 126 (65%), catered for both men and women, there were relatively fewer, 33 (17%), hospitals exclusively for men and marginally more, 36 (18%) catering solely for women. Balme and Stauffer, "Enquiry: Scientific Efficiency," p.8.

admitted to these 99 hospitals in 1910 was reportedly 37,589 men and 13,532 women,⁷³ that is, a ratio closer to three to one.⁷⁴ (see Figure 11)

In other words, whereas an inpatient in the American hospitals surveyed above was as likely to be a woman as a man, in China, patients in Western hospitals were three times more likely to be men. There were at least two forces at work: the reluctance of Chinese women to consult a male physician in certain circumstances and, when there *were* female physicians, problems associated with entering an institution for a period of time. Certainly many women physicians commented on the difficulties they faced persuading Chinese women to enter a hospital as inpatients. According to a report on the hospital for women operated by the SPG at Peking in 1900,⁷⁵ it was

still an exception for Chinese women to consent to life in a foreign compound, and if there is any possibility of recovery in their own homes they very much prefer the dirt and squalor there, with painful cart journeys to and from the dispensary to becoming in-patients.

According to the writer the “excuses are manifold” but they read as though they could equally have been enunciated by the great majority of women anywhere until very recently.

[T]here is no one to look after my house. I have two or three small children, whom I cannot possibly leave. My husband will not let me go away from home. I will come as often as you like, but I cannot live there.⁷⁶

Dr Margaret Polk, of the MEM(S) hospital at Suzhou, was one of the relatively few *women* who contributed regularly to the *CMMJ* and spoke at medical conferences. At a meeting of the Shanghai Medical Missionary Association in January 1901, she outlined wide-ranging concerns about the state of women’s medical work. In relation to the difficulties she had

⁷³ A note to the 1910 statistics explains that, where a hospital failed to divide patients into male and female all were counted as male. The way that the data are presented makes it impossible to remove these hospitals from the set. Thus the resultant ratio may be skewed in favour of the number of male patients.

⁷⁴ In other words, medical missionaries provided a disproportionate number of beds for women. Either, women stayed longer in hospital, or the occupancy rate of women’s beds was less than that of men’s beds. The statistical returns, and most annual reports, provide insufficient information about occupancy rates or lengths of stay for men compared with women to make a proper judgment as to the extent to which these affected the total number of women being admitted to hospital.

⁷⁵ Church of England Mission in North China “somewhat incorrectly called the S.P.G. Mission” Couling, *The Encyclopaedia Sinica*, pp. 27, 117.

⁷⁶ A. Marston, “Peking S.P.G. Hospital” *CMMJ* 14, no. 3 (1900): p. 206.

faced in persuading the more wealthy Chinese women to accept treatment she explained that the

woman will often be surrounded by people whose unreason will prevent her yielding. [I had to reason with] the father-in-law, the mother-in-law, two or three of the older sisters-in-law, the woman's own family, and last but no means least in a Chinese family, the servants.⁷⁷

In her experience, even if she could persuade a woman to enter the hospital, she would not stay long: young wives were not allowed out at all, wives of officials were more restricted than others, poor women were needed at home and some feared that their husbands would take a new wife if they were away too long. Dr Mary Fulton, who was described as “being in charge of the largest medical work for women in China”,⁷⁸ described similar difficulties still being experienced twelve years later:

It is not easy for a Chinese mother to leave her home duties. Then she controls no money, and the husband gives only grudgingly. The women are afraid to stay as long as their needs require. One said she must hurry home, or her husband would bring back another wife during her absence. The men go where and when they please, and carry all the money with them. They stay in a hospital as long as they wish.⁷⁹

Mary Brown had observed that “the elderly women are less particular, but the younger women are very much hedged about by custom and prejudice”.⁸⁰ The restrictions noted by these physicians were common but not universal. For example, H.T. Whitney of the ABCFM explained why they had few problems attracting women to their dispensary at Fuzhou:

we have a large class of 'field women', large-footed, who work in the fields with men, bear heavy burdens, carry produce to market, go about boldly on the streets, and mix freely with the crowds, so that they would naturally come to a free dispensary ... it may further be stated in this connection that in later years a fair number of the better class of women, “bound-footed” annually visited our

⁷⁷ Margaret H. Polk, "Women's Medical Work" *CMMJ* 15, no. 2 (1901): p.114.

⁷⁸ The David Gregg Hospital for Women (1903); the Hackett Medical College for Women; The Turner School for Nurses, with the Perkins Memorial Building containing maternity and children's wards at Canton.

⁷⁹ *Hospitals in China*, p. 5.

⁸⁰ Mary Brown, "The Training of Native Women as Physicians" *CMMJ* 12, no. 4 (1898): p. 179.

dispensaries.⁸¹

Dr Kate Woodhull, with the same Board, also at Fuzhou, reinforced this insight. She wrote of the independence of “field women” whom she thought were the happiest women in China. She described them as privileged in that they could “walk whenever and wherever they like, go to the stores and make purchases, etc.” and they could be said “socially, to be almost emancipated”.⁸² Regardless of the concerns of many medical men and women, increasing numbers of Chinese women did enter hospitals as patients and many more visited dispensaries. Graham, in her study of American Protestant schools, concluded that missionaries “used the schools, both boys and girls, to challenge the Chinese attitude towards gender and women's place in society”. There is less evidence that *medical* missionaries challenged Chinese norms in relation to separation of the sexes. Medical missionaries in China tried to make their hospitals attractive to women by conforming to Chinese custom and extending the segregation of the sexes in dispensaries to the hospital-proper. Inpatients were separated, according to sex, to a greater extent in China than in America. For example, the Church of Scotland hospital at Yichang reported that it had “been found necessary this year to fall in with the demands of Chinese etiquette and have the women's ward in a separate building from the men.”⁸³ Jeffreys, whose experience had been mainly in relatively cosmopolitan Shanghai, argued that separate institutions for women, *staffed by women*⁸⁴ were unnecessary. He agreed, however, that hospitals could “meet the utmost of Chinese needs of good taste”: one could organise common administrative areas but a “properly guarded barrier” should separate wards. He also suggested “a double entrance, for men and women”.⁸⁵ Hussey's Wuchang hospital, with rigorous separation of the sexes, has been discussed earlier. (See page 109 ff.) Although the amount of accommodation for men and women (and children) at Wuchang was roughly comparable, the architect allowed for complete duplication of all facilities so that the sexes could not mix. The original hospital, built in 1883 for the MEM at Suzhou, was another

⁸¹ H.T. Whitney, "Medical Missionary Work in Foochow, II" *CMMJ* 3, no. 4 (1889): p. 86.

⁸² Kate Woodhull, "The Field Women of Foochow" *CMMJ* 16, no. 1 (1902): pp. 44-5.

⁸³ "Hospital Reports: Church of Scotland, Ichang": p. 97.

⁸⁴ My emphasis.

⁸⁵ Jefferys and Maxwell, *Diseases of China*, pp. 670-1.

which exemplified this approach: two hospitals, one for men and another for women, were built in adjacent compounds. They were completely separate both physically and in their management.⁸⁶

The Treating Physician

If women patients were in the minority it was not because of a lack of women physicians.⁸⁷ In stark contrast with the situation in America, a patient in an American hospital in China at the turn of the century would have been at least five or six times more likely to have been treated by a female physician. The first female foreign medical missionary in China, Dr Lucinda Combs, arrived in 1873⁸⁸ and went to Peking with the MEM. A steady stream of women, many of whom were stationed in the treaty ports but others who ventured inland and opened new medical work, followed her.⁸⁹

It has been well documented that in America – and in Britain even more so – opportunities for women to pursue careers in medicine were limited.⁹⁰ One of the early women missionary physicians to go to China, Anne-Houston-Patterson, wrote, in an autobiographical piece for the *Medical Woman's Journal* in 1887, that in her home state of Virginia there was “not one woman doctor”.⁹¹ Medical schools were not open to American women before 1890; Johns Hopkins in Baltimore, became the first, after being offered a large donation with the stipulation that women should be admitted under the same conditions as men.⁹² In 1891, Houston-Patterson, like all her sisters who sought medical

⁸⁶ Phillips, "The Hospital for Women at Soochow": p. 30. See also discussion in Jefferys and Maxwell, *Diseases of China*, pp. 683-4.

⁸⁷ The preferred term for themselves: “not that one objects to washlady, saleslady, etc., but woman is a grand word, and let us use the grandest word we can find”. It's worthwhile. Francis F. Tucker and Emma Boose Tucker, "Letter to the Editor" 22, no. 1 (1908).

⁸⁸ Thomson, "Medical Missionaries to the Chinese": p. 56.

⁸⁹ More than “twenty-five of her sex ... have since followed her”. B.C. Atterbury, "Medical Missionary Work in Peking" *CMMJ* 1, no. 3 (1887): p. 113.

⁹⁰ See for example Mary Roth Walsh, “Feminist Showplace” in *Women and Health in America: Historical Readings*, ed. Judith Walzer Leavitt (Madison, Wisconsin: University of Wisconsin Press, 1984).

⁹¹ Anne Houston-Patterson, "Fifty Three Years a Doctor" *Medical Woman's Journal*, no. August (1944): p. 31.

⁹² In the latter half of the nineteenth century women had started their own medical schools and, being denied access to general hospitals for clinical training, their own hospitals, mainly catering for women and children. Ruth J. Abram, "*Send Us a Lady Physician*": *Women Doctors in America, 1835-1920* (New York: W.W. Norton & Company, 1985), p. 182.

careers, graduated from one of the women-only colleges started by and for women: the Women's Medical College of Baltimore.⁹³ Other schools followed Johns Hopkins' lead "usually after a bitter and protracted battle"⁹⁴ but, paradoxically, this had the effect of further limiting *women's* options. A number of the seventeen women's medical schools established during the latter half of the nineteenth century closed.⁹⁵ At the same time opposition from men meant that those medical schools that did open their doors imposed quotas on women: about five percent from 1910 and for the next fifty years (other than in wartime). In fact, there were fewer women studying medicine in 1909 than there had been in 1894: down from 1419 to 921.⁹⁶

Moreover, having graduated in medicine did not guarantee that a woman physician would find acceptance. In 1887, Charlotte in North Carolina "had the distinction of possessing one [woman doctor] but the Doctors Club of that city would not allow her to join!"⁹⁷ Estimates in the secondary sources of the number of female physicians practising in America at the turn of the century vary somewhat but there is general agreement that the percentage was very low. Starr states that in the twenty years between 1880⁹⁸ and 1900 the percentage of women doctors in America doubled from 2.8 to 5.6 percent.⁹⁹ Marrett cautions that even this small percentage may be misleading because the total numbers included the comparatively larger proportion of women than men who practised as homeopaths.¹⁰⁰ She

⁹³ Houston-Patterson, "Fifty Three Years": p. 31.

⁹⁴ Cora Bagley Marrett, "On the Evolution of Women's Medical Societies" in *Women and Health in America: Historical Readings*, ed. Judith Walzer Leavitt (Madison, Wisconsin: University of Wisconsin Press, 1984), p. 431.

⁹⁵ Paul Starr, *The Social Transformation of American Medicine* (New York: Basic Books, Inc., 1982), p. 117. Many of the remainder closed following the Flexner Report, *Medical Education in the United States and Canada* (1910) which recommended the consolidation of medical schools, their association with universities, the upgrading of facilities and the employment of full-time teachers rather than practising physicians. Porter, *Greatest Benefit*, p. 358.

⁹⁶ Starr, *The Social Transformation of American Medicine*, p. 124.

⁹⁷ Houston-Patterson, "Fifty Three Years": p. 31.

⁹⁸ "The second national census to identify physicians by sex" Marrett, "On the Evolution of Women's Medical Societies", pp. 429-30.

⁹⁹ Although the percentage was considerably higher in some major cities: 18.2 percent in Boston, 19.3 percent in Minneapolis and 13.8 percent in San Francisco. Starr, *The Social Transformation of American Medicine*, p. 117.

¹⁰⁰ For example, of the sixty women medical women in Boston in 1892 three quarters of them were homeopaths. Marrett, "On the Evolution of Women's Medical Societies", p. 430.

provides data for ten cities, taken between 1892 and 1898, which show that female “regular” (ie allopathic) practitioners contributed between two and seven percent of all regular physicians in those cities.¹⁰¹

Paul Varg described the young American male missionaries as not necessarily

typical or religious aesthetes [but rather driven by the] normal excitement over an unusual career in an unusual corner of the world, free from the more prosaic patterns of the ministry, or a position in business at home.¹⁰²

If this description is valid it is possible that this would have been even more the case for women physicians. In middle to late nineteenth-century America there were few openings for those women physicians in “existing medical clinics, dispensaries, hospitals and institutions”¹⁰³ and so they were forced to establish hospitals, exclusively for women and children, where they could practice and where trainee women doctors and nurses could gain clinical experience. The missionary enterprise offered adventurous women the opportunity to practise a far wider range of skills than at home.¹⁰⁴ They were more likely to be able to work as equals with men, performing mainstream medical work, rather than as handmaidens.¹⁰⁵ Houston-Patterson was one such woman. The daughter of a Presbyterian minister, with an aunt who was a missionary in Mexico, she had wanted to be a foreign missionary since she was six years old. She arrived in China in September 1891, three months after graduating from a course that lasted only two and a half years. She had had “no internship” and, although she had been required to be present during operations, she had had no opportunity to practise surgery. Her daunting task was to “open up in China with no consultants, no nurses, ‘no nothing’.”¹⁰⁶ Many like her were attracted to the role and

¹⁰¹ At the time homeopathy still vied with allopathy, or “regular”, medicine and was associated with some prestigious institutions. When all female physicians were included, the percentage was slightly higher and ranged from five to nine. Ibid

¹⁰² Paul A. Varg, *Missionaries, Chinese and Diplomats: The American Protestant Missionary Movement in China, 1890-1952* (Princeton, New Jersey: Princeton University Press, 1958), pp. vii-viii

¹⁰³ Abram, “*Send Us a Lady Physician*”: *Women Doctors in America, 1835-1920*, p. 182.

¹⁰⁴ See Sara Waitstill Tucker, “Opportunities for Women: The Development of Professional Women’s Medicine at Canton, China, 1879-1901” *Women’s Studies International Forum* 13, no. 4 (1990) for an overview of the advantages afforded American women who treated and trained Chinese women in Canton.

¹⁰⁵ See Ruoff, ed., *Death Throes of a Dynasty*, p. 2.

¹⁰⁶ The Hospital was in North Jiangsu. Houston-Patterson, “Fifty Three Years”: p. 31.

were eagerly sought by missionary societies who believed that women were better suited and able to work among and influence the women of China than were men.¹⁰⁷

Mary Davidson voiced the most common reason for welcoming women physicians: “the very strong objection raised by many ladies in China to being attended by one of the other sex”.¹⁰⁸ As early as 1899, in a paper read to the West China Conference, she noted that, ironically, in America where medical women had made such apparent progress in education and patients did not object to male physicians, they were less able to use their training than in China. In China, women could enter as equals into the medical and surgical professions where men have “so long enjoyed exclusive rights and privileges”.¹⁰⁹ She urged that the “voice of this conference may be clear and strong in emphasizing the great need for many more qualified women, who may hear the call and quickly respond to it” and indeed, the conference passed a resolution (proposed by Dr Richard Wolfendale, seconded by Dr J.H. McCartney) indicating

hearty sympathy with medical work amongst women by women; and its belief that there is much scope for many fully-qualified medical women than are at present working in these western provinces”¹¹⁰

The extent to which missions succeeded and women responded is illustrated in Figures 14¹¹¹ and 15.¹¹² Figure 12 compares the rate of men and women physicians arriving in China

¹⁰⁷ There was “said to have been twenty-two women physicians in China by 1890” Latourette, *A History of Christian Missions in China*, p.457. A count of female members of the China Medical Missionary Society, published in 1890, reveals twenty-seven current members. Jos. C Thomson, “Medical Missionaries to the Chinese” *CMMJ* 4, no. 4 (1890): pp. 231-35.

¹⁰⁸ For example, see E.H. Edwards, “Work Among Women” *CMMJ* 1, no. 3 (1887).

¹⁰⁹ Mary J. Davidson, “Medical Work Amongst Women by Women” *CMMJ* 13, no. 3 (1899): pp77-8.

¹¹⁰ *Ibid*: p. 83.

¹¹¹ Figure constructed from a count of new arrivals (that is returning missionaries have been removed) in *CMMJ* (1865-1912) supplemented and checked against data included in Marshall Broomhall, ed., *The Chinese Empire: A General Survey and Missionary Survey* (London: Morgan & Scott, 1907) and Wong and Wu Lien-teh, *History of Chinese Medicine*. The totals do not represent the number of physicians in China at any one time because those who left the field have not been taken any to account.

¹¹² Compiled from a count of names in lists of members of the Medical Missionary Association for 1890, 1897 and 1901. Beebe, “List of Members”; “List of Members”; Thomson, “Medical Missionaries to the Chinese” According to the China Mission Handbook, Shanghai, 1896 which gave “for the first time a bird’s-eye view, as comprehensive as it is trustworthy, of evangelical mission work in China” the ratio of female to male physicians was higher than membership of the Association would indicate. Of the 183 medical missionaries, 59 or 32% were women and was almost the same in 1898. Warnek, *History of Protestant Missions*, pp. 295 and 297. The CMMA failed to conform to its constitution and publish an alphabetical list of members annually, so I have had to rely on figures gleaned from the statistical returns for 1906, 1907 and

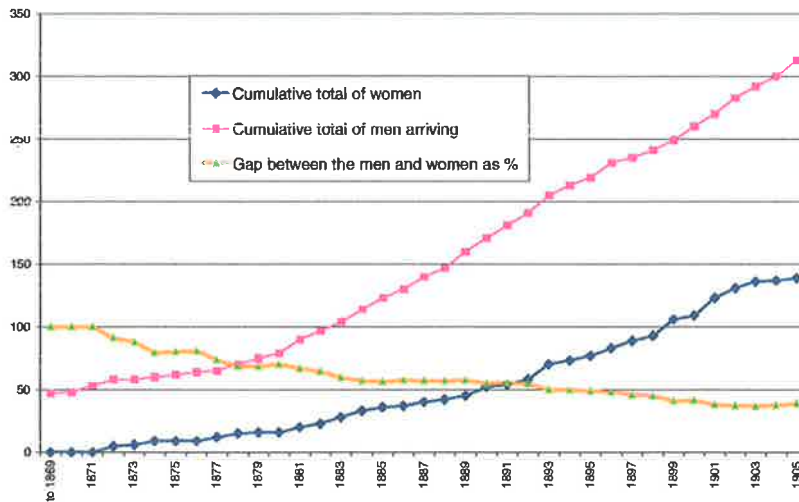


Figure 12: Comparison of the Rate of Arrival of male and Female Physicians to China, 1860-1905.

Sources: See fn. 113 .

from 1869, when at least forty-seven male physicians had already arrived, to 1905 when the *CMMJ* ceased detailed reporting of arrivals. Although the rate of arrival was always less than that of the men, the percentage gap

between the number of medical men and women, declined steadily from 100 percent in 1872 to under 40 percent in 1905.¹¹³ (see Figure 12)

By the time that Johns Hopkins first allowed women in (1890) already more than twenty percent of all missionary physicians in China were women. The percentage steadily increased until, by 1906, one third were women.¹¹⁴ The percentage of women physicians

1910, which do not include all hospitals. "Medical [Mission] Statistics for 1906"; "Medical Mission Statistics, 1907"; "[Medical Mission] Statistics for the Year, 1910" . In these returns, the number of women is more likely to be understated than the number of men because, in the case of a hospital with both men and women's departments, often it was only the man who was named as physician. For example, McCartney is the only physician recorded in connection with the Chunking Hospital where Dr Agnes Edmonds was in charge of the women's hospital from 1903. I have attempted to remedy such omissions by checking details from annual reports of individual hospitals, annual reports of the major missionary associations, newspaper articles and various accounts in the *CMMJ* and *CMJ*. For example *Centers of Compassion: Our Hospitals in China*, (Boston, Mass.: Woman's Foreign Missionary Society, Methodist Episcopal Church, c. 1913) ; J.W. Davis, "The Opening of the Tooker Memorial Hospital, Soochow" *CMMJ* 14, no. 1 (1900) ; "Foreign Medical Work, Woman's Missionary Council, Mary Black Hospital: Soochow, China," (Soochow: MEC(S), n.d.) ; "Hospital Reports: Soochow, Elizabeth Blake Hospital" *CMMJ* 14, no. 3 (1900) ; *Hospitals in China*, ; *Hospitals in China*, Medical Mission Series (Philadelphia, Pa: The Woman's Foreign Missionary Society of the Presbyterian Church, 1920) ; *Hospitals in China*, Medical Mission Series (Philadelphia, Pa.: The Woman's Foreign Missionary Society of the Presbyterian Church, c. 1904.) ; "The Opening of a Model Hospital at Kiukiang" *North China Herald and S.C. & C. Gazette*, December 24 1901 ; *Roots, Our Plan* ; Francis F. Tucker and Emma Boose Tucker, "Williams' Hospital of the American Board" *CMMJ* 19, no. 6 (1905).

¹¹³ Figure constructed from a count of new arrivals (that is returning missionaries have been removed) in *CMMJ* (1865-1912) supplemented and checked against data included in Broomhall, ed., *The Chinese Empire* and Wong and Wu Lien-teh, *History of Chinese Medicine* . The totals do not represent the number of physicians in China at any one time because those who left the field have not been taken any to account.

¹¹⁴ The figures for 1906 and 1910 were derived from those hospitals that responded to the surveys (in 1910 returns were received from 126 hospitals, representing 175 of the 415 medical missionaries in China). Broomhall, who provides a summary of statistics collected from all missionary societies reveals a total of 298

reported as practising in China (as opposed to arriving) is shown in Figure 13.¹¹⁵

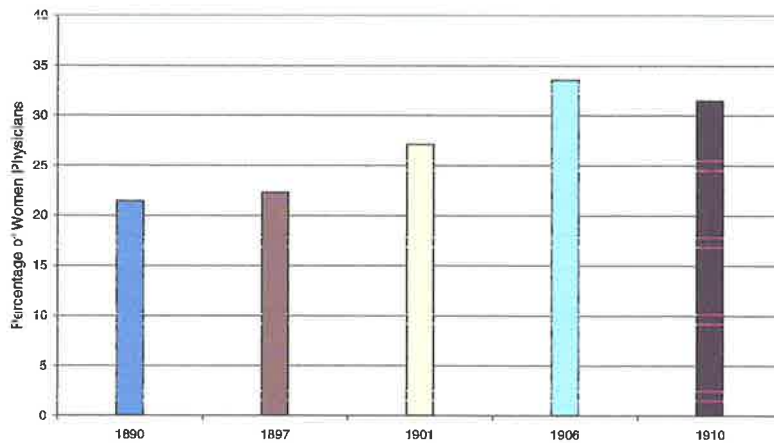


Figure 13: Percentage of Mission Physicians in China who were Female, 1890-1910.

Source: See fns. 114 and 115.

This picture is dramatically different from what could be found in America during the comparable period. A sample of reports from American hospitals will serve to demonstrate the point.

In 1887, the 70-bed Maine General

Hospital had no women medical staff, either resident or consulting.¹¹⁶ At the Lancaster General (Pennsylvania) in 1906, the only women on the staff were the chief nurse, the matron and bookkeeper. Similarly, the medical and surgical staff of the Pennsylvania Hospital in 1908 was exclusively male. The Auburn City Hospital, New York, was unique among this selection in that all the members of its Board of Managers were women but, still, not one woman was employed amongst the resident staff nor were any women on the visiting (or consultant) medical, surgical, homeopathic, obstetric or pathology staff. By 1915, the private Highland Hospital at Fall River, Massachusetts, of the ten medical staff, two – the pathologist and anaesthetist – were women. Even as late as 1925, there were only two women members of a medical staff numbering 22 at the Bloomingdale (Psychiatric) Hospital at White Plains, New York. One might have expected that the Babies Post-Graduate Hospital in New York would have female medical staff but in 1917 there were

medical missionaries of whom 75 (25%) were women in 1906 which is a lower number than that derived from the partial survey. Broomhall, ed., *The Chinese Empire*, pp. 36-9. On the other hand, Warnek, in 1901, provides figures that indicate that more than thirty percent of physicians were women from 1896 on. Warnek, *History of Protestant Missions*, pp. 295 and 297.

¹¹⁵ "List of Members"; "Medical [Mission] Statistics for 1906"; "[Medical Mission] Statistics for the Year, 1910"; Thomson, "Medical Missionaries to the Chinese"; Thomson, "Medical Missionaries to the Chinese" .

¹¹⁶ *Seventeenth Annual Report of the Directors of the Maine General Hospital*, (Portland: Stephen Berry, 1887).

none among the 26 visiting, and two resident, physicians or surgeons.¹¹⁷ In comparison, in China not only did women comprise over twenty-five percent of medical missionaries, in American-based mission hospitals they were even more prevalent: in 1906 thirty-six percent of all American physicians working in China were women. There were fewer women doctors in the hospitals of British mission societies (18%)¹¹⁸ but they were still far more common than in Britain. A woman medical practitioner in England, in a letter to the *Lancet* in 1873, had referred to “the four ladies now practising in England”¹¹⁹ and, according to Starr, there were still only a mere 258 female physicians in the whole of Britain at the turn of the century.¹²⁰

Of the women who responded to the call to “send us a lady physician”,¹²¹ many confined their practice to women and children as did the majority of their sisters who stayed in America.¹²² An exception, Dr Susan Tallmon, arrived in Linqingzhou 臨清州 in late 1905 to re-establish the medical work which had been abandoned during the Boxer rebellion.¹²³ In February 1908 she opened a “general dispensary, private examining room and drug room” in a single room in the court where the missionaries lived. (see Plate 52¹²⁴) She worked alone except for the help of an “empirically trained man” – presumably in Chinese medicine.¹²⁵ She saw both men and women and, for the four months between 1 November 1909 and 1 March 1910, the number of men and boys (632) treated at the dispensary was

¹¹⁷ *Auburn City Hospital*, ; *Lancaster Hospital*, ; *Report of the Pennsylvania Hospital*, ; *Annual Report of the Medical Director of Bloomingdale Hospital, White Plains - New York*, (White Plains, NY: 1925) ; *Report of the Babies' Wards Post-Graduate Hospital*, ; *Sixth Annual Report of the Highland Hospital, Fall River, Mass.*, Not that American hospitals of this era were devoid of feminine influence: all had matrons, nurses and active women's auxiliaries.

¹¹⁸ Extracted from table in Broomhall, ed., *The Chinese Empire*, pp. 36-9.

¹¹⁹ Sophia Jex-Blake, "Letter to the Editor, Medical Women" *Lancet*, no. 8 November (1873).

¹²⁰ Starr, *The Social Transformation of American Medicine*, p. 117.

¹²¹ McCartney, in 1893, described Chongqing as “one of the best fields that could be afforded to a lady physician in China”. McCartney, *Second (1893) Annual Report*, p. 2.

¹²² Abram, "*Send Us a Lady Physician*": *Women Doctors in America, 1835-1920*, p. 172.

¹²³ ABCFM hospital.

¹²⁴ Tallmon, *Lintsingchow Hospital*, p. 5.

¹²⁵ *Ibid*, p. 3.

greater than the number of women and girls (512).¹²⁶

The first hospital run by women, for women and children, was at Fuzhou. In 1875 Dr Sigourney Trask, of the Women's Foreign Missionary Society (WFMS) of the MEM, built a hospital, later to be named the Magaw Memorial.¹²⁷ Another was the Tooker Hospital for Women at Suzhou, established by the APM(N) in 1900, where two women referred to as "Miss Mary A. Ayer and Miss Frances F. Cattell – both of them doctors trained and graduated from Woman's Medical College Pennsylvania" were in charge of all the medical work.¹²⁸ These "women only" hospitals faced their own, peculiar, problems. For example, what were they to do with men? Elizabeth Reifsnyder raised the issue in 1887. As she said, "at home the woman is a free moral agent, so far as going to the dispensary is concerned", whereas in China men accompanied their wives, mothers and daughters. If these men needed medical attention she would treat them but her real dilemma arose when it became obvious that there was nothing wrong with the women but they "demanded attention for their men folk".¹²⁹

As distinct from the men, the women who worked as medical missionaries were overwhelmingly young and single.¹³⁰ Of the 132 medical women who arrived before 1905, 116 (87.8 percent) were single. By comparison, of the 208 men, for whom marital status could be determined, only 72 (34.6 percent) were single. The rest of the men were either already married, many with young children, or married very soon after arriving.¹³¹ This

¹²⁶ Ibid, p. 23. It was more common in mixed sex hospitals for the number of men to far exceed that of women whether the physician was a man or a woman. See p. 191.

¹²⁷ *Centers of Compassion: Our Hospitals in China*, p. 13.

¹²⁸ Before the hospital opened both women spent one year in China "studying the language, observing the ways of the people and medical missionary methods". Davis, "The Opening of the Tooker Memorial Hospital, Soochow": p. 58.

¹²⁹ Reifsnyder, "Methods of Dispensary Work": p. 69.

¹³⁰ The same held true for all women missionaries. In 1906 when there were 1101 married and 471 single men there were 971 "single ladies" and 75 "lady physicians", that is 1037 single women. Data extrapolated from Broomhall, ed., *The Chinese Empire*, pp. 36-9.

¹³¹ Statistics for all missionaries (including physicians) are available for 1906 which imply a higher rate of marriage among men: 1572 men, 1101 wives, that is 70% married, 30% single or unaccompanied by wives. Figures derived from a count of arrivals noted above in fn. 113. There was insufficient information to determine the marital status of 51 men. It was the policy of most missionary societies to send out married men, to provide stability and a helpmeet for the man and as an example to the Chinese of the "Christian family". See also Hunter, *Gospel of Gentility*, p. 11.

disparity between the marital status of men and women inevitably meant that the women had to become even more independent and resourceful than would have been necessary at home. They often worked alone and, whilst they usually had no family to care for, they had no 'wives' to share the kind of supportive work that Mrs Maxwell took on for her husband at Yongchun 永春 in Fujian. She

takes charge of the kitchen, oversees the collection of money by the students, and makes it pay its way well ... she also takes charge of the operating theatre for me.¹³²

If these single professional women were a novelty in their homelands they would have been even more extraordinary in China where women were seldom formally educated. A rare mention of Chinese women doctors (neither midwives nor trained in a foreign institution) was made by Margaret Polk who reported that she had come across three: one taught by her physician husband; another old woman who came to the hospital and a third, 35 years old, from "an official family. I admired her, and the family treated her with marked respect". She was sure that if she had come across three, there must be others, which meant that

there was no foundation for the belief that the education of Chinese women in medicine is an innovation, or for the oft repeated statement that China is not ready for women physicians.¹³³

As an aspect of the missionary intention to see hospital work devolve to Chinese control many women missionaries encouraged Chinese girls, who had been educated in mission schools, to take up medicine as a career.¹³⁴ It was not long before they were travelling to America to train as physicians. The first of these, Hü Jinying 胡金英 (supported by Sigourney Trask¹³⁵) became, in 1883, the "first Chinese Methodist medical doctor".¹³⁶ In

¹³² J. Preston Maxwell, "Hospital Reports: Eng-chhun Hospital" *CMMJ* 20, no. 3 (1906): p. 144.

¹³³ Polk, "Women's Medical Work": p. 116.

¹³⁴ Mary Brown made a plea for the training of Chinese women as physicians to the Shandong Missionary Conference in 1898. Brown, "The Training of Native Women as Physicians" She did see potential for problems with such a scheme. In her experience, a "characteristic of the Chinese people: viz., unwillingness to perform disagreeable offices for one another", a feeling ("a remnant of the selfishness of heathenism") which "medical training does not always eradicate". The custom of early marriage also militated against requiring trainee doctors to be single. She accepted married students, who paid their own way, helped with dispensary work and whose parent or guardian promised they would stay for four years. It was also compulsory to have "unbound feet. Brown, "The Training of Native Women as Physicians": pp. 179-80.

¹³⁵ See page 203.

1901, two Chinese women physicians, Drs Shi Meiyu 石美玉 (Mary Stone) and K'ang Cheng (Ida Kahn 康爱德), who had graduated from Michigan University¹³⁷ were put in charge of a new women's hospital for the Methodist Central China Mission at Jiujiang in Jiangxi: the Elizabeth Skelton Danforth Hospital.¹³⁸ These Chinese women physicians, as will become obvious later, brought a singular perspective to hospital work in China.

The fact that the missionary field was a hospitable arena did not mean that professional women were exempt from some of the limitations placed on their sisters at home. Margaret Polk spelled out some of the difficulties women physicians faced. When she spoke, before a mostly (if not entirely) male audience,¹³⁹ she described a medical woman's typical experience: being patronised by men, attempting to rebel and finally succumbing to either marriage or playing the role of nurse to the male physician. She thought that a woman physician felt that she "dare not take the initiative in anything, since by doing so she 'loses her womanliness'." Physical restrictions on women also meant they found it difficult to get out among the people and become familiar with the "thoughts, the customs, the superstitions, and the emotions that dominate the people for whom [they] would work".¹⁴⁰ Being a woman, though, did not mean that Susan Tallmon (see page 202) was sequestered within the mission compound. In a letter home, she described the type of conveyances furnished by patients who called her to see them at home. In the city, it was usually a sedan chair carried by two men but in the country it was more commonly a cart drawn by "mule or pony or both" and on one occasion a cart pulled by a "little red cow". (see Plate 53).¹⁴¹ Whatever the boundaries being a woman imposed, it would seem from their hospital reports, that the great majority overcame them and that the practice they carried on was as

¹³⁶ Robert, *American Women in Mission: A Social History of their Thought and Practice*, p. 183. The first Chinese woman to go to America to study medicine was Jin Yamei (1864-1934), from Ningbo, who went to New York in 1881. She opened dispensaries in Xiamen, Chengdu and other locations when she returned to China in 1888. Dominique Hoizey and Marie-Joseph, *A History of Chinese Medicine*, trans. Paul Bailey (Vancouver: UBC Press, 1993), p. 152.

¹³⁷ See fn. 72 at page 144. *Ibid*, p. 186.

¹³⁸ For details of these two women, see "Drs. Ida Kahn and Mary Stone" *CMMJ* 10, no. 4 (1896).

¹³⁹ See page 193.

¹⁴⁰ Polk, "Women's Medical Work": pp. 112-3.

¹⁴¹ Tallmon, *Lintsingchow Hospital*, p. 14.

diverse as any man's.

There is debate in the literature as to the extent to which a female presence among the medical staff influenced the workings of a late nineteenth-century American hospital. The notion that women were specially suited to working with women and children was commonly believed and promoted by women and assumed by scholars such as Mary Roth Walsh.¹⁴² But, as Morantz and Zschoche have demonstrated, concrete evidence that women treated obstetric patients significantly differently from their male counterparts is, at best, inconclusive. For example, they found no appreciable difference between men and women in the willingness to intervene technologically in a birth. The medical outcome for patients did vary with the sex of the physician, but "only to a small extent and only in an indirect manner". They concluded:

women physicians probably exhibited a different orientation to patient care. Thus men and women doctors acted alike in most therapeutic situations, but for very different reasons and with different meanings, different both to themselves and to their patients.¹⁴³

So, although it is beyond dispute that the American hospital in China was very different, in terms of the professional staff gender profile, from its equivalent in America, it is less clear as to what the effect this would have had on the style or type of treatment offered to patients.

Another aspect of the professional staff profile in which the hospital in China differed from its counterpart at home was that a significant proportion of male physicians, in addition to being trained in medicine, were also trained in theology. This was particularly true in the early days: of the 54 physicians who preceded the first woman, 24 (44.4 percent) were

¹⁴² See Walsh, "Feminist Showplace"

¹⁴³ Regina Markell Morantz and Sue Zschoche, "Professionalism, Feminism, and Gender Roles: A Comparative Study of Nineteenth-Century Medical Therapeutics" in *Women and Health in America: Historical Readings*, ed. Judith Walzer Leavitt (Madison, Wisconsin: University of Wisconsin Press, 1984), pp. 412-15. Their study involved a comparison (based on clinical records) of the New England Hospital (founded in Boston in 1862), one of the first "hospitals for women and children staffed by women physicians", with the Boston Lying-In Hospital, one of the teaching facilities of the Harvard Medical School (staffed by men).

ministers of religion. In the beginning they were missionaries first and physicians second.¹⁴⁴

It was relatively common for clergymen, untrained in medicine, to dispense simple remedies, especially as a means to “secure a hearing” where prejudice prevailed.

McCartney, in his usual blunt way, attacked the practice:

It is said that a missionary *naturally* is more able to heal disease than a Chinese quack. This may be so, but for my part I can see no difference between an Anglo-Saxon quack and a Chinese quack.¹⁴⁵

As medical missions became more professional the proportion of purely medical men increased, so that between 1873 and 1905, all but 39 of the 259 men (85 percent) who arrived were physicians only. How the gender mix and the presence of significant numbers of theologically trained men affected the operation of the hospital in general, or the experience of patients, requires more detailed study than is possible here.

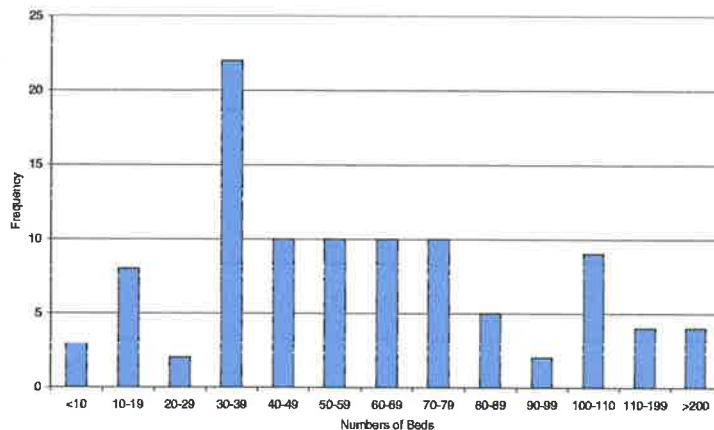


Figure 14: The Size of Mission Hoapitals in China (Numbers of Beds), 1910

Source: "[Medical Mission] Statistics for the Year, 1910." *CMJ* 25, no. 5 (1911); inserted between pp. 338-9.

Size of Hospital

Another factor, which would have affected the patient's experience of hospital, was its size.

There was pressure to increase the number of beds to cope with increasing demand but any

¹⁴⁴ See Forsythe, *An American Missionary Community in China, 1895-1905*, p. 17. Also, a number of ministers of religion, who were impressed with what could be achieved through medicine, took up medical studies after having been in China for a period.

¹⁴⁵ McCartney, "Medical Work": p. 99. Robert Beebe also disapproved of clergymen doing medical work except looking after their own families, and Chinese helpers, when professional help was not available. He thought it potentially dangerous to the patients and to the reputation of the mission. Beebe, "Hospitals and Dispensaries": pp. 12-3. Similarly, the Editor of the *CMJ*, after praising the "faithful men who have trodden this difficult path [Christian ministry]", went on to state, "that of all classes of professional men, the average minister is the very least fitted to practice the science of medicine". "The Emmanuel Movement" *CMJ* 23, no. 2 (1909): p. 112.

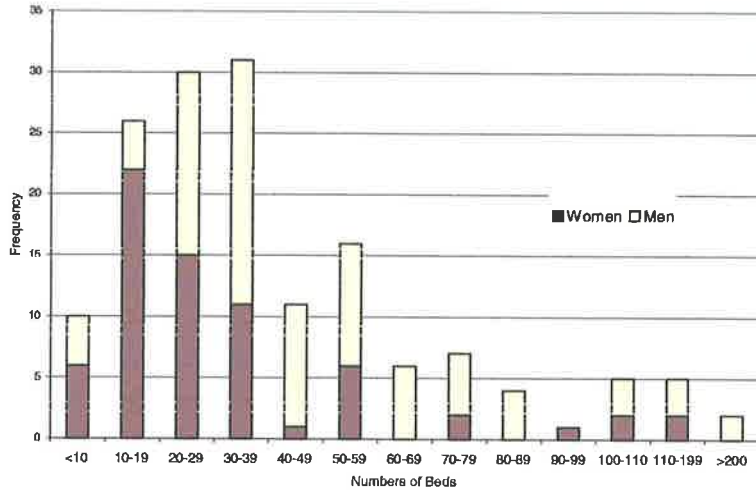


Figure 15: The Size of Men's and Women's Hospitals in China (Numbers of Beds), 1910

Source: "[Medical Mission] Statistics for the Year, 1910." *CMJ* 25, no. 5 (1911): between pp. 338-9.

expansion was limited by the availability of staff and, to a lesser extent, of funds. In addition, if any staff became available the various missionary societies adopted different policies as regards the priority they put on expanding

existing facilities or opening up new fields of influence.

As illustrated in Figure 14, missionary hospitals in China came in all sizes. Of those replying to the 1910 CMMA statistical survey, a hospital with between thirty and forty beds was the most common (modal size) and the median hospital had between fifty and sixty beds.¹⁴⁶ This picture, though, is somewhat misleading because those hospitals that reported having both male and female beds were generally in effect two separate hospitals: separate buildings in separate compounds. (see discussion at page 195) When this feature of hospitals in China is taken into consideration it emerges that women's hospitals tended to be small: the majority having between 10 and 30 beds.¹⁴⁷ Men's hospitals, on the other hand, were more often medium sized: the majority having between 20 and 60 beds.¹⁴⁸ (see Figure 15)

Administrative procedures and the arrangement of physical spaces all would have had an

¹⁴⁶ The results are skewed in favour of the larger hospital, which had the resources and interest in responding to the survey. In any event information was supplied by only 99 of the approximately 400 hospitals in China at the time.

¹⁴⁷ The modal (most frequently occurring) size of a women's hospital was 10 -19 beds and the median size had between 20 and 29 beds.

¹⁴⁸ The modal (most frequently occurring) size of a men's hospital was 30-39 beds and the median size, between 50 and 59 beds.

impact on a patient's experience of hospital. The extent to which local custom was taken into account would have affected the ease, or anxiety, with which the patient approached the foreign institution. Admission policies not only determine whether or not a patient himself is admitted they also affect the nature of one's fellow patients. It was a conjunction of the situation in America, as regards opportunities for women, with the reticence of Chinese women to be attended by a man, that determined that relatively more patients in China would be treated by a female physician than in America. While the size of the hospital and the ratio of beds provided for men and women would have had some influence on the patient there are other aspects aspects of life in hospital which a more immediate impact on a patient. Apart from the nature of medical treatment, these include the arrangements made for sleeping, eating and nursing. These, along with the extent to which rules and regulations in the ward were put in place, how long the patient stayed in hospital and how dying and death were dealt with all coloured the patient's experience. It is to these aspects that I will now turn.

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光緒三十三年 月 日 在田宅街 發		膏 散 丸水	每服包 每服 每服	每日 每日 每日	次 次 次	飯 飯 飯	溫水服 溫水服 溫水服	憑票取藥過午看病務請囑託不可過服	的人	耶穌差遣門徒去宣講 神國的道醫治有病
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Plate 50: Prescription Sheet recommended by Charles Roys
 Source: Charles K. Roys "Some Dispensary Methods." *CMMJ* 21, no. 3 (1907): p. 112.

姓名	年	紀	居住	居業	何病	家中如何	煙酒如何	病何時得	方得如何	現在如何	形勢如何
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Plate 51: Wooden Type-Block, Headings for Patient Record
 Source: Charles K. Roys "Some Dispensary Methods." *CMMJ* 21, no. 3 (1907): p. 114.

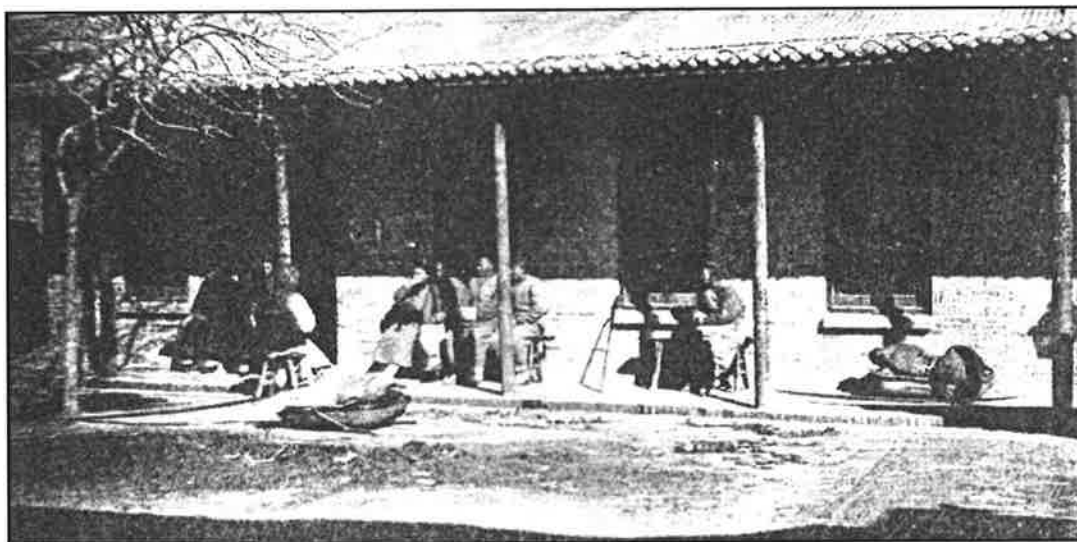


Plate 52: "Preaching to Patients Waiting for the Dispensary to Open" Linqingzhou, 1905
 Source: Susan B. Tallmon, *Glimpses of Lintsingchow Hospital: A.B.C.F.M., 1910*: p. 5.

CHAPTER 9: LIFE ON THE WARD

Certainly it is difficult to keep patients from expectorating on the floor and from storing food, articles of clothing, and tobacco and pipes in the bed.¹

Few generalisations can be made about the general appearance and amenity of hospitals in China at the turn of the century: patients would have experienced a wide range. S.R. Hodge was perhaps being more optimistic than practical when he asked, in 1891:

why should a Mission hospital be a series of sheds with hard boards to lie on, and with barest of furniture in its wards? Why should we not make them as comfortable as the hospitals for our poor at home, providing such things as water beds, air-pillows and invalid chairs?²

A few years later one of the larger established hospitals was compared favourably with those at home, but based on contemporary reports, this was an exception rather than the rule. Clearly impressed with Main's hospital at Hangzhou, Isabelle Bird, described it as

abreast of our best hospitals in lighting, ventilation, general sanitation, arrangement and organisation ... the purity of the walls, floors, and bedding is so great as to make one long for a speck of comfortable dirt.³

She waxed more effusive when comparing the large ward in the women's hospital, with its "highly varnished floor, flowers, pictures, tables, chairs, and harmonium [to a] pleasant double drawing-room in a large English mansion".⁴ In contrast, according to the editor of the *CMMJ*, it was a "sad fact [that] wards of too many of our mission hospitals too nearly approach the condition of the homes of the inmates".⁵ Missionaries must "set a good

¹ Kerr, "The Native Benevolent Institutions of Canton, part 1": p. 157.

² See page 135. Hodge, "The Church's Duty": p. 141.

³ Bird, *The Yangtze Valley*, pp. 42-5.

⁴ *Ibid*, p. 466.

⁵ R.G.K., "Editorial: Cleanliness": p. 156. The belief that Chinese homes were dirty was not universal among western medical men and women. When Dr Arthur Stanley, the Health Officer in Shanghai, wrote an article about Chinese hygiene the editor of the *CMMJ* agreed with him that "as far as natural hygiene goes Chinese hygiene is in some important respects superior to that in both the large cities and in the country districts of Europe and America ... London, Philadelphia, Naples especially, and Italy in general". Jefferys compared his experience in Philadelphia of "finding [a] child in a garret room approached by a narrow ladder-like staircase, one of eight people in a room ten by twelve feet, two minute windows nailed down, so that neither of them could be opened ... the room crowded with old clothes, vermin and other live stoke, stale food and urine standing, and the air literally rotten". A number of correspondents who took issue with Stanley disagreed with

example, by excluding dirt as far as possible from our wards".⁶ That this was easier said than done was demonstrated in the Jieyang 揭扬 Hospital in Guangdong which was, according to its 1904 report,

from the point of view of an enlightened physician of the twentieth century ... unhygienic, unsanitary and dirty, in spite of strenuous and united efforts to make it otherwise.⁷

A. Marston, of the SPG Hospital at Peking, took a different attitude. She thought that hospital accommodation in China was "sufficient" for their present needs. "We have to repress our desires for wards and hospital nursing until the people are more ready to appreciate them", she said.⁸ L. G. Thacker of the Quanzhoufu hWomen's Hospital in Fujian, on the other hand, considered it imperative to take patient physical comfort seriously: "they hardly know they have souls, but they know they have bodies".⁹

Furnishing and Bedding

If it had proved difficult to persuade patients to enter a foreign compound how much more difficult would it be to persuade them to actually live there? In America the idea that the hospital setting could be intimidating is obvious from the many references in annual reports to the trouble that had been taken to make the rooms "homelike". As the Sisters of Mercy described it:

special care has been given to the proper furnishing of the private rooms ... all tastes and likings, the simplest as well as the most fastidious can be satisfied.

This concern extended to the wards where the "the comfort and convenience of patients have been carefully considered" in the design and furnishing.¹⁰ The photograph, included in

his claim that prostitution and drunkenness was less prevalent than at home but did not take issue with his opinions about Chinese hygiene. Arthur Stanley, "Chinese Hygiene" *CMMJ* 17, no. 1 (1903); Cecil J. Davenport, R.T. Booth, and Fred H. Judd, "Letters to the Editor: Re: Dr. Stanley on Hygiene" *CMMJ* 17, no. 3 (1903); W. Hamilton Jefferys, "Editorial: Chinese Hygiene, by Dr. Arthur Stanley, M.D. Health Officer of Shanghai" *CMMJ* 17, no. 4 (1903): p. 166.

⁶ R.G.K., "Editorial: Cleanliness": p. 157.

⁷ Cecil J. Davenport, "Hospital Reports" *CMMJ* 18, no. 3 (1904): p. 156.

⁸ Marston, "Peking S.P.G. Hospital": p. 206.

⁹ L.G. Thacker, "How Best to Obtain and Conserve Results in the Evangelistic Work among Hospital Patients" *CMJ* 26, no. 6 (1912): p. 341.

¹⁰ Sisters of Mercy, *St. John's Hospital*, p. 14-5.

the Lancaster Hospital 1906 report, of a private room, “handsomely furnished by friends”, with its pristine white sheets, dressing table and washstand with mirrors, chair for a visitor and curtained windows is of a typical example from the period. (see Plate 54¹¹)

Economic considerations were just as important as sensitivity to Chinese norms when it came to furnishing mission hospitals. The choice of beds in particular was a major concern. Whenever a report of the opening of a new hospital appeared, mention was made of the type of beds: the most pride was expressed in beds of American or English manufacture with iron frames, sometimes “painted white”.¹² Apparently not all of the CMS patients at Ningbo fully appreciated these luxuries. The hospital was

furnished with iron spring bedsteads, and as a rule these are greatly appreciated, and patients strongly object to being removed to the hard beds in the ward for septic cases. On the other hand, we have walked into wards at night, and have been surprised to see several patients sleeping on the floor, the reason given being that the floor was more comfortable.¹³

A minority of Chinese patients experienced the foreign bed. For example, at the Soochow Hospital in 1914, Dr Park reported that although a small ward of twelve beds to be used for the most important surgical work was “fitted with Lawson Tait beds and with bedding and clothing as a hospital should have, it is the only part of our hospital which is so equipped.”¹⁴ In 1919, when Balme conducted his survey, only 45 percent of the hospitals had any foreign beds. (An idea of the conditions in the wards can be had from the photograph of a ward in the *An-ting* Hospital for Men (APM), Peking, see Plate 55)¹⁵ Wolfendale was not so concerned: rather than imitate the home hospital he advocated using indigenous solutions. In his prescription for the ideal mission hospital he argued that bedding and clothing need not be foreign:

¹¹ *Lancaster Hospital*, facing p. 48.

¹² Alfred Hogg of Wenchow Hospital reported, in 1898, that their bedsteads from England were iron, with wooden bottoms and straw mattresses. Alfred Hogg, "Letter to the Editor: Wenchow Hospital" *CMMJ* 13, no. 1&2 (1899)

¹³ *Twenty-sixth Annual Report: CMS Hospital, Ningbo*, p. 5.

¹⁴ W.H. Park and J.A. Snell, *Medical Work: Soochow Hospital Report* (Suzhou: Board of Missions of the Methodist Episcopal Church, South, The China Conference, 1914), p. 1.

¹⁵ Harold Balme, *Tsinanfu's Opportunity: Being an Account of the Formation and Work of a Union Medical College and Hospital* (c.1914), p. 13.

blankets, foreign sheets, and pyjamas are not really required. We are not come out to China to make the Chinese British or Americans. The cotton vests, etc., worn by them is all that one desires, provided they be kept white and clean. Then the *pukai*¹⁶ can be kept absolutely clean by changing the outside covering, tied by tapes along one side.¹⁷

In Luella Masters' MEM hospital at Fuzhou the problem of indigenous versus foreign bedding was avoided as patients not only paid for their board but also provided their own "fuel, food and bedding" and the hospital stepped in only if the patient's was "too dirty or not suitable". In such cases the hospital rented bedding to patients, or, if they were very poor, provided it at no cost.¹⁸ As far as the type of bedding was concerned, straw mattresses in removable cotton covers were considered ideal: "by emptying and burning the straw, boiling the mattress and pillow covers and washing iron frames and wire springs the beds can be effectively cleansed and vermin exterminated".¹⁹ Balme's call for hospitals to provide clean bedding and clothing gives some indication of the conditions prevalent in many hospitals:

it is quite useless to spend soap and water on a dirty patient if he is to pass his time sleeping in dirty clothes or on verminous bedding ... and it as well to remember that private patients, who gladly pay for private rooms, are often the dirtiest of all.²⁰

Charles Lewis, who as we have seen earlier favoured building in the Chinese style because he believed this would make patients feel more at home (see page 84), carried this philosophy through to the provision of beds: his were "boards on trestles such as the patients were used to sleeping on at home".²¹ Another early hospital, at Funing 福甯 in North China, described their wards as being off a courtyard and

very simply arranged and furnished they are, with tiled floors, trestles for beds and lumps of firewood for pillows. But it is the best we can do and the people

¹⁶ Cotton-wool quilt.

¹⁷ Wolfendale, "An Ideal Medical Missionary Hospital": p. 9.

¹⁸ Masters, "The "Pay Doctor" in China": p. 3.

¹⁹ Davis, "The Opening of the Tooker Memorial Hospital, Soochow": p. 58. Not all advocated routinely burning the straw mattress, Mabel Poulter, who, by 1916 had Lawson Tait iron beds, advised sunning the straw mattresses and washing mats with Jeyes fluid and only burned them if they were soiled. Mabel C. Poulter, "Obstetrical Experiences in a Chinese City" *CMJ* 30, no. 2 (1916): p. 78.

²⁰ Balme, "Irreducible Minimum": p. 572.

²¹ Speer, "Lu Tai-fu", *Charles Lewis*, p. 34.

are satisfied.²²

Some of those who were early into the field, especially in the north of the country, promoted the use of the traditional Chinese *kang* 炕. Douthwaite, who established the hospital for the CIM at Yantai (Chefoo), explained that his guiding principle was to arrange his hospital

in accordance with the tastes and habits of the people, as far as can be consistent with cleanliness. We have a few beds for surgical cases, but most of the patients prefer the brick k'ang to which they are accustomed.²³

His *kang* was a brick platform with a top composed of stone slabs, plastered with clay, which was heated by burning grass or other fuel. In summer it was covered with straw matting and, in cold weather, padded quilts. His patients apparently preferred “these hard, comfortless beds [to the] spring mattresses which are provided for those who desire them [and would] lie or sit for weeks, quite happy and contented”.²⁴ Peck²⁵ had a more elaborate description of the *kang* common in Chinese homes in Shandong.²⁶ They were built, in autumn, of mud bricks and were warmed mainly by the waste heat from the food-kettle. In spring the *kang* were dismantled and, with the valuable soot, spread as fertiliser on the fields. Wooden beds were used in summer. Peck wondered if he should

adopt some modification of this plan, or confine them to beds and try and warm the beds during the cold weather ... the latter plan most consonant with our foreign ideas, is most at variance with the habits of the people.²⁷

An interesting example of the use of the *kang* was to be found in the LMS hospital at Qizhou 祁州 in Shanxi. There the women’s ward comprised “one long k'ang capable of accommodating 15 patients comfortably”. This was in contrast with the men’s ward, which was “larger, and possesses 25 separate k'angs for as many patients”. No explanation was

²² Porter, "The Medical Arm of the Missionary Society": p. 267. Twenty years later, Miss Hope Bell was to observe “It is a mistake to think that Chinese patients prefer little hard pillows: they much prefer softer and larger ones”. E. Hope Bell, "Nursing Requirements in our Mission Hospitals" *CMJ* 29, no. 3 (1915): p. 176.

²³ Douthwaite, "Chefoo: 1887 Report." p. 83.

²⁴ Ibid.

²⁵ See page 82 ff.

²⁶ Peck, "Concerning Williams' Hospital": p. 66.

²⁷ Ibid. He mentioned that Mackenzie at Tianjin had opted to provide foreign beds but his was the only “testimony [he knew] of, as to experience in this latitude”.

offered as to the reasoning behind this distinction but no doubt it was a considerable advance on “stowing away patients in the coal cellar for lack of accommodation”.²⁸ This brings us to another common feature of hospitals in China: overcrowding.

Overcrowding

The missionary in charge of the CMS hospital at Ningbo, described how, in 1910

we allowed 27 patients to occupy a 17 bed ward; our floor being so infinitely cleaner than some of their own beds, and no difficulty at all was found in putting up ‘extras’ on the planks.²⁹

It was not always the periodic outbreaks of disease, like the “raging epidemic of dysentery” that saw this influx of boys into hospital from a Christian orphanage, that caused the overcrowding. Sometimes it was simply that the missionaries were overwhelmed. The LMS at Xiaogan 孝感 in Hubei started in 1900 with only six beds but they received so many patients that they had to turn all the available rooms into wards:

the patients slept anywhere – on forms or tables, and *under* them, on the bare floor, even in the yard outside. For weeks it was unsafe to move about the dispensary at night without a light. One was pretty sure to kick some patient's legs or tread on him. We had only a small native house, but within four and a half months 197 patients had managed to come and go.³⁰

Although physicians grumbled about inadequate facilities in annual reports aimed at potential donors, many appeared to think that the Chinese were not so concerned. Josephine Bixby observed that, although at her American Baptist hospital at Jieyang 揭扬 in Guangdong, patients “have often to sleep two – not to say three – in a bed ... being crowded into narrow quarters never has an adverse influence upon the temper of the Chinese”. She cited a couple of typical situations:

A crying baby in a ward containing a dozen or twenty other patients calls forth no comment unless questions are asked as to how the little one rests ... another patient with a foul-smelling disease is quietly endured as one of the conditions

²⁸ Sewell McFarlane, S, "Opening of the Chi-chou Mission New Hospital" *CMMJ* 8, no. 4 (1894): p. 220.

²⁹ Cole, *Twenty-fourth Annual Report: C.M.S. Hospital, Ningpo*, p. 4.

³⁰ Henry Fowler, "Hiau-kan L.M.S. Hospital" *CMMJ* 16, no. 3 (1902): p. 151.

of receiving hospital privileges.³¹

A feature peculiar to China further exacerbated overcrowding of hospitals. In America under certain circumstances, at St John's for example, when the patient was "dangerously ill" the hospital allowed a friend, relative or nurse to accompany a patient.³² The privilege was not generally extended to patients in wards. In China the situation was very different. Firstly, it was a matter of cultural sensitivities as Balme explained: it had been, "neither easy nor polite to induce patients to come into the hospital unless they were allowed to bring their friends to live with them". John A. Anderson, who was working in Western Yunnan agreed. He

rather liked his patients to bring their friends or servants with them. It helped to keep the patients from being homesick, and it brought more people under the influence of the gospel.³³

Secondly, it was a matter of necessity. Few hospitals, especially in the early days, had nursing staff.³⁴ Those they did have were mostly men, more properly described as orderlies. If patients in China needed nursing care they had to provide their own. "Two or three servants" frequently accompanied private patients³⁵ and family members – husbands, sons, daughters, sisters, fathers or mothers – attended patients in wards. By 1920 Balme thought although the psychological importance for patients to be attended had diminished, the lack of nurses and orderlies remained. This meant that 37 percent of the hospitals in his survey reported that *all* patients brought friends to stay with them in the wards and a further 51 percent allowed them to do so. In other words, as late as 1920, 88 percent of hospitals had to accommodate friends and family – who often slept on the floor next to the patient "for

³¹ Josephine M. Bixby, "Kieh-yang Hospital Report" *CMMJ* 19, no. 6 (1905): p. 262.

³² Rules for Companions to Patients Sisters of Mercy, *St. John's Hospital*, p. 21. The companion was not allowed unfettered access to the patient, they needed the physician's permission. See also Rules for Private Patients *Auburn City Hospital*, p. 29.

³³ Cited in "Discussion on Women's Medical Work by Polk" *CMMJ* 15, no. 4 (1901): p. 299.

³⁴ In 1912 Arthur Tatchell, of the Hodge Memorial Hospital at Hankow, bemoaned the lack of nurses in most hospitals and called for the training of male nurses. He noted that "the time has not arrived when men patients can be nursed by women nurses" although he had successfully employed maybe the first English matron in a men's hospital to train male nurses ten years earlier. W. Arthur Tatchell, "The Training of Male Nurses" *CMJ* 26, no. 5 (1912): p. 271.

³⁵ Polk, "Women's Medical Work": p. 114.

want of a spare bed".³⁶ Lucy Saville's hospital for women at Beijing was one of the exceptions. In preparation for introducing clinical training for Chinese nurses she reported in 1906 that she had "almost entirely abolished the heretofore prevalent practice of allowing mothers and friends to live with the patient in the hospital".³⁷ Josephine Bixby, on the other hand, described a situation of having three women in a small room "scarcely large enough for two". It becomes obvious that the three patients were not alone in this small room since she recorded that when the attendant of one patient had to leave, the attendants of the other two took over all her duties. Thus, there had been six people in the room.³⁸

Hospital Food

Nursing, reassurance and company, important as they were, were not the only things relatives and friends provided. In many hospitals, they were also responsible for patients' nutrition. They collected fuel (see Plate 56³⁹) and brought, prepared and cooked the patients' meals. A. P. Peck, at Pangjiachuang, painted a grim picture of what little he was able to offer his patients in the way of physical amenities:

we have not money to feed you. You must bring your own grain or be able to buy your food ... we cannot supply you with clean bedding. You must bring your own. So our patients are often enveloped in garments saturated with indescribable filth ... we have no staff of nurses; if you are going to need attendance, you must bring some one from your home; thus there are two or more persons to feed instead of one. We cannot even furnish fuel for cooking the food ... the sum therefore, of what we have been able to give them is a spot on a brick bed big enough to sleep on, a kettle to cook in, to be shared perhaps with a dozen others ...⁴⁰

In Chinese hospitals, the management of the culinary department, when it was present, was also distinctive. Whereas American hospitals included a cook on the staff, many hospitals

³⁶ A.F. Cole, *Twenty-third Annual Report: C.M.S. Hospital, Ningpo* (Ningpo: C.M.S. Medical Mission, 1909), p. 15. See also Balme and Stauffer, "Enquiry: Scientific Efficiency," p. 15-6; Jefferys and Maxwell, *Diseases of China*, p. 7. The phenomenon was not peculiar to China. The doctor in charge of a western hospital in Japan in the 1870s commented: "we would have no patients had we not accepted their families". For details, see John Z. Bowers, *When the Twain Meet: The Rise of Western Medicine in Japan* (Baltimore: Johns Hopkins University Press, 1980), p. 68.

³⁷ Saville, "Hospital Reports: London Mission Women's Hospital, Peking, Annual Report, 1905": p. 188.

³⁸ Bixby, "Kieh-yang (1905)": p. 262.

³⁹ Tucker, Tucker, and Sawyer, *A Chinese Revolution*, p. 15.

⁴⁰ Peck, "The Development of the Medical Department of a Mission Station": p. 14.

in China did not employ a cook directly. For example, Duncan Main's hospital contracted with a "head cook" who engaged four others to help. The terms allowed a payment of twelve cents per day, or \$3.60 per month, on behalf of each patient "whether on a special diet or not".⁴¹ It was not until 1919 that the Soochow Hospital abandoned the "farming out method" and had its own kitchen, which, although more expensive, afforded the hospital more control over the quality of the food provided. They congratulated themselves that, despite the cholera epidemic that year, no case of cholera had arisen within the hospital.⁴²

Even when they did not employ the cook, most Chinese hospitals provided somewhere for cooking, usually a lean-to or shed in the compound away from the hospital-proper, on a "native stove" using every variety of fuel, "from coal balls to bamboo sticks".⁴³ Dr Mary Latimer James described the early days of the American Church hospital at Wuchang where they were

forced to cook in a dark shed-like structure, wedged into the angle of a building, and I am not infrequently put to it to cheer up the cook and provide warm food for the patients and nurses, when snow swirls around his neck, or heavy rains wash away not merely his fire, but also his primitive brick stove.⁴⁴

Some hospitals instituted their own culinary department. Josephine Bixby reported in 1905 that three years previously they had abandoned the system of requiring patients to bring charcoal and cooking utensils with them. Instead they charged them 100 *cash* a day for meals prepared by a general cook. Apparently the new system had "met with much opposition in the start, for it was not their 'custom', but it is now in such general favor that no one would wish to go back to the old plan".⁴⁵ It is hardly surprising that Bixby welcomed having control over a kitchen. Her American training and experience would have led her to expect to be operating under a set of rules such as those in place at the Lancaster

⁴¹ De Gruche, *Doctor Apricot*, p. 140.

⁴² Snell, *Report of the Soochow Hospital, Soochow, China*, p. 2.

⁴³ In Balme's survey in 1920, 70% of kitchens were situated in "out-houses"; 94% used "native stoves" and only 33% were screened from flies and mosquitoes. Balme and Stauffer, "Enquiry: Scientific Efficiency," pp. 17-8.

⁴⁴ Mary Latimer James, "What Is - And What Should Be" in *Our Plan for the Church General Hospital, Wuchang: A Statement of the Most Urgent Needs in the District of Hankow*, Leaflet 211 (New York: The Board of Missions, c. 1916), p. 6.

⁴⁵ Bixby, "Kieh-yang (1905)": p. 263.

General or Auburn City Hospitals. Visitors to private patients at Auburn were forbidden to bring in “wine, liquors, food or delicacies of any kind ... without the permission of the Superintendent or attending physician”. It was obviously so well understood by the community that it was not considered necessary to include such a rule for patients in wards.⁴⁶ Similarly, at the Lancaster General, in addition to the same prohibitions, patients were not “permitted the use of any diet other than that which may be ordered by the proper officers”.⁴⁷ Bixby, who clearly had a low opinion of what she saw as her patients' behaviour could now, as she put it, regulate the patients' diet, which was a

very important thing with people who are so prone to over-eat, under-eat, to eat dead or half decayed food rather than see it thrown out, and to eat at any and all hours of the day or night.⁴⁸

Writing in 1919, Balme thought that the kitchen was “admittedly the weakest spot in the majority of mission hospitals of to-day”. He was here referring mainly to physical conditions such as lack of screening from flies, inadequate removal of fumes and smoke from dirty stoves and too many “hiding-places for stale food”. On the subject of food he was less prescriptive and referred simply to the need for “a controlled dietary”.⁴⁹ However, and possibly luckily for the patients, many medical missionaries were unable to exercise any control over diet because their patients were being provided for individually by friends and relatives.

Diet

It would seem from the literature that most historians of the hospital in America and Britain have considered the question of patients' diet to be of only passing interest.⁵⁰ Mention of food is usually restricted to noting that nineteenth-century hospitals, seeking to attract private patients, used the “daintiness” of the food as a selling point. Contemporary

⁴⁶ *Auburn City Hospital*, p. 29.

⁴⁷ *Lancaster Hospital*, p. 54.

⁴⁸ Bixby, “Kieh-yang (1905)”: p. 236.

⁴⁹ Balme, “Irreducible Minimum”: p. 272-73.

⁵⁰ Three, who have written general histories of the hospital, Guenter B. Risse, *Mending Bodies, Saving Souls: A History of Hospitals* (New York: Oxford University Press, 1999) ; Rosenberg, *The Care of Strangers* ; Stevens, *In Sickness and in Wealth* , while they mention it in the text, do not include a reference to diet or nutrition in their indexes.

American hospital financial reports also shed little light on the subject because expenditure on foodstuffs is subsumed, more often than not, under the heading “provisions” or “table bills”. An indication of what constituted “regular fare” at Lancaster General in 1905 cannot be deduced from the long lists of donations from its many active women's auxiliaries: from puddings and jams to fruit and vegetables, cereals and cooking oils, to ducks, chickens and eggs. The lists of donations ‘in kind’ served the same purpose as the list of financial contributions: to thank those who gave and to encourage others. No specific requests for types of foods were made, nor it would seem were any donations refused, so it is not possible to deduce their policy on patients’ diet. Auburn City Hospital Thanksgiving and Christmas dinners of 1909 appear to have been lavish affairs with donations of turkeys, chickens, gallons of oysters and ice cream, plates of “macaroons and lady fingers”, with cakes and fruit, including apples, bananas, grapes, oranges, figs and dates listed as being donated.⁵¹ “Special diets” were obviously provided for some patients⁵² but as to their composition no information is available. If the hospital followed the dictates of contemporary literature as to what constituted “invalid food”, one can only imagine that these special diets were unappetising. While a popular contemporary manual for medical practitioners⁵³ emphasised the therapeutic value of a nourishing diet most stress was put on it being “bland [and] non-irritating”. The only condiment allowed was common salt, and that, in strict moderation. Certain stimulants were allowed in cases where “the appetite for food is almost wanting”: these included “wine, ale, and porter [because] previous habits must be attended to, and the drunkard must be supplied with his accustomed stimulant”.⁵⁴ A 1900 household encyclopaedia aimed at women suggested feeding a patient various forms of gruel, meat broths, and jellies. All were prepared by boiling the main ingredient – cornmeal, oatmeal, beef, chicken, mutton or rice – in water for several hours. The writer described them as containing “little nutritional matter” and no suggestion was made as to

⁵¹ *Auburn City Hospital*, p. 37.

⁵² Extra charges for “special diet” compared to “regular fare”, mentioned. *Ibid*, p. 22.

⁵³ William Augustus Guy and John Harley, eds., *Hooper's Physician's Vade Mecum: A Manual of the Principles and Practice of Physic*, Tenth ed., vol. 1 (New York: William Wood & Company, 1884). The original by Hooper was first published in 1823 and, by 1884 was in its tenth edition, revised by Guy and Harley.

⁵⁴ See *Ibid*, pp. 217-22.

how to make them more palatable.⁵⁵ It seems that Cecil Davenport with the LMS at Wuchang in 1899 was following this regimen but he despaired of his Chinese patients who

Almost invariably ... refuse to take beef tea, or milk, or chicken broth. They have not come to the stage of knowledge that would lead them to honor the great physician who had it put on his tombstone that "he fed fevers". They prefer nothing, or peanuts, or raw pears, or pig's stomach, and all sorts of sweetmeats - and smuggle them in and eat them.⁵⁶

Dietetics in China

Most medical missionaries took little interest in the details of their patients' diet. From a survey of the scant supply of articles and correspondence it seems that most of the men were more concerned about the practicalities of providing food than the nature of the food itself. In the main, it was a few women physicians who commented on diet. A notable exception was Fred Judd who wrote a letter to the editor of the *CMMJ* in 1906 calling on "senior medical people" to contribute their experience of "dieting patients on native food". He had observed that, in comparison with America

in this land [diet] seems to occupy an even more important place, at any rate in the minds and habits of our Chinese patients. One of the commonest questions they ask is 'what foods shall I abstain from?'

He thought that although many Chinese ideas may be "fanciful or even ridiculous" they were based on experience and that "in some cases we may even be able to learn a lesson from them".⁵⁷ His call apparently went largely unheeded since he was still asking the 1911 Conference to deal with "practical topics ... such as the role of Chinese diet in disease".⁵⁸ Judd seems to have been one of the few medical missionaries who took seriously the fact that dietetics had always been an integral part of Chinese Traditional Medicine (TCM).

The idea of regulating diet as a way of preventing or curing disease was not confined to China. Ancient Greek and Roman medicine attended to diet but in the West, according to

⁵⁵ Henry M. Lyman and others, *The Practical Home Physician and Encyclopedia of Medicine* (London: World Publishing Co., c.1900), pp. 1073-75.

⁵⁶ Extracted from LMS Hospital Report for 1897-8 by the Editor of *CMMJ*. "Hospital Reports": pp. 56-7.

⁵⁷ Fred H. Judd, "Dieting Patients: Letter to the Editor" *CMMJ* 20, no. 6 (1906).

⁵⁸ Fred H. Judd, "Enhancing the Value of the Medical Conference: Letter to the Editor:" *CMJ* 25, no. 6 (1911).

Ackerknecht (who included a history of dietetics in his history of therapeutics), prescribing diet for illness steadily declined throughout the eighteenth century.⁵⁹ In America the “diet kitchen” did not form part of the normal hospital until after the Civil War in the mid-nineteenth century⁶⁰ whereas in China during the Zhou dynasty (1121-249 BCE) the imperial “department of dietetics even preceded that of medicine in order of priority”.⁶¹ In all societies, including the missionaries' home countries, there was a considerable body of folklore relating to the efficacy of various foods and medicinal herbs but in China the common wisdom surrounding food and diet belonged to a far more coherent, “rational” system. Dietetics was a distinct but integral component of the traditional medical system.

Chinese medicine, a complex system woven from three parallel traditions – demonology, Confucianism and Taoism – is grounded in the same *yin-yang* 阴阳 polarity, *wuxing* 五行 (Five Phases), and *qi* 气 metaphysics that underpins all Chinese traditional thought about science and nature.⁶² Illness indicates disharmony, and disharmony is the result of imbalances such as too little (depletion) or too much (repletion) of *yin* or *yang*. Harmony, and thus health, is indicated by the free and smooth flow of *qi*. Ideally, illness should be prevented rather than cured but when treatment is called for it is to restore the balance of *yin* and *yang*. As well as the drugs (vegetable, animal, and mineral) described within the

⁵⁹ See, Erwin H. Ackerknecht, *Therapeutics: From the Primitives to the 20th Century with an Appendix: History of Dietetics* (New York: Hafner Press, 1973), pp. 171-86.

⁶⁰ In 1861, delegates from the Women's Central Association of Relief from New York proposed that the Secretary of War establish a Commission, which, inter alia, would “enquire into the subjects of diet, cooking, cooks ... crude unvaried, or ill-cooked food”. The United States Sanitary Commission was the result but the emphasis was on soldiers in the field rather than hospitals per se. The resulting Regulations for the Medical Department of Military Forces included rudimentary instructions relating to the preparation of food and to diet: for example “the diet of the patients will be divided into full, half, and low ... to each ten patients, for example, on low diet, a certain quantity of tea, sugar, &c. To each ten on half diet, a certain quantity of rice, milk, &c.” R.W. Gibbes, *Regulations for the Medical Department of the Military Forces of South Carolina* (1861, accessed June 7 2002); available from URL: <http://docsouth.unc.edu/gibbes/gibbes.html>. McCool dates attention to the diet of wounded soldiers to the Spanish-American War when “ ‘dietists’ provided nutrition support for the wounded” and claims that “it was not until World War I that the American Red Cross established the first qualifications for dieticians assigned to Army-based hospitals”. Audrey C. McCool, “The Heritage of Army Dietetics” *Journal of American Dietetic Association* 97, no. 10 (1997): p. 1080.

⁶¹ Wong and Wu Lien-teh, *History of Chinese Medicine*, p. 315.

⁶² For discussion of Chinese Traditional Medicine and its relation to foods see E.N. Anderson, “Fishing People's Medicine: Variations on Chinese Themes,” in *Association of Asian Studies, Pacific Coast Branch* (Bellingham, WA: 2002); Bray, “Chinese Health Beliefs”; Manfred Porkert and Dr. Christian Ullmann, *Chinese Medicine*, trans. Mark Howson (New York: Henry Holt and Company, 1982); Paul U. Unschuld, “The Chinese Reception of Indian Medicine in the First Millenium A.D.” *Bulletin of the History of Medicine* 53 (1979), and Paul U. Unschuld, *Medicine in China* (Berkeley: University of California Press, 1985).

various pharmacopoeia published throughout Chinese history, all foods were classified within the same cosmological system and could be prescribed according to their supposed interaction with the person, his disease, his temperament, the season, etc. For example, foods, classified on a continuum ranging from hot (or heating) to cold (or cooling), could be used to counteract the effects of diseases whose symptoms were similarly classified. Thus “warming” foods may be used to compensate for problems classified as “cool” and, *vice versa*, “cool” foods help to reduce heat symptoms.⁶³ There was not necessarily consistency throughout the country as to which foods belonged to which category but the theory that internal balance should be aimed for by giving the appropriate foods was universally understood.

Lay Knowledge of Dietetics

Knowledge of the role of diet in the treatment of disease and recuperation was not confined to medical practitioners but was widespread among all classes of the society. Anderson says,

almost all traditional Chinese families had someone who knew a good deal about traditional nutrition, and everybody had someone in the neighborhood who knew a lot”.⁶⁴

As well as wisdom handed down from generation to generation the explosion of popular publishing, which occurred in late Ming and early Qing China, increased people’s knowledge. A feature of the popular literature, which included “household encyclopedias, guides to everyday etiquette and family ritual ... medical and prescription handbooks, morality books, almanacs, and manuals of geomancy”⁶⁵ was their “close connection with everyday activities”.⁶⁶ According to a conservative estimate made at Hankou, fifty percent

⁶³ See Porkert and Ullmann, *Chinese Medicine*, p. 203.

⁶⁴ E.N. Anderson, *Personal Communication*, (2002)..

⁶⁵ Cynthia J Brokaw, "Commercial Publishing in Late Imperial China: The Zou and Ma Family Businesses of Sibao, Fujian" *Late Imperial China* 17, no. 1 (1996): pp. 49-50.

⁶⁶ Wei Shang, *Writing, Reading, and Constructing the Everyday World: Studies of Late Ming and Early Qing Reading Materials* (1997, accessed 19th June 2002); available from <http://www.aasianst.org/absts/1997abst/China/c153.htm>.

of their adult patients could read public health notices “readily”⁶⁷ which meant that the literate and semi-literate had access to medical knowledge, which included dietetic theories.

Just as the patients' friends and relatives would have among them experts in diet so a hospital cook, left to his own devices, would have brought dietary knowledge and beliefs with him.⁶⁸

The Hospital Cook

Such was the situation in McCartney's hospital at Chongqing. In this institution, in 1893, the “bill of fare provided [was] two kinds of vegetables and rice three times a day, with beef on Wednesdays and pork on Saturdays”.⁶⁹ McCartney usually did not itemise food within his financial statements but in 1908 he was on furlough and his colleague included some details in *his* report. The proportion of expenditure on the various classes of food was as follows: 64 percent on rice, 16 percent on vegetable, 11 percent on meat, 4.8 percent on salt, and 4.4 percent on lard.⁷⁰ This, when compared with the expenditure by mill workers in Shanghai in 1920 (53 percent on rice, 8.5 percent on vegetables and legumes, 11.4 percent on meat, fish and seafood), would indicate that patients were being fed a reasonably typical Chinese diet.⁷¹ McCartney was apparently happy with the arrangement he had with his cook but as the American-trained Chinese physician, Mary Stone,⁷² (see Plate 57⁷³) pointed out: “so often the kitchen is given to the entire charge of the cook who takes his squeezes and gives the patients very poor food – poor as to food value”.⁷⁴ It is noteworthy that it was a

⁶⁷ Jefferys and Maxwell, *Diseases of China*, p. 656 fn. Rawski estimates literacy in late Qing as “perhaps as high as 40% male and 10% female empire wide”. Christopher A Reed, “Printing and Publishing in Late Imperial China (17th through 19th centuries),” in *New Paradigms and Parallels: The Printing Press and the Internet Conference* (Santa Monica, CA: 2000), p. 5.

⁶⁸ According to Buell, and supported by Sivin, “every family had its food expert that provided this kind of knowledge”. Paul D. Buell, *Personal Communication*, (2002) ; Sivin, *Personal Communication*.

⁶⁹ McCartney, *Second (1893) Annual Report*, p. 2.

⁷⁰ Calculated using reported expenditure on various classes of food included in *Gouldy Memorial Hospital, Methodist Episcopal Church, Chungking, West China, 1908*, pp. 16-7.

⁷¹ Jonathon Spence, “Ch'ing” in *Food in Chinese Culture : Anthropological and Historical Perspectives*, ed. K.C.Chang and Eugene N. Anderson (New Haven: Yale University Press, 1977), pp. 268-70.

⁷² See pages 144 and 205.

⁷³ Balme, *China and Modern Medicine*, facing p. 128.

⁷⁴ Mary Stone, “Hospital Dietary in China” *CMJ* 26, no. 5 (1912): p. 299.

Chinese woman doctor, albeit trained in America, who wrote the only substantial article dealing with diet to be printed before 1916 in the journal read by most medical missionaries. Because “nourishing food”, with sunlight and fresh air, were “such an important part of the cure”, she advocated taking charge of the kitchen and paying close attention to “the study of dietetics”. She did not use typical Chinese cosmological language but, rather, the Western scientific terminology familiar to her audience. She advised them to follow Chinese custom in the preparation of food, to focus on the foods that they liked, and to take account of differences between the normal diet of the rich and the poor. She noted that both classes ate rice and vegetables. The rich added meat and the poor, meat-substitutes, in particular, “varieties of beans and modifications of beans” which were plentiful and cheap as were eggs and fish. The examples she gave of meals provided at her hospital attest to the variety. Morning, noon and evening meals were based on rice supplemented, in the morning, with “beans, bean curd, fresh vegetable, and a little dried turnip or squash”. At noon she added “one kind of meat, some form of beans, two kinds of vegetables” and in the evening “some form of bean curd, eggs, and two kinds of vegetables”. She promoted the use of ripe fruit but discouraged the use of “salt vegetables, salted meats, and peppers” while acknowledging that small quantities acted as “appetizers and may be allowed”. She understood that her patients did not take kindly to some foods, such as “straight meat broths”, a common feature of American invalid food, so she suggested flavouring them with vegetables “like turnip, arrowroot, celery, dried dates, onions, or a handful of rice”. She thought that convalescents, or those with “weak digestion” and consequently on a restricted diet, could still have variety: she used “soft rice, arrowroot flour, lily bulb flour, bean curd cheese, vermicelli, eggs, vegetables, or light meats cooked very tender, scraped beef, and cooked fruit”. To make milk more palatable for Chinese, who had “never tasted it”, she had found that “giving a bite of ginger” took the taste away. She considered that it was impractical to prepare complex menus for each meal and recommended allowing for patients’ idiosyncrasies by preparing all food according to the rules of a “wholesome diet” from which the patient may choose because, “obviously in regard to particulars, each patient must be a law unto himself”.⁷⁵

⁷⁵ Ibid: pp. 300-1. Neal presented results of a survey and analysis of the Chinese diet in terms of the calorific

Anderson has demonstrated in relation to the boat people of Castle Peak Bay, Hong Kong, whom he claims are “not very different from other Chinese”, that

in practice, essentially all illnesses – other than broken bones and the like – were first treated by diet modification ... the eldest woman in the household was normally the chief caregiver; others acted under her orders.⁷⁶

In determining what foods to feed to a patient in hospital Anderson makes the point that

diet therapy had to be tailored to the individual. People differ in their response to food ... often a food that was “cool” for most people was experienced as “heating” by some ... individual experience over time, and the immediate environmental context, both affected nutritional therapy. Any caregiver would take these factors into account.⁷⁷

Thus, from a patient's point of view, given that the majority were being fed by friends and relatives or a Chinese cook, we can assume that local dietary customs would have been very evident in the hospital. Most patients of missionary hospitals were very poor and the food they could afford would have been limited to rice and a little vegetable but it is most unlikely, given that they were steeped in the tradition, that anyone would have fed the patient food that was contra-indicated.

It is beyond the scope of this study to make any assessment or judgment as to whether Chinese patients would have been better or worse off than their counterparts in the West as far as diet was concerned although, as the Health Officer at Shanghai wrote:

Concerning the quality of the Chinese food a European would generally say there is no ‘stamina’ in it. Diseases, however, like rickets and gout, which are attributed to disordered metabolism, are conspicuous by their absence among the Chinese. Functional disease of the stomach and alimentary tract are less common than among Europeans, and the teeth of the Chinese are admitted by all to be exceptionally beautiful and good.⁷⁸

In one hospital, some patients definitely did suffer from the effects of a rule not to accept

value to help physicians design adequate, balanced diets for patients in hospital. James Boyd Neal, "Diet Lists for Use in the Hospital of the Union Medical College, Tsinan, Shantung" *CMJ* 30, no. 1 (1916). After the article by Stone, this appears to be the first serious attempt to deal with the issue of diet by medical missionaries in China.

⁷⁶ Anderson, "Fishing People's Medicine," p. 5.

⁷⁷ *Ibid*, pp. 4-5.

⁷⁸ Stanley, "Chinese Hygiene": p. 58.

patients who would not agree to “our diets and stick to them”. Anne Fearn acknowledged that it was her “desire for cleanliness, and in our anxiety to provide only the best foods [that] inadvertently were responsible for bringing two dread diseases into the compound, tuberculosis and beriberi”. By providing (more expensive) polished rice the hospital had

unknowingly taken away the very vitamins they needed because, aside from their *san woen van* (three bowls of rice), they ate little else save a flavouring of cabbage, pork, chicken, or fish. First one girl and then another was sent home to die.⁷⁹

In a hospital, where patients were having food prepared for them individually, it was likely that their diets would have been more specific to their condition than if they were catered for from a single kitchen. Their experience of “hospital food” would have been significantly different from that of a hospital patient in America. As well, the advantage to the patient's psychological health is self-evident. As Anderson puts it, “when they could do nothing else – as was all too often the case – they could at least make the patient feel that family, neighbors, and community cared and were acting to help”.⁸⁰

It would seem that in relation to food a lack of funds (for staff and facilities) and Chinese custom interacted to give rise to a phenomenon that distinguished the American hospital in China from its counterpart at home.

Control of Patients

The change from mid-nineteenth century almshouse to early twentieth-century American medical facility was accompanied by an increasing emphasis on control of patients. The efficiency that was the mark of a well-run ward required that patients' demands not be allowed to prevail. Rosenberg's portrayal of life on the American hospital ward in the 1870s, which had not changed significantly since the beginning of the century, in many ways could have been of life in a mission hospital in China well into the twentieth century. During this period American patients had, according to Rosenberg

hoped and expected to find relatives and friends a source of emotional support in

⁷⁹ Fearn, *My Days of Strength*, pp. 64-5.

⁸⁰ Anderson, "Fishing People's Medicine," p. 10.

strange and threatening surroundings ... been reluctant to take baths and change out of their own clothes; slept in wooden beds on straw-filled mattresses and ... used the hot flues for spittoons and emptied their urinals into the sink.

Their visitors had smuggled in food and drink and paid little attention to stipulated visiting hours or limits on numbers and vermin, “lice, bedbugs, flies, and even rats [were] tenacious realities of hospital life”.⁸¹ In other words, the chaotic circumstances were similar to those existing in many mission hospital in China in the late Qing. On the other hand, by 1910 in America the transformation of the hospital was complete and “the average patient's experience had become something very different”. The social organisation of the hospital had also changed and, in particular, the imposition of “appropriate discipline” on patients who were considered to be “exacting and, in some cases, querulous”.⁸² It was not that nineteenth-century hospitals had lacked rules but now the rules were more likely to be enforced. All hospitals established and published a set of rules of behaviour for patients, and often their visitors. Patients at the Lancaster General were supposed to

conduct themselves with decorum towards each other, the officers of the hospital, and the nurses and servants; they shall not use profane or indecent language, become intoxicated, or behave rudely or indecently; they shall not smoke tobacco or play at any game of chance in the hospital.⁸³

They were also forbidden to leave the hospital without permission, read in bed at night, or eat any food not ordered for them. Charity patients were expected to work for their keep by helping with nursing, or other duties. Visiting was restricted to two hours per day, in the afternoon, and visitors were forbidden to bring in foodstuffs or medicines for patients.⁸⁴ The Auburn City Hospital operated under a similar regime but included a proscription on bringing more than “one change of underclothing [or] any piece of baggage larger than a hand bag” into the hospital. Private patients could have visitors anytime between 11 a.m. and 8.30 p.m. but they were asked to visit only their “own friends and to leave the Hospital quietly without loitering in the hallways or on the stairs.”⁸⁵ Sometimes more indirect

⁸¹ See Rosenberg, *The Care of Strangers*, Chapter 12, pp. 286-309.

⁸² *Ibid.*, p. 298.

⁸³ *Lancaster Hospital*, p. 53.

⁸⁴ *Ibid.*, pp. 53-4.

⁸⁵ See *Auburn City Hospital*, pp. 29, 46.

methods of control were employed; for example, staff distancing themselves from patients using not only the barrier of the uniform which set them apart but also the manner in which they addressed or treated them. Rosenberg gives the example of nurses being encouraged to control patients by withdrawing “little privileges she has been enjoying – by passing her with a curt “Good Morning” and so on, until she realizes she must obey the general law”.⁸⁶

Hospitals in China, too, had rules: “We find that the Chinese like discipline (providing it is not strict)” McCartney said in 1893 “and we have endeavored to have all the rules obeyed which were made when the hospital was established”.⁸⁷ He adopted a peculiarly Chinese avenue to disseminate his rules: a calendar. Since the Zhou dynasty, astrological and calendrical calculations had been the exclusive prerogative of the state and the resulting calendars were distributed only among officials. However, during the Tang, to counter the proliferation of illegal versions spawned by the invention and spread of printing, the state started to publish special editions for sale to the public.⁸⁸ “No single document did more to symbolize the legitimacy of the regime” and during the Qing about 2,340,000 were printed each year, and after distribution to officials, surplus copies sold “to an eager public”.⁸⁹ As well as basic calendrical information such as the phases of the moon, the year's solar divisions, and times of sunrise and sunset and so on, they provided monthly guidance as to agriculture, meteorology and auspicious days and times for various ritual and mundane activities. The latter included such things as “bathing and grooming, cutting out clothes, household cleaning and decoration, establishing a new bed ...”⁹⁰ A popular derivative of the calendar, the privately published almanacs were, according to the Rev. A.P. Parker, “perhaps the most universally circulated book in China”.⁹¹ They were cheap and extremely useful tools for daily life, providing advice on “family life, food, etiquette, travel ...” and, by the late nineteenth and early twentieth centuries, “had become conduits for new

⁸⁶ Rosenberg, *The Care of Strangers*, p. 298.

⁸⁷ McCartney, *Second (1893) Annual Report*, p. 2.

⁸⁸ Richard J. Smith, *Fortune-tellers and Philosophers: Divination in Traditional Chinese Society* (Boulder: Westview Press, 1991), pp. 18, 39-40.

⁸⁹ *Ibid*, pp. 74-5.

⁹⁰ *Ibid*, p. 82.

⁹¹ A.P. Parker, “Chinese Almanac” *The Chinese Recorder* 19, no. 2 (1888): p. 61.

information on recent educational and political changes, modern science and technology ...”⁹² McCartney, capitalising on the Chinese fondness for such literature, produced his own calendar in which were printed “plain instructions about itch, small-pox, tuberculosis and the like” as well as the “rules and regulations of the hospital”.⁹³ These were distributed without charge to all clinic patients: 15,280 in 1908.⁹⁴

Not all physicians were as keen on rules as McCartney. The Chinese were viewed, by some,

as not only ignorant but conceited and self-willed, and sickness does not render them any more amenable to laws and regulations. The key to successful work amongst them lies in unflinching good-humour and inexhaustible patience ... and the combined exercise of gentle firmness and persuasive love ...⁹⁵

W. Hamilton Jefferys of St Luke's Hospital at Shanghai advised medical missionaries that they would save themselves “endless trouble” and their patients “endless ingenuity” if they were to limit their “rules to the bare necessities and extend [their] elasticity to the utmost degree short of, and sometimes past, the breaking point”. In his own hospital, any rules were restricted to forbidding gambling and cooking or heating water, “except on the stove provided”. Patients who refused treatment were required to leave. He advised breaking a rule that patients needed permission to leave the ward and his last rule was “to say yes unless good reason not to”. His patients “may smoke and talk all night” and friends could come and go, or not go, as they pleased. They often slept on the floor next to the patient and ate hospital food, as long as they paid for it. He cited times when a patient had had as many

⁹² Smith, *Fortune-tellers and Philosophers*, p. 87.

⁹³ I have not been able to locate a copy of McCartney's calendars and he does not make it clear whether they were Christian or Chinese. It is most likely that it followed the example of the simple calendar, produced by the American Presbyterian Press at Shanghai, which included both Chinese and Western months and days. (see Plate 58). *English and Chinese Calendar: 1893*, 1893, American Presbyterian Mission Press, Shanghai.) Missionaries who produced calendars were advised, in 1891, that giving the “hour of eclipses” wrongly was “very prejudicial to the reputation of Christianity”. “North China Mission American Board: Resolution” *Chinese Recorder* 22, no. 7 (1891): p. 342.

⁹⁴ The practice was “continued” in 1908 but is not clear when it was started. *Gouldy Memorial Hospital, Methodist Episcopal Church, Chungking, West China, 1908*, p. 7. Others discovered the value of the calendar and missionary societies started producing them in large numbers. According to the U.S. Consular Service in China, “no form of advertising is more popular with the Chinese than an attractive calendar issued toward the Chinese New Year”. E.M. Merrins, “Foreign Patent Medicines in China - Editorial” *CMMJ* 31, no. 4 (1917): p. 317.

⁹⁵ Originally published in the Edinburgh M.M. Society's Quarterly Paper. P. Anderson, “Foreign Nurses for Chinese Hospitals” *CMMJ* 10, no. 1 (1896).

as fifteen visitors at one time.⁹⁶ The central role of evangelism in a mission hospital goes some way to explain the reason for such advice and was enunciated by Miss G.L.Thacker, who wrote in 1912:

Hospital Rules are, of course, necessary, but any rule the obeying of which seriously detracts from a patient's idea of comfort may make him or her less receptive to the Gospel.⁹⁷

Jefferys deftly summed up the essential difference between hospitals in China with those in America, from the point of view of the control over patients' behaviour, when he wrote

the hospital is far more homey and far more human than eleven-tenths of our rule-trodden institutions in the dear homeland, and it suits the Chinese patients very well indeed.⁹⁸

Length of Stay – the Evangelists' Dilemma

The desire to influence patients religiously played a role in the length of time a patient would stay in a hospital in China. Patients were more likely to have been encouraged to stay longer than they would have had they been in America. Many factors affect the average time a patient spends in hospital, whether in America or China, which makes simple comparisons risky. These factors include the mix of patients in terms of medical and surgical cases or, if mainly medical, the ratio of acute to chronic conditions; the type of treatment regimen in use, which can be related to the level and type of technology or staff available; seasonal conditions which affect the types of diseases encountered; and the presence of epidemic, or famine, in the locality. Less directly, where the patient lived, the level of support they had in the neighbourhood of the hospital and cultural beliefs all had an effect.

In America a general decrease in the length of a hospital stay coincided with the emphasis, in the newly established hospitals, on catering for acute rather than the chronic cases such as had predominated in the earlier almshouse-type of institution. In an effort to restrain

⁹⁶ Jefferys and Maxwell, *Diseases of China*, p. 7.

⁹⁷ Thacker, "How Best to Obtain": p. 341.

⁹⁸ Jefferys and Maxwell, *Diseases of China*, p. 8.

rising costs associated with new technologies and improved facilities for private patients, hospital administrators attempted to shorten hospital stays. They succeeded to the extent that between 1870 and 1900 the average stay dropped from “roughly six weeks to one closer to three”.⁹⁹

In China, most medical missionaries concentrated more on the practice of surgery than in America. There were a number of reasons for the surgical focus: western therapeutics at the time were not demonstrably more efficacious than Chinese except for:

inoculation for smallpox; quinine therapy for malaria ... ; a certain number of medicinal plants not employed by Chinese doctors, such as digitalis; analgesia (e.g. using opium) and anesthesia; and even before anesthesia and antisepsis, a range of surgery including control of bleeding ... and circa 1900 Chinese medicine also had a greater base of recorded effective drugs than Western medicine.¹⁰⁰

Although China had a rich history of famous, probably legendary, surgeons performing ‘amazing’ operations stretching back to the sixth century BCE, surgery was never a major component of traditional medicine. In Qing China the practice of *waike* 外科, which included but was not confined to surgery, was limited to acupuncture; counter-irritation measures such as pinching the skin, application of plasters (blisters) and moxa; simple operations, including for harelip and entropion; and castration.¹⁰¹ Western surgery, in particular of the eye and the removal of cumbersome, disfiguring tumours, provided a dramatic demonstration of the medical missionary's skill. The missionaries hoped that, in addition, it would be seen as evidence of their technological superiority, which they believed to be a consequence of “Christian civilization”. Kilborn noted that his practice was

⁹⁹ Rosenberg, *The Care of Strangers*, p. 289.

¹⁰⁰ Zhao Hongjun, "Jindai Zhongxiyi lunzheng shi (History of the Modern Controversies over Chinese vs. Western Medicine) introduction and summary by Nathan Sivin" *Chinese Science* 10 (1991): p. 22.

¹⁰¹ According to Thomson, the use of moxa “dates to periods long preceding the dawn of actual history, and which seems peculiarly Chinese” and was “prepared by making a small cone of the flowers of amaranthus, or of the downy fibres of the bruised stem of a species of artemisia, and is used by setting this cone on fire on the part affected”. Jos. C Thomson, "Surgery in China: Section I - The History and Present Position of Chinese Native Surgery" *CMMJ* 6, no. 4 (1892): p. 226. Joseph Needham wrote that “the acupuncture technique, was from ancient times onward thought most valuable in acute diseases, while moxa was considered more appropriate in chronic ones, and even for prophylactic purposes too”. Joseph Needham, *Science in Traditional China: A Comparative Perspective* (Cambridge, Massachusetts: Harvard University Press, 1981), p. 85. See also discussion: Christopher Cullen and others, "Discussion: Relative Lack of Dissection in China" *EASCI Discussion List* (2000).

comprised of markedly more surgical than medical cases partly, he thought, “because the superiority of scientific surgery [was] more easily demonstrated to the Chinese than that of scientific medicine”.¹⁰²

The mix of surgical to medical cases in a hospital affects the average length of a hospital stay but few hospitals in China during the period under review reported their medical and surgical patients separately. The great majority gave total patient numbers, often divided into male and female, with a list of operations undertaken.¹⁰³ Most reports noted that surgical cases predominated but the few reports where data are available illustrate the difficulty of making generalisations. For example, in 1916 at the *Hua Mei* Hospital run by American Baptists at Ningbo the ratio of medical to surgical cases was 1: 1.53.¹⁰⁴ This figure is much lower than that provided by Park for the hospital run by the MEM at Suzhou, where the ratio (in 1914) was 1 : 2.63.¹⁰⁵ In Shanghai, at St Luke's Hospital for the Chinese, one of the oldest hospitals in a city with a long and extensive contact with foreigners, the situation seems to have been different from the rest of the country. Here, in 1904, the number of medical cases admitted to hospital was roughly equal to surgical, 398 to 468, or (1 : 1.18)¹⁰⁶ The author of the report noted that every year they had witnessed a “marked increase in the quantity and severity of the accidental surgery ... due to the growing shipping and manufacturing interests of fast-growing Shanghai”. He lays the blame for this at the feet of foreigners but equally attributes the “confidence of the natives in Western scientific methods [which] increases in leaps and bounds” to the efficacy of foreign surgical methods.¹⁰⁷

¹⁰² Kilborn, *Heal the Sick*, p. 197.

¹⁰³ As Rosenberg pointed out, in relation to antebellum hospitals in America, many “surgical” patients were admitted but few operations undertaken. Treatment more often consisted of “diet and rest, the regular changing of dressings, and the healing powers of nature”. Rosenberg, *The Care of Strangers*, p. 28. In China, although more operations would probably have been performed on patients classified as “surgical” once anaesthetic and aseptic surgery were common, there would have still been a discrepancy between the two.

¹⁰⁴ J.S. Grant, *Wha Mei Hospital Report for 1915* (Ningbo: American Baptist Foreign Missionary Society, 1916) ; J.S. Grant, *Wha Mei Hospital Report for 1916 in connection with the American Baptist Foreign Missionary Society, Ningpo, China* (Shanghai: Presbyterian Mission Press, 1917).

¹⁰⁵ Park and Snell, *Medical Work: Soochow Hospital Report*, p. 3.

¹⁰⁶ "Hospital Reports: St. Luke's Hospital for Chinese, Shanghai" *CMMJ* 18, no. 1 (1904): p. 38.

¹⁰⁷ *Ibid.*

In choosing to accept patients for surgery rather than those suffering from chronic conditions, for whom they could do little, missionaries faced a dilemma. Their principal and guiding purpose was evangelical and the longer a patient stayed with them in the hospital the better their chance of influencing them to accept Christianity. As Hudson Taylor¹⁰⁸ had apparently remarked to John Anderson:

chronic diseases are God's way of bringing people to himself, and that although from a medical point of view they are rather hopeless, they are very hopeful from the preacher's standpoint.¹⁰⁹

Cole expressed the sentiments of many of his counterparts when he referred to his female patients at Ningbo who were "under treatment for three or four months, which gives us a good opportunity for teaching them".¹¹⁰ A number of patients appear to have taken up almost permanent residence in hospitals. Eliza Wells spoke, in 1904, of "a girl who has been an inmate of the hospital for several years ... she knows the gospel well, having heard it many, many times".¹¹¹ On the other hand, if they took in long-term patients the number of people who would come under their influence was diminished.¹¹² It was the perennial question of quantity versus quality, with the answer depending on whether the medical or religious imperative was paramount. The missionaries wanted it both ways – greater numbers and longer exposure. The tension created between these twin aims required a balancing act. They took in a mix of patients, surgical and medical, and encouraged them to stay long enough for the fullest recovery and most religious influence, but not so long as to take up beds sought after by potential patients and converts. The author of the first annual report of the Philander Smith Memorial Hospital at Nanjing, noted that they looked to the inpatients, rather than outpatients, for results of religious work and had observed that:

Many will accept the Gospel much as they take their medicine, seeming to think it is the way to do it at a foreign hospital, and that it will please us and gain

¹⁰⁸ The founder of the China Inland Mission. See fn. 77 page 167.

¹⁰⁹ John A. Anderson, "Medical Work at T'ai Chow-fu" *CMMJ* 19, no. 5 (1905): p. 212.

¹¹⁰ Cole, *Twenty-third Annual Report: C.M.S. Hospital, Ningpo*, p.15.

¹¹¹ Eliza Wells, "London Missionary Society, Report for 1904, Hongkong 1904," Hongkong.

¹¹² This dilemma bore similarities to another faced by medical missionaries. Was it more desirable to treat large numbers in the dispensary; spread the word widely whilst iterating in the countryside; or spend more time with fewer in hospital?

favors. Others are probably honest in their desire to know the truth and take some pains to learn. A few other (sic) again, are not willing to hear, and will roll themselves up in their bed and cover their head when a service is held in the ward.¹¹³

As Francis Tucker commented: “results are most marked with the inpatients, those who stay in the hospital from several days to several months” and so, during 1904, the hospital’s “512 inpatients were urged to stay as long as they would that they might get the more physical and spiritual benefit”. This policy had resulted in much overcrowding but little extra expense (for dressings and medicine only) since patients furnished their own food and bedding.¹¹⁴ One of the earliest hospitals in which the shift of imperative from religious to medical was observable was the Hospital for Chinese at Shanghai, established by the LMS in 1844. In 1905, when hospitals in the interior were still young and endeavouring to gain acceptance, this hospital was fifty years old and a familiar part of the Shanghai medical scene. It adopted a policy of limiting admission to those who absolutely needed hospital treatment and reported an example of its success:

For instance, 454 of the native police force were warded during 1904. During the year [1905] only 152 were warded, the rest being treated as out-patients, getting well just as soon, and probably getting back on duty the sooner.¹¹⁵

Without the religious imperative, hospitals in America had a simpler problem; they could concentrate on making efficiencies in hospital administration and control the type of patient they admitted in order to gradually reduce the length of time spent in hospital. The Auburn City Hospital 1910 annual report provides useful relevant data covering a number of years. In 1906, for example, there were 1.8 surgical cases to each medical case and the average stay was 18.5 days.¹¹⁶ McCartney was one of the few medical missionaries who regularly

¹¹³ Robert Case Beebe, "Hospital Reports: Philander Smith Memorial Hospital, Nanking" *CMMJ* 1, no. 3 (1887): p. 178.

¹¹⁴ Tucker and Tucker, "Williams' Hospital of the American Board": pp. 258-9.

¹¹⁵ "Hospital Reports: Fifty-ninth Annual Report of the Chinese Hospital (Shantung Road) Shanghai, 1905" 20, no. 5 (1906): p. 231-2.

¹¹⁶ Calculated from a count of cases recorded. *Auburn City Hospital*, p. 26. It is appropriate to use the Auburn City Hospital for comparison as its statistics compare favourably with the 19 days, which was the “average length of stay in non-sectarian institutions” in 1904. Risse, *Mending Bodies*, p. 471. The equivalent statistics for the Lancaster Hospital reveal a similar story: in 1905-6, when there were two surgical cases for every medical case, the average length of stay was 17.95 days. Calculated from data contained in *Lancaster Hospital*, 42. In St. Johns, several years later in 1913 - 4, the medical to surgical ratio was still in the same

reported the number of “hospital days”. Thus the average length of stay can be calculated and a comparison made with the situation at the Auburn City Hospital over a similar period. In each year between 1904 and 1910 patients in the Auburn City Hospital spent fewer days in hospital on average than patients in McCartney’s hospital at Chongqing. At Auburn the average length of stay gradually

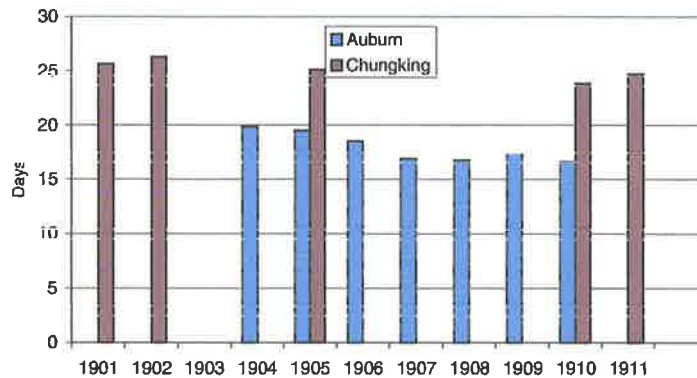


Figure 16: Length of Stay, Auburn and Chungking Hospitals
Sources: Auburn City Hospital: Thirty-first Annual Report of the Board of Managers p. 26 and Chungking Hospital Reports 1901-1911.

declined from twenty to a little over sixteen and a half. At Chongqing between 1901 and 1911, on the other hand, the average length of stay was more consistent: hovering around twenty-five days.¹¹⁷ (See Figure 16)

Specialisation

There were neither enough medical people nor hospitals anywhere in China at the turn of the century to allow for the specialisation, within the one institution or between institutions, such as was occurring in America and Britain. Other than isolated instances of establishments for a particular class of patient – an insane asylum (by Kerr at Canton¹¹⁸); a

range (1 : 2.1) and the average length of stay was shorter again at 17.0 days. Sisters of Mercy, *St. John's Hospital*, p. 39.

¹¹⁷ This figure was very close to that reported by the LMS Men's Hospital at Hankou 汉口 in 1904 – twenty-five and a half days. "Hospital Reports: London Mission Men's Hospital at Hankow" *CMMJ* 18, no. 3 (1904): p. 149. As hospitals became more sophisticated, and shifted their emphasis from religious to professional, the time people spent in hospital probably decreased closer in line with their counterparts in America. For example, in 1917 when the Soochow Hospital had a number of specialist departments and classes of accommodation the average stay, for all patients, was a mere 12.5 days. This increased to 14 days if those who stayed one or two day were removed. The group of patients who stayed longest were those being treated for opium addiction. The length of treatment also varied with the class of patient: third class patients staying longest. John A. Snell, *Report of the Soochow Hospital, Soochow, China* (Shanghai: The Oriental Press, 1917), pp. 7-8.

¹¹⁸ Opened in 1898, for history see C.C. Seldon, "Work Among the Chinese Insane and Some of its Results" *CMMJ* 19, no. 1 (1905).

leper hospital (by Kuhne at Dongwan 东莞¹¹⁹) or a sanatorium for tuberculosis sufferers (by Main at Hangzhou¹²⁰) – the majority of hospitals still had only a single medical missionary, assisted by any Chinese he or she was able to train. This did not mean that all hospitals dealt with the same range of medical problems.

A survey of the lists of operations undertaken by various hospitals reveals that some degree of specialisation did occur, and it seems to have had as much to do with the reputation of the physician as any particular location or peculiar timing. Thus the Canton Hospital, which was made famous by Peter Parker for the number of bladder stone operations, continued to enjoy its reputation under Kerr, who, it was said, had performed more “stone operations” than any “other known surgeon, barring one”.¹²¹ Similarly, in 1904, one third of Samuel Cochran's 65 hospital patients at Huaiyuan 怀远 in Anhui were operated on for the same complaint. This increased to 36 the following year and to 40 in the eight months to April 1906.¹²² Cochran had “discovered and exploited a similarly profitable field [as Kerr]”.¹²³ In his 1910 work, Jefferys noted that *vesical calculus* (bladder stone) was “found pretty much all over China” and most hospitals would meet between one and ten cases each year. It was particularly prevalent in Guangdong and Anhui. As his information was based on reports from physicians, rather than any epidemiological survey, he cannot have known whether there were in fact more bladder stones in a particular population or simply that people sought out the doctors who had a reputation for expertise in this specialty.

Throughout the primary literature there are many stories of hospitals successfully treating one patient for a particular complaint and subsequently being approached by others (from the patient's home town) with the same complaint. Also, many doctors reported the

¹¹⁹ Opened in 1899. For history see John E. Kuhne, “The Leper Asylum at Tungkun” *CMMJ* 21, no. 1 (1907) and G Olpp, “The Rhenish Mission Hospital, Tungkun” *CMMJ* 23, no. 3 (1909).

¹²⁰ Main's men's hospital (1884) grew out of an Opium Refuge (1881) to which was added a women's hospital (1894). In addition to the “Convalescent and Fresh-air Homes”, he established small leper asylums (1889), a Maternity Hospital (1906). Main, “Short Sketch of Work in the Hangchow Medical Mission”. For a more complete history, see De Gruche, *Doctor Apricot*.

¹²¹ Jefferys and Maxwell, *Diseases of China*, p. 523.

¹²² He reported “almost daily [being] forced to turn away needy cases; many of them suffering constant agony”. Samuel Cochran, “Fifth Report of the Hwai-yuen Hospital, September 1st., 1905 - April 30th, 1906” *CMMJ* 21, no. 2 (1907): p. 98.

¹²³ Jefferys and Maxwell, *Diseases of China*, p. 523.

considerable distances travelled by some patients to get to the hospital.¹²⁴ It would seem that a specialty arose, not so much out of training or conscious intention, but from the interaction of demand based on reputation and expertise. Increased practice of a particular operation would improve the doctor's performance, and hence his or her reputation, and demand would rise correspondingly, establishing a cycle that was beneficial to doctor and patient alike. By comparison, specialty practice in America had developed, throughout the nineteenth century, from being considered a "style of quackery" to a lucrative business based on post-graduate training, often in Germany or France.¹²⁵

The pattern observed in China seems to have more in common with what Chang Che-Chia, who outlined the role and place of traditional physicians in Qing society, has described. In particular, he canvassed the role played by a doctor's "reputation" in traditional Chinese medical practice.¹²⁶ Physicians could be informally classified on a continuum from the most respected, "famous physicians" (*mingyi* 名医), through "literati physician" (*ruyi* 儒医) to "ordinary" (*shiyi* 时医). Another class, hereditary physicians (*zuchuan shiyi* 祖传世医) practised healing on the strength of inherited, secret prescriptions. These classifications were not exclusive: while all *mingyi* were also *ruyi*, in that they were Confucian scholars who also studied medicine, not all *ruyi* were *mingyi*. Famous doctors could charge higher fees but relying on reputation made them more vulnerable when they failed. The skills of *shiyi* were generally considered "not outstanding" and a label of "hereditary physician" was descriptive only and did not imply any particular level of expertise. The Qing government had abandoned earlier systems of examining medical practitioners and although the labels "more or less graded the quality of the physician" they were not assigned under any defined criteria. As far as competence within a class was concerned, people had to find other ways to judge a doctor. Doctors as a group were not generally highly regarded in Qing society and the main concern of people, and government, was on how to recognize a "quack" – of

¹²⁴ Some examples are discussed at page 240 ff.

¹²⁵ For an overview of the rise of specialisation in Western hospitals, see Rosenberg, *The Care of Strangers*, pp. 169-75.

¹²⁶ See Chapter III, Unofficial Physicians – The Traditional Physicians in Late Imperial Chinese Society, of Chang Che-Chia, "The Therapeutic Tug of War: The Imperial Physician-Patient Relationship in the Era of Empress Dowager Cixi (1874-1908) (Ching-Qing)" (PhD, University of Pennsylvania, 1998), pp. 55-83.

whom there were many. Chang describes the strategies the people adopted to discriminate between physicians. First, they learnt as much as they could about medicine so that they could question and effectively test the doctor. This option of “knowing medicine” would not have been available to potential Chinese patients of missionaries as they lacked access to Western medical knowledge. Another technique was to hide their symptoms from a doctor and assess his competence according to whether he could identify their problem, and lastly they could rely on the recommendation of friends and family. This last method “solved the conflict between the necessity to test the doctor’s ability and the importance of trusting a doctor”.¹²⁷ One can assume Chinese people would have carried this aspect of Chinese medical culture into their dealings with medical missionaries. That this was the case seems to be borne out in an observation by Barton, of the CMS Hospital at Ningbo who noted that

the particular branch of medicine in which the foreign physician individually excels becomes speedily known among the Chinese. Probably there is no country where a man's reputation spreads faster than in China. This is easily demonstrated by a comparative scrutiny of the surgical procedures in different hospitals where there is a predominance of certain operations.¹²⁸

As well as the lists of operations, further evidence of the role that reputation played in the specialty is evident in the many descriptions of people travelling excessive distances to consult particular doctors. It must be remembered that, especially the early medical missionaries with whom we are concerned in this study, were rarely trained specialists in any particular field of medicine. China afforded them the opportunity they would have been denied in America: to undertake a practice limited only by their confidence. Physicians in America may have performed simple surgical procedures but when they got to China many of these same doctors, often alone and isolated from their peers, could undertake heroic operations. Not all of them became specialists in China but a significant number did and it is possible to attribute this directly to their being away from home but also being acted

¹²⁷ Ibid., p. 76.

¹²⁸ His own practice that year had been dominated, on the medical side, by cases of “tuberculosis, syphilis, dysentery, and intestinal parasitic infections [which were] responsible for a very high percentage of cases admitted”. H. Barton, *Twenty-ninth Annual Report: C.M.S. Hospital, Ningpo* (Ningpo: C.M.S. Medical Mission, 1915), p.9.

upon by Chinese custom. Cole acknowledged the role reputation played in his practice when he described most Chinese as being unwilling to consult him without a recommendation from someone who has “been in and *actually come out of it again* without having lost a liver or eyes or some other personal property at the hands of the foreigner”.¹²⁹

Rosenberg portrays specialisation in America as being essentially driven by supply whereas in China, it would appear that it could better be described as being driven by demand. So although the end result may have been similar, the routes taken were different.

Day Surgery – an Innovative Solution to a Dilemma

As is obvious to anyone who has lived in China, Chinese who have to travel prefer to do so, if possible, “safe within [their] net of relationships”.¹³⁰ The traveller is handed from one relative, “friend”, or “friend of a friend”, to another who, as locals, can organise accommodation and anything else he may need. There is ample evidence that many Chinese travelled long distances for treatment in the missionary dispensaries and hospitals. The report of the Methodist New Connection Mission (MNCM) at Leling 乐陵, for 1892 described patients coming “from 521 different towns and villages, covering the large area of 17,000 square miles”.¹³¹ Similarly, A. Lyall reported that in the course of a year at Swatow they had patients “coming from 1,600 to 1,800 different towns and villages”.¹³² Cecil Davenport referred to patients who had regularly “come scores, or may be hundreds of miles”. In 1905 he had had twenty-six “scholars from a city 100 miles west” who came to break off their opium habit.¹³³ Another, William Wilson, who reported using his ‘cure for the opium habit’ as lure to attract patients who would not come into hospital in the interior, had patients who came from “cities and towns up to 120 miles away”.¹³⁴

¹²⁹ Cole, *Twenty-third Annual Report: C.M.S. Hospital, Ningpo*, p. 5.

¹³⁰ Bill Purves describes how his workers organised buying trips for the factory he managed in the late 1980s in western Guangdong. Bill Purves, *Barefoot in the Boardroom: Venture and Misadventure in the People's Republic of China* (Sydney: Allen & Unwin, 1991), pp. 136-7.

¹³¹ "Methodist New Connection Mission, Laoling" *Chinese Recorder* 1892.

¹³² Lyall, "Swatow Medical Mission": p. 27.

¹³³ Cecil J. Davenport, "L.M.S. Hospital, Wuchang" *CMMJ* 19, no. 6 (1905): p. 265

¹³⁴ Wilson, "Hospital Reports: Sui-ting-fu, Wan Hsien, via Ichang": p. 122.

Such a patient, who had to move away from his familiar surroundings, would seek out, through his contacts, people who could ease his passage through unfamiliar territory and who could look out for him or act on his behalf when he reached his destination. If his medical problem was not severe enough to demand hospitalisation, he might be lucky enough to have somewhere in the hospital town where he could live while visiting the dispensary for treatment. If he was less fortunate he may have to spend time in a local hotel and, failing that, he may have to be admitted to the hospital.

This phenomenon, coupled with the overcrowding and poor physical conditions in many hospitals, gave rise to a distinctive phenomenon, which sounds modern today: the notions of “day surgery” and “hostel” accommodation. The Tuckers, one week in 1912, had their largest ever number of inpatients, nearly twice as many as they had room for: “some sleep in their carts, others on the floor of an old building, well propped with timbers to keep it from falling, and many on the hospital porches”. Other patients “complain that the rooms, with their broken brick floors and decrepit roofs, are not suitable to live in and hire quarters away from our dilapidated buildings.¹³⁵ Samuel Cochran at Huaiyuan, writing in 1905, bemoaned the fact that his buildings were so unsuitable that patients had to stay in neighbouring inns. He lost the opportunity to give “close medical attention and the influence of daily instruction in the Christian truth.”¹³⁶

In some places, enterprising Chinese established hotels or inns near hospitals to provide familiar-style accommodation for wary patients. Charles Lewis¹³⁷ at Baodingfu describes one such establishment near his hospital.

A man runs an inn, which is called the “Hygiene Hotel” (*weisheng tien*) ... many as soon as they are able to leave the hospital, go there to live and come to the hospital for dressings. The inn can probably accommodate thirty patients. It is filled mainly with discharged patients from our hospital.¹³⁸

The medical missionaries saw some considerable benefit in this arrangement and at least

¹³⁵ Tucker, Tucker, and Sawyer, *A Chinese Revolution*, pp. 8-9.

¹³⁶ Samuel Cochran, “Hospital Reports: Hwai-yuen Hospital, An-hui” *CMMJ* 19, no. 2 (1905): p. 121.

¹³⁷ See page 80 ff.

¹³⁸ Speer, “*Lu Taiifu*”, *Charles Lewis*, p. 84.

one, Arthur Peill at Cangzhou in Hebei, reported in 1904 that during the past year he had built a “commodious and very convenient inn, which [was] also a food-shop for the patients and an annexe to the wards”.¹³⁹

In America, where the availability of medical care was considerably greater and clinics within easy reach of the majority, people did not need to be admitted to hospital but could attend the dispensary or outpatients clinic on a regular basis for ongoing monitoring, treatment or dressing. Snell asserted that in China somewhere between 50 and 75 percent of all inpatients were in fact suffering from minor ailments that could be adequately treated in the dispensary. The problem was that many travelled considerable distances to visit the sparsely situated hospitals and, if they had no friends or relatives with whom to stay, had to be admitted to hospital. Snell suggested that, as new hospitals were built, the old buildings be retained as hostels.

Why not provide a good but an inexpensive building where this ambulatory patient can pass the time. Provide for him entertainment, religious and general instruction. His disease is not so severe but that he can take in a little instruction and [we can] continue to care for them about as we have been.

Those who did need a major operation could still enter the hospital “the day before operation” but be released in a “week or ten days and kept in the hostel for a few days longer before returning home”. This would leave the new, modern hospital for “those saturated with disease” who would have the

constant attention of skilled, faithful, loving nurses and the expert attentions of competent doctors. Many more of this class will then be sent home well and happy instead of in coffins.¹⁴⁰

This brings us to how dying patients were catered for in the missionary hospital.

Dying and Death

From the earliest days medical missionaries were concerned about how best to deal with death in the hospital. It was commonly agreed among medical missionaries that it would be

¹³⁹ Arthur D Peill, “Roberts' Memorial Hospital, T'sang-chou” *CMMJ* 18, no. 2 (1904): p. 99.

¹⁴⁰ John A. Snell, “The City Hospital” *CMMJ: Hospital Supplement* (1921): pp. 43-4.

ideal if there were no hospital deaths. This was obviously impossible, since more often than not, the people who came to them only did so after their own doctors, folk healers or priests had failed. The best they could do, therefore, was to make every effort to minimise the risk. The missionaries were concerned for their own reputation, safety and legal position but most often couched descriptions of the strategies they adopted in terms of Chinese beliefs, and what they called “superstition”. The first tactic, to avoid deaths during or following surgery, was to try to dissuade anyone who did not have an excellent prognosis from going ahead with an operation. If they were not able to convince the patient his friends and relatives would be brought into the discussion to add weight to the argument. If the decision was still made to proceed:

We make it ‘sine qua non’ that there shall be one or more friends present at the operation, in order to see fair play. The plan works splendidly. There is afterwards no suspicion that we have plucked out an eye or mysteriously extracted blood or ‘virtue’ or what not. The Chinese are wonderfully suspicious and inventive and we need on that account to do everything quite openly.¹⁴¹

This plan, which had been introduced for their own protection, had proved successful at the LMS hospital at Xiaogan 孝感 and, “a thing not by any means to be despised in China, the good name and ‘luck’ of the hospital has been maintained”.¹⁴² In the event that death appeared imminent, this hospital, in common with most others

kept in mind the desire of every Chinese to die in his own home and have frankly told the man and his friends the condition of affairs. Acting in this way we have never heard a word of reproach when the patient was removed or after his decease.¹⁴³

Most hospitals reported low inpatient death rates. For example, only eight of the 503 inpatients who passed through Cole's hospital in 1906 died in hospital but “many others were taken out by relatives on point of death, because of superstitious fears.”¹⁴⁴ Cole

¹⁴¹ "L.M.H., Hiau-kan Annual Report" *CMMJ* 17, no. 3 (1903): p. 125.

¹⁴² Henry Fowler, "L.M.S. Hiau Kan Medical Mission Report for 1902 1913," p. 7, *China India Local Reports*, 1913, London.

¹⁴³ "L.M.H., Hiau-kan Annual Report": p. 125.

¹⁴⁴ Cole, *Twentieth Annual Report: C.M.S. Hospital, Ningpo*, p. 4. Kilborn recorded that in his early days they had “a relative or “street elder” to take them away” but that this had become less necessary as time went on. Kilborn, *Heal the Sick*, p. 200.

elaborated in 1909, "Chinese dread, as a rule, that their relatives should die outside their own homes, fearing that their spirits would become wanderers".¹⁴⁵ As James Watson has explained, Chinese and European beliefs about the meaning of death differed. Whereas in Europe it was thought the body and spirit parted company at the moment of death, in China separation of the spirit from the body too early "before the ritualised expulsion from the community was thought to bring disaster". The spirit was easily disorientated, particularly by movement, and might become separated from the body. Keeping it and body together was "one of the primary goals of Chinese funeral rites".¹⁴⁶ Susan Naquin's description of the circumstances surrounding death in North China in the nineteenth and early twentieth century (1870-1940) may also shed light on why the Chinese did not want to die away from home. She explains that it was considered unlucky to die "on the communal *k'ang*". At the last opportunity, the dying person would be transferred, on a flat board, to a special room where the family would gather and the "formal expression of grief" would begin with the dying person's last breath.¹⁴⁷ Thus, if the person died away from home, not only might the spirit be prematurely separated from the body but also, the family might not have been able to carry out their duties to the dead person. Thus, removing patients before death would have served the interests of the hospital and those of their Chinese patients and their families.

How to cope in the unfortunate instances when a death did happen within the hospital exercised the minds of all medical missionaries. Although before 1916 autopsy and dissection were illegal in China Butchart recommended that hospitals include a morgue in their plans.¹⁴⁸ A body could be "locked up in a secure way, so that it cannot by any

¹⁴⁵ Cole, *Twenty-third Annual Report: C.M.S. Hospital, Ningpo*, p.14.

¹⁴⁶ See James L. Watson, "Funeral Specialists in Cantonese Society: Pollution, Performance, and Social Hierarchy" in *Death Ritual in Late Imperial and Modern China*, ed. James L. Watson and Evelyn S. Rawski (Berkeley: University of California Press, 1988), pp. 122-3 ; James L. Watson, "The Structure of Chinese Funerary Rites: Elementary Forms, Ritual Sequence, and the Primacy of Performance" in *Death Ritual in Late Imperial and Modern China*, ed. James L. Watson and Evelyn S. Rawski (Berkeley: University of California Press, 1988), p. 8.

¹⁴⁷ Susan Naquin, "Funerals in North China: Uniformity and Variation" in *Death Ritual in Late Imperial and Modern China*, ed. James L. Watson and Evelyn S. Rawski (Berkeley: University of California Press, 1988), p. 38.

¹⁴⁸ Ministry of the Interior, "Regulations for Dissection in China: issued by Ministry of the Interior, Nov. 22nd, 1913. Government Gazette 563. Supplementary Regulations issued April 22nd, 1914. Order No. 85 of the Board of the Interior." *CMMJ* 30, no. 2 (1916): pp. 126-30.

possibility be mutilated and hence spread an evil report". He advised that the "dead room" should be placed so that "the body can easily be removed through a back gate in as quiet a manner as possible". This would have the dual purpose of protecting the hospital's reputation and being sensitive to the Chinese, whom he described as having "a great prejudice to its being removed by the front way".¹⁴⁹ A survey of the plans of hospitals that provided such a room reveals that most took this advice. For example McCartney described the "kitchens, wash house, dead house and servants dining room, [as being] in the rear with back doors opening on the city wall".¹⁵⁰

Few hospitals reported that they had experienced significant repercussions from death in hospital. Somerville's experience in his LMS hospital at Wuchang seems to have been typical. A death had caused

not only no trouble, the others did not stampede, those waiting to come in did not lessen and none refused to be operated on. It was like a hospital at home.¹⁵¹

Butchart was assuming that there would be someone to whom bodies could be given for burial but when this was not the case it raised another level of concern for many missionaries. Charles Lewis of Jinan suggested in a letter to the editor of the *CMMJ* that hospitals try to get

the Governor (who has some reasonableness) to issue some sort of grant ... putting them on a par with temples as regards the disposal of bodies having died in them.¹⁵²

This would also enable him to take in "this miserable class of patients whom we pity and do not have the heart to turn away to die with no attention at all". It would make it compulsory for the *Ti-pao* (local constable) to take the bodies and dispose of them and if relatives turned up they would be referred to him. Lewis' Chinese assistants, and other Chinese with whom he had discussed this solution, had considered it "a feasible plan". The

¹⁴⁹ Butchart, "Hospital Construction": pp. 101-2.

¹⁵⁰ McCartney, *Annual Report (1901)*, p. 2.

¹⁵¹ C.W. Somerville, *Report of the London Mission Men's Hospital, Wuchang* (Shanghai: American Presbyterian Press, 1905), p. 7.

¹⁵² "Disposal of Patients Dying in Hospital" *CMMJ* 14, no. 3 (1900): p. 197.

editor disagreed: "we would hardly like to be thought of by the people as being in any sense in the same category as temples" but he acknowledged that others may think differently and invited discussion.¹⁵³

In America, on the other hand, death was a common feature of life on the ward until, coinciding with change in the patient population to include more members of the middle class, dying patients were routinely removed from the ward in case the sight of them upset the new, largely paying, patients.¹⁵⁴

In a number of respects patients' experience of hospital in China would have much the same as that of their counterparts in America. In both, patients had to tolerate being the objects of observation and experimentation. As the century wore on and hospitals in China became more organised and more highly staffed, they introduced standardised methods of recording cases that could be used for statistical analysis and epidemiological investigation.¹⁵⁵ But, as this chapter has demonstrated, the similarities were fewer than the differences. In China, segregation of the sexes was absolute; friends and relatives stood in for nurses, cooks and launderers;¹⁵⁶ beds could be communal; quilts took the place of sheets and blankets and lumps of wood replaced pillows; the number of men outnumbered women patients to a far greater degree; patients, who were more likely to be treated by a woman physician, also tended to stay longer; and preaching and Bible reading were ubiquitous. These dissimilarities cannot be explained by recourse to a simple cause. Firstly, they were the result of the interweaving of a number of forces which would have arisen out of operating a medical mission in any foreign country: lack of funds and staff and the primacy of the evangelical imperative while, at the same time, attempting to adhere to contemporary Western notions of best practice. Secondly, distinctiveness, for example the feminisation of

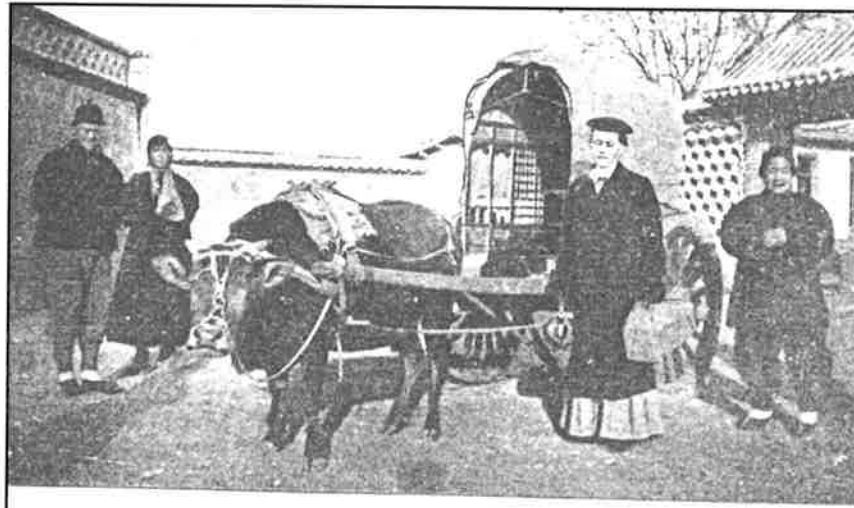
¹⁵³ Ibid: p. 198.

¹⁵⁴ Rosenberg, *The Care of Strangers*, pp. 292-93. In medieval times in Europe, it was considered lucky to die in the monastic hospital among people who would pray for your soul. See Risse, *Mending Bodies*, pp.104-5.

¹⁵⁵ For example see Hadden, "Registration"; George Hadden, "A Standard Clinical Chart" *CMMJ* 32, no. 6 (1918) ; Carl A. Hedblom, "Hospital Efficiency in China" *CMJ* 30, no. 4 (1916) ; L.F. Heimburger, "The Value of Hospital Records" *CMMJ* 35, no. 3 (1921).

¹⁵⁶ For the situation regarding the lack of laundry facilities in Chinese hospitals, see F.E. Dilley, "The Hospital Laundry" *CMMJ* 32, no. 5 (1918).

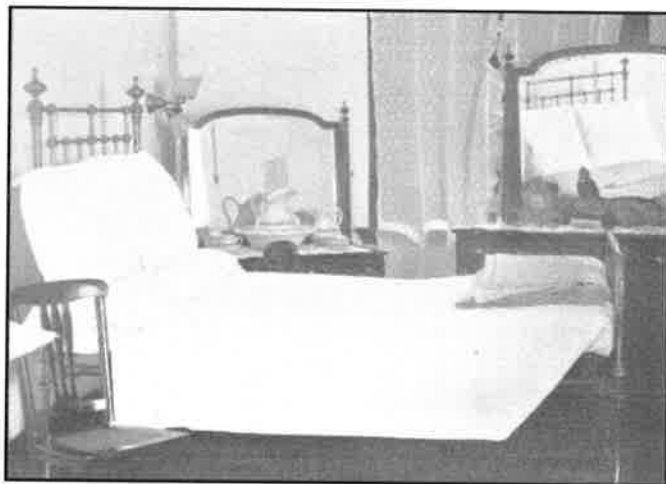
hospitals, could arise from an interaction of several influences: sexual discrimination at home, the opportunity afforded by necessity and a desire to attract Chinese women patients. Thirdly, it is clear that, to a substantial degree, certain differences were due to the missionaries' response to Chinese patients' preferences, cultural practices and beliefs. These included the arrangements made for meals, the laxness of hospital rules and the number and types of people resident in the hospital in addition to patients. All these determined the nature of the American hospital in China and distinguished it clearly from its manifestation in America.



THE DOCTOR'S CARRIAGE

**Plate 53: Susan Tallmon
at Linqingzhou**

Source: Susan B. Tallmon,
*Glimpses of Lintsingchow
Hospital*: A.B.C.F.M., 1910: p. 14



**Plate 54: Private Room,
Lancaster General
Hospital, 1906**

Source: *The Lancaster General
Hospital*: Lancaster: Press of the
New Era Printing Company, 1906:
facing p. 48.



PATIENTS OF MEN'S HOSPITAL, PEKING.

Plate 55: Ward in the An-ting Hospital for Men (APM), Peking

Source: *Hospitals in China*. Medical Mission Series. 1912: p. 11.



Plate 56: Boy Collecting Fuel for his Brother in Hospital

Source: Francis F. Tucker, et al. *A Chinese Revolution* Williams Hospital of the American Board, 1912: p. 15

Plate 57: Dr Shi Meiyu (Mary Stone)

Source: Balme, Harold. *China and Modern Medicine* 1921: facing p. 128.

ENGLISH AND CHINESE CALENDAR.

1893.

CHINESE CYCLE 癸巳 KUEI-SI.

56th and 57th Years of
H. M. QUEEN VICTORIA.

117th and 118th Years of the
INDEPENDENCE OF THE U. S. A.

18th and 19th Years of
H. L. M. KWANG-SHU 光緒.

JAN.	FEB.	MAR.	APRIL	MAY.	JUNE.	JULY.	AUG.	SEPT.	OCT.	NOV.	DEC.
1st & 14th MOONS.	12th & 1st MOONS.	1st & 2nd MOONS.	2nd & 3rd MOONS.	3rd & 4th MOONS.	4th & 5th MOONS.	5th & 6th MOONS.	6th & 7th MOONS.	7th & 8th MOONS.	8th & 9th MOONS.	9th & 10th MOONS.	10th & 11th MOONS.
1 Sun	14 W	15 W	1 W	13 S	1 S	16 M	1 Tu	17 F	18 S	1 Tu	20 W
2 M	16 2 Th	16 2 Th	2 M	14 14	2 Sun	16 2 Tu	2 W	21 2 S	22 2 S	2 M	23 2 Th
3 Tu	16 3 F	17 3 F	3 M	15 15	3 M	17 3 W	3 Th	22 3 M	23 3 Th	3 M	24 3 F
4 W	17 4 S	18 4 S	4 Tu	16 16	4 Tu	18 4 Th	4 F	23 4 M	24 4 F	4 M	25 4 S
5 Th	18 5 M	19 5 M	5 W	17 17	5 F	19 5 F	5 S	24 4 M	25 5 S	5 W	26 5 Th
6 F	19 6 M	20 6 M	6 Th	18 18	6 S	20 6 S	6 Sun	25 5 W	26 6 Sun	6 Th	27 6 F
7 S	20 7 Tu	21 7 Tu	7 F	19 19	7 Sun	21 7 Sun	7 M	26 6 M	27 7 M	7 F	28 7 S
8 Sun	21 8 W	22 8 W	8 S	20 20	8 M	22 8 M	8 Tu	27 6 M	28 8 Tu	8 S	29 8 W
9 M	22 9 Th	23 9 Th	9 M	21 21	9 Tu	23 9 Tu	9 W	28 7 M	29 9 W	9 Th	30 9 Th
10 Tu	24 10 F	24 10 F	10 M	22 22	10 W	24 10 W	10 Th	29 8 M	30 10 Th	10 F	1 10 F
11 W	24 11 S	25 11 S	11 Tu	23 23	11 Th	25 11 Th	11 F	10 Sun	1 11 W	11 S	2 11 S
12 Th	25 12 Sun	26 12 Sun	12 M	24 24	12 F	26 12 F	12 S	11 M	2 12 Th	2 12 Th	3 12 Th
13 F	26 13 M	27 13 M	13 Tu	25 25	13 S	27 13 S	13 M	12 Tu	3 13 F	3 13 F	4 13 F
14 S	27 14 Tu	28 14 Tu	14 W	26 26	14 Sun	28 14 Sun	14 M	13 W	4 14 S	4 14 S	5 14 S
15 Sun	28 15 W	29 15 W	15 Th	27 27	15 M	29 15 M	15 Tu	14 M	5 15 Sun	5 15 Sun	6 15 Sun
16 M	29 16 Th	30 16 Th	16 F	28 28	16 Tu	30 16 Tu	16 W	15 W	6 16 M	6 16 M	7 16 M
17 Tu	20 17 F	17 F	17 S	29 29	17 W	1 17 S	17 Th	16 M	7 17 Tu	7 17 Tu	8 17 Tu
18 W	1 18 S	2 18 S	18 M	1 1	18 Th	2 18 Th	18 F	17 Sun	8 18 W	8 18 W	9 18 W
19 Th	2 19 Sun	3 19 Sun	19 M	2 2	19 W	3 19 W	19 S	18 M	9 19 Th	9 19 Th	10 19 Th
20 F	3 20 M	4 20 M	20 Tu	3 3	20 W	4 20 W	20 S	19 Tu	10 20 F	10 20 F	11 20 F
21 S	4 21 Tu	5 21 Tu	21 W	4 4	21 Th	5 21 Th	21 M	20 W	11 21 S	11 21 S	12 21 S
22 Sun	5 22 W	6 22 W	22 Th	5 5	22 F	6 22 F	22 Tu	21 M	12 22 Sun	12 22 Sun	13 22 Sun
23 M	6 23 Th	7 23 Th	23 F	6 6	23 S	7 23 S	23 W	22 Tu	13 23 M	13 23 M	14 23 M
24 Tu	7 24 F	8 24 F	24 S	7 7	24 Sun	8 24 Sun	24 M	23 W	14 24 Tu	14 24 Tu	15 24 Tu
25 W	8 25 S	9 25 S	25 M	8 8	25 M	9 25 M	25 Tu	24 M	15 25 W	15 25 W	16 25 W
26 Th	9 26 Sun	10 26 Sun	26 M	9 9	26 Tu	10 26 Tu	26 W	25 M	16 26 Th	16 26 Th	17 26 Th
27 F	10 27 M	11 27 M	27 Tu	10 10	27 W	11 27 W	27 Th	26 M	17 27 F	17 27 F	18 27 F
28 S	11 28 W	12 28 W	28 Th	11 11	28 F	12 28 F	28 M	27 M	18 28 S	18 28 S	19 28 S
29 Sun	12 29 Th	13 29 Th	29 F	12 12	29 S	13 29 S	29 Tu	28 M	19 29 Sun	19 29 Sun	20 29 Sun
30 M	13 30 M	14 30 M	30 Tu	13 13	30 W	14 30 W	30 W	29 Tu	20 30 M	20 30 M	21 30 M
31 Tu	14 31 F	15 31 F	31 W	14 14	31 Th	15 31 Th	31 M	30 W	21 31 Tu	21 31 Tu	22 31 Tu

AMERICAN PRESBYTERIAN MISSION PRESS, SHANGHAI, CHINA.

Plate 58: English and Chinese Calendar, 1893. Produced for sale by the American Presbyterian Mission Press, Shanghai.

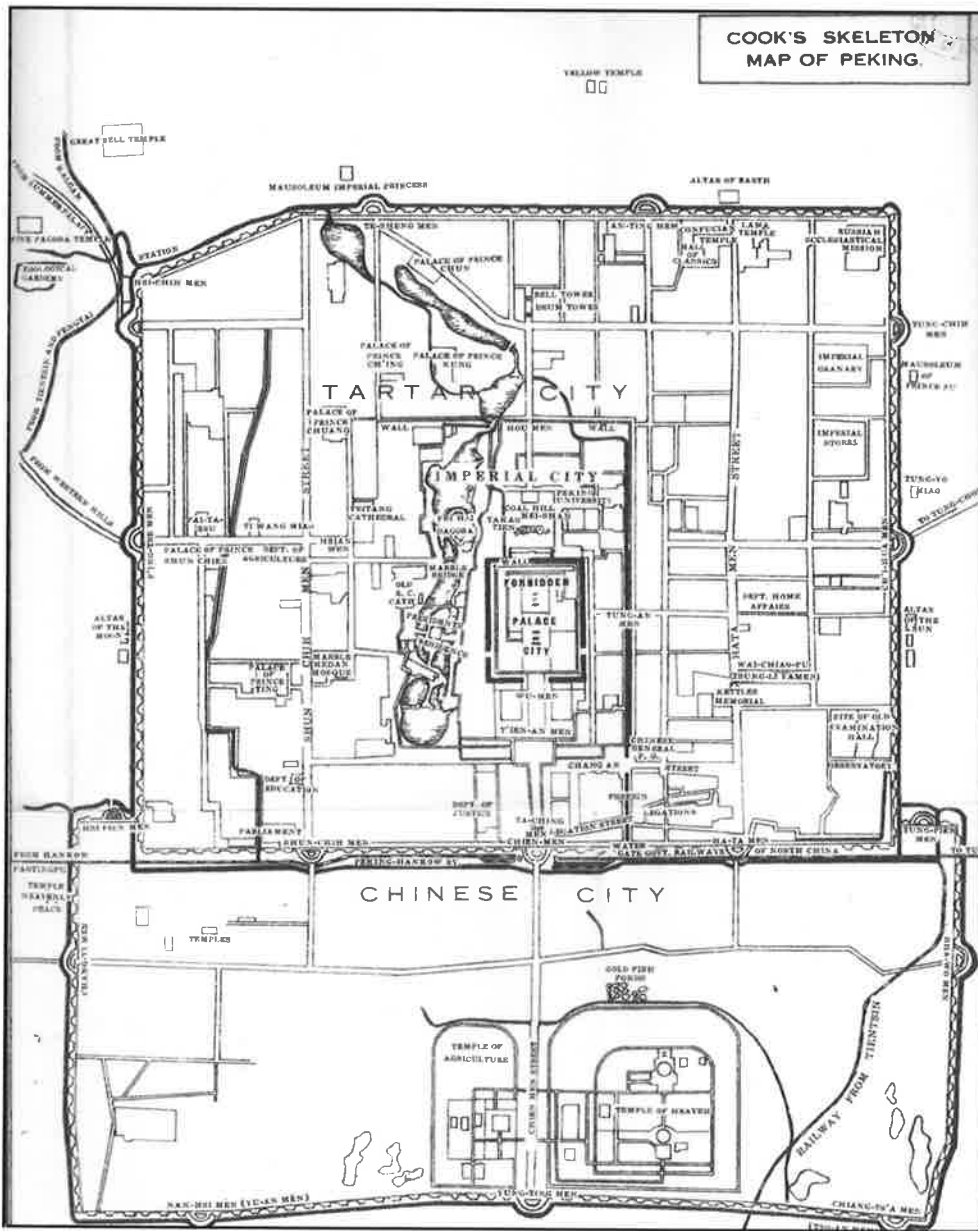


Plate 59: Cook's Skeleton Map of Peking

Source: Bredon, Juliet. *Peking: A Historical and Intimate Description of its Chief Places of Interest*. Shanghai: Kelly and Walsh, Limited, 1922: Facing page 414.

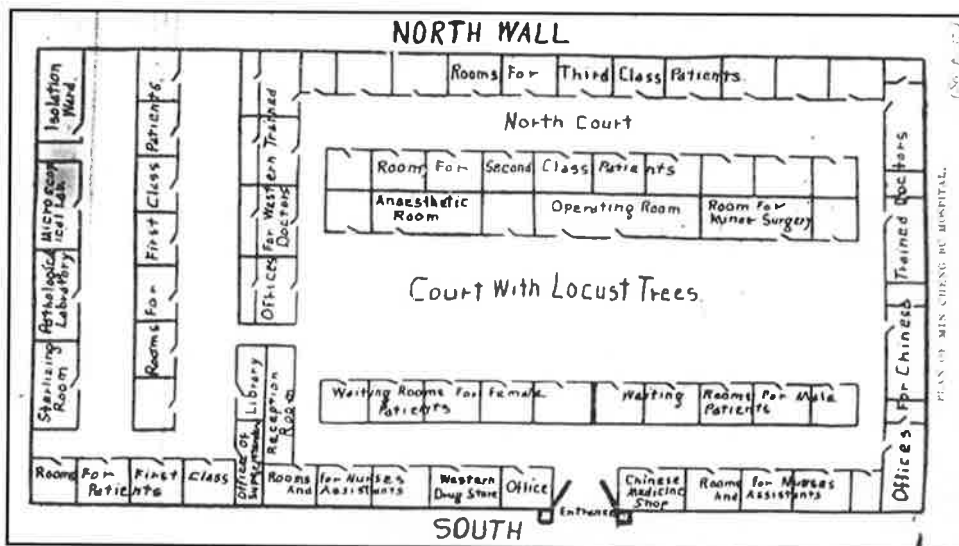


Plate 60: Plan of the Minzhengbu Yiyuan, Established 1906.

Source: Mallowney, John J. "Modern Hospitals for Chinese by Chinese." *CMJ* 26, no. 1 (1912): 41.



Plate 61: Long Building on Eastern Side of Courtyard, *Waiyuan Yiyuan*, 2001

Source: Photograph, courtesy of Joy Bailey.



Plate 62: A Small Ward Facing into Courtyard, *Waiyuan Yiyuan*, 2001

Source: Photograph, courtesy of Joy Bailey.

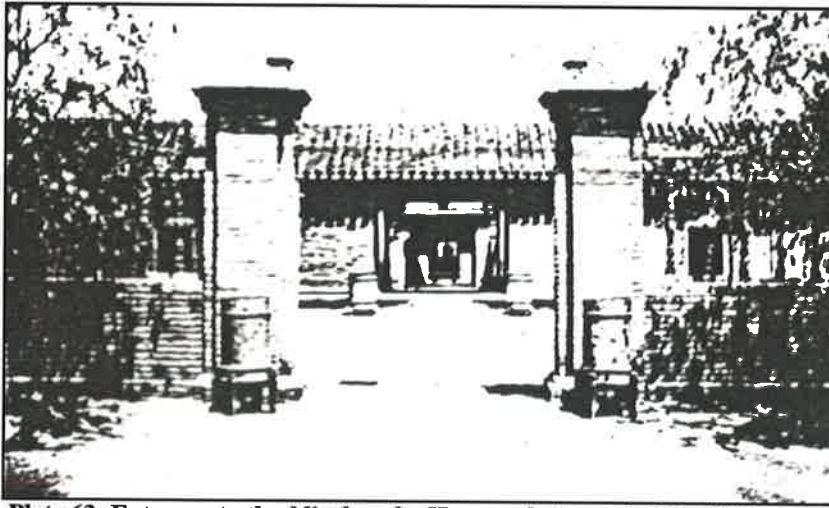


Plate 63: Entrance to the *Minzhengbu Yiyuan*, photographed in 1912

Source: Mallowney, John J. "Modern Hospitals for Chinese by Chinese." *CMJ* 26, no. 1 (1912): opposite p. 36.



Plate 64: Staff of the *Minzhengbu Yiyuan*, 1912

Source: Mallowney, John J. "Modern Hospitals for Chinese by Chinese." *CMJ* 26, no. 1 (1912): opposite p. 36.

CONCLUSION

While the motive of the Chinese in opening these dispensaries may have been a questionable one of opposition, they could in no way have more perfectly demonstrated their appreciation of the same work done by foreigners [than by the] imitation of the plan pursued in the Mission dispensary: preaching rooms attached where patients are harangued on the sacred edict while waiting for medicines".¹

This thesis had its genesis when I happened upon the reproduction of a sketch plan which accompanied a brief description of a late-Qing Chinese hospital. If it was true, as accepted wisdom had it, that Protestant missionaries had introduced the hospital into China then one might have expected that a Chinese hospital established in 1906 in Beijing should have resembled the (Western) hospital on which it was presumably modelled. This particular hospital did not appear to have been modelled on a Western example either in its physical form or in its management. Two questions arose: (i) what was the nature of the mission hospital which the missionaries did bring with them to China; (ii) how much did this Chinese hospital owe its existence and form to the introduced hospital and how much did it owe to indigenous Chinese precursors?

To answer the first question it was not going to be enough to simply describe mission hospitals, nor to assume that they would be the same as contemporary hospitals in the West. Any investigation was going to have to bring any differences between the hospital as it existed in America on the one hand and the hospital the Protestant missionaries established in China, on the other, into sharp focus. That is to say, it would have to be a comparative study. The second question was going to require me to investigate the nature of any Chinese precursors which may indeed have had a role in the shape taken by this late Qing Chinese hospital.

The Mission Hospital

Because the Protestant mission hospital, *qua* hospital, has largely escaped scrutiny, for the

¹ Eleanor Chestnut, "Medical Work in Lien-chow, Kwangtung" *CMMJ* 14, no. 2 (1900): p. 123.

reasons I canvassed in the introduction to this work,² this thesis has been mainly concerned with answering the first of these questions. Hospitals run by Protestant missionaries in China around the turn of the twentieth century were clearly distinguishable from contemporary hospitals in America or Britain. For example, in contrast to the situation in America, most mission hospitals concentrated on providing outpatient (dispensary) services to large numbers of patients rather than inpatient services to a much smaller number of patients.³ In addition, many of the patients, who were admitted to hospital wards could have been attended to as outpatients had they been able to find suitable local accommodation.⁴ But the mission hospital was not *only* fit to provide dispensary services, they were carrying out major surgery comparable to anything attempted in America at the time, as is clear from their annual reports. In America the hospital was becoming the essential setting for the provision of technologically sophisticated medical care, medical research and the education and professional development of doctors whereas in China, although they trained assistants, set up medical schools and, increasingly, conducted research, medical missionaries' main focus was on winning the patient over. As we have seen, entering and staying in hospital was encouraged by missionaries who saw their prime responsibility as being to influence the Chinese religiously: treating their bodily ills was a means to that end.⁵ Beyond the differences that could be explained in terms of the evangelistic aims of missionaries the thesis is concerned with examining the imported hospital in terms of the ways in which it differed from its counterparts at home that could be specifically attributed to its being in China and serving Chinese patients. What effect had China, and the Chinese, had on the missionary hospital or, in other words, to what extent and in what ways had it been sinicized?

Just as many missionaries decided to adopt Chinese dress⁶ many medical missionaries

² See page 5 ff.

³ See pages 184 and 153.

⁴ See pages 235 and 242.

⁵ See page 234 ff.

⁶ Members of the CIM decided as a matter policy to adopt Chinese dress. See Francis H James, "Chinese Dress" *Chinese Recorder and Missionary Journal* 20, no. 1 (1889): p. 182-83. See also James Harrison Wilson, *China: Travels and Investigations in the "Middle Kingdom"* (Wilmington, Delaware: Scholarly Resources Inc., 1972, 1887), p. 282 and Hunter, *Gospel of Gentility*, pp. 138-140.

consciously adopted Chinese methods, styles, customs and ideas in their hospitals. Missionaries adopted Chinese dress for a variety of reasons ranging from the pragmatic to the ideological. It was sometimes a matter of convenience, availability or cost and in other cases they believed that in doing so they would find favour with the Chinese they wanted to attract and influence. So, too, it was due to a multiplicity of reasons that medical missionaries adapted the Western hospital they brought with them to China. I have shown that these adaptations affected all aspects of the operation of the hospital from its physical expression and financing to the more subtle areas of operation such as how they accommodated the patients' need for family involvement, dietary preferences and Chinese propriety. Like the missionary who had adopted Chinese dress and found that it did not "prevent all opposition or reviling, did not open all doors, and even that it did not secure all the advantages he anticipated it would", the medical missionary would probably have said that adapting their Western institution to accommodate the Chinese had been "on the whole ... most advantageous".⁷

The differences between the American hospital in America and the American hospital as it developed in China were never due to a single, or even dominant, cause. Rather, differences were all the result of a complex process involving, to a greater or lesser extent, accommodation, appreciation, negotiation, opportunism and pragmatism. For example, it was the lack of opportunities for American women trained in medicine at home which had the most influence on the high ratio of women to men physicians practising in China. However, the reluctance of Chinese women to consult a foreign male doctor was also involved.⁸ Similarly, the use of Chinese building styles, materials and methods, as well as arranging buildings in conformity with Chinese ideas and traditions, was sometimes simply practical, sometimes based on an appreciation of the Chinese ideas and sometimes a conscious attempt to woo the Chinese or, at least, not frighten them away. Along with these considerations, as I have shown, medical missionaries who built hospitals were attempting to find a balance between the realities in China and the newly acquired knowledge of the

⁷ James, "Chinese Dress": p. 183.

⁸ See page 196 ff.

link between health and buildings in the West.⁹

At times neither the foreign nor Chinese practice was appropriate. What was required was the development of a new approach designed to fulfil the unique requirements of the situation in which the missionaries found themselves. One example of such an innovation was in regard to financing the hospital. As I have demonstrated, it was not customary in either America or China to extract fees from people who used the services of dispensaries but, in China, all but the most destitute outpatients of mission hospitals paid for this service.¹⁰ In fact in China, to a greater extent than in America at the time, patients, including outpatients, contributed the bulk of the funds for the operation of the mission-run hospitals.¹¹ Ideological arguments, ranging from invoking Chinese custom to claiming that free treatment would pauperise patients, were mounted for and against charging fees. Necessity decided the issue in the end. Mission hospitals could not rely in the long-term on a continuous supply of funds from home so could not continue to function, let alone grow, unless a flow of funds from within China could be assured.¹²

In a similar way, the presence of patients' families and friends in the hospital was not only the result of accommodating Chinese custom and to allay patients' fears but was also dictated by the simple lack of resources, both human and capital.¹³ There were many consequences of having, often ambulatory, patients with their family members and friends caring for them, cooking their food and sleeping in the hospital. For example, the fact that hospitals were often chronically overcrowded made it impossible for medical missionaries to apply the strict rules that were by this time *de rigueur* in hospitals in America. The presence of so many non-patients meant that every action of the medical missionaries was able to be scrutinised in a way which would not have been possible in America. Friends and family members, who were deciding what to give the patient to eat and preparing their food, became, perforce, integral members of the team caring for the patient and had to be

⁹ See page 81 ff.

¹⁰ See page 153 ff.

¹¹ See Chapter 7.

¹² See page 132 ff.

¹³ See page 215 ff.

consulted about how the patient was managed.¹⁴ All of these aspects helped to distinguish the hospital in China from its American counterpart.

If the Chinese were going to establish their own hospitals modelled on a foreign example then it would have been to this modified, sinicized, hospital that they would have looked and not the hospital as it existed in America.

Indigenous Precursors

However, before proceeding to examine the evidence for the extent to which the Chinese hospital is a direct successor of the introduced, albeit adapted, hospital it is necessary to summarise what we know about the character of any indigenous models to which they also would have looked. As I have demonstrated in chapters 1 and 2, the idea of a place where sick people could be cared for away from their own home was not unknown in China.

There had existed in China throughout much of her history institutions and systems for the provision of medical care which, had they existed in Europe, would have been included in the history of the hospital as precursors to the modern hospital. Buddhist monasteries, in the Tang dynasty (618-906 CE), had fulfilled a similar function to that of Christian monasteries and hostels which had existed from the fourth century in Western and Eastern Europe. A state-run welfare system, which had included hospitals with medical staff, had operated during the Song (960-1279 CE) and Yüan (1279-1368) dynasties. This system had given way in the Ming (1368-1644) and Qing (1644-1911) to institutionalised care provided by voluntary charitable organisations established, principally, by the gentry.¹⁵ Institutionalised care in China never became as highly 'medicalised' as in the West but, then, neither was the hospital in the West until the state of medicine demanded it. Physicians had not been included on the staff of hospitals in Europe until the thirteenth century and it was not until the eighteenth century that the defining characteristic of a person entering a hospital in Europe was sickness requiring, specifically, medical care.¹⁶

¹⁴ See, for example, pages 120, 181 and 194.

¹⁵ See Appendix A.

¹⁶ The twelfth-century Byzantine hospital, the *Pantocrator* and tenth-century Muslim *Bimaristans*, excepted. See page 24 ff.

When the missionaries arrived there were Chinese welfare and medical institutions in existence, albeit offering a different form of medicine premised on a different view of disease, in many of the towns and cities where the missionaries established themselves. The missionaries were entering a medical market-place with a wide variety of providers of healing services, some of which included institutionalised medical care.¹⁷ It was not vacant territory. So, missionaries had to find a *niche* for themselves; they did so largely using their knowledge of surgery which did not form part of the Chinese medical system.¹⁸

The other ingredients considered essential for the development of a hospital, a motive and the means, were not lacking in China either. For example, as I have shown, the alleged driving forces behind the establishment of hospitals in the West, charity and compassion, were alive in China and were evident to missionaries when they arrived.¹⁹ The various models of providing welfare services that existed in the West, the use of guilds, the actions of community leaders (in China, the gentry), state and local government and religious charities all existed in China and had all been involved at one time or another in the provision of welfare, including medical, services. This aspect of the missionary hospital was not new. Nor were the methods of financing new: China had financed its welfare activities from subscriptions, donations from individuals, from government funds, and in addition had a long tradition of ensuring ongoing funding by investing in real estate.

The mission hospital's emphasis on dispensary services was not alien either.²⁰ Because of the nature of Chinese medicine, medical care provided by other than a private physician or other practitioner had always consisted of dispensary-type services and had not required inpatient accommodation. Jing Shao, in his study "Hospitalizing Traditional Chinese Medicine", has characterised the different traditional forms of practice of Chinese medicine as being largely

'ambulatory', in that either the patient would walk or be carried to the

¹⁷ See Chapter 2.

¹⁸ See page 232 ff.

¹⁹ See page 33 ff. and Chapter 2.

²⁰ See page 40.

practitioner, or the practitioner would walk or be carried to the patient .²¹

Traditional remedies consisted of herbal prescriptions which patients, or their family, made up and administered at home: hospitalisation was unnecessary.²² For example, when a hospital of Chinese medicine was established in Shasi in Hubei province as late as 1956 the eight beds “essentially provided lodging for patients who had travelled from distant rural areas”.²³ Chinese who had had to travel considerable distances to a charity or public dispensary in the nineteenth century would have often found accommodation in one of the inns which abounded in Chinese towns.

So far as patients paying for medical services was concerned, China always provided medicine and medical advice (in a dispensary setting) free of charge. In addition, it had devised other public systems.²⁴ For example, during the Tang dynasty (618-906 CE)

prescriptions together with officially-fixed prices of medicines were engraved on stones erected in public places, and it was decreed that the poor and sick should be able to obtain money from the national treasury to buy them. This publication of official prices was also designed to moderate the cost of medicines sold in private pharmacies.²⁵

Medical knowledge was also disseminated via such avenues as almanacs and calendars.²⁶

A separate nursing profession did not form part of the Chinese system of medical care but, as we have seen, the practice of family and friends caring for the patient in hospital had been adopted, out of necessity and consideration, by missionaries. Although training for male nurses was undertaken by missionaries, female nurses were not commonly found in hospitals before the 1920s.²⁷ Similarly, responsibility for feeding institutionalised patients had always devolved to family members and this practice, too, had been adopted in mission

²¹ Jing Shao, “Hospitalizing’ Traditional Chinese Medicine: Identity, Knowledge and Reification” (PhD, University of Chicago, 1999), p. 118.

²² *Ibid*, p. 119.

²³ *Ibid*, p. 118. Compare the missionary response to the same problem at page 240.

²⁴ For example, see pages 45 and 145.

²⁵ “Arab and Persian merchants, who travelled widely in China in the ninth century, witnessed and reported on all these measures.” Leung, “Organized Medicine”: p. 135.

²⁶ See page 229 ff.

²⁷ The question of women nursing men was still being discussed in 1919. See Edith J. Haward, “Is China Ready for Women Nurses in Men’s Hospitals?” *CMMJ* 33, no. 2 (1919).

hospitals.

It is clear then, that when medical missionaries arrived in the mid to late-nineteenth century the Chinese were not only familiar with forms of institutionalised medical care which had been available in China for hundreds of years but that the structures and means for financing charitable works were present in their contemporary society. To return now to the second question posed at the beginning of this section: to what extent were these two institutions, the imported hospital and indigenous precursors, the model for the late-Qing Chinese hospital?

The New Chinese Hospital

It would hardly be surprising to discover that the process of the establishment of the hospital, as an institution, in China was more complex than a case of cultural imperialism or of simple transplantation, in its entirety, into virgin soil. One test of the extent to which the hospital in China was an “introduced species” is to examine what, in fact, the Chinese did establish in the way of institutionalised medical care after the missionaries had been in China for a period.

The first case I will consider is the one mentioned at the beginning of this section: a *Minzhengbu Yiyuan*,²⁸ in particular the *Neichengguan yiyuan* or Inner City Public Hospital, which was established in 1906 in the Manchu, or Tartar, city of Beijing²⁹ by the Ministry of

²⁸ Except for a cursory mention in general histories of Chinese medicine and studies focusing on particular aspects of the history of Western medicine in China the *Minzhengbu* hospitals have not received attention. See for example, an (unsourced) list of newly established Chinese hospitals in Dominique Hoizey and Marie-Joseph, *A History of Chinese Medicine*, trans. Paul Bailey (Vancouver: UBC Press, 1993), pp. 151-2; Wong and Wu Lien-teh, *History of Chinese Medicine*, pp. 567-68. Wu Lien-teh lists the hospitals with which he was associated after the 1911 bubonic plague provided the impetus for their establishment in Wu Lien-teh, *Plague Fighter*, pp. 448-69. Yip mentions the *Minzhengbu* briefly but not their hospitals Ka-che Yip, *Health and National Reconstruction in Nationalist China: the Development of Modern Health Services, 1928-1937*, Monograph and Occasional Paper Series; no. 50 (Ann Arbor, Michigan: Association for Asian Studies, 1995), pp. 14-15 as do Carol Benedict, *Bubonic Plague in Nineteenth-Century China* (Stanford, California: Stanford University Press, 1996), p. 155, Croizier, *Traditional Medicine*, pp. 44-5 and Hillier and Jewell, *Health Care*, p. 24. The only treatment in Chinese appears to be an article by Zhu Xianhua 朱先华 published in 1985 but he does not include his sources. See Zhu Xianhua, "Qingmode jingchengguan yiyuan (The Public Hospital in the Capital in the Late Qing Dynasty)" *Zhonghua yizshi zazhi* 15, no. 1 (1985).

²⁹ See Plate 59, Map of Peking. Source: Juliet Bredon, *Peking: A Historical and Intimate Description of its Chief Places of Interest*, Second ed. (Shanghai: Kelly and Walsh, Limited, 1922), facing page 414.

Civil Affairs (the *Mingzhengbu*).³⁰ A comparison of the plan (see Plate 60) of this hospital with those included in the earlier discussion of mission hospitals shows clearly that this hospital took little or nothing from foreign designs.³¹ Although I have not been able to locate plans of any other government hospitals it seems that this one may have been representative. Firstly, according to John Mallowney,³² who described this hospital for the benefit of his missionary colleagues in 1912, the *Minzhengbu* operated hospitals in several of China's largest cities, and although they may "differ a little, in a general way they are practically laid out on the same plan".³³ And secondly, Ronald Knapp, an expert in vernacular Chinese architecture, finds the plan to be what he "would have expected. It looks like the general plan of complexes all over China in the 19th and 20th century, even to the present".³⁴ The plan and design were indigenous to China.

One of the more obvious differences concerned the style of patient accommodation. None of the patients in this hospital were accommodated in communal wards, as were the majority of patients in mission hospitals, but in small, one or two-bed rooms. We can get some idea of what this hospital may have looked like from a present-day small hospital,

³⁰ The German idea, that "public health and disease prevention efforts should be directed by the police", which had been adopted in Japan, had gained currency in China since 1902. See Benedict, "Policing the Sick": p. 60 and Benedict, *Bubonic Plague*, pp. 154-55. The Ministry of Civil Affairs, the *Minzhengbu*, was created in 1906 to take responsibility for both the police and "matters relating to public sanitation" which included "the prevention of plague, examination of doctors and inspection of hospitals". Bell and Woodhead, *The China Year Book*, p. 230. There was no specific mention of the establishment of hospitals for the poor sick and the ministry "generally encouraged private initiatives to fulfil public functions, including medical relief". Yip, *Health and National Reconstruction*, p. 15. The ministry was reorganised in 1913 under a new name, the Ministry of the Interior or *Neiwubu* 内务部, into ten departments. One was the Department of Sanitation and Public Health, the *Weisheng si* 卫生司, under Lin Wenqing 林文庆. It was to supervise the establishment of "workhouses, institutions for the blind, the dumb and the insane" as well as orphanages, and relief for "distressed widows", the poor and for victims of disasters. See Chen Haifeng, *Zhongguo weisheng*, pp. 16-17.

³¹ See Chapters 4 and 5.

³² A member of the medical staff of the MEM hospital at Beijing.

³³ Mallowney had visited at least two other government hospitals in Beijing: the *Waicheng guan yiyuan* 外城官医院, in the Chinese city, and an "Almshouse and Refuge for the Insane", the *fengrenyuan* 疯人院. John J. Mallowney, "Modern Hospitals for Chinese by Chinese" *CMJ* 26, no. 1 (1912): p. 38. See also "Brief Report of the Investigation of Hospitals and Institutions for Defectives made by a group of students directed by the Y.M.C.A. 1913," p. 2. F.W. Peabody and R.S Green of the CMB reported on visits to a number of government hospitals in other Chinese towns, including Nanchang, Nanking, Kaifeng, see Francis W. Peabody, "Chinese Hospital: Nanking 1914,"; Francis W. Peabody, "Police Hospital: Nanchang 1914,"; Francis W. Peabody and R.S. Green, "Government Hospital: Kaifeng 1914," .

³⁴ Ronald G. Knapp, *Personal Communication*, (2002). See also Ronald G. Knapp, *China's Vernacular Architecture: House form and Culture* (Honolulu: University of Hawai'i Press, 1989).

within the grounds of the *Wai Yuan* 外院 in Xian 西安 (Shaanxi), the layout of which shares a number of the features of this early twentieth-century Chinese hospital. (see Plates 61 and 62)

In terms of organisation, this hospital was distinctive in that patients, as well as being divided along the normal lines of gender and class were further divided according to which type of medicine they preferred, Traditional Chinese or Western. Outpatients entered the hospital compound through a southern gate with long one-storey buildings stretching to the right and left. (see Plate 63) The first room of the building on the left side was the “little office, where the patients must tell whether they wish to see the *Chung Yi* 中医, the Chinese trained doctor, or the *Hsi Yi* 西医, the Western-trained doctor”.³⁵ A bamboo slip system, like the one the missionaries had appropriated from Chinese practice, was used in this hospital to regulate the order in which patients were attended to. After they were registered they were given “bamboo slips”, red for men and green for women, and special ones for those who had priority for treatment: naval officers, army officers and ordinary soldiers; school students; policemen; and those who were wounded or needed urgent attention.³⁶

The accommodation of the two schools of medicine was expressed physically in the complex: Western medicine on the western side and Chinese on the east.

The enclosure forms a rectangle; the entrance divides this into two parts, one of which is given over to the adherents of the Old School, and one to the disciples of the Western Sciences.³⁷

Muldowney was impressed with many aspects of the hospital plan, construction and operation but the feature that he found most interesting was the way in which the two systems of medicine were integrated. In his opinion, rather than being an example of the Chinese emulating the mission example it was a Chinese attempt to not only preserve what was useful of Chinese traditional medicine but also to introduce the people to Western

³⁵ Muldowney, "Modern Hospitals for Chinese by Chinese": p. 37.

³⁶ Zhu Xianhua, "Hospital in the Capital": pp. 31-2.

³⁷ Muldowney, "Modern Hospitals for Chinese by Chinese": p. 36.

medicine. He commended the Chinese government's approach to his medical missionary colleagues, describing it thus:

instead of antagonizing and embittering the old by the new, they have given each a chance to work out its own salvation. And the natural law will work out here as elsewhere, it will be 'the survival of the fittest'.³⁸

Provision had been made for all aspects of both systems of medicine including, for example, separate drug stores:

a finely-equipped modern drug-store, where all the important Western remedies are found ... [and] a fine large room containing, not the bottles, beakers, mortars and paraphernalia of a Western drug-store, but all sorts of herbs, leaves, barks, and other substances in the neatly labelled drawers and jars, large and small, of the old-type Chinese medicine shop.³⁹

F.W. Peabody of the China Medical Board of the Rockefeller Foundation, who visited the hospital in 1914, thought that of the two apothecary shops "the Chinese was rather more attractive looking".⁴⁰ There were separate waiting rooms for men and women as well as a reception room for those first class patients who chose Western medicine. It was furnished in Western style:

the visitor is invited after passing in his card and going through the usual formalities and courtesies of which the Chinese are masters. This little waiting-room is supplied, not with the old straight-back, hard-seated Chinese chairs, but with the fine upholstered European kind, and in it is a large table covered with a spotless white table-cloth, a fine side-board, a coat and hat rack and a wash-stand with towels. The walls are made cheery by a few artistic pictures and an enlarged photograph of Prince Su,⁴¹ who, as the head of the Board of Interior, is the titular chief of this system of *Min Cheng Bu* Hospitals.⁴²

³⁸ Ibid. According to Zhu Xianhua, in the early stages of the hospitals comparatively more people were treated with Chinese medicine than with Western. He attributed this to Western medicine having "only just appeared in my country and was not known or understood by the people". The situation was reversed from the sixth month of 1907 when 6,851 people were treated with Chinese medicine and 7,499 with Western medicine and from then on the preference for Western treatment continued to rise. Zhu Xianhua, "Hospital in the Capital": p. 32. Mallowney was told that "four-fifths of the patients ask for the Western-trained physician. Mallowney, "Modern Hospitals for Chinese by Chinese": p. 39. The YMCA students (in 1913) estimated that of 500 patients, 150 would choose Chinese medicine. "Brief Report, p.1.

³⁹ Mallowney, "Modern Hospitals for Chinese by Chinese": p. 37.

⁴⁰ Francis W. Peabody, "Visit to Chinese General Hospital with Dr. Dilley, Peking 1914," p. 2.

⁴¹ A post he had held since July 1907, Montague H.T. Bell and H.G.W. Woodhead, *The China Year Book* (London: George Routledge & Sons, Ltd., 1913), p. 554.

⁴² Mallowney, "Modern Hospitals for Chinese by Chinese": p. 37.

Unlike outpatients in most mission hospitals, outpatients of the *Minzhengbu yiyuan* were not charged a fee. In this respect the hospital was in line with traditional Chinese practice and did not emulate the foreign example. Inpatients paid a daily fee: first class – \$1, second class – 50 cents and third class – 15 cents for which they received “meals, medicines, operations, and all medical and surgical attention while in the hospital”.⁴³ The hospital was also supported financially by the government, via a grant from the *Minzhengbu* of 400 *yuan* per month, and donations from grateful patients.⁴⁴ It does not appear, from the many references to free dispensaries in the contemporary record, that this hospital was an exception. Isabella Bird, passing through Zhenjiang 镇江 (Jiangsu) in 1896, for example, reported the existence of

two free dispensaries, with nine doctors in charge. They are open without fees every day, treating about 200 patients, who are not required to pay for their medicines.⁴⁵

Mullowney had been told, however, that the authorities in charge of the *Minzhengbu* hospital were

very seriously contemplating a change [because] they have found, as we have in Western lands, that a great many people abuse the privilege and a great many come for treatment who could easily pay a physician.⁴⁶

Free Chinese dispensaries may have been the norm but there was a minority which did charge patients. One such was the Jiukiang ‘Red Cross’ hospital, run by mission-trained Chinese doctors,⁴⁷ supported mainly by subscriptions from merchants and from a “house tax [and] a tax on tea sent to Hupeh”. They charged outpatients “eight coppers for the first visit, and four coppers afterwards, but soldiers and police pay half rates”.⁴⁸

⁴³ Ibid: p. 38, 40. Zhu expresses it slightly differently: the only patients who paid anything, according to him, were inpatients who paid a fee to cover the cost of food. Zhu Xianhua, “Hospital in the Capital”: pp. 31, 32.

⁴⁴ Zhu Xianhua, “Hospital in the Capital”: p. 31.

⁴⁵ Bird, *The Yangtze Valley*, p. 180. In 1905 N.S. Hopkins reported from Beijing that “there [were] many free dispensaries opened by the government and the military in this city”. N.S. Hopkins and G.D. Lowry, “Hospital Reports: Peking Medical Work” *CMMJ* 20, no. 3 (1906): p. 148

⁴⁶ Mullowney, “Modern Hospitals for Chinese by Chinese”: p. 42.

⁴⁷ Trained at the ACM hospital at Anqing in Anhui. Francis W. Peabody and R.S. Green, “Red Cross Hospital: Kiukiang 1914,” p. 1.

⁴⁸ Ibid, pp. 1.

The policies on charging outpatients may have varied among Chinese hospitals and dispensaries as they did among mission hospitals. However, whereas it has been shown that 74 percent of mission hospitals charged a fee for outpatient services in the period 1903 - 1910⁴⁹ one gets the impression that a much smaller proportion of Chinese dispensaries did so. Because accurate statistical or survey data are not available for Chinese hospitals it is not possible to make a definitive statement but it would seem highly likely that Chinese hospitals relied much less on patients for their financial viability than did mission hospitals.

Whereas the majority of mission hospitals in 1906 had only one, and at the most two, physicians this hospital was well endowed. Wu Weiyu 吳為雨 and Xie Kangyou 謝康尤, both graduates in Western medicine from the Beiyang Medical School had been appointed, in 1906, as chief and deputy medical officer respectively at the Inner City hospital.⁵⁰ Tang Jian 唐堅, a doctor with the Public Health Office of the Police Department, took charge of Chinese medicine and was later responsible for setting up a second hospital.⁵¹ According to Zhu Xianhua, when the hospital was established eight physicians were appointed to treat patients: four for Chinese and four for Western medicine.⁵² When Mallowney visited in 1912 he noted that, under the supervision of the “Chief of the Sanitary Department of the Board of the Interior”, who had studied in England and Germany, there were seven Western-trained physicians: one had been trained in France, two in Japan, three at the government medical school in Tianjin, “where the teachers are Frenchmen”, and one at the St John’s Medical School at Shanghai. The three “doctors of the old school” had had their training at “the old-fashioned medical school, outside the Ho Men in Peking”.⁵³ Peabody

⁴⁹ See page 163 ff.

⁵⁰ Zhu Xianhua, "Hospital in the Capital": p. 31. Mallowney noted that when he visited in 1911 a “doctor Wu, trained at the Government medical school at Tientsin, where the teachers are Frenchmen” (that is, the Beiyang Medical School) was one of the doctors “of the new school”. Mallowney, "Modern Hospitals for Chinese by Chinese": p. 39.

⁵¹ The *Waichengguan yiyuan* in the Chinese City. (see Plate 59) Zhu Xianhua, "Hospital in the Capital": p. 31.

⁵² Mallowney was told that originally there had been “four old-school doctors and three new-school doctors in attendance”. Mallowney, "Modern Hospitals for Chinese by Chinese": p. 39. Peabody reported “about five doctors educated in western medicine and ... three doctors of the Chinese school” when he visited. Peabody, "Visit to Chinese General, p. 1 The YMCA students reported five doctors trained in “foreign style (largely Japan) and four Chinese-style doctors”. Brief Report, p. 1.

⁵³ The Hou men 后门, the “back gate” between the Imperial City and Tarter City. Mallowney, "Modern Hospitals for Chinese by Chinese": p. 39. See Plate 47

noted that “the western men were fairly bright looking men ...[but] the Chinese doctors were much older and certainly looked much wiser than their western colleagues”.⁵⁴ Compared with mission hospitals, where up to a third of physicians were women, in these hospitals, as far as we know, they were all men. The hospital also employed many more ancillary staff than a mission hospital could. The *Minzhengbu yiyuan* staff included three pharmacists with eight assistants, six administrative (book-keeping) staff, a number responsible for cleaning, running errands, “looking after the fire for tea”, and delivering hot water. There was also one chief and six policemen who undertook guard duties.⁵⁵ A photograph of hospital staff, sitting against one of the buildings, accompanied Mallowney’s article. (see Plate 64) Although he does not identify the members of staff the group of four aptly reflects the hospital's policy and management. Standing at the back, a guard wearing a police uniform represents the department under whose auspices the hospital was run. The Chinese doctor, wearing western coat, collar and tie and holding a straw hat, was presumably one of those trained in Western medicine whereas those on either side of him, in Chinese dress, represented traditional Chinese medicine. The person on the far right looks as though he may have been one of the ten nurses Zhu mentions as being employed in the hospital.⁵⁶

Just as the mission hospitals had some rules, so apparently, did these hospitals. The rules for the *Minzhengbu* hospitals provided that all patients should be given a bath and have their hair washed before being admitted to a ward; inpatients could not leave the hospital at will and could not be discharged without a certificate of cure from a doctor; and visiting friends and relatives had to report to the manager and get permission from the doctor if they wanted to bring a present of food for the patient.⁵⁷ Whether these rules were observed in this hospital any more than they were in a mission hospital is not known.

⁵⁴ Peabody, "Visit to Chinese General, p. 1, p.2.

⁵⁵ Zhu Xianhua, "Hospital in the Capital": p. 31.

⁵⁶ Ibid: p. 32.

⁵⁷ Ibid.

Reading the various contemporary reports of this hospital⁵⁸ a picture emerges of an institution which was undoubtedly a hospital but quite distinct from either an American hospital as established by missionaries or a traditional Chinese dispensary.

Alternative Models

The *Minzhengbu* hospital, however, was not the only form that Chinese hospitals took in the late Qing. In 1902, when the Capital University was established in Beijing, both traditional Chinese and Western Medicine were included in the curriculum with the Chinese put first: “with a view to giving pride of place to Chinese learning with Western study as an essential subsidiary.”⁵⁹ In 1903 this twin system of medicine was put into practice when a hospital was apparently planned for Jinan in Shandong “to be run on native and western lines [in an] old temple”.⁶⁰

John Kerr, a keen observer of the Chinese institutions in Canton,⁶¹ was sure that the emergence of Chinese “native dispensaries and so-called hospitals, which are now quite numerous in South China” was due to the example of foreigners.⁶² In an 1899 article, he cited the “Native Dispensary of Canton”, or *Aiyutang* 爱育堂, as “a specimen of these institutions”. It had been set up in 1871 when Canton already had two missionary hospitals and several dispensaries, the oldest having been there for some thirty-five years.⁶³ He was

⁵⁸ In addition to Peabody and Green for the Rockefeller Foundation a group of students from the YMCA included both the *Neichengguan yiyuan* and *Waichengguan yiyuan* in their survey of welfare institutions in Beijing. See “Brief Report ; J.S. Burgess, “Correspondence from J.S. Burgess, of the Peking Young Men's Christian Association (The Princeton Work in Peking) n.d.,” .

⁵⁹ From 1903 students studied both Chinese and Western medicine in a four year course run by two departments (medicine and materia medica) at the University. Ma Kanwen, “East-West Medical Exchange and their Mutual Influence”, p. 171. The situation changed after the end of the Qing but these go beyond the focus of this study.

⁶⁰ “Chinanfu: Open a Hospital” *North China Herald and S.C. & C. Gazette and S.C. & C. Gazette*, June 26 1903. A 1912 survey of medical work in Shandong province briefly described the hospital as having both Chinese and a Western departments: the “attendance is very large at the daily dispensaries, amounting at present to forty or fifty thousand a year in the Western department, and half that number on the Chinese side. The hospital side of the institution had not, it was noted, been so largely developed. “Medical Work in Shantung” *CMJ* 26, no. 1 (1912): p. 112.

⁶¹ See page 46 ff.

⁶² John Glasgow Kerr, “A Chinese Benevolent Association” *CMMJ* 3, no. 4 (1889): p. 152. Yu Shenchu lists the Chinese hospitals in Guangzhou, Beijing, Shanghai, Tianjin, Nanjing, Ningbo, Hangzhou, Suzhou, Chengdu, Hangkou, Fuzhou, Xiamen (Amoy) set up to vie with the foreigners. Yu Shenchu, *Zhongguo yixue jian shi* (A Brief History of Chinese Medicine) (Fuzhou: Fujian kexue jishu chubanshe, 1983), pp. 374-5.

⁶³ He also noted that, as well as the example of missionary medical work, many Southern Chinese would have been aware of the existence of naval, military and civil hospitals in Hong Kong.

interested to explore “how far they are copied from the foreign models and how far native ideas have developed them on new lines”: he was clearly not anticipating that any transfer of the Western model would be in its entirety.⁶⁴ The administration, finances, and services provided by the *Aiyutang*, according to its annual report for 1887, were not significantly different from those of the dispensaries and benevolent institutions met by missionaries when they arrived in China and was quite unlike mission hospitals. Management was under the guidance of a board of officials, the *Guangdong shanhou zongju* 广东善后总局, and the work was divided into four categories: medical, educational, aid to the poor and “general objects”.⁶⁵ It would appear that medical aid was restricted to dispensary services. Listed expenditure included 838 *taels* (or \$1,163) paid to four doctors; 2,975 *taels* (or \$3,993) paid for 78,501 prescriptions to be “filled at drug-stores for patients”; and 320 *taels* paid for vaccinations.⁶⁶ The sources of funds for the *Aiyutang* included donations and subscriptions from individuals. However, it also relied on substantial sums from rents, collected from shops and land purchased by, or given to, the institution and interest on the monies deposited to spend on real estate when it became available. As we have seen earlier, reliance on real estate for income was fundamental to Buddhist monasteries and subsequent Chinese benevolent institutions.⁶⁷ These last two sources of funds (rents and interest) contributed 45 percent of the total income for 1887. A further 43 percent came from the sale of rice and a mere 12.3 percent from donations.⁶⁸ None was collected from patients. Kerr was impressed with the financial acuity of the managers and interpreted their policy as being:

⁶⁴ Kerr, "Chinese Benevolent Association": p. 154.

⁶⁵ By far the biggest expenditure on giving aid to the poor was on the provision of coffins, gravestones and burial grounds. The quality of coffins depended on the status of the poor: the aged poor (\$3.62), the “respectable poor” (\$ 2.50) and “friendless paupers” (\$1.50). Paupers who died in Kerr’s hospital were also provided with coffins from this charity: 26 in 1887. “General objects” included donations to other charitable causes, for example 2,000 Taels (\$2,777) to the Viceroy’s college and 700 Taels (\$962) to the ‘Home for the Blind’. In previous years “large sums of money had been collected and disbursed for the relief of sufferers from famine and floods, both in this and in the more distant Provinces of the Empire”. Ibid: pp. 153-54.

⁶⁶ Smallpox vaccination by Chinese practitioners was commonly given by the “arm to arm” method and the amount paid out for this was most likely to have been to mothers of children from whose arm lymph was taken: the rate of payment was 40 cash per vaccination according to an 1886 report. E.A. Aldridge, “Report on the Health of Hoihow (Kiungchow) for the Half-year ended 31st March 1886” in *Customs Gazette, Medical Reports, No. 31* (Shanghai: Imperial Maritime Customs, 1885-6), p. 18.

⁶⁷ See pages 34 ff. and 158.

⁶⁸ Kerr, "Chinese Benevolent Association": p. 154.

not to trust to voluntary contributions, but to invest in real estate, so that they will not be dependent on what in a heathen country is well known to be a very uncertain source of support for benevolent purposes.⁶⁹

Another Canton medical welfare institution, the *Fangbiansuo*, in addition to operating a dispensary, provided accommodation for “friendless paupers who [were] dangerously ill”.⁷⁰ According to the 1888 report, which gave the name, age and birthplace of each patient along with the outcome of their time in the institution, there had been “243 males and 87 females who recovered and were sent away [and] 469 males and 138 females who died, friendless”.⁷¹ The death-rate, sixty-five percent, in the *Fangbiansuo* was very different from that of mission hospitals and reflects their different purposes. Mission hospitals sought to minimise the number of patients dying in hospital by either not accepting dying patients in the first place or arranging with family and friends to remove them from hospital prior to death.⁷² The high death-rate in the *Fangbiansuo* is consistent with its aim of providing a place to die for those who had no family.⁷³ Kerr came to no definite conclusion about the provenance of these two institutions *vis a vis* Western influence but, it would seem that, whilst the timing of their establishment may have been influenced by the foreign presence, they owed their form, financing and management to their own Chinese predecessors. Kerr was optimistic about the future of Chinese institutions but would have liked them to have been *more* influenced by the mission example:

the success attained under the control of heathen managers is an assurance that the same business talent, sanctified by grace and devoted to works of Christian benevolence, will fill this land with institutions for the relief of human suffering

⁶⁹ Ibid: p. 155.

⁷⁰ For example, during the plague in Canton in 1894 Mary Niles reported that 296 people had died of plague during the third month in the Fangbian suo. Mary W. Niles, "Plague in Canton" *CMMJ* 8, no. 2 (1894): p. 119. The Aiyutang had supplied 415 coffins to paupers who had died there in 1887. Kerr, "Chinese Benevolent Association": pp. 153-4

⁷¹ Kerr, "Is It An Advance?" p. 67.

⁷² See 242 ff.

⁷³ The death-rate among women was slightly less than that of the men: 61.3% to 65.8%. Kerr, "Is It An Advance?" p. 67. The proportion of men to women admitted to the *Fangbian suo* in 1888 was approximately three to one which compares with the ratio found in mission hospitals between 1904 and 1910, see page 191 ff. See also the discussion of the role of a Chinese institution, established in Hong Kong in 1851, the Kwong Fook I-t'sz (*Guangfu yici* 广副义祠), with similar aims to the *Fangbiansuo*. Elizabeth Sinn, *Power and Charity: The Early History of the Tung Wah Hospital Hong Kong* ed. Wang Gungwu, 1989 ed., East Asian Historical Monographs (Hong Kong: Oxford University Press, 1989), pp. 18-20, 32-5.

in all its forms ...⁷⁴

Unlike the *Minzhengbu* hospitals the institutions Kerr described employed only Chinese traditional medicine as did the “Hospital of Extensive Benevolence (*guangren yiyuan* 广仁医院)”, which had been set up in Wuzhou (Guangxi), funded by “native subscription”. With its “small, square chambers, without windows, like prison cells”,⁷⁵ it would appear that this hospital was closer in form to the *Minzhengbu* hospital than any foreign example. The establishment of Chinese hospitals was prompted by a range of circumstances and for a range of motives. For example, it was an attempt to improve the quality of Chinese traditional medicine which drove the officials and merchants in 1895 at Haikou 海口 on Hainan Island. They considered that the “medical knowledge of the men professing to be native doctors was of the very poorest description” and subscribed money to establish a hospital in a converted government school building. Three doctors were engaged and “medicine and advice [were] given gratis to the poorest applicants”. Those who could afford to pay were given prescriptions to be made up at one of the “native drug stores”. Aldridge, a Customs Medical Officer, thought that the “chance of obtaining better native treatment has been greatly taken advantage of, and the hospital so far has been a success”: 7300 patients had been seen in the three summer months and average monthly attendance since opening had been 1100 patients.⁷⁶

A relatively common strategy emerged where a young man, once he had received some training in a mission hospital, was sponsored by members of the gentry or officials to set up his own practice and take in patients. One of the earliest reports of this phenomenon came in 1881 from Hankow, in Hubei. An “old hospital boy [had set up] a hospital for the poor Chinese of the city” using three converted Chinese houses. He was supported by “ten mandarins [who] have given him Tls. 100 each per annum” and he charged a small fee (14

⁷⁴ Kerr, “Chinese Benevolent Association”: p. 155.

⁷⁵ Although none had been admitted, the hospital had been built to accommodate 27 inpatients and it was intended that they could choose either to be treated by a staff physician or a private practitioner. Roderick MacDonald, “Report on the Health of Wuchow for the Half-year ended 30th September 1898” in *Customs Gazette, Medical Reports, No. 56* (Shanghai: Imperial Maritime Customs, 1898), p. 25.

⁷⁶ Aldridge, “Health of Hoihow (Kiungchow) March 1886”, p. 18

cash) for the first visit and another for any medicine.⁷⁷ According to Thomas Kirkwood in 1904, it was not the missionary example to which the “talk of starting a hospital in Chungking to be managed wholly by Chinese” was due but to the influence of the local Chinese newspaper and its Japanese editor. The paper was

continually instructing the Chinese, what they have done in Japan. After all the victories of the Japanese against Russia, the Chinese are beginning to think they can follow the example of Japan. And so they mean to begin with a hospital.⁷⁸

In 1910 an institution was founded which does seem to have been directly modelled on a missionary Western-style hospital. This apparently very successful enterprise⁷⁹ was established in Cixi 慈溪, a walled city near Ningbo, when two “leading gentlemen”, Chen Xiatang 陈夏堂 and Zou Runqing 奏润卿,⁸⁰ set up the “Tzeki People’s Medical Association” (*Cixi baoli yihui* 慈溪保黎医会).⁸¹ Funded by subscription, they hired Doctor Wu Lianting 吴莲艇, who had been trained by a missionary doctor at Kashing, and, using an adapted ten-room Chinese house, established a “modern western hospital” (*xiandai xiyi yiyuan* 现代西医医院), the *Baoli yiyuan* 保黎医院.⁸² The Cixi *Baoli* adopted an interesting approach to patient fees. It seems that the people were initially “somewhat sceptical and slow to avail themselves” of the services but, by

offering free attendance and medicine for two days a week, charging only five cents on the others, and also by judicious use of tickets on the part of the committee, prejudice was removed and people began to flock to the place.⁸³

Cody has stated, in reference to the adoption of Western education, that those Chinese who

⁷⁷ Others, like a graduate of the Soochow Hospital, set up in private practice “[and] had two mandarins staying in his house for treatment”. “Hospital Reports: Soochow Hospital: October 1st, 1889, to September 30th, 1890” *CMMJ* 5, no. 1 (1891): p. 18.

⁷⁸ Thomas Kirkwood, *Report of the London Mission Hospital, Chungking (West China) in charge of Thomas Kirkwood. M.A. M.B. C.M.* (Chungking: Lungmenhao Press, 1904), p. 3.

⁷⁹ Still in existence in 1987. See *Cixi xianzhi*, (Shanghai: Zhejiang Renmin chubanshe, 1992), p. 840.

⁸⁰ *Ibid.*

⁸¹ “Chinese Medical Enterprises” *CMJ* 31 (1917): p. 247.

⁸² *Cixi xianzhi*, p. 12. This hospital’s long history has been well documented in Cixi and Ningbo gazetteers: see *Cixi xianzhi*, pp. 840, 845 and *Ningbo shizhi*, (Beijing: Zhonghua shuju, 1995). Missionaries were made aware of the enterprise six years after its commencement: see “Chinese Medical Enterprises”: p. 247 and “A Vigorous Chinese Hospital” *CMJ* 32 (1918).

⁸³ “Chinese Medical Enterprises”: p. 247.

wanted to “adopt western learning [built their schools] in what they considered to be the correct western style, ...tall, plain houses of wood and plaster with bare roofs of grey tiles”.⁸⁴ However, it was not until 1912 that any mention can be found of a Chinese-run hospital being housed in anything but Chinese-style buildings. The Cixi Medical Association was reported as having replaced their adapted Chinese house with a “two-storeyed foreign hospital accommodating 27 men and 23 women” in 1912 and in 1916 they added a “two-storeyed modern building” to their plant.⁸⁵ Most of the Chinese who adopted the notion of the hospital as a site for medical treatment do not seem to have felt it necessary to adopt Western architecture along with the package.

Although none of the commentators has provided a comprehensive description of the wards in a Chinese hospital, a picture can be built up from snippets of information contained in their reports from a range of hospitals. Peabody and Green were suspicious of the “spotless white uniforms” worn by attendants at the Government Hospital at Kaifeng but the rooms used by the Western-trained doctor responsible for surgery were “clean and neat”.⁸⁶ A well-financed Government Hospital in Nanking, housed in an “excellent building” with room for 50 patients, only had “about eight patients in a dirty, neglected ward, looking very miserable but lying on excellent iron beds” when Peabody visited in 1914.⁸⁷ Dr Jin Yunmei 金韵梅, the American-trained Chinese doctor in charge of the Peiyang Hospital for Women and Children, did apparently “strictly enforce” the rule that “friends of patients are not allowed to stay in the hospital”.⁸⁸ But she, unlike doctors in other hospitals, had access to a large contingent of women nurses from the training school attached to the hospital and “everything looked very clean” and patients, who were provided with bedding, looked “fairly well cared for”.⁸⁹ Peabody and Green were impressed by a hospital in Jiujiang⁹⁰ run

⁸⁴ Cody, "Striking a Harmonious Chord": p. 4.

⁸⁵ "Chinese Medical Enterprises": p. 247.

⁸⁶ Peabody and Green, "Government Hospital: Kaifeng . This hospital had not begun taking inpatients at the time of their visit.

⁸⁷ Peabody, "Chinese Hospital: Nanking .

⁸⁸ Jin Yunmei (Kin Yamei), who graduated from the New York College for Women, was the first Chinese woman to graduate abroad.

⁸⁹ Francis W. Peabody, "Visit to Peiyang Hospital for Women and Children:Tientsin 1914," p.2.

⁹⁰ Called the Red Cross Hospital but apparently with no connection to the National red Cross Society.

by two Chinese doctors who had both been trained at the AEM hospital at Anqing. Patients were all bathed on admission and slept on wooden beds; the hospital supplied bedding and clothes, “unless their own were clean [and the wards] were about as neat and clean as one can expect in old Chinese buildings”.⁹¹ In the Kung Yee hospital at Canton, “maintained by an association of fifty Chinese gentlemen” but under the charge of a foreign physician, Dr Todd, patients were allowed to have only one friend with them at night but “there are more of the family in the room during the day”. The wards were “fairly clean considering the good many people in them”.⁹² Mallowney had been particularly struck by the fact that the *Minzhengbu* hospital was “housed in buildings of Chinese architecture, and enclosed according to Chinese fashion, within high walls”.⁹³ He was impressed by the cleanliness of the hospital:⁹⁴

The most striking thing to one's eye, as one passes from place to place in this half-Eastern, half-Western temple of healing, is the refreshing cleanliness and orderliness of the whole establishment. I have seen very few foreign-managed hospitals in China that are any cleaner, if as clean and hygienically in order, than these hospitals of the *Min Cheng Bu*.

He used this observation to reinforce his call for the use of Chinese architecture and for medical missionaries to

learn too, even though it is rather late, that the old Chinese architecture can be used and can be made hygienically clean, and that therefore, it is not perhaps as necessary as some people think, to spend large sums of money in foreign architecture.⁹⁵

⁹¹ Peabody and Green, "Red Cross Hospital, p. 2.

⁹² Francis W. Peabody, "Kung Yee Hospital, Canton 1914," p. 1. In 1916 there were five foreign physicians associated with this hospital and medical school and a staff of seventeen Chinese, most of whom were physicians. The hospital would have appeared to cater for a larger proportion of inpatients than other Chinese hospitals: In-patients, 1443 men and 88 women; outpatients 8,425 men and 2,030 women. "Abstract from Chinese Report of the Kwangtung Kung Yee Medical College and Hospital, 1914-15" *CMMJ* 30, no. 6 (1916).

⁹³ Mallowney, "Modern Hospitals for Chinese by Chinese": p. 36. Although he described the enclosure walls as being 'high' the photograph of the gate shows relatively low walls with the waiting rooms beyond in full view of passers-by. See Plate 63.

⁹⁴ Peabody, although he described the “rooms, bed, and patients” as being “in a very dilapidated condition he drew attention to the “attempt at cleanliness and antiseptic” in the surgical dressing room. Peabody, "Visit to Chinese General, p. 3.

⁹⁵ Mallowney, "Modern Hospitals for Chinese by Chinese": p. 38.

Thus, it would seem that the conditions in Chinese hospitals were no more constant, and just as variable, as those encountered in mission hospitals.

Just as there was no typical American hospital, nor typical mission hospital, it seems there was no typical Chinese hospital. What emerges is that the Chinese did not adopt a single model; rather, a range of institutions came into being towards the end of the Qing which shared some characteristics of the foreign model with characteristics of earlier indigenous Chinese institutions. If these emergent Chinese institutions indeed resembled the mission hospitals in China it was because the mission hospitals had taken on Chinese characteristics and had more in common with Chinese models than with their own counterparts at home. In other words, the mission hospital was a “sinicized” hospital. It is also clear that none of the new Chinese hospitals were modelled, absolutely, even on the sinicized mission hospital. Rather, they can be interpreted as examples of syncretism: the Chinese drew on both autochthonous and foreign precursors to create uniquely Chinese institutions.

A letter from a present-day correspondent from Ningxia Autonomous Region, who chooses Chinese or Western medicine at her local hospital depending on her ailment, provides an illustration of what has become of that Chinese institution. Wang Zhuqin relates that in smaller centres, or rural areas, most people still take food in to cook for hospital patients. She says that, although “it is against hospital regulations” they persist because:

if someone is hospitalized and there is nobody from his or her family to take care of him or her, [they] will feel disappointed and at a loss - nobody in the world cares about [them]. But if there is a certain person from his or her family cooking or taking care of him or her, he will feel much better. He even gets better sooner. Cooking food for the inpatients is a way of expressing one's love to others. It's also a kind of Chinese tradition.⁹⁶

In the Introduction I cited Rogaski's characterisation of the Tianjin Hospital for the Treatment of Sick Chinese.⁹⁷ It is appropriate now to revisit that description and compare it with what we have discovered about both the mission hospital and subsequent Chinese hospitals:

⁹⁶ Wang Zhuqin, *Personal Communication*, (2001).

⁹⁷ See pages 5 - 6.

The Hospital for the Treatment of Sick Chinese introduced a new and radically different site for cure. The sufferer who stayed at the hospital became an individual, removed from the context of the family and the mediating role the family played between the patient and the practitioner. The sufferer became the patient, defined solely through his relationship vis-a-vis the doctor. Within the institutional setting of the hospital, the doctor had constant access to the patient as an object of study.⁹⁸

The stark contrast of this characterisation with the picture which has emerged from an examination of the primary sources illustrates the dangers inherent in uncritically adopting an ideological framework within which to write history. I have shown that the history of the hospital within the Chinese environment has not paralleled the history of the hospital in the West. This thesis has gone some way to fill gaps in the history of the American hospital, to include some of its history in China, as well as to fill a gap in the history of the Chinese hospital.

⁹⁸ Rogaski, "From Protecting Life", p. 65.

APPENDIX A

Notes and Sources for Figure A : Comparative Chronology

1. Greek *Asclepieia*, or 'healing temples'.¹
2. Temkin describes the role of "public physician" as dating from the fifth century BCE but there is much debate as to if, or when, they provided a place for patients to recuperate. Miller, for example, acknowledges that physicians performed surgery in their offices, or *iatreia*, but disputes any claim that accommodation was provided in them before the Christian era.²
3. Based on the *Zhouli*.³ See page 27 ff.
4. Based on the *Guanzi*.⁴ See page 28 ff.
5. *Valetudinaria*, or military hospitals, provided for Roman soldiers, gladiators, and by plantation owners, for slaves date from early in the first century CE.⁵ Thompson and Goldin, who focus on the physical manifestation revealed by excavations, are impressed by the planning and sanitary techniques, as is Scarborough.⁶
6. From the biography of Han Emperor Hanping 汉平.⁷ See fn. 50 at page 30.
7. A Royal proclamation of Yongping 永平, in 60 CE.⁸ See page 81.
8. These small, sometimes short-lived, institutions provided refuge for people who were sick, travelling or elderly.⁹
9. *Xenodocheia* or *xenones*, associated with Christian churches from early in the fourth century CE.¹⁰ Miller cites the *xenon* at Antioch, which was described in 381 CE as being a place where "every root of evil, the strange forms of disease, and the many causes of depression" could be observed, as being "perhaps a true hospital".¹¹ See page 32 ff.

¹ See Risse, *Mending Bodies*, pp.15-38

² Miller, *Birth of the Hospital*, pp. 41-47 ; Temkin, *Double Face of Janus*, pp. 205-6

³ Lu Gwei-Djen and Needham, "Origin of Examinations": pp. 63-4. See also Croizier, *Traditional Medicine*, pp. 28-9.

⁴ See, Croizier, *Traditional Medicine*, pp.29-30 ; Demieville, *Buddhism and Healing*, p. 58 ; Wong and Wu Lien-teh, *History of Chinese Medicine*, pp. 43-4

⁵ Risse, *Mending Bodies*, pp. 38-59.

⁶ Scarborough, *Roman Medicine*, pp. 76-9 ; Thompson and Goldin, *The Hospital*, pp. 4-6.

⁷ *Han Shu*. Ban Gu (32-92). Beijing: Zhonghua shuju, 1975.. See Wong and Wu Lien-teh, *History of Chinese Medicine*, p. 77 and Needham, *Sc. and Civ.*, vol. 6, p. 54.

⁸ Wong and Wu Lien-teh, *History of Chinese Medicine*, p. 138.

⁹ See Granshaw, "The Hospital", p.1181 ; Miller, *Birth of the Hospital*, p. 21-2 ; Rosen, "The Hospital: Historical Sociology", pp. 3-4 ; Temkin, *Double Face of Janus*, p. 218.

¹⁰ Miller, *Birth of the Hospital*, pp.20-21 ; Rosen, "The Hospital: Historical Sociology", pp. 3-4.

¹¹ Miller, *Birth of the Hospital*, p. 21.

10. According to Wong, the *Liubing guan* 六病馆, or Six Diseases Home, a "charity hospital" was organised by Crown Prince Hui Wen and Prince Jing Ling who were admirers of Buddhism. Prince Jing Ling also established a "hai" where he took in the poor and provided them with medicine and clothing.¹²

11. The first permanent hospital with a dispensary was established in 491 by Xiao Ziling, "a Buddhist prince of the Southern Qi dynasty".¹³ Ren Yingqiu describes the event which motivated its establishment: "there was a big flood and millions were affected by the epidemic. Ling Wangxiao 陵王萧... set up a dispensary and took in the sick poor. This was probably China's earliest private benevolent hospital" (my translation).¹⁴

12. In 510 CE "Toba Yu, a prince of Northern Wei" established a "government hospital" under the auspices of the Ministry of Imperial Sacrifices (*taichangbu*). It was intended for poor or destitute suffering from disabling diseases.¹⁵ Ren Yingqiu describes this establishment as "maybe the earliest type of public hospital".¹⁶

13. The refuge set up by Xin Gongyi 辛公义.¹⁷ See page 34.

14. *Nosokomeia*, specifically for the care of the sick developed into late sixth or early seventh-century hospitals like the "Sampson - an institution with a specialized staff of physicians and trained assistants".¹⁸ See page 32.

15. Christian charitable institutions for orphans, the aged and foundlings.¹⁹ See page 32.

16. There were "400-odd" Hôtel Dieu by the early seventeenth century.²⁰

17. Buddhist temples served as hostels for monks, pilgrims, lay travellers, officials and students.²¹

18. State-sponsored welfare.²² See page 35 ff.

19. *Beitian yuan* or *Beitian fang* (Fields of Compassion).²³ See page 34 ff.

20. State-sponsored infirmaries established following the proscription of Buddhism in 845 AD.²⁴ See page 35 ff.

¹² Wong, "Chinese Hospitals in Ancient Times": p. 78.

¹³ P.Y. Ho and F.P. Lisowski, *A Brief History of Chinese Medicine, 2nd Edition* (Singapore: World Scientific Publishing Co., 1997), p. 21. See also Needham, *Sc. and Civ.*, vol. 6, p.54.

¹⁴ Ren Yingqiu, "Yiyuande": p. 19.

¹⁵ Zhen Zhiya, "Zhongguo gudaide yiyuan": p. 55 ; Ho and Lisowski, *Brief History*, p. 19 and Needham, *Sc. and Civ.*, vol. 6, p. 54.

¹⁶ Ren Yingqiu, "Yiyuande": p. 19.

¹⁷ Wong and Wu Lien-teh, *History of Chinese Medicine*, p. 137. See also Needham, *Sc. and Civ.*, vol. 6, p. 54

¹⁸ Miller, *Birth of the Hospital*, p. 23, 25-7.

¹⁹ *Ibid*, pp. 24-5.

²⁰ Jones, *Charitable Imperative*, p. 10.

²¹ See Ch'en, *Buddhism in China*, pp. 263-4.

²² Ch'en, *Chinese Transformation*, p. 297

²³ Demieville, *Buddhism and Healing*, pp. 58-60 ; Leung, "Organized Medicine": p. 135 ; Scogin, "Poor Relief": p. 3 ; Wong and Wu Lien-teh, *History of Chinese Medicine*, p. 139.

²⁴ Scogin, "Poor Relief": p.31 ; Wong and Wu Lien-teh, *History of Chinese Medicine*, p. 139; and Demieville, *Buddhism and Healing*, pp. 59-60.

21. First Islamic *Bimaristan* (hospital), at Baghdad at the turn of the ninth century.²⁵
22. The first Muslim hospital was not widely emulated in the ninth century and only emerged widely throughout the empire in the 10th century. They were well established in major cities by the 12th century.²⁶ See page 25 ff.
23. Carlin describes the leper hospitals as “the first and perhaps easiest to distinguish” of the medieval hospitals in England. According to Porter, by early in the thirteenth century there existed some 19,000 leprosaria in Europe. As leprosy declined some of these became hospitals for people with other infectious diseases, the insane or merely indigent. Some were brought into use as quarantine hospitals during the plague of the fourteenth century. Almshouses were by far the most common English medieval welfare institution (67 percent) followed by leper hospitals (31 percent) and refuges for poor pilgrims or travellers (12 percent). Generally, in none of these was medical or nursing care provided. Only 10 percent of the medieval institutions provided any form of medical care, those for the “non-leprous sick poor” and of these less one fifth were devoted exclusively to the sick.²⁷
24. In the official history of the Song, *futian yuan* 幅田院 Blessed Fields (or Good Fortune Home) are already referred to as the “old system” when discussing the reforms undertaken during the reign of Yingzong 英宗(1064-1068).²⁸
25. *Huimin yaoju* (惠民药局), or charity pharmacies, which distributed free medicines, particularly during epidemics but at other times for common illnesses, were established at least by the Yuanfeng 元丰reign (1078-1085) when the publication of state-sponsored books of prescriptions was initiated.²⁹
26. *Anle fang* 安乐坊, or peace and happiness ward: set up by “the famous scholar-official” Su Shi (1036-1101) in Hangzhou in 1089”.³⁰ See page 38 ff.
27. *Juyang fa* 居养法, or ‘Poorhouse System’.³¹ See page 38 ff.
28. *Anji fang* 安济坊, or ‘Peace and Relief Wards or Hospitals’.³² See page 39 ff.
29. St Bartholomew’s, London.³³
30. *Pantocrator Xenon*: Complex Byzantine hospital at Constaninople, Miller’s “first modern hospital”, founded in 1136.³⁴
31. Yüan dynasty military hospitals modelled on *anle fang*.³⁵

²⁵ Dols, "Origins of the Islamic Hospital": pp. 382-4 and Risse, *Mending Bodies*, pp. 125-29.

²⁶ Dols, "Origins of the Islamic Hospital": p. 388.

²⁷ Carlin, "Medieval English Hospitals", pp. 23-5.

²⁸ Scogin, "Poor Relief": p. 31.

²⁹ Leung, "Organized Medicine": pp. 136-37.

³⁰ Ibid: p.136; Scogin, "Poor Relief"; Wong and Wu Lien-teh, *History of Chinese Medicine*, p. 139.

³¹ Scogin, "Poor Relief": pp. 32-3.

³² Ibid: pp. 34-5.

³³ Porter, *Cambridge Illustrated History*, p. 212.

³⁴ See Miller, *Birth of the Hospital*, pp. 11-29 ; Rosen, "The Hospital: Historical Sociology", pp. 12-29; Risse, *Mending Bodies*, pp. 125-130.

³⁵ Zhen Zhiya, "Zhongguo gudaide yiyuan": p. 56.

32. St Maria Nuova established in Florence in 1288.³⁶ See page 24.

33. Quarantine hospitals: The idea of quarantine, isolation wards and boards of health were developed in the Italian city states in the fourteenth and fifteenth centuries as a response to the bubonic plague.³⁷

34. Yuan emperor Chengzong (r.1295-1308) re-established state hospitals.³⁸

35. The monastic hospitals, for example, St Thomas, and St. Bartholomew's were re-established under the auspices of the City of London after a short break following the Reformation and the dissolution of the monasteries. This time they had physicians on the staff so that they could provide specifically for the sick poor. London was an exception to the rest of the country where there were no comparable institutions.³⁹

36. *Hospitaux Generaux*: Jones describes the dual role of compassion and control in the establishment of these "catch all institutions", or "hospital-cum-workhouse", by the French state.⁴⁰

37. The *Tongshan hui* 同善会, or Society for Sharing Goodness, was the first documented benevolent society. Started in 1590 in Yucheng 虞城, Henan at the instigation of Ming scholar, Yang Dongming (1548-1624) 杨东明 its charter was to build roads and bridges and distribute alms to the poor and needy. The following year Yang led an elite group to establish a second society, the *Guangren hui* 广仁会, or Society for Spreading Humaneness, in the same city. This time they included medical care for the poor in the charter: effected by the distribution of prescriptions and medicine.⁴¹ Rogaski discusses a similar institution, the *Yuli tang*, established in Tianjin in 1687.⁴²

38. Charitable dispensary set up in a temple by "the late Ming patriot", Qi Biao (1602-1645) in Shaoxing in 1636. Ten physicians worked in six-hour rotating shifts.⁴³

39. *Shiyao ju* 施药局: the first new charitable dispensary of the Qing.⁴⁴

39. Two medical general hospitals in London: St Bartholomew's and St Thomas's.⁴⁵

40. First hospitals in America: Pennsylvania Hospital in 1792 and New York Hospital in 1771.⁴⁶

41. Free Dispensaries, England and Scotland. 1770, Aldersgate Street Dispensary, London.⁴⁷

³⁶ See Henderson, "Hospitals of Florence", pp. 70-1; Granshaw, "The Hospital", pp.1183-4 ; Porter, *Greatest Benefit*, p. 211.

³⁷ See Benedict, "Policing the Sick": p. 62 and Dorothy Porter, "Public Health" in *Companion Encyclopedia of the History of Medicine*, ed. W.F. Bynum and Roy Porter (London: Routledge, 1993), p. 1232.

³⁸ *Yuan shi*. Song Lian (1310-1381). Beijing: Zhonghua shuju, 1976. speaks of appointing doctors and setting up the old *huimimiaoju* to distribute medicine to the widowed and poor who are sick. The use of the word "hospital" is K.C. Wong's (unsourced) interpretation. Wong, "Chinese Hospitals in Ancient Times": p. 80.

³⁹ Granshaw, "The Hospital", p. 1184.

⁴⁰ Jones, *Charitable Imperative*, pp. 39-41.

⁴¹ Handlin-Smith, "Benevolent Societies": p. 311 ; Leung, "Organized Medicine": p. 145.

⁴² Rogaski, "From Protecting Life", pp. 82-3.

⁴³ For details of this and similar establishments, see Leung, "Organized Medicine": pp.145-46.

⁴⁴ *Ibid*: p. 146.

⁴⁵ Granshaw, "The Hospital", p. 1184.

⁴⁶ Rosenberg, *The Care of Strangers*, pp. 18-22 and Bordley and Harvey, *Two Centuries of American Medicine*, p. 57.

42. 1802, London Fever Hospital.⁴⁸

43. *Puji tang* 普济堂. This general clinic and infirmary was formed from the merging of a dispensary and a charitable institution which provided a medical service. The majority of people were treated as outpatients by “Confucian doctors” but those without families who were seriously ill could be accommodated in “a ward at the rear of the building’. In the mid 18th century the Yongzheng 雍正 Emperor ordered that these be set up all over the country.⁴⁹

44. Specialised hospitals were ‘medicalised’ earlier than general hospitals.⁵⁰

45. Map showing Qing Charitable Institutions with a medical service in the Jiangnan region before 1840.⁵¹

46. Peter Parker, the “first medical missionary” arrives and sets up a hospital in Canton, 1834.⁵²

47. Hospitals played a central role in health care by the 1920s.⁵³

⁴⁷ See Cherry, *Medical Services*, p. 42 ; Granshaw, “The Hospital”, pp. 1188-89.

⁴⁸ Freidson, ed., *The Hospital in Modern Society*, p. 21.

⁴⁹ Leung, “Organized Medicine”: pp. 147-48..

⁵⁰ Granshaw, “The Hospital”, pp. 1189-91.

⁵¹ Leung, “Organized Medicine”: p. 148.

⁵² See “Peter Parker : Bodies or Souls” in Jonathon Spence, *To Change China: Western Advisers in China 1620 - 1960* (London: Penguin Books, 1969), pp. 34-56.

⁵³ Granshaw, “The Hospital”, p. 1195-6.

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