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The Alchemy of Medicine: Making Doctors, Knowledge, and Drugs in Treaty-Port Shanghai, 1915-1927

By

Peiting Carrie Li

A dissertation submitted in partial satisfaction of the

requirements for the degree of

Doctor of Philosophy

in

History

in the

Graduate Division

of the

University of California, Berkeley

Committee in charge:

Professor Wen-hsin Yeh, Chair Professor Thomas W. Laqueur Professor Andrew F. Jones

Fall 2019

The Alchemy of Medicine: Making Doctors, Knowledge, and Drugs in Treaty-Port Shanghai, 1915-1927

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by Peiting Carrie Li

Abstract

The Alchemy of Medicine: Making Doctors, Knowledge, and Drugs in Treaty-Port Shanghai, 1915-1927 by

Peiting Carrie Li

Doctor of Philosophy in History University of California, Berkeley Professor Wen-hsin Yeh, Chair

This project investigates not the inexplicable cures that healed the sick in early 20th-century China, but the transformations in the hierarchies of knowledge on which Western medical authority was based. I look at simultaneously existing paradigms of authority surrounding doctors of Western medicine, scientific medical knowledge, and Chinese herbal medicine in the print media of 1920s Shanghai.

The historical confluence of challenges to Chinese medicine and the rise of Western medicine are the backdrop of this story. The fall of the last dynasty in 1911 prompted Chinese reformers to question their guiding paradigms in all areas of life, including language and politics, science and medicine. Intellectuals like Liang Qichao condemned traditional Chinese culture, which was seen as weakening China in the face of foreign imperialism. Chinese medicine however, was not completely repudiated. For all the harsh criticism of Chinese theories of knowing the body based on concepts like *yin yang*, and methods of diagnosis such as pulse reading, in areas of treatment, herbal and mineral especially, doctors and patients still viewed their native medicine as retaining some value. For prior to the rise of medical schools in the mid-19th century and lab-based biomedicine in the mid-20th century, doctors of Western medicine – often portrayed as charlatans hawking unproven nostrums – struggled to respond effectively to diseases. I ask how Chinese doctors of Western medicine in Shanghai made a case for themselves as figures of authority at a time when Western medicine was ascendant yet could not offer reliable cures for many of the major diseases of the time.

Drawing on professional medical journals, popular newspapers, and legal regulations, I show how physicians presented themselves as ethical professionals; how medical journals turned subjective experience into objective scientific knowledge; and the ways professional, popular, and state reporting transformed authoritative herbs into efficacious drugs. The forms of institutional organization and knowledge production that created this medical authority simultaneously produced a whole host of tensions: between professional ethics and medical entrepreneurship; scientific knowledge that was locally contingent but sought to be globally coherent; and between authentic and commodified indigenous medicine. I argue that a particular formation of Sino-Western medicine, knowledge production, and the market in Republican Shanghai resulted in print media restructuring hierarchies of knowledge production to hinge less on asserting the inherent qualities of medical experts, knowledge, or drugs, and more on articulating the institutional processes that validated claims as an expert physician, producer of medical knowledge, and purveyor of effective medical treatments.

To my father and mother,

Percy Tzu-jung Li 李子榮 and Sherry Hsueh-hui Li 許雪慧

always, and ever

Preface

I suppose this story, my story, begins with my grandfather who left Taiwan in the 1930s for the colonial center, Japan, hoping to study medicine but eventually settling on pharmacy. He worked at the pharmaceutical company Takeda in Shanghai before returning to Taiwan when the Chinese civil war broke out in 1945. My father also left Taiwan, in 1974 to study organic chemistry in the U.S., the new center for science at the time. The story, as he likes to tell it, is that one day he looked down at his two young daughters — not knowing that a third daughter would soon arrive — and decided to abandon his dream of becoming a chemistry professor for a job in computer science in order to provide his family a more secure future.

Western science and chemistry, though, remained a strong presence in our home. One annual rite of passage we endured was the school science fair. My father oversaw experiments that included fermenting bananas with yeast and ripening persimmons with the ethylene from apples. At the same time, Chinese ways of knowing the world remained a part of our lives. My mother too had given up her own dreams – she grew up on a farm and had wanted to be a writer, but could not do so in her non-native tongue after she joined my father in the U.D.. But her taste for poetry and plants lived on, as she tended her garden and reminded us to eat goji berries to keep our eyes healthy, and black sesame seeds to keep our hair dark. We complained whenever she cooked that dark brown mixture of Chinese herbs, filling the house with a bitter, pungent odor. It was only decades later when I learned that the medicine was supposed to help her conceive a boy, who never came.

Was it inevitable that my mother, the poor farm girl from a village in the rural south, and my father, the cosmopolitan city boy from the northern capital, did not believe in the same science and medicine? Differences in family background, education, and professional training help explain why Chinese medicine, Chinese culture and ways of knowing, might hold meaning and value far from the sites that sustained their production, and why they continue to retain their hold on people like my parents, and me.

This dissertation offers another story.

Acknowledgments

My first and last thanks is to my parents, Percy Tzu-jung Li and Sherry Hsueh-hui Li. Given my family background, it may now seem inevitable that I would end up studying the history of medicine in China, but my path has been circuitous enough that to make it to this point is a happy surprise.

I am grateful to my committee for their commitment to my intellectual independence and warm support when I needed it. First, and foremost, my deepest thanks to my advisor, Wen-hsin Yeh for seeing me through. Her steadfast encouragement, understanding in times of struggle, and unflagging kindness have been matched with an otherworldly, acute sensibility for the complexities of history and importance of narrative that has continually inspired me. Tom Laqueur has always made things more fun, and I thank him for his unrelenting warmth and sage advice when I most needed it. Our independent study on history of medicine, the writing seminars in which we talked about the art of posing a question and opening a piece have been some of my favorite times in grad school. In all his intellectual curiosity and joy for this work — he is my model for the life of a scholar. I thank Andrew Jones for his kind listening, steadfast encouragement, and willingness to always meet me where I have been. His responsiveness has made all the difference these years. Despite their best efforts, I've been a most challenging student, I know. I thank them for the forbearance and patience. All errors and oversights in my work are entirely mine.

Thank you to Carol Benedict and Melissa Dale, who first introduced me to Chinese history at Georgetown. Eugenia Lean and Madeleine Zelin were my first teachers in graduate school at Columbia. I thank them all for taking my developing interest in Chinese history so seriously. At Columbia I enjoyed the company of an energetic cohort of colleagues and friends, among them: Ramona Bajema, Adam Bronson, Buyun Chen, Chad Diehl, Chelsea Foxwell, Reto Hofmann, Hsu Hui-lin, Colin Jaundrill, S.E. Kile, Andy Liu, Mi-Ryong Shim, Tim Yang, and Zhou Yurou. Starr Library and poker nights with you all made it much more fun.

My Chinese teachers Fann Meiyuan and Lin Chiu-fang at the International Chinese Language Program in Taipei have been steadfast in their encouragement and endless in their patience. I thank them for their constant encouragement.

An unexpected sojourn in Cambridge, Massachusetts led me to the wonderful people at Harvard. My thanks first to the Denise Ho, for introducing me to the community and recommending me as a teaching fellow to the wonderfully kind Roderick MacFarquhar. The Cultural Revolution class made me think teaching could be my calling. Mark Elliott was, and continues to be, a constant source of support and encouragement; my deepest gratitude to him as my teacher in so many things. My thanks to Ariel Fox, Qian Ying, Wei Yang, and Victor Seow who made this interloper feel very welcome.

Returning to California, and to Berkeley in particular, has been a dream. I am thankful to have been a student and have taught students at the greatest public university in the world. Its ethos and values have deeply shaped me, intellectually and personally. The Berkeley History department has been a stimulating home, full of generous faculty who have offered thoughtful counsel, incisive questions, and steadfast support. My warmest thanks to Michael Nylan for her

advice practical and philosophical, and for providing a model of scholarly collaboration and friendship. To James Vernon, a thousand persimmon thanks for listening so attentively and helping reframe all my perceived obstacles as possibilities. Kerwin Klein patiently spent a semester helping me find my first footing in intellectual history. His encouragement, humor, and unique sensibility I've missed greatly. Massimmo Mazzotti has kept an eye out for me as I've been poking around the field of history of science, always offering to help bring me in from the cold. Thanks to Cathryn Carson for her wise perspective and advice on next steps. Jan de Vries generously answered a desperate email from Shanghai and helped me rethink my research question. David Johnson helped me understand that it's worth holding out for a question with intellectual leverage. Thanks to Andrew Barshay for modelling pure historical empathy and helping me keep the hope that I would eventually find a historical person to capture my attention. Beth Berry impressed upon me the sacredness of the craft of writing, and took the time to help me craft better recommendation letters. For his interest in my work and generosity in providing feedback, I thank John Lesch. Margaret Chowning, for her warmth and help navigating the administrative maze - thank you. David Henkin offered some long-term perspective that came just at the right time. Suzanna Elm, as head graduate advisor, has shepherded me through the final stage of the Ph.D. with a keen eye and many kind words. My thanks also to Peter Zinoman for listening to a late-stage Ph.D. student and helping her make the final push. For casual Dwinelle hallway conversations that meant so much more, I thank: Caitlin Rosenthal, Martin Jay, Ethan Shagan, and Yuri Slezkine. And my deepest thanks to Barbara Hayashida, Mabel Lee, and Todd Kuebler for their help and encouragement in guiding me through the Ph.D. bureaucracy with such understanding and warmth.

At Berkeley, I've been blessed with many fellow travelers, who I thank here: Cyrus Chen, Jesse Watson, Amanda Buster, Margaret Tillman, James Lin, Jonathan Tang, Matthew Berry, Caleb Ford, Joe Passman, Linh Vu, and Larissa Pitts. To Lisa Brooks, Bonnie Wong, Christopher Lawson, Zoe Griffith, Paulina Hartono, Shoufu Yin, and Trenton Wilson — it's been wonderful to have you as readers and interlocutors. Adrianne Francisco has my gratitude for her support, without which I would have been lost in Shanghai. For their kindness and camaraderie, I thank Natalie Mendoza, Jennifer Robin Terry, Maggie Elmore, Albert Wu, Katherine Zubovich, Mirjam Vorkelius, Peggy O'Donnell, Bathsheba Demuth, Yana Skorobogatov, and Christin Zurbach. Laurence Coderre has offered much-needed advice and perspective. I thank Wendy Xin for helping me get back on the writing horse. Liz Carlisle kept me afloat with her good cheer and perspective. My thanks to Michelle Wang for her tough love, and incisive perspective, and to William Ma for his cheer and zest for life.

Some of my most inspiring teachers and colleagues have been from other departments. My dearest Placing Asia colleagues and friends Tobias Smith, Annie Malcolm, Ying-fen Chen, Jesse Rodenbiker, Gregory Fayard, Jenny Zhang, and Kristin Sangren -- thank you for your intellectual energy and encouragement. Emily Gottreich renewed my faith in teaching and in what history can do. Thanks to Cori Hayden for showing me another way to think about asking questions. Teaching for the Big Ideas courses and for Arts+Design has opened my eyes to larger questions and aesthetic possibilities. I thank Daniel Boyarin and Michael Nylan for their intellectual curiosity and for taking pleasure and scholarly pursuits so seriously. Suzanne Li Puma, Natasha

Boas, Eric Siegel, and Shannon Jackson gave me a new model of collaboration, and I thank them, and Shannon especially, for advocating for diversity and equity in our teaching on curation. Peter Glazer, Stan Lai, and Christian Nagler were wonderful partners on the subject of creativity and helped open my eyes to all the possibilities of creative work.

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To the kind doctors at the Tang Center, who helped restore use of my eyes, and my vision, I

thank: Drs. Deborah Lee Chen, Meng Lin, and Amrit Bilkhu. Hope that thing with feathers, is the best medicine; Schwartz is only one story about black; and Waldo I am so grateful to have found.

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Long days of solitary writing at home were bearable only because I lived in good place for walking. My neighborhood in North Berkeley, its bars and benches have been my writing and reading spots away from home. And in my local peregrinations, through the accumulation of brief connections, I've come to know many of the individuals who work and live there. We can never know what a single encounter can mean to another person; often those brief moments of connection helped me just make it through that day. I thank: the energetic and encouraging Marcia, Paul, and Belle at Masse's; Jonathan, Zolty, Rene, and Veronica who made me feel so welcome to read and write at the Chez Panisse Cafe bar; and the wonderful workers at Cheeseboard, especially Alex, Callie, Hillary, Paul, James, Davie, and Ursula. That bench in front of Cheeseboard has been the place I've done the most reading, writing, and thinking outside my apartment. It's also the spot I've met some of the people dearest to me now, including: Oliver O'Reilly from mechanical engineering, whose attentive ear and sympathetic perspective have helped me throughout the Ph.D. and all the life that happens alongside it; and the morning gang Burkhardt Militzer, Nicole Thesz, Frank Salsbury, Morgan Baum, Abdi Soltani, David Olsen - all of whom have offered good cheer and support.

A shared love of leisure reading and the art of writing has helped me continue to believe in the academic work. Vladimir Nabokov restored my faith in a words by giving me a model of writing that is both intellectually rigorous and aesthetically astounding. His observations on exile and painterly writing for the eye have been my daily inspiration for years now. Thanks to Albert Wu and Michelle Kuo for their kind ears and warm encouragement; to Martin Holden, Bill McClung, Phyllis Brooks Schafer, Eleanor and Nick Crump and our other dear Slow Reading friends at University Press Books; Thomas Farber for sharing observations about this most curious of métiers and for reading some early poems. And for sharing the music, another craft akin to writing, I thank: Franklin Lei, Arthur Remedios, and Katherine Lee.

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perceptive questions, and gentle nudging has saved me so many times. And my deepest thanks to John Parman, for helping me see things always with more subtlety, for his encouragement of my work, for always writing, and for being my first and last reader.

My family in Taiwan hosted me over the years and always made me feel completely at home. I am especially grateful to my second aunt and uncle, Lee Xiu-hua and Hsu Song-ken for their kindness and what they have taught me about work academic and other joys. My cousins Yun Shan and Fu Yin have been especially encouraging, for which I thank them.

Academic life, because it is so rarefied in many ways, has taken me quite far from the lives of my sisters Peiyin Patty Li and Peiling Andrea Junek. I'm grateful to them for their understanding and support during this long, often difficult period away. I look forward to meeting again on the other side and more time with you both.

It is not unusual for the first and second generation of immigrants to be separated by an unbridgeable abyss. I'm grateful that the Ph.D. has allowed me to avoid that fate. For, in doing this work, I've been able to build a stronger relationship with my parents, not only because of geographic proximity but also because my studies have helped me better understand and connect with them. Our relationship now is marked by a habitual exchange of Chinese puns, comically garbled idioms, persimmoned paradises and hoshigakied heavens, and all those private jokes which are the secret code of happy families. Our time together and all the tensions and harmonies between Chinese and Western ways of being that emerge are a reminder to me of the living side of my intellectual work. They have been my two greatest sources of support and inspiration during the Ph.D.. Thank you for the life you have given me, and the one we have together. Without you, there is no place I could ever call home.

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The Alchemy of Medicine: Making Doctors, Knowledge, and Drugs in Treaty-Port Shanghai, 1915-1927

Introduction

This project investigates not the inexplicable cures that healed the sick in early twentieth-century Shanghai, but the transformations in the hierarchies of knowledge on which Western medical authority was based. It does so by illuminating the ways print media restructured conditions of knowledge production that allowed one to identify as an expert physician, produce authoritative medical knowledge, and make a claim for effective treatments. Drawing on professional medical journals, popular newspapers, and legal regulations, I show how physicians presented themselves as ethical professionals; how medical journals turned subjective experience into objective scientific knowledge; and the ways professional, popular, and state reporting transformed authoritative herbs into efficacious drugs.

Much work on science and medicine in China has highlighted the adoption of particular ideas, practices, and institutions such as hygiene, quarantine, and hospitals. My project, by contrast, focuses on the middle ground that doctors occupied between the state and the sick, examining the discursive practices in print media that shaped medical knowledge and authority. Thus, I investigate these doctors — their writing and writing about them, the knowledge they consumed and created, the herbal and drug treatments they lauded and criticized — not just through the institutional structures they inhabited, but also through the professional, print, and commercial networks in which they were embedded. I argue that a particular formation of Sino-Western medicine, knowledge production, and the market in Republican Shanghai resulted in print media restructuring hierarchies of knowledge production to hinge less on asserting the inherent qualities of medical experts, knowledge, or drugs, and more on articulating the institutional and experiential processes that validated one's claims for authority.

Historical Context

The end of the Chinese dynastic system in 1911 disrupted a previously intact set of orienting paradigms, challenging political, intellectual, and cultural understandings of the world and China's place in it. In the decades that followed, many Chinese thinkers including the prominent intellectual Liang Qichao and the writer Lu Xun, advocated jettisoning the traditional culture they argued had weakened China in the face of foreign imperialism. Along with the Chinese language, science, and the political system, Chinese medicine also met with a radical rethinking at this time.

Chinese and Western medicine were, and are, two distinct systems of understanding, diagnosing, and treating sickness. The appeal of Western biomedicine over Chinese medicine owes much to what Paul Unschuld has described as biochemical/biophysical medicine's chemical, physical, and surgical treatment of illnesses that produces an "unparalleled ability to influence the processes of the organism in a desired and predictable manner." Furthermore, the specificity of disease concepts yielded by late nineteenth and early-twentieth century science's search for internal patterns of diseases led to a situation in which "generally fluid and nonspecific ideas (about disease) had changed fundamentally by the beginning of the 20th

¹ Paul Unschuld, Medicine in China: A History of Ideas (Berkeley: University of California Press, 1985), 235.

century," replaced by "recognizably modern notions of mechanism-based ailments with characteristic clinical courses." Moreover, new technologies of diagnosis and examination such as laboratory tests and analyses (e.g. blood and urine tests) X-rays, thermometers, blood pressure cuffs, and tissue sampling increased the precision of knowledge about the body's internal conditions and functions.

The ascendance of Western biomedicine in China was connected to doubts about whether premodern, non-scientific Chinese medicine had a place in the project of China's modernity. For science, and Western biomedicine, enjoy the status of objective, universal knowledge. Sean Lei Hsiang-lin describes the way that discourses of modernity rest on what Ian Hacking has characterized as a representationist conception of reality. In this view, the goal of science is "to create representations of the natural world, which are assumed to be universal, internal, and transcultural — that is natural and thus universal." Such a model makes it hard to accommodate Chinese science and medicine. This is because Chinese medicine did not, at this time, posit theories of causality and patterns of treatment that were assumed to be universal, or true for all human bodies, situations, or illnesses, nor represent the known natural world with as much fidelity as did Western science and biomedicine.

Scholars have identified the Manchurian Plague of 1911 as the turning point when support for public health measures proved "the superiority of modern medicine over Chinese medicine." This viewpoint is epitomized in the figure of Wu Liande, a Cambridge-trained doctor who led efforts to end the epidemic by isolating patient cases, bacteriological testing, and mass cremation—all measures that challenged Confucian ideals and angered many Chinese people. Chinese medicine and its practitioners were challenged with another way of knowing, diagnosing, and treating the body that privileged causal explanations and stable, general patterns that could, with greater specificity, distinguish who would die and who would live. Anatomy and germ theory were based on theories and technologies that explained underlying structures that directly connected what could be seen under a scalpel or through an X-ray with a specific understanding of disease etiology and treatment. In contrast, Chinese theories of medicine based on concepts like five phases or *yin yang* posited an understanding of the body and illness in terms of internal balance, micro-macrocosmic resonance, and transformations. As such, Chinese medicine did not offer an anatomic, universal, realist representation of the human body and explanations of illness in the same way as Western biomedicine.

² Charles Rosenberg, "The Tyranny of Diagnosis: Specific Entities and Individual Experience," *Millbank Quarterly* 80, no.2 (January 1, 2002): 242, quoted by Christopher Sellers, "To Place or Not to Place: Toward an Environmental History of Modern Medicine" *Bulletin of the History of Medicine* 92, no. 1 (Spring 2018): 10.

³ Christopher Sellers lists work on technologies in medicine including Stanley Joel Reiser, *Technological Medicine: The Changing World of Doctors and Patients* (New York: Cambridge University Press, 2009) and Bettyann Kevles, *Naked to the Bone: Medical Imaging in the Twentieth Century* (Reading, Mass.: Basic Books, 1998) in Christopher Sellers, "To Place or Not to Place: Toward an Environmental History of Modern Medicine," *Bulletin of the History of Medicine* 92, no. 1 (April 20, 2018): 18.

⁴ Sean Xiang-lin Lei, *Neither Donkey nor Horse: Medicine in the Struggle over China's Modernity* (Chicago: The University of Chicago Press, 2014), 14.

⁵ Ibid., 13-14.

⁶ Ibid., 21.

⁷ Liande Wu, *Plague Fighter*; the Autobiography of a Modern Chinese Physician (Cambridge (Eng.): W. Heffer, 1959), 12.

⁸ Sean Xiang-lin Lei, *Neither Donkey nor Horse: Medicine in the Struggle over China's Modernity* (Chicago: The University of Chicago Press, 2014), 12-15.

Methodology, Intervention in secondary literature, and Contribution

This dissertation looks at simultaneously existing networks. Previous work on interactions between Western and Chinese systems of medical knowledge production has focused on certain texts, individual translators, educational institutions, indigenous or hybrid business models, competition for state support, and the rise of public health institutions. Instead of situating doctors, knowledge, and drugs within a particular institutional context, I look at the simultaneous existence of different paradigms of asserting authority in these areas as they appeared were produced discursively in print.

Doctors as professionals

Scholars have often emphasized doctors' education as constitutive of their identity. The formation of new medical schools, with new curricula, instructors, and fields of study has rightly received much scholarly attention. I want to suggest that literati became doctors not only by means of the new educational subjects and understanding of medicine that they learned in school, but also by means of how they organized and presented themselves to each other and the general public as scholar professionals.

Key to understanding these doctors' self-presentation is a late imperial divide between medicine as scholarly mastery of texts and medicine as embodied craft. The first, and higher status type of medicine was a field of study, an intellectual undertaking connected to philosophy and based on textual mastery of an established canon of medical classics and their commentaries. The most famous of these canonical medical texts was *The Yellow Emperor's Inner Canon*, written between the first century B.C.E. and the seventh century C.E. In this view, texts were the indisputable basis for medical knowledge. As Robert Hymes notes, biographies of Song dynasty (960-1279) physicians emphasized the books they wrote, which stressed precedent and insight over clinical practice. The second, and a lower-status notion of medicine, was as a specialized practice, physical skill, occupation, or craft. Literati physicians were differentiated from these other type of healers, the likes of which included bone-setters, herbalists, midwives — all of them unlicensed and with the exception of physicians serving the

⁹ See Bridie Andrews, "Tuberculosis and the Assimilation of Germ Theory in China, 1895-1937," *Journal of the History of Medicine and Allied Sciences* 52, no. 1 (1997): 114–57; Bridie Andrews, *The Making of Modern Chinese Medicine*, 1850-1960 (Vancouver: UBC Press, 2014); Bridie Andrews, "Ding Fubao and the Morals of Medical Modernization," *East Asian Science*, *Technology*, and *Medicine*, no. 42 (2015): 7–38; Mary Brown Bullock, *An American Transplant: The Rockefeller Foundation and Peking Union Medical College* (Berkeley: University of California Press, 1980); Ruth Rogaski, *Hygienic Modernity: Meanings of Health and Disease in Treaty-Port China* (Berkeley: University of California Press, 2004); Sherman Cochran, *Chinese Medicine Men: Consumer Culture in China and Southeast Asia* (Cambridge, Mass: Harvard University Press, 2006); Xiaoqun Xu, *Chinese Professionals and the Republican State: The Rise of Professional Associations in Shanghai 1912-1937*, Cambridge Modern China Series (Cambridge, U.K.; New York: Cambridge University Press, 2001); Sean Xiang-lin Lei, *Neither Donkey nor Horse: Medicine in the Struggle over China's Modernity* (Chicago: The University of Chicago Press, 2014); Chieko Nakajima, *Body, Society, and Nation: The Creation of Public Health and Urban Culture in Shanghai* (Cambridge, Massachusetts: Harvard University Press, 2018).

¹⁰ Robert Hymes, "Not Quite Gentlemen? Doctors in Sung and Yuan," Chinese Science 7 (1986): 33.

¹¹ Charlotte Furth, A Flourishing Yin Gender in China's Medical History, 960-1665 (Berkeley: University of California Press, 1999), 20.

¹² Hymes, 50.

¹³ Ibid., 33.

emperor, without formal, institutionalized training before the early twentieth-century.¹⁴

Analyzing the establishment of physicians as a profession illuminates the actual challenges in the practice of medicine, in being doctors in the world they faced after their medical training had ended. Much scholarly work has characterized the predicament doctors faced at this time as one of Chinese versus Western medicine in an epistemological or intellectual sense. In other words, that the difference between Chinese and Western medicine was seen mainly in terms of distinct theories of the body, causes and diagnosis of illness, and therapeutics. ¹⁵ While I do not deny these differences are significant, I propose that looking at one related but distinct area of concern to this debate, namely the ways commercial interests were both rhetorical foil and necessary prop to these doctors. On the one hand, doctors presented themselves rhetorically as defenders of medical ethics in an increasingly commercialized world of unqualified quacks and dangerous drugs. On the other hand, these doctors were in the business of medicine, and reliant on the support of commercial medicine for their professional activities. Anxieties about easily accessible medications and the appearance of the pharmacist as another purveyor of drugs suggests that we can understand doctors in China not just along the lines of Chinese and Western medicine, but in terms of the challenges offered by commercial medical interests in general, and patent medicines and pharmacists in particular.

Doctors and knowledge production

My investigations into the content and form of professional medical knowledge production is inspired by work in history of science and science and technology studies. Historians of science Steve Shapin and Simon Shaffer have argued that the literary technologies of scientific writing — ways that scientists wrote about their experiments in a compelling fashion — played a key role in the rise of scientific authority in seventeenth-century British experimental life. ¹⁶ Another touchstone for this project is Bruno Latour's work on the ways scientific authority derives from the larger networks of people, print, and practices in which scientists are embedded. ¹⁷

Scholars such as Ruth Rogaski and Bridie Andrews have demonstrated that in the Republican era, Western and Chinese medicine were not so starkly opposed either theoretically or in practice. Their nuanced studies shed light on the discursive ways doctors sought to solve practical problems of health drawing on both Western and Chinese medicine. ¹⁸ I build on their work by arguing that one significant site of interaction between Chinese and Western medicine was in a new form of knowledge production and dissemination — medical journals. When medical journals do appear in secondary literature as sources, scholars have pointed to the existence of professional medical journals or cite discrete articles published in these journals to argue for the

¹⁴ See, for example, on the variety of healers in late-imperial China, Angela Ki Che Leung, "Medical Instruction and Popularization in Ming-Qing China," *Late Imperial China* 24, no. 1 (August 21, 2003): 130–52; 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): 134–66.

¹⁵ 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).

¹⁶ Steven Shapin and Simon Schaffer, *Leviathan and the Air-Pump: Hobbes, Boyle, and the Experimental Life* (Princeton: Princeton University Press, 2011).

¹⁷ Bruno Latour, *Science in Action: How to Follow Scientists and Engineers through Society* (Cambridge, Mass: Harvard University Press, 1987).

¹⁸ Ruth Rogaski, Hygienic Modernity; Andrews, The Making of Modern Chinese Medicine.

rise in the professional identity or particular practices of Western-educated Chinese physicians.¹⁹ Of less interest are the actual intellectual content or debates in these journals.

I suggest that these publications merit closer examination. For, in their use a range of genres — editorials, research articles, and even literary pieces — and modes of writing they performed a kind of alchemy, transforming subjective experience into objective knowledge.

Doctors and commercial medicine, in professional and popular media

A third area of intervention is to argue that professional and popular print medical knowledge constituted a distinctive mode of cultural production and consumption. In the case of Shanghai, the growth of both socioeconomic institutions and new forms of cultural activity were made possible by the appearance of new public structures and spaces for urban cultural production and consumption, mostly in the concessions.²⁰ And yet, work on commercial medicine and consumer culture in medical products has not taken into account the role professional physicians played therein. Sherman Cochran has shown how commercial medical companies used print culture (journals, pamphlets, etc.) and urban settings (store fronts, decor) to increase publicity and sales of Western medicine produced by Chinese companies at this time. But there is little sense of what doctors at the time thought about such medicines being sold on the market, much less their involvement in such commercial activities.²¹

My dissertation shows that besides epistemological debates and state maneuverings, we should consider the role of commercial interests on the medical profession, knowledge production, and drug treatments. Along with the rise of a market in mass-produced medical products, there emerged a heterogeneous market of medical information inflected by capitalism. This marketplace manifested new personal and professional networks of social, scientific, and commercial authority that were at times complementary, and at other times contradictory to each other, and to imperial traditions of asserting authority as physicians, over knowledge, and about treatments.

Dissertation Overview

To illustrate many of the changes I document, I consider the life of one doctor, Yu Fengbin (1884-1930), a physician, scholar, educator, and government official in Shanghai. He was unusual for his time, as a Chinese person formally trained in Western medicine, committed to both Chinese and Western medicine.

In the first section of my dissertation, "From Literati to Physicians" the paucity of state regulations on who could practice medicine in the early twentieth century meant that imperial literati could become Western medical professionals in the new Republican state by means of print media and professional associations. Chapter 1, "In the Business of Medicine: Professional Doctors in Republican Shanghai," looks at Chinese physicians of Western medicine as a group, and the new professional medical association that Yu and others established to distinguish

¹⁹ On the appearance of medical journals, see Andrews, *The Making of Modern Chinese Medicine*, 174-178. A variety of medical journals are also used more generally used as a source throughout Lei, *Neither Donkey nor Horse* but not the subject of analysis per se.

²⁰ Leo Ou-fan Lee, *Shanghai Modern: The Flowering of a New Urban Culture in China*, 1930-1945 (Cambridge, Mass.: Harvard University Press, 1999), 7.

²¹ Sherman Cochran, *Chinese Medicine Men: Consumer Culture in China and Southeast Asia* (Cambridge, Mass: Harvard University Press, 2006).

themselves from unqualified quacks. In conferences and public talks, they promoted a vision of themselves as ethical practitioners serving a public vulnerable to the predations of commercial medicine. At the same time, while these physicians decried the influence of patent medicines and misleading advertising, they were also in the business of selling medicine, seeing private patients, and enjoying the sponsorship of private drug companies. Chapter 2, "When Biography Becomes History: Lives of a Doctor in Republican Shanghai," examines the simultaneous coexistence of stories about Yu Fengbin at and after the time of his death in the popular and professional medical press, scholarly reports, and in his own words. I focus on how each of these sources discursively constructed a different image of Yu as a doctor.

The second section of my thesis "Medical Journal Writing as Genre: Explanation and Enchantment" looks at production of professional knowledge in missionary and Chinese medical journals. The medical journal was not sui generis in China. Rather, it both modeled itself on and departed from an existing model offered by the missionary journal. These journals, I argue, embodied a tension between locally contingent medical experience and globally coherent scientific knowledge. Here, I draw on the notion of "literary technologies" from the history of science to consider the conventions that governed the communication of scientific knowledge. helping to create a medical community. Chapter 3, "Missionary and Chinese Medical Journals: The Content of the Form" compares the aims and formats of both journals, showing how they simultaneously brought medical knowledge home to China in translation and used genres like the case study to make locally-grounded medical experience legible for readers abroad. Chapter 4, "When Anecdote Becomes Evidence: Retelling Chinese Medicine in Republican Shanghai Western Medical Journals" examines the narrative strategies employed by foreign and native authors to explain Chinese medicine, as history and as therapeutic practice. For both foreign and native doctors, Chinese medicine was a puzzle with which they had to contend. For Chinese, they had to explain the history of the medicine from which they departed but in which they were culturally, if not emotionally, rooted. And for missionary doctors, Western medicine could not explain some of Chinese medicine's most obvious successes, particularly in diagnosis and therapies. I focus on their attempts to explain inexplicable phenomena like acupuncture and Chinese herbal treatments for tuberculosis.

My dissertation ends with Chapter 5, "When Herbs Become Drugs: Identification and Efficacy in Shanghai's Medical Market." This case study explores the recasting of a locally well-known Chinese herb to treat consumption into a trademarked "lung-shaped herb" in 1920s Republican Shanghai. I do this by tracing the shifting basis of authenticating procedures involved in this process. Yu Fengbin sought to identify the herb using methods of observation, textual research, and first-hand experience that recalled late imperial natural history practices. At the same time, popular media reporting focused not on what the herb was, but on what claims could be made about the efficacy of the drug based on processes of state testing.

This project helps us understand that what made for authoritative claims about medicine in Republican China was created not just by state regulation, but discursively too by professional doctors and commercial medical interests alike. What lent Western medicine its authority was often produced by certain modes of writing, and Chinese medicine too, as shown through investigations by liminal figures like Yu Fengbin, still had a place in the print, in that world as well.

IN THE BUSINESS OF MEDICINE: PROFESSIONAL DOCTORS IN REPUBLICAN SHANGHAI

I. Introduction

This chapter looks at the rhetoric surrounding who was a doctor of Western medicine in 1920s Shanghai. On the surface, it seems that the issue might simply be one of qualifications: in order to practice medicine, one needed to be a graduate of a Western medical school. Such was the requirement for doctors who wanted to join the first native professional association of Western medicine established in Shanghai in 1915. Another way to analyze a doctor is to consider what doctors advocated as the kind of work they did. Here too, sources and scholarship tell us that doctors in the early 20th century were concerned with promoting preventive medicine and public health, the use of science, production of scholarly work, and ethical behavior.

I suggest another lens through which to evaluate doctors is to examine what they saw as the biggest challenge to themselves as doctors. Were there doctors who behaved badly, not like doctors at all? How might we examine those doctors who pursued interests that might have conflicted with their professional or ethical identities as doctors? Looking at the sources, I discern another way of examining how doctors conceived of themselves, namely who or what they presented themselves in opposition to. Thus, I ask the question: what did doctors see as the problem with themselves? And what might a view from the state, in its attempts to regulate doctors suggest that officials were concerned about?

The context of this story is Republican Shanghai, 1915 to 1929. This was just a few years after the last dynasty ended, and two years after the Nationalists came to power. The sources I use are the journal produced by the *Zhonghua yixue hui* 中華醫學雜誌 National Medical Association of China, in particular reporting on its first annual conference in 1916. Another set of sources is *The North China Daily News's* coverage of the conference proceedings. Tucked into the story is also a view from Shanghai's International Settlement, which was governed by the Municipal Council. References to registration of doctors appear a few times in the meeting minutes notes of the Municipal Council. And reporting from *Shen bao* the most widely circulating newspaper at the time rounds the sources out.

This chapter begins by looking at concerns raised by doctors at this first conference. I then highlight some of the issues about doctors' doings raised in 1915 and 1916 by these doctors, missionary and Chinese. Then I look at regulations on medical practitioners in the 1920s and compare those governing doctors and pharmacists.

I find that in 1915 and through the 1920s, although doctors presented themselves as concerned with honesty and ethics, such concerns give voice to the reality that doctors were also commercially profitable actors. This can be seen in two respects. First, that they were commercial actors who engaged in misleading advertising. And second, that they were implicated in prescribing and producing medicines of no therapeutic value. These critiques are borne out by sources related to the medical association, the popular press, and government regulations.

II. Medical organization in China

Christian missionary organization

Christian missionaries arriving in the mid-nineteenth century were the first doctors of Western medicine to formally organize in China. Gradually, by the second decade of the twentieth century there emerged an organization of native Chinese physicians trained in Western medicine. Always a small minority of the population, in the years immediately after the 1911 revolution, these physicians numbered about 400-500 in a population of population of approximately 450 million people.²² Of those, less than half had received any formal training and most were located in urban areas like Beijing and Shanghai. By 1920, the number of physicians had increased to 1,500. Of these 600 were either missionaries or foreigners in private practice. This equaled about one "modern" doctor per 300,000 people.²³ For the vast majority of the population, native Chinese medicine and medical practitioners remained the main source of medical care.

Formal professional organizations devoted to Western medicine in China began in 1838 with the Canton Medical Missionary Society, which was connected with the Canton Missionary Hospital founded by an American Protestant, Peter Parker. As more missionaries came to China, they established a national umbrella organization, the Medical Missionary Association, in 1886. Dr. John Kerr, who was stationed in Canton, served as its first president, and the association had divisions for areas from North China, Shanghai, Wuchang and Hankow, to Fujian and Formosa. The 34 original members were all Westerners who were stationed throughout China. The objectives of the organization were to promote medicine among Chinese, to advance missionary work, and to preserve the character, interest, and honor of the fraternity by maintaining a union of the profession in China. Membership in the China Medical Missionary Association, later renamed China Medical Association in 1925, was limited almost exclusively to European and American medical missionaries.²⁴

Membership as exclusion

Membership in professional medical associations was, from one perspective, an issue of exclusion. The missionaries excluded native Chinese, and the native Chinese in turn excluded those without degrees from recognized Western medical schools. At the time of this conference, there existed two main medical associations - one started by missionaries in 1886, and the other established by native Chinese in 1915. The exclusion of Chinese from the missionary association helped prompt the formation of the native association.

²² Ka-che Yip gives a population of 450 million in 1912, and 450 medical missionaries in the 1910s. Ka-che Yip, *Health and National Reconstruction in Nationalist China: The Development of Modern Health Services, 1928-1937* (Ann Arbor, Mich.: Association for Asian Studies, 1995), 13. Zhao Hongjun states that in 1915 there were only 500-600 Western physicians in China. Zhao Hongjun, "Chinese versus Western medicine: A history of relations in the twentieth century," *Chinese Science* 10 (December 1991): 21-37.

²³ Yip, Health and National Reconstruction, 13.

²⁴ For more on the Medical Missionary Association, see Wang Jimin and Wu Liande, *History of Chinese medicine: being a chronicle of medical happenings in China from ancient times to the present period* (Tientsin, China: Tientsin Press, Ltd., 1932), 312.

A 1921 letter from a Chinese graduate of Harvard Medical School comments on the missionary association's exclusiveness. Way Sung New, who was at Harvard from 1910 to 1914, and stayed on in Boston for an additional four years working at clinics and hospitals paints the following picture of medical associations in a letter to his former medical school teacher, an officer of the Massachusetts Medical Society. In the letter, published by the Boston Medical and Surgical Journal in 1921, Way writes:

The history of medical associations is an interesting one. Briefly, I may say that about fifteen or twenty years ago, the medical missionaries, the mostly Americans and Britishers, formed the China Medical Missionary Association. It was at that time purely for themselves, to help each other in diagnosis, problems in hospital administration, etc. The Chinese hardly ever took a part in it, for there had been few or no Chinese doctors who have graduated from abroad and who could conform to the medical ethics of what we call "Western medicine," in distinguishing it from the old form of Chinese medicine. Recently, as there are more of us returning, and some of us have also gone into missionary work, Chinese doctors qualified abroad, have also been admitted. This is, then, one organization where the Chinese doctors and the medical missionary doctors come into contact and meet and get to know each other better.²⁵

Sung thus points to the practical benefits of belonging to an association, namely to exchange information about medical practice and administration. What is telling is that he writes that there were no Chinese participating in the missionary association for two reasons: first, that there was a dearth of Chinese doctors who graduated from medical school abroad; and that second, could conform to the medical ethics of Western medicine as opposed to Chinese medicine. What were the "medical ethics" of "Western medicine" compared to "Chinese medicine" is not clear from this passage.

The National Medical Association of China

Though eventually allowed to join the missionary medical association, native Chinese doctors of Western medicine decided to establish their own organization. Founded in 1915, the National Medical Association of China 中華醫學會 (NMAC) was the first national organization of Western-educated Chinese physicians in Republican China, and explicitly promoted Western medical knowledge. The association sought to bring together Chinese practitioners of Western medicine as a distinct group of professionals. The doctors involved in the founding of the NMAC were trained in Europe, the US, or Western-managed medical schools in China. Wu Liande first proposed the idea of an indigenous Chinese-led medical association in 1910, but it was not founded until several years later. In 1915, at the biennial conference of the China Medical Missionary Association, over dinner on February 5th in Shanghai, twenty-one Western-educated Chinese physicians met to establish the NMAC. The first group of elected officials were:

²⁵ Way Sung New, "A Letter from China," *The Boston Medical and Surgical Journal* 185 no. 8 (August 25, 1921): 245-246.

²⁶ These physicians were: Drs. Yen Fu-ching, E.S. Tyau, C.v Yui, Hsu Shih-fang, U.K. Koo, Ting Foh-pao, H.C. Chen, E.Y. Kau. T.K.M Siao, N.A. Tang, Ida Kahn, Z.D. Dzung, Y.W. Lee, C.S. Lau, K.T. Liang, W.P. Chung, A.M. Wong, Mary Stone, Dau Se Zak, Tsao Liyuen, and Wu Lien-teh. Wu Lien-teh and Chimin K. Wong. Note these names are spelled in the sources using the romanization system at the time. Wang and Wu, *History of Chinese Medicine*, 441.

President, Yan Fuqing; Secretary, Wu Liande; Treasurer, E.S. Tyau; Elected Members T.K.M. Siao and Tsao-Li-yuan; Business Manager, C. Voonping Yui (romanization of Yu Fengbin used at that time. Wu later served as president from 1916 to 1920, after which Yu Fengbin took over the position from 1920 to 1922. A membership fee of four dollars per year was suggested, and donations for immediate expenses were taken.²⁷

The careers of the two first presidents of the NMAC give a sense of the background and experiences of the larger group of doctors who formed the core of the organization. Yan Fuqing, the first president of the NMAC was a graduate of the medical school of St. John's University. He obtained a medical degree from Yale, and worked abroad as a doctor in South Africa, England, and the US. Upon returning to China he held positions including president of the NMAC, vice president of Peking Union Medical College, and president of the medical school at Zhongshan University. Wu Liande, the second president, was a Straits Chinese educated at Cambridge and most famous for serving as the Vice-Director of the Imperial Medical College in Tianjin and spearheading the fight against pneumonic plague in Manchuria 1910-1911. He later served as Director-General of the National Quarantine Service of China. Other founding members of the NMU had all been educated either abroad or domestically.

Membership, as an issue of exclusion

Membership in the National Medical Association was distinguished based on foreign education and knowledge of Western languages. Regular membership belonged to graduates in medicine of recognized foreign universities or colleges or graduates of medical colleges in China recognized by the association who had good reading and writing knowledge of at least one Western language. Next were associate members who had graduated from recognized medical colleges in China but possessed no knowledge of Western languages. They had the same privileges as regular members but were ineligible to become officers. They could, though, become regular members if recommended by two regular members and approved by a committee. Honorary members were distinguished individuals and members of the profession of all nationalities who had rendered some signal service to China. Thus, the distinction was made on the level of education and language ability. The minimum membership fee was four dollars. By October 1915, a membership campaign launched after the initial meeting had resulted in an enrollment of 232 doctors.³⁰ By 1917, branches developed in Canton and Hong Kong branches, and membership increased to 92 members, 25 of whom were women.³¹ By 1919 the NMAC had 450 members, of whom 50 were trained abroad.³²

State and society, and the question of professions

²⁷ Ibid.

²⁸ Chieko Nakajima, "Health, medicine, and nation in Shanghai, ca. 1900-1945" (PhD diss., University of Michigan, 2004), 57.

²⁹ On Wu's official duties in government, see Liande Wu, *Plague Fighter*; the Autobiography of a Modern Chinese Physician (Cambridge (Eng.): W. Heffer, 1959), 253-425.

³⁰ For specifics on membership types and numbers, see Wu and Wong, 443.

³¹ Ibid., 451

³² Xiaoqun Xu, *Chinese Professionals and the Republican State: The Rise of Professional Associations in Shanghai*, 1912-1937 (Cambridge, U.K.; New York: Cambridge University Press, 2001), 133.

Scholarly literature on professions in China has largely been framed within a state-society framework that asks whether non-state organizations allowed for freedom from the state. Influenced by Jürgen Habermas's notion of the public sphere and the 1989 Tiananmen crackdown, this question provoked debate among China scholars, most famously Frederic Wakeman Jr. and Philip Huang, exemplified in the 1993 "The Civil Society and Public Sphere Debate: Western Reflections on Chinese Political Culture" issue of Modern China.³³

Voluntary associations that mediated between state and society during the Qing dynasty gradually gave way to professional associations that had to negotiate a new relationship with the Republican government. Some questions scholars have asked include: did these associations form a qualitatively different type of third sector of society, distinct from government and business? And did formal organizations of doctors actually constitute a profession?

Doctors and their relationship with the state

The emergence of professional groups took on new urgency in the Qing and Republican eras. One of the notable features of early twentieth-century Shanghai was the rise of professional associations in areas as diverse as law, journalism, and medicine. In investigating professional organizations of doctors, much scholarly work has placed the relationship between doctors and the state at the forefront. In one of the few studies of professionalization of doctors in the Republican period, Xu Xiaoqun argues that these professionals were leaders in the processes of modernization pursued by both society and the state, in particular after the Nationalist government was established in 1927. These groups were characterized by their commitment to asserting authority over their own expertise and ethics. Looking at associations of lawyers, doctors, and journalists from 1912 to 1937, Xu makes three arguments. First, that these professionals were a new social category that reflected a new kind of class formation in Republican Shanghai during the process of modernization. Second, he argues that these professionals were different from other urban voluntary associations — native-place associations, trade guilds, chambers of commerce, secret societies — in their professional concerns and efforts at professionalization. And third, that the professional associations existed in a symbiotic relationship with the Chinese state, as they used the state to support their claims as either native (Chinese) or as Western-style medical doctors.³⁴ This emphasis on the importance of state patronage, or the mutual imbrication of the medical elite and the nationalizing state, is echoed by Sean Hsiang-lin Lei in his recent book on doctors in China and the Nationalist government.35

The NMAC decided its membership based on the educational background and language abilities of prospective members. This marked the boundaries of their medical community as

³³ See the articles in the Symposium: "Public Sphere"/"Civil Society" in China? Paradigmatic Issues in Chinese Studies, III *Modern China* 19, no. 2, (April 1993), including Frederic Wakeman, "The Civil Society and Public Sphere Debate: Western Reflections on Chinese Political Culture," *Modern China* 19, no. 2 (1993): 108–38; Philip C. C. Huang, "'Public Sphere'/"Civil Society" in China?: The Third Realm between State and Society," *Modern China* 19, no. 2 (1993): 216–40; William T. Rowe, "The Problem of 'Civil Society' in Late Imperial China," *Modern China* 19, no. 2 (1993): 139–57; Mary Backus Rankin, "Some Observations on a Chinese Public Sphere," *Modern China* 19, no. 2 (1993): 158–82; Heath B. Chamberlain, "On the Search for Civil Society in China," *Modern China* 19, no. 2 (1993): 199–215.

³⁴ Janet Y Chen, *Guilty of Indigence: The Urban Poor in China*, 1900-1953 (Princeton (N.J.): Princeton University Press, 2012).

³⁵ Lei, Neither Donkey nor Horse.

they themselves defined it. That Chinese physicians of Western medicine decided to form their own medical professional organization suggests both a recognition that they formed a discrete group of indigenous practitioners who wanted to take charge of professional work, and that there were benefits the imprimatur of a professional association would confer upon them. The formation of a professional association whose second main priority was the maintenance of the honor and interest of the medical profession would allow a group to police its own, uphold its own standards, and form a distinct body to be recognized by the government and others.³⁶

Who could join the association and why that distinction was significant are two separate questions. One thing that follows from who could join the association was a belief or professed belief that its members would then practice medicine in a particular way. In other words, that there was a connection between the educational and linguistic background of the members and their orientation toward medicine. While some scholars have noted the influence that educational background played on the types of treatments prescribed or amount of laboratory work that the doctors undertook, here I chose to focus on another tack. The remainder of this section looks at how the professional presentation of doctors in the NMAC illustrates how doctors were concerned with distinguishing themselves from quacks, charlatans, and other unsavory types of doctors.

III. Doctors on Doctors

History of medicine: public health and private interests

The first draft constitution published in October of 1915 outlined the main objectives of the association. The association had four objectives: first, to promote good will and union among Chinese practitioners of Western medicine; second, to maintain the honor and interest of the medical profession; third, to expedite the spread of modern medical science in China and arouse interest in public health and preventative medicine among the people; fourth, to coordinate and cooperate with existing medical forces in China, Chinese and foreign, in working out the above objectives.³⁷ Indigenous Chinese medicine was not part of the organization's official ambit. The association envisioned two audiences: members of a medical profession engaged in modern medical science, and a lay public who could learn more about preventive medicine and public health.

Scholarship for Euro-American contexts on doctors at this time generally emphasizes the rise of doctors as a distinct professional group and their attempts to distance themselves from unqualified medical quacks.³⁸ Industrialization in the nineteenth century led to large-scale migration to cities and the development of densely populated urban spaces home to masses of people living in crowded living quarters, working in dusty factories, and straining municipal resource management. These conditions resulted in high incidences and regular epidemics of

³⁶ The funding of organization is not entirely clear. In his memoir, Wu says "From the beginning our medical journal prospered and a considerable income accumulated from advertisements by manufacturing chemists, drug firms in China, medical book publishers and others," see Wu, *Plague Fighter*, 353.

³⁷ Ibid., 442

³⁸ On professionalization of medicine in the U.S., see Paul Starr, *The Social Transformation of American Medicine* (New York: Basic Books, 1982).

infectious diseases like typhoid, cholera, and tuberculosis.³⁹ Given that reliable cures for infectious diseases did not begin appearing until the turn of the century and later, it makes sense that the efforts of doctors would turn to prevention over treatment. Moreover, the prevalence of patent medicines of dubious therapeutic efficacy and the rise of a mass print market full of advertisements lends further saliency to the question of doctors' authority.⁴⁰

For China, the story about medicine in the mid-nineteenth to mid-twentieth century has largely been focused on the rise of public health administration and prevention of diseases. Scholars have looked at large, state-sponsored measures to combat the social conditions — overcrowded housing, rampant malnutrition, poor sanitation — that led to the spread of infectious diseases like tuberculosis and cholera. For example, Ruth Rogaski has shown how a discourse of deficiency and ideas associated with hygienic modernity took hold among Chinese medical elites in the northern port city of Tianjin at the turn of the twentieth century. Chieko Nakajima's recent work shows how hygiene campaigns undertaken by the Shanghai Municipal Health Bureau in sanitation, statistics, and food inspections constituted a public health administration. In these two cases, questions of modernity and medicine have been tied to elite rhetoric about health and the appearance of municipal public health administration bodies.

Indeed, in primary sources from 1915, the year of the National Medical Association of China's founding, it is clear that public health and preventative medicine were important measures. For example, in an article "On the necessity and parameters of public health and hygiene" published in *Dongfang zazhi* 東方雜誌 *Eastern Miscellany*, Yu Fengbin makes a key connection between the health of individuals and the health of a nation. Clearly informed by Darwinian notions of fitness, Yu criticizes the poor hygiene of Chinese people and dirty environment that abets the spread of infectious diseases. Instead of depending on gods or concepts such as yin yang to diagnose, or doing experiments on animals to find medicines, he writes, "today those good at treating illness do not emphasize treating illness but emphasize prevention" (況今之善治病者。不重寮並。而重防病矣)⁴³ After cataloging the problems of filfth and mice that spread disease in China, Yu goes on to list fifteen types of public health measures adopted in the American cities of Boston, New York, and Philadelphia that should serve as models for China. These included mortality statistics, eye glasses for near sightedness, school hygiene, as well as milk and meat inspection. Health is spread of the problems of the statistics of the problems of t

Private interests

And yet, looking at the conference proceedings and its initial journal publication for what doctors specifically said about themselves or what they perceived as the greatest challenge to themselves as doctors what stands out is not matters related to public health, but those associated with the enticements of commercial medicine. For example, in his first published piece in *The*

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³⁹ On industrialization and the rise of urban medical challenges, see for example on tuberculosis: René J Dubos and Jean Dubos, *The White Plague: Tuberculosis, Man and Society* (Boston: Little, Brown, 1952).

⁴⁰ See for example Andrea Tone and Elizabeth Siegel Watkins, *Medicating Modern America Prescription Drugs in History* (New York: New York University Press, 2007).

⁴¹ Ruth Rogaski, *Hygienic Modernity*.

⁴² Chieko Nakajima, *Body, Society, and Nation: The Creation of Public Health and Urban Culture in Shanghai* (Cambridge, Massachusetts: Harvard University Press, 2018).

⁴³ 俞鳳賓 Yu Fengbin, "Lun gongzhong weisheng zhi biyao ji qi fanwei" 論公眾衛生之必要及其範圍 (On the necessity and parameters of public health and hygiene) *Dongfang zazhi* 東方雜誌 (1915), 11.

⁴⁴ Ibid, 13-14.

National Medical Journal of China, entitled "An Admonition to Oneself" Yu Fengbin, the Shanghai doctor who served as editor of the journal, in writing about about the reasons for forming the association, began with an argument about self-improvement. He reached back deep into imperial times to draw a connection between medical practitioners today and those of the past:

The reason for this self-admonition is that practicing medicine is an important method for showing kindness to people. The perfect collection of medicine for the royal king should not be kept as the rare goods stored away waiting for the right timing to triple profits. Thus, there was a Han dynasty official to deal with this. The Song dynasty pharmacies patterned after this good ancient admonition and did not deviate from the duty of doing good for the people. The medical profession was fundamentally a natural way of helping people. There were many good people in the medical profession. [自篇之道奈何。曰醫乃輔仁之術貴乎。太上十全藥非奇貨可居豈望利市三倍漢置令丞。宋設藥局取法上古之箴不負惠民之職橘井滿泉本屬濟人之物。杏林多樹]⁴⁵

This is not the case currently, though, he laments. Instead, this age is marked by heartlessness, which lacks a friendly spirit and is marked by competition instead. [尚收施賑之功 洎乎輓近世風澆灕而古道泯滅不又砥礦何來愷悌之心弗事競爭焉]. He goes on to specifically the problems: the bad behavior of doctors and lure of profit:

Recognizing the difference between good and bad, mastering the skill of handling medical materials (gold liquid and silver pills). Learning widely about precious literature and books (is good). To behave like a profit-chasing merchant and treat matters of life carelessly is looked down upon by people. The goals of this medical association are nothing more than the following: people getting together having academic exchanges, colleagues encouraging doing good deeds, conducting oneself morally in professional practice and always keep in mind and heart the importance of "four things to avoid". [識短長之別彼術精金液銀丸。學博靈樞玉版者。每因行同市儈。草菅人命為世詬病斯會之設不啻以文會友以友輔仁行道立身情懷四戒146

Here, then, is an argument for ethical behavior on the part of doctors, who are interested in promoting knowledge and collegiality. And what is explicitly specified as behaviors that doctors should avoid are even more telling. Yu goes on to say:

these four principles are: 1) to flatter the rich and look down on the poor harms personal morals and the treating of patients equally. (One should) treat people equally without discrimination. No matter if they belong to the well-dressed class or are those who are down and out, they should receive no differential medical treatment . . . 2) Avoid self-importance; 3) Avoid jealousy. If one knows something, behave as if you know it. If you do not know something, then behave like you do not know it. If instead one sells counterfeit drugs to make illegitimate profits and uses advertising to entice people, although this is way of a livelihood might be prosperous, what about righteousness and

⁴⁵ Yu, "Zi zhen pian" 自箴篇 [An Essay of Self-Criticism] Zhonghua yixue zazhi 中華醫學雜誌The National Medical Journal of China 1, no. 1 (November 1915): 7.

⁴⁶ Ibid., 8.

justice? 4) Avoid cheating and taking advantage of people [媚富鄙貧。最傷私德。病者平等。一視同仁。纨絝袴之屬。襤褸之流。醫毋軒輊一戒勢利自謙者益。自滿者損。我之所知渺乎一粟。人之積學高若重山愧且不惶何暇自炫。二戒驕矜。愛人者人恆愛之誹人者人恆誹之。同類相殘。燃萁煮豆。識者鄙之。三戒嫉妒。知之為知之。不知為不知。反是則詐偽藥射利。廣告惑人行之則欺生涯雖盛。乳如道義何。四戒,欺詐147

If we take Yu's early article on doctors as representative of one view of a prominent doctor in his time about the individuals comprising his profession, it seems that in Republican Shanghai, among doctors of Western medicine — and perhaps Chinese medicine as well — there were a bunch of fawning, self-important, jealous cheats. In Yu's presentation of the ideas for which doctors should strive, it was not just a commitment to medical science or a desire to advance the country through improving the health of its population, but also that doctors should be humble, and above all help their sick patients, not subject them to the predations of commercial medicine.

In Conference – doctors' concerns

Doctors' speeches at their first national conference gives a sense of how they presented themselves and what they saw as the most pressing issues about their profession. This section begins with a brief overview of the conference format and coverage. Then, I trace two strains of critique that doctors made about themselves. The first is about the correct medical ethics in presenting themselves to the public and not giving into undue publicity. And second was the dangers that patent medicines posed to patients, and doctors being implicated in those commercial interests.

First Conference

One way to track the initial priorities of the National Medical Association of China is to examine its first conference, which was held a year after the association was established, in Shanghai at the YMCA building on February 7-12, 1916. Two days before, *Shen bao* published a detailed itinerary of the conference. Scheduled for six days, Monday to Saturday, the conference ran from nine in the morning stretching into the evening past dinner. At this time the membership of the association was about 300 doctors in all of China and in other countries. Of those, about fifty were residents of Shanghai. About thirty members from outside of Shanghai were expected to attend; their room and board would be covered by the Shanghai members. Besides speeches and discussion panels, the conference offered, among other excitements, evening meals and entertainment sponsored by pharmacies and insurance companies. The North-China Daily News reported: "Two of the large dispensaries on Foochow Road have arranged to give two banquets during the week of the conference, and a local life assurance company has arranged to provide motor cars for the visiting medical men to use on Shanghai sight-seeing trips." The sessions and lectures were open to the general public.

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⁴⁷ Yu, "An Essay of Self-Criticism," 8.

⁴⁸ "Coming Medical Conference in Shanghai. The National Medical Association of China," *The North-China Daily News*, January 27, 1916.

⁴⁹ Ibid.

Chinese and English-language coverage of the conference in newspapers like *Shen bao* and *The North China Herald Daily News*, as well as in *The National Medical Journal of China* provided both summaries of the conference's daily agenda as well as commentary on the nature of the undertaking. Shen Bao reports offered a brief summary of the conference agenda with no editorial commentary whatsoever. By contrast, The North China Herald Daily News provided detailed descriptions of the conference proceedings, as well as appraisals of the importance of the work of the conference. The report on the conference in *The National Medical Journal of China* written by Yu Fengbin offered a contextualization of the efforts that went into putting on the conference, and a bit more detailed reporting on the opening and closing remarks of the conference than Shen Bao. That the main newspapers of the day devoted such detailed coverage to this conference suggests the significance of the event for both the general public and medical community in Shanghai.

Some of the talks that were given reflect the main concerns of the association at its outset. Yan Fuqing gave a presidential address and there were also the following public lectures: Duties of the Medical Profession (Yan Fuqing), How to lead a Healthy Life (Wu Liande), Quack Medicine (Arthur Stanley), A Layman's Impression of Modern Medicine (Roger S. Greene), and Health as a Factor in National Strength (W.W. Peter). Sessions on five important subjects were held: Preventive Medicine, ⁵⁰ Medical Education, ⁵¹ Medical Text-books and Publications in Chinese, ⁵² Standard of Medical Practitioners, ⁵³ and Patent Medicines. ⁵⁴ Five resolutions were passed, among them asking the government to control of tuberculosis and venereal disease. Officers for the next year were elected, and subcommittees appointed memberships, including Yu Fengbin as one of two vice presidents, and a large number of exhibits "comprising sections on Plague (Dr. Wu Lien-teh) the teaching of public health (Drs. Peter and Wu Lien-teh), etc." were displayed at the conference and visited by "hundreds of persons." ⁵⁵

Concerns about ethics

In making the case for themselves, the doctors — Chinese and missionary — voiced an understanding of themselves as more professionally and publicly minded vis-à-vis other medical practitioners. By the time of the first association conference, doctors openly named the dangers that threatened their profession and the public, whom they served. In many of the speeches and papers given at the conference, speakers emphasized the high ethical standards to which they as a profession should strive. The remarks of two doctors in particular, Yan Fuqing (president of the National Medical Association of China) and Arthur Stanley (Health Officer of the International Settlement), are representative of the views voiced in the conference.

In his opening remarks at the conference, Yan Fuqing, made it clear that the medical

⁵⁰ Wu and Wong list the following: "Foundations of Modern Hygiene in China" by Wu Liande (Harbin), "Home Hygiene" Ida Khan (Nanchang); "Some Attempts at Sanitary Reform in Hankow since the Revolution of 1911 (Hankow), Wu and Wang, *History of Chinese medicine*, 444.

⁵¹ "Medical Education in China" by Dr. S.P. Chen Peking); "Medical Education for Nurses" by Dr. L.Y. Tsao Nanking); "Shall we leave it all to the Rockefeller Foundation?" by Dr. J.H. Liu (Shanghai), Ibid..

⁵² Papers by Drs. N. Abel Tang (Shanghai) and C.V. Yui (Shanghai), Ibid..

⁵³ Papers by Drs. P.M. Jee (Tientsin) and H.T. Chiang (Tayeh), Ibid..

⁵⁴ Papers by Drs. E.B. Young (Changsha), E-li Day (Shanghai), and S.F. Lee (Hongkong), Ibid..

⁵⁵ Ibid.., 443-444.

association represented the interests of a new class of medical professionals vis-à-vis non-professionals:

In addition to being honest and ethical ourselves, we are also to act as sentinels to guard against quacks and frauds from coming in to contaminate our profession. It is only be observing the highest medical ethics ourselves and in preventing corruption from contaminating the profession from without, that the dignity and honor of our noble profession may be protected and raised to its highest standard.⁵⁶

Besides education and accreditation, there was a sense that this group of doctors was different from those who did not belong to the association — due to their ethical stance. What precisely Yan means by "medical ethics" is never clearly stated. It is possible, however, to get a sense of what he means by being "honest" and ethical ourselves" from another part of this same speech in which he discusses the problem of doctors advertising and drugs.

Missionary doctors at the conference voiced concerns about the professional and ethical responsibilities of doctors. The English-language North China Daily News summarized conference proceedings and speeches of the conference for the foreign community. One article highlighted the range of points these doctors made urging peers to uphold a high ethical standard. For example, Dr. E. M. Merrins, editor of China Missionary Medical Association's journal urged colleagues not to speak ill of each other unnecessarily and avoid those guilty of malpractice. He also emphasized that the medical sciences were largely concerned with preventative medicine against diseases rather than the mere prescribing of medicines. Dr. W.H. Venable, president of China Missionary Medical Association, emphasized the dignity and greatness, humility and modesty of the medical profession. He urged doctors to adopt "I serve" as a motto. And finally, Dr. Duncan Main, of Hangzhou, warned of the danger of placing money too much to the fore. "We must not only relieve suffering, we must also advance science." 57

Together, these remarks suggest that one of the gravest threats to the profession came from within. Professional doctors were ethical doctors who would: cooperate with colleagues, help patients and advance medical science; to gossip about colleagues, engage in malpractice, and work merely for money were the activities of non-ethical medical practitioners.

Late imperial ethical scholar Confucian doctors

Such a position on medical ethics echoes the ideal of an ethical Confucian physician scholar that dated back to the late imperial period. In an earlier time, doctors in China did not enjoy high social status; in fact, medical practitioners before the late imperial period were traditionally considered artisans, not scholars or figures of respect. This relates to the distinction between medicine as textual scholarly knowledge, and medicine as accumulated experience and observation by hereditary doctors who passed secret formulas down through generations. In the dynastic histories and gazetteers, they were often listed with astronomers, geomancesr, and other types of craftspeople.⁵⁸ As Robert Hymes has shown in his study of the southeastern province of

⁵⁶ Yan Fuqing, "Presidential Address," Zhonghua yixue zazhi 中華醫學雜誌 The National Medical Journal of China 2, no. 1 (March 1916): 9.

⁵⁷ "National Medical Association," *The North-China Daily News*, February 11, 1916.

⁵⁸ Yüan-ling Chao, Medicine and Society in Late Imperial China a Study of Physicians in Suzhou, 1600-1850

Fuzhou, up until the Yuan dynasty elites largely eschewed medicine as a profession. Instead, they favored government office gained through the civil service exam.⁵⁹ During the Ming and Qing, with the decline in the number of spots to become an official and the increasing wealth of southern Jiangnan merchant society, medicine began to seem like a favorable alternative to civil service. Thus, in order to boost their status, physicians began to take on the cloak of Confucian scholars by emphasizing mastery of texts. This was aided by flourishing networks of printing and publishing at the time. For these doctors, emphasis on the ethics of medicine was an important means to legitimation.⁶⁰

IV. View from the State

Reading the earliest state regulations of medical practitioners, which dated to 1922, one does not discern the suspect medical ethics of doctors that they themselves voiced in 1915.

1922 Chinese regulations

The Ministry of the Interior used municipal and provincial police departments to administer examination and registration of both native physicians and Western-style doctors. These regulations also made the distinction between physicians *yishi* 醫師 and medical scholars *yishi* 醫士. Physicians would qualify for government employment and could issue death certificates. Such licenses required producing a graduation certification from any college of Western medicine in China or abroad, or furnishing a certificate of practicing medicine in a foreign hospital for three years. These regulations received heavy criticism from Western-style doctors, not just for the use of police but also for the equal recognition accorded native medicine. There is no record of enforcement of such regulations. From the perspective of the state, then, what was at issue was qualifications to practice medicine, not necessarily the problematic or unethical behavior of those practicing doctors.

International Settlement

Less clear are the actual rules governing doctors practicing medicine in the International Settlement. In an 1929 overview of health administration in the settlement, an author notes that in 1901, attempts were made to pass bylaws dealing with the following four issues: overcrowding, compulsory notification of infectious diseases, compulsory isolation of cases of infectious disease, and regulation of medical practitioners. These laws did not receive popular support and did not become effective.⁶² The report does not divulge why these laws did not receive support, but the elaborate steps to change bylaws requiring the approval of the consular body and taxpayers may partly explain this.

During the decade of the 1920s, there were increasing calls in both the Chinese and foreign

⁽New York: Peter Lang, 2009), 12.

⁵⁹ Hymes, "Not Quite Gentlemen?,"57.)

⁶⁰ Chao, *Medicine and Society*, Chapter 1, "The 'Confucianization' of medicine: the idea of the *Ruyi* (Confucian Physician) in Late Imperial China, 25-52.

⁶¹ Xu, Chinese Professionals and the Republican State, 123. Bridie Andrews, The Making of Modern Chinese Medicine, 150.

⁶² Jordan, J.H. "Municipal Health Administration in the International Settlement, Shanghai." *Zhonghua yixue zazhi* 中華醫學雜誌 *The China Medical Journal* 43, no. 3 (March 1929): 339-340.

press of Shanghai to license doctors. Even before, in 1914, one of the major English-language publications in Shanghai, The China Press, published an article that expressed misgivings about the situation: "DOCTORS AND CHEMISTS NOT REQUIRED TO REGISTER HERE Complaint Made by Recent Arrival Substantiated by Dr. Stanley; Problem Hard to Handle" Dr. A. Stanley, the Health Officer of the International Settlement said that neither in Europe nor America was there any prohibition against people not possessing certificates, but acknowledged a law for chemists' shops where only qualified chemists could file prescriptions. Regarding Shanghai, Stanley noted that the Council could have registered doctors and chemists, but opposition to such a move made it unsuccessful. The article concluded: "Dr. Stanley said that he did not think at the present time there were any unqualified foreign doctors practising in the Settlement, though of course there were any number of Chinese and a whole host of Chinese chemist shops." 63

Whether a doctor could actually practice medicine seems to have come down to a question of the physician's education. For instance, in 1928 the editor of *The China Press* answered a reader's letter: "Can a Portuguese who studied and completed his course of medicine at the 'Aurora University' Shanghai Practice here?" And my reply is: Yes, certainly he can, if the "Aurora University" is recognized as a university by the French Government." The editor of the paper went on to say that there were thousands of Portuguese who had taken courses abroad, and that graduates were: "fully entitled to make public use of their titles, be they doctors of medicine, barristers-at-law or bachelors. One's right is merely controlled by the right of one's university to this name, and if it has been recognized by Government as such, nothing can debar us from using our titles."

V. Commercial Concerns

Doctors' advertising

The concerns about medical ethics raised in the 1915 conference can be broadly divided along two lines: 1) doctors' self promotional advertising; 2) the appearance of patent medicines in an increasingly commercialized environment where doctors were no longer the sole authorities about patients' treatments, because they could self-diagnose and self drug. Moreover, doctors were themselves often involved in the production and sale of such drugs, leading to a conflict of interest between caring for patients and making money off their care with treatments of often dubious efficacy.

The problem of publicity, doctors in the marketplace

Returning to Yan Fuqing's opening remarks at the first native association's first conference in 1916, we see a strong condemnation of doctors who operate as business actors. He specifically identified the problem of self-promotion and the need for doctors to be measured by their peers and contribution to medicine:

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⁶³ "DOCTORS AND CHEMISTS NOT REQUIRED TO REGISTER HERE Complaint Made by Recent Arrival Substantiated by Dr. Stanley; Problem Hard to Handle," *The China Press*, April 28, 1914.

^{64 &}quot;Doctors' Degrees," The China Press, September 13, 1928.

⁶⁵ Ibid.

Undue publicity as to our ability it not only unethical but is entirely uncalled for, because there is yet no competition between honest practitioners. To prey on the ignorance of the public, to pose for what we are not and to resort to unprincipled methods in making ourselves better known, are all corrupt practices, condemned by medical men all over the world. The time is bound to come when a doctor will be judged not by the size of his sign-board, nor by the kind of house he occupies, but by the medical facilities and equipment he has; not by the number of testimonies he possesses from non-medical men, but by his standing among respectable members in the profession; and not by what he poses to be on [*sic*] the newspapers, but by the contribution he is able to give to medical science.⁶⁶

Here, then Yan points to an unsavory phenomenon — that doctors, in competition with each other, might stoop to promoting themselves to an unknowing, gullible public. There is a suggestion that at the time people assessed a doctor according to how visible he was to the public via advertising, fancy equipment, or glowing reviews in the non-medical popular press. Instead, Yan argues for the judgment of a doctor according to the standards of his own profession — by other accredited and ethically-minded doctors, as well as the doctor's service to medical science.

This concern about doctors' use of advertising is echoed later in sources related to the International Settlement's Municipal Council. For example, a 1923 article entitled "ADVERTISING BY DOCTORS The 'Oblique' Method as Adopted by Certain Practitioners in the Press Discussion at General Medical Council" described the plethora of ways doctors promoted their services in ways that were misleading, even dishonest. For example, advertisements in the Court Circular column reference a "well-known physician" when mentioning a deceased person; or including the qualifications and professional address of a physician who was the father or groom in an engagement or marriage notice.⁶⁷ The article also criticized reporting on the radio about a specific medical topic in which one doctor repeatedly mentioned his extended experience that suggested deliberate intent on the part of the practitioner to advertise himself. Although it is important that the public be informed about medical questions, "if the object of this publicity was proper instruction of the public then it was quite right that the articles should appear, but he did not think that the names of the medical writers should be given."68 Moreover, many of the doctors quoted most often in the press "were not necessarily those whose opinions carried most weight in the medical profession or with the educated public." The article ended by reporting that the council passed a resolution that they should issue a warning about such canvassing and advertising.

Drugs

To be an ethical doctor not only had to do with how doctors presented themselves to the

⁶⁶ Yan, Fuqing. "Presidential Address." Zhonghua yixue zazhi 中華醫學雜誌 The National Medical Journal of China 2, no. 1 (March 1916): 8-9.

⁶⁷ "ADVERTISING BY DOCTORS The 'Oblique' Method as Adopted by Certain Practitioners in the Press Discussion at General Medical Council," *The North-China Daily News*, February 7, 1923.

⁶⁸ Ibid.

⁶⁹ "ADVERTISING BY DOCTORS The 'Oblique' Method," The North-China Daily News, February 7, 1923.

public, but also with a new kind of relationship they had with patients and the appearance readily accessible drugs.

One of the tensions that comes through from the conference itself is that between the responsibility of doctors to patients and the unsavory influence of commercial medicine. This comes out most clearly in the talks given on patent medicines. In total, one major talk and two short papers were given on the subject. The main talk was given on February 9, the third day of the conference, by Dr. Stanley, health officer of the Shanghai International Settlement, on patent medicines. One morning session on Friday, February 11 was devoted to the subject of patent medicine, with two short papers given by Drs. E.B. Young of Changhsha and Eli Day of Shanghai. This session was chaired by Dr. Stanley, but little is said of these two papers, save that their authors urged members of the association "to wage war against patent medicines and quackery."

Dr. Stanley made the case that doctors no longer enjoyed a monopoly over consulting and treating illness. Instead, he pointed out that "matters of health and disease were now discussed at the dinner table and in the drawing room which a little while ago would have been reserved for the privacy of the consulting room. Consequently, there was much imaginary disease and as a natural result a corresponding number of imaginary remedies." He goes on to say that "a great deal was preventable or curable, but much of this suffering was not prevented or cured owing to want of skilled attention at the proper time. The evil was intensified by the fact that quackery was prevalent everywhere. The best hope of destroying quackery was by education founded solely on the bed rock of natural science."

Part of the problem was with the easy availability of patent medicines, proprietary treatments that did not necessarily successfully treat or cure illness. Newspaper reporting on Yan Fuqing's lecture, "The Duties of the Medical Profession," summarized his criticism as follows:

The lecturer devoted considerable time to an expire of the worthless and harmfulness of the scores of patent medicines that are being shipped to China by the ton, illustrating his remarks with charts showing the analysis of these alleged cures, many of which he mentioned by name and discussed in fullest detail. Chinese dispensaries all over China are largely stocked with these imported articles, and even Chinese drug dealers themselves, instead of devoting their energies to manufacturing pure drugs, are from year to year increasing their outputs of Chinese-made patent medicines. Some of the large shops in Shanghai handle scores of these 'medicine, one even claiming to grow a new foot to replace one that had been bound in infancy. The Chinese firm offering this fraud claimed to have medals from expositions etc., and an endorsement from the Shanghai Municipal Council, which remark caused many of the audience to laugh, including Dr. Stanley who followed the lecturer with the keenest interest.⁷³

In particular, the doctors lambasted the pernicious role of advertising in fooling gullible patients. Stanley noted that drugs tended to play a small part in rational treatment of disease, and that "the habit of self-drugging had been made fatally easy by the ingenuity of the medicine

⁷⁰ "NATIONAL MEDICAL ASSOCIATION. END OF AN IMPORTANT WEEK'S WORK," *The North-China Daily News*, February 12, 1916.

⁷¹ "NATIONAL MEDICAL ASSOCIATION. CHINESE TERMINOLOGY IN MEDICINE," *The North-China Daily News*, February 10, 1916.

⁷² Ibid.

⁷³ "National Medical Association. The Opening Meeting," *The North-China Daily News*, February 8, 1916.

makers and by all manner of attractive advertising and enticing packaging."⁷⁴ Stanley singled out patent medicine that purported to cure cancer and tuberculosis as particularly misleading. For example, he stated, "'Consumption cures' were among the most impudent and wicked of quack medicines. Very high prices were often charged for these particularly worthless preparations. Fifty dollars was charged for a "consumption cure" sufficient to last a month, the actual cost of which was ten dollars."⁷⁵

Doctors were not completely innocent in the spread of patent medicines because they sometimes prescribed them to patients. Stanley pointed out that "not only must the doctors fight against unnecessary drugging, but they must themselves refuse to prescribe any but drugs of known value." Very few new drugs, he said are discovered by druggists, though a great many new drugs are put on the market. Stanley said he great faith in China and in the NMAC, and was glad to see two sessions for the discussion of patent medicines and public health.

Another part of the perceived problem with doctors was that they worked directly in the production of these commercial drugs. Again, Stanley lay the blame directly at the feet of physicians themselves: "It seemed a pity to see so many foreign trained Chinese physicians in Shanghai working in association with drug stores. Manufacturers of drugs took unto themselves too much in recommending the use of this and that preparation to physicians. New drugs and medicines should come from the research laboratory of the University and of the teaching hospital. None of the really useful drugs or medicines had been discovered by druggists or manufacturing firms."⁷⁸

Commercial Interests in medical scholarship

There are signs that there existed a connection between ethical doctors and commercial medical companies. For, despite the outcry over the dangers of commercial medicine, from the outset, private interests helped fund the association's conference. Overviews of annual meetings mention how insurance companies and paid for banquets and tours of Shanghai for the association members. For example, evening entertainment was sponsored by private companies. At 7 p.m. on the second night of the conference, the Zhong-ying pharmacy hosted a banquet for association members at the upscale Western-style restaurant [七時中英大藥房公宴各會員於一品香].⁷⁹ On the third day of the conference, after Dr. Stanley's speech about the pernicious effects of medical advertising, the International Dispensary treated each member of the association to a tour and banquet, "at which both guests and hosts thoroughly enjoyed themselves [七時五洲大藥房邀請各會員至新世界遊覧晚膳賓主盡歡而散]."80

From 1:30 to 5 p.m. the following day, the 華安合羣保險公司 Hua Hua an he qun insurance company treated association members to take a car sightseeing tour of Shanghai river famous

⁷⁴ "National Medical Association. The Opening Meeting," *The North-China Daily News*, February 8, 1916.

⁷⁵ Ibid.

⁷⁶ Ibid.

⁷⁷ "NATIONAL MEDICAL ASSOCIATION. END OF AN IMPORTANT WEEK'S WORK," *The North-China Daily News*, February 12, 1916.

 $^{^{78}}$ "NATIONAL MEDICAL ASSOCIATION. CHINESE TERMINOLOGY IN MEDICINE," The North-China Daily News, February 10, 1916.

⁷⁹ "Zhonghua yixue hui di er ri kaihui jiyao" 中華醫學會第二日開會紀要 (National Medical Association of China Day Two Conference Summary)," *Shen bao*, February 9, 1916.

⁸⁰ Ibid.

area [下午一時半至五時半華安合羣保險公司請各會員乘汽車游覽申江名勝之區].⁸¹ And on the second to last day of the conference, the conference attendees had two separate events sponsored by private companies. The first, was [七時華英大藥房設席於華慶園款待會員]. The second was the Jin Xing Ren insurance company treating association member to opera/performance at *dawu tai* [八時金星人壽保險公司請各會員至大舞臺觀劇].⁸²

Foreign concerns about drugs and pharmacists

There also is a discernible unease about drugs and those selling them. Meeting minutes from the Municipal Council voice disquiet over the sale of noxious drugs in the settlement. For example, a meeting of the Council held on August 2, 1922 referred to a letter from the Senior Consul in which an inquest held on the body of a woman from the Netherlands suggested that "it would appear that poisons of the most virulent kind are obtainable at Chinese shops in the Settlement without any medical certificate or prescription being required."83 Later, this same set of meeting minutes references an existing stipulation that "licenses be granted to duly 'qualified' persons only and that sales shall be made on the prescription of 'qualified' persons only."84 Two years later, in 1924, the Municipal Council adopted a report by the Sale of Poisons Commission. "With regard to foreign medical practitioners it is realized that, inasmuch as the Council has power to enforce registration of all chemists, it can be made a condition of their licenses that prescriptions signed by registered medical practitioners only, may be filled, and that thus the desired registration of medical practitioners will effectually be secured."85 What this suggests is that the authorities of the International Settlement were concerned about chemists supplying harmful drugs, and that some form of registration existed that authorities could use to screen chemists.

The earliest attempts at regulating medical practitioners came in 1922, through the Ministry of the Interior, which used municipal and provincial police departments to administer examination and registration of both native physicians and Western-style doctors. These regulations also made the distinction between physicians 醫師 and medical scholars 醫士. Physicians could qualify for government employment and issue death certificates. Such licenses required producing a graduation certification from any college of Western medicine in China or abroad or furnishing a certificate of practicing medicine in a foreign hospital for three years. Such regulations received heavy criticism from Western-style doctors, not just for the use of police but also for the equal recognition accorded native medicine. There is no record of enforcement of such regulations.⁸⁶

^{** &}quot;中華醫學會開會日程 Zhonghua yixue hui kaihui richeng (National Medical Association of China Conference Program)," *Shen bao*, February 7, 1916.

⁸² Ibid

⁸³ Municipal Council Meeting Minutes, August 2, 1922, *The Minutes of Shanghai Municipal Council*. 1854-1943, vol. 22 (Shanghai: Shanghai gu ji chu ban she, 1922), 168.

⁸⁴ Ibid., 169.

⁸⁵ Ibid, 462.

⁸⁶ Xu, Chinese Professional and the Republican State, 123. Andrews, The Making of Modern Chinese Medicine, 150.

VI. Figure of the pharmacist

Of doctors and pharmacists

By far the laws on medical practitioners that has garnered the most interest among scholars for its timing and symbolic importance was a series of regulations issued in 1929 which regulated doctors and pharmacists.⁸⁷ Sean Hsiang-lin Lei devotes much attention to this issue, particularly how the regulations spurred native Chinese doctors to organize and lobby for inclusion in the medical establishment, eventually earning a separate status under the label of "National Medicine" with its own corresponding institutions.⁸⁸ Lei's work focuses on doctors of Western and Chinese medicine, and their relationship with the nascent Republican state.

How pharmacists figure in the picture of medical practitioner regulation has not been an interest of scholars. Examining the regulations about doctors and pharmacists together is potentially illuminating, given the concerns about drugs and those who sell them that are present starting in 1915 at the National Medical Association of China's first conference and in the foreign press during the 1920s

Impressions of pharmacists prior to 1929

Prior to a set of 1929 regulations on registration of medical practitioners, it is hard to find an articulation of what qualified one to be a pharmacist. Even the terminology for pharmacists was inconsistent. In English, the terms pharmacist, chemist, and druggist all appear to be used somewhat interchangeably in foreign media. In Chinese, the term used for pharmacists was 藥劑 節 or 藥師. On a very basic level, it seems that pharmacists were defined as those who gave out prescriptions.

A 1921 English-language article, "What the Pharmacist Owes the Public" that appeared in the journal *Yiyao zazhi* 醫藥雜誌 outlines some concerns regarding the work of the pharmacist. Reprinted from an American magazine for pharmacists, this article directly points to the problem when people buy drugs themselves. On the duty of the pharmacist, the author writes: "we are our brother's keeper to the extent that we have no right to furnish him with drugs and medicines that are not good and we recognize a moral duty in refusing to sell dangerous habit forming drugs except under the very closest restrictions, but does not our sense of responsibility often end there? Should we not be ready to help him to a better understanding of the remedies he purchases?" Moreover, the author asks readers to recognize that self-medication often always is equivalent to self-diagnosis, and to help people understand that "they cannot diagnose their own ailments and that no one really can except a physician who has been trained in that very thing." ⁹⁰

Pharmacists on medicine and drugs

Starting around 1926, there were suddenly more articles making the case for and against

⁸⁷ "Weishengbu gongbu yiyaoshi tiaoli" 衛生部公布醫師藥師條例 (Ministry of Health Announces Doctor and Pharmacist Regulations)," *Shen bao*, January 26, 1929.

⁸⁸ See Lei, *Neither Donkey Nor Horse*, Chapter 5, "The Chinese Medical Revolution and the National Medicine Movement," pp. 97-119.

⁸⁹ 姜 Jiang, "What the Pharmacist Owes the Public," Yiyao zazhi 醫藥雜誌 4, no. 6 (1921): 2-3.

⁹⁰ Ibid.

pharmacists. In 1926, the Chinese Pharmaceutical Association (中華藥學會) published a letter written to the Ministry of Health regarding regulations for the registration of Western medicine pharmacists. This organization was established in 1907 in Tokyo by pharmacists from China who graduated from pharmacy school in Japan (mostly in Tokyo). By 1912 the association had moved to Beijing. In a letter, the pharmacists made a distinction between themselves and doctors based on a difference in areas of knowledge: doctors were in charge of medicine, while drugs were the purview of pharmacists.

The pharmacists here are of the view that doctors are not qualified to perform the duties of the pharmacist because the former lack familiarity with drugs. They write, "since new medical knowledge has entered our country, the adjustment of Western drugs has not been taken seriously. Some who are not doctors simultaneously serve as pharmacists. And some who are not well versed in pharmacology are flooded among them [吾國自新醫學輸入以來。對於西藥之調劑。向不重視。非醫師兼充藥劑師。即委託不諳藥學者濫於其間].⁹² The authors point to the recognition of the separation of medicine and pharmacy in Europe, America, and Japan, where these two fields have been clearly separated.

The knowledge of doctors and pharmacists were different, according to pharmacists, who cast medicine and pharmacy as two distinct branches of knowledge. While the realm of doctors was that of the body, pharmacists learned about drugs and their workings on the body. The article identifies the main subjects of medicine as physiological dissection, in addition to pathology, medicines, diagnosis, bacteriology, surgery, internal medicine, obstetrics, eyes (ophthalmology), nose, ear and throat, skin, and forensic medicine. (如醫學主要科目為生理解剖。醫化組織。病理。藥物。診斷。細菌。外科。內科。產科。眼。鼻。耳。咽喉科。皮花科。法醫學等). For pharmacy, the main subjects are inorganic chemistry, organic chemistry, qualitative analysis, quantitative analysis, use of medicine plants, raw drugs, hygienic chemistry, medicinal industrial chemistry, pharmacology, bacteriology, (judgment chemistry), judgment of dispensary medicines from every country, and the art of prescription adjustment, etc. (藥學主要科目無機化學。有機化學。定性分析。定量分析。藥用植物。生藥學。衛生化學。藥品工業化學。製藥化學。細菌學。裁判化學。各國藥局方藥品鑑定學。調劑術等).

Thus, the letter from the doctors clearly delineates a difference between themselves and pharmacists based on realms of knowledge acquired through education.

The pharmacists further posit an inherent difference between medicine *yi* 醫 and drugs *yao* 藥. "Ultimately, when looking at the rules, it is agreed that medicine and drugs are very difficult. But society does not inspect, and each one confuses medicine and drugs as one. And so those in the medical profession do not attach importance to what they have learned" [綜觀規定。醫藥萬難 苟同。然社會不察。每以醫藥混而為一。此實非社會之不明。乃操醫藥業者不重其所學1⁹³

⁹¹ Cao Hui suggests the association might have been established in 1908. Cao Hui 曹晖,"关于中国药学会成立年份的初步考察 Guanyu Zhongguo Yaoxuehui chengli nianfen de chubu kaocha (On the Preliminary Investigations of the Year of the Founding of the Chinese Pharmaceutical Association)," 中国药学杂志 26, no. 11 (1991): 689-691.

^{92 &}quot;中華藥學會致衛生局函(十一月十八日):對於西藥劑師登記 Zhonghua Yixuehui zhi weishengju han (shiyi yue shiba ri): duiyu xi yaojishi dengji (Chinese Pharmaceutical Association Letter to the Ministry of Health November 18: On Registration of Western Pharmacists)," *Guangji yikan* 廣濟醫刊 (1926), 26.

^{93 &}quot;Zhonghua Yixuehui zhi weishengju han (shiyi yue shiba ri): duiyu xi yaojishi dengji" 中華藥學會致衛生局

Medicine, or healing, is what doctors do. Drugs are what pharmacists know.

Regarding the proposed regulations, the pharmacists had some criticisms. First, they say that they have not heard of any specialized pharmacists who were involved in the formulation of the regulations [此次西藥劑師章程之規定。未聞有藥學專門者參與其間]. Moreover, the fields of study specified in the examination were not appropriate, as they were missing 生藥學 (pharmacognosy),藥品鑑定學 (drug identification), and 製藥化學 (medicinal chemistry), which were required knowledge for pharmacists to provide services. And the pharmacists also object to the absence of rules stipulating that doctors cannot at the same time also serve as pharmacists. [如生理藥物法醫學如非欲藥劑師兼充醫生], lamenting the fact that currently in Shanghai there are many doctors who are doing this. [他日主持者稍或不察。亦即以醫為藥。以藥為醫。不特笑世界。亦害社會。更有言者。滬上醫師兼充藥劑師之職務多。將來是否在取締之列。章程中亦應明白規定1.94

The letter ends with an assertion of boundaries between the knowledge and professions of doctors and pharmacists. "The respected Ministry of Health should surely understand thoroughly the boundaries between different scientific knowledge and between professions. In light of the responsibility that resides with this professional association, we find it difficult to be silent. Taking the liberty of showing disrespect, (辛希裁復) we hope to get answers to relieve the public's misgivings. We sincerely pray for the best." [想責局對於是等科學之界限。職業之異同。自必洞悉無遺。敝會職責所在。未便緘默。用特不揣冒昧瀆陳。辛希裁復。俾翻羣疑。不勝盼禱之至195

What the pharmacists were doing was arguing that their work required a specialization of knowledge that the doctors lacked, namely, a familiarity with the workings of drugs. Here, the pharmacists deflected the question of skill away from diagnosis and pivoted to treatment and all the types of specialized knowledge associated with treatment.

VII. Lack of foreign regulation

By the end of the decade there was no forthcoming registration of doctors by the foreign authorities in Shanghai. In contrast, the Chinese Nationalist government had by 1929 issued a series of regulations requiring the registration of doctors, as well as pharmacists, dentists, and nurses. This disparity between actions by foreign and Chinese authorities on this issue was noted with dismay by another major foreign newspaper of the time, *The North-China Daily News*:

Dr. G. H. Chan's letter, which we published yesterday, deals with a matter that is vital to the well-being of the community Chinese and foreign; and his plea for the co-operation of the Municipal Health authorities in eliminating the quack and the charlatan from local medical practice deserves all support. That the Chinese have, of their own volition, undertaken this much needed reform is one of the most promising of recent portents; it is more than regrettable that similar efforts in the foreign Settlements are so much hindered as they at

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函(十一月十八日):對於西藥劑師登記 (Chinese Pharmaceutical Association Letter to the Ministry of Health November 18: On Registration of Western Pharmacists)," 廣濟醫刊, (1926), 26.

^{94 &}quot;Zhonghua Yixuehui zhi weishengju han (shiyi yue shiba ri): duiyu xi yaojishi dengji," 26.

⁹⁵ Ibid.

present inevitably are. Here is a matter that is, or ought to be, beyond the considerations of petty politics. The health of the community is all important. The yeoman service rendered by those who have it in charge is above praise. The realization that they are powerless to extend their work in divers [sic] directions within the Settlement itself gives one furiously to think. Dr. Chan with good reason adverts to certain malpractices which a few foreign practitioners, alas, are as guilty as the very Chinese he condemns. He exposes nothing but what has frequently attracted the attention of the ethical majority. The fact remains, however, that until those who are designated to act in these matters can do so with a free hand, just so long as will conservation of health within the Settlement fall short of a feasible maximum. We note the opposition to the registration as recorded by Dr. Chan, and, with him, one salutes those who did their duty in the face of dire threats.⁹⁶

VIII. 1929 Chinese state regulation

While these pharmacists made the case that their work differed substantially from that of doctors, regulations about who could practice pharmacy hewed to qualifications based on education. A set of 1927 rules passed by the Ministry of the Interior stipulated that as long as pharmacists had graduated from a domestic or foreign government-recognized school or had practiced as a pharmacist for at least five years in a dispensary or hospital, they could practice pharmacy. It is not until the regulations of 1929 that the views of the state on the differences between doctors and pharmacists in their actual work is made clear.

The 1929 regulations disqualified those who did not graduate from medical schools and required registration be conducted by police departments. The regulations consisted of 25 rules for each group. There are quite few similarities between the regulations in terms of qualifications for practicing. For example, article three for both groups mandated that in order to practice, both doctors and pharmacists had to be at least 20 years of age, and possess a certificate of graduation from a specialized program at a Chinese or foreign official or government school. And there were certain conditions that would disqualify both groups from practicing. For doctors and pharmacists both, article four stipulated that even if they possessed the qualifications outlined in article three, they would not be issued a license if they: 1) had been imprisoned for three years or more; 2) had been deprived of the right to manage their property; 3) lost their mind (○非因從事國民革命、而曾判處三年以上之徒刑者、○禁治產者、⑤心神喪失者

⁹⁶ "Registration of Doctors," The North-China Daily News, March 17, 1928, pp. 6.

⁹⁷ 沈瑞麟 Chen Ruilin, "Fagei Yaojishi Kaiye Zhizhao Zanxing Guize發給藥劑師開業執照暫行規則 (Temporary Rules Distributed to License Pharmacists Opening Private Practice)," *Zhengfu Gongbao* 政府公報, 1927.

^{98 &}quot;Weishengbu gongbu yiyaoshi tiaoli"衛生部公布醫師藥師條例 (Ministry of Health Announces Doctor and Pharmacist Regulations)," *Shen bao*, January 26, 1929.

^{99 &}quot;Weishengbu gongbu yiyaoshi tiaoli"衛生部公布醫師藥師條例 (Ministry of Health Announces Doctor and Pharmacist Regulations)," *Shen bao*, January 26, 1929. (article three for doctors: 凡年在二十歲以上、具有左列資格之一者、得呈請給予醫師證書、○在國立或政府有案之公立私立醫學專門學校以上畢業、領有畢業證書者、○在外國官立或政府有案之私立醫學專門學校以上畢業、領有畢業證書、或在外國政府領有醫師證書者、○外國人曾在各該國政府領有醫師證書、經外交部證明者、@經醫師考試及格、領有證書者; article three for pharmacists: 藥師證書、○在國立或政府有案之公立私立專門以上學校藥科畢業、領有畢業證書者、○在外國官立或政府有案之私立專門以上學校藥科畢業、領有畢業證書者、○在外國官立或政府有案之私立專門以上學校藥科畢業、領有畢業證書者、@經藥師考試及格者)

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Regarding overlap between doctors and pharmacists, nothing explicitly prohibited doctors from also serving as pharmacists or vice versa. But the educational requirements effectively made it impossible for one to serve as the other without a degree in the subject. Pharmacists were prohibited from working at two different pharmacies simultaneously (article 10). There is also a shared emphasis on the need for detailed record keeping of prescriptions — for example, the name of the patient, drug, and its use. Doctors had to hold onto their records for five years, where pharmacists needed to keep theirs for three years (article 12 and 14, respectively).

It is in the sections outlining duties of the doctors and pharmacists that differences appear. First, doctors had more of an obligation to the state, to whom they were required to report to the authorities if someone has or died of an infectious disease, or if there is suspicion of a crime in the case of a dead body or stillborn baby (article 15, 16). And they had to be personally present to perform autopsies and issue death certificates. And doctors had to hand over relevant documents to the authorities if demanded (article 14). In contrast, pharmacists did not have to report to the state but did have to defer to doctors. Pharmacists had to ask doctors for questions to clarify the quantity or toxicity of a medicine, or for permission to alter a prescription (articles 12-14).

The 1929 regulations also suggest that the Nationalist government was concerned about unethical doctors and illicit drugs. Article 18 for doctors specifically prohibits them from making or spreading untrue or inflated advertisements. This corroborates the concerns that the International Settlement's Municipal Council voiced about doctors spreading false advertising earlier in the decade. There is no similar provision for pharmacists. Article 19 for doctors prohibits the prescription of opium or narcotics outside of appropriate medical treatment. If doctors and pharmacists practiced without licenses they would be fined. If undertaking improper activities or violating regulations they would also have to pay a fine.

There seem to be many fewer pharmacists than doctors at the time applying for licenses. In September 1929 a first round of licenses was issued to 111 doctors; 7 pharmacists; 102 midwives. In May 1929, second round of licenses were issued to 47 doctors, 6 pharmacists, and 35 midwives. Newspaper reports several years later on a 1934 law extending pharmacists license from five to seven years lament that there were not enough pharmacists to meet the need of society. There seems to be a concern about the possibility of pharmacists not completely following the prescriptions given by doctors. But unlike doctors, there is no mention of a concern about promoting false advertising.

IX. Conclusion

If we put aside the issue of qualifications via education or testing, then what do we know about who a doctor of Western medicine was in early Republican Shanghai? If we think less

^{100 &}quot;Weishengbu gongbu yiyaoshi tiaoli"衛生部公布醫師藥師條例 (Ministry of Health Announces Doctor and Pharmacist Regulations)," *Shen bao*, January 26, 1929.

^{101 &}quot;Shanghai shi zhengfu xunling di ba si si hao: ling Weishengfu: wei zhun neizhengbu zi wei feng zhun jiang defa yaojisheng zhizhao xianzhi zhanhan er nian qing chi zunzhao yi'an ling yang zhun zhao you 上海市政府訓令第八四四○號:令卫生局:為準内政部咨為奉准將核發藥劑生執照限制展延 二年請轉飭遵照一案令仰遵 照由 (Shanghai Municipal Government Instruction Number 844: Order Ministry of Health to Prepare Ministry of the Interior to Consult Present to Approve Pharmacists License Limit Extension to Two Years Request In Accordance with One Case Order to Comply With)," 上海市政府公報, 1934.

¹⁰² Ibid.

about who could become a doctor, or practice medicine and more about what were the behaviors that doctors themselves recognized as a threat to their professional livelihood and identities, then we see a new foil: first patent medicines, and then, on the horizon, pharmacists.

Patent medicines were a threat because patients often used these formulas that did not work. They were a threat because people did not need to see doctors if they could directly treat their own illnesses. Cast in a negative light, it is called self-medication. Perhaps in a positive light, though, it might be called home remedies. They were also a threat because doctors were involved in their production and prescription, and thus there might be a conflict of interest in producing or prescribing these drugs.

The picture we get is of doctors as economic actors, who sought to make a living, and maybe even get rich. They were not aligned with the state necessarily, but not innocent bystanders either. They were in the business of medicine. But as a profession, in this professional association, they called for ethical behavior vis-à-vis patients as a foundational cornerstone of their work. In this literati-inflected ideal of the scholar Confucian physician, the idea of a doctor making money off patients was abhorrent. This, I think, points to a transition away from literati ideals of the scholar Confucian physician, whose sensibilities and skills of diagnosis were contrasted with unskilled hereditary doctors. Instead, there is a shift, or a rise in a new field of knowledge, pharmacy and a new person whose expertise is in that particular realm of drugs. Thus, the ground upon which doctors had previously stood had shifted. Literati no longer, they were living in a brave new commercial world in which ethical people also wanted to make some money, and patients did not necessarily see doctors but bought treatments, effective or not, directly from the store themselves.

Chapter 2

WHEN BIOGRAPHY BECOMES HISTORY: LIVES OF A DOCTOR IN REPUBLICAN SHANGHAI

I. Introduction

This chapter looks not at the life of one doctor, but the stories of his life that circulated at the time of and after his death. In life and in death, Yu Fengbin 俞鳳寶 (1884-1930) embodied certain ineffable contradictions that seem difficult to resolve. He grew up steeped in the literatic culture of late nineteenth-century imperial China, left home to study public health in the United States, and became a celebrated physician of Western medicine in Shanghai in the early twentieth century. A tireless scholar who published over 150 articles and 10 books on medicine, he treated the infirm and poor in his successful private practice, but died at the age of 46 from a kidney condition for which he long sought a cure. A figure mostly unknown to scholars of medicine in China today, he was quite prominent in medical and popular circles circles when he died. Historical sources — popular obituaries, formal profiles, scholarly articles — each tell his life story slightly differently, written as they were in distinct genres each with their own formal modes and by a variety of authors with their own unique agendas. The simultaneity of these different paradigms of knowing and explaining a person, how to reconcile them, and what they tell us about this doctor in 1920s Shanghai is the subject of this chapter.

Following his untimely death, obituaries for Yu appeared in Shanghai's most prominent medical and popular publications. Several days after his death on December 4, 1930, a prominent English-language newspaper wrote: "The 'North-China Sunday News' regret [sic] to announce the death of Dr. C. Voongping Yui one of the most distinguished Chinese medical practitioners of Shanghai." At the same time, however, to another audience, it seems that he was almost entirely unknown. In 1931, a regional Jiangsu Province educational publication published an article on the prominent educator Yuan Guanlan and Yu Fengbin, presenting them as two figures worthy of moral emulation. Anticipating the choice of Yu as a subject, the author wrote people will undoubtedly ask, "Yu Fengbin is not a famous person. What is so great about him that we should learn from?" And even for scholars of modern China, and of medicine in China in particular, Yu remains largely absent from their histories. 105 He has not received the attention of

¹⁰³ "C. Voongping Yui, M.D., D.P.H.," *The North-China Daily News*, December 7, 1930, 24. Romanized today in pinyin as Yu Fengbin, his name at the time appeared in different forms, including C. Voongping Yui, and C.V. Yu.

¹⁰⁴ This piece is not simply an obituary, but an article about moral models for emulation, which includes detailed biographical information and analysis of character and personality traits, as well as anecdotes. 馮邁櫻 Feng Maiying, "我們應當學袁觀瀾俞鳳賓兩先生:附照片 (We Should Learn from the Two Gentlemen Yuan Guanlan and Yu Fengbin: Including Photo)," *Minjian xunkan* 民間旬刊 13 (1931): 5–11. The author is referred to in this article by his given name, Maiying, But his surname is Feng 馮. See obituary for Feng Maiying, "悼馮邁櫻先生雷 迅 Dao Feng Maiying Xiansheng Lei Xun (Mourning Mr. Feng Maiying (by) Lei Xun)," Fengbao zhoukan 奉報問刊奉報周刊 1, no. 5 (1938): 20.

¹⁰⁵ Two essays have been published by scholars in China, one in 1995 the other in 2015. 谢蜀生 Xie Shusheng, "中华医学会早期著名活动家——俞凤宾博士 Zhonghua Yixuehui zaoqi zhuming huodongjia (National Medical Journal of China Early Period Activist - Yu Fengbin Ph.D.)," *Yixue yu zhexue* 医学与哲学 16, no. 3 (June 1995): 328–30. 张进 Zhang Jin, "俞凤宾与近代中国卫生科学的传播 Yu Fengbin yu jindai zhongguo weisheng kexue de

one of his closest peers, Dr. Wu Liande, who is credited as a founding figure in raising awareness about public health. He appears as a footnote in other major studies or included in lists of doctors in the work of others.¹⁰⁶

Examining the stories of this person's life sheds light on print culture in 1920s Shanghai and how different sources present the ideal image of a doctor of Western medicine. This investigation also illuminates the social and cultural context of becoming and being a doctor. Here, the role of educational experiences and professional networks is particularly significant. Then, we will learn about the changing ways the lives of individuals in the past are presented. Obituary, profiles, scholarly assessments are all biography, in some form, and sources for the historian.

The choice of Yu Fengbin as my subject as opposed to a more well-known figure in the history of medicine in China is deliberate. With the rise of social and cultural history in the 1970s and 1980s, figures who have long garnered our attention for their political importance have gradually come to share the historical stage with people we might consider more minor figures, but who, nonetheless and perhaps precisely because of their more minor status, may be better able to illuminate the major challenges of their times. This focus on more obscure figures is apparent in works such as Natalie Zemon Davis's *The Return of Martin Guerre* (1983), about 16th century French peasants welcoming an imposter home. ¹⁰⁷ In the field of Chinese history, Philip Kuhn's *Soulstealers: The Chinese Sorcery Scare of 1768* (1992) runs from the local to the center and back, investigating the Qianlong emperor's use of the suppression of a queue-cutting scare to force provincial authorities to discipline local officials, set against the backdrop of a once-prosperous eighteenth-century China in social and economic decline. ¹⁰⁸

Yu, because he was well known at the time of his death is not, strictly speaking, a minor figure in history. But he has escaped the attention of mainstream histories of medicine in China. We need not rescue all previously known figures from the dustbin of history. For me, it was because of the contradictions that marked his life that lent his story a kind of elegiac, equivocal quality that makes him worth investigating. In deciding to make Yu the center of my investigations, one inspiration has been the 20th-century Chinese writer 張愛玲 Eileen Chang's focus on non-traditional heroes who possess what she calls "equivocal contrast." Rather than the exciting manifestation of strength akin to the stark contrast of bright red with deep green, Chang depicted ordinary people who possess an inherent strength and beauty most often manifested in tragedy, or, even better, in desolation — a contrast that is truly revelatory, akin to the subtle contrast between scallion green and peach red. 109 In her essay, Ziji de wenzhang 自己的文章 "Writing of One's Own":

chuanbo (Yu Fengbin and the Dissemination of Modern Chinese Hygienic Science)," *Lan tai shijie* 兰台世界, February 2, 2015.

¹⁰⁶ For example, Yu is mentioned briefly among lists of doctors in Chieko Nakajima, *Body, Society, and Nation: The Creation of Public Health and Urban Culture in Shanghai* (Cambridge, Massachusetts: Harvard University Asia Center, Cambridge, Massachusetts: Harvard University Press, 2018), 89 where he is identified briefly as a member of the Songhu Public Health Bureau's advisory committee formed in 1927. Seung-Joon Lee, "The Patriot's Scientific Diet: Nutrition Science and Dietary Reform Campaigns in China, 1910s–1950s," *Modern Asian Studies* 49, no. 6 (November 2015): 1809 mentions lists Yu's presence at a talk on public health given by the dean of Harvard Medical School of China in 1912.

Natalie Zemon Davis, *The Return of Martin Guerre* (Cambridge, Mass: Harvard University Press, 1983).
 Philip A. Kuhn, *Soulstealers: The Chinese Sorcery Scare of 1768* (Cambridge, Mass: Harvard University

¹⁰⁹ Eileen Chang 張愛玲, *Liu Yan* 流言 (Taipei: Huangguang wenhua, 1991), 18. Eileen Chang, *Written on Water*, trans. Andrew F. Jones, Weatherhead Books on Asia (New York: Columbia University Press, 2005), 16-17.

So my fiction with the exception of Cao Qiqiao in 'The Golden Cangue,' is populated with equivocal characters. They are not heroes, but they are of the majority who actually bear the weight of the times. As equivocal as they may be, they are also in earnest about their lives. They lack tragedy; all they have is desolation. Tragedy is a kind of closure, while desolation is a form of revelation. [所以我的小說裏,除了『金鎖記』裏的曹七巧,全是寫不徹底的人物。他們不是英雄,他們可是這時代的廣大的負荷者。因為他們雖然不徹底,但究竟是認真的。他們沒有悲壯,只有蒼涼。悲壯是一種完成,而餐量則是一種啟示]¹¹⁰

For me, Yu Fengbin has been such an interesting figure to investigate because of this quality of equivocal contrast. His writing and activities suggest he neither wholly rejected nor fully embraced either Chinese or Western medicine. And even the story, the narrative, we get of him through the eyes of others is hard to characterize as completely one way or the other. Writing by him and about him reflects the uncertain times and the uncertainty about paradigms of Western and Chinese medicine in the air he breathed. This was a time of moral doctors in the business of medicine, who sought to assert their authority alongside suspect charlatan quacks who proffered remedies that were perhaps more familiar and comforting to the sick.

When dealing with the contradictions of a time, and the paradox embodied in a person it is helpful to consider precisely the nature of those contradictions. To shed light on the contradictions with which people in the past wrestled without imposing our own subsequent value judgments is a challenge for historians. Joseph Levenson, a forefather in the field of Chinese intellectual history offers some helpful words on this matter. In his study of the late Qing and Republican-era intellectual Liang Qichao, Levenson writes that:

Every man has an emotional commitment to history and an intellectual commitment to value, and he tries to make those commitments coincide. A stable society is one whose members would choose, on universal principles, the particular culture which they inherit. In its great ages, the Chinese Empire had been such a society. Chinese had loved their civilization not only because they were born into it but because they thought it good. In the nineteenth century, however, history and value were torn apart in many Chinese minds. Liang Ch'i-ch'ao (1873-1929) began writing, in the 1890's, as one who was straining against his tradition intellectually, seeing value elsewhere, but still emotionally tied to it, held by his history.¹¹¹

As we shall see, Yu, like Liang, was torn between two worlds, between history and value, between all that Chinese culture had once so confidently offered as universal, as his, and all that Western culture — science and medicine especially — presented as universal and true at the turn of the twentieth century.

There is something to be said for not only exploring what a person did but what contradictions he or she struggled with in the doing. Levenson writes that "Liang's prison was a mind laced with necessary inconsistencies, incompatible ideas which he had to believe — not for

¹¹⁰ Chang, Liu yan, 19. Chang, Written on Water, 17.

¹¹¹ Joseph Levenson, *Liang Ch'i-Ch'ao and the Mind of Modern China*, 2d rev. ed., 1959 (Berkeley: University of California Press, 1967), 1.

their logical coherence but because of his personal need. My effort as historian, after giving the record of what he did, is to find out what wracked him as he did it."¹¹² And further, that this effort to investigate an individual will yield insight not just into that particular individual but, on the larger context in which he lived. Or, as Levenson puts it: "For all the steady concentration on Liang, my intent is to establish what his milieu expected of him and could offer him."¹¹³

Here, then, is a key point in my decision not to focus this chapter on Yu's writing about Chinese and Western medicine and discovering how he could hold simultaneously seemingly incompatible positions about these two systems. That will come later. Instead, in this chapter I propose that the print media, the very means by which he was known to others in his time and at the time of his death, by which he made his views known were themselves contradictory, equivocal, heterogeneous, and produced a varied picture of an individual. And that, as a consequence, authority over him is diffused. Thus, I hope to show that the contradictions we apprehend in Yu, and in figures like him, are inseparable from the very means by which they wrote and circulated their positions and knowledge.

This is not a project aimed at casually dismissing or perplexedly pointing to contradictions in the thinking of a person at a particular place in time. To write historically of a person in the past, is, as Levenson pointed out, "to recognize the relativities of his situation," meaning that the goal "is not to show that Liang was ridiculous to think as he did." but that it was *reasonable* for him to think as he did." Whereas a philosopher is concerned with testing thought for a timeless rationality, "the intellectual historian is particularly concerned with *thinking*, to probe beneath it for a time's questions by divining how it is reasonable — perhaps in spite of or precisely because of imperfect rationality." In looking at how our image of Yu changes based on what we read about him, I seek to trace changes in thinking about him over time, and thus, further, to understand what his milieu expected of him and could offer him.

Chapter overview

In the first part of this chapter, I piece together the basic story of a life as told at the time of a death, sketching out briefly Yu's influences and activities from his earliest to last days. The goal here is to give a sense of the larger world this person lived in, the contexts in which he was embedded that help explain "what his milieu expected of him and could offer him." I emphasize the importance of his educational and professional networks, which appear to have positioned him along a certain trajectory. The source here for such biographical information are obituaries that appeared in popular newspapers and professional medical journals immediately after his death on December 4, 1930 in Shanghai. These give us a picture of him from the perspective of the general public and his colleagues in medicine.

The second section analyzes the way the stories of his life were told in the context of print media in 1920-30s Shanghai. Here, the sources I draw on are a pair of longer, didactic writings that appeared in the year after Yu's death that touted him as a moral exemplar to be emulated. These tell us something of the ways new forms of print media portrayed individuals, in a mode of biography that differed from the hagiographic obituaries that are the source base of the

¹¹² Levenson, Liang Ch'i-Ch'ao and the Mind of Modern China, vii.

¹¹³ Ibid.

¹¹⁴ Levenson, Liang Ch'i-Ch'ao and the Mind of Modern China, vii, emphasis in original.

¹¹⁵ Ibid.

¹¹⁶ Ibid.

previous section. Specifically, for the reading public comprised of Shanghai petite urbanites, these articles illustrate the development of presenting individual lives that was less about innate personal qualities and more about the personal traits developed through experience that explained their accomplishments.

The third section considers the stories about the stories of his life as told decades after his death. In this I shift to focus on assessments that were written at a distance from the subject. Written with some distance, but not complete detachment — the first piece of writing is a reminiscence of Yu by his own son from a collection of oral histories published in 1983. The other piece is a scholarly assessment that appeared in 1995. Where parts one and two offer the reader a sense of what his milieu expected and could offer Yu at the time of his passing, this section shows what he subsequently came to mean to his world with the passing of decades.

The chapter concludes with an epilogue that goes back to 1929, to give us the dying doctor's perspective on his own impending death. In a literary piece that appeared in the medical journal for which he served as editor, Yu recounted a botched surgery operation in a foreign-run hospital to treat the long-standing kidney condition that killed him just one year later. Ending here offers a glimpse of Yu's own sense of himself; we see not just what he did in the past or who he was to later times, but his own experience as a doctor and as a patient.

II. Obituary as Genre

This section gives three different view of Yu through obituaries that appeared in the popular, medical, and foreign press. These sources present a view of an individual notable for what he did, and the range of positions he held. Here then is a very general picture of a person: his education at home and abroad, his professional activities, publishing work, and teaching activities.

An obituary that appeared in the prominent and popular *Shen Bao* is an example of what is likely the most widely-circulating piece about Yu at the time of his death. Published on December 5, 1930, the day after he died, under the title "Yu Fengbin Ph.D., passes away"(俞鳳 實博士逝世), the obituary included a picture of Yu. The obituary presents Yu in brief — in terms of his educational degrees, medical practice, scholarly work, and professional activities. It reads:

Yu Fengbin, Ph.D., after graduating in medicine from St. John's University, practiced medicine in Shanghai, in the founding year of the Republic went to study in America at University of Pennsylvania, studying internal medicine, tropical medicine, and public health. After receiving a Ph.D. he returned to China and practiced medicine in Shanghai, saved innumerable lives. In addition to practicing medicine, he also wrote many works, publishing more than twenty works, (this) Ph.D. was enthusiastic everyday about social undertakings. He previously was the director of the National Medical Association of China, a member of the Medical Terminology Investigation Committee, and Shanghai Jiaotong University doctor. He made many contributions to medical and scholarly circles. At present he was a professor at National Central University Medical School, a member of the Shanghai Municipal Government Construction Consultation Committee. Unfortunately, he broke down from overwork, suffered from an incurable kidney ailment,

yesterday (the fourth) at 5:30 in the evening, and died in Shanghai at the age of forty-six. Among those who heard the news, none do not deeply regret it, indeed it is a great loss for China's medical and scholarly circles [俞鳳賓博士、自畢業於上海約翰大學醫科後、在滬行醫數載、復於民國元年游學美國、肄業於本雪佛義大學、專攻內科診斷熱帶病及公衆衛生學、及得博士學位歸國後、又在滬行醫、活人無算、除行醫外、博士復從事著述、已出版之著作近二十種、博士平日熱心社會事業、曾任中華醫學會會長、醫學名詞審查會委員、上海交通大學校醫、對於醫界學界、殊多貢獻、現任國立中央大學醫學院教授、上海市政府建設討論會委員、不幸積勞成疾、竟罹不治之腎臟症、於昨日(四日)下午五時半、歿於滬寓、享年四十六歲、聞者莫不痛惜、誠中國醫界學界之重大損失也].117

The obituary published by his home journal, *The National Medical Journal of China* emphasized his professional engagements, and government and medical positions.

Mr. Yu Fengbin, from Taicang, Jiangsu, at first graduated from St. John's academy and continued his studies in the United States, receiving a Ph.D. in public health. In the 4th year of Republic (1915) he returned to his country to practice medicine in Shanghai, and his reputation flourished by the day. He also simultaneously, on the side, was the school doctor at Nanyang College, holding this position from the beginning to the end, for about fifteen years, taking up his tasks with an unrivaled ardency that rarely could be exceeded in comparison. He also concentrated on writing, publishing on the subject of public health, an estimated ten books that are all still in circulation, and was an editor of The National Medical Journal of China for more than ten years. In addition, he attempted to initiate the organization of the National Medical Association of China and the Scientific Terminology Investigation Committee, which were beneficial to the field of medicine, and really was not superficial nor showy. In the twelfth year of Republic (1923) he took on the position of professorship at St John's Medical school, while simultaneously serving as a member of the Ministry of Health Central Public Health Committee, and a professor at the Central Medical school. The medical profession looked up to him as the standard. 「俞君鳳賓江蘇太倉人,初畢業於聖約翰書院繼復於美, 得衛生學博士,民國四年貴國懸壺滬上,聲譽日隆。施兼南陽大學校醫,前後任職 凡十五年,熱心任事,罕與倫比。又潛心著作,關於衛生書籍刊刻行世者約十餘 種,編輯中華醫學雜誌十餘年。又嘗發起組織中華醫學會及科學名辭審查會,作福 醫界,誠非淺顯。民國十二年任聖約翰大學醫科教授,兼任衛生部中央衛生委員會 員,中央大學醫學院教授,杏林成奉為圭臬]118

Unexpectedly, last year on December 4th because of a chronic kidney inflammation he died. This was a misfortune for our country's medical world. This society's colleagues, hearing this

^{117 &}quot;Yu Fengbin boshi shishi" 俞鳳賓博士逝世(附圖片 (Yu Fengbin Ph.D. Dies (Including Photo))," *Shen bao*. December 5, 1930.

^{118 &}quot;Yu Fengbin boshi rong'ai 俞鳳賓博士荣哀 (Honorable Lament for Yu Fengbin)," *Zhonghua yixue zazhi* 中華醫學雜誌 *The National Medical Journal of China* 17, no. 1 (February 1931): 102.

news from afar deeply lamented it, and thus sent funeral scrolls to show how we cherish his memory. 不料去年十二月四日竟以慢性腎炎而不起,誠我國醫界之不辛。本社同人逖聽之餘,悼惜殊深,爰送輓聯一軸,以示懷思。

The obituary ends by publishing the funeral couplets written by Yu's association colleagues upon hearing of his death:

Serving as a diligent lecturer, long admired by the later generation, unexpectedly the bad news arrived, which rendered the longing for the figure who has served as our model an empty image

The gentleman who organized this scholarly association and defined the glossary, who single-handedly pushed for the movement, just when we expected to have a deeply talented person to depend on forever, how can one overcome the sadness of losing this model figure in the middle of this path whom one has looked up to?¹¹⁹

「任講師勤著,後進久傾心,不料噩耗忽傳,頓使典型空想像」「組學會定名辭, 羣流推獨步,方期長才永賴,何堪中道失瞻依」

In emphasizing the response to Yu's death by the association members, and highlighting certain qualities — diligence, tenacity — this obituary highlights what Yu means to this particular organization. The inclusion of funeral couplets also seems significant, as a particular way to memorialize the passing of a person by a specific group.

An announcement of Yu's death in *The North China Daily News*, the most prominent English-language paper in Shanghai provides a slightly different picture, placing less emphasis on his scholarly contributions, and more on his accomplishments as a practicing physician.

The "North-China Sunday News" regret to announce the death of Dr. C. Voongping Yui, one of the most distinguished Chinese medical practitioners of Shanghai, which took place at his residence at Loh's Garden, West Gate, last Thursday.

Dr. Yui was born in Shanghai in 1885 and received his medical training first at St. John's university and St. Luke's Hospital, and later at the University of Pennsylvania, Philadelphia, where he specialized in public health and obtained the degree of doctor of public health.

Returning to China in 1910, Dr. Yui soon built up a large and lucrative private practice, and his consulting rooms both in the Settlement and the city were always filled with patients. But Dr. Yui was interested also in the social problems of his people, especially in the prevention of disease. To carry out this effectively, he wrote during the past 15 years more than 20 simple tracts on health in the Chinese language, in which work he received much help from his wife, who was a very accomplished Chinese scholar.

When the National Medical Association was founded in 1914, Dr. Yui took a very

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¹¹⁹ Ibid.

conspicuous part in its organization and served for nearly 12 years as editor of the Chinese section of the "National Medical Journal." For his distinguished services Dr. Yui was elected president of the National Medical Association in 1919 and served for the term of two years.

Dr. Yui was exceedingly popular with his patients, for whose welfare he constantly imported the latest instruments and medicines, and in his consulting room could be seen the latest medical inventions of the day. His death will be much felt by his colleagues both in Shanghai and elsewhere and his place will be hard to fill among the Chinese medical profession.

The executive council of the Medical Association at its special meeting on Friday passed a resolution expressing the deepest condolence with his family. Dr. Yui leaves a widow and eight children, two of whom are married. The date of the funeral will be announced later. 120

In this English-language obituary, there are several pieces of information that contradict the picture one gets from the Chinese-language obituaries. Some of these are more minor than others. For instance, there are several discrepancies between this article and the Chinese-language ones regarding basic biographical information. In this article his year of birth is given as 1885 and birthplace as Shanghai, whereas the other articles identified him as from Taicang. Second, the date of Yu's return to the US is given as 1910, whereas other articles identify him as going back in 1915. Records from the University of Pennsylvania indicate that he completed his degree work in 1912, yet there is no mention anywhere of what he did in his additional time in the United States, if indeed he did not return until 1915.

Other slippages are more significant. After his return to China, "Dr. Yui soon built up a large and lucrative private practice, and his consulting rooms both in the Settlement and the city were always filled with patients. But Dr. Yui was interested also in the social problems of his people, especially in the prevention of disease. To carry out this effectively, he wrote during the past 15 years more than 20 simple tracts on health in the Chinese language, in which work he received much help from his wife, who was a very accomplished Chinese scholar. This is the first explicit and detailed mention of his private practice in his obituaries. The size and profitability of his private medical practice are implicitly contrasted to his commitment to public issues concerning the general population and to popularizing knowledge for people. Moreover, the scale and income derived from his medical practice might be construed as running counter to the ideals of economy, frugality, and the ultimately public ends of medicine that his colleagues advocated at the National Medical Association, and that he himself explicitly voices in his own professional writing.

Obituaries: from content to context

Thus, from these obituaries we get an outline of Yu's life that is not surprising: young literati goes to the city to study the newest science/medicine of the time, goes abroad to pursue further study, upon returning enters enthusiastically into the scholarly, professional, government, and medical world. So dedicated was he to all his activities that he was overworked, and died at the

¹²⁰ "C. Voongping Yui, M.D., D.P.H," *The North-China Daily News*, December 7, 1930.

¹²¹ Ibid.

young age of 46. The context is more complicated.

Yu's formal education in Western medicine is the starting point for all his obituaries, suggesting that that education was a key part of his identity for others. This education in medicine began at St. John's University, one of the most prominent institutions of Western style education in China during the early to mid-twentieth century. Founded in 1879 by a member of the American Episcopal Mission, the school was located in the Western suburb of Jessfield, five miles from the Bund. The students mostly hailed from the nearby Jiangnan area. Compared to other missionary schools, it was more scholarly in orientation, offering courses in sciences and liberal arts, and attracting large numbers of non-Christian Chinese students. St. John's had originally functioned mostly at the level of a middle school, offering classes in Chinese and theology, but in 1896 it was organized into three schools: the School of Arts and Science, Theology, and Medical School. The medical school faculty was mostly Westerners, led by Dr. Henry Boone, who came to China from the Medical Department of the University of New York. 122

The medical school curriculum was Western in content, emphasizing clinical experience. There were four students in the first class of 1896. The first two years of their education was preclinical coursework in areas including chemistry, materia medica, and anatomy. The second two years were devoted to pre-clinical training, when the students lived at Saint Luke's Hospital (*Tongren yiyuan*) and studied all areas of clinical medicine, including internal medicine, surgery, pediatrics, and diseases of skin, eye, ear, nose, and throat.¹²³

One of the early points of contention at the medical school was the choice between English and Chinese as the language of instruction. Some favored using English in order to guarantee the quality of medical education, as the Chinese language lacked equivalents for medical and scientific terminology, and because of the lack of Chinese literature on Western medicine. Others pointed to the lack of sufficient English-teaching staff, and the fact that few students had the necessary language training. Eventually, St. John's Medical School adopted English as the language of instruction. 124 At the medical school all courses were taught in English in order to more directly absorb the latest advances in medicine from Western countries.

That St. John's was one of the most prominent universities in Shanghai merits more discussion here. Shanghai at the turn of the century was China's largest commercial and industrial metropolis, and highly Westernized due to the presence of foreign powers in the treaty-port system. In contrast to Beijing, which was considered the repository of traditional Chinese pedagogy, Shanghai's Westernized educational institutions sought to satisfy the economic and cultural demands of the city's bourgeoisie. ¹²⁵ Thus, the decision to prioritize English as the language of instruction in the middle school was not surprising. This situation persisted even after Yu Fengbin's time at St. John's. Elizabeth Perry notes that the Chinese faculty had long been relegated to second-class citizenship ever since the faculty made the study of Chinese literature and philosophy optional in 1917. ¹²⁶ St Johns was not actually accorded registration by

¹²² On the establishment of St. John's Medical School, see Kaiyi Chen, *Seeds from the West: St. John's Medical School, Shanghai*, *1880-1952* (Chicago: Imprint Publications, 2001), 40-56.

¹²³ On St. John's more generally, see Wen-hsin Yeh, *The Alienated Academy: Culture and Politics in Republican China*, 1919-1937 (Cambridge, Mass: Harvard University Press, 1990), 49-88.

¹²⁴ Chen, Seeds from the West, 43-47.

¹²⁵ Elizabeth J. Perry, "Managing Student Protest in Republican China: Yenching and St. John's Compared," *Frontiers in the History of China* 8, no. 1 (2013): 5.

¹²⁶ Perry, "Managing Student Protest in Republican China," 7.

the Ministry of Education until 1947.¹²⁷ Elizabeth Perry notes that St. John's had a close relationship with the Anglo-American authorities who ran the Shanghai Municipal Council, which oversaw the International Settlement.¹²⁸

The obituary in Shen Bao, "Yu Fengbin Ph.D. dies (including photo)" (俞鳳賓博士逝世(附圖片)), lists Yu's academic degree title after his name in the headline. 129 This suggests the importance of his higher degree in the public's estimation of this individual. In 1913, Yu left Shanghai for Philadelphia to pursue a doctorate in public health at the University of Pennsylvania. In so doing, he joined a wave of doctors from China who traveled abroad to pursue medical degrees in Europe and America at the beginning of the twentieth century. Among these were many of Yu's later colleagues, with whom after his return to Shanghai, he would go on to establish the National Medical Association of China 中華醫學會, the first native medical professional association in China. These individuals included: Wu Liande, a Straits Chinese who got a Ph.D. from Cambridge and went on to head the efforts against the pneumonic plague in Manchuria in 1911; Yan Fuqing (St. John's class of 1903), who would go on to study at Yale and serve as the head of the National Public Health Administration of the Chinese Nationalist Party; and another St. John's classmate, Diao Xinde (E.S. Tyau, class of 1903), a specialist in tropical diseases and public health who also studied at the University of Pennsylvania and would go on to become the first St. John's alumnus to join the faculty of the school, and was later appointed dean.130

Where these doctors studied abroad shifted them into Anglo-American or German-Japanese medical cliques that formed in China after their return. Although the number of students who went to Japan was greater than those who went to England or the US, most of the Japan-educated doctors went to mid-level technical schools and not Imperial Universities. By contrast, the Chinese students who went to Great Britain or the United States tended to graduate from elite schools. Gao Xi notes that the difference between medical factions was not that great in terms of scientific knowledge but was really about political power. After the fall of the Qing dynasty, the Beiyang government adopted the Japanese model of medicine, which placed more control over health care with the police. This is evidenced by the placement of the Health Division under the Police Department in the Ministry of Internal Affairs in 1913. With the rise of the Republican government in 1927, the British-American model and those educated in that style became dominant, with the establishment of a separate Department of Health in 1928.¹³¹

At the University of Pennsylvania, Yu received training in public health, a relatively new, emerging field of study at the time. In 1913, when he was 29 years old, he was one of five students at the University of Pennsylvania to receive a Doctor of Public Hygiene and a Certificate of Proficiency in Tropical Medicine. The public hygiene degree cost \$150.00 and required twelve courses, including: sanitary engineering, inspection of meat, milk, and other animal products, practical methods used in sanitary work, practical bacteriology, personal

¹²⁷ Ibid., 5.

¹²⁸ Ibid., 3.

¹²⁹ "Yu Fengbin Ph.D. Dies," Shen bao, December 5, 1930.

¹³⁰ For more on these individuals, their education, and role at St. John's, see Chen, *Seeds From the West*, 57-118

¹³¹ Gao Xi, "Foreign Models of Medicine in Twentieth-Century China," in *Medical Transitions in Twentieth-Century China*, ed. Mary Brown Bullock and Bridie Andrews (Bloomington, Indiana: Indiana University Press, 2014), 181-191.

¹³² For details on the content of courses, see "University of Pennsylvania Courses in Public Hygiene 1914-1915," *The University Bulletins* 3, no. 3 (February 1915): 5-14.

hygiene, vital statistics, and general hygiene. His coursework in tropical medicine included: Medical Climatology and Geography, Hygiene of Tropics and of Ships, Tropical Medicine, Skin Disease of Tropics, Pathology of Tropical Diseases, Bacteriology of Tropical Diseases, and Surgery of Tropical Diseases. The course in tropical medicine was designed not only with a view toward practitioners operating in the American South, but also "in view of the rapid extension of American commerce into tropical regions realizes the existing and increasing need for medical men with suitable preparation in extending the spheres of American influence in tropical America and the far East." The students were an international mix. The University of Pennsylvania School of Medicine Announcement from 1912/1913 also mentions a number of students from Central and South America. The importance of Yu's education is evident from his later medical writings, which reflect an enduring interest in preventative public health, particularly personal hygiene, as well as translation and medical terminology.

Together, these three obituaries give a somewhat static view of an individual. The readers learn the basic facts of Yu's life — what he did, but not why. The obituary in *The North China Daily News* does start to give a sense of why he was popular with patients — for the latest equipment and medicines he used. And there is a bit of commentary on his making a good living from his private practice, but at the same time being committed to alleviating the social problems of his people, especially in disease prevention.

In emphasizing his education and positions that he held, these obituaries for Yu draw on the old form of biographical history dating back to the Tang dynasty. In early China, writings about the deceased took the form of recording exemplary lives to illuminate ethical principles for emulation. The *muzhi* (grave record) or *mubiao* (grave notice) were brief literary, laudatory biographies that ended with a formal poem (*ming*) in praise of the deceased that was shorter than the biography itself and added no new facts about the person. These writings presented a person from the point of view of the bureaucrat-historian, conceiving of the person as falling into a type, "at most realizing potentialities present from birth, but never exhibiting a dynamic and changing personality." None of these obituaries, perhaps due to the limitations of space, go back to identifying innate qualities the person held at birth, though the medical obituary does end with a poem.

English-language scholarship on the genre of obituaries in Republican China is for the most part silent. Although articles about the deaths of individuals appeared in *Shen Bao* as early as 1876, shortly after the founding of the newspaper, it is not a genre that has received much attention. For example, Barbara Mittler, in her study of *Shen Bao* from 1872 to 1912, provides an analysis of newspaper prose writing of many types, including: the editorial or leading essay; the *baguwen*-syle editorial (*lun*), the editorial (*shuo*), editorial *ji* (writing in the form of notes between friends or the *youji* (travel records), letters and responses (*shu*). But there is no discussion of obituaries as a new type of prose writing.

What does one see in Republican Shanghai of obituaries? How to understand the obituaries written about Yu in their wider context? In terms of titles, people did not start being identified in the headline specifically by name until about 1915. Prior to that, it was usually foreigners

¹³³ "Graduate Work," University of Pennsylvania Catalogue: School of Medicine (1911-12) Announcements for the 147th Annual Session 1912-1913. (March 1912): 91.

¹³⁴ David S. Nivison, "Aspects of Traditional Chinese Biography," *The Journal of Asian Studies* 21, no. 4 (1962): 458.

¹³⁵ Barbara Mittler, A Newspaper for China?: Power, Identity and Change in Shanghai's News Media, 1872-1912 (Cambridge, Mass.: Harvard University Press, 2004), 43-117, Chapter 1 "An Alien Medium Domesticated: Transformations of the New(s)paper in China."

employed in China or even foreigners abroad identified by their professional position.

It seems that Yu was, simply going by numbers, a figure of some importance in the eyes of *Shen Bao*. Some numbers may help to get a sense of scale and scope. In the five-year period from 1928 to 1932, *Shen Bao* published 385 articles with the words 逝世 "to pass away, die" in the title; of those 39 were accompanied by photographs of their subject, as was the case with the notice of Yu Fengbin's death, "Yu Fengbin PhD passes away (photo included) 俞鳳賓博士逝世 (附圖片, running a length of 254 characters. Among the other lucky dead whose photographs were included with their death announcement were the earliest, on March 1, 1928 Zhen Duanfu 鄭端甫¹³⁶ an eminent figure in advertising (313 characters); and the latest, Huang Chujiu 黃楚九 manager of the Great China-France Drugstores (Zhongfa da yaofang 中法大藥房) and a highly prominent person in the medicine world whose passing was recorded in a 668 character-long article on January 20, 1931.¹³⁷

III. Moral Exemplar

This section looks at how Yu appears in another genre of writings: didactic profiles meant to serve as exemplars for moral emulation. Where obituaries briefly assess Yu's life in relation to the general public or his professional peers, these profiles, in contrast, present his life as an example for readers to follow. Specifically, I look at two lengthy profiles of Yu that argued for a relationship between his individual experience and the development of personal qualities that were key to his success. These profiles emphasize the connection between his family background, education, and professional success. This section turns away from what Yu did to what others at the time thought he was.

One of the most detailed profiles of Yu appeared in *Shenghuo Weekly*, a prominent journal published by the Chinese Society of Vocational Education (CSVE) starting in 1925. The CSVE promoted the idea that "the new economy was an open system that operated on principles of individual merit." *Shenghuo* was edited by Zou Taofen, a fellow alumnus of St. John's University and one of the most well-known figures in publishing during the Republican period. The journal was aimed at sharing the secrets of individual success with "petty urbanites" who held salaried desk jobs and "vocational youth" who lacked the necessary credentials to secure good jobs in the new economy. 139

The obituary "Condolences regarding advisor to this publication Yu Fengbin" was written by Zou himself. ¹⁴⁰ Zou begins by writing that Yu had answered many medical questions that came in from readers of the journal. The actual number of articles Yu wrote for the publication is quite small, though — one on deaths among Chinese, another on winter health problems, and one on

^{136 &}quot;Zhen Duanfu zuochen shishi" 鄭端甫昨晨逝世(附圖片)[Zhen Duanfu Dies Yesterday Morning (Including Photo)], *Shen bao*, April 1, 1928.

^{137 &}quot;Huang Chujiu zuori shishi" 黃楚九昨日逝世(附圖片)[Huang Chujiu Dies Yesterday (with Photo)], *Shen bao*, January 20, 1931.

¹³⁸ Wen-hsin Yeh, *Shanghai Splendor: Economic Sentiments and the Making Of Modern China*, *1843-1949* (Berkeley: University of California Press, 2007), 101.

¹³⁹ Ibid., 102-103.

¹⁴⁰ 鄒韜奮 Zou Taofen, "Zhidao ben kan yixue guwen Yu Fengbin xiansheng: fu zhaopian 志悼本刊醫學顧問 俞鳳賓先生:附照片 [Condolences Regarding Advisor to This Publication Yu Fengbin: Including Photo], *Shenghuo* 生活 6, no. 2 (1930): 53–54.

the importance of leaving the city for a change of scenery in the country. ¹⁴¹ In his profile of Yu, Zou adhered to a pattern of using an autobiographical voice and first-person narrative to discuss social and economic issues with readers. The two men appear to have known each other for quite a while. They would not have overlapped at St. John's since Yu was nine years older than Zou. Zou writes that when he was a student at the middle school affiliated with Nanyang University he heard Yu give a talk about hygiene, took notes, and published them in a magazine. After it was published, Yu invited Zou to come talk. Yu's open-mindedness and attachment to Chinese is something Zou says he could glean from the first conversation [我當時就看出他的虛懷若谷和重視國文的態度]."¹⁴²

When Zou fell ill in middle school, he stayed with Yu, the school doctor, for one month. During this period, Zou notes that everyday Yu was in a hurry to get out the door to examine patients, but in the evening came to the author's room to chat. At that time Zou said he could see even more clearly Yu's open-mindedness and the importance he attached to Chinese. Yu bought a lot of woodblock books on Chinese learning and stayed up late reading them alone in his little study. Every time he bought a new book, he would happily take it to Zou's room and show it to the author. "That kind of spirit of exuberance and love of learning," Zou wrote, "up until now I think of it. [他買了許多關於研究國學的木板書籍, 常於晚間獨自一人在他的一個小小書房 裏展閱.每遇買到了一部好書,更欣欣然拿到我房間裏來給我看. 那種眉飛色舞的神情和他 那種好學的精神,至今思之.]"¹⁴³

Yu's experience at the University of Pennsylvania was key, Zou argued, for developing the personal characteristics of diligence, frugality, and perseverance that later estimations of him repeatedly emphasized as explaining his personal and professional success. Using money he made from his private practice in Shanghai, he financed his studies at the University of Pennsylvania. Because there were limits to the financial resources with which he could support himself, he had to work quite diligently. Zou writes:

There is one thing that made a deep impression when Yu told me about his time studying in the US. Because he paid for himself, his finances were limited and he had to work very hard. At that time he studied with Diao Xinde at University of Pennsylvania. Because of the urgency of morning and afternoon class time, he did not have time to eat lunch, and could only sneak a few bites of bread he put in a drawer, and went to afternoon classes with an empty stomach. His successes in school and in his profession came out of these bitter struggles. Most children of wealthy families do not become anything, because they are accustomed to being comfortable. Yu was able to eat bitterness, and this was precisely the foundation for his success in school and work [先生嘗與記者談起他赴美後求學時的種種情形。有一件事使我印象很深的,是他談起因自費所備有限,研學乃不得不格外勤苦,他當時和刁信德醫生同在美國本雪佛義大學醫科求學,因午前午後上課時間之急迫,來不及出去吃午飯,僅帶一些麵包放在抽屜裏抽空偷吃一些渡渡飢,午後仍帶着餓肚上課。學業之成就,多由刻苦中來,纨絝子弟之多不成器,即由於

¹⁴¹ See Yu Fengbin 俞鳳賓, "Zhongguo he si ren zhi duo ye!: fu zhaopian" 中國人何死人之多耶!:附照片 [Why are so many Chinese people dying! Photo included), *Shenghuo* 生活 3, no. 31 (1928): 339–42.; Yu Fengbin 俞鳳賓, "Dongji de jiankang wenti" 冬季的健康問題 [Winter Season Health Problems], *Shenghuo* 生活 4, no. 8 (1929): 75–76; Yu Fengbin 俞鳳賓 "Jiao wai" 郊外 [Suburb Outskirts], *Shenghuo* 生活 4, no. 28 (1929): 309–10.

¹⁴² Zou, "Condolences Regarding Advisor to this Publication Yu Fengbin," 53–54.

¹⁴³ Ibid., 53.

舒服慣了,先生之能吃苦處,正是他的學業有成就的基礎].144

The profile of Yu was in keeping with Zou's profiles of economic elites (bankers, accountants, attorneys, manufactures) that presented their career paths and demystified their fame and wealth. ¹⁴⁵ In the presentation of such lives, it was the individual's personal qualities, morality, work ethic, and experience of hardship that led to personal advancement and economic success. Experiencing hardship early in one's life was a key fact in preparation for later success. Such a view was consistent with the Neo-Confucian emphasis on moral self-cultivation (*xiuyang*). ¹⁴⁶

Even more explicitly didactic than Zou Taofen's profile of Yu was an article that appeared in a regional Jiangsu educational periodical the following year. *Minjian xunkan* was a short-lived publication, in existence only from 1930 to 1932. It was an educational periodical published by the Jiangsu Provincial Zhenjiang People's Association 江苏省立镇江民众教育馆编辑. Its purpose was to share folk knowledge and stimulate education of the people. It published pieces on a wide range of topics, including educational problems, vocational education news, and art. The author of the article, Feng Maiying was a prominent educator in the Jiangsu area. 147

A very detailed piece, "We Should Learn From The Gentlemen Yuan Guanlan and Yu Fengbin" begins by saying that when people see this article, they will certainly ask why the author placed the two figures of Yuan Guanlan and Yu Fengbin side by side, as Yuan is a very famous educator figure and Yu is not famous, not important, nor a great person [有人看到,我這標題,必定要說「袁觀瀾是著名的學閥,有何可學之處?俞鳳賓不是一個名人,有什麼大了不得指出,要我們去學他呢?」 148 Why the two figures, so disparate in their levels of fame, are brought together as moral models to be emulated is because they both "have had meritorious achievement for the country or brought benefit to society" and thus it is worth seeing how they conducted themselves. (袁俞兩先生都於民國十九年的下半年逝世了,他兩先生的行事,或則功在國家,或則造福社會,都不可沒,所以在這懷念死人的時候,當學死者之為). The article identifies Yuan Guanlan as an important figure in educational circles who served as the head of the Jiangsu Provincial Education Association. Yu, though decidedly less well known, is nonetheless named as an important figure worthy of study because he was diligent and studied hard, had a spirit of working tirelessly for society, which often caused people to be moved [刻苦求學,和為社會服務不厭不倦精神,常常使人感動]. 149

That Yu was profiled by this educator, alongside Yuan, a prominent contemporary in educational circles, speaks to the depth of Yu's involvement with Jiangsu educational circles. Yu's work with the Jiangsu Ministry of Education revolved around medical terminology. Scholarly assessments of Yu note his presence at a 1916 meeting to form a committee to investigate medical terminology. Missionary, pharmaceutical, and medical societies all

¹⁴⁴ Zou, 53.

¹⁴⁵ Yeh, Shanghai Splendor, 104.

¹⁴⁶ Ibid., 101-128.

¹⁴⁷ See 1938 obituary for Feng Maiying, "Dao Feng Maiying xiansheng Lei Xun 悼馮邁櫻先生雷迅 [Mourning Mr. Feng Maiying (by) Lei Xun], *Fengbao zhoukan* 奉報周刊奉報周刊 1, no. 5 (1938): 20.

¹⁴⁸ Feng Maiying 馮邁櫻, "Women yingdang xue Yuan Guanlan Yu Fengbin liang xiansheng: fu zhaopian 我們應當學袁觀瀾俞鳳賓兩先生: 附照片 [We Should Learn from the Gentlemen Yuan Guanlan and Yu Fengbin: Including Photo], *Minjian xunkan* 民間旬刊 13 (1931): 5.

¹⁴⁹ Ibid.

participated; Yu served as the representative from the National Medical Association of China. The article offers a brief, but detailed outline of the lives of both individuals [袁俞两先生史略] It is from this piece that we get the most detailed description of Yu's life, from his childhood to death. Of Yu, it says that he came from a humble background with no family wealth [秉性廉介,家無儲蓄]. Readers also learn about his financial support for his younger brother Yu Songhua to study in Japan and Germany, and his younger sister Yu Qingtang to study at Columbia University in the United States. In the biographical sketch, the picture of Yu presented here hews quite closely to the biography in Zou Taofen's article.

There is a bit more here, though, on his personal qualities, which are painted in broad strokes: he lived frugally, treated others generously, did not experience great fame or wealth and did not climb his way up through social connections. Moreover, he promoted health and kept to the way at the upmost. He had no hobbies outside of his work, except reading. And when faced with a misunderstanding or reproach he remained calm and did not dispute. [先生自奉儉約,待人甚厚,生平淡於名利,不事夤緣,不治生產,其抱負載著述中已盡披露,以增進健康,維持道心為至旨;居恆絕無嗜好,職務之暇,輒披覽卷以當消遣;偶逢不諒解者,或非議者能泰然置之,而不計較]¹⁵³

At the end of the article, Feng lists five virtues that Yuan and Yu possess that are worthy of learning. "The five examples of the virtues of the gentlemen Yuan and Yu" (袁命兩先生的懿範) are: 1) conscientious and incorruptible (勤懇廉潔); 2) working hard without complaint 刻苦耐勞; 3) public-minded 急公好義; 4) indifference toward fame and wealth 淡泊名利; 5) indefatigable in studies 力學不倦. For each of these entries Mai not only gives examples from the behavior of Yuan and Yu, but also laments precisely the lack of these virtues and the presence of their corresponding vices in society today.

For example, for the first virtue, being conscientious and incorruptible, we also get a sense that Republican Shanghai was plagued by corrupt and venal doctors. Mai writes that "Yu cared for the ill as he would care for himself, in a spirit of warm service and never schemed for himself" [俞先生診人之病,一如診己之病,熱心服務,從不為自己打算]. In a tone of outrage, he asks, how to compare with the charlatan doctors who kill people and are ostentatious and liberal with money? On this point, it is already enough as a model for later generations. (俞先生雖終日為人診病,還是一囊秋水;較諸現在一般人之高唱廉潔。而腰纏萬金者何如?較諸一般庸醫殺人而排場闊綽者何如?只此一點已足為後人楷模)154

This way of offering a moral exemplar differs from Zou's article, which explicitly presents the qualities of Yu that are worthy of emulation as embedded in a narrative of his life and specific first-person anecdotes involving Zou or through unattributed episodes relayed to the reader. Feng's way of presenting Yu is more of a directly didactic approach, with negative examples. There is a concern for the lack of precisely these morals at present in Feng's piece.

Both obituaries written about Yu and these moral exemplar pieces can be seen as a continuity

¹⁵⁰ 谢蜀生 Xie Shusheng, "Zhonghua Yixuehui zaoqi zhuming huodongjia 中华医学会早期著名活动家——俞凤宾博士 [National Medical Journal of China Early Period Activist - Yu Fengbin Ph.D.], *Yixue yu zhexue* 医学与哲学 16, no. 3 (June 1995): 329.

¹⁵¹ Feng, We Should Learn from the Gentlemen Yuan Guanlan and Yu Fengbin, 7.

¹⁵² Ibid.

¹⁵³ Ibid.

¹⁵⁴ Ibid., 8.

of late imperial forms of biography that presented an individual in order to demonstrate principles of morality. They hew very much to the structure of the *lie zhuan* "exemplary lives" that were part of the bureaucratic historical enterprise of official dynastic histories that sought to relate virtue to administrative success. *Lie zhuan* gave the following: names, home, ancestors, an incident to show how the character of subject was evident in childhood. The main part of the *lie zhuan* was a list of educational achievements, successive appointments, titles and honors received, involvement in public events, quotations from memorials or literary works, and anecdotal material intended to reveal a person's character. ¹⁵⁵ In both their articles, Zou and Feng Maiying seem to be doing this.

But, more than simply listing achievements, Zou and Feng also provide a picture of an individual as a product of his times. In late imperial and Republican China, there was a shift away from presenting purely exemplary models who possessed at an early age an innate quality that explained their success (the praise and blame model) toward revealing something about the character of an individual and his response to his times. Such a shift has been characterized by Brian Moloughney as a transition from biographical history to historical biography. These new forms of writing sought to illuminate the social and economic conditions of the time. It was not just narration of events related to influential people, what Liang Qichao, a leading intellectual of the time, noted was called history but was actually genealogy. ¹⁵⁶ Instead, new historical biography sought to interpret individual lives within theirs ocial context. This development was highly influenced by innovations in Chinese classical studies of evidential research (*kaozheng*) that made use of diverse source materials, as well as by Western historiographical practices of economic and social history of Rankean history introduced first to Japan and then to China during the early to mid 20th-century. ¹⁵⁷

There is, however, a tension between the way the moral exemplar pieces attempt to explain a life and also explain the times in which they lived. On the one hand, these articles identify personal qualities such as frugality and persistence that were born of individual experience and were instrumental for Yu's later successes. His personal qualities were mentioned in brief in the obituaries, but here they are given a story of their own. At the same time, his being written about by and alongside such prominent people like Zou Taofen and Yuan Guanlan suggests that Yu benefitted from being embedded in elite personal and professional networks. This can be seen by who is writing about him, who he associated with, and the positions he held. He was a member of Jiangsu educational networks. If he were such an unknown, why would Feng Maiying have chosen to write about him alongside Yuan Guanlan? These networks likely also played a significant role in his success.

The story of an individual thus becomes not just about his innate qualities or personal experiences but a larger picture of them embedded in a particular set of relationships, situations.

¹⁵⁵ Brian Moloughney, "From Biographical History to Historical Biography: A Transformation in Chinese Historical Writing," *East Asian History*, no. 4 (December 1992): 9-10.

¹⁵⁶ Ibid., 15.

¹⁵⁷ Ibid., 13.

IV. Later Assessments

Despite the plethora of writing about Yu in his own time, there has not been much written about him in our own. In 1983, 50 years after his death, Yu's son, Yu Huanwen, published a short reminiscence about his father in a collection of oral history for Taicang County, from where Yu hailed. 158 12 years later in 1995, Xie Shusheng, a scholar at Peking University Health Science Center, published an essay, "The National Medical Association of China early period famous activist — Yu Fengbin, Ph.D.," (早期著名活动家) in the journal *Medicine and Philosophy*. 159 Assessments of Yu told decades later give us a sense of how people in later times made sense of Yu. The person was ostensibly the same; the lens through which people viewed him differed.

Where obituaries and moral exemplar profiles hinted at Yu's background in classical Chinese learning, here that background is connected directly to his professional orientation toward Chinese medicine. This yields a new interpretation of Yu as committed to Chinese learning and medicine, and unique among his Western-educated peers as a synthesizer of Chinese and Western medicine compared to his peers. Together, these essays reflect a reading of Yu not just as a person who possessed upstanding qualities of character, but as a figure situated within a larger history, as a figure who had intellectual ideas about Chinese and Western medicine.

Yu's family and early education in Chinese

The profile of Yu by his own son situates Yu within a particular cultural milieu of an elite family and classical education. Yu was born in 1884 to a family from Taicang, a city in the southeastern province of Jiangsu, 60 kilometers northwest of Shanghai and the same distance east of Suzhou. From Yu's son, Yu Huanwen, we learn that Yu Fengbin's father was one Yu Liyun 俞隸雲 (俞隶云), who tested number one in the Taicang municipality 太仓州 during the Qing dynasty, and was fluent in Chinese and several foreign languages. Yu Liyun was a supervisor at Shanghai Telegram for thirty years, during which time he trained many of the country's early telegram personnel. His mother, unnamed, was "familiar with ancient Chinese literature, and paid special attention to the cultivation of her children, was a loving mother and an inspiring teacher (启蒙老师)." Yu had two younger siblings: a brother, Yu Songhua, and a sister, Yu Qingtang.

In addition to the family emphasis on classical learning, Yu's early education in Chinese seems also notable. The son says of this briefly that when Yu was young he went to Suzhou to

¹⁵⁸ 俞焕文 Yu Huanwen, "Mingyi Yu Fengbin 名医俞凤宾 [Famous Doctor Yu Fengbin], (Taicang Xian: Zhongguo ren min zheng zhi xie shang hui yi Jiangsu Sheng Taicang Xian wei yuan hui, 1983), 107–11.

¹⁵⁹ Xie Shusheng 谢蜀生, "Zhonghua Yixuehui zaoqi zhuming huodongjia 中华医学会早期著名活动家——俞凤宾博士 [National Medical Journal of China Early Period Activist - Yu Fengbin Ph.D.], *Yixue yu zhexue* 医学与哲学 16, no. 3 (June 1995): 328–30. Another scholarly article appeared 10 years later, in 2015 by 张进 Zhang Jin, "Yu Fengbin yu jindai Zhongguo weisheng kexue de chuanbo 俞凤宾与近代中国卫生科学的传播 [Yu Fengbin and the Dissemination of Modern Chinese Hygienic Science], *Lan Zhi Shijie* 兰台世界, February 2, 2015. Zhang's article assess Yu's role as a disseminator of hygiene science, which is less pertinent to the themes I will discuss here, so for now I will leave this essay aside.

¹⁶⁰ Yu Huanwen, "Famous Doctor Yu Fengbin," 107–11.

¹⁶¹ Ibid., 107.

study ancient literature at Wumuyuan [俞氏幼年到苏州,在五亩园就学,攻读古文]¹⁶² This early education in Chinese is then interpreted by Xie Shusheng, writing in 1995, as one of the reasons for Yu's subsequent equal commitment to learning both from China and the West (兼容並蓄,学贵中西): "When he was young, Yu studied in a old-style private school, established roots in ancient Chinese. This led to him cultivating a lifelong love of Chinese literature and old books" (俞凤宾先生幼时曾在私塾读书,打下了中国古文的深厚根底,这养成了他对中国文学和古籍的终身爱好).¹⁶³ The love of Chinese classical learning continued after his formal education, as both the son and Xie mention Yu's membership in Liu Yazi's Southern Society, a prominent literature and poetry organization of the late Qing and early Republican periods.¹⁶⁴ Even when Yu was practicing medicine, it appears he still made time for his literary pursuits. Xie notes that "during the day he practiced medicine, at night he studied and wrote articles and poems. His home study was filled with books, and many rare editions, causing friends to gasp and acclaim it as the acme of perfection [他日里行医,夜里读书作文,写诗作词。他家的书房中,满架书籍,许多善本,珍本令朋友叹为观止]¹⁶⁵

This commitment to classical Chinese learning is taken by scholars to offer a new interpretation of Yu, as committed to both Chinese and Western medicine. Xie writes that while most of the National Medical Association founders had an instinctive rejection of Chinese medicine, Yu was very different and clearly opposed abolishing Chinese medicine. In contrast to members like Yu Yunxiu and Liu Ruiheng, who supported abolishing Chinese medicine, Yu continued to promote Chinese medicine.

Xie points to Yu's 1916 essay, "Discussion of preserving ancient medical learning" (保存古 医学的商権) published in *The National Medical Journal of China*, and quotes Yu at length, to the effect that those who would like to abolish the old medicine have had only superficial experience with Western medicine and that in order to preserve proper national essence (保存正确之国粹) and absorb new types of learning, the best of old and new, Chinese and Western medicine should be integrated. Yu's use of the term "national essence" (*guocui*) is significant at the time, as the early days of the Republic were rife with debate about this idea.

Thus, there emerges another picture of Yu, as a synthesizer of Chinese and Western medicine, one that we do not get from his obituaries at the time, nor from the profiles of him as a model for moral emulation. In those earlier images of him, it was his accomplishments personal qualities that were emphasized. Here he is presented as someone representing a position that is historically situated.

Thus far this chapter has been about the changes wrought by obituaries, profiles, memoirs, and scholarly accounts on the image of this one doctor. It has told how a diligent doctor became a moral model, and how a moral model became a historical rarity. Popular obituaries painted him as a figure notable for his education and positions. Profiles in educational publications underscored his moral qualities as born of experiences of hardship. And so, by virtue of his hardwon virtues, Yu became more than just an accomplished doctor, but a moral exemplar worthy of emulation. Decades after his death, Yu was granted a new life as a synthesizer of Chinese and Western medicine in the reminiscences of his son and analysis of a scholar.

¹⁶² Yu Huanwen, "Famous Doctor Yu Fengbin," 107...

¹⁶³ Xie, "National Medical Journal of China Early Period Activist - Yu Fengbin Ph.D.," 330.

¹⁶⁴ Yu Huanwen, "Famous doctor Yu Fengbin,"110.

¹⁶⁵ Xie, 330.

¹⁶⁶ Ibid., 329.

V. Yu Fengbin near death, in his own words

Yu Fengbin never wrote the story of his own life. But he did write a story that may be the closest thing we have to a story of his death. One of the last published essays before his death, this report reflects some of the enduring themes that occupied him throughout his professional life: medical ethics, bureaucracy, and personal relationships. "Diary of seven days of drinking ice water" ("drinking ice water" can also mean "panic" yin bing qi riji 飲水七日記) tells of a seven-day period surrounding an operation to get his tonsils removed, and the near-death experience that resulted from it. His language is by turns classical and vernacular, his tone alternately biting and elegiac. Ranging from a critique of the unnecessary opulence of the hospital, to a description of a bureaucratic communication breakdown between the nurses and doctors, to a grateful account of family who came to be by his side on his sickbed, this exquisite essay defies categorization.

The article is notable for its genre: it appeared as an arts and literature piece (*yiwen* 藝文) in the *National Medical Journal of China* in October 1929.¹⁶⁷ This was the only such piece to appear under an arts and literature heading in at least the two years before and after its publication, suggesting its uniqueness in the publication. At five pages, it is notably long for such an article. The piece is divided into eight parts with poetic titles of seven characters each:

- 1) 春寒豈是飲冰時 Is Cold Spring Truly the Time To Drink Ice Water?
- 2) 為去雙鵝欲就醫 Seeking Medical Treatment To Remove Tonsil Infection
- 3) 華棟雕梁超級頂 Painted Columns and Sculptured Beams, Exceeding the Extreme
- 4) 箍鈎手術亦新奇 Bind and Hook Surgery, New and Unusual
- 5) 血湧如潮將及危 Blood Gushing Out Like Tide Flow, Approaching Danger
- 6) 忽來妙手善護持 Suddenly Skilled Hands Arrive, Adept at Protecting and Sustaining
- 7) 溫語勸人沁腦府 Warm Words Calm a Person, Seeping into the Brain
- 8) 樂為輸血感仁慈 Happy to Give Blood Transfusion, Appreciating Kindness

The piece is unique for its highly personal tone, a first-person narrative about a seasoned doctor's experience as helpless patient. The diary can be read on a more general level as a comment on the vicissitudes of medical care in a foreign-run hospital in treaty-port Shanghai. But what the reader gets is something highly personal and with granular detail about his experience of treatment. He gives information about himself and his place in the medical world of 1928 Shanghai: his childhood history of tonsillitis and its recent return along with the kidney inflammation; he shares his experience of the lavish hospital where absent doctors and inept nurses cannot stem the bleeding; his presentiment that something could go wrong and secretly bringing his own medicine to staunch bleeding; and the inexplicable "feelings from afar" (yuangan) that summoned his loved ones to his bedside when he was near death.

Scholars have noted that poetry and painting have often been aids for biographers seeking to

¹⁶⁷ Yu Fengbin 俞鳳賓, "Yin bing qi riji" 飲冰七日記 (Diary of Seven Days of Drinking Ice Water), Zhonghua yixue zazhi 中華醫學雜誌 The National Medical Journal of China 15, no. 5 (October 1929): 562–66.

understand the private lives and feelings of individuals. Most biographical sources emphasize the moral, literary, scholarly, and official achievements of their subjects. Self-revelation was not encouraged, and attainment was viewed as residing in fulfillment of familial and social roles. Thus, this piece offers readers a glimpse into the interior life and particular experience of Yu that is absent in the writings that have been examined in this chapter thus far.

After a brief introduction stating the need to record his experiences, the piece is structured chronologically. It starts with his introducing the season of his experience — late spring — the recurrence of a childhood sickness, his decision to seek an operation and the ensuing complications that nearly led to his death.

He states at the beginning: "It was the end of the beginning of spring, when the cold air entered and the spring wind was like knives. Morning had started and I looked at my Fahrenheit gauge. It said lower than forty degrees. And I, at the time of the spring cold, unexpectedly had the experience of drinking ice water for seven days and nights. The situation and feelings I experienced at the time seem like they cannot not be recorded. [己已孟春之抄,寒氣襲入,春風似剪。晨起視法倫表,恆示四十度弱;而余於春寒料峭之際,忽有飲冰七晝夜之事。其中經過情形,似不可無紀述.]"¹⁶⁹

The title of the piece comes from the fact that one cannot drink or eat hot things after surgery to remove the tonsils. Yu notes that he has had infected tonsils since his childhood; this is a condition people refer to as a pair of suckling geese [雙乳鵝]. In recent years this problem had plagued him again, and he had also contracted a chronic kidney infection [慢性腎臟炎] He thus decided to remove the tonsils.

Displaying his characteristic interest in both Chinese and Western medicine, he sought the opinion of friends in both fields of medicine. While his three Chinese friends advised caution, his three Western friends suggested either using cutting by electric means or the local anesthetic and then bind and hook surgery. (乃在醫界中,徵集三華友之意見,俱以謹慎為勸,商諸三西友,或擬為我用電割法,或主張局部麻醉後箍鈎手術). Yu has some disquiet about the surgery. The operation seems potentially fraught from the very beginning, as Yu asks the surgeon if there was a danger of bleeding because of his high blood pressure. The surgeon who performed a test on him promised to find a way to prevent the possible bleeding. Still this does not seem to have set Yu's mind at ease, as the day before the operation he purchased a special medicine to stop bleeding and hid it in his pocket [動手術之前一日,余購特別止血藥,預藏於衣袋] 171

Yu is highly critical of two particular aspects of medicine: the lavish facilities of the hospital and the quality of care he receives there. The hospital, never named, is a large facility, about fifteen kilometers from his house. He notes that "the size of the hospital was impressive, with solemn architecture: the floor made of purple brick. . . the four-five operating rooms, five floors, several tens of sickrooms, each floor with the newest facilities including a washroom and heater; two different elevators. The staff were divided into day and evening shifts [此院規模宏大,建築莊嚴。紫色大理石鋪地。... 其中手術室,大小四五間。樓凡五曾,病房數十間,均屬最新式之建築,各有浴室並熱汽裝置。電梯兩副,服務人員,均分日夜兩班。]172 But then

¹⁶⁸ Endymion Porter Wilkinson, *Chinese History: A New Manual*, Fourth edition, (Cambridge, Massachusetts: Harvard-Yenching Institute, 2015), 148.

¹⁶⁹ Yu Fengbin, "Diary of Seven Days," 562.

¹⁷⁰ Ibid.

¹⁷¹ Ibid., 563.

¹⁷² Ibid.

he goes on to offer a biting comment on "the perfection of the facilities being too numerous to record," which has a pejorative connotation used to describe crimes [設備之完美,罄竹難書]. It is the cost of the facilities that seems hard for Yu to stomach. He writes, "someone told me that the daily expenditures of the hospital must be more than five or six hundred *liang*. Therefore, first-class sickrooms, each day each room although they take a fee of 14 *liang*, additionally they collect a special fee for treatment, and still it is not sufficient for the budget. Even so, merely to rely on a material civilized hospital, for patients, does this really have a great benefit? I have doubts. [人謂余曰,該院每日之用度須五六百兩以上,故頭等病房,每日每間雖收費一十四兩,且又外加特別治療等費,尚虞不敷支配云。然而徒恃物質文明之醫院,於病者,究有大利益乎亦疑問也]."¹⁷³

The second critique is directed at the incompetence and inflexibility of the hospital staff, particularly his nurse. Immediately after his surgery, Yu had three episodes of throwing up blood, feeling faint, and having cold sweats. He told the nurse about it and demanded that she report it to the surgeon via telephone but the nurse did not call, and the hospital had no resident or doctor on duty. "Following the example, in case of crisis or having dangerous situation, the nurse should have thought and known how to respond. Now, the nurse herself not only did not know how to stop the bleeding but also did not have the knowledge in dealing with the emergency. She even was not willing, on my behalf, to call in the surgeon. It was especially a surprise to me.¹⁷⁴"

When the bleeding got worse, Yu's wife wanted to use the phone to call the doctor but was not allowed to. Here, Yu offers a particularly scathing critique of personnel in the hospital today contrasted with the flexibility of practice in earlier times:

My wife wanted to use the phone but was not allowed to. In the ancient times when the practices of rites governed contact between people were extremely strict, female relatives could still extend a hand to help. That is a flexibility for fitting the reality. Today, personnel in the hospital only know to follow the rules blindly and put aside considerations of life and death. Is that not the case of, somehow, missing the larger picture? [内人欲用電話,又不許。在禮教極盛之古代,嫂溺猶可援之以手,從權也。今院中人員,祇知死守規則,不顧人祇生命關係,不亦大惑不解乎?]¹⁷⁵

Yu continued to lose blood, and realized that he was having extremely serious bleeding episodes in succession. He then writes,

I then became deeply regretful about earlier in that moment I did not follow the advice from my three Chinese friends. At that earlier moment, in preparation, I was able to purchase the medicine for stopping the bleeding, but now, I could not inject or administer it myself. Moreover, it was not that I was "a doctor who was without medicine," but indeed was "had a way but was unable to put it into place." It was as if the only choice was to bite my fingers and wait for the death! [自知險象環生,深悔當初,未從三華友之言。當斯時也,所備止血之藥,不能自行注射或敷用。並且「自做郎中無藥醫。」確是「有法無施處。) 彷彿戍守待斃而已!]116

¹⁷³ Yu Fengbin, "Diary of Seven Days," 562.

¹⁷⁴ Ibid..

¹⁷⁵ Ibid., 564.

¹⁷⁶ Ibid.

To make matters worse, Yu writes that the nurse blamed him for coughing, drinking, and eating too often, which caused the bleeding. But when she saw him throwing up violently and his face drained of all color, she began to panic and was unable to get a doctor to help. Another nurse, from Scotland, got the only doctor in the hospital and asked him for emergency help. Yu gave him the special medicine to stop the bleeding that he had hidden in his clothes, but the doctor did not know how to use it. The medical staff, doctors and nurses alike, are portrayed as confused and incompetent, "not even knowing what to do with their hands and feet" [均慌亂異常,手足無措].¹⁷⁷ Yu writes that he knew the time for him to die kept coming closer and closer.

Luckily, another doctor arrived, who, Yu writes, he learned later had happened to be nearby when seeing another patient. After examining Yu, the doctor ordered that a blood mass on the left side of his throat be removed. The bleeding stopped. Later, my wife entered the room and I said that the life and death have all predetermined by God. It is a waste (and is not helpful) if one just worries and is anxious. I myself wanted to take risks and had nothing to do with anyone else. [後內子入室,余日,死生有命,憂急亦突然也,自欲冒險,與人何尤)¹⁷⁸

Yu also takes matters into his own hands, as a physician. He asked the people in the hospital to inject the medicine that stops the bleeding as well as the physiological salt solution and ordered his children to get some medicine that stimulates that lost nerve. ¹⁷⁹ Yu stayed in the hospital to recover, during which time he could only drink cold liquids so as not to cause pain in his throat.

The story ends with Yu describing a curious phenomena by which his siblings arrived at the hospital before letters or telegrams had reached them. This Yu characterizes as "to be summoned by feelings, which can also be called feelings from afar, which does not easily happen [精神感召,又曰遠感,乃不易得之一事]." Yu's younger cousin, who did not know he was admitted to the hospital, had a dream that the Yu family was disturbed. He went to the family home and learned that Yu was in the hospital experiencing deep pain. This was another case of being summoned from afar by feeling, Yu wrote. Yu's brother and his wife, concerned about the amount of blood Yu had lost, and having heard that recently the king of England had benefited from a blood transfusion, offered to have their blood checked and if it matched would be happy to donate it. The depth of their love is something Yu will never forget, and therefore mentions it here, he says. The section ends with his stating that it was March 15th, 1927, just one week following the surgery.

Yu concludes by calling attention to the poetic design of the article. The subtitles consecutively form two seven-character, four-line poems. And he ends the piece with the same self-deprecatory tone that marks much of his writing by saying: "What a pity my humble verse is neither sufficiently erudite nor refined to earn a laugh. [搞中小題目八個連續之可湊成七絕二首均押支韻惜乎歪詩不足以博大雅之一粲]"¹⁸³

As readers, we can interpret this piece several ways. First, we learn about some observations of medical care at the time from the perspective of a doctor turned patient ravaged by illness, and

¹⁷⁷ Yu Fengbin, "Diary of Seven Days," 564.

¹⁷⁸ Ibid., 565.

¹⁷⁹ Ibid.

¹⁸⁰ Ibid.

¹⁸¹ Ibid., 566.

¹⁸² Ibid.

¹⁸³ Ibid.

left at the mercy of an inept hospital system. Yu is critical of the hospital's lavish facilities, questioning whether they actually help people. And his operation goes badly, in no small part because of the breakdown in communication among the hospital nurses and doctors and the hospital being understaffed.

We also learn something about Yu's orientation toward Chinese and Western medicine. He consults both Chinese and Western doctors about his tonsil infection, opting to follow the advice of his Western doctors and undergo the surgery. But when the surgery takes a turn for the worse, he regrets not heeding the advice of his Chinese physician friends. It might be too much to say that this corroborates scholarly assessments of him as a synthesizer of Chinese and Western medicine. But we can say that at least he seems in this case to draw on both traditions.

And finally, we get a sense that Yu had a certain amount of acceptance of the importance of fate and the limits of human action in this particular arena of living and dying. This is a picture of individual helplessness, anger at the hospital system and care, wonder at the love and inexplicable arrival of his family. The surgery that almost takes his life is both a premonition and a postponement of his death.

VI. Conclusion

This chapter has shown how print media presented and thus transformed the life of one doctor in Republican Shanghai. By looking at the story of this doctor's life and death as told in four distinct veins — obituaries at the time of his death, articles lauding him as a moral exemplar, and assessments decades later by his son and another scholar, and in his own words — I have shown that the emphasis of these different versions of this same person changed from what he did, to what he could mean to others at his time, to how he was interpreted as a historical figure at that time, to his personal experience with death.

And yet, reading the same genre of document from different perspectives yields a more nuanced picture of this person. The popular, professional, and foreign obituaries suggest that what made a person notable was not the same thing. To the public, a snapshot of an individual identified by education and professional positions was all they got. For his medical peers, it was his wide range of activities that set him as the standard for the medical community. This was an indefatigable person who practiced medicine, taught, served in government, published for his peers and for the masses. And for foreigners, he was notable for his range of activities plus using the latest technologies to serve his patients. In the second vein, Yu was held up as a figure for moral emulation whose individual experience helped him develop personal qualities necessary for success. And yet, at the same time, these articles portrayed him as a person who was deeply embedded in elite educational and professional networks that perhaps played an equally important role in his success. Assessed decades after his death, Yu's early education in classical Chinese learning is connected to a later interpretation of him as a unique synthesizer of Chinese and Western medicine.

The stories of a person in obituaries, moral exemplars, and scholarly accounts give a particular narrative of an individual: someone who did certain things, who seemingly inevitably by virtue of his education and background, qualities cultivated by experience or opportunities granted by networks became a certain person. What Yu's story in his own words gives us, however, is something more nuanced. We see a person's account of fear and pain, struggling to

respond to a difficult situation, once doctor now patient, subject like anyone else to the cruelties of uneven medical care and interventions of fate. This experience is given a personal, emotional depth by its first-person voice and poetic structure. There is no linear progression of a person, no simple cause and effect, no clear morals or intellectual position. The fact that he survives (only to die a year later) is purely accidental. A different doctor just happened to be around to order the right surgery. Though Yu prepares the medicine to stop the bleeding, he almost does not get to use it.

In a way this is a transgressive story of an individual at odds with the image we get from the other writings because Yu's personal qualities or accomplishments are not explicitly named, and thus they cannot directly help us understand anything of the individual. If we try to understand this person solely based on obituaries, as a moral exemplar, or as a historical figure — namely what he meant to others, we miss something about what his own experience meant to himself. From this piece we do not get a sense of what Yu did or who he was to his times or later times. But we do get a sense of how he felt about living and almost dying, at that particular time. And that writing made this individual — flesh and blood, obviously accomplished— into something more than an individual who meant something to others. He reveals himself as a person writing his own story.

The simultaneous existence of these different pictures of Yu points to the multiplicity of paradigms of understanding and explaining a person.

Chapter 3.

MISSIONARY AND CHINESE MEDICAL JOURNALS: THE CONTENT OF THE FORM

I. Introduction

The National Medical Journal of China 中華醫學雜誌, was a bilingual English-Chinese journal published by the National Medical Association from 1915 to 1931. It ran quarterly from 1916 to 1923 and bi-monthly after 1924. With its Chinese-language section, the journal met a need that had been recognized by missionaries and native practitioners of medicine. It was distinctive as a bilingual English and Chinese medical journal at a time when Western medicine, while lauded by Chinese intellectuals, was not fully accepted by a public that largely relied on indigenous medical and healing practices.

Medical journals offer two insights in the history of medicine of China: first as an object of study in and of themselves; and second as a medium through which to understand changing views of medicine as theory and practice.

Medical Journals in Euro-American scholarship

Scholars such as Melinda Baldwin have drawn attention to the importance of 19th and 20th-century scientific periodicals like *Nature* as one of the means by which scientific communities communicated and formed, an analogue to the Republic of Letters in early modern and Enlightenment Europe. ¹⁸⁴ In Europe, 17th and early 18th-century journals served to record presentations at meetings of scientific societies and reprint foreign articles. The monograph had long been the primary form for sharing results of scientific research, ranging from Isaac Newton's 1687 *Principia Mathematica* to Charles Darwin's 1859 *On the Origin of Species*. By the early 20th century in Europe, the modern scientific journal was the site for the representation, certification, and registration of scientific knowledge, coming to be the embodiment of authoritative scientific knowledge. ¹⁸⁵ While there has been more work on scientific periodicals in Victorian Britain, such scholarship has focused on publications aimed at a general or popular readership. Scientific knowledge created by and for other scientific experts remains a province relatively unexplored by historians of science and medicine.

The lack of attention to medical journals within the history of medicine is not surprising. Indeed, even in the fields of medicine for Euro-America, these sources have received scant attention as historical phenomena worthy of examination. This is not because the spread of medical knowledge in print form was insignificant. On the contrary, in one of the few works dedicated especially to medical journals, W.F. Bynum, Stephen Lock, and Roy Porter state that: "It is now commonly argued by historians of science that the transformation of attitudes towards Nature that we call the Scientific Revolution owed as much to the new styles of thinking required by the printed scientific paper as to the pioneering of experimentation and the invention of the

¹⁸⁴ See Melinda Clare Baldwin, *Making Nature: The History of a Scientific Journal* (Chicago: University of Chicago Press, 2015), 8.

¹⁸⁵ Alex Csiszar, "Broken Pieces of Fact: The Scientific Periodical and the Politics of Search in Nineteenth-Century France and Britain" (Harvard University, 2010).

laboratory."¹⁸⁶ Print was especially crucial to the spread of medical knowledge due to "the crucial importance to medical instruction of the reproducibility of standardized, stereotyped anatomical and physiological illustrations, made possible by the techniques of woodcutting, engraving, and finally, photography."¹⁸⁷ And further, whereas communication in medical-scientific fields before the mid-17th century was individual and private through letters, printing allowed for data recording and collecting of opinion in medico-scientific journals, resulting in a qualitative transformation in knowledge. ¹⁸⁸

Still, little is known about what Bynum, Porter, and Lock call "medical journalism": its roots, the form and content of journals, editorial practices, finances, and the ways medical journalism affected the world of medicine proper. How to explain this neglect? Bynum et. al argue that historians generally are more interested in content than form: the discoveries, ideas, priorities, controversies, influences, and meanings, "(Historians) are interested in the words on the page, rather than the page itself, and the place of the page within the wider media of information dispersal and preservation." The challenge for historians to consider, then, is the impact on the economy of medical knowledge by regular repositories of news, information and opinion. "How much more certain, how much more speedy, did data dissemination become? What impact did this have upon the making of the medical community itself? Clearly, the medial journal recorded and reflected medical change ... how far did it also serve as an engine actually for shaping the future of medicine?" ¹⁹¹

Medical knowledge transmission in China

In terms of knowledge transmission, physicians in late imperial China passed on medical knowledge and proprietary formulas through a period of apprenticeship, often organized along hereditary lines. ¹⁹² The common period of medical apprenticeships in the Ming period (1368-1644) was three years, the first year of which was dedicated to memorizing texts. The subsequent years were spent learning the use of drugs, helping in clinical visits, and discussing prescription and diagnosis. ¹⁹³ The reputation of a doctor played a large role in attracting patients, given that doctors did not receive official recognition, training, or status until the late Qing and early Republican periods. ¹⁹⁴

Prior to the arrival of medical journals in China at the turn of the 20th century, medical knowledge as it circulated in print appeared in a variety of forms. These included published case

¹⁸⁶ W. F. Bynum, Stephen Lock, and Roy Porter, eds., *Medical Journals and Medical Knowledge: Historical Essays*, The Wellcome Institute Series in the History of Medicine (London; New York: Routledge, 1992), 1.

¹⁸⁷ Ibid., 1.

¹⁸⁸ Ibid., 2

¹⁸⁹ Ibid.

¹⁹⁰ Ibid., 3.

¹⁹¹ Ibid.

¹⁹² Yi-Li Wu, *Reproducing Women: Medicine*, *Metaphor*, *and Childbirth in Late Imperial China* (Berkeley: University of California Press, 2010).

¹⁹³ Angela ki che Leung, "Medical Instruction and Popularization in Ming-Qing China," *Late Imperial China* 24, no. 1 (August 21, 2003): 146.

¹⁹⁴ See Wu on the widely held suspicions of doctors as charlatans and quacks hawking false remedies in a competitive marketplace during the late-imperial period. She notes that such sentiments helped grant legitimacy to medical amateurs who relied on popular manuals and challenged doctors' claims to privileged knowledge. Wu, *Reproducing Women*, 54-57, and more generally, Chapter 1, "Amateur as Arbiter: Popular *Fuke* Manuals in the Qing."

studies of famous doctors, medical case collections, gazetteers, medical primers and manuals, family encyclopedia and almanacs, literary collections, and local historical chronicles.¹⁹⁵ In a study of late-imperial Chinese medical primers, Angela Leung notes that it was especially during the Ming dynasty, with a flourishing print culture, that "medical knowledge, not ratified by any formal authority, became more accessible."¹⁹⁶ Medical knowledge traveled through all of these channels, leading to a heterogeneous mix of medical practitioners, both literati and lay. Self-treatment was common among those who could read these sources.¹⁹⁷

Medical Journals as source and subject

What medical journals can offer as both source and subject of study is a view of the thinking of a community of doctors, both at a specific time and over time. If one were curious to know what professional medical knowledge production looked like in 1919, one could peruse the medical journal of that year. One could get a glimpse into what the pressing medical issues of the day were, the thoughts about particular treatments for tuberculosis, say, or new publications on surgery. At the same time, the journal offers us a longer view of thinking over time. So one can get a sense of how knowledge or debates about medical issues such as public health measures or the opium problem developed over a decade or more.

Medical journals also offer us knowledge-making communities as a subject. Scholars of medicine have understandably focused on the ouvre of individuals — for example, the well-known doctors Ding Fubao or Wu Liande. 198 Or tracing an idea through time — hygiene, for instance. 199 Or institutions — public health. 200 Here I reconstruct a preliminary view of a community of doctors who were writing for each other. In taking this approach, I am inspired by two works in the history of science. First, Ludwik Fleck's study of the epistemology of the genesis and development of the Wasserman reaction's relation to syphilis illuminates how scientific facts are created by thought collectives marked by particular thinking styles that emphasize things like objective truth, clarity, and accuracy and de-emphasize things like the individual. 201 Fleck, in turn, was highly influential for the historian of science Thomas Kuhn, who argued for a dialectical understanding of change in scientific knowledge as proceding by shifts in the paradigms that demarcate the criteria and standards for solving problems that, when

¹⁹⁵ Wu, *Reproducing Women*, 16 for information on print sources regarding women's reproductive health in late-imperial China. See Angela ki che Leung, "Medical Instruction and Popularization in Ming-Qing China," *Late Imperial China* 24, no. 1 (August 21, 2003): 149.

¹⁹⁶ Angela ki che Leung, "Medical Instruction and Popularization in Ming-Qing China," *Late Imperial China* 24, no. 1 (August 21, 2003): 131.

¹⁹⁷ The increase in number of examination candidates for a small number of official positions made medicine an more popular trade for local gentry to enter, leading to a significant subgroup of scholars-turned-doctors by the end of the Ming dynasty. Wu points to a dramatic increase in the number of doctors with civil service examination degrees from the Ming to the end of the Qing, from six to thirty percent, in four prefectures of the northern Zhejiang province. See Wu, *Reproducing Women*, 37-39.

¹⁹⁸ Bridie Andrews, "Ding Fubao and the Morals of Medical Modernization." Wayne Soon, "Coming from Afar: The Overseas Chinese and the Institutionalization of Western Medicine and Science in China, 1910-1970" (PhD diss., Princeton University, 2014).

¹⁹⁹ Ruth Rogaski, Hygienic Modernity.

²⁰⁰ Chieko Nakajima, *Body, Society, and Nation: The Creation of Public Health and Urban Culture in Shanghai* (Cambridge, Massachusetts: Harvard University Asia Center, Cambridge, Massachusetts Harvard University Press, 2018, 2018).

²⁰¹ Ludwik Fleck, *Genesis and Development of a Scientific Fact* (1935) (Chicago: University of Chicago Press, 1981).

faced with anomalies, lead to a crisis that ushers in a new way of seeing the world and solving problems based on a new paradigm.²⁰² Applying the approaches of these historians of science to medical knowledge-making communities, shifts our focus away from the ideas and toward their production, the various forms they took, and the larger network of texts, authors, and concerns in which they were embedded.

Chapter Overview

This chapter is divided into three sections that look at the setting, development, and form of the first native journal of Western medicine in China, *The National Medical Journal of China* +華醫學雜誌. Knowledge about Western medicine in journal form appeared first in English, written by missionary doctors, and then in Chinese by native doctors who formed their own association with the express purpose of publishing in their own language, thus leading to a bilingual medical journal in Shanghai in 1915. I begin by looking at the meeting of the native journal with its precursor, the missionary journal and why the need for the Chinese journal first arose. To do this, I compare editorials that identify the aims of the two journals. The second line of analysis surveys the form of the journals looking at the different types of writing they contained, and the change in the organization of the Chinese journal over time. In the third section, I concentrate on the key transition from annotation and translation of existing foreign medical writing to publication of original research produced in China. Here I focus on writing concerning tuberculosis, the number one cause of death in China at the time. The themes that I highlight throughout the chapter are the differences between the English and Chinese-language parts of the journal, the distinctiveness of form and content of the Chinese journal, and how the mode of writing about medical experience ran the gamut from first-person narrative to impersonal numbers.

This chapter has two goals. First, I show the sheer variety of materials in these medical journals, to explore what their appearance as a new genre of medical knowledge might mean. Since the journals contained everything from advertisements for German I.G. Farben drugs, to annotations of *The British Medical Journal*, to reprints of articles from Indian medical journals, to detailed clinical case studies of patients in China, then it is safe to say that this was a large, illuminated world of medical knowledge that was qualitatively different from earlier forms of medical knowledge production in late-imperial China. And not only was there research in the form of annotations, reprints, and original articles; a wealth of visual materials played a part in creating the authority of this medical journal: advertisements, photographs of doctors in white coats at conferences, tables of disease incidence, photographs of lungs ravaged by tuberculosis, and graphs of heart rates speeding and slowing.

Second, I want to investigate how language and modes of writing in early professional, scientific medical knowledge production created medical authority. Whether in English or in Chinese, the writing that appeared in this journal also took on decidedly particular forms and modes: presentation of original research, annotations or summaries of existing medical literature from abroad, and editorials, to name but a few. In each of these types of writing, unique ways of telling stories about medicine and medical experience can be seen. From first-person narratives of knowledgeable doctors diagnosing specific diseases, to individual case studies of patients undergoing treatment, to histories of Chinese medicine — each type of writing on some drew

²⁰² Thomas S Kuhn, *The Structure of Scientific Revolutions*. *Second Edition*, *Enlarged*. (Chicago, London: University of Chicago Press, 1970).

upon and laid claim to authority over Western medicine in China at this time. In investigating these forms of writing and how they created the authority of their authors over medical matters, I draw on the idea that the mode in which these doctors were writing itself produced the authority of the author and what they were writing about, which was separate from, but not unrelated to, the status of the author, the actual precision of the diagnosis, or efficacy of treatment.

That writing produces authority is not a new idea, but one that historians of science, among others, have explored for a while. This has been well articulated in the notion of "literary technology" by Steven Shapin and Simon Schaffer in their 1985 book *Leviathan and the Air-Pump: Hobbes, Boyle, and the Experimental Life.*²⁰³ Shapin and Schaffer examine the controversy between Boyle and Hobbes over the air pump to illuminate how scientific experimental practice as a form of social life took hold in 17th-century England. They argue that one aspect of Robert Boyle's approach that helped experimental practice become accepted as a proper way of producing scientific knowledge was the way Boyle wrote about his experiments, aggregating individual sensory experiences and beliefs into collective facts. Along with material (machines that operate between human perception and natural reality) and social (collective enterprise of production of knowledge, like the Royal Society), there were literary technologies, meaning the conventions and manners of proper scientific prose, including detail and impression of verisimilitude, that governed the communication of scientific knowledge, which in turn helped create the experimental community able to virtually witness experiments.²⁰⁴

For Chinese doctors of Western medicine writing about Western medicine in medical journals, their writing made them part of an endeavor both to bring Western medicine to China — a certain way of understanding and practicing, and writing about medicine — and to bring experiences with medicine in China to a reading audience in and outside of China. Doctors based in the interior of China could write about their experiences treating patients for tuberculosis in a way that would be intelligible to a doctor sitting in London who had his own tuberculosis cases to face.

II. Missionary and Native Journals in 1915

This section situates the rise of the native *National Medical Journal of China* in relation to the missionary publication *The China Medical Journal*. The missionary journal was the natural model for the native journal, as several of the native journal's key founding members were involved with the missionary association.

Missionary journal: aims and audience

The aim of the missionary journal was to connect missionaries and those educated at missionary schools, and help them keep abreast of the latest medical developments. A letter from the association president, W.H. Venable, published in the March 1915 issue, emphasized the

²⁰³ See Steven Shapin and Simon Schaffer, *Leviathan and the Air-Pump: Hobbes, Boyle, and the Experimental Life* (Princeton: Princeton University Press, 2011). The first edition was published in 1985; the 2011 edition has a new introduction.

²⁰⁴ Ibid., see Chapter Two "Seeing and Believing: The Experimental Production of Pneumatic Facts," pages 22-79, and 60-65 especially.

importance of the journal as a means of communication: "The CHINA MEDICAL JOURNAL is the organ through which we communicate with each other, or in other words it is our nervous system. The Medical Journal in Chinese is also indispensable to us. It is the means through which our Chinese graduates, who do not know English, are to keep in touch with the advance of medical science." 205

More specifically, the journal was a key means by which doctors could learn what they needed, as Allen C. Hutcheson, editor of the journal, argued that the nature of the work in China was such that a doctor needed to treat diseases of all kinds. Since no person was able to keep up with developments in all areas, it was important that editors helped supply doctors with the latest research.²⁰⁶

And yet, the fact that the missionary journal did not have a Chinese-language component was a problem that the missionaries acknowledged. At the February 1915 biennial conference of the China Missionary Medical Association, the president, Dr. D. Duncan Main, in his address, recognized the need to teach medicine with more textbooks and medical writing in Chinese. He noted the challenge of translating work into Chinese:

I feel very strongly that those of us who believe in teaching medicine to the Chinese in their own language will have to admit we cannot do it as it ought to be done as we know it can be done. Our books are being translated and printed far too slowly, and some of those that are translated sadly need revising, and some also need to be rewritten or withdrawn. And so far we have done almost nothing towards the issuing of a medical journal in the Chinese language, which is very much needed.²⁰⁷

The business manager of the journal, P.J. Todd, reiterated this sentiment several months later, pleading from Canton for Chinese translations of materials:

If the members who prepare articles or reports of cases for their Branch meetings would have them translated into good Chinese and send them to the Chinese Medical Journal, it would give us an abundance of original material. Others could translate articles from foreign journals. We would also be glad to get items of news which would be of special interest to the medical profession of China. We ask you to get busy and help us make the Chinese Journal as good as our English JOURNAL²⁰⁸

Despite such entreaties, the missionary journal was unable to meet this need for Chinese-language articles. That the new association formed in 1915 by native Chinese doctors of Western medicine made one of their explicit aims providing medical knowledge in Chinese was thus not surprising.

Native Journal - aims and audience

From the outset, the bilingual nature of the native journal yields simultaneously existing

²⁰⁵ W.H. Venable, "The President's Letter," *The China Medical Journal* 29, no. 2 (March 1915): 128.

²⁰⁶ Allen C. Hutcheson, "Report of the Editor of China Medical Journal" 29, no. 2 (March 1915): 117.

²⁰⁷ "Record of Proceedings China Medical Missionary Association Biennial Conference," *The China Medical Journal* 29, no. 2 (March 1915): 94.

²⁰⁸ P.J. Todd, "The Chinese Medical Journal," *The China Medical Journal* 29, no. 3 (May 1915): 216.

different views of the journal's intended aims and audience. English-language and Chinese-language editorials articulate overlapping but distinct goals. In the inaugural 1915 issue, the Chinese journal's editors thanked the missionary medical association for helping the native association become established. This is expressed explicitly in an English-language editorial, "Ourselves" that promoted a distinct vision of doctors engaged in "modern medical science" and specifically mentioned the new bilingual journal that the native association would produce:

The call of modern medicine throughout China is indeed urgent, and we believe that the formation of similar associations in every province of this vast land of ours, whose object lies in the promotion of a healthier, stronger and more united China, will prove of immense benefit to all classes of the community. Hence, we have decided to publish our Journal in Chinese and English — the former because it is our national tongue, and the latter because it is the prevailing foreign language and by its means all the wonderful discoveries and resources of modern medicine may directly reach our people.²⁰⁹

Here, then, is a certain vision of what the bilingual journal would do as presented to English-readers of the journal, comprised of foreign-educated native doctors and the foreign medical community. Publishing in Chinese was important because that was the language of the land. And publishing in English was a means by which the findings and resources of "modern medicine" could directly reach people in China.

What the native journal billed itself in Chinese to its Chinese-reading audience was, however, slightly different. While the importance of translating Western medical knowledge into Chinese was certainly a principal goal, there were some other objectives. An early description of the "special characteristics of the journal" (中華醫學雜誌之特色) next to a subscription order reveals what the journal editors envisioned. The first characteristic of note was that "the abundant materials were written by Chinese and foreign authors of distinction, and for which no effort was spared to gather together of quality for the present age (材料宏富。搜集中外名家之 著作。不遺餘力。彙而刊之。以質當世)."²¹⁰ The second characteristic was the inclusion of both Chinese and Western language articles. This would help famous doctors sojourning in China. Members of the association who were good at Chinese and Western language could all submit writings. (中西論文並載。以便旅華名醫。以及會員中之特長於中西文者。均可供 獻著作也.) And a third unique quality of the publication was the advertising section, which would only include first-rate medicines and not any quack remedies or medicine of poor quality in order to avoid counterfeit goods (literally "mistaking fish eye balls for pearls") and help readers select medicines. (本雜誌廣告欄中。專載上等藥料。僅錄優良物品。至若偽藥劣 貨。概不列入。以免魚目混珠。且便利閱者之檢擇).211

The part about an advertising section points to the important role the journal editors envisioned the publication would play in not just transmitting medical knowledge, but in helping doctors navigate the commercial waters of medicines. From this we learn that it was not only

²⁰⁹ "Ourselves," Zhonghua yixue zazhi 中華醫學雜誌 The National Medical Journal of China 1, no. 1 (November 1915): 15–16.

²¹⁰ "Zhonghua yixue zazhi zhi tese 中華醫學雜誌之特色 (Special Characteristics of The National Medical Journal of China)," *Zhonghua yixue zazhi* 中華醫學雜誌 *The National Medical Journal of China* 2, no. 1 (March 1916), 3 in the Chinese section of the journal, no page number given.

²¹¹ Ibid.

regular consumers or patients who needed help discerning superior medicines but doctors as well.

Another perspective of the journal editors, written in Chinese for a Chinese-reading audience was given by Wu Liande, one of the journal's editors and also a member of the missionary association. In this essay, the status of Western medicine vis-à-vis Chinese medicine is clearly an issue. In an essay in that same first issue, "On the significance of medical learning" (*yixue zazhi zhi guanxi* 醫學雜誌之關係)²¹² Wu laments the poor state of medicine in China and the ubiquity of medical practitioners without qualifications. He ends with some general musings on the contributions of a medical journal to the medical profession:

This medical journal has five special characteristics. First, Chinese and Western editors, when translating important questions will mutually translate new insights and old knowledge, thus avoiding obstruction (互相繙譯新得舊知不虞閡隔). Second, many publications use ornate language but these are not erudite scholars. Although difficult to explain, this periodical will only use normal, easy writing to ensure that those who have possess only a little knowledge (putong xueshi) can understand it with a single glance. Third, the Chinese medical world has stagnated thoroughly. Chinese medicine is one of the main obstacles. This publication will daily permeate and mold people, so that the atmosphere can gradually become more open, receive guidance and support, and together improve.²¹³ Fourth, in recent years in consumption and plague have continually spread in each province, without exception though keeping on guard there has been no prescription (for a cure). Now this publication can be used as a guide to warn, and assist the police in implementing policies and making preparations. Fifth, those in this shared vocation can exchange knowledge and mutually observe and learn, together raise citizens in the area of health. The authors, whether or not they can take on this responsibility, evening and dawn they devote themselves to praying for the future prospects of this medical journal.²¹⁴ 本醫學雜誌尤有五大特色存焉一以中西兩文編輯凡有重要問題互相繙譯新得舊知不 虞閡隔. 二各雜誌多功詞藻競尚高深,非淹達之士,類難盡解.本雜誌則惟就通常淺文 字,務使稍具普通學識者即可一目瞭然. 三中國醫界學凝滯全係執抝中醫為其魔障,有 此雜誌,日為浸潤而陶鑄之,期可風氣漸開,得以提攜而共進.四年來各省癆病瘟疫蔓延 不絕,均由防範無方.今假雜誌金乏針而警告之,自可輔助警官,俾知施行而設備.五同 業藉以交換知識互相觀摩,共躋民國於健康.斯則著者無任為此.醫學雜誌前途昕夕聲 香禱祝而不置也已215

Thus, the picture one gets is that the journal will be a place to share Chinese and Western medical knowledge openly, using accessible language as an aid to practical medical matters. In addition, the publication would provide a forum for doctors to work to improve the health of China's citizens.

Wu expresses a concern about the unimpeded flow of knowledge at the time, characterized along the lines of old and new, and implicitly Western and Chinese. He identifies a problem of

²¹² Wu Liande, "Yixue zazhi zhi guanxi 醫學雜誌之關係 (On the Significance of Medical Learning)," Zhonghua yixue zazhi 中華醫學雜誌 The National Medical Journal of China 5, no. 4 (December 1919): 1–2.

²¹³ Ibid, 2.

²¹⁴ Ibid.

²¹⁵ Ibid.

obstruction *gehe* 閡隔 in the translation of new insights and old knowledge (新得舊知), which Chinese and Western editors can remedy by working together in translating. Here, *gehe* most likely refers to the lack of a means of communicating medical knowledge, the solution to which is the journal itself. He also discusses Chinese medicine specifically, identifying it as the obstacle (literally "demon obstacle" *mozhang* 魔障) that has caused the of stagnation of the Chinese medical world. In contrast to late-imperial traditions of medical knowledge that circulated directly from master to disciple over a long period of apprenticeship, or was kept within a family of hereditary doctors, the medical journal as a form represented a means by which medical knowledge could enter the public domain and become a shared undertaking by a community dispersed in time and over space.

III. Missionary Journal - Format

Looking at the format of the journal in 1915, just as the native association and its journal were coming into being, there is a clear sense of the missionary journal meeting several needs. The first was scientific, to provide a place for publishing original research and summarizing research from abroad. The second was professional, embodied in the editorial section which reported on the happenings of the missionary association and the correspondence and personal section that allowed members to keep up with each other.

The missionary journal went through several iterations. It was published quarterly by the China Medical Missionary Association from 1887 to 1907, and after that under the name *The China Medical Journal* 博醫會報. From the period of 1915 to 1931 it co-existed with the publication produced by native Chinese practitioners of Western medicine. In 1932, it merged with the English section of *The National Medical Journal of China* to form the *Chinese Medical Journal*.

The major sections of the missionary journal were: clinical notes, hospital technology, editorials, China Medical Association Section, Missionary Section, Current Medical Literature, Book Reviews, Correspondence, Wanted Column, News and Comments, New Members Proposed, New Members Elected, and Proposed Program. It also included an index of articles for each volume, and an index of authors. Thus, one can see that the major areas of information the journal contained were items that would help with research and treatment, news on professional association, summaries of scholarly literature, and communications from readers and members.

Take for example the January issue of 1915. The following is a list of original articles contained in this issue: Tuberculin in Treatment; Motor Tics, with Illustrative Case; Vesical Calculus; Case of Extra-Uterine Pregnancy; A Method for Closure of Abdominal Incisions; Surgery of the Spleen, Case Reports, Comments on Splenectomy; Gastric Carcinoma — A Case Report. The original research articles give a picture of doctors from all corners of China sharing cases and methods on subjects from spleen surgery to tuberculosis treatments.

After the original research articles, the next section of the journal provided reports on a particular area in the form of the "Custom's Surgeon's Report" (pp. 25-31). In this case the report was on the health of Tainan, Formosa for 1913, which notes that syphilis and hysteria were quite common. The next section offered topical and timely news under the section "Items of Interest" (pp. 31-32), which gave a few sentences on a variety of subjects including: the lifting of restrictions on the export of emetine from England and supplies being sent to Shanghai as usual;

pamphlets on hygiene and cleanliness distributed to the Australian expeditionary force; and an epidemic of cholera in Manila.²¹⁶

Editorials

Editorials were one way members of the missionary medical association presented the nature of their work in China. These editorials appeared after the original research articles and clinical notes, and gave a view about medical matters from a political or social perspective. For example, editorials in 1915 included: lists of upcoming papers to be presented in the upcoming medical conference (January 1915); an article "Chinese Co-operation" at the 1915 conference that lauded the trend toward increased participation in the conference by Chinese who received their medical education abroad (February 1915); on the Rockefeller Foundation's report, "Missionaries and the question of accuracy" (May 1915); "Public Health, the Past and the Future" (July 1915); "The Health of Missionaries" (September 1915); and "The Morphine Evil in China" (November 1915).

Book Reviews and Progress in various medical fields

Finally, a major section of the journal was comprised of reviewing scholarly literature on medicine, both books and journal articles. For example in the "Book Reviews" section (pp. 38-40) there were one to three paragraphs on the following titles: *Healing and Saving: The Life Story of Philip Rees, Medical Missionary in China; The Balneo-Gymnastic Treatment of Chronic Diseases of the Heart; Educational Directory of China, 1914*; and *Dysenteries: Their Differentiation and Treatment.* The section that included brief abstracts of or selections from journals abroad included sections on a variety of branches of medicine, such as internal medicine, tropical diseases, surgery, and preventative medicine from journals including The British Medical Journal, Tropical Disease Bulletin, New York Medical Journal and The Journal of the American Medical Association.²¹⁸

What the book reviews and abstracts of medical journal articles suggest is that the missionary journal did a good job compiling this information in a timely fashion. The original dates of the journal articles are generally from less than a year before their being reprinted. And we get a sense of who the missionary journal editors saw as their peers or reputable sources of medical information — *The British Medical Journal, Journal of the American Medical Association*, and *Tropical Disease Bulletin*. We also get a sense of what particular medical issues were most interesting to missionary doctors at the time: internal medicine, tropical diseases, and obstetrics, among others.

Facilitating social bonds among missionaries

In addition, the journal facilitated the exchange of information between individuals that the journal editors thought the community would find useful. The major sections of the missionary journal that facilitated this were "In Memorium" (obituaries of doctors), reporting on the Nurses' Association, and <u>Correspondence</u>. The correspondence and personal records section of the journal fulfilled a social purpose — to strengthen the communal bonds of missionaries sojourning far from their homes.

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²¹⁶ See *The China Medical Journal* 29 no. 1(January 1915).

²¹⁷ See *The China Medical Journal* 29 no. 1-6 (January, February, May, September, November 1915).

²¹⁸ Ibid.

For example, a question about how to make cotton wool absorbent that was posed in January of 1915: DEAR SIR: My hospital supply of absorbent cotton wool is running short and as on account of the war there is doubt whether new supplies from home will be obtainable, I am writing to ask if anyone can tell me how to make native cotton will absorbent. I have heard that it can be done, but how I do not know. I shall be very grateful to anyone who can tell me. Yours, M. C. Poulter"²¹⁹

Three answers came several months later in the next issue. There was a letter from V.K. Dzau of Hankow who advocated boiling cotton in a solution of potassium or sodium hydroxide. Another from G in Shandong recommended boiling the cotton with borax and kneading it with a heavy piece of wood. And "Economy" questioned whether this extra preparation was perhaps not a "wise expenditure of energy for Mission hospitals" since "prepared cotton at very reasonable rates" could be purchased in Shanghai and elsewhere. ²²⁰

A community at a glance

The column "Personal Record" for January 1915 was a list of births (3), marriages (3), deaths (1), arrivals (5) and departures. Under births, was "At Shanghai, November 13th, to Dr. and Mrs. H.H. Morris, a son." Under deaths, "At Peking, November 4th, Dr. H.V. WENHAM, of the Union Medical College, Peking, from pneumonia."²²¹

Sometimes this column, called "Personal Items" gives a sense of particular individuals. For example, in the March 1915 issue, items included news of Dr. James L. Maxwell of Tainan, Formosa, "our newly elected Vice-president, left on furlough for England, *via* the Siberian route. He was unable to obtain an accident insurance policy covering the journey, nevertheless, we trust he will reach his destination in safety."²²² The unfortunate news of the missionaries was also shared. For example, of the twenty-five members of the Church Missionary Society stationed in German East Africa, Palestine, or Turkish Arabia who were held prisoner by the Germans or Turks. "Dr. Sterling, of Gaza, Palestine, was actually in a prison for several days, his wife, however, being permitted to bring him his daily food. Ordinarily a very busy man, he rather enjoyed the enforced leisure, as it gave him a good opportunity for reading."²²³

By May of that year, the column had changed names to "Personalia" and included not only news of individuals, but reprints of letters from missionaries. For example, again from Dr. Maxwell: "In a letter from England dated March 16th, 1915, Dr. James L. Maxwell writes: 'Arrived home safely a couple of weeks ago, just three weeks from Shanghai. Quite uneventful journey and no difficulties I am expecting to be appointed surgeon to one of the base hospitals in this country while on furlough." ²²⁴

Summary of Missionary Journal format

Thus the journal offers a snapshot of a particular medical community at a specific place and time. In 1915, when the native association was forming and a bilingual journal on its way, the

²¹⁹ "How to Make Absorbent?," The China Medical Journal 29, no. 1 (January 1915): 63.

²²⁰ "The Preparation of Native Absorbent Cotton," *The China Medical Journal* 29, no. 2 (March 1915): 140–41.

²²¹ "Personal Record," The China Medical Journal 29, no. 1 (January 1915): 63.

²²² "Personal Items," The China Medical Journal 29, no. 1 (May 1915): 141.

²²³ Ibid., 142.

²²⁴ "Personalia," The China Medical Journal 29, no. 3 (May 1915): 216.

missionary journal shows us that it was already meeting the community's scientific needs by publishing original research and reprinting material from abroad. The plethora of forms this production and transmission of medical knowledge took ranged from clinical notes to reviews of current medical literature. Moreover, the journal also served as a way for members to communicate directly with each other through the correspondence section, to ask questions about practical medical matters they faced daily. Finally, in providing personal news about individual members, the journal also performed a social function of connecting a community whose members were spread throughout the far corners of China. Meeting these needs in the Chinese language would be left to the native association's journal.

IV. Native Journal - change in form over time

When *The National Medical Journal of China* started in 1915, *The China Medical Missionary Journal* was the other major existing scholarly publication devoted to Western medicine in China. This missionary publication was one of the models for native Chinese physicians' *The National Medical Journal*. Three of the people who founded the native association and ran the journal — Wu Liande, Diao Xinde, and Yan Fuqing — were also members of the missionary organization.

Adhering to and departing from the missionary journal model

From the start, *The National Medical Journal of China* both adhered to and departed from the model provided by the missionary journal. Compared to the missionary journal, the Chinese journal started out with little original research. Most of the articles in the inaugural issue were editorials, essays, or abstracts of already existing research from abroad. But it had more information on government regulations, and essays in Chinese on topics more specific to China, such as Yu Fengbin's first essay on the medical profession.

In the first issue published in November 1915, in the English section, there is one research article on Chondron-Sarcoma of the Upper Jaw (J.W.H. Chun), and the other three articles are more editorial in nature, such as Diao Xinde's "The Demand of Modern Medicine upon the Profession, the College, and the Government." The journal also had quite a bit of association-related notices, such as minutes for the first meeting, the constitution and by-laws, and an editorial about the association. On the Chinese, side, the native journal had seven articles in the Chinese language, none of which contained original research. Instead, they were shorter pieces on topics such as medical learning and publication (Wu Liande), a self-critical essay reflecting on the medical profession (Yu Fengbin), and hygienic eating methods (Wu Liande). After these essays, the journal published lists of local regulations, such as the Ministry of the Interior's rules on autopsies. The Chinese section ended with the schedule for the upcoming medical association conference. 225

Editorial Departments

In the journal itself there is not much specifically about editorial decisions or debates. Looking at the positions and changes in content and format over time, however, it is possible to

²²⁵ Zhonghua yixue zazhi 中華醫學雜誌 The National Medical Journal of China 1, no. 1 (November 1915).)

learn about the editorial priorities of the journal. In the inaugural issue the Chineses section identifies the editorial staff, a small team: the editor (Wu Liande), general manager (Yu Fengbin), and accountant Diao Xinde. By the next year, in English, the following staff information is given: editorial staff, English Department (Liu Ruiheng, Wu Liande), Chinese Department (Yu Fengbin, or C. Voonping Yui as his name was spelled then), and Business Manager (Diao Xinde, or T.K.M. Siao). By 1917, the editorial staff identified in the English section had expanded considerably. Now individual departmental editors were listed in nine areas:

Chinese Drs. Liu Tak-san, Kui Chow, Chan Hin-fan

Tropical Medicine Dr. Lim Boon-keng Internal Medicine Dr. Holt A. Cheng

Surgery

Eyes, Nose, Throat

Women and Children

History and Native Practice

Public Health and Pathology

General News

JH Liu

Lee Shu Fen

Liag San Wan

K.C. Wong

E.S. Tyau

JWH Chu²²⁶

From this list of editorial departments one gets a sense of the fields of medical knowledge deemed important at the time, as well as the areas of intellectual concern to the doctors. Discrete specialties divided by environment (tropical medicine), body (eyes, nose, throat), and method of treatment (surgery) shared space with articles on public health, commentary on medical research from abroad, and history of Chinese medicine. Gradually by the late 1920s the following departments were added: Surgery, Infectious Diseases, Obstetrics, Tropical Diseases, Biological Chemistry, Chinese Medicine (combined with history), Internal Medicine, Pathology, Gynecology, Ophthalmology.²²⁷ This expansion suggests an increase in the people specialized in these various areas of medicine.

Original Research

Both English and Chinese-language editorials reported on association news and reprinted local regulations. For example, in the English-language section of November 1915 E.S. Tyau had a piece, "The Demand of Modern Medicine upon the Profession, the College and the Government." And in the Chinese section there were articles discussing methods for disease prevention in China and the use of surgery in wartime Europe. The Chinese section ended with regulations on autopsies from the Ministry of Internal Affairs and the draft program for the China Medical Association's national conference the following year.

Over time, however, the journal began to publish more original research, both in English and Chinese. With the next volume there was a differentiation between editorials, record of events, and the start of original research articles. In general, the sections of the English-language portion over the next ten years were fairly consistent: original articles, editorial, miscellaneous (Annotations, Correspondence, Book Review, Publications Received, and sometimes a thematic report), and then a brief list of some original articles in the Chinese edition.

²²⁶ See Zhonghua yixue zazhi 中華醫學雜誌 The National Medical Journal of China over the year 1917.

²²⁷ See Zhonghua yixue zazhi 中華醫學雜誌 The National Medical Journal of China over 1920-27.

Compared to the English section, the Chinese section was much larger and changed in format over the years. There is some inconsistency in the particular sections, but in general the trend is toward more translation and association news. The publication started off in 1916 with the following sections: 言論 (speech), 紀事 (chronicle), 嚶求集腋 (seeking like-minded friends), 來稿 (contributions received), 輿論一斑 (public opinion), and 文牘 (official documents). Within these different sections the focus is both on international exchange and domestic medical developments. Of the seven articles under "Essays" 論說, two articles are on Chinese and Western medicine: Wu Liande's "Army and Navy use of Chinese and Western medical theory" [陸海軍參用中西醫論] and Yu Fengbin's "The Change and Development of Chinese and Western Medicine" [中西醫學之沿革]. ²²⁸ There is one article on mosquitos, another on translation of medical textbooks, surgery, medical terminology, and preserving ancient medicine.

Ten years later, in 1926, the Chinese section of the journal had expanded to include discrete sections on articles (論說), translations of medical works (醫藥譯林), association news (本會消息), and English articles in this edition (本期英文論說目錄). Moreover, there were sections on other more topical themes that did not appear in each volume such as 禁煙紀事 (chronicle of opium ban), 救傷見聞 (information on wound treatment). Page 1930, the journal had the following sections: 社論 (editorial), 原著 (original works), 臨床講述 (clinical narration), 譯叢 (translated books) 消息 (news), 介紹新著 (introducing new works). The addition of a separate section on clinical narration, translated as clinical case studies, suggests that knowledge gleaned from clinical observation became considered a category independent from original articles. The battle against opium may have died down enough to warrant not including it as a stand-alone section in the journal.

Correspondence

Like the missionary journal, the native journal also published correspondence received. This appeared only in English, however. The content of correspondence ranged from notices from abroad about courses to conferences of interest. For example, an April 1926 letter submitted by the Internationale Gesellschaft fuer Sexualforschung (International Society for Sexual Research) advertised its first conference in Berlin from October 11-25, 1926. Among the members of this society were S. Freud (Wien) - presumably Sigmund Freud of Vienna. And again from Berlin, in April 1927, the Kaisers Friedrich-Institute wrote asking to publish an announcement for a fall international medical postgraduate course consisting of classes in all branches of medicine with externships in clinics, hospitals, and laboratoriFs. Thus, it is possible to get a sense that the

²²⁸ Wu Liande, "Luhaijun canyong zhongxi yi lun" 陸海軍參用中西醫論(Army and Navy Use of Chinese and Western Medical Theory)And," *Zhonghua yixue zazhi* 中華醫學雜誌 *The National Medical Journal of China* 2, no. 1 (March 1916): 1-3.; Yu Fengbin 俞鳳賓, "Zhongxi yixue zhi yange" 中西醫學之沿革 (The Change and Development of Chinese and Western Medicine)," *Zhonghua yixue zazhi* 中華醫學雜誌 *The National Medical Journal of China* 2, no. 1 (March 1916): 25–29.

²²⁹ See Zhonghua yixue zazhi 中華醫學雜誌 The National Medical Journal of China for 1916, volumes 1-6.

²³⁰ For change in sections, see *Zhonghua yixue zazhi* 中華醫學雜誌 *The National Medical Journal of China* 中華醫學雜誌 16 (1930), volumes 1-6.

²³¹ "Correspondence," Zhonghua yixue zazhi 中華醫學雜誌 The National Medical Journal of China 12, no. 4 (August 1926): 345–46.

^{232 &}quot;Correspondence," Zhonghua yixue zazhi 中華醫學雜誌 The National Medical Journal of China 13, no. 3

wider medical world all the way to Europe had taken note of the existence of this journal and saw its members as peers involved in the same undertaking.

Summary of Missionary vs. Native Journal

In both English and Chinese, the missionary journal met the scientific needs of its readers with original research, reprinted articles from abroad, and book reviews. Through its correspondence section, it also enabled members to communicate directly with each other about practical matters. Compared to the native journal, however, the missionary journal was less directly rooted in the local political and social environment. Contributors to the native journal included government officials and local luminaries in educational circles. The journal carried editorials about the state of the profession and local political and social medical developments. In this engagement with local politics, it differed from the missionary publication. While the missionary journal was certainly located in Shanghai and its members were also tied to foreign authorities, the native publication was by definition more inclusive because the membership of the native association was open to a wider range of Chinese doctors of Western medicine than the missionary association.

Scholars of medical journals in Great Britain and America have noted that early medical journals in the nineteenth century were comprised of surveys of new books and compilations of medical news, in addition to case reports. Over time the trend was toward publishing of more original research, as well as features such as editorials, commentaries upon public events. The National Medical Journal of China hewed to this same pattern. Initially the contents of the publication were mostly drawn from elsewhere (book reviews, reprints of other medical journal articles), in addition to publishing editorials on topical matters, and medical-related government regulations. Over the first decade of its run, there was a gradual shift to publication of more original research, both from abroad and in China.

V. The Content of the Form: from Annotation to Original Research

Writings on tuberculosis trace the native journal's shift from mostly annotations, translations, and reprints of material from abroad to publish original research in earnest in the 1920s. I emphasize the elements of language, time, and source in assessing the formal qualities of the early journal. With regard to the content on tuberculosis specifically, early writing contains the beginnings of case studies of diagnosis and treatment in Chinese, alongside summaries of treatments in English. By 1927, in English there are detailed cases with individual patient names.

Annotations and translations of foreign research were one way to bring medical knowledge from the wider world to China. And in the other direction, reporting on medical happenings and medical research that took place in China helped bring medical knowledge of China to the rest of the world. In what mode that would need to be written in order to make this experience legible to readers at a distance was both a matter of form and content. I argue. In terms of form, the medical journal organized information into set categories — annotation, clinical narration,

⁽June 1927): 298-99.

²³³ See the collection of essays in W. F. Bynum, Stephen Lock, and Roy Porter, eds., *Medical Journals and Medical Knowledge: Historical Essays*, and in particular Roy Porter, "The Rise of Medical Journalism in Britain to 1800, 6–28.

editorials, and original works. It is the original works in particular that I would like to focus on, specifically those about tuberculosis.

Tuberculosis

Today we know that tuberculosis (TB) is an infectious disease, commonly associated with the lungs, and can affect almost any tissue or organ. Its primary cause is the acid-fast bacillus Mycobacterium tuberculosis. It is usually a chronic disease that lingers for months, years, but acute forms which most commonly strike infants and children can prove fatal in a matter of days. The disease was endemic from ancient times in Eurasia, North Africa, possibly the Americas affecting small numbers of people and maintaining low prevalence rates. But with rise of industrial centers between the 18th and 20th centuries, it became epidemic in much of Europe, North and South America, Africa, and Asia. TB killed millions, on par with great global epidemic diseases of bubonic plague, cholera, measles, smallpox, typhoid, typhus, etc. There was no specific drug therapy until 1944, when researchers discovered streptomycin which was effective in inhibiting disease. Two more drugs, para-aminosalicylic acid (PAS) and isoniazid (isonicotinic acid hydrazide, INH) discovered 1946 and 1952 respectively, provided effective treatment in combination with streptomycin. These made all but most advanced cases curable. Tuberculosis is no longer epidemic, but it still afflicts people worldwide. Developing countries suffer most severely because populations more likely exposed to bacillus, at higher risk of developing disease when malnourished or old age.²³⁴

The causes for tuberculosis are multifactorial, as exposure to the tubercle bacillus is a necessary but not sufficient condition for developing the disease. The host and the host's environment contribute numerous other central causes to its pathogenesis. The bacilli reach humans almost exclusively through aerial transmission. Talking, coughing, sneezing, spitting, singing, and other respiratory functions produce airborne particles droplet nuclei, which can contain one to three bacilli. One bacilli is enough to establish infection when inhaled. In enclosed space, particles can remain suspended like tobacco smoke. Dry bacilli can remain viable for months. Once they have entered the body, the bacilli can remain viable throughout a host's lifetime, dormant until resistance fails. In contrast to most other infectious diseases, tuberculosis has an indefinite and variable incubation period.²³⁵

The primary host-dependent factors are: age, gender, and immunogenetic factors along with environmental factors such as crowding, quality of nutrition, and working conditions. The main environmental factors important in the etiology of the disease are: crowding, quality of nutrition, and working conditions. The disease was most common among the artisans who worked in dusty textile mills and pottery factories and among students and professional classes who spent time indoors in crowded living conditions, which facilitated the airborne spread of the disease.²³⁶

Between the discovery of the tuberculosis bacillus in 1882 and the invention of streptomycin antibiotics in 1944, there was no consensus among Chinese medical professionals on how to treat tuberculosis. Western medical journals, pharmaceutical company publications, and journals of Chinese medicine advocated a variety of therapies including bed rest, acupuncture and herbs, diet therapy, tuberculin, and hydrochloric acid.

²³⁴ William D. Johnston, "Tuberculosis," in *The Cambridge World History of Human Disease*, ed. Kenneth F. Kiple (Cambridge: Cambridge University Press, 1993), 1059.

²³⁵ Ibid., 1059–60.

²³⁶ Ibid., 1060-61.

Tuberculosis, in Shanghai

Tuberculosis proved a particularly serious challenge as the single greatest cause of all deaths in China during the 1920s to 1940s, responsible for one out of every three deaths from any kind of disease. In the 1920s more then 850,000 people died of tuberculosis a year; by the 1930s this had increased to 1.2 million. In 1934 an estimated 60 percent of the Shanghai population had contracted tuberculosis at some point, and 94 percent for those over the age of 24. In 1934, tuberculosis caused an estimated 1.2 million deaths a year in China, and was the cause of one-fifth to one-quarter of all deaths, including thirty percent of deaths for people ages sixteen to sixty.²³⁷

It is difficult to provide accurate numbers for the prevalence of tuberculosis in Shanghai during this period because prior to the creation of the Ministry of Health the Chinese authorities did not collect statistics on diseases. In addition, tuberculosis was not included among the infectious diseases that doctors were required to report diagnosis of within twelve hours as mandated according to a 1928 Ministry of Health directive. In some cases data is only available for the International Settlement and for the French Concession.²³⁸

TB mortality rates in China were significantly higher compared to those in Europe, North America, and Japan. A 1932 study by the Lester Institute of Medical Research in Shanghai 上海 雷氏德研究院 of 17 hospitals nationwide found that the mortality rate of tuberculosis in China was twice as high as that of Western countries. In 1930, 303 of 100,000 tuberculosis patients died in China; in the US the number was 71, 95 for England, and 185 for Japan. The numbers given just four years later were slightly worse. Rachel Core notes that in 1935, TB mortality in China was estimated to have been 400 per 100,000. This figure was eight times the rate for New Zealand, five times that of the United States, four times that of England, and more than twice that of Japan. The control of Japan.

Treatments for tuberculosis

Until the mid-19th century, Chinese understandings of the disease focused on identification of symptoms and course of disease rather than on a pathogen. Bridie Andrews explains how understandings of tuberculosis changed with the assimilation of germ theory in China. 241 虚痨病 *xulaobing* "wasting disease" was thought to be caused by a range of factors, including exhaustion, internal organ function, imbalance in the body's blood and qi, environmental conditions, overwork, and malevolent spirits or worms. Benjamin Hobson, the first missionary to provide textbooks of western medicine in China, created a new technical terminology that

²³⁷ Mark Elvin and Yixia Zhang, "Environment and Tuberculosis in Modern China," in *Sediments of Time: Environment and Society in Chinese History*, ed. Ts'ui-jung Liu and Elvin, Mark, Studies in Environment and History (Cambridge: Cambridge University Press, 1998), 523-24. Rachel Core, "Tuberculosis Control in Shanghai: Bringing Health to the Masses, 1928-Present," in *Medical Transitions in Twentieth-Century China*, ed. Bridie Andrews and Mary Brown Bullock (Bloomington, Indiana: Indiana University Press, 2014), 128.

²³⁸ Core, 128.

²³⁹ 张大庆 Zhang Daqing, *Zhongguo jindai jibing shehui shi* 中国近代疾病社会史 (A social history of diseases in modern China) (Jinan: Shandong jiaoyu chuban she, 2006), 26.

²⁴⁰ Core 128

²⁴¹ Bridie Andrews, "Tuberculosis and the Assimilation of Germ Theory in China, 1895-1937," *Journal of the History of Medicine and Allied Sciences* 52, no. 1 (1997): 114–57.

coopted existing Chinese terms. Thus, "consumption" was translated into *laobing* 癆病. In the late 19th to early 20th century, Chinese medical students imported the translations of tuberculosis 肺結核 *feijiehe* "lung tubercle" from Japan. The adoption of germ theory by Chinese doctors ranged from use of only Western concepts and Japanese medical terminology (Ding Fubao), identification of wasting worms with the germs of tuberculosis (Gu Mingsheng), arguments that the real cause was the body's depletion of yin and not germs alone (Zhang Xichuan). Thus, as Marta Hanson has put it, before the 19th century, not one Chinese person suffered from plague, cholera, tuberculosis, or malaria, though millions died from bone steaming, corpse worms, and consumption. ²⁴²

In Bridie Andrews's article on tuberculosis and germ theory, the treatments for tuberculosis reflect the different causal explanations for the disease of each author she investigates. Ding Fubao, who recognized Western concepts and Japanese medical terminology, advocated a combination of injected and oral drugs. Gu Mingsheng, who identified the wasting worms of traditional Chinese medical explanations with the germs of tuberculosis, advocated therapies that were entirely Western — sunlight, open windows, rest, and fresh air, along with warnings against use of many Western proprietary medicines against consumption, which were no good and would probably harm patients. Zhang Xichun, who argued for the body's depletion of yin and not just germs, combined Chinese and Western medicine, offering a preliminary treatment with herbs, aspirin to induce sweat, and then treatment with pills made from two western drugs, creosote and menthol combined in a base of bean flower. He evaluates creosote in terms of Chinese pharmacy, as having a cooling "nature" *xing* and a pungent "taste" *wei*. He describes aspirin as having a cooling nature, slightly sour taste useful for dissipating fever but could lead to excessive sweating.²⁴³

Different explanations of the cause of disease and rationales for therapies (especially sanatoriums) were able to coexist until 1940s success with new chemotherapy. Andrews argues that "this coexistence of alternative and sometimes contradictory rationales is important when making a comparison with China, where premodern ideas about the cause, transmission, and appropriate treatment of apparently similar diseases are all too easily dismissed as 'folklore.' Before the advent of streptomycin barely half a century ago, traditional Chinese explanations and remedies for tuberculosis must have offered at least as good a chance of recovery as their Western alternatives."²⁴⁴

The government of Shanghai did not develop any comprehensive plans to combat the city's leading infectious disease. The Republican authorities deliberately deprioritized tuberculosis for two reasons. First, was the high cost that equipment like X-ray machines for diagnosis and the establishment of special hospitals and sanataria for tuberculosis, which were considered beyond the limits of the government budget. Second, health reformers of the time recognized that improvement of the economic conditions of the community played the largest role in improving mortality rates. The priority given to enacting public health measures by figures like John B. Grant, who was on the faculty of Peking Union Medical College, in a 1923

²⁴² Andrew Schonebaum, "Vectors of Contagion and Tuberculosis in Modern Chinese Literature," *Modern Chinese Literature and Culture* 23, no. 1 (2011): 19, quotes Marta E. Hanson, *Speaking of Epidemics in Chinese Medicine: Disease and the Geographic Imagination in Late Imperial China*, (Milton Park, Abingdon, Oxon; New York, NY: Routledge, 2011).

²⁴³ Andrews, "Tuberculosis and the Assimilation of Germ Theory in China," 134–41.

²⁴⁴ Ibid 120

²⁴⁵ Sean Hsiang-lin Lei, "Habituating Individuality: The Framing of Tuberculosis and Its Material Solutions in Republican China," *Bulletin of the History of Medicine* 84, no. 2 (2010): 254-255.

proposal for the establishment of a department of hygiene, emphasized the need to control "gastrointestinal diseases that lend themselves much more readily to the influence of public health measures" and concluded that "In China, where funds and personnel are limited, it would be unwise to concentrate inadequate resources on tuberculosis until the attack on the more easily controlled gastro-intestinal diseases has been well organized."²⁴⁶

Due to the reluctance of the government to take charge of efforts to combat tuberculosis, leading Chinese doctors took it upon themselves to organize anti-tuberculosis efforts. In October 1933, doctors included Yan Fuqing, Wu Liande, and Li Ting'an formed the Chinese Anti-Tuberculosis Association (CATA, 中國防療協會). Later accounts note that the association was organized by the National Medical Association of China and the Shanghai Municipal Health Administration. Five years later, the Shanghai branch of this association (SATA 上海防療協會) was established. CATA and SATA understood both preventative and treatment programs, and were the only organizations active in the 1930s and 1940s dedicated to combatting a single disease.²⁴⁷

Annotation and Translation

Summarizing research and publications from abroad was one of the explicit goals of the native journal. These summaries ranged from abstracts of a few paragraphs glossing foreign medical journal articles to complete translations of individual articles that ran several pages. The annotations were generally in English, while the research articles were translated into Chinese initially, with the rare article surfacing in its original English or German later in the publication's run.

Looking at mentions of tuberculosis from 1915 to 1927, we discover a mixture of general and specific descriptions of diagnosis and treatments, in English and Chinese. We read, for example, a brief paragraph in the September 1917 Annotations section, summarizing a paper in *The Journal of Experimental Medicine* by Dr. Gensaburo Koga on the use of cyanocuprol: "After experimenting on guinea pigs he gave it intravenously to 63 cases of tuberculosis in man. 25 cases were cured, 22 improved, 3 died, and 9 were still under treatment. The author contends that the preparation greatly improves or apparently cures pulmonary and surgical tuberculosis in the first and second stages." The journal editors promptly published their translations and summaries of work from abroad — most articles appeared in the Chinese journal within one year of their original publication date. In 1921, translations of foreign articles included: a June 1920 article from the British journal *The Lancet* on diagnosis and treatment of kidney and liver inflammation; a January 1921 *New York Medical Journal* piece on latent pulmonary tuberculosis; and a *Munchener Mediszinische Wochenschrift* dating from 1920 on new methods for treating pulmonary tuberculosis. ²⁴⁹ As the journal print continued, there were an increasing number of

²⁴⁶ Quoted in Lei, "Habituating Individuality," 253. Lei quotes 1923 "A Proposal for a Department of Hygiene" from the Rockefeller Foundation Archives. The Rockefeller Foundation was the principal sponsor of the Peking Union Medical College, where Grant taught.

²⁴⁷ Core, 129.

²⁴⁸ "Annotations: Cyanocuprol in Tuberculosis," *Zhonghua yixue zazhi* 中華醫學雜誌 *The National Medical Journal of China* 3, no. 3 (September 1917): 121.

²⁴⁹ See "Shen zang yan zhi zhencha ji zhiliao: Maikelin boshi shu" 腎臟炎之診察及治療:麦克林博士述 (Kidney Inflammation Examination and Treatment: Michelin PhD Narration) (The Lancet, June 19,1920) *Zhonghua yixue zazhi* 中華醫學雜誌 *The National Medical Journal of China* 7, no. 2 (June 1921): 93–103; "Qianfuxing feijiehe: Ma'ershalisiku'en boshi shu" 潛伏性肺結核:邁爾沙利斯夸恩博士述 (Latent Tuberculosis:

annotations and abstracts starting in 1921.

The internationalism of the journal as gauged by the sources of annotations and reprints is clear. There main sources for annotations and translations of original research are Great Britain, Germany, and the United States. In addition, looking at publications received, it is clear the journal was pulling from an even wider geographical range. The "Publications Received" column appeared only in the English-language section. In June 1924, for example, the publications received were: *American Journal of Obstetrics and Gynecology, The China Medical Journal, Acta Dermatologica* (from Kyoto, Japan), *The Atlantic Medical Journal* (Pennsylvania), *Long Island Medical Journal, The Journal of the Philippine Island Medical Association, Southern Medicine and Surgery* (Charlottesville, North Carolina), *The Medical Herald* (New York), *The Annual Report of the International Anti-opium Association*, and *General Medical Journal of China*. Thus, in addition to major national medical journals such as *The British Medical Journal*, one sees smaller regional journals as well. These journals are not summarized, but merely listed. Their very presence indicates that this journal was functioning as a portal to the international medical community.

Original writing on tuberculosis in medical journals

English and Chinese-language original writing on tuberculosis in the native journal shows a variety of opinions regarding treatment and emphasis on responsibility. Moreover, the grounds on which arguments are made, and evidence presented differs. In general, both Chinese and English-language writing agreed that prevention of developing tuberculosis and of the transmission of the disease was where doctors should focus their efforts. Two authors writing in English, Diao Xinde and A.C. Selmon, argue that the disease is curable in its early stages, and so prompt diagnosis is key.

Both also are critical of drug treatment. Selmon offers a more measured negative assessment:

There is an axiom to the effect that 'the curability of a disease is in inverse ration to the number of drugs and therapeutic measures used against it.' Since almost every important compound in the pharmacopeia has been used or is being used in the treatment of tuberculosis, the conclusion is justified that up to the present no cure has been found, yet as S. Soliscohen says, there are some drugs that have 'stood the test of time' and help in the recovery of the patient. Creosote, cod-liver oil and calcium would take first place in the list, but the routine use of any or all of these cannot be justified.²⁵¹

Diao diagnosis the problem of drugs being a problem of doctors, the patent medicine market, and patients. Some drugs are prescribed by inexperienced doctors who do not recognize the

Mai'ershalisiku'en Narration)," Zhonghua yixue zazhi 中華醫學雜誌 The National Medical Journal of China 7, no. 3 (September 1921): 151–55. (New York Medical Journal, January 22,1921.); "Zhiliao feijiehe zhi xin fa: Alunsipei'erge Boshi Shu 治療肺結核之新法:阿論司配爾格博士述 (New Methods for Treating Pulmonary Tuberculosis: Alunsipei'erge Ph.D. Narration)," Zhonghua yixue zazhi 中華醫學雜誌 The National Medical Journal of China 7, no. 3 (September 1921): 145–47.

^{250 &}quot;Publications Received," Zhonghua yixue zazhi 中華醫學雜誌 The National Medical Journal of China 10, no. 3 (June 1924): 203.

²⁵¹ See A.C. Selmon, "The Treatment of Tuberculosis," *Zhonghua yixue zazhi* 中華醫學雜誌 *The National Medical Journal of China* 9, no. 2 (June 1923): 107–8. Selmon has a list of reference works at the end of the article, of which Soliscohen is the author of one.

disease as tuberculosis and often falsely identify their patients as having a minor bronchial condition. Even more pernicious are seductive newspaper announcements for patent medicines purporting to cure tuberculosis or advertisements by quacks who describe themselves as specialists in the disease and who make fortunes off patent medicines that usually contain alcohol and narcotics. Patients themselves also play a role, as Diao also notes that "Chinese patients are in the habit of calling in more than one doctor especially in chronic diseases like tuberculosis, when the disease does not promptly respond to ordinary treatment." ²⁵³

Chinese-language writing tends to be more directly critical of the lack of sanatoria. Selmon voices his position with reserve: "Proper and adequate treatment of tuberculosis is a very difficult problem for the practitioner in China. No tuberculosis sanatoriums have been opened, and the public are as yet entirely ignorant of the fundamental facts concerning the nature of the disease, its cause and methods of propagation."²⁵⁴

Diao more directly questions what society is doing:

As consumption is a preventable disease, there should be imposed a direct obligation upon society to secure all possible means of prevention. In fact the prevention of consumption has been for years the most vital sociologic and economic problem of modern cities. What has society and government bending for tuberculosis in Shanghai? As far as I know, there is hardly any provision for the care and maintenance of the unfortunate consumptives who are incapable of self-support. For foreigners with tuberculosis there is a special hospital. The diseases is rampant among the Chinese who constitute the great majority of the population in Shanghai. I have brought to your serious attention the fact that the large majority of tuberculosis patients are victims of delayed or erroneous diagnosis. There is no legitimate control of tuberculosis and thus consumptives are permitted to become the undefended prey of ignorant and unscrupulous charlatans.²⁵⁵

One of the most vociferous denunciation of drugs treatments appeared in a 1928 article 肺結核治療之藥物觀 "Medicament in Pulmonary Tuberculosis" by Chen Wenda 陳閏達, a doctor at Guangji hospital in Hangzhou, and regular contributor to the journal. He argued that owing to the ignorance of patients and the scheming of medical merchants, drugs seeking to profit from purporting to cure pulmonary tuberculosis have flooded the market. Instead of seeking diagnosis and treatment at the hospital, swayed by advertisements for drugs with names like 'wet lung' 潤肺, 'stop cough' 止咳, and avoid consumption '避痨,' patients take the medicines for a long time. Additional symptoms of TB are covered up by the drug, and so patients are fooled into thinking they are experiencing a recovery and continue to work, and not rest.

It was not only medical drug merchants who were to blame. Chen also criticizes doctors for being complicit. Because medical merchants are well aware of the country's lack of recuperation facilities (sanatoriums), they produce more and more trademarked preparations for doctors to use

²⁵² 习信德 Diao Xinde, "The Treatment of Pulmonary Tuberculosis," *Zhonghua yixue zazhi* 中華醫學雜誌 *The National Medical Journal of China* 9, no. 4 (December 1923): 313.

²⁵³ Ibid., 314.

²⁵⁴ Selmon, "The Treatment of Tuberculosis," 104.

²⁵⁵ Diao, "The Treatment of Pulmonary Tuberculosis," 314.

²⁵⁶ 陳聞達 Chen Wenda, "Feijiehe zhiliao zhi yaowu guan" 肺結核治療之藥物觀 (Medicament in Pulmonary Tuberculosis)," *Zhonghua yixue zazhi* 中華醫學雜誌 *The National Medical Journal of China* 14, no. 3 (June 1928): 147–49.

as injections. Thus, doctors simply function as resellers of these drugs, even if in some cases they have not thoroughly understood their use. Chen ends his article by criticizing China's sick people as still living in an age of superstition about drugs [吾國人之病人。尚在迷信醫藥時代]. He says unequivocally that peaceful rest and clean air are the most successful ways to treat tuberculosis, and ends his article calling for greater energies to be put into prevention methods and the establishment of sanatoriums. ²⁵⁷

Arguments against drug treatments either in English or Chinese situate the problem of tuberculosis within a larger social framework of lack of preventive measures, the problems of misdiagnosis by doctors, and the wide availability of patent medicines of dubious efficacy. That criticisms of the lack of sanatoria or patent medicines were much more pointed in Chinese may be because native doctors were more outraged at conditions in their own country.

Drug treatment in Chinese-language case histories

Despite the invective against drugs as a treatment for tuberculosis, there were, nonetheless a number of articles that detailed the use of drug treatments. In Chinese and English, these articles are written in a different register than those discussed above. Writing about tuberculosis treatments that appeared in original research appeared in the form of case histories. These present a story of treatment, a course of actions taken over time. Organized around treatment of patients, these are narratives divided into discrete stages of diagnosis and treatment, a certain number of patients, who are presented in terms of numbers.

Case studies in Chinese medical writing

The case study in Chinese medical writing preceded the arrival of the Western-style medical journal. As Charlotte Furth points out in the introduction to, and her chapter in, *Thinking With Cases: Specialist Knowledge in Chinese Cultural History*, the case is a set of particulars presented as facts that point to common patterns. These lead to truth claims that are specific to individual situations, not generalizations with law-like universality. The authority the authors of cases claim as experts is also key, as that status lends the cases the quality of valid knowledge, as distinct from stories, examples or instances. Furth traces the history of the an 案 case, meaning a document, back in Chinese history as a matter of law connected directly to the state since earliest imperial times. Public written records of medical cases first appeared in biographies of physicians contained in dynastic histories. The Song dynasty saw the rise of the Confucian scholar doctor (*ruyi*) as a public persona well-versed in state-authorized medical classics. The first published medical case history by a single author was *The Medical Cases of Wang Ji (Shishan yi'an)* in 1531. By the end of the sixteenth century, Furth notes that "the medical case history collection was an established genre among learned physicians." The

²⁵⁷ Chen, "Medicament in Pulmonary Tuberculosis,"149.

²⁵⁸ Charlotte Furth glosses the historian of science John Forrester on thinking with cases as a method of producing valid knowledge that is separate from hypothetical-deductive methods of logic or inductive methods of experimental science, Charlotte Furth, Judith T. Zeitlin, and Ping-chen Hsiung, eds., *Thinking with Cases: Specialist Knowledge in Chinese Cultural History* (Honolulu: University of Hawai'i Press, 2007), 2-5.

²⁵⁹ Ibid., 3.

²⁶⁰ Furth, *Thinking with Cases*, 14.

medical case reached maturity as a form during the Ming, as a record of a doctor's own experience, often written "to convey a particular therapeutic strategy in pharmacy." What is key about the case is that it was a means for doctors to assert authority based on their individual experience and judgment of clinical manifestations vis-à-vis the traditional canon/commentary mode of thinking based on classics and historical learning. ²⁶²

In terms of the actual content of cases, Andrews offers some helpful observations on the modernization of the Chinese medical genre of case records to case histories in the early to mid-20th century. Physicians in late imperial China recorded their consultations in the form of a case record written by doctors and composed from memory after a consultation that explained how complicated cases were treated, and highlighted the physician's own skill and erudition. Often, case descriptions were brief and did not give proportions of drugs, assuming tacit knowledge on the part of the other physicians with substantial experience and knowledge who were the main audience for this writing. There were, however, more detailed case records that Andrews characterizes as didactic, for which "a case record needed to include basic information about the patient, information derived from diagnostic procedures, an account of the treatment applied, and a record of the effect of that treatment. Even more usefully, a record might also explain how the diagnosis was reached and explain why a particular therapy was chosen." 264

Andrews argues that the standardization of the didactic case record into 'case history' saw the increasing use of Western medical rubrics (e.g., headings on the causes of disease 病因; disease names 病名), and detailed information about contents and proportions of drug prescriptions. The major difference between the genres of case records and case histories is the narrative style of the case records integrates the physician with the patients, and describes that experience in a temporal, narrative style. In contrast, the case history format organizes the information according to categories similar to those used in Western-medical case histories: patient, cause of disease, symptoms, diagnosis, therapy, and prescription. The role of individual experience, both of the physician and of the patient, thus appears differently in these two genres.

Cases that appear medical journals are distinct from the the medical cases that Andrews discusses in that she describes those published by individual physicians of Chinese medicine, usually in a collection organized by a single author. She also mentions He Lianchen's modernization of Chinese case records in the *Shaoxing Journal*, which was devoted to Chinese medicine. The cases that I am looking at appeared in a journal of Western medicine edited by Chinese, and written by different authors.

²⁶¹ Ibid.

²⁶² Ibid.

²⁶³ Bridie Andrews, "From Case Records to Case Histories: The Modernisation of a Chinese Medical Genre, 1912-49," in *Innovation in Chinese Medicine*, ed. Elisabeth Hsu (Cambridge: Cambridge University Press, 2001), 324–36.

²⁶⁴ Ibid., 326-327.

physician Ding Zezhou丁澤周 starts: (Mr) Fu, aged 20-odd, had been suffering from throat-rash for eight days, He had a high fever without sweating, and a had a slight aversion to cold. The rashes were dispersed and indistinct. His face was purple and dark, and the throat was swollen and putrid. He had trouble swallowing even trickles of water, and experienced restlessness and nassau, with no respite day or night. The Fu family had several households, but only (this) one son, so his old mother and young wife were weeping bitterly as they begged me to save him. I said: 'Although the condition is critical, his normal *qi* (*zhengqi* 正氣) is not yet defeated, so he could still recover." On diagnosis his pulse was obstructed, accelerated, and not clearly distinguishable; the tongue coating was greasy and yellow; when I read the prescriptions he had taken earlier, sure enough, they were (mistakenly) of the 'nurturing yin and clearing the lungs decoction' type." Ibid., 327-328.

Case histories of tuberculosis

An early Chinese-language article about tuberculosis diagnosis and treatment shows the use of the case history format. In 1917, Lin Jiarui writes a detailed three-page account of his clinical experience with using tuberculin with 40 patients in a hospital in Yokohama, Japan. This article is divided into diagnosis [診斷], concerns prior to injection [注射前之注意], and post-injection clinical observations [注射後臨床上所見]. After first determining that 33 patients actually had the tuberculosis bacteria, Lin cautions that prior to injecting them one has to examine the chest area and check for the TB bacteria in the phlegm, and also checking the urine. After the injections most patients plagued by fever were in good spirits, and those with serious cases gradually experience a recovery of appetite, physical strength, and spirit, though there were three cases that did not look good, and five whose condition Lin cannot identify. 266

Two English-language articles on tuberculosis that appeared in 1927 are also written in the case history format that Andrews discusses. The presence of the doctor is minimized, with no first-person narrative highlighting his erudition. Instead, the facts of the case are presented in highly objective, impersonal terms. The investigations of tuberculosis both begin with the statement of objective, impersonal facts. There is no record of the physicians' individual thought or thinking, but only a record of the results of tests and examinations. The patients are described in great specificity — described by in names and numbers, procedure and outcomes. The focus is on symptoms and diagnosis.

"The Differential Diagnosis of Early Pulmonary Tuberculosis and Mitral Disease" by Dr. M.H. Chen, in Changsha, Hunan is a collection of four cases. The article begins: "The consideration that led to the investigation of this subject was the striking fact that an unusually high percentage of mitral disease had been encountered in our tuberculosis clinic and that we find a marked resemblance of symptoms to these two conditions. Among 153 cases seen in the tuberculosis clinic, there occurred 13 or 8.4% instances of mitral disease." A Case of Tuberculosis Adenitis with Constitutional Symptoms Treated with Angio-lymphe" by J.W. H. Chun, M.B., B.C. (Cantab) Harbin opens with: "On the 5th of May 1927, Mrs. Han, nullipara, aged 16 came to us for treatment for tuberculous adenines of the right neck. The history was that three or four months ago she noticed there was a swelling of the back which was gradually increasing in size, but with no accompanying pain. Past history was negative, except there was cough in the winter. No serious illness of any kind was recorded." The impetus for investigation in both articles is a puzzle that is factual in nature and articulated with numerical data.

The absence of the author's subjective experience is another noticeable characteristic of this writing. The article on diagnosis of early pulmonary tuberculosis provides four cases describing the patients' symptoms. For example, Mr. L.W.H, a Chinese teacher age 38, entered the hospital

²⁶⁶ 林家瑞 Lin Jiarui, "Kaokeshi jiehe zhiliao linchuan shiyan ji" 考克氏結核治療 臨床實驗記 (Koch Tuberculosis Treatment Clinical Experiment Record) *Zhonghua yixue zazhi* 中華醫學雜誌 *The National Medical Journal of China* 3, no. 4 (December 1917): 28–30.

²⁶⁷ M.H. Chien, "The Differential Diagnosis of Early Pulmonary Tuberculosis and Mitral Disease," *Zhonghua yixue zazhi* 中華醫學雜誌 *The National Medical Journal of China* 13, no. 2 (April 1927): 184.

²⁶⁸ J.W.H. Chun, "A Case of Tuberculous Adenitis with Constitutional Symptoms Treated With Angiolymphe," Zhonghua yixue zazhi 中華醫學雜誌 The National Medical Journal of China 13, no. 6 (December 1927): 456.

on February 16, 1926. Besides presenting the symptoms (coughing up blood for 12 months, sweats), Chen also charts the progress of the disease (cough starting one year ago, to hemoptysis starting last year), and the results of physical examination (heart, lung, blood pressure, X-rays showing calcified areas).²⁶⁹ The author of this article offers his assessment, but in his expertise is hidden or embedded directly in the observations: "Physical examination showed his lung apices were free. The right lower back of the chest showed signs of consolidation with numerous moist rales. Heart had a pre systolic thrill and enlarged on both sides, P2 was accentuated and greater than A2."²⁷⁰

Discussion of treatment is also similarly technical in terminology. In "A Case of Tuberculous Adenitis with Constitutional Symptoms Treated with Angio-lymphe," the patient is Mrs. Han, age 16, who suffers from tuberculosis adenitis of the right neck. The article describes the administration of Angiolymphe over a four week period, giving the amount of injection, the change in the patient's condition (appetite, flush, gland size). The author provides specific information about the drug:

Angiolymphe is a perfectly harmless plant extract which may be given with success in all forms of tuberculosis. Angiolymphe has a curative effect on tuberculosis of the lungs, larynx, skin and bones, in all cases of surgical tuberculosis, in urino-genital cases (tuberculosis of the testicle and ovary), in military tuberculosis, in short, in every case in which the morbid condition can be traced to infection with tubercle bacilli This is a plant extract prepared from various Iridea, and it contains as its active principle glucosides of these plants, but no alkaloids. This plant extract is prepared in a special manner and is sterilised so as to be suitable for injection Dr. Rous of Paris was the originator of this preparation. The formula is given as follows: — Orchis Maculata 15 g., Ixia rosea 5 ", Morea sinensis 4 ", Aqua distillata 10000"²⁷¹

The visual data in the English-language writing consists of photographs, as well as representations of quantitative data in graphs and charts. The article on diagnosis of early pulmonary tuberculosis includes four photographs of X-rays showing varying levels of density that indicate pulmonary infarction.²⁷² The case of tuberculous adenitis includes four pages of graphs showing the daily change in temperature and pulse readings of the patient over three months.²⁷³

Quantitative data in chart and table form, and photographs especially, appear about twice as often in the English-language articles in the journal for the years 1924-1928.²⁷⁴ For example, the February 1927 issue English-language section three sets of quantitative data: lists of causes of

²⁶⁹ Chien, "Differential Diagnosis," 184-186.

²⁷⁰ Ibid., 185.

²⁷¹ Chun, "Tuberculosis Adenitis," 457-458.

²⁷² Chien, 185-191.

²⁷³ Chun, 456a-d.

²⁷⁴ The use of quantitative language of statistics in medicine is a trend that dates back to the late nineteenth and early twentieth century in Europe and the US, consonant with the rise of public health initiatives and the rise of scientific approaches to social problems. See, for example, William Coleman, *Death Is a Social Disease: Public Health and Political Economy in Early Industrial France* (Madison, Wis.: University of Wisconsin Press, 1982).

death in China,²⁷⁵ tables for results of a health survey of Pinchiang (Harbin),²⁷⁶ prevalence of communicable disease in China and Manchuria.²⁷⁷

Looking at articles and case studies on tuberculosis that appeared in English and Chinese, in different sections of the journal, it is clear that doctors had different viewpoints about treatments and wrote about them in different modes. Arguments in favor of drug treatments tended to be made in editorial-like mode, discussing specifics of location, challenges doctors faced in correctly diagnosing and a commercial market full of drugs claiming to be effective. Articles that presented drug treatments did so in another vein, the case study, with specifics of age, drug dosages, and X-ray photographs. There are also annotations of articles from abroad summarizing treatments tried and maybe true.

VI. Conclusion

Medical journal writing took a variety of forms that reflected a medical community deeply connected to the wider world. Medical knowledge production, as pictured in these journals, were as engaged in the consumption of medical knowledge from abroad as they were preoccupied with the production of medical knowledge based on experience in China, both by missionaries and native doctors.

When the native journal came into being, the earliest editorials exclaimed that being able to translate foreign, modern medical knowledge into the Chinese language was key for the development of the medical profession, the quality of medical care in China, and the strengthening of the Chinese people and nation. It aimed to meet a need by translating foreign medical writing and publishing original research in Chinese. In addition, the Chinese-language section of the journal covered things that the missionary journal did not, such as official documents from the state, association news, or advertisements.

Over time, the native journal gradually moved from reprinting and summarizing foreign medical articles to original articles produced in China. These took the form of both clinical case studies as well as more editorial-like overviews and summaries of medical problems and solutions. In form and content, one can see the adoption of norms of the case history that move away from late-imperial influenced modes of writing that highlight the erudition of the physician in diagnosis and skill, to case histories organized around Western medical rubrics of disease, symptoms, and diagnosis. Examination of writing on tuberculosis has shown that these numerical narratives of drug treatments appeared alongside polemics arguing against drugs and for early diagnosis and preventative measures such as stays in sanatoria.

If we are to envisage the world these doctors inhabited in retrospective fashion, these medical journals help illuminate that world in all its inconsistencies and contradictions. Writing in differentt languages, reading in various genres, both home and abroad, at a transitional period in the broader history of medicine itself — how could it be otherwise? The medical journal put medical experience in China into a form of medical knowledge that would have been

²⁷⁵ J.B. Grant, F.T. Huang, and S.C. Hsu, "A Preliminary Note on Classification of Causes of Death in China," *Zhonghua yixue zazhi* 中華醫學雜誌 *The National Medical Journal of China* 14, no. 1 (February 1927): 4–23.

²⁷⁶ Lin Chia Swee and Wu Liande, "Report of a Preliminary Health Survey of Pinchiang (Chinese City of Harbin)," *Zhonghua yixue zazhi* 中華醫學雜誌 *The National Medical Journal of China* 13, no. 1 (June 1926): 24–82. This article contains 24 of data detailing population growth, results of inspection of prostitutes and eating houses, number of medical practitioners, etc.

²⁷⁷ Tsefang F. Huang, "Communicable Disease Information," *Zhonghua yixue zazhi* 中華醫學雜誌 *The National Medical Journal of China* 13, no. 1 (February 1927): 98–101.

understandable to readers at a distance. As we shall see in the following two chapters, however, in the Chinese-language section of the native journal, there were some traces of late-imperial ways of writing about medicine in China, even as Western medicine proliferated.

When Anecdote Becomes Evidence: Retelling Chinese Medicine in Republican Shanghai Western Medical Journals

I. Introduction

Even in Western medical journals from Republican Shanghai, doctors still told serious stories about Chinese medicine. While narratives repudiating Chinese medicine as superstitious and ineffective abound in literature of the 1920s, there were nonetheless doctors who sought to explain Chinese medicine. This chapter focuses on the ways a few of these physicians chose to explain Chinese medicine as history and as practice in the Protestant missionary *China Medical Journal* and the native Chinese journal, *The National Medical Journal of China* 中華醫學雜誌.

I take Chinese medicine to have three aspects: theories of the body and illness, embodied knowledge of doctors in treatment and diagnosis, and therapies to treat the body struck by illness. In each case, they refer to developments and practices in China that prevailed until major, sustained contact with and influence by Euro-America on medical subjects starting in the late-19th century. The few cases where historians of China have considered the matter of Western medical journals, the narrative is one in which Western-trained physicians criticize Chinese medicine. For example, the historian Zhao Hongjun describes *The National Medical Journal of China* as a vehicle for promoting Western medicine and critiquing Chinese medicine, calling the National Medical Association 中華醫學會 the main opponent of Chinese medicine through its mouthpiece, the journal. He points out that several of the association leaders had links to the warlord government and helped define national policies opposed to Chinese medicine. Indeed, much of the two journals' contents — research articles and editorials especially — supports that view.

And yet, substantive discussion of Chinese medicine does appear in two forms: first, as a historical subject to be explained; and second as a practical matter discussed in the journals as therapy and treatment. Two doctors, Wang Jimin and Yu Fengbin, offered an epistemology and intellectual explanation for Chinese medicine in discussing its history. Wang headed the journal's editorial department on Chinese Medicine, which first appeared in March of 1917 under the title "History and Native Practice." With Wu Liande, he co-edited a highly influential 1936 Englishlanguage history of Chinese medicine that scholars have used as a key primary source for this period. Wang wrote in both English and Chinese. In contrast, though Yu was educated in the U.S. and many mentions are made of him giving remarks in English, his published articles are all in Chinese. These include several pieces on the history of Chinese medicine at the start of the

²⁷⁸ This definition of Chinese medicine draws from the framework put forward by a Chinese reformer of medicine, Yu Yan, who suggested a tripartite definition of Chinese medicine as theories of the body, therapies, and doctor's knowledge. See Lei. *Neither Donkey nor Horse*, 70-71.

²⁷⁹ This was especially the case when Yu Yan, a prominent doctor, was editor of the journal from 1934-38. Zhao Hongjun, "Chinese versus Western Medicine: A History of Their Relations in the Twentieth Century," *Chinese Science* 10 (1991): 29.

²⁸⁰ Wang Jimin and Wu Liande, *History of Chinese Medicine: Being a Chronicle of Medical Happenings in China from Ancient Times to the Present Period* (Tientsin, China: Tientsin Press, Ltd, 1932).

journal's run.

The second type of writing on Chinese medicine I look at are two pieces on therapies and treatments. The first is a 1916 case study of acupuncture by James Cantlie, a former missionary in China. This article was first published in London's *The Journal of Tropical Medicine and Hygiene*, and then reprinted in the missionary *China Medical Journal* a few months later. The second is a 1927 investigation and identification of a potential herbal treatment for tuberculosis published in the Chinese-language edition of the native *The National Medical Journal of China*, written by Yu Fengbin. These pieces evince different epistemologies of claims for knowledge. Thus, contra claims by Zhao Hongjun characterizing the journal as hostile to Chinese medicine, there were attempts to positively assess Chinese medicine, as history and as practice.

Theoretical intervention - epistemologies of knowledge

This paper draws on three notions of epistemologies of knowledge: first, history and cases; second, history and value; and third, scientific writing as a form of literary technology. Writing as history and writing as cases exemplify a tension between history and commentary. Charlotte Furth, in discussing "thinking with cases" in late imperial legal and medical contexts points to the distinction between "dynastic history writing that separated truthful narration of events (*shi*) from authorial commentary or judgment (*an*). Eventually, cases developed into illustrative anecdotes used by learned physicians to draw on their experience and consider clinical manifestations rather than the traditional canon or commentary mode of thinking." In this vein, it was a doctor who interpreted clinical experience, not a pre-existing canon of texts, that was the source of authority.

Another lens through which to understand explanations of medical knowledge is the tension between history and value. As discussed in the second chapter of this dissertation, Joseph Levenson argued that Chinese intellectuals faced a crisis between reconciling their emotional commitment to history, which gave them their identity, and their intellectual commitment to the value and relevance of Chinese civilization, which gave Chinese culture a place in the world. Medical journal writing is one place where tensions between history and value can be seen, and were even resolved. Writing about Chinese medicine — as history and then as practice — was a way for Chinese intellectuals like Yu to argue for both history and value.

Finally, as discussed in chapter three, Steven Shapin and Simon Schafer's notion of literary technologies examines writing that compelled people to believe the claims of 17th-century experimental science. Writing about Chinese medicine in the vein of case studies and experimental science in these two journals allowed doctors to investigate and make claims about Chinese medicine as practice — its purported efficacy, and value as therapy. But this mode of writing cannot explain the history of Chinese medicine. This could only be accomplished by writing about the history of Chinese medicine in the manner of Wang and Yu — history as subject and as method.

These two types of writing together — history as subject and as method, experimental science and thinking with cases — allowed these authors to reconcile their commitments to history and value in the manner articulated by Levenson. History was the way these two Chinese doctors of Western medicine attempted to make sense of the medical history of their own society.

²⁸¹ Furth, "Introduction: Thinking with Cases," in *Thinking with Cases*, 8-14.

²⁸² Levenson, Liang Ch'i-Ch'ao and the Mind of Modern China.

²⁸³ Shapin and Schaffer, Leviathan and the Air-Pump.

The simultaneous existence of

While both journals fulfilled a similar scientific need to publish the most current research findings, their social mission was different with respect to their relationship to Chinese medicine, both as idea and as practice. For missionary physicians, Chinese medicine did not pose an intellectual challenge to their system of medicine nor practical challenge to their medical practice. Thus, any discussion of Chinese medicine in their journal, both its theory and practice, was not defensive in nature. In contrast, for the Western-educated Chinese physicians who chose to engage with Chinese medicine or the practice of medicine in China, Chinese medicine was something they had to explain — either its successes or failures, its continuing appeal among the general population, or its possible areas of continued value for modern medicine. Therefore, for these authors, even in a medical journal devoted to Western medicine, Chinese medicine was an unavoidable topic.

The first part of this paper discusses the ways Chinese medicine was conceived of as a subject of history. The second section looks at two examples of discussions of Chinese medicine as practice, for acupuncture and herbs.

II. Chinese Medicine as History

Chinese medicine posed a puzzle to Chinese doctors of Western medicine at the turn of the 20th century: how to reconcile the well-established and often successful body of native lifestyle practices, medical theories, diagnosis and treatments that kept Chinese people alive, even healthy in the face of high mortality rates, poor hygiene practices, and other health failures that were glaringly clear in the heyday of state-sponsored public health campaigns? Writing about Chinese medicine in the two journals are generally of two types. First are articles that discuss Chinese medicine in the context of trying to understand its logic and successes in terms of Western science. The second are articles that are about practices or treatments associated with Chinese medicine itself, such as acupuncture or herbs.

The first kind of articles explain why Chinese medicine developed, succeeded, and failed. Such an approach can be seen in the writing of three doctors: Wu Liande, Yu Fengbin, and Wang Jimin. Wu wrote an article, in English, titled "Awakening the Sanitary Conscience of China" in 1915, published in the missionary journal. ²⁸⁴ Yu published two articles in 1916 about the history of Chinese medicine in the Chinese-language section of the native journal. ²⁸⁵ Wang authored a regular column on the history of Chinese medicine for the native journal. He also wrote a 1912 piece in the missionary journal called "China's Contribution to the Science of Medicine." ²⁸⁶ Taken together, these pieces provide a picture of thinking about Chinese medicine by three Western-trained doctors, written for an audience of both foreign and Chinese doctors.

²⁸⁴ Wu Liande, "Awakening the Sanitary Conscience of China," *The China Medical Journal* 24, no. 4 (July 1915): 222–23.

²⁸⁵ 俞鳳賓 Yu Fengbin, "Zhongxi yixue zhi yange" 中西醫學之沿革 (The Changes and Development of Chinese and Western Medicine)," *Zhonghua yixue zazhi* 中華醫學雜誌 *The National Medical Journal of China* 2, no. 1 (March 1916): 25–28.俞鳳賓 Yu Fengbin, "Baocun guyixue zhi shangque" 保存古醫學之商権 (Discussion of the Preservation of Ancient Chinese Medical Knowledge)," *Zhonghua yixue zazhi* 中華醫學雜誌 *The National Medical Journal of China* 2, no. 1 (March 1916): 4–6.

²⁸⁶ Jimin Wang, "China's Contribution to the Science of Medicine," *The China Medical Journal* 43, no. 12 (December 1929): 1193–1208.

Wu concentrates on the failure to develop measures associated with the public health movement of the late 19th and early 20th centuries that emphasized preventative measures — quarantine, water sanitation, healthier living conditions — that limited the spread of infectious diseases. He shares his shock at seeing "servants emptying pails containing excreta into the river, whilst only a few feet away someone was washing vegetables and a carrier was conveying his two buckets of water for the use of a neighboring fashionable restaurant."²⁸⁷

Yet at the same time he notes that for centuries Chinese have practiced a "system of simple hygiene" that is adapted to their needs: "They wear suitable clothes for summer and winter, drink tea, avoid alcohol as a rule, eat cooked food and are moderate in many things." Such daily habits have led to the result that "certain diseases which are frequently met with in the west are not so common in this country. These are: enteric fever, appendicitis, insanity (in its worst forms), pneumonia, severe forms of bronchitis, some heart, kidney, and liver affections, and most illnesses arising from alcohol." Thus Wu recognized a kind of passive hygiene that Chinese unknowingly practiced that led to better health outcomes.

In one of his first articles in *The National Medical Journal*, "The Changes and Development of Chinese and Western Medicine" (中西醫學之沿革 *Zhongxi yixue zhi yange*), published in 1916, just after his return to Shanghai from the United States, Yu offers a detailed genealogy of Chinese and Western medicine. Unlike Wu, Yu was clearly an avid historian: he goes back into deep historical time to situate his investigation. In his account, Chinese medicine was largely inferential and marked by a constant back and forth between established texts and empirical practice. He lists main figures from each dynasty and their contributions, beginning with two pioneers of Chinese medicine: Shen Nong who tasted herbs and investigated the pulse, and Qi Nong, who classified diseases and illness. And he ends with Qing dynasty doctors such as Wang Xunchen, the first doctor to travel to Europe and practice medicine and Huang Chuoqing 黃綽卿 who was the first to translate medical books.

In his discussion of the history of Western medicine, Yu highlights the continual improvement and openness that helped it flourish. Not only did Hippocrates distinguish between various kinds of diseases and propose clinical experiments, "but he also demonstrated the honor of the medical profession and practice, not allowing the concealing of its benefits to seek profit and treat it as a secret art used to cheat people." (抑且證明醫業之高貴。既不可居奇射利又不當祕術欺人). 290 He continues to list the contributions of other individuals in the field of Western medicine — Harvey's discovery of blood circulation, the work of Pasteur and Koch on bacteria, Ehrlich's advances in chemistry and immunology — and ends with an observation about why the Western medical field has developed: "Today the flourishing of Western medicine can actually be attributed to the constantly seeking improvement and seeking truth from facts passed down in the teachings of Hippocrates. (今西洋醫學之盛實由於精益求精,實事求是,其歇氏之遺訓)."291

One of the main differences between Chinese and Western medicine was, he argued, a different orientation to the production and sharing of medical knowledge:

Chinese scholars did not compete, knowledge and skills declined, especially medical skill. Those scholars engaged in the medical field, perhaps because their vision was not

²⁸⁷ Liande Wu, "Awakening the Sanitary Conscience of China, 223.

²⁸⁸ Ibid..

²⁸⁹ Ibid

²⁹⁰ Yu, "Changes and Development of Chinese and Western Medicine," 26–27.

²⁹¹ Ibid., 27.

high enough, and they kept secret what benefits they learned and did not like to share it with other people. This approach kept the application of whatever was learned to oneself and limited its practical application to a single person without the desire to spread the benefits to the general public, and without the service of gathering all views and widely promoting their benefits. (中國學者不競, 學術衰敝, 而醫術為尤. 其談醫之士, 或以見地不高, 祕其一得之長, 而不樂舉以示人. 則研究縱有心得, 而致用祗限一身, 無普濟眾生之願, 無集思廣益之功)²⁹²

Thus, in contrast to Western medicine, where benefits were shared and not restricted to improving the lives of an individual or small group, here knowledge is kept secret. Toward the end of this article, Yu criticizes the practices of medical lineages and transmission that lead to the compartmentalization of circulation of knowledge, as well as the lack of open-ended debate.

Surprisingly, though, in another vein, Yu argues that the strengths and weaknesses of Chinese medicine have the same origin: its long history. Appearing only 20 pages before his essay on the history of Chinese and Western medicine in the same issue, Yu had another article, "Discussion of the Preservation of Ancient Chinese Medical Knowledge," in which he wrote:

I believe that the disadvantage of Chinese medicine is that it has not changed over several thousand years. But the value of Chinese medicine is in the very deep experience (yueli 閱歷) accumulated over several thousand years. There are many precise areas in it (正不少精確處). We should experiment with the excellent methods, this is absolutely the way of famous doctors to exceed knowledge and deeply ponder it. Therefore, what is called "national essence" is not random research. Those who learn the way of our country and learn Chinese medicine, can treasure it and verify the true parts of theory it contains, like European public health. We should combine with what has been enacted by Westerners. If students take what is old and completely abolish it, then this will completely wipe out the experience of people in the past and we lose our national essence, is this not a shame? (我以為中醫之弊。在數千年間一成不變。而中醫之價值在數千年間之閱歷功深。正不少精確處。凡應驗良方莫不為名醫窮智竭慮之作。故可謂國粹的而非偶然的研求國學者每學中醫學之可寶誠以其中的確不磨之論理間歐衛生方法。與西洋所現行者相 脗合也。若徒以其舊而全廢之則將昔人所閱歷者掃蕩盡淨喪失國粹豈不可惜乎)²9³

In the first essay, Yu tells a story of the histories of Western and Chinese medicine that explains their respective natures being open and closed has led to their flourishing and stagnation, respectively. And yet, this long period of not changing, when considered from another perspective, is the source of one of Chinese medicine's greatest strengths: its deep well of accumulated experience.

Wang Jimin echoes Yu over a decade later, writing for the missionary journal. He starts by acknowledging the impression that Chinese medicine is unscientific, for its "ignorance of anatomy and physiology, the low esteem in which the profession is held by the public, the illiteracy and incompetence of its members, its empirical system of treatment, its crude methods of preparing drugs, its lack of instruments in diagnosis and operations and its absurd philosophy

²⁹² Yu, "The Changes and Development of Chinese and Western Medicine," 27.

²⁹³ Yu, "Discussion of the Preservation of Ancient Chinese Medical Knowledge," 4.

regarding the origin and causes of a disease."²⁹⁴ Wang acknowledges that superstition and healing are closely entwined, and that quacks exist in China as elsewhere. That said, Chinese medicine as embodied in the figure of the doctor and the knowledge passed down are to be respected.

The regular Chinese doctor is one who treats diseases according to certain rules and standards, and has a clear conception of his noble calling. In spite of the varied speculations and absurd theories as to the causation of diseases there is yet a rational, semi-scientific and dignified practice which is based upon the accumulated knowledge of centuries, and which represents the observations and experiences of many bright minds. The very fact that this practice has existed for forty centuries and that it is so implicitly believed in by the mass is proof that there must be some good in it. The Chinese, being a sensible people, would have utterly rejected the whole system if nothing but harm had come from its practice. Also, if viewed from the historical standpoint Chinese medicine is at least equal to, if not more profound, than that of other countries of the same period and therefore merits deeper investigation and greater appreciation than it has hitherto received.²⁹⁵

With that, Wang goes on to summarize different aspects of Chinese medicine. Why, then did China fail to develop modern science and medicine? Wang writes:

While the Chinese have acquired lot of experience, accumulated a mass of information, collected a great variety of facts, formulated some fundamental principles, anticipated many discoveries, invented some useful methods some of which have been brought to a high degree of excellence, yet they never pursued a single subject in a way calculated to lead them to final success. Many of the things hinted at have remained barren of results until centuries later when modern science stepped in and secured the prize. Chinese medicine, as it exists today, may be compared with the European art of the sixteenth century. It is a matter much to be regretted, that in spite of such a good start, they never seem to have pushed their investigations further but, on the contrary, have lost many of the valuable clues left them by their ancestors.²⁹⁶

Thus, in comparison with his peers, Yu Fengbin is unique in offering a story of Chinese medicine in which history, tradition, and accumulated experience are rationale all their own.

In their attempts to explain Chinese medicine as history, Wang and Yu offer a narration of events. But they also provide commentary, an assessment of why Chinese medicine did not develop as Western medicine did. In their mining of history for the answer to why Chinese medicine did not go the way of Western medicine, Yu and Wang pre-date late scholars' investigations of this same question.

Why did some physicians see Chinese and Western medicine as fundamentally different on a historical and practical level? Robert Hart offers a general overview the answers of different scholars to the question of why these two systems developed differently, centered around the

²⁹⁴ Wang, "China's Contribution to the Science of Medicine," 1193.

²⁹⁵ Ibid., 1193-94.

²⁹⁶ Ibid., 1208.

question of why there was no "science" in China, or the "Needham question" as it is known. Thanks to the work of historians of science that emphasizes the social constructivism of scientific knowledge, scholars now accept a plurality of sciences and related knowledge-making practices, no longer taking "science" for granted as a monolithic, whiggish, triumphalist development unique to seventeenth-century Europe.

To review, the historiography on why "science" did not develop in China. Robert Hart offers an overview of the literature on this question, beginning with Joseph Needham, who highlighted the universal claims of modern science as distinctive from "primitive" science. Other explanations have hinged on the philosophical (Mark Elvin, who argued that metaphysical thought of Wang Yangming explain failure to create science); the social (Joseph Levenson, who argued that the absence of a Chinese scientific tradition was the result of an 'amateur ideal'); the linguistic (Alfred Bloom, that the Chinese language inhibited the ability think theoretically); the logical (Robert Hartwell, who argued that absence formal logic system embodied in Euclidean geometry); and the political (Wenyuan Qian, who offered politico-ideological explanation).²⁹⁷

III. Chinese Medicine as Practice

Two Western-trained physicians engaged with Chinese medicine in another mode, describing their experience experimenting with and investigating medical treatments. The first article was about acupuncture, appearing in 1916 in the missionary journal by a Scottish physician, James Cantlie. The second, a 1927 article about herbal treatments for tuberculosis, by Yu Fengbin, was published in Chinese. These two physicians wrote about their experiences in a mode that resembles both the first-person narrative experimental science writing of Robert Boyle and the early case record type that Andrews identifies, in which the particular experience and erudition of the physician comes to the fore.

In February of 1916, James Cantlie, former Dean of the College of Medicine for Chinese in Hong Kong, whose students included the founding figure of the Republic of China, Sun Yat-sen, was co-founder of the London Tropical School of Medicine. Cantlie published an article titled, "'Needling' Painful Spots, as Practised by the Chinese, With the Writer's Experiences" in *The Journal of Tropical Medicine and Hygiene* that was then reprinted in the missionary *China Medical Journal* nine months later in November 1916 under a slightly different title: "'Needling' Painful Spots, as Practised by The Chinese" several months later.²⁹⁸ Despite the missing "the writer's experiences" in the missionary reprint, the contents of the article are the same.

Cantlie begins his article by describing the practice of what we now call acupuncture. He writes: "From time immemorial the Chinese have practiced "needling" the body for the relief of pain, of swellings, of stiffness, and the treatment of many ailments. The practice has become with them an art — an exact science, in fact, if the term science can be applied to such a proceeding." What makes Cantlie's article so interesting is that lacking a clear idea of why puncturing the skin at so many points might be considered a form of therapy, he argues for trying

²⁹⁷ See Roger Hart, "Beyond Science and Civilization: A Post-Needham Critique," *East Asian Science*, *Technology, and Medicine*, no. 16 (1999): 101-102.

²⁹⁸ James Cantlie, "'Needling' Painful Spots, as Practised by the Chinese, With the Writer's Experiences"," *The Journal of Tropical Medicine and Hygiene* 19, no. 4 (February 1916): 46–47. "'Needling' Painful Spots, as Practised by The Chinese," *The China Medical Journal* 30, no. 6 (November 1916): 410–13.

²⁹⁹ Cantlie, "Needling' Painful Spots, as Practised by The Chinese," *The China Medical Journal* 30, no. 6 (November 1916): 410.

it in the spirit of experimentation:

The modern student of surface anatomy may well stand aghast when asked to interpret the several structures any particular puncture might traverse when pushed deeply; and the clinician will be puzzled to explain the possible effect likely to be produced thereby. We may and do say: 'There is something in it'; but we seldom if ever venture to practise it, except occasionally in an experimental and tentative fashion, as, for instance, by placing an electric needle in the sciatic nerve."³⁰⁰

Finally, Cantlie goes on to ask whether needling is practiced with the idea of provoking a response by counter-irritation or with the idea of puncturing circumscribed effusions which would distend the tissues and engender localized pain. Without being sure about the reason, but unable to think of any other beyond the two aforementioned, Cantlie notes that "either the one or the other is sufficient to justify its use if it can be proved that good results obtain."³⁰¹

Cantlie then goes on to argue that it is the latter, "that the puncturing of the fasciae is the reason for the practice, and the only possible way in which 'needling' can claim to be a rational treatment." He continues,

It may be asked, Is the puncturing of the fasciae to relieve tension so frequently required as a means of treatment? The fact is, we know little of such a pathological condition; for instance, what do we know of the real pathological state in lumbago? Our treatment is empirical because our knowledge of the ailment is limited — it might be said non-existent.³⁰³

Having admitted to the limits of knowledge about the causes of lumbago, lower back pain, Cantlie accepts that an empirical approach to treatment is necessary. He then continues:

Is it an effusion into the mass of lumbar muscles? If so, then is the mystery explainable and the puncture of the thick fascia covering the muscles justified as a rational therapeutic agent. This is evidently the reason for the Chinese practice of 'needling,; which undoubtedly relieves pain and shortens the duration of the ailment.

Cantlie then likens Chinese needling to a more expanded practice of relieving tension in an inflamed organ as done in Western medicine:

Relieving tension when an organ is inflamed is a sound and long-practised method of treatment in scientific medicine. It is chiefly confined, however, to a few organs only; at one time free incisions for orchitis were in vogue, but beyond that and subcutaneous inflammation the procedure is seldom carried. Were it extended to inflammations of the liver, the lungs, glands, and either organs, good might and theoretically, should ensue.³⁰⁴

³⁰⁰ Cantlie, "Needling' Painful Spots, as Practised by The Chinese," 410.

³⁰¹ Ibid.

³⁰² Ibid.

³⁰³ Ibid., 410-411.

³⁰⁴ Ibid.

With his use of the word empirical, it is clear is that he is convinced enough to try needling as a therapeutic treatment: "so impressed has the writer become that he has adopted 'needling' for many ailments." He gives a list of seven different ailments: rheumatic pains in the gluteal and hip-joint; pains on the back of the thigh associated with neuralgic pain over or in the sciatic nerve; shoulder-joint pain; lumbago; sprained ankle stiffness and swelling; post-fracture leg muscles hampered in ordinary action; sacrum and pelvic pain among women. ³⁰⁵ In three of these cases (rheumatic pain, lumbago, and leg fracture) Cantlie adds that he tried needling when pain relief was not forthcoming any other way.

Cantlie then provides a more detailed account of employing needling to help a patient who injured his hip playing tennis, and did not find relief after a variety of treatments, including rest, formentations, electricity, and massage tried over two years. Cantlie then decides to try needling:

Defying all known treatment, the writer, using an anesthetic, on two occasions punctured the area of the hip deeply, most of the punctures reaching down to the bone. The punctures were made down the thigh along the tract of the sciatic nerve, down to the back of the knee. The needles were also made to puncture the capsule of the hip-joint at three places. The method of manipulation consisted of holding a hare-lip pin in either hand and rapidly thrusting each deeply into the tissues, over a hundred punctures being made in the space of two or three minutes.

The benefit of this treatment was apparent, and its repetition still continued to do $\mathsf{good}.^{306}$

There are several facts that mitagate against calling what Cantlie does here a form of Chinese medicine. First, he does not mention "needling" according to any set of guidelines that would have existed for acupuncture (meridian points). Second, he does not specify using any special type of needles. Assuming he sterilized the needles, the sheer number — over 100 in 2-3 minutes! — of puncturing down to the bone also seems a great departure from Chinese practices of acupuncture.

Cantlie ends his article by writing, "This short account of 'needling' may serve to bring up for discussion a practice which has tradition — that is, experience — for its justification; and there can be no doubt that as a rational treatment it has much to recommend it." Here then is an interesting basis on which to recommend this treatment: it is a practice with a tradition, that tradition being experience. The tradition dates "from time immemorial" as Cantlie states at the outset of his article. Note, he makes no reference to any textual basis for that tradition.

Lichtschin Herb to treat tuberculosis

One of the most striking examples of medical journal writing on Chinese medicine are two articles by Yu Fengbin. He wrote two articles on potential herbal treatments for tuberculosis in the *National Medical Journal of China*: "癧子頸草之採訪與識別 The Identification of 'Lihtschin' Herb Used by Ancient Chinese for Treating Tuberculous Cervical Adenitis" and

³⁰⁵ Cantlie, "Needling' Painful Spots, as Practised by The Chinese," 411-412.

³⁰⁶ Ibid., 412-413.

³⁰⁷ Ibid., 413.

³⁰⁸ 俞鳳賓 Yu Fengbin, "Lizi jingcao zhi caifang yu shibie" 癧子頸草之採訪與識別 [The Identification of 'Lihtschin' Herb Used by Ancient Chinese for Treating Tuberculous] Cervical Adenitis," *Zhonghua yixue zazhi* 中

"肺形草之採訪與識別 The Identification of an Herb Used Empirically for Pulmonary Tuberculosis."³⁰⁹ This paper will focus on the first of these articles, leaving discussion of the second for the next chapter.

There is a significant discrepancy between the given English-language titles and the Chinese-language titles of the articles, suggesting Yu's emphasis on historical, native origins of and the empirical use of these herbs. The title of the first article in English emphasizes that this is a treatment used by ancient Chinese; but that is not apparent from the Chinese title, which does not contain that phrase. The title of the second paper uses the word "empirically" to describe the use of the herb for (treating) pulmonary tuberculosis. Again, from the Chinese title, that word "empirically" is nowhere to be found. In both cases, Yu has added some additional context in English that suggests he thought these aspects – history and empiricism -- were worth emphasizing.

Yu presents his personal curiosity as the starting point for his investigation: "when I was young, I heard that for the illness tuberculosis cervical adentis, if one got the Lihtschin herb mashed it up into a paste and applied it topically, there was hope for a complete cure." Decades later he again heard about this herb, which was even more effective if taken orally. Therefore, he searched for it, but could not find it. [余幼時聞歷子頸一症。若得歷子頸草打爛塗之。則有痊癒之希望。十年來。又聞歷子頸草。不獨外治有益。內服更有效云。顧覓之而不可得。]W The village people call it, "the unique and only herb that brings out the effect of success (獨一提功草)." According to custom, he writes, it is said that the Lihtschin herb can treat tuberculosis that has spread to the neck, causing inflammation in the shape of a chestnut. It is commonly called chestnut neck or lizi (scrofula) neck. "Prescriptions that use this herb to cure (the illness) thus use common names, today as now. This makes it easy for people to know it." [頸腺患結核性之發炎。名為瘰癧。其狀如栗子。俗稱栗子頸。或癧子頸。單方中治療此症之草。遂以俗名呼之。今仍其舊。使人易曉耳). Thus at the very outset, Yu sets forth a mixture of individual memory, village terminology, and custom to convince his readers that this herb is worth investigating.

In 1926 a person who had taken this herb comes to his lab, and Yu takes an x-ray of this person's lung to verify that he indeed had been cured of tuberculosis. In order to locate the plants that bear the herbs, Yu relies on wide network of non-professional sources, but he also describes his own role in the process of discovery and evaluation. Anecdotes about the herb and its purported efficacy abound, but what remains unclear is the actual herb itself — its provenance, type, and name. The first step Yu takes is to locate the origin of the Lihtschin herb that he has heard about. It so happens that a female servant in his own household comes from 常熟 Changshu, 河港涇 Donggangjing village in Suzhou, about 100 kilometers northwest of Shanghai. She tells him of 20-year old suffering from scrofula, a swelling of glands that is most likely a form of tuberculosis, who experienced a full recovery after applying the Lihtschin herb

華醫學雜誌 The National Medical Journal of China 13, no. 1 (February 1927): 9-16.

³⁰⁹ 俞鳳賓 Yu Fengbin, "Feixingcao zhi caifang yu shibie 肺形草之採訪與識別 (The Identification of an Herb Used Empirically for Pulmonary Tuberculosis)," *Zhonghua yixue zazhi* 中華醫學雜誌 *The National Medical Journal of China* 13, no. 2 (April 1927): 93–98.

³¹⁰ Yu, "Identification of 'Lihtschin' Herb," 9.

³¹¹ Ibid.

³¹² Ibid.

for one or two months.³¹³ In the fall of 1925, Yu procures over 20 of these plants to cultivate. Unsure whether this is the Lihtschin herb, he waits to see the color of the flowers. His gardner tells him that if in the spring the plants yield yellow flowers, then they are probably 蒲公英 *pugongying*, a dandelion (Taraxacum), which is also called 黃花郎 *huanghua lang* (yellow flower gentleman).³¹⁴ Yu notes that the plants have sprouted thorns, and the edges of the leaves have indentations. Uncertain about whether the plants are poisonous, he pounds up the leaves into a juice and drinks it. It was, he says, of a mild flavor and no poisoning occurred.³¹⁵

The next step in Yu's investigation, the identification of the type and name of the plants, requires another kind of expertise and experience — academically trained experts. After verifying that the Lihtschin plant is not poisonous, in 1926 Yu turns to two agronomists, 唐松園 Tang Songyuan³¹⁶ and 馮明吳 Feng Mingwu, who test the plant and identify it as a kind of 薊 *ji* thistle. Then Yu consults a Qing dynasty, Qianlong edition of the *Bencao Gangmu* (Compendium of *Materia Medica*), a 1596 Ming dynasty compilation by Li Shizhen (1518-1593)³¹⁷ and finds out that there are two types of thistle (large and small) and that the flowers should be purplish red in color. Since the flowers of Yu's plants are yellow, he again returns to Changshu to seek plants with the correct color flowers.

After determining in consultation with experts that the Lihtschin herb is a kind of thistle, the final piece in the process of verification and identification of herbs as medicine is to trace the name, the etymology, and physical description of the plants using Chinese written and visual reference material. In his investigation, Yu offers a detailed explanation of the pronunciation of thistle ji (薊). It grows in the mountains, in thick, fat branches. It is called Yang baoji. Today it is called horse thistle. Yu provides the various names and physical descriptions of the plant appearing in sources going back to Tang and Song times, including the Bencao gangmu, local gazetteers, records of famous doctors, general dictionaries like Cihai and more specialized botanical dictionaries. Layers of accretion and detail help build a history of this herb known by in earlier times. The *Bencao gangmu* describe the plants as having hairy roots and flowers like a hair bun. It is variously called tiger ji or chicken ji. According to the Zheng Jiao gazetteer, the plant may or may not be poisonous to dogs. Northerners call it one thousand needle grass, which sprouts seedlings in the fourth month and the roots of which can be picked in the ninth month. Local doctors say that the herb is the local people's ginseng and is sometimes used to cheat people.³¹⁸ Thus, a rich philological and phonological examination of the herb sheds light on its previous life, manifold uses, and many names. It is telling that Yu chooses to make evident all his textual research. In this way, he harkens back to the model of case studies that Furth and Andrews discuss, in which the erudition and learning of the doctor is paramount.

Images are one last component in presenting a full understanding of the plant. The article

³¹³ Yu, "Lihtschin," 10.

³¹⁴ Ibid.

³¹⁵ Ibid.

³¹⁶ Tang Songyuan was a Jiangsu native educated at agronomy at Tokyo Imperial University and served as chair of the Central University School of Agriculture and the Shanghai Special Municipality Bureau of Social Affairs Agriculture. Jishi 股技士 Gu, "Nongjie Renminglu: Tang Zhicai Zi Songyuan Jiangsu Wujin Ren 農界人名錄:唐志才字松園,江蘇武進人 (Agricultural Personages Directory: Tang Zhicai Zi Songyuan, Jiang Suwu Jin Ren)," 1, No. 18 (1931): 42.," *Nongye Zhoubao* 農業週報 1, no. 18 (1931): 42.

³¹⁷ Georges Métailié, "The Bencao Gangmu of Li Shizhen: An Innovation in Natural History?," in *Innovation in Chinese Medicine*, ed. Elizabeth Hsu (Cambridge: Cambridge University Press, 2001), 221–61.

³¹⁸ Yu, "Lihtschin," 11-12.

provides two illustrates of big and small thistles³¹⁹ and two additional full pages of color illustrations of a three types of thistles drawn from a Tokyo agronomy research association.³²⁰ Yu also gives information from Japanese sources about the three additional thistles pictured: *Carduus crisps L.* 飛廉薊, *Cirsium japonicum Dc のあざみ* 野薊, and *Cirsium purpuratum maxim フジ*刀ザ三富士薊. Given that identification of the plant based on its physical characteristics has been so important — flower color, leaf shape, plant size — it is not surprising that Yu uses images to provide the reader with a visual representation of the plant. In the five-year span of the journal 1924-1928, these are the only color illustrations that appear.

Writing Chinese medicine, of acupuncture and herbs

The narratives of Cantlie and Yu are written in a highly engaging style that relays their direct experience with the needling and herbs to creates a sense of verisimilitude. The readers can follow along with both authors: what questions they have, what steps they took to learn and do more, see their frustrations and setbacks, especially for Yu. In this way, their writings exhibit many of the qualities that made early experimental scientific writing compelling. That these articles were published hundreds of years after Boyle's writing on the air pump suggests that some of the literary technologies of writing from 17th-century England and 20th-century China had similarities.

Moreover, one also gets a sense of the particular set of skills and erudition, learning and familiarity with contexts and texts that Yu brought to bear in his investigation of the Lihtschin herb. In this way his writing is reminiscent of first-persona narrative late-imperial case studies that Andrews argues were eventually replaced in the Republican era by case histories organized around disease illness, description of course treatment, and disease names.

At the same time, we also see Cantlie and Yu presenting two cases of Chinese medicine, an evaluation of evidence, a record of experience, and a promotion of certain ideals. In these instances, the case as a form privileged experience not text, especially for Cantlie, but less so for Yu. Because Yu referred so often to texts to make his case, we see the remnants of an older scholar-physician, literati notion of scholarship. This suggests that on some level, texts, textual knowledge and the canon, remained important for Yu in understanding this herb, which itself represents one facet of Chinese medicine.

IV. Conclusion

This chapter has examined two ways in which Western medical journals told stories about Chinese medicine. The very presence of these articles suggests that despite characterizations of the journals as against Chinese medicine, in fact this was a topic worthy of serious consideration. For Chinese doctors of Western medicine, their native medical traditions posed a puzzle that they had to, on some level, explain or reconcile themselves to. Given the long-established body of medical theories, methods of diagnosis, and forms of treatment that had served Chinese well in

³¹⁹ The source of these images is not clear. Yu says only that they come from records of famous plant images " 植物名實圖" Yu, "Lihtschin," 12.

³²⁰ Yu gives the name of the research association as *Riben Dongjing bowu xue yanjiu hui* 日本東京博物學研究會, Ibid., 12a and 12b.

some, if not many ways, how to explain its shortcomings in the face of Western medicine? Where did the continued value in Chinese medicine lie? And how to explain its many successes? How to reform it, and even take best practices from both Chinese and Western medicine?

Authors writing in English and Chinese, in both missionary and the native journal addressed these questions either directly or indirectly. In writing about Chinese medicine, authors adopted two different modes. One was to approach Chinese medicine as history, as a phenomena to be explained. Yu and Wang both consider Chinese medicine — its early successes and subsequent challenges. Where Yu puts Chinese medicine in the framework of comparative history, examining the West, Wang focuses more on the nature of Chinese medicine and its shortcomings as an art in an age of science. In this, Wang, and Yu, to a lesser extent, prefigured the investigations of historians of science of China who grappled with the "Needham question": why up until the 16th century had China been so far advanced in terms of the application of human ingenuity to practical problems, but fell behind and never developed a scientific or industrial revolution?

Yu does highlight the role of constantly seeking improvement, truth from facts, and producing and sharing medical knowledge as responsible for Western medicine's continual flourishing. Though he does not come out and say it explicitly here, from other writings I have looked at and in light of what is known about his activities and positions on this matter, particularly his involvement with the journal, it is a good bet to say that Yu considered the medical journal a key means to share medical knowledge and thus promote the flourishing of modern medicine in China.

In addition to history, another, and not unrelated approach, was to consider Chinese medicine as practice. In the case of Cantlie's acupuncture article, he considers this treatment as therapy. In Yu Fengbin's investigations of the Lihtschin herb, he considers the herb as a potential therapy as well. In these writings, the use of first-person narratives that conjure verisimilitude, and the thinking and mistakes of the author are qualities associated with the new type of writing that marked seventeenth-century England's experimental science as embodied by Robert Boyle. Yu also performs investigations that include textual references and empirical testing that are reminiscent of late-imperial methods of natural history. This will be discussed in greater detail in the next chapter of this dissertation.

Writing in an experimental or case study mode, Yu and Cantlie presented anecdotes from their personal experience as evidence for the value of Chinese medicine. Ultimately, that authors both missionary and native, in English and Chinese used history, experimental science, and case studies to explain Chinese medicine in these medical journals suggests that these were all valid ways of producing medical knowledge about Chinese medicine in this new form of medical knowledge production and circulation, the Western-style medical journal.

WHEN HERBS BECOME DRUGS: IDENTIFICATION AND EFFICACY IN SHANGHAI'S MEDICAL MARKET

I. Introduction

In 1923 and 1924, there were two people suffering from tuberculosis in an unnamed Shanghai hospital. Patient A, a woman, suffered months of coughing up blood, fever, and sweating. Only when a friend secretly cooked a kind of herbal folk medicine slowly in boiling water [秘密煎養一種單方中之草藥) and gave it to her every day did her fever subside. She stopped coughing up blood and eventually was able to eat food. After a month she recovered. Patient B, a man, was seriously coughing up blood and needed help moving around. He also recovered after taking the herb for a month [今先述吾於此草發生好奇心之緣由。癸亥甲子之間。上海某醫院病人中。有甲乙二人。先後患肺痨。甲為婦人。咳嗆,發熱,略血,盜汗。調治累月無起色。有友人秘密煎養一種單方中之草藥。每日飲服。 旋即熱退血止。咳嗆平順。漸思飲食。盜汗亦止。服至月餘。 健旺如常。某乙係男子。亦患肺病。略血大作。每翻身轉側。 必吐血數口。是以飲食動作。悉需人助。正在垂危之際。亦服此項草藥。逾月而痊。今努力任事。而未復發。].321

Such was the origin of one Western-trained doctor's investigation into a potential Chinese herbal treatment for tuberculosis in 1920s treaty-port Shanghai.

Organization of chapter

This chapter charts how a remote mountain herb to treat consumption became a trademarked drug to cure pulmonary tuberculosis in 1920s Republican Shanghai. I do this by tracing the shifting basis of authenticating procedures involved in this process. In late imperial times the authority of herbs stemmed from late-imperial poetry, local gazetteers, and oral lore. By the 1920s, however, this herb was described as an object of research, testing, and trademarks.

As described in chapter four, Yu Fengbin published his investigations of the herb in *The National Medical Journal of China* in 1927. He sought to understand the herb through classical Chinese scholarly and literary textual methods, overlaid with scientific procedures of taxonomy and identification. In this style of exploration, he is representative of embodied the transition from literati to professional medicine seen in medical institutions and print explored in the previous chapters of this dissertation.

This chapter is divided into three parts, focusing on place, early identification, and reports of efficacy. The first section looks at how the herb was described as coming from a particular place in a mountainous region south of Shanghai. This is contrasted to the clinic in which it was sold in Shanghai, established by a medical entrepreneur from that region. The second section examines how the herb was identified, what processes different actors undertook to locate and name the herb, and what processes they subjected it to. In this, the focus shifted from identification to efficacy. The last section looks at reports that indicate the herb was becoming increasingly

³²¹ 俞鳳賓 Yu Fengbin, "Feixingcao zhi caifang yu shibie 肺形草之採訪與識別" [The Identification of an Herb Used Empirically for Pulmonary Tuberculosis], *Zhonghua yixue zazhi* 中華醫學雜誌 *The National Medical Journal of China* 13, no. 2 (April 1927): 94.

popular, as allusions to trademark, testing, and fake medicines appear. The sources I draw on are of two types: medical journal writing and newspaper reports, primarily from *Shen bao*, the most widely-circulating Chinese-language newspaper of the early 20th century. A note on terminology: throughout this chapter I translate *cao* 草 as herb (literally meaning "grass") and *yao* 藥 as either medicine, or sometimes drug to highlight the the processed nature of the treatment when the sources seem to emphasize this quality.

At this time, when investigators of the herb could make no definitive claims for efficacious treatment, their assertions were based on two distinct types of authority. In the scholarly professional vein, as communicated in the preeminent journal of Western medicine, Yu employed a variety of epistemic practices — first-person anecdote, the assurances of professionals — to identify an herb that in some ways frustrated classification. In the popular press, however, references to the herb indicate that it was being understood and endorsed by state-sponsored public health institutions. Mentions of testing done by the Ministry of Health illustrate the rise of a kind of authentication apparatus that contrasts with the natural history methods utilized by Yu.

II: From Mountain Herb to City Drug

The earliest reports about the herb in the popular press emphasize that it was the product of a particular place, associated with a specific family. It is first mentioned in September 1925 in Shen bao. Referring to pulmonary tuberculosis, the article stated: "Chinese medicine has always used roasted tubers etc. which is said to kill insects, but it is rarely effective. Only a type of lungshaped herb, a special product of the Shao family in Wenzhou, Zhejiang province is extremely effective [唯有肺形草一種、係浙江溫州邵姓特產、治肺特著奇效].322 But, the article continues, "the area is isolated from transportation. In recent years, the herb is being sold in Shanghai and is said to have cured many who have long suffered spitting and coughing up blood of tuberculosis [聞患吐血咳嗽百日癆等治愈甚多].323 Moreover, the herb has a disinfecting element [殺菌素]. Chemical testing is currently being done at a hospital in Changsha to extract its essence [其化驗、以期提取精華], the results of which have not been published."324 The article ends by saying that "it is a shame this herb is a secret formula of the Shao family [邵姓秘 方], and planting is not extensive."325 At present, Doctor Shao Jingqing 邵靜卿醫生 has established a Tianji medical clinic [天濟醫室] at Shanghai's Jing'an Temple road specifically to sell this medicine to cure illness and distribute this preparation [專以此藥治病、並配劑出售云 1.326 The lung-shaped herb thus undergoes a specific kind of alchemy: starting as an herb cao 草 (literally "grass") that was a secret formula, and turned into a yao 藥 medicine, drug that was a ji 劑 chemical or pharmaceutical preparation.

In Shanghai, the sale of the herb was limited to the Tianji clinic. Within three years, Dr. Shao had opened at least three locations. The first clinic was located at the end of Jing'an Temple road,

^{322 &}quot;Zhiliao feibing zhi yaopin," 治療肺病之藥品 [Drugs for Treating Pulmonary Tuberculosis], *Shen bao*, September 27, 1925.

 $^{^{323}}$ Note the use of the term lao 癆 is often translated as consumption. It seems to be used interchangeably with feibing 肺病, literally "lung disease"

³²⁴ "Drugs for Treating Pulmonary Tuberculosis" *Shen bao*, September 27, 1925.

³²⁵ Ibid.

³²⁶ Ibid.

Lianji lane.³²⁷ An advertisement from December 1925 urges customers to take advantage of a four-week sale, one dose costing one *yuan* and each patient limited to purchasing five doses.³²⁸ It was said that demand has exceeded supply, and a special arrangement has been made to bring down the price of this medicine for four weeks to one yuan, with individuals limited to purchasing five doses.³²⁹ Within a few years, the clinic had expanded as a place to not only sell the herbal medicine, but a site where patients could also be examined. By April of 1928, the Tianji clinic had opened a main salesroom at another location, the intersection of Guangdong road and Shi road, new Xinpu lane.³³⁰ An article one month later emphasized that Shao "keeping in mind patients, especially established the clinic on Stone Road on the north corner Stone Road and Five Horse Road for the convenience of patients to seek medical advice" [藉便病者就診].³³¹

Shen bao reinforced the idea that the clinic solved the problem of physical access to the herb, as reports noted that the original ingredient, the lung-shaped herb, was not easy to find.³³² In addition, the humid climate of Shanghai likely posed a challenge for storing and processing of herbs.³³³ Moreover, the clinic also served as a specific address to which inquiries for the herb could be directed, as newspapers report that "letters arrive in a continuous stream from every province seeking to purchase (the medicine) [銷數激增各省信函來滬採購者].³³⁴"

The change in place, the physical location of the herb, from Yandang Mountains to the streets of Shanghai was a significant factor in its transformation to a medical product. Early reporting alluded to the particular regional origins of the herb, being from a specific mountain, and the secret formula known to a family for several generations. When the herb appeared as medicine in Shanghai, reports promoting it emphasized the convenience of the clinic. It was a place accessible to consumers that not only sold the herb, provided regular distribution according to a set price, and assured access to the herb, now which was now considered a medicine or drug. The clinic was also part of the larger public health infrastructure of the city, offering patient exams and immunizations.

A comparative case worth considering in the role of provenance and place of sale in the making of a medicine in the Republican era is the Anguo medical fair. Susan Jones argues that personal trust rather than legal contractual protections played a key role in the economy at Anguo, located in Hebei, central China. Shipping by rail became more important, especially during 1930s and 1940s, because these lines were protected to ensure food and military supplies for occupied cities. This led to the rise of new markets with access to rail services, which offered

³²⁷ Ibid

^{328 &}quot;Feixingcao jianjia si xingqi" 肺形草减價四星期 [Lung-Shaped Herb Reduced Price for Four Weeks]" *Shen bao*, December 14, 1925.

^{329 &}quot;Lung-Shaped Herb Reduced Price for Four Weeks," Shen bao, December 14, 1925.

^{330 &}quot;Feixingcao zhi faming zhe" 肺形草之發明者 [Inventor of the Lung-Shaped Herb], April 28, 1928.

^{331 &}quot;Feixingcao zhi fahang" 肺形草之發行 [Wholesale of Lung-Shaped Herb]," Shen bao, May 28, 1928.

^{332 &}quot;Yiyao xun" 醫藥訊 [Medical dispatch], Shen bao, June 26, 1928.

³³³ Cochran notes this was the case for herbs in North China, prompting Yue Daren to move his Daren Tang medicine plant in Shanghai north to Tianjin. It is unclear whether northern herbs especially might have wilted in the Shanghai humidity, whereas southern herbs like the lung-shaped herb from Wenzhou might have fared better. Sherman Cochran, *Chinese Medicine Men: Consumer Culture in China and Southeast Asia* (Cambridge, Mass: Harvard University Press, 2006), 28.

^{334 &}quot;Medical dispatch," Shen bao, June 26, 1928.

³³⁵ Susan Mann Jones, "Trade, Transport, and Taxes: The Decline of a National Medicine Fair in Republican China," in *Proceedings of the NEH Modern China Project*, 1978-80: Political Leadership and Social Change at the Local Level in China, from 1850 to the Present, ed. Tang Tsou, Select Papers from the Center for Far Eastern Studies, no. 4, 1979-80 (Chicago, Ill: University of Chicago, 1981), 112–42.

higher stakes and required traders to rely on professional banking and transportation services based more on contract and less on personal services. Nationalist government tax policies, standardized currency, and new railroads eroded the spatial and financial advantages enjoyed by Anguo bankers and its Chamber of Commerce leading to demise of this medicine market in favor of Tianjin and other locations. Jones writes that Zheng Hecheng, author of a 1932 report on the twice-yearly North China Qizhou, Anguo county medical market, "did not expect the Anguo market to survive the transition to modernity," because it was "a market created not by economic forces of supply and demand, but by 'superstition.' The same herb, produced in Suiyuan, did not become medicine until it was transported to Anguo and sold in sight of the Medicine God's temple." Jones, thus, points to the rise of rail and banking infrastructure in disrupting traditional sites of sale for medicine. The case of the lung-shaped herb, in moving from Yandang to Shanghai, shows the role that physical infrastructure in cities such as the Tianji clinic played in transforming a remote mountain herb into an accessible city drug.

III. Early Investigations

1927 was a year of herbal thinking for Yu: within the span of four months he published two Chinese-language articles on potential herbal treatments for tuberculosis in the Chinese-language section of *The National Medical Journal of China*.. The first, *Lizi jingcao zhi caifang yu shibie* "歷子頸草之採訪與識別" with the English title "The Identification of 'Lihtschin' Herb Used by Ancient Chinese for Treating Tuberculous Cervical Adenitis" was an investigation of a different herb discussed in a chapter four of this dissertation.³³⁷ The second article, on the lung-shaped herb, appeared two months later, in the same section of the journaland was reprinted in two other medical publications that same year.³³⁸ This article was written in Chinese with the given English title "The Identification of an Herb Used Empirically for Pulmonary Tuberculosis.³³⁹ *Feixing cao zhi caifang yu shibie* 肺形草之採訪與識別," which translates in English to "the search for and classification of a lung-shaped herb."³⁴⁰

In terms of structure and organization, the article is four-and-a-half pages long, with one black and white illustration of an herb Yu identified as the lung-shaped herb. The investigation he lays out in eight parts: 1) Feixing lao zhi danfang 肺形草之單方 medical prescription of the lung-shaped herb; 2) Feixingcao zhi mide 肺形草之覓得 the search and discovery of the lung-shaped herb; 3) xiangren zhi mingming 鄉人之命名 naming by village people; 4) xueming zhi jianding 學名之檢定 examination and certification of scientific name; 5) chandi xingtai yu

³³⁶ Jones, 132. Zheng argued therefore that the spread of modern education alone would remove rationale for an Anguo Fair. Moreover, herb markets in cities on rail lines, like Niuzhuang and Jinan, were beginning to draw customers. Hankou was becoming the main distribution center for southwestern markets. Manchurian herbs were going by sea direct to Shanghai and Canton. Anguo was 125 miles southwest of Beijing. The biggest medicine fairs in south China were at Zhangshu, Jiangxi Province

³³⁷ 俞鳳賓 Yu Fengbin, "Identification of 'Lihtschin' Herb.

³³⁸ This article was reprinted in at least two other medical publications that same year: 俞鳳賓 Yu Fengbin, "Feixingcao zhi caifang yu shibie (bing ying) (futu)" 肺形草之採訪與識別(丙寅)(附圖)(The Identification of an Herb Used Empirically for Pulmonary Tuberculosis)," *Guangji Yikan* 廣濟醫刊 4, no. 11 (1927): 18–24; "Feixingcao Zhi Caifang Yu Shibie" 肺形草之採訪與識別 (The Identification of an Herb Used Empirically for Pulmonary Tuberculosis)," *Zhongxi yixue bao* 中西醫學報 9, no. 3 (1927): 1–5.

³³⁹ Yu, Identification of an Herb Used Empirically for Pulmonary Tuberculosis," 93–98.

³⁴⁰ Ibid.

huaqi 產地形態與花期 place of production, shape (morphology) and flowering season; 6) tongwuyiming zhi shencha 同物異名之審查 examination of same plant with different names; 7) Yandang shan zhi zhi suo zai gazetteers 雁蕩山志之所載 what is recorded in Yandang Mountain; 8) fenji ji fufa 分劑及服法 dosage and usage. To the left of the first line there is a black and white illustration of the jinxian lao golden thread herb 金線草, an herb that Yu identifies later as the same as the lung-shaped herb.

The article is bookended with a paragraph each in which Yu makes clear his motivations, characterizing his endeavors as meeting an ethical need to investigate and share research into Chinese herbal medicine.

Investigation

preface

Yu begins by making a general statement about the importance of making knowledge about herbal medicine widely known. "Those herbs and trees in the world that are investigated and proved to be effective in treating and curing illness," he writes, "should be made known public (天生草木。苟有治病之效能。已經攷查有據。即宜公佈。)This allows scholars to continue their research and if verified (繼續研究倘能證明) then patients will have the opportunity to use them and the majority of the citizens can enjoy their benefits (可享其利益)."³⁴²

Next, Yu directly contrasts the openness of other countries that share knowledge about medical prescriptions with the secretiveness that prevails in China. "Therefore, recent civilized countries have made medicine public, stopping secret prescriptions and getting rid of medicines produced from secret recipes. (是以近世文明各國。醫藥公開。戒除祕方。掃蕩秘製藥品。) The harm caused by seeking to gain profit is eliminated, and patients can also avoid being hindered in receiving treatment and are able to get good prescription and effective medicines. This is because humanitarian principles are strong (there)."(居奇射利之弊遂蠲除。而病者亦可免受節制。收良方靈藥之效。蓋以人道主義為重也。)343 Moreover, he acknowledges the importance of laws that support discovery and innovation in these areas, writing, "With regard to new realizations and discoveries, they all are entitled to the right of having the patents as a reward. The laws in that regard are perfect."(至於心得發明。則有專利之權以作酬報。法至善熱也。)344

The situation in China is not as open. Yu writes, "On the contrary, looking at our own country, even though there are countless home remedies and effective preparations (單方靈劑), they are often kept secret and not made known to the outside. This eventually leads to their disappearance from the the world, and society cannot enjoy their benefits."³⁴⁵ With regard to the lung-shaped herb that has been used to treat pulmonary tuberculosis, Yu says that it has become popular for some time but the real truth about it has not yet been transmitted (吾於治療肺癆之

³⁴¹ Yu, "Identification of an Herb Used Empirically," 93.

³⁴² Ibid.

³⁴³ Ibid.

³⁴⁴ Ibid., 93-94.

³⁴⁵ Ibid., 94.

肺形草。因嘗鬨動一時。未傳真諦.) 346

Yu concludes his introduction by arguing that even though one cannot definitely conclude that the herb is effective, one can also not deny that it is worthy of further study and research. He casts himself as performing a labor to benefit those who might want to investigate the herb in the future: "If I fear the labor of holding a writing brush and set aside the journey of this investigation and do not describe it, then those who come to the scene later will not have to spend time and effort to seek out the information again." 347

Some characteristics of Yu's introduction are worth noting. First, he does not explicitly single out "Western medicine" (xiyi 西醫) and "Chinese medicine" (zhongyi 中醫) and position them in mutual opposition. Rather, he uses the term "civilized countries" (wenming geguo 文明 各國) whose medicine and drugs are public (醫藥公開) in contrast to "our country" (wuguo 吾國), whose medical prescriptions and preparations are secret (mi 秘). At a time when the opposition between Western and Chinese medicine was often described in binary terms, Yu's discussion here suggests that he does not see such a dichotomy. Instead, Yu frames the problem more explicitly as the respective natures of different medicines (public or secret) and the consequences that follow from those orientations — benefit to the world or disappearance from it.

Searching for a sample

Yu's account of his search bears out this characterization of secrecy surrounding Chinese herbs. To begin, the herb is not what it is named. The next section of the starts with: "The three characters lung shape herb are not its original name. That is only what recent people call it. For the search and investigation of its real name, I have had some measure of success which is recorded as follows." [肺形草三字。非原名。乃近人所喚之名稱。於真名之查攷。余稍有所得記之於後。] 348

Identifying the herb of this medicine was a challenge, as the medicine was actually one of several herbs mixed together. Yu says that several people pooled money to try and buy the prescription, but without any success. The names of the people or the place from which they attempted to procure the herb are not given. It is likely that it was Shao Jingjing's Tianji clinic, because that was reported as the only place in Shanghai to sell the herb. In any case, the people (Yu never says who) did manage to learn that the herb in the prescription was called "lungshaped herb." But the real name was never divulged. The task of identification was rendered nearly impossible, he writes, because those who bought the herb only got cut-up roots, leaves and flowers [有三四人願醵貲數千元。議買其方。終亦未諧。但悉其方中之草。喚作肺形草。而真實名稱。則未宣洩。買其草者。僅得剪碎之根葉花朵。而鑑別殊艱焉]³⁴⁹

How to identify an herb without a sample or a name? That the herb eventually made its way into Yu's hands he makes clear was due to an element of serendipity as well as the interest and efforts of others. Several years later, in the winter of 1926, a person who had successfully used the lung-shaped herb came to Yu's lab for another reason. This person saw the picture of a lung taken with Yu's x-ray machine and told Yu a story about the effectiveness of the herbal medicine.

³⁴⁶ Ibid.

³⁴⁷ Yu, "Identification of an Herb Used Empirically," 94.

³⁴⁸ Ibid.

³⁴⁹ Ibid.

Yu showed him a sample of another herb draft article on a potential tuberculosis cure (the Lihtschin herb mentioned earlier). Yu expressed regret at not being able to get a sample of the lung-shaped herb. This person, greatly moved by Yu's desire to do this research, Yu writes, volunteered to find a sample for Yu and came back with it after two months. Yu bought it, but says that he still did not know the true name of this herb. Fortunately, it so happened that a friend from the Yandang Mountains showed him a mountain herb that looked like the lung-shaped herb. Thus, Yu concludes, he knows the provenance of that the plant: it is from Zhejiang province, Wenzhou city, Qingtian county, Yueqing county-level city, Yandang Mountains [浙江溫州青田樂青雁蕩山].³⁵⁰

Looking for a folk name³⁵¹

Not only did Yu get the actual plant, but he was given a name as well. His friend asked the country people of Wenzhou about it, and they said it was called the *ba zi cao* "eight character herb" 八字草 or *ren zi cao* "person character herb" (人字草) because the leaves of the herb resemble the shapes of the characters for the number eight (*ba* 八) and person (*ren* 人). Next Yu turned to a reference work to look for the plant under the name of person-shaped herb. "The Encyclopedia of Botany (植物大學辭典) records that *ren zi cao* belongs to the tiger ear family (虎耳科). Tiger ear herbs have the generic name (屬名) of Saxifraga Cortussefolia. Its shape is like the character "big" (*da* 大). The leaf lacks deep cuts and has fine hairs (葉之缺刻深。有毛茸), blossoms like character "person" *ren* (開花如人字), and it extends to the shape of a spike (like the shape of rice 穗)."³⁵²

Scientific name

Yu then brought the lung-shaped herb to his expert friends for help. Feng Mingwu 馮明吳, an agronomist who Yu had consulted in the case of another herb to treat tuberculosis appears again. This time Wu tells Yu that this plant is in fact not what agronomists call "person character grass," because it is actually egg shaped and does not have leaf cuts. Yu continues his search for the scientific name of the plant, and sends samples to Wang Shaoyun 王紹雲, an agronomist who Yu notes is educated in Japan at Tokyo University. After exchanging letters and discussing with Hu Changchi 胡昌熾, they tell Yu that this plant's academic scholarly name (草之學名) is not person-shaped plant (人字草), but is a golden thread herb (金線草) in Liao Ke (蓼科), the Latin name of which is: *Polygonum Virginianum L. Synonym Polygonum filiform, Th.* or said to be 牛膝 Niu Xi,菟絲子 Tu Si Zi. Those are different names for the same thing (synonyms) for this herb (同物異名), which Yu promises more on later.³⁵³

Location, shape, season

³⁵⁰ The original texts is: 浙江溫州青田樂青 but *le qing* 樂青 likely refers to 樂清 (last character, same pronunciation but different character). Yu, "Identification of an Herb Used Empirically," 95.

³⁵¹ Ibid.

³⁵² Ibid.

³⁵³ Ibid.

Whereas at the beginning of his investigations, Yu had no herb and no name, at this point he can provide some coordinates of identification. The location of its production (產地) is: in mountainous terrain, and it is a *su get cao ben* persistent root herbs 宿根草本. Its shape is stem height is 3 *chi*. The leaf is a reversed egg shape, sharp in the front, and shaped like character *ba* eight / *ba*, leaves are arranged next to each other shaped like sword envelope. Its blooming season: In the summer, slim and long flower stem extended from the stem, flowers are few and deep red. Below the flower are four pieces of calyxes, five pieces of stamen, long spike-like inflorescence, the *hua zhou* floral axis 花軸 is red, flowers are few.³⁵⁴

Investigation of different names for the same plant

Yu then goes on to elaborate the other names of the plant appearing in various plant-related texts and reference works. He finds two major synonyms for the herb. The first is a "rabbit thread" which appears in Li Shizhen's Ming-dynasty *Bencao gangmu Systematic Materia Medica* 本草綱目, as a synonym under the entry for *tusi zi* (菟絲子). Consulting diagrams that appeared in the Qing dynasty edition of the *Bencao gangmu* he sees similarities to this herb. Yu persisted in his search, taking it to the street and going to a shop to purchase the rabbit thread herb *tusi zi* (菟絲子) but only saw the small and fine seeds. As far as the leaves and branches go, they were not available in the shop [余往藥肆中購菟絲子。祇見小之種子。至於枝葉。則肆中所不備也]. 355 A second synonym is given by some unnamed Japanese scholars as take *niu xi* "ox knee" 牛膝. Consulting the *bencao gangmu* diagram again, he sees some similarities to his herb. A botany encyclopedia states that niu xi 牛膝 belongs to the amaranth family (*xian ke* 莧科) with its scientific name being Achyranthes bidentate. 356

Next, Yu turns to local gazetteers from Yandang Mountains for help. He finds mention of the golden thread herb in Yandang gazetteer (雁蕩 志) a four-volume, Jiajing-era (1522-1566) Ming dynasty, sixteenth-century gazetteer which was later published during the Wan Li emperor's time (1573-1619). In them, the golden thread herb *jinxing cao* was recorded with another name *xieke cao* "crab shell herb" (蟹殼草). Its leaves are round like the shell of crab. It grows wildly and has red threads between the spacings of lengths over a third of a meter. It may grow on the rocks or by the sides of wells. It has a cooling nature and can lower fevers and can be used to treat flare ups and inflammation sores [性寒涼。治湯火瘡用].³⁵⁷ The government publication of Wenzhou (溫州府志) also mentioned golden thread herb. Its description is the same as that from Yan Mountains (雁山, short for Yandang Mountains). However, this herb is missing in the official publications from the Qing Tian county (青田縣志). Yu concludes that people had known about the herb since the Jiajing era (mid-sixteenth century), and used it as topical medicine (敷藥) but had yet to know about its ability in treating lung illness. In the chapter "Tu Si Zi (菟絲子)" of the book, Li Shizhen's *Bencao gangmu* does not clearly state that use either.³⁵⁸

³⁵⁴ Yu, "Identification of an Herb Used Empirically," 95-96.

³⁵⁵ Ibid., 96.

³⁵⁶ Ibid., 96-97.

³⁵⁷ Ibid., 97.

³⁵⁸ Ibid.

Dosage and Usage

Treating tuberculosis with the golden thread herb, Yu writes, was originally a private prescription and therefore was not recorded in any of the bencao. Nonetheless, Yu continues to give some instructions: An adult can take the four herb stems. Yu clarifies: "Using Chinese medical measurements, that is between three and half to four units of Qian (錢)."359 It should be cooked in the water and drunk. According to patients who have received treatment, it is best to take the medicine in a persistent manner. It is said about herbal medicine for tuberculosis that there are three or four more ingredients (that can be taken). If one can use lung-shaped herb as the main ingredient and use other medicinal herbs as supplementary ingredients, and cook them together in the water, the effectiveness may be even greater. In the practice of Chinese medicinal prescription, it always has ways of using the combination of main ingredient and supplementary ingredients, just like having the principle of balancing used in the equations of mathematics. [X]聞治肺病之藥草。尚有三四種。苟能以肺形草為主要物。以其餘作輔助品。共同煎服。則 效驗較大。中國藥方。向有君臣佐使之配合。如算學中之方程式] Whether there are other herbs that can be used as supplementary ingredients, Yu writes, that he is still in the process of gathering and collecting and perhaps that he can published on this at a later date. Here, then, Yu offers an explanation and even tacit support for Shao adding additional herbs to the original one to make the lung-shaped herb medicine.³⁶⁰

Yu's conclusions

How then does Yu understand his attempts at investigating this herb? In the second to last paragraph of his article he writes: "In my attempt to treat tuberculosis, it is best to adapt the scientific methods, and to avoid just trusting folk prescriptions (literally "single" prescriptions) [吾人治療肺病。且用科學方法。不可偏信單方.] At the present with regard to this herb, it is just being recognized as worthy of further research [今於此草。不過認為有研究之價值]."³⁶¹ He notes that with further experiments, the lung-shaped herb may become one of the treatments for tuberculosis [將來實驗之列。逐漸增多。或可作為治療肺病之一助?] "Today, those who want to try to take the herb cannot give up the scientific methods and practices and simply depend on single prescriptions [不可拋棄科學方法。而專恃單方]"³⁶²

Yu ends this section by emphasizing the importance of lifestyle methods — sun exposure, fresh air, ample nutrients, and sufficient rest — for treating tuberculosis which he says are outlined in his Commercial Press book *Recovery Methods for Tuberculosis*. He adds that methods of diagnosis using X-ray and microscope should not be ignored. And appropriate injections and medicines should be taken. [尚有愛克斯光線、顯微鏡、聞診筒之診斷。正當注射劑及適宜藥料之應用。均屬不可忽略。]³⁶³ The herbs he describes are still being investigated. Their places of origin, identification, and nomenclature have been studied for some

³⁵⁹ Yu, "Identification of an Herb Used Empirically," 97.

³⁶⁰ Ibid.

³⁶¹ Ibid.

³⁶² Ibid.

³⁶³ Ibid., 98.

time. What has been learned is recorded to prevent it being neglected and forgotten [今予所述之草藥。尚在考察時期。其場地、識別、與名詞三端。經過一度之研究。學有所獲。紀之於此。以免遺忘耳。]³⁶⁴

The article concludes: "Lung-shaped herb grows in Zhejiang, Wenzhou, and Yandang Mountains. Local country people call it eight character herb *ba zi cao* or person character herb *ren zi can* (八字草 or 人字草). Its scientific name is golden thread herb *jin xian can* (金線草) Polygonum Virginianum L. Synonym Polygonum filiform. The three characters golden thread herb *jin xian cao* (金線草) are seen in Yandang Mountain gazetteer edited by Zhu Jian during the era of Jia Jing. Recently, some people used this medicine (藥) to treat lung (illness), three and half to four *qian* (錢) every day (Chinese Medicinal Measurement), cooked in the water and drink it. Its characteristics has yet to be studied and determined.

And finally, if one were not clear about the models of scientific writing that Yu is looking to, his very last sentence makes clear he is looking West: "To follow the example of European and American articles, a summary for this piece is given as an ending. [今仿歐美論文之體例。述本篇之提要。以作結束]"365

Conclusions regarding sample and name investigation

In its emphasis on different names, weighing of diverse types of evidence, and prominent first-person narrative that displays the erudition and judgment of the author, this article is clearly indebted to the conventions of late imperial Chinese natural history. This genre is represented most clearly by the Ming naturalist Li Shizhen (1518-1593), whose 1596 *Bencao gangmu* (*Systematic Materia Medica*) was the first work in China to combine natural history and medicinal text. As Carla Nappi explains, Li Shizhen represented a new type of undertaking, negotiating different types of evidence (literary, medical, anecdotal) and bringing the epistemic practices of commentary to bear on objects in the natural world (e.g., dragon bones, plants, insects) whose constant change thwarted classification. Such investigations took place against the backdrop of a flourishing late Ming print market in which a wider variety of texts were available to a larger number of readers than ever before. This context encouraged the melding of "the connoisseur's sensibility, the scholar's judgment and broad learning, and the collector's encyclopedic sampling of an expanding printed world with a doctor's concern for harmonizing cosmic and corporeal change." 367

Yu, too, embodied a synthesis of these myriad sensibilities. Just to take the example of naming, it is clear how this text draws on late-imperial natural history writing as a model genre. It may seem that Yu placed an inordinate amount of attention on getting the correct name of this plant. Proper naming was, as Nappi reminds us, was a main goal of any naturalist. In contrast to drug formularies that provided recipes, *bencao* texts included background information on medicinal drugs, including categorization of substances according to flavor, toxicity, appearance, seasonality. *Bencao* texts also included the textual and natural history of drugs, which could

³⁶⁴ Ibid.

³⁶⁵ Yu, "Identification of an Herb Used Empirically," 98.

³⁶⁶ Carla Nappi, *The Monkey and the Inkpot: Natural History and Its Transformations in Early Modern China* (Cambridge, Mass: Harvard University Press, 2009), 6.

³⁶⁷ Ibid..

include lists of alternate or vernacular names.³⁶⁸ In all these respects, Yu's investigation of the herb reflects these natural history practices.

In other ways, however, Yu also illustrates the rise of different intellectual and epistemic imperatives. One of the differences between Li Shizhen's 16th-century Ming China and Yu's 1920s world was that Yu was writing at a time when the appearance of Western medicine — its theories, ways of disseminating information, and treatments — had challenged Chinese medicine as the only way of theorizing, diagnosing, and treating illness. The encounter with Western medicine starting in the mid-19th century prompted a rethinking of ways of being doctors, circulating knowledge, and types of treatments. With regard to treatments specifically, one of the critiques leveled against Chinese medicine was that treatments did not work or that knowledge about treatments was not widely available. Some reformers of Chinese medicine argued for the reduction of Chinese medicine to a potential repository of raw materials for new Western-style drugs. In his promotion of the need to research this herb, Yu seems to fall into line with this viewpoint.

Yu's cooperation with other experts suggests the rise of new areas of specialized knowledge, a valorization of publicly shared knowledge, and a critique of private prescriptions. Yu's investigation, the identification of the type and name of the plants, required another kind of expertise and experience — academically-trained experts. Part of Yu's expert status is access to locally-situated people and familiarity with rich textual sources, which allows him to shed light on the esoteric knowledge that they contain. Committed to publicizing his findings, he criticizes locals who possess knowledge about the herb and prevent others from learning about it.

Part IV. Media and Medical Infrastructure

Herbal medicine in a time of state building

In the year following Yu's article, popular newspaper reports in *Shen bao* appeared that put Dr. Shao Jingqing, the purveyor of the drug, at the center of the story. Headlines such as "Inventor of Lung-shaped Herb," "Distribution office of Lung-shaped Herb," "Solid sales of Lung-shaped Herb," "Tianji clinic epidemic Prevention News" illustrate the range of news on the clinic that appeared in 1928, when reporting about the herb was at its peak. In describing this medical entrepreneur and the official institutions that he went to for certification and testing, one gets the sense that the herb, its creator, and the clinic existed within a larger context of public health infrastructure that was emerging in the first year of the Nationalist government's consolidated regime. This world was quite different from that depicted in Yu's 1927 article, a scholarly doctor making his way through texts and plant samples using late-imperial gazetteers and botanical encyclopedias as references.

From free herb to effective medicine

One aspect the articles emphasized was that the lung-shaped herb medicine was a product of Shao's individual labor. Shao made the medicine that patients purchased at the store easier to access in three respects. First, Shao offered and herb that the lay person would probably have

³⁶⁸ Ibid 28

³⁶⁹ Bridie Andrews, "The Republic of China," in *Chinese Medicine and Healing: An Illustrated History*, ed. T. J. Hinrichs and Linda L. Barnes (Cambridge, Mass: Belknap Press of Harvard University Press, 2013), 230-231.

difficulty identifying from other herbs and plants. Second, in terms of physical access, consumers would not have to make the two-hundred mile trek south to Yandang Mountains to get the herb themselves. And third, Shao was not selling a plant for people to take home and prepare themselves, but a purportedly more effective chemical preparation that he developed.

An early article clearly describes this story of individual innovation. "The inventor of the lung-shaped herb" (肺形草之發明者), published in 1928, puts the transformation of this herb at the very beginning, "Often seen in recent newspaper coverage, the medical community on treatments for pulmonary tuberculosis (literally "lung illness" 肺病) have already done research and obtained one kind of natural plant [天然植物] that is seen as a miracle medicine [聖藥]. This medicine was developed by Shao Jingqing. Its original name is eight-character herb or personshaped herb."370 The article then situates Shao's activities within the context of its history as a locally-known medicine: "Passed down from previous generations, it was known only that this herb was effective for treating lung ailments. No fee was imposed on patients. [並不取值). This continued for three of four generations until Shao, who studied medicine [歧黃], was surprised by the special effectiveness of the herb [驚此草之奇效]. He undertook careful study, researched it, and tried out various formulations [君臣佐使] to make a new compound, which is today's lung-shaped herb. Its efficacy is even more potent. He has come brought the medicine to Shanghai and cured many people."371 Here, then, is a picture of an herb, once well-known locally and available at no cost to patients, now transformed into an even more effective medicine thanks to the hard work, study, and development of an individual medical practitioner, for sale to the residents of Shanghai.

If the herb was available for free to local people, what besides access to the herb might warrant the cost to city customers? What exactly did Shen do to the herb to transform it from a secret family prescription to medicine in Shanghai? It is unclear to which processes Shao subjected the herb, as newspaper reporting lacked details. A 1927 report says that Shao planned to use chemistry methods to distill the herb's essence and create a liquid medicine for the benefit of consumers. Whether or not Shao succeeded is unclear, as no later reports mention the medicine being available in liquid form. In 1928 Shao is described as "combining five or six other precious herbs to manufacture this herb" [該草係選擇珍貴草藥五六種配合製成] the original material of which is hard to find [惟原料採覓不易]. Note that the report uses the word cao 草 herb both for the individual five or six precious herbs and for the herbal medicine, and not yao 藥 drug or medicine that is produced from this mix.

Cochran, in his study Chinese medical entrepreneurs, notes that whereas traditional Chinese medicine shops sold raw herbs that customers had to prepare at home, one distinguishing characteristic of the Daren Tang and Tongren Tang medicine shops was that they sold more convenient ready-to-use Chinese medicines (*cheng yao*) or in the form of pills (*da wan*).³⁷⁴ Since reporting on the herb did not mention pills nor ready-to-use medicines, and given that Yu in 1927 gives directions for preparing the herb at home, it is likely that the lung-shaped herb medicine was simply a mixture of herbs for the consumer to prepare at home.

³⁷⁰ "Feixingcao zhi faming zhe" 肺形草之發明者 [Inventor of the Lung-Shaped Herb], *Shen bao* April 28, 1928.

³⁷¹ Ibid.

^{372 &}quot;Yiyao xun" 醫藥訊 [Medical dispatch], Shen bao, August 24, 1927.

^{373 &}quot;Yiyao xun" 醫藥訊 [Medical dispatch], Shen bao, June 26, 1928.

³⁷⁴ Cochran, Chinese Medicine Men, 32.

Partnerships: medical practitioners, doctors, and scholarly physicians

Beyond the lore of local recipes, newspaper reports emphasized that Shao was working with other medical professionals in the sale of this herbal medicine. One such partner was Dr. Jiang Shaozhu 蔣紹朱醫師, who is first mentioned in June 1928 as permanently stationed at the clinic for the convenience of patients.³⁷⁵ This was not a partnership of two people with identical medical status, though. The earliest articles from 1925 describe Shao variously as "doctor" 醫生 or "(of the) Shao family" 邵氏 but starting in 1928 he is described more consistently as 醫士, an herb doctor, doctor's assistant, or a medical practitioner with secondary medical-training or a person whose status derives from several generations. Jiang Shaozhu, in contrast, is clearly identified as an *yishi* 醫師, a qualified doctor or physician who has received actual training.³⁷⁶

Shao did not partner exclusively with professional physicians; scholarly physicians of classical medicine appear as well. In July of that same year *Shen bao* reports that there are a number of wholesellers who came to Shanghai from different cities. Among them was Dr. Zhu Mingchu, described as a famous third-generation classical physician [富陽名醫朱明初醫師、係 三世儒醫] from Fuyang county in Hangzhou, a city 100 miles southeast of Shanghai and well known as a center of Chinese medicine. Zhu, it is reported, was a graduate of Shanghai's Nanyang University, sent a letter to Shao's Tianji clinic in Shanghai to purchase the herb and was cured of tuberculosis. Note the use of the term medical doctor 醫師 not a medical practitioner to describe Zhu. He subsequently opened a clinic in Hangzhou to sell the herb.

This sensitivity to the different status of doctors compared to medical practitioners was heightened during the 1920s. The first laws to examine and register native and Western-style doctors were passed in 1922. In 1929 the Ministry of Health issued provisional regulations on doctors that disqualified those who did not graduate from medical schools, although at the end of that year allowances were for doctors to practice if they had registered with the bureau or if they had applied for or received a license from the Ministry of Health.³⁷⁹ Newspaper reports never mention Shao attending medical school. In their positive coverage of Tianji clinic and Shao, it would seem that referring to his employing state-recognized medical doctors or classically-trained doctors who had graduated from university was a way to bolster the authority and appeal of Shao and his medicine.

Clinic as sites for service in state public health

Reports also suggests that the Tianji clinic was part of a larger public health infrastructure emerging in the first year of the consolidated Republican government regime. It started as a place of sale where those suffering from pulmonary tuberculosis could purchase this particular herb, but quickly became a place where patients could be examined for other diseases and receive other public health services.

^{375 &}quot;Medical dispatch," Shen bao, June 26, 1928.

³⁷⁶ Yishi 醫士 "medical practitioner" and yishi 醫師 "medical doctor" are pronounced almost the same, but the second character is a falling fourth tone in the case of the former and a flat, first tone for the latter.

^{377 &}quot;Feixingcao zhi changxiao" 肺形草之暢銷 [Lung-Shaped Herb Sells Well], Shen bao, July 4, 1928.

³⁷⁸ Ibid.

³⁷⁹ For more details on registration of medical doctors, see Xu, 137-149.

Scholars have noted how in Shanghai, prior to 1927, health matters focusing on curative measures were largely left in the hands of private non-governmental institutions and individuals. Shanghai's health and sanitation problems were significant, as the city was prone to overcrowding and lacked adequate urban infrastructure. The death rate was estimated at 25 per 1,000 people. The Wusong-Shanghai Public Health Bureau, established in 1926, was mostly concerned with improving the physical appearance of the city through measures lik street sweeping and night-soil removal, and also established clinics offering free smallpox vaccinations. After Chiang Kai-shek consolidated the Nationalist regime in April of 1927, the Shanghai Public Health Bureau took over health matters for the city. Rather than building full-scale hospitals, the Public Health Bureau opened four health stations that carried out tasks ranging from collecting vital statistics, supervising environmental sanitation, inspecting food and water, administering epidemic vaccinations, and isolating and treating patients suffering from communicable diseases. Sas

While an earlier generation of scholarship looked at the Nanjing decade (1927-38) as a failure of state building, setting the stage for the Nationalist regime's collapse, more recent work has taken a more nuanced look at Nationalists' attempts at financial, social, educational, and scientific reform. In the field of medicine, Yip Ka-che has examined the emergence, organization, and consequences of modern health services in the Nanjing decade. He argues that despite severe constraints of political instability, lack of financial support, and rural poverty, the government was able to establish central health institutions that were relatively sufficient by 1937.³⁸⁴ The presence of state-sponsored public health institutions is echoed by Chieko Nakajima, showing the priority Shanghai administrators put on state-sponsored health stations, traveling clinics, and mobile teams providing medical services such as vaccination campaigns, disposal of the dead, and food safety measures to prevent communicable diseases and promote a sanitary environment to the residents of Shanghai.³⁸⁵

Reporting on the Tianji clinic shows that it too played a part in offering public services like immunizations. In April of 1928 it was noted that Dr. Shao would be at the clinic everyday from three to six p.m. and would also employ Dr. Jiang Shaosong 蔣紹宋醫師 who had experience treating pulmonary tuberculosis as well as gonnhorea and external diseases of every kind. There are also indications that the clinic was a site of public health services for the neighborhood residents at large. In August of that same year, owing to the "summer epidemic," dense population, and lack of immunization hospitals, neighborhood residents and friends of the store could go to Tianji for free immunizations everyday from three to six p.m.. This program was overseen by Dr. Jiang, who was identified as former head of the Shanghai hospital [上海醫院內料主任蔣紹宋醫師]. 1887 It is likely that the summer of 1928 the epidemic that is referred to was cholera, as the Public Health Bureau had designated May through September as cholera

³⁸⁰ Nakajima, Body, Society, and Nation, 95.

³⁸¹ Nakajima, *Body*, *Society*, and *Nation*, 94.

Nakajima, Body, Society, and Nation, 88-93. Xu, Chinese Professionals, 140.

³⁸³ Nakajima, *Body*, *Society*, and Nation, 96.

³⁸⁴ Ka-che Yip, *Health and National Reconstruction in Nationalist China: The Development of Modern Health Services*, 1928-1937 (Ann Arbor, Mich.: Association for Asian Studies, 1995).

³⁸⁵ Nakajima, *Body*, *Society*, and Nation.

^{386 &}quot;Yiyao xun"" 醫藥訊 [Medical dispatch]," Shen bao, April 29, 1928.

³⁸⁷ "Tianji Yishi Zhi Fangyi Xiaoxi 天濟醫室之防疫消息 [Tianji Clinic Epidemic Prevention News], *Shen bao*, August 3, 1928.

prevention period.³⁸⁸ The efficacy of the cholera vaccination was not proven, but this did not stop the Public Health Bureau from setting up injection booths on the street during the spring and summer to inoculate residents.³⁸⁹

Herbs Undergoing Testing

Writing about the herb in the popular press often addressed the question of efficacy by citing the tests it had undergone. This testing had different aims: to extract its essence, verify that it is not harmful, or to confirm that it is efficacious. As early as autumn of 1925 newspaper reports mentioned that herb was undergoing chemical experiments in order to extract its essences. This was reported in *Shen Bao*, and the testing took place at a hospital in Changsha, Hunan in order to extract its essences, but the results not yet published. (現長沙湘雅醫院正將其化驗、以期提取精華、結果尚未發表).³⁹⁰

In 1928, reports and advertisements in *Shen bao* describe the the herb having going through different types of testing and registration that attest to its benefits. One advertisement in March of that year emphasized that the herb had gone through Shanghai municipal government registration and chemical testing to verify that it is not poisonous. A May 1928 report said that the herb had passed the Agricultural Business Bureau chemical certification verifying that it could directly kill germs. 曾經農商部化驗證明、有直接殺滅癆菌之妙.³⁹¹ By October of 1928, it was noted that this herb is pure, and suitable for making national medical products [蓋此草純係國產藥品所配合], having been affirmed by the Shanghai Ministry of Health "using chemical experiments that fulfilled scientific principles" that the herb was indeed efficacious. [曾經上海市衛生局化驗、適合科學原則、確有實地治效.]³⁹²

Throughout the 1920s and 1930s, the herb underwent various tests and emerged with different certifications, illustrating an increasingly developed system of official verification. Government institutions responsible for testing the herb ranged from the national-level Agricultural Business Bureau to the municipal-level Shanghai Ministry of Health, and possibly individual Shanghai hospitals. Established in 1913 by combining the 工商部 and 農林部, the ambit of the Agricultural Business Bureau was to oversee agricultural products, water, mountain wood, and animal husbandry. On the municipal level, it is likely that one of the bodies involved in such testing was a precursor to the Central Hygienic Laboratory in Shanghai, which was established in March of 1929. This laboratory exercised control over drugs and patent medicines, which included performing chemical and pharmaceutical analysis in addition to bacteriological and pathological examinations and laboratory work. ³⁹³ This was part of a greater effort on the part of the Nationalist government to increase state control over the technical side of health matters in the late 1920s and early 1930s. In May of 1931, the Nationalist government established the Central Field Health Station in Nanjing. One of its departments was that of chemistry and pharmacology, whose duties included research and pharmaceuticals in Chinese drugs. ³⁹⁴

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³⁸⁸ Nakajima, *Body*, *Society*, and Nation, 107.

These booths along with other measures resulted in 48,906 vaccinations in 1927-28. Yip, 37.

³⁹⁰ "Zhiliao feibing zhi yaopin" 治療肺病之藥品 (Drugs for Treating Pulmonary Tuberculosis, *Shen bao*, September 27, 1925.

³⁹¹ "Wholesale of Lung-Shaped Herb" Shen bao, May 28, 1928.

^{392 &}quot;Yiyao xun," 醫藥訊 [Medical dispatch], Shen bao, October 20, 1928.

³⁹³ Yip, 50.

³⁹⁴ Ibid.

It should be noted that the idea of subjecting Chinese herbs to laboratory testing was not initially always accepted by the purveyors of herbs. Sherman Cochran shares the story of Yue Duzhou, a member of the family who owned the Beijing Tongren Tang Chinese medicine shop. Yue Duzhou, who had studied business management in France during the early 1920s had returned to China with the idea of "building a laboratory and subjecting Tongren Tang's medicines to chemical analysis, but his family flatly refused to finance this proposal and sternly reprimanded him for 'forgetting our ancestors' (wang zu)." That Shao was relying on these state institutions to bolster his claims for efficacy, and the popular press was reporting on such testing signifies that the authority of these processes of authentication coexisted with doubts about either the need or suitability of such testing of historically valued herbs.

The case of the development of ephedrine from the Chinese herb *mahuang* as a treatment for asthma is the earliest case of successful chemical testing of a Chinese herb. Sean Lei Hsiang-lin summarizes the testing of this herb, which began with a German-trained Japanese pharmacologist in Tokyo who isolated an alkaloid from *mahuang* in 1885 and was taken up by researchers at the Peking Union Medical College who published a paper on ephedrine in 1924. They later published a monograph in the American journal *Medicine* in 1930.³⁹⁶ The case of the lung-shaped herb differs in that at least as depicted in Shanghai newspapers, the testing it underwent was by government institutions. In contrast, Yu Fengbin is the only professional doctor at this time who studied the herb, and as I have shown, hewed more to late-imperial Chinese natural science approaches of identification and naming.

V. National Product

Herb as national product, vis-à-vis Western medicine

One of the main selling points of the herb put forth explicitly by some authors was that it is a national product, *guochan xinyao* "nationally produced new medicine" (國產新藥). *Shen bao* emphasized the national origins of the herb, characterizing it as being made from pure national product (此草純係國產藥品所配合). ³⁹⁷ This identification of the herb as national is more explicitly political than earlier characterizations of the herb that praised its natural medicinal properties. Previous reports highlighted it being *tianran* 天然 "natural," "good medicine for curing tuberculosis" 治療良藥 "of a strong medicinal nature" 藥性强猛, and "rich in disinfecting power" 富有一種殺菌力³⁹⁸

In 1929, for example, an author writing under the pseudonym Fei Shi gave a detailed report on his view of the lung-shaped herb, identifying it as a potential model for countering Western medicine. The article begins by lamenting the national situation of weakness that allowed Western medicine to gain a foothold in China: "Ever since the import of Western medicines to China started, the loss of foreign reserves has reached tens of millions every year. Our nation has weakened and our people have been impoverished. These problems had been traced to this

³⁹⁵ Cochran, 25-26.

³⁹⁶ Lei, Neither Donkey nor Horse, 87-90.

^{397 &}quot;Yiyao xun" 醫藥訊 [Medical dispatch] Shen bao, October 20, 1928.

³⁹⁸ "Yiyao xun" 醫藥訊 [Medical dispatch] Shen bao August 8, 1928.

situation as one of the causes. This was really not only an ineffective counter measure in resisting the inflow, but could well attributed to the lack of effort by the people of our medical community. (慨自西藥輸入中土。漏巵歲逾千萬。國弱民貧。有由來矣。豈誠抵制之無力。良由?藥人十之不努力)"³⁹⁹

Such comments are indicative of a shift in sentiment about the value of the herb. By 1929, and even before, reports in the professional and popular press promoted it on the basis that the herb was important as a Chinese medical product, a national product that stood in contrast to Western medicine and Western drugs considered detrimental to China's economy and sovereignty. Such a position can be understood in the context of the National Studies Movement's debates about culture. In this movement, "Chinese culture" was seen as a normative good, something to be promoted and preserved. The herb being perceived as a national product was also particularly salient in the context of the the early twentieth-century Chinese national product movement, which imbued individual consumer choices with national significance. Karl Gerth notes that Chinese economic elites were the main drivers of this movement, an "evolving, growing, and interactive set of institutions, discourses, and organizations" promoting Chinese-owned business and factories in campaigns and consumer boycotts targeting imports of foreign countries.⁴⁰⁰

In explaining the deficits of Chinese medicine, Fei echoes Yu in lamenting the secrecy surrounding herbs. Since the 17^{th} -century with the publication of the *Bencao Gangmu*, Fei writes that "there have not been any new medicine presented," which can partly be explained by the fact that Chinese medicines are mostly produced from natural resources (我國藥材。太半本屬天產。本草綱目而外。迄未有新藥物露布). There is another reason, however, which has to do with the lack of communication about the availability of native medicine.

Going into the vast country sides and deep into the hills, there were all kinds of secluded valleys and glens that have unusual flowers and rare herbs which are capable of being used for curing illness. Their number were numerous beyond being counted. Even today no one has tested and used them yet. Described in articles authored by private individuals, one can often find many unusual prescriptions and excellent medicines. Not being communicated forcefully, most of the prescriptions and medicines have been buried without being known. Those treasures have been wasted and abandoned. It is really a sad pity (而腹地窮巖幽谷奇花異草。堪資療病者。指不勝數。迄無人試用。私家著述。每多奇驗良方。提倡不力。遂多淹沒不彰。寶藏委棄。堪為大惜. 401

Fei goes on to praise Dr. Shao Jingqing as a good counter example to such a trend. He writes that Dr. Shao used this medicinal preparation for consumption passed down in his family, and modified it a bit, adjusting the the composition to produce a product named lung-shaped herb. Moreover, he writes that the herb has accumulated many miracles (疊著奇蹟) since it was introduced to the world, and "in places as far as Japan and the south China sea (Southeast Asia), without exception people compete to purchase it and praise it non-stop. It not only benefits the

³⁹⁹ 費詩 Fei Shi, "Fei Shi jiejin: Feixingcao zhi ru shi wo guan" 費詩借鏡:肺形草之如是我觀 [Fei Shi Learning from Others' Experiences: My Views on Lung-Shaped Herb] *Weisheng Bao* 衛生報, no. 55 (1929): 1.

⁴⁰⁰ Karl Gerth, *China Made: Consumer Culture and the Creation of the Nation*, (Cambridge, Massachusetts: Harvard University Press, 2004), 6.

⁴⁰¹ Fei, "Fei Shi Learning from Others' Experiences: My Views on Lung-Shaped Herb," 1.

world and benefits the people, it also becomes the foundation of countering the Western medicine (比者有浙東邵靜卿醫士。本其家傳治癆良方.斟酌增損。定名曰肺形草。問世以來。疊著奇蹟。遠至東瀛南洋等處。莫不爭相購服。稱頌不止。是不獨壽世壽人。且為抵制西藥之帳本矣)"⁴⁰²

Another reason Fei lauds the herb is because it does not produce the side effects associated with Western medicine. Regarding recent medicines to treat tuberculosis that have been sold on the market, he writes:

Today, medicines sold on the market to treat consumption (tuberculosis) not only do they contain narcotic anesthetic ingredients, like Bai Song syrup and Tu Gen, and alcohol, etc., which are anesthetic lung-cleaning agents and have the potential worry of damaging the stomach when used for some long time. Not only is this herb not an anesthetic material, it also has the excellent ability to stop bleeding and eliminate mucus. The continuing use of the medicine can also reinvigorate the stomach; this point is very difficult for other medicines to achieve [且今日市售治癆藥。不外含有麻醉物質。白松糖漿吐根酒等之麻醉清肺劑。久服每有敗胃之虞。而此草既無麻醉物質。具有卓越之止血化痰作用外。連服並能醒胃。此點最為難能]⁴⁰³

Fei concludes by stating that he values the herb and feels most strongly about the scarcity of nationally produced new medicines and the unique effectiveness of this particular medicine in the treatment of the tuberculosis [可貴者余感於國產新藥之寥落與該藥之奇效。爰誌數言。為同胞之患瘠者進一解]⁴⁰⁴

Concerns about Western drugs

Such arguments about the dangers of Western drugs were common in publications promoting Chinese medicine. For example, in a well-known journal on Chinese medicine, *Guanghua yixue zazhi* 光華醫學雜誌, objections to Western drug treatments for tuberculosis can be divided along two lines: first, they were simply not effective; and second, they were harmful. Letters from readers often said that they have tried Western drugs such as fish liver oil or drugs with promising names like *run fei jiang* 潤肺漿 lung moistening syrup but have found them ineffective. And yet, these articles were not overwhelmingly positive in their endorsement of Chinese herbs. A 1936 article from *Guanghua yixue zazhi*, in response to a reader inquiry about Chinese herbs *fei liao cao* 肺療草 "lung treatment herb" and *yi jin cao* 益金草 "beneficial golden herb" states that these herbs are not necessarily effective. The doctor recommends instead a diet therapy targeting individual symptoms, for example to take things to clear lung phlegm like shells, almonds, winter melon, or pipa juice. Other articles advocate resting, avoiding the

⁴⁰² Ibid.

⁴⁰³ Fei, "Fei Shi Learning from Others' Experiences," 1...

⁴⁰⁴ Ibid.

⁴⁰⁵ 黄全卿 Huang Quanqing, "Duzhe xinxiang: feilao" 讀者信箱:肺癆 Reader's Mailbox)," *Guanghua Yixue zazhi* 光華醫學雜誌 3, no. 7 (1936): 71.

⁴⁰⁶ 嘯谷宗 Xiao Guzong, "Duzhe xinxiang Feilao di san qi" 讀者信箱肺癆第三期 (Reader's Mailbox Pulmonary Tuberculosis Third Stage), *Guanghua yixue zazhi* 光華醫學雜誌 3, no. 9 (1936): 68.

wind, and avoiding licentious thoughts of women.⁴⁰⁷

This one author, Fei She, may have portrayed the lung-shaped herb as a good solution to a national economic problem. Yet, arguments for native medicines based on national origins, for what they represented as a national product did not always translate to profits. Looking at advertisements from Shao Jingqing and Tianji clinic itself will undoubtedly yield a more complete picture. Cochran gives the example of Huang Chuju's attempt to capitalize on the boycott of Japanese-made goods after Japan's 21 Demands were made public in 1915 with nationalistic newspaper advertisements advertising his Human Elixir as a national good and as a way to staunch economic drain abroad. Ultimately, however, sales were mediocre, much less than his Ailuo Brain Tonic.⁴⁰⁸

Not knowing who Fei Shi was, or enough about the publication in which he was writing at this point, it is hard to say more about what this discussion of the herb could mean, or how common his sentiments were. For the herb itself, and Chinese herbal remedies in general, national origins and the perception that it was "natural" and had fewer side effects were additional arguments for it, separate from authentication via chemical testing or historical weight given by late-imperial textual sources.

VI. Professional Doubts

Despite enthusiastic endorsements in popular and professional media, doubts about the herb remained. In professional medical writing, one of the sharpest critiques of the herb came from Wang Jimin, who was, as mentioned previously, one of Yu's colleagues in founding the National Medical Association of China, and served as editor of the Chinese medical history section of its journal. His unfavorable appraisal of the herb appeared in 1932 in a science journal. He mentions the original 1927 article that appeared in the same publication by his colleague, Yu, who by that time was deceased. Wang offers his writing on the herb as a corrective to the unreliable information about it that was circulating. For, "although he had long heard the name lung-shaped herb, there have been many reports without real experiments [肺形草之名,余聞之已久,但皆係耳食,從無實地實驗之報告]"⁴⁰⁹ Only Yu's article, Wang asserts, has "a lot of value," aside from which he had not seen any written materials related to the herb [僅俞鳳賓博士,在中西醫學報,發表「肺形草之採訪與識別」一文,頗有價值,此外均未見有關於此草之文獻,著者對此小有經驗特錄之如左]⁴¹⁰

Wang presents a summary of seven case studies of people who had taken the herb. With the exception of one, none of them saw any salutary effect. The cases are detailed, providing a surname, age, occupation, and geographical origin for each case. Wang also gives an account of what conditions prompted taking the medicine, other treatments the patients tried, how long patients took the lung-shaped herb, and the outcome. The cases are quite brief, several sentences, to one paragraph. In several instances patients took the herb and it actually seemed to have a

⁴⁰⁷ 朱甸澄 Zhu Diancheng, "Duzhe xinxiang rubu Feijie" 讀者信箱 乳部結核 (Reader's Mailbox Breast Tuberculosis)," *Guanghua yixue zazhi* 光華醫學雜誌 3, no. 7 (1936): 72–73.

⁴⁰⁸ Cochran, Chinese Medicine Men, 49.

⁴⁰⁹ Wang Jimin 王吉民, "Shiyong Feixingcao zhi jingyan" 試用肺形草之經驗 [Experience Trying the Lung-Shaped Herb], *Kexue yibao* 科學醫報 1, no. 1 (1932): 14.

⁴¹⁰ Ibid., 14–15.

worsening effect.

For example, in case number four, someone named Pan who was a news reporter and a Chinese doctor, contracted tuberculosis. After seeing an advertisement for the herb, Pan immediately purchased half a dozen doses. After taking five doses, he immediately felt his blood boiling, stopped taking it and did not dare try it again. He then got rid of all his medicines and his cough gradually got better and his body became stronger. Wang writes that although one cannot say he has experienced a full recover, everyday his condition improves.⁴¹¹

Other cases were ambiguous. For example, case number 2 was a 32-year old male named Li who often did business in Hong Kong. After contracting preliminary tuberculosis four years ago he started coughing up blood. Follow his doctor's advice to adjust his diet he recovered but when his nutrition deteriorated he became ill. He also tried needle therapy (acupuncture), but that did not work and he stopped after six weeks. After taking bed rest for several months, he went to Xihu to recuperate and then went to Qingdao for a year and healed a great deal before returning to Hong Kong. After several months when he was working quite hard, he became emaciated. He returned to China, to Moganshan to avoid the heat. There he saw great improvement, gaining weight, being in high spirits. In order to treat his phlegm he took three doses of the herb, and things started to get better. He continued taking the medicine, but upon experiencing a slight pain in his upper body he wrote a letter to the distribution office to inquire whether he should continue taking the medicine and received a reply that it was not necessary. Until now, his disease symptoms have not been completely cured. 412

The article concludes with Wang arguing that the medicine is not efficacious. This conclusion is based on the cases he has described, the experience narrated, and his analysis. Tellingly, the word he uses to describe the treatment changes in the conclusion. In the introduction to the article and in each of the seven cases, Wang refers to the "lung-shaped herb" 肺形草. But in the conclusion the word "herb" is nowhere to be found. Instead, Wang identifies the inefficacious treatment as a "drug" 藥. He writes: "a drug to treat lung illness (presumably pulmonary tuberculosis), it is said to shoot with unfailing accuracy, but this is an exaggeration, because with the exception of one individual Yao, its efficacy is scarcely seen...it can be seen that this drug should not be taken rashly. [以上區區七例,為數太少,無估定該藥優劣之可能,但仿單所述為肺病聖藥,百發百中,則尤衛冕過甚其詞,若將上述經驗,詳加分析,適得其反,除姚姓一案,略見功效外。其餘均無顯著之成績,甚且有三人熱度增劇,可見該藥實不可妄試也]"⁴¹³

Wang ends his article saying that it was actually written two years ago and he wanted to get more long-term results but was not able to do more research. In a self-deprecatory tone, he laments that he was unable to provide more than this cursory piece to his editor, and hopes that colleagues will be able to supplement it. [此係二年前舊稿,因欲得長間之試驗,故留未發表,但迄無機研究。適值編輯先生案稿甚急,愧無以應,以此塞責,聊充編輯而已,尚望同道有以補之。]⁴¹⁴

That Wang, who had a very positive estimation of Chinese medicine and medical innovations and histories (as discussed in chapters three and four), presented a critical assessment of the lung-shaped herb is significant. He draws conclusions based on seven empirical case studies.

⁴¹¹ Ibid., 15.

⁴¹² Wang, "Experience Trying the Lung-Shaped Herb," 14.

⁴¹³ Ibid., 15.

⁴¹⁴ Ibid.

Nowhere does he refer to the history of the herb like Yu or what kind of testing it has undergone, as in popular reporting. In this way, his mode of investigating the herb differs significantly from that of Yu. The late-imperial naturalist vein of writing is nowhere to be found. Instead, we see an appeal to clinical experience, not philological investigation. In this I see a shift from discussions about what the herb was, its history, its poetic names, places of planting, etc., to what its effects as observed in specific cases.

VIII. Conclusion

In professional medical and popular print media, the way the lung-shaped herb is discussed shifts from an attention to identification to a preoccupation with efficacy. Claims about the herb—its value, its efficacy—began with what the herb was (its history and various names), to what processes it had undergone (testing), to whether it healed tubercular patients (clinical trials). This all happened in the context of the movement to abolish Chinese medicine, debates about which had been occurring for the past few decades but was formally launched with a motion to "abolish old-style medicine" in 1929. Sean Lei Hsiang-lin has pointed out that by the 1920s, Chinese medicine had been partitioned into three categories: theory, Chinese drugs, and doctors' experience. As the case of ephedrine shows, Chinese drugs were seen as promising objects for scientific research. Arguments about the weakness of Chinese medicine were widespread in the 1920s, but by the spring of 1929 there was clear formal opposition by Chinese doctors to the attempts of the state and Western-trained Chinese doctors to abolish Chinese medicine. Scholars have presented these developments as Western biomedical doctors keen to limit competition from indigenous physicians and non-professional healers. 415

Discussion of the lung-shaped herb largely preceded this high point of debate and is thus a window into a panoply of voices about medicine in the period just as the Nationalist government was starting to consolidate its power in Shanghai and much of the medical infrastructure was established. Together, these writings on the herb show that in addition to the state, there were also professional, popular, and commercial actors competing for authority over treatments. Yu was unusual in being a biomedically-trained physician interested in understanding Chinese herbs through both Chinese and Western lenses. He made an argument for the value of the herb as an object of scientific inquiry, but drew no conclusions about its efficacy. His arguments for the importance of the herb were based on anecdote, his own judgment, and textual evidence stretching back to late imperial times. Popular media reporting on the herb, on the other hand, presented it as an efficacious medicine verified by testing by new state institutions like the Ministry of Health. Arguments for the herb also took on a new ideological significance in the National Goods Movement, as a symbol of resistance against Western drugs. Doubts about the reporting of the herb's efficacy, unsupported by experiments prompted Wang Jimin, another physician, to critique the laudatory coverage of the herb. In doing so, his mode of writing differs significantly from that of Yu. No trace of the late-imperial naturalist vein of writing remains. Instead of an appeal to philological investigations we see reference to clinical experience.

What emerges from these disparate accounts is a distinction between the ways that authors and experts made claims about why someone should believe in an herb — based on what it had been known for in the past, what amorphous authenticating procedures it had undergone, and

⁴¹⁵ Lei, Neither Donkey nor Horse.

what it could actually do based on experiments. This suggests a shift in epistemic thinking with regard to the role of medical experts, authenticating procedures, and networks of dissemination in the production of medical knowledge. Perhaps because it was impossible to make an absolute claim for the efficacy of the herb, authoritative claims about it derived their force from the networks and chains of reference and authentication procedures in which they were embedded.

Where before the herb was known through mentions and textual sources and in person, by the mid-1930s it was trademarked, tested, and available for purchase through the mail. This development reflects changes in the ways medical authority was configured and presented in print. It is clear that while new types of assurances arose, concerns about it persisted. One new concern was that people would be duped into purchasing counterfeit treatments, hence the concern for purchasing trademarked herbs. This, as Huang Weiqing notes in a 1936 article offering samples of the herb to doctors and patients is partly because the first treatment was produced in limited quantities, and that it is difficult to recognize and distinguish from other plants.⁴¹⁶

In the end, medicine, in its various guises — professional, institutional, and commercial became by the 1930s less about an herb or drug itself — as recorded in prose and poetry — and more about how people made claims for its provenance, and its efficacy. There was a divergence across the professional and popular registers. And in many cases, the claims for knowledge and authority hinged on what different professional or commercial actors argued that they brought to the development of the herb as a drug. In the case of this herb, its authenticity as a product from a particular locale was one reason it was kept secret. But in time its being kept secret mitigated against its becoming known to the world. This secrecy reflected its ownership by the family that obtained it and controlled its distribution. Over time, though, these same owners had commercial reasons to publicize the herb and subject it to government testing. And so this once obscure herb became a widely available drug: a source of profit for the entrepreneurial scion of the family who controlled its distribution, a product offering hope to suffering patients, an object of testing for newly emerging state laboratories, and a subject for Western medical research. In short, it evolved from a local product, a medicinal herb available to anyone willing to seek out the places where it grew wild, to a packaged treatment available to patients at a clinic, to a medicine sold to consumers by mail. Thus, something that had once had an incentive to remain private, in a time of commercial possibility, had to become public.

^{**}Huang Weiqing, "Zengsong shenmi de tuxie Feilao yaocao: gongkai qixiao zheng Feixingcao de biaoben! zhuan gong quanguo yishi ji bingjia de shiyan" 贈送神秘的吐血肺癆藥草:公開奇效真正肺形草的標本!專供全國醫師及病家的實驗 [Presenting and Giving Away the Mysterious Medicinal Herb That Treats Tuberculosis Patients Who Cough up Blood: Publicly Available, Extraordinarily Effective Real Samples of the Lung-Shaped Herb! Specifically Offered to the Nation's Doctors and Patients for Experiments], *Guoyi zhengyan* 國醫正言, no. 23 (1936): 20–22.

CONCLUSION

This project was born of a vague sense of disquiet because histories of China, and of Chinese medicine and science in particular, appeared so often to only seek recognizable analogues to the Western experience. In that vein, it seemed to me that modern medicine in China then necessarily revolved around the appearance of particular forms and practices—treating illness with certain drugs, employing state-sponsored preventative public health measures, or finding bacteria using an X-ray. Those avenues of investigation have yielded many important insights. It is simply that my interest is in the slightly messier versions of history.

Still, I must confess: my search for a point of entry began with probing sources related to familiar forms — professional associations, medical journals, and trademarked drugs. Yet, instead of interpreting the appearance of such forms as evidence for an expected iteration of medical modernity, I have considered them only the tip of the iceberg. In looking more closely at what lay beneath, at the range of interests involved and actors concerned, I have not found a single, teleological story of these forms, of medical modernity emerging or failing to emerge. Instead, I have attempted to illuminate here the strange alchemy of medicine that helped make doctors, knowledge, and drugs at this time, in all their contradictions and complexity.

Figures like Yu Fengbin exemplify these transformations. At the heart of these processes is a shifting in hierarchies of knowledge, on which claims of authority — to be an expert physician, to produce medical knowledge, and to know an elusive herb — were made. I argue that a particular formation of Sino-Western medicine, knowledge production, and the market in Republican Shanghai resulted in print media discursively creating new hierarchies of knowledge production as less a matter of asserting immanent qualities of medical experts, knowledge, or drugs, and more a matter of articulating the public, institutional processes whereby one could claim authoritative knowledge.

At the turn of the 20th century, in the transition from late imperial to Republican China, the once familiar grounds on which authority had been constructed were in great flux. Literati could no longer hope to secure status based on the civil service exam, and instead had to make their way as professionals in a competitive, commercial world. The milieu of treaty-port Shanghai, with a population plagued by tuberculosis, an entrenched foreign presence, a flourishing print culture, and a strong business ethos — made fertile ground for medical merchants and doctors alike. It is in this context that we can understand the complex and contradicting narrative I have presented.

At a certain point in or around the mid-19th to early 20th century, to be a doctor in China became more than a matter of familiarity with canonical medical texts or embodied skill in diagnosing mysterious illnesses and prescribing empirically-proven prescriptions cultivated through apprenticeship. Instead, with the arrival of Western medicine, patent medicines, and with powerful pharmaceutical drugs looming on the horizon, doctors had to contend with challenges to their primacy over diagnosis and treatment in fundamentally new ways. Sources associated with one of the key formations we identify with the professionalization of medicine — the professional association — reveal the tension between doctors in service to the public and in pursuit of private interests. They lamented the susceptibility of patients to misleading advertising, while at the same time castigated their peers for prescribing and manufacturing these drugs of dubious efficacy. The very training and status that allowed them to take the high moral road permitted them to make the most of the commercial realm as well.

The state enters here too, with new Republican government regulations revealing a concern

not just with who was qualified to be a doctor, but how a doctor might be different from other purveyors of treatment. With the expansion in fields of knowledge (medicine and pharmacology) and ambit of activities (professional and commercial), we can understand doctors in a new light: they were not just a product of new educational institutions, clinical training, or membership in professional associations; they also emerged in a relation to other actors and how the qualitatively new tensions between medical expertise and medical entrepreneurship, between moral commitments and commercial concerns that manifested at this time.

As with a group of physicians, so we see with the stories of an individual doctor. Attempts to understand my protagonist, Yu, as a professionally accomplished physician, a moral exemplar, an early synthesizer of Western and Chinese medicine employed a certain mode of writing that posited an understanding of his qualities, inherent or developed through hardship that helped explain his success. But looking across genres and sources, the picture we get of him is more complicated. The various images we get of him points to the limits of knowing a person in the past, and of the folly of positing the efficacy of human action in the medical realm.

The emergence of medical journals allowed doctors to bridge language, distance, and time but also illuminated tensions between locally contingent and globally coherent knowledge. In order to make physicians' experience into knowledge that was legible to readers at a distance, that experience took a certain form: case studies featuring first-person narratives of erudite literati physicians gave way to case histories organized around disease symptoms, treated with precise dosages of new drugs. In writing on Chinese medicine, a puzzle that both native and foreign doctors addressed, other modes of writing — history and experimental science existed simultaneously in the bilingual medical journal sphere. There is an acknowledgment of the value of Chinese medicine — its history, herbs, and acupuncture — simply because it has existed for many years, and that it had value in the wider world as proven through empirical experiments — an instance where the unity of history and value remained intact, as Levenson would say.

The shifts we see in the ways people talked about a lung-shaped used to treat tuberculosis illuminate the broader intellectual change I have been tracing. Yu sought to identify the herb using late-imperial natural history methods of textual reference and first-hand observation, relayed in a style highlighting his individual erudition. He also was directly tapped into a network of professionals educated in new disciplines like agronomy, whom he consulted to help identify the herb. Shao Jingqing, the purveyor of the herb, made a case for its efficacy based on his individual efforts at producing this drug and making it available at a convenient location to consumers in Shanghai. *Shen bao's* reports on the herb referenced the chain of state-sponsored testing the herb underwent. It was also trademarked, and heavily advertised as later articles show. The herb had another life identified as a national product and bulwark against the influx of Western medicine. But not everyone believed in its efficacy against tuberculosis, as Wang Jimin's articles and case histories that point to the arrival of statistical significance and experimental reasoning that would challenge thinking with cases as a valid means of producing knowledge.

Such shifts in ways of knowing, such transformations in epistemic thinking, have been lucidly noted by thinkers like Michel Foucault in *The Order of Things* and more recently by Peter Galison and Lorraine Daston, in *Objectivity*. ⁴¹⁷ I draw inspiration from these works. In addition to documenting a shift at the level of ideas, I have pointed to the ways that certain

⁴¹⁷ Michel Foucault, *The Order of Things: An Archaeology of the Human Sciences* (New York: Vintage Books, 1994). Lorraine Daston and Peter Galison, *Objectivity* (New York: Cambridge, Mass: Zone Books; Distributed by the MIT Press, 2007).

mediating institutions — medical associations, scientific publications, popular newspapers, and government agencies — have materially contributed to that process. For Chinese doctors of Western medicine, the basis of their authority shifted away from claims about immanence and the ultimate nature of things. Their claims for authority depended less on private, individual skill cultivated along discrete lines of transmission, and privileged access to resources and belonging to a discrete community and more on a public, commercialized mode of articulation that was reliant on authentication processes performed by intermediating infrastructure — professional organizations, print media, government regulation — for force in the world. The rise of professional fields of medical knowledge and organizations both challenged and re-articulated obstacles (隔閡 gehe) to the flow of people, knowledge, and goods, as well as the expertise and skills, modes of communication, and local provenance that once granted more solid authority over that realm.

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