



## NATIONAL ENDOWMENT FOR THE HUMANITIES

DIVISION OF RESEARCH PROGRAMS

### **Narrative Section of a Successful Application**

The attached document contains the grant narrative and selected portions of a previously funded grant application. It is not intended to serve as a model, but to give you a sense of how a successful application may be crafted. Every successful application is different, and each applicant is urged to prepare a proposal that reflects its unique project and aspirations. Prospective applicants should consult the Research Programs application guidelines at <https://www.neh.gov/grants/research/fellowships> for instructions.

Note: The attachment only contains the grant narrative and selected portions, not the entire funded application. In addition, certain portions may have been redacted to protect the privacy interests of an individual and/or to protect confidential commercial and financial information and/or to protect copyrighted materials.

Project Title: A Chinese Man-of-Letters in an Age of Industrial Capitalism: Chen Diexian (1879-1940)

Institution: Columbia University

Project Director: Eugenia Lean

Grant Program: Fellowships

**Manufacturing Matters: Chen Diexian (1879-1940), a Chinese Man-of-Letters in an Age of Industrial Capitalism**  
**Eugenia Lean**

I am applying for a NEH fellowship to complete my book manuscript, *Manufacturing Matters: Chen Diexian (1879-1940), a Chinese Man-of-Letters in an Age of Industrial Capitalism*. This project focuses on polymath Chen Diexian, a novelist and pen-for-hire, a professional editor/translator and dabbler in chemistry, and eventually, a patriotic captain of industry. It explores how lettered, if middlebrow, elites like Chen navigated a transitional period around the fall of the Qing empire (1644-1912) to emerge as savvy entrepreneurs who leveraged their classical education to find success in the newly commercial world of letters and emerging sphere of industrial manufacturing. Productive in the making and selling of words *and* things, Chen turned his literati-studio into a chemistry lab, shared brand name manufacturing formulas as “common knowledge” in newspapers, and utilized proceeds from his romance novels to manufacture “Butterfly Brand Toothpowder,” unique in its ability to double as face powder. In an era when words and things were not just mass-produced but also widely counterfeited, Chen vigorously protected his own brand and products by adapting emerging global laws on trademarks and patents, even while advocating the “emulation” (*fangzhi*) of foreign technologies. At a moment when China’s engagement with global commerce was deeply fraught in the face of economic imperialism, Chen’s industrious activities constituted a form of “vernacular industrialism” (*xiao gongyi*) that was local and “homegrown” (as opposed to imperialist or foreign), informal and part of China’s consumer culture (rather than state-sponsored or academia-oriented), and artisanal and family-run if eventually located in factories. This vernacular industrialism came to inform the National Products Movement, a “buy and manufacture Chinese goods” campaign at the time, and presaged PRC nativist industrial campaigns such as the Great Leap Forward. Overall, the project will contribute to our understanding of the emergence of industrial capitalism in China, the significance of informal practices of chemistry and manufacturing in modern China, and Chinese engagement with global circuits of law, science and commerce in the early twentieth-century.

Conventionally, the early twentieth-century has been characterized as a time of transitional chaos. In 1905, the dismantling of the civil service examination led to the decline of Confucian orthodoxy; 1911 saw the overthrow of the empire; the early Republican era (1912-1927) witnessed political fragmentation and entrenched extra-territoriality. Yet, it was precisely during a period when the central state was weak and imperialist powers were present that China witnessed the rise of vibrant treaty-port economies and modern print and light manufacturing industries. With institutions of knowledge production, social occupations, and politics in flux, opportunity was available for middlebrow lettered figures like Chen, to translate and explore regimes of chemical and legal knowledge, adapt and tinker with foreign technologies, and openly engage in commerce and industry, activities once deemed unthinkable for respectable men to do.

By examining how unlikely actors such as Chen built industry in unconventional, often ad hoc ways, this project diverges from earlier scholarship on Chinese industry that focuses on formal science and industry and often evaluates China’s development along a teleological yardstick. Early studies of China’s chemistry industry, for example, assume the inevitable progress of industrialization, take the modern West’s experience with capitalism and industrialization as a standard, and suggest that industrial developments originated solely in the West and were belatedly transplanted to China, often imperfectly and after dismaying resistance (e.g., Reardon-Anderson 1991). If recent revisionist scholarship moves away from using blatantly western standards, it nonetheless focuses on formal institutions of science and industry, whether state sponsored arsenals of the Self-Strengthening Movement (1861-1895) (e.g., Meng 1999, Elman 2005) or the early twentieth-century rise of laboratory science and academic disciplines (e.g., Shen 2013, Asen 2016). In contrast, Chen’s vernacular industrialism illustrates how in an

era when modern expertise and formal fields of knowledge had not yet been established, exploration of chemistry and manufacturing often took place in unconventional spaces and ways, and for unexpected purposes. Chen's activities included tinkering with foam fire-extinguishers in elegant gatherings of lettered men in Hangzhou, experimenting in scientific appliance shops associated with anti-Manchu activities (e.g., making poisons and bombs for political assassination), using cuttlefish bones to source magnesium carbonate locally, and producing knowledge on manufacturing in how-to columns. Not conforming to states of industrial development that emerge from American or European history, Chen's pursuits show a multifaceted Chinese engagement with manufacturing, science and commerce. At times, they were deemed "frivolous" in their aim to demarcate taste in a burgeoning consumer culture. Other times, they were described as critical in helping manufacture competitive nativist products.

As a maverick polymath who blended for-profit, middlebrow activities across the worlds of letters and industry and commerce, Chen Diexian's case complicates the recent "material turn" in historical writing. As a corrective to the post-structuralist inspired linguistic turn of the 1990s, recent scholarship has rightly moved back to examining material and institutional conditions of history. Yet, this has at times been done at the expense of considering cultural concerns, politics, and textual knowledge. For instance, recent work that posits how the West's fortuitous windfall of coal and access to resources in the American colonies explain the eighteenth-century "great divergence" between industrial and economic development in China and the West rests on the problematic assumption that if Chinese (or any other actors) had access to coal, they would automatically industrialize (Pomeranz 2000). Neglected in such an approach is the "human factor," or conditions of imperialism and politics under which the Chinese worldview shifted from appreciating coal as a resource upholding livelihood (*minsheng*) to seeing coal as fuel necessary for an industrial nation-state's survival in a new world order (Wu 2015). Chen Diexian's practices – cultural and commercial, imaginative and industrial – provide a perfect opportunity to understand how building industry was predicated just as much on the production of textual and conceptual knowledge, as it was on the production of raw materials, finished goods and factories. Drawing from a rich tradition of tinkering and innovating with words, Chen tinkered with foreign recipes to adapt them to local material conditions, and innovated in manufacturing. As an editor in the middlebrow print market, Chen authenticated industrial knowledge and manufacturing information that encouraged hands-on practice, exploring chemistry, and investing in industrial work.

As a self-purported nativist not able to speak a single foreign language, Chen nonetheless accessed transnational circuits of scientific knowledge and materials, and emerging regimes of global capitalism, including trademark and patent laws. He also ensured that his Butterfly toothpowder and other products traveled in China and beyond to Southeast Asia to compete in a cosmopolitan pharmaceutical market with global competitors from Japan and Europe. By tracing the transnational networks in which Chen secured knowledge and materials to build his nativist industry, as well as identify how his products became global commodities, this project is focused on a single individual rooted in his domestic locale, yet nonetheless is highly global in scope, shedding light on the far-flung, border crossing circuits of knowledge, material and expertise that early twentieth Chinese entrepreneurs like Chen were connected to. Through practices of collaborative translation where fidelity was second to adapting texts to local concerns, Chen Diexian improved foreign recipes and technologies, and presented such adaptation as virtuous "emulation" crucial to Chinese industry. Knowledgeable about emerging legal frameworks on trademark infringement and patent laws (he translated legal texts in addition to fiction and scientific tracts), Chen promoted trademark law domestically to protect his Butterfly brand and pursue local copycats. And, while an advocate of emulating foreign manufacturing recipes and technologies, he sought patents for his own gadgets and technologies, basing his claims of ownership not on original invention, but on the improvement (*gailiang*) of the technologies, an approach that came to inform the patriotic National Products Movement. These practices were not

examples of ignorance or deviousness, but instead demonstrate how copying and innovation were not always at odds. They also reveal the strategic agency of Chen, who despite being highly “local,” adeptly drew from far reaching circuits of law and science, as well as engaged competitively in global capitalism.

Revisionist scholarship has moved away from understanding “Chinese” science as merely an “alternative” or derivative of “Western” science, an entrenched narrative that founders of the history of Chinese science, such as Joseph Needham, had established. Informed by post-colonialism, such work has explored, for example, the pathways of empire by which hygienic models were transmitted to and localized into Chinese treaty-ports like Tianjin (e.g., Rogaski 2006). Yet, in this study, Chinese actors, while active in negotiating their encounters with Western and Japanese actors within Tianjin, are indexed as the “local,” and particularized, rather than as a “global” actor. In contrast, scholars interested in the global history of science have started to show how South Asian translators and go-betweens, Chinese and Naxi guides to British botanists, and native informers to colonial anthropologists in early twentieth century Africa (e.g., Raj 2007, Fan 2004, Mueggler 2015, Tilley 2011) were crucial participants in the making of global science. The story of modern science is thus not one of transmission from the West elsewhere, but rests on linkages, practices of translation, points of convergence, and globally circulating networks of expertise and material, fundamentally questioning what is even meant by “Chinese” and “Western” science. This study similarly shows how, even as he presented his endeavors as autarkic and homegrown, Chen Diexian was in actuality a global actor participating in far-flung pathways of pharmaceutical and chemical knowledge and ingredients, as well as shaping global markets for pharmaceutical commodities.

A NEH fellowship will provide the necessary time off from administration and teaching to finish the book manuscript. I have three body chapters out of a total of five completed. Research has been conducted for the remaining two but they remain partially drafted. Chapter one examines Chen’s early years in Hangzhou, when he established himself as a literary figure with a reputation for promoting new endeavors (chemistry, manufacturing, and the pursuit of profit). Chapter two follows him to Shanghai, where he becomes a powerful editor invested in promoting chemical production for the inner chambers in a woman’s magazine that he edits. Chapters three and four examine Chen’s move into industry. Chapter three focuses on the experimentation Chen conducted for his toothpowder and the founding of his cosmetics company in 1918. Chapter four looks at his life-long interest in the foam-based fire extinguisher and his promotion of the manufacturing knowledge of the gadget and other technologies as “common knowledge,” which contrasted with the increasingly formalized scientific professionalism of the age. The final two chapters inquire into Chen’s strategies of authenticating his brand, as he became a seasoned industrialist in the late 1920s-1930s. Chapter five explores how he branded and claimed legal ownership over Butterfly cosmetics as they spread into Chinese diaspora markets in Southeast Asia. Chapter six examines how Chen compiled collectanea on manufacturing to authenticate trustworthy knowledge, as well as his own products, in the 1930s when words were easily copied and things were inauthentic foreign “enemy” products or counterfeit.

During the past few years, I have published three full-length articles related to the project. One article appeared in the special issue of *Osiris* on “Masculinities in Science/Sciences of Masculinity,” and two others are included in the edited conference volumes, *Science and Technology in Republican China*, edited by Jing Tsu and Benjamin Elman and *The Business of Culture: Cultural Entrepreneurs in China and Southeast Asia, 1900-65*, edited by Christopher Rea and Nicolai Volland. University of California Press, the publisher of my award winning first book, *Public Passions*, has expressed interest in the manuscript, as have several other presses, including Columbia University Press and Stanford University Press. If awarded the NEH grant, I plan to finish the book project and submit the manuscript for publication by the end of the grant tenure.

## Select Bibliography

### Archival Sources

Hangzhou Library, Rare Books Department, Hangzhou, China

Shanghai Municipal Archives, Shanghai, China

Ministry of Industry and Commerce archives at No. Two Historical Archives in Nanjing, China

Ministry of Industry and Commerce archives at Institute of Modern History, Academia Sinica, Taipei, Taiwan

### Published Sources

*Hangzhou baibua bao* [Hangzhou Vernacular Daily] (Hangzhou), 1907-1909

*Huaxue gongyi* [The Chemical Industry] (Shanghai), 1922-1923

*Nüzi shijie* [Women's World] (Shanghai), 1914-1915

*Jiangsu shen shiye gongbao* [Industrial Bulletin of the Jiangsu Province], 1919-1922

*Zonghui Xinbao* [Union Times] (Singapore), 1906-1939

### Secondary Sources

Alford, William. 1995. *To Steal a Book Is an Elegant Offense: Intellectual Property Law in Chinese Civilization*. Stanford University Press.

Daniel Asen. 2016. *Death in Beijing: Murder and Forensic Science in Republican China*. Cambridge: Cambridge University Press.

Cochran, Sherman. 2006. *Chinese Medicine Men: Consumer Cultures in China and Southeast Asia*. Cambridge, MA: Harvard University Press.

Elman, Benjamin. 2005. *On Their Own Terms: Science in China, 1550-1900*. Cambridge, MA: Harvard University Press.

Eyferth, Jacob. 2009. *Eating Rice from Bamboo Roots: The Social History of a Community of Handicraft Papermakers in Rural Sichuan, 1920s-2000*. Cambridge, MA: Harvard University East Asia Center.

Fa-ti Fan, *British Naturalists in Qing China: Science, Empire, and Cultural Encounter* (Harvard University Press, 2004).

Gabriel, Joseph M. 2014. *Medical Monopoly: Intellectual Property Rights and the Origins of the Modern Pharmaceutical Industry*. Chicago: University of Chicago Press.

Gerth, Karl. 2003. *China Made: Consumer Culture and the Creation of the Nation*. Cambridge, MA: Harvard University Press.

Meng Yue. 1999. "Hybrid Science versus Modernity: The Practice of the Jiangnan Arsenal, 1864–1897," *East Asian Science, Technology and Medicine* 16: 13-52.

Erik Mueggler, *The Paper Road: Archive and Experience in the Botanical Exploration of West China and Tibet* (University of California 2011).

Pan Junxiang, ed. 1996. *Zhongguo jindai guobuo yundong* [China's modern National Products Movement]. Beijing: Zhongguo wenshi chubanshe.

Pomeranz, Kenneth. 2000. *The Great Divergence: China, Europe and the Making of the Modern World Economy*. Princeton: Princeton University Press.

Raj, Kapil. 2007. *Relocating Modern Science: Circulation and the Construction of Knowledge in South Asia and Europe, 1650-1900*. Basingstoke: Palgrave Macmillan.

Reardon-Anderson, James. 2003. *The Study of Change: Chemistry in China, 1840-1949*. Cambridge: Cambridge University Press.

Shen, Grace. 2014. *Unearthing the Nation: Modern Geology and Nationalism in Republican China, 1911–1949*. Chicago: University of Chicago Press.

Smith, Pamela. 2004. *The Body of the Artisan: Art and Experience in the Scientific Revolution*. Chicago: University of Chicago Press.

Helen Tilley, 2011. *Africa as a Living Laboratory: Empire, Development, and the Problem of Scientific Knowledge, 1870-1950*. Chicago: University of Chicago Press.

Wu, Shellen. 2015. *Empires of Coal: Fueling China's Entry into the Modern World Order, 1860-1920*. Stanford: Stanford University Press.