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**Smokeless Sugar:
The Death of a Provincial Bureaucrat and the
Construction of China's National Economy**

Emily M. Hill



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Contents

Figures and Tables / vii

Acknowledgments / ix

Abbreviations and Measurements / xi

Note on Transliteration and Translations / xii

Introduction / 1

- 1 The Formation of Agricultural Expertise: Feng Rui's Education and Early Career / 21
- 2 Public Service in Guangdong, 1931-36: Economic Nationalism and Provincial Planning / 47
- 3 Rice and Revenue: Guangdong's "Benefit Agriculture" Import Taxes / 71
- 4 White Sugar: Global Business and Provincial Enterprises / 97
- 5 Bitter Experiences with Sugarcane / 122
- 6 Brokers, Smugglers, and the Official Sugar Monopoly, 1934-36 / 148
- 7 National Reunification and the Punishment of Feng Rui / 179
- 8 Provincial Sugar Industry Programs, 1945-58 / 206

Conclusion: Shaping China's Economic Nation on the Eve of War / 225

Notes / 243

Bibliography / 290

Index / 310

Figures and Tables

Figures

- 1 Map of Guangdong, 1936 / 6
- 2 Feng Rui at work in Ding County, Hebei, 1928 / 37
- 3 Map of Guangdong showing the locations of the sugar mills built, 1933-37 / 99
- 4 Feng Rui at the Guangdong provincial sugarcane experimental farm, 1935 / 131
- 5 Feng Rui with his daughters, 1935 or 1936 / 201
- 6 Sugarcane delivery at the Shitou provincial sugar mill, 1992 / 221
- 7 Chen Zhaoyu, wife of Feng Rui, circa 1933 / 241

Tables

- 2.1 Agricultural improvement plans in Guangdong, 1933 / 58
- 2.2 Budget of Guangdong's Bureau of Agriculture and Forestry, 1931-36 / 63
- 3.1 Registered shipments of rice into Guangdong, 1928-33 / 73
- 3.2 Import taxes and tariffs on milled rice, 1933-36 / 76
- 3.3 Rice production per hectare during the 1930s / 81
- 3.4 Registered rice imports into Guangdong, 1932-37 / 86
- 4.1 Construction of sugar mills in Guangdong / 98
- 4.2 Tariffs on imports of milled and refined sugar / 101
- 4.3 Comparative consumption of white sugar, 1933 / 103
- 4.4 Projected returns on investment in sugar milling, 1934-35 / 112
- 5.1 Sugar-production costs and market value, 1933 / 125
- 5.2 Sugarcane-cultivation area required to supply four government sugar mills, 1936 / 128
- 5.3 Cane-crushing season in the Guangdong sugar mills, 1934-36 / 140
- 6.1 Sugar distribution districts and licensed merchants' monthly sales quotas, 1935 / 150
- 6.2 Registered exports from Hong Kong in China's total sugar imports, 1931-33 / 152

- 6.3 Sugar imports, 1923-34 / 152
- 6.4 Sugar trade between Hong Kong and Guangdong / 153
- 6.5 Income of the Guangdong Native Products Sales Office, 1934-35 / 163
- 6.6 China's sugar imports, 1933 / 176
- 8.1 Land area devoted to sugarcane supplying government mills, 1951-57 / 214
- 8.2 Average sugarcane yields in areas supplying government mills, 1951-58 / 215
- 8.3 White sugar production and exports, 1952-89 / 219

Acknowledgments

While surveying Chinese-language materials on the topic of provincial industrialization during a summer visit to Sun Yat-sen University in Guangzhou, I came across a reference to Feng Rui as a “returned student” from Cornell University in the United States. The name was one I knew already, but I had not known that Feng Rui held a doctoral degree from Cornell. Continuing my reading in the Wason Collection at Cornell, I happened to discover that at an earlier stage of his education Feng Rui was a student on the campus of Sun Yat-sen University, during the era when the site belonged to Lingnan College. I then walked to the library of the New York State College of Agriculture at Cornell, located Feng’s doctoral dissertation on a shelf among others completed in 1924 and checked it out. Finding Feng Rui’s dissertation to be a work of high quality and continuing relevance, I began to feel a sense of curiosity and compassion towards a talented person who was also my schoolmate of sorts. From then on, the focus of my research gradually shifted to centre on Feng Rui.

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To conclude her account, Chen Zhaoyu wrote that she believed a clear picture of what happened to Feng Rui would emerge one day. As this book goes to press, I am convinced that she was right. Since I discovered my shared academic affiliations with Feng Rui, the milieu of his life and the circumstances of his death have steadily become clear to me. As well, I am increasingly aware that it has been a privilege to examine what he and Chen Zhaoyu wrote and accomplished during their lives.

In short, my thanks go to all who have personally and professionally afforded me the privilege of studying and making sense of the past.

Abbreviations and Measurements

CCP	Chinese Communist Party
GSM	Guangdong Sugar Monopoly
HIW	Honolulu Iron Works
MEM	Mass Education Movement
NSE	National Southeastern University
PLA	People's Liberation Army
PRC	People's Republic of China
TSR	Taikoo Sugar Refinery
<i>dan</i>	Unit of weight, about 133 pounds during the 1930s
G\$	Guangdong dollar, worth about US\$0.27 in 1936
HK\$	Hong Kong dollar, worth about US\$0.38 in 1936
<i>jin</i>	Unit of weight, about 1.3 pounds during the 1930s
<i>mu</i>	Locally variable unit of land measurement, about one-sixth of an acre
N\$	National dollar, worth about US\$0.36 in 1936
quintal	Unit of weight, equal to 100 kilograms
<i>tael</i>	Unit of account, equal to 37.8 grams of silver
<i>yuan</i>	Refers to the <i>renminbi</i> , China's currency since 1949, officially valued at US\$0.40 in 1955

Note on Transliteration and Translations

With three exceptions, the *pinyin* system of representing Chinese is used in this book. The exceptions are personal names: Chiang Kaishek (Jiang Jieshi in pinyin), Sun Yatsen (Sun Yixian), and James Yen (Yan Yangchu). Otherwise, personal names are given in pinyin. With the first use of a personal name in pinyin, an alternate spelling is provided in brackets if it has been in common use. Thus, for example, Song Ziwen, finance minister and banker, is also identified as T.V. Soong. Readers unfamiliar with Chinese spelling systems and pronunciation should note that Feng Rui may be pronounced “Fung Ray.” The meaning of Rui is “sharp.” It is also noteworthy that although some sources refer to him using the Wade-Giles spelling of Feng *Jui*, he never used that spelling himself. Feng Rui’s own preference conformed to pinyin, although that system had not yet been formalized during his lifetime.

Quotations from works in Chinese are my own translations.

Smokeless Sugar

Introduction

The Unexplained Death of Feng Rui

During a tense confrontation between China's central government and the leaders of Guangdong province, in which both sides prepared to use military force, Feng Rui was arrested at his home near the provincial government headquarters on the afternoon of 10 August 1936. After a month of imprisonment, he was killed on government orders. While in detention, Feng was not permitted to communicate with the world outside his cell or receive visits, even from family members. He was not informed of his death sentence until military police arrived to escort him to an execution ground on the outskirts of Guangzhou. After the execution, the government of Guangdong issued a terse report, listing its charges against Feng Rui.¹ As the *South China Morning Post* of Hong Kong reported, summarizing the government's statement:

After the execution, which was carried out in the eastern suburb outside the city at 4 pm by a party of 30 gendarmes, an official communiqué was issued stating that Feng Rui, aged 38, native of Panyu, Kwangtung [Guangdong] was found guilty of corruption and embezzlement of Government money. He was also found guilty of oppressing the farmers in the Province and purchasing foreign sugar to pass it off as produced by the Government factories. The communiqué states that complaints have been received from all over the province since Feng's arrest. He admitted all offences during a careful trial.²

The most specific of the official charges against Feng Rui was that he was guilty of "purchasing foreign sugar to pass it off as produced by the Government factories." The people of Guangdong referred to this imported commodity as "smokeless sugar" because no fuel was consumed in its manufacturing process.³ A form of direct import substitution in the industrial sector had indeed been practised in Guangdong. Feng Rui was the director of a well-known provincial program of investment in sugar milling, launched in 1933, which by the time of his arrest featured the sale of imported sugar in packaging marked with the "Five Rams" brand name adopted by the provincial manufacturers. Despite Feng's association with "smokeless sugar," however, the justice of the punishment that he received is far from clear.

Considered to have reached the age of thirty-eight according to the customary Chinese measurement of age, Feng Rui was born on 5 December 1899.⁴ Still quite young in 1936, Feng was a prominent public figure, with friends and acquaintances in both North and South China, in academic circles, and among China's foreign residents, particularly those from the United States, where he had been a student during the 1920s. He had served as the director of Guangdong's Bureau of Agriculture and Forestry since November 1931. In that position, Feng Rui gained national prominence as the supervisor of Guangdong's most important industrial-development project, a sugar-milling program through which China's first up-to-date sugar factories were constructed. Feng was also well-known as an academic expert on agriculture and served as dean of the School of Agriculture at Lingnan University in Guangzhou concurrently with his post in the provincial government. In his intellectual role, Feng Rui was an outspoken advocate of national economic reform. Yet during the two years before his death, Feng's prominence had increased because of his advocacy of provincial economic interests. He acted as a representative of Guangdong during visits to Shanghai and the national capital in Nanjing for meetings with central government officials. Especially since mid-1935, his statements to journalists on discussions with central government leaders had been widely reported in local and national daily newspapers.⁵

At the time of Feng Rui's arrest, his wife and daughters were in Europe. Chen Zhaoyu had been receiving treatment for tuberculosis at a sanatorium in Switzerland for the past few months. Learning that her husband had been arrested, she immediately made arrangements to return to China. Determined to do her utmost to save Feng from harm, she also wrote to political leaders requesting their help to secure her husband's release from detention. But by the time she reached Guangzhou, Feng Rui had already been killed. Her elder daughter remembers clearly Chen Zhaoyu's grief and anger at the injustice of her husband's death.⁶ To establish his innocence, Chen wrote a long, emotionally worded essay. Including a set of newspaper clippings, copies of letters Feng had written to her during the past two years, and a brief autobiography that he had recently composed, she privately published her defence as a book several months after his death. Arguing that the charges against Feng Rui were entirely unfounded, Chen countered each one by marshalling details to present an accurate account of his career. She declared that Feng had met a tragic end because he was an idealistic activist who did not understand the need for caution in political life.⁷

Feng Rui's widow stated in her account that his many friends and acquaintances in Guangzhou were shocked and talked in private about his execution for days afterward.⁸ But few details were available. Feng Rui had been tried and sentenced by a military tribunal in a closed session, and Guangzhou lacked a

free press, restricting public discussion of his case. During the four-week period of Feng Rui's imprisonment, his captors gathered complaints about him from various quarters.⁹ However, Feng Rui was prevented from seeking help or defending himself publicly in any way. He had been held incommunicado and in solitary confinement.¹⁰ Only very general descriptions of Feng's alleged misdeeds, enlivened with rumours about his personal life, were available in the news.¹¹ Apart from Chen Zhaoyu, no one who had been personally acquainted with Feng Rui or involved with the handling of his case provided a public explanation of his death until 1963, when a brief account by Li Jiezhi (1900-94) appeared in print. Formerly Guangdong's commissioner of police, Li had been responsible for Feng Rui's arrest in August 1936.¹² He offered a few details on the handling of the case, mentioning that Feng shouted out to passers-by that he was innocent while being taken by car to the execution ground.¹³ Yet, Li Jiezhi's account raises more questions than it answers. Why, for instance, was Feng Rui not permitted to communicate with anyone following his arrest? It seems that Li Jiezhi offered a belated response to the shock and incomprehension about Feng's death. Perhaps because his account had not satisfied readers, Li revised it many years later. He then added a few details to his earlier version, writing in a tone of greater sympathy for Feng Rui.¹⁴

Li stated that the military men who sentenced Feng Rui to death were influenced by the popular disapproval Feng had aroused by purchasing a luxurious automobile and carrying on an affair with a dance-hall girl from Hong Kong named He Lili. According to Li, even He Lili denounced Feng Rui after his arrest, placing announcements in the Hong Kong press in which she confirmed that Feng was corrupt.¹⁵ Rather than serving to explain Feng's death, such points make it seem even more unjust. If Li Jiezhi is to be believed, Feng Rui was sentenced to death on the basis of disapproving gossip and newspaper notices that might have been planted.

This book is the first account to offer a thorough examination of Feng Rui's career and the circumstances of his death since Chen Zhaoyu's book appeared in 1937.¹⁶ It explains that Feng's death sentence served political purposes. His case diverted public attention from the actions of others associated with controversial activities, particularly the smuggling of commodities subject to national tariffs. This examination of the setting of Feng Rui's career as a provincial bureaucrat also casts light on wider issues. In particular, it draws attention to the formation of China as a national economy, in both material and conceptual terms. Feng Rui's fate was linked to the contentious impact on coastal commerce of the strong claims to sovereignty embodied in China's first full and independent tariff regime, implemented in 1929.¹⁷ He was also an agent in the formation of China's distinctive system of agricultural production. The remainder of this

introduction elaborates on these points with reference to the context of Feng Rui's career.

Provincial Semi-Autonomy

Feng was associated with a provincial leader who fell from power during the summer of 1936. In his position as director of the Bureau of Agriculture and Forestry of Guangdong province, Feng was considered to be a protege of Chen Jitang (1890-1954), the military commander who dominated Guangdong from 1931 until his departure from the province in July 1936.

Feng's arrest resulted from a confrontation between Chen Jitang and China's central government. Known as the "Southwest Incident" (*Xinan shibian*) or the "Guangdong-Guangxi Revolt" (*LiangGuang fanpan*), the crisis erupted in June 1936, when Chen Jitang and his military allies in the neighbouring province of Guangxi made a bid for national leadership. On 2 June, they dispatched a flurry of telegrams to other regional authorities and to Nanjing, calling for an active national defence against Japanese incursions in northern China. By committing their armies to an immediate mobilization, with or without central orders, the leaders of the Southwest threatened to rebel against their military superior, Chiang Kaishek (1887-1975).¹⁸ However, support for their venture was not forthcoming from other regions. A number of Chen Jitang's key subordinates then declared their loyalty to a united China and to Chiang Kaishek. Chen Jitang resigned from office in mid-July and left Guangzhou, travelling to Hong Kong on a British gunboat in the company of his loyal followers. A new set of provincial leaders was installed through arrangements supervised by Chiang Kaishek, and the public greeted this transfer of authority as the peaceful reintegration of Guangdong within China. Feng Rui was one of the most prominent members of the former government of Guangdong to remain in office throughout these events. As the new provincial government was settling in, however, he was arrested on the orders of Yu Hanmou (1896-1981), the general newly appointed to command Guangdong's armed forces. Two days after Chen Jitang departed from Hong Kong on a ship bound to Europe, news agencies received the official announcement that Feng Rui had been sentenced to death by a military tribunal convened by General Yu.¹⁹

In public statements, Yu Hanmou proclaimed that a new era of military leadership and corruption-free administration in Guangdong had begun following the removal of Chen Jitang and his "clique."²⁰ Observers understood the conspicuous severity of Feng's punishment as a new regime's display of firm commitment to combatting corruption by making an example of a well-known official.²¹ The day after Feng's death, an editorial in Guangzhou's popular daily *Qunsheng bao* (Popular Voice) congratulated the authorities on their resolve

and hoped that other offenders would also be dealt with firmly.²² But the new Guangdong government's campaign against corruption in 1936 was of brief duration and consisted almost entirely of the attack on Feng Rui. Official sources provided no further information on his case following the press release stating that he had been killed. Police Commissioner Li Jiezhi did not mention problematic shipments of white sugar in his accounts. As seen above, however, the charge that Feng "purchas[ed] foreign sugar to pass it off as produced by the Government factories," was conspicuous in the official report of Feng Rui's execution. Guangdong's smokeless sugar is the key to understanding the circumstances of Feng's arrest and his death in disgrace. Conversely, the case of Feng Rui contributes to understanding challenges faced by China's central government at the time of his death. Feng's activities as an official involved him in the two most serious challenges, which were Chinese regionalism and relations with Japan.

The creation of large supplies of white table sugar through a process that did not require the burning of fuel was part of a larger problem concerning national tariffs in Chen Jitang's autonomous Guangdong. Contention over tariffs was an aspect of the challenge of Guangdong to China's central state, represented by the Nationalist Government founded in Nanjing in 1928. Tariff questions also highlight how domestic politics were connected to the escalation of tensions between China and Japan during the years before full-scale war began in 1937. The challenge of Guangdong to China's central government is most sharply evident in the phenomenon referred to by critical observers as "official smuggling." For several years before the ousting of Chen Jitang, he and other top officials in the province were associated with the duty-free importation of large volumes of commodities subject to tariffs set in Nanjing.²³ Authorities in Nanjing naturally opposed this activity because of the loss of significant revenue to the central government. By the time of Chen Jitang's departure, they had received reports that half the revenue due to be collected on tariffs in Guangdong was lost to his regime.²⁴ They were also worried about the effect on China's creditworthiness of a decline in the revenues on which major foreign loans were secured.²⁵ Moreover, portions of the disputed imports either originated in Japan or were carried to China's coastal waters in Japanese ships.²⁶ The dispute between Nanjing and Guangdong was further complicated by Japanese military encroachments in northeastern and northern China during the 1930s. In 1936, Chinese officials and the general public watched with alarm as a flood of smuggling swept into northern China in the wake of an expanded Japanese military presence and Japanese sponsorship of separatist administrations in the region.²⁷ A sense of crisis developed during the year as the major newspapers carried frequent reports describing the smuggling activity in northern China and how it

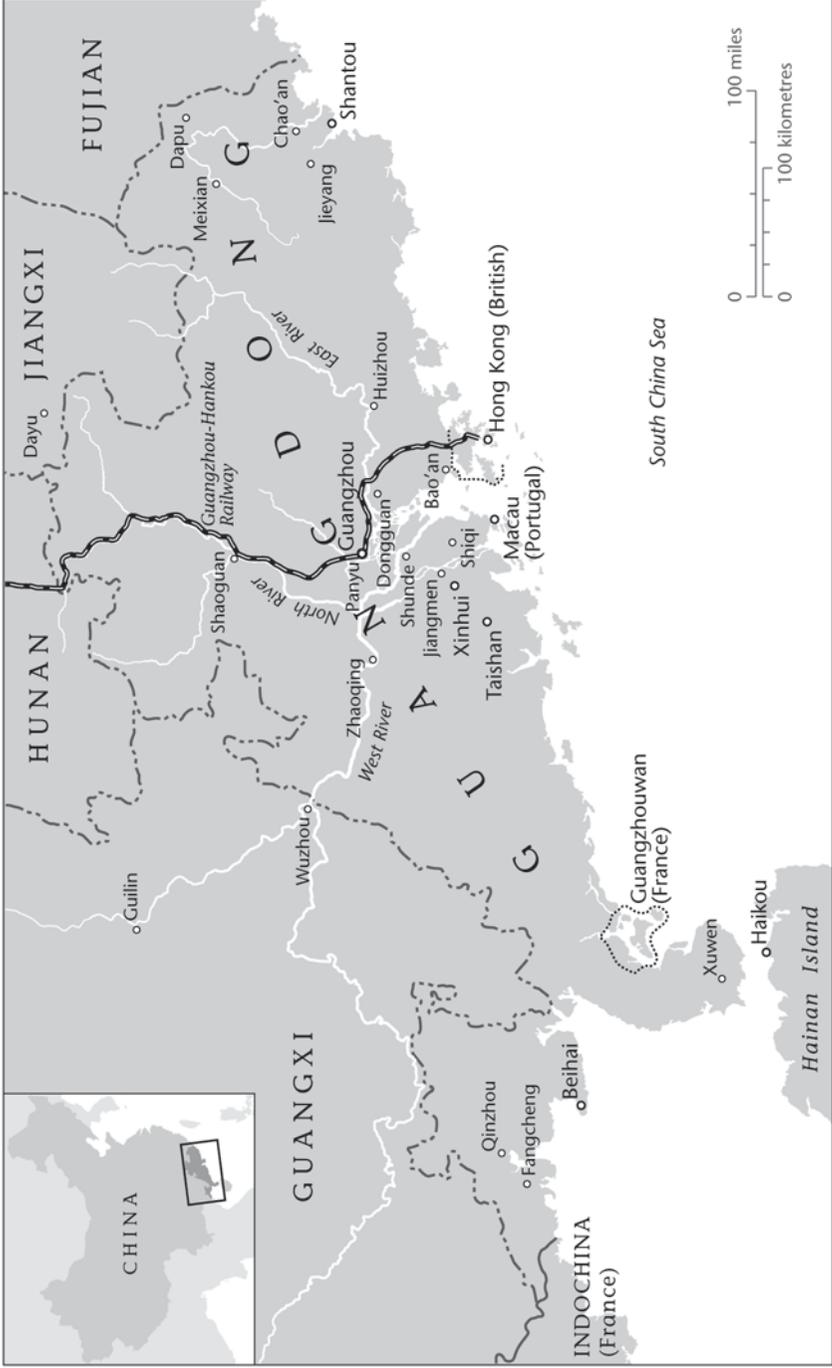


Figure 1 Map of Guangdong, 1936. Prepared by Chen Weiqing of the Institute of Historical Geography, Fudan University, Shanghai, and updated by Eric Leinberger.

was openly protected by Japanese troops.²⁸ Feng Rui, as an agent of southern provincial trade, came under public scrutiny, and he is a valuable guide to the border zone where the challenge of regional autonomy and the threat of conflict between China and Japan were most closely interlinked.

Guangdong province possessed a long coastline studded with isles and inlets, including a section that was later transferred to the jurisdiction of Guangxi, and its land borders faced territories administered by Britain (Hong Kong), as well as France (Indochina and Guangzhouwan), and Portugal (Macau) (See Figure 1.1). For smugglers, the Japanese colony of Taiwan was also within reach. This political geography provided various actors with a broad range of opportunities to exploit differences between pricing regimes, often by evading the grasp of tariff-collecting state agencies.²⁹ The presence of Hong Kong with its strong state presence and concentration of financial and infrastructural capital was of special significance. There was economic asymmetry between Hong Kong and China as well as a jurisdictional divide. Most of the paper currency issued in the colony circulated in southern China, providing monetary stability in a region with a profusion of local currencies and suggesting Hong Kong's magnetic force in the region.³⁰ Yet, despite contrasting commercial conditions and political regimes between the colony and South China, the majority of Hong Kong's population originated in nearby regions of Guangdong.³¹ For Chinese nationals, moreover, two-way travel between the jurisdictions was unrestricted.³² These geographic, political, economic, and cultural features created many opportunities for arbitrage. Brokers, middlemen, and mediators engaged in cross-border business ranging from petty commodity trade to large-scale transactions between currencies.³³ Smuggling was a constant part of this cross-border activity. After substantial increases in tariffs on many of China's major import goods came into effect with the new tariff schedule of 1 February 1929, inward smuggling immediately became more profitable. The control of trade along the coast then became the most pressing preoccupation of China's national customs agency, an institution called the Chinese Maritime Customs Administration. During the early years of the new tariff regime, Customs was largely concerned with smuggling in the vicinity of Hong Kong, more so than with problems elsewhere.³⁴ In response to new challenges, the agency's capacity for tariff enforcement was strengthened by the establishment of its Preventive Department, and by 1934 this unit was equipped with a fleet of about sixty ships.³⁵

From the point of view of China's central officials, the evasion of national tariffs along the southern coast was a threatening parallel to the circumstances of the national government's formation during the 1920s. The Nationalist Government in Nanjing was the continuation of a government established in Guangzhou in 1920 by Sun Yatsen (1866-1925), its Extraordinary President.³⁶

Repudiating the internationally recognized government of the Republic of China in Beijing, Sun and his Nationalist party followers sought to restore the Republic of China in Guangzhou, claiming that it was the sole legitimate representative of the Chinese nation.³⁷ Access to tax revenue streams in Guangdong was crucial in providing material support for the Nationalists' political claims. In addition to a proliferation of taxes imposed on local trade, transportation, consumption, and entertainment, Nationalist agents collected tariff revenue claimed by the government in Beijing and established their own customs stations in Guangdong's ports.³⁸

With regional trade and commerce serving as a fiscal foundation for the political viability of the Guangzhou-based nation-state, Sun Yatsen's challenge to the internationally recognized government in Beijing proved successful following his death in 1925. Chiang Kaishek assumed leadership in Sun's mission of revolutionary national reunification and launched a military campaign from Guangdong that resulted in the re-establishment of the Nationalist government in Nanjing in 1927 and international recognition in 1928.³⁹ Yet, their relocation northward exposed the Nationalist leaders to the danger that a southern rump would re-assert itself on the strength of access to the resources of the southern zone on which the restoration of the republic itself was based. Moreover, a remnant of the state apparatus established in Guangzhou by Sun Yatsen survived in the form of a provincial executive council after Nanjing became the national capital.⁴⁰ This anomalous council gave Guangdong a special constitutional status and provided its leaders with a form of political leverage lacking in other regions that posed separatist threats to the Nationalist government in Nanjing.⁴¹ English-language reports referred to the province's ambiguous status within a nominally unitary state as "semi-autonomy." Guangdong from 1927 to 1936 was comparable to a "march" or "marchland" such as had existed in Europe in medieval and early modern times. Like a march, the province was an imprecisely demarcated and highly militarized region of shared jurisdiction rather than an area subject to the exclusive authority of a central government. South China during the Nanjing period was rather like Wales between the twelfth and fifteenth centuries. The marchland of eastern Wales was a buffer zone between the independent Welsh principality and the jurisdiction of the English monarchy.⁴² To the west of Guangdong lay the province of Guangxi, a mountainous fastness ruled by military leaders who maintained *de facto* independence from Nanjing's authority throughout the Republican period. During the period of Feng's bureaucratic career, the military leaders of Guangdong and Guangxi maintained a diplomatic alliance.⁴³ Like marchland lords, they shared authority over a region known as the Southwest.⁴⁴ The autonomy of the highest-ranking of these lords, Guangdong's Marshal Chen Jitang (1890-1954), is indicated in a popular sobriquet that

referred to him as “The King of the South” (*Nantian Wang*). Overt autonomy for southern China was fleeting, however, compared to long-lasting marches in medieval Europe. Thanks to its control of a coastline at least as long as Guangdong’s and the resources of the Lower Yangzi region – a delta area larger and richer than Guangdong’s core in the Pearl River Delta – the Nationalist Government in Nanjing enjoyed a period of expanding revenues. A reliable flow of tariff revenue became the central government’s fiscal mainstay. From 1929 onward, customs revenue grew to account for half the total revenue of the Nanjing government and a large portion of its domestic and foreign debt was secured on the basis of tariff revenue.⁴⁵ Yet as the reliance on customs revenue increased, so did Nanjing’s need to negotiate with the lords of the Southwest. The record of Chiang Kaishek’s notes and correspondence during the years between 1931 and 1936 reveals his intention to curb Chen Jitang’s prince-like power.⁴⁶ At the same time, successful state-building in Nanjing improved Chiang’s capacity for centralizing efforts. Institutions such as the official salt monopoly and the diplomatic service of the Republic of China were significantly strengthened between 1928 and the onset of the Anti-Japanese War.⁴⁷ But Chiang Kaishek’s southern rivals were not standing still. They were engaged in parallel state-building programs during the mid-1930s, directing resources into programs of institutional reform and economic development.⁴⁸

During his reign in Guangdong, Chen Jitang buttressed his military defences as a militarist might be expected to do. But the resources of Guangdong were sufficient to support a program of economic construction as well. During its years of semi-autonomy, Guangdong’s provincial government succeeded in directing remarkable flows of official investment into industrial construction projects. Many of the new enterprises produced consumer goods, including a brewery and a paper mill in addition to the sugar mills directed by Feng Rui.⁴⁹ Guangdong’s achievement in the building of a modern industrial sector deserves more attention than it has received. During the pre-war period, the scale of government investment in industrialization in Guangdong was possibly more significant than comparable efforts initiated by the central government or other regional governments in China, not counting the Japanese investments in northeast China during the Manchukuo period (1932-45). In 1935, a well-informed observer calculated that Guangdong had by then invested more substantially in industrial development than the central government.⁵⁰ Yet Guangdong’s investment, primarily in light industrial enterprises, has been overlooked by researchers. A recent study locates the pre-1949 origins of contemporary China’s state-owned industrial system in the central government’s significant program of investment in heavy industry before and during the war against Japan.⁵¹ During the period before full-scale war began in 1937,

Guangdong's total expenditures in industrial construction were at least comparable in scale to Nanjing's.⁵²

Comparing central and provincial efforts in another sector, we see that the Nanjing government played an activist role in economic affairs during the 1930s, organizing programs to support the cotton and silk industries by helping them stabilize their supplies of raw materials. This took government agents to the countryside to provide loans and technical assistance to cotton cultivators and sericulturalists. Some permanent links were established through these efforts.⁵³ In a more radical restructuring effort, Guangdong's sugar industry program sought to link industry, agriculture, and commerce by placing sugarcane cultivation, sugar milling, and marketing under official direction. As the official director of the Guangdong Sugar Industry Revival Plan, launched in 1933, Feng Rui managed the most important of Guangdong's investment projects.⁵⁴ Linking agriculture to industry, Guangdong's sugar industry program was also significant as prewar China's most ambitious government-led effort to institute a comprehensive system of planned economic production. Placed in charge, at age thirty-three, of this pioneering program of economic development and restructuring, Feng Rui was a forerunner of economic planning in China.

Borders and Brokerage

Feng Rui was a bureaucratic broker who linked together social spaces, economic sectors, and geographic zones. Among the various terms denoting mediation and border-crossing activity, broker seems the most suitable to describe him because of its evocation of the rewards and risks that are associated with brokerage activities. It is also helpful that the nature of a brokerage position, particularly in business affairs, has been illuminated in the disciplines of sociology and business administration. A broker is an agent whose initiative and position in a social network facilitates more numerous and productive interactions within the network and in new connections beyond the original network.⁵⁵ Recent research in Chinese history, moreover, has advanced understanding of the broker's role in constituting a national cultural space, conceived as a realm distinct from the foreign.⁵⁶ Feng Rui's case provides an opportunity to take a further step in understanding the formation of China's economy through social interaction, particularly through the glimpses of one broker's subjective experience that investigation of Feng's case offers.

Feng Rui exemplifies the broker's role. According to his wife, he was committed to integrating knowledge and action in his career.⁵⁷ Feng was both articulate and active. He was a recognized authority on agricultural administration, interpreting specialized knowledge for practical purposes. In the Guangdong sugar-milling program, he was an agent linking international capital to China's

agricultural hinterland. As a mediator across the boundary between government authority and private commerce, he took steps to reconstitute the relationship between bureaucratic and commercial spheres. Most controversially, Feng Rui became prominent as an agent involved in directing flows of revenue to the government that he served by tapping Guangdong's border resources. In the end, the allegations against him cast him as a broker who served only himself. His downfall is a reminder that the rewards of brokerage are related to the risks inherent in the role.

The setting of Feng Rui's bureaucratic career illustrates vividly how a political boundary may serve as a resource to the population of a border zone.⁵⁸ A border is an obstacle but not a barrier to economic exchange, resourceful for the agents who make connections across it. This is particularly true of borders between adjoining well-populated territories, and the richness of the resources of such zones is enhanced where more than two political authorities adjoin. Best seen as a maritime frontier rather than a clear border or boundary line, the southern coast of China was a zone of economic interaction where many parties were active.⁵⁹ Following anthropologists, this southern border zone may be conceptualized as a distinct economic entity.⁶⁰ As Owen Lattimore observed, moreover, a frontier area tends to become a distinct social unit as the peoples on either side of a border tend to identify with one another more than with the states that have jurisdiction over them.⁶¹

Brokers take risks because the existence of a resource, benefit, or advantage leads to contestation over its possession and control. Actors positioned in a geographical border zone, for instance, compete for access to the zone's special opportunities. The stricter the limits to access, the greater are the gains to those who hold a monopoly over border resources. Through Feng Rui, we see how inter-regional commodity flows and contested trade regimes contributed to the formation of China's national economy. The tariff regulations instituted in Nanjing in 1929 sharpened China's external borders and at the same time accentuated an internal division. Given the conflicting trade regimes of Nanjing and Guangdong, Guangdong may be seen as an "internal frontier" during the period of autonomy for the Southwest. In effect, the border zone shifted more definitely inward as the new national tariffs encouraged traders to profit by evading them.⁶² This helps to make clear how disputes related to patterns of inter-regional and international trade, linked at certain points to the menace of Japan, were significant in the formation of China's national borders and national economy.

In his role as a manager and spokesman for provincial industry, Feng Rui is a helpful guide. To follow his career near China's territorial edge is to survey the material means, politics, and rhetoric through which China's national

economy was constructed at the southern coastal and internal frontiers. In this account, at the same time, Feng Rui re-emerges from the obscure circumstances in which he died. Just as two-way travel is the essence of brokerage, the pages that follow interpret how Feng Rui expressed himself in terms of the landscape of his life and at the same time interpret that landscape following his guidance.

Construction of the National Economy

Like other nations, “China” exists as a reification that has been created and maintained by thought and words. Recent work corrects a tendency to view the building of nation-consciousness in China as though it were exclusively a project of the Chinese Communist Party (CCP). According to analysis focusing on Chinese Communist leadership and the later twentieth century, the Nationalist state did not contribute significantly to nation-building during the prewar era. One scholar claims that the Nanjing government was so hobbled by territorial fragmentation and a lack of social cohesion that it was, “never able to build a coherent Chinese nation that transcended these regional and class divisions.”⁶³ Certainly the CCP’s construction effort became dominant and, in mainland China, has lasted much longer than the efforts of the Nanjing era. However, for the sake of understanding the context and foundations of the early formation of the CCP’s nationalist ideology, the rival party’s achievements should not be ignored. Recent scholarship on China’s Republican period (1911-49) has revealed the significance to nation-building of official efforts during the period. For instance, officials made effective claims to territory considered to have been subject to Qing rule, reconstituting a patrimonial realm as the nation-state of China. Considering this record, a researcher argues that officials of the Republican era deserve credit for “stunning accomplishments” in international diplomacy.⁶⁴ Rejecting federalist forms for their nation-state, furthermore, leaders associated with the Nationalist party reconstituted another legacy of monarchical rule, namely the unitary state.⁶⁵ As well as examining how the territorial extent and internal structure of the Chinese state were constituted during the period, scholars have contributed important work in recent years to examine how agents both within and outside officialdom built the ideas and the institutions of national identity, particularly during the Nanjing period (1927-37).⁶⁶

Recent research has demonstrated that efforts during the Nanjing era to protect and re-shape the Chinese national economy through official measures were of great significance as well. Margherita Zanasi analyzes the efforts of government bureaucrats to establish substantial programs of planned investment in state-owned industry and to institute official control (*tongzhi*) over economic activity during the 1930s. Both provincial and central-level officials

participated in a movement to establish rational official direction over economic affairs. The phrase they all used was *tongzhi jingji* (“unified economy” or “monopoly economy”), usually translated into English at the time as “economic control.”⁶⁷ The Anti-Japanese War (1937-45) provided the need and the opportunity for China’s national leaders to concentrate economic resources. Yet they did this on the basis of a strong strain of anti-capitalist sentiment that infused and supported Nationalist ideology during the decade preceding the war. As Zanasi points out, China’s policy direction, shared with other countries, was interpreted at the time as a shift away from free-market capitalism.⁶⁸ In addition to efforts to institute economic control, technocratic aspirations were expressed in the establishment of regulatory agencies, national banks and investment programs, and scientific research to inform public policy.⁶⁹ The promotion of new official policies during the Nanjing decade reflected and was supported by a significant strengthening of state capacity. An increasingly professional bureaucracy commanded more material resources, thanks not only to more efficient revenue collection but also to the gradual expansion of the Chinese economy. In this period of significant growth during the quarter century preceding the beginning of full-scale war between China and Japan in July 1937, industrial output grew most significantly among the various sectors.⁷⁰ Despite the gradual growth of the industrial sector, however, anxiety about imbalances and dislocations strongly affected Nanjing’s official policies as the Great Depression made its impact in China. As falling prices in international markets contributed to an expansion of China’s imports between 1929 and 1933, the volume and value of exports slumped, arousing fears that China would soon be bankrupt. Officials instituted protectionist measures, raising tariffs in 1930 and 1932. They then faced a currency crisis. Dislocations caused by the rising value of silver and plummeting commodity prices forced further action by the mid-1930s. Through a successful program of currency reform and support for industrial enterprises, Nationalist officials made good progress in overcoming these challenges before the Anti-Japanese War began.⁷¹ As a result, China’s contemporary political economy was founded in part on the need for protective economic nationalism during the prewar period.

Aspects of China’s experiences were shared in other regions. As Eric Hobsbawm declared in a study of nationalism, “The interwar economic crises reinforced the self-centred ‘national economy’ in a most spectacular manner.”⁷² In the case of China, the concept of a national economy, rooted in nineteenth-century awareness of the Qing state’s disadvantaged position in the international treaty system, experienced a formative spurt of growth. Zanasi discusses how the concept of a “national economy” (*minzu jingji*) that should be protected from foreign exploitation was actively promoted by central-level bureaucrats during

the 1930s.⁷³ As bureaucrats promoted state control and protectionism, there was positive response from the public. Business owners who faced difficulties appealed to officials to do more to help them survive the troubled times.⁷⁴ According to Wen-hsin Yeh, “economic sentiments” were fostered and took root among Shanghai’s urbanites during the Republican period. By 1937, literate urbanites tended to believe that state protection of the economic sphere was a requirement of nationhood.⁷⁵ At the same time, the belief developed that every ordinary consumer should take part in protecting the nation. As Carl Gerth has shown, the distinction between “national goods” and imports became socially and culturally significant, serving as a primary mode of analysis in personal and political life. Depression conditions and escalating tensions in relations with Japan sharpened the distinction during the 1930s. Campaigns to buy Chinese-made goods were led by private entrepreneurs, sponsored by officials, and mobilized students and housewives. Even though many continued to purchase imported goods, the concurrent development of Chinese forms of nationalism and consumerism had lasting significance.⁷⁶ Meanwhile, as official and popular responses to Japanese encroachments and manoeuvres in northeastern and northern China increased in intensity, nationalism rooted itself in the form of anti-Japanese salvationism.⁷⁷ During the few years before full-scale war began, Japanese-backed smuggling into China aroused growing indignation. Whereas military and diplomatic affairs were conducted offstage, the daily news and nationalist consumer campaigns provided constant reminders of the dangers that invading commodities posed to the national economy. And then a long war ensued, embedding the anxieties of the 1930s in lasting structures. The nation had been constructed as an economic space, coextensive with territorial space and equally in need of protection.

The story of Feng Rui is valuable as a concrete case of how interactions across divisions constituted China during a period of assertive boundary formation. A state’s material power, as well as its imagined existence, may be seen as the outcome of a process of social interaction, occurring both internally among groups and externally among collectives such as states.⁷⁸ At the time of Feng Rui’s death, Nationalist officials were asserting central authority over an internal frontier in Guangdong. At the same time, they pursued urgent multilateral negotiations in defense against Japanese military encroachments and Japanese-backed economic incursions in the form of coastal smuggling. All along, their actions were constrained by and responsive to actors outside officialdom. Feng Rui is a guide to understanding how an economic nation formed with distinctive characteristics in the Chinese setting. The setting of his career helps to explain why the nation-builders strove for unity and centralization. Their concern is related to domestic divisions, particularly the separatism emanating from the

marchland of the Southwest. In 1936, during a critical phase of concern about Japanese smuggling in North China, the separatism of the Southwest and Feng's brokerage activity became fatefully linked to the threat of Japanese invasion. Guangdong's interests had already been difficult to reconcile with national goals. For instance, in the name of national economic protectionism, Guangdong's independent tariff regime discriminated against goods produced in other parts of China as well as against foreign imports.⁷⁹ In fact the economic nation was constructed regionally as well as centrally. In his role as a spokesman for Guangdong's sugar industry program, Feng Rui illustrates this well. In Guangdong he promoted provincial prosperity, and, for audiences beyond the province, he promoted the sugar program as a national economic development effort implemented at the provincial level.⁸⁰

As a nationally known intellectual and the director of a provincial Bureau of Agriculture and Forestry, Feng Rui also helped to structure China as an agricultural economy. Formed both regionally and in inter-regional interaction during the interwar period, the economic nation was at the same time being constructed at an agricultural frontier. In a sense, agrarian China was invented by Feng Rui and his fellow experts. After separating agriculture from the modern economy in conceptual terms, they made steps to re-integrate agriculture and industry in institutional efforts. As Feng claimed in a lecture at his *alma mater* in Guangzhou in 1933, Guangdong's economic development plan sought to avoid the separation between villagers' agricultural pursuits and their employment in industries that were characteristic of modern capitalism as it had developed overseas. He envisioned that it would be possible to avoid the "confrontations" between agriculture and industry that characterized capitalism by fusing together the three sectors of agriculture, industry, and commerce in the activity of a single household.⁸¹ In the lecture he expanded on a point made to conclude his doctoral dissertation of 1924, that "the prosperity of agriculture can be assured only in conjunction with the prosperity of industry."⁸² In fact, perhaps more than any other government official of the era, Feng Rui had the opportunity to put this idea into practice both in fine detail and on a large scale. He took the lead in implementing and directing a remarkable set of measures intended to fuse agriculture, industry, and trade in a coordinated and planned program. On the rhetorical plane and on a practical level as well, he contributed to the construction of China's economy during the 1930s in a manner that emphasized the interdependent development of agriculture and industry behind a protective tariff barrier and under official guidance.

Feng Rui was an unusually articulate member of China's bureaucratic corps. Thanks largely to his intellectual ability, he rose to a prominent position that was rare among mid-level provincial officials. A prolific writer and engaging

speaker, Feng played the role of a broker between the academic and policy-making worlds. His publications during the 1920s helped readers make sense of China's economic conditions in a comparative context. At a later stage, he authored many articles and reports to outline and defend provincial policies and programs. From 1932 to 1936, Feng Rui was an active agent representing his province in Shanghai and Nanjing in efforts to reconcile inter-regional conflicts of interest. The centre asserted its terms with his death. Nonetheless, Guangdong's sugar-milling program was a significant investment that eventually yielded returns. Remaining under official control, it later provided significant streams of revenue to a successor regime. Feng's work proved to be a lasting component in the local construction of China's national and nationalistic economic system.

Outline of the Book

Reaching into the past largely through Feng Rui's own writing, the first chapter of this work places Feng Rui in his social setting and recounts his education and early career. It then outlines how his ideas about China's economy and the need for protectionism in international trade took shape.

Feng Rui was born in the Huangpu district southeast of Guangzhou. Educated locally until age fifteen, he then travelled north for further studies in Nanjing and later won a scholarship that enabled him to attend graduate school in the United States. In 1925, he returned from his studies overseas with a doctoral degree. After a brief period of teaching and research in Guangzhou, Feng worked in North China for several years before returning to his native province to take up an official appointment as an agriculture specialist. During these years, he wrote numerous essays that were accepted for publication in academic journals.

Before becoming a government official, Feng Rui developed a reputation as an academic expert on agriculture, policy analysis, and social reform. Feng's experience and his many published articles made his name familiar in intellectual circles.⁸³ He discussed an impressive range of topics in his publications. For village householders, Feng provided practical advice on matters such as how to select seeds, protect crops against pests, and improve farm tools. To an academic audience at the national level, meanwhile, he directed proposals for reforming agriculture so as to restructure the entire Chinese economy. Feng Rui stressed the backwardness both of agriculture and of official agricultural administration in China, calling for far-reaching reforms to strengthen the two together. He authoritatively compared China's experience with the agricultural achievements of the advanced nations, especially the United States. The United States was an inspiring source of ideas thanks to dramatic increases in farm

output since the mid-nineteenth century and also to the development of professional agricultural-training programs. Feng Rui did not propose simple emulation of advanced practices, however, but policies adapted for China. He did not accept capitalism as the only development model. Thanks to his credentials as an expert on agricultural affairs and his contributions to the formation of ideas about overall national economic reform through reorganization at the grassroots level, Feng Rui was an agent in the articulation of an alternative national development path for China.

Chapter 2 discusses Feng Rui's early career in Guangdong. After returning to his native province in 1931, he participated in a remarkable program of state-building at the provincial level. Feng's tenure as director of the Guangdong Bureau of Agriculture and Forestry from November 1931 to August 1936 was almost exactly congruent with a period of formally recognized autonomy for the province of Guangdong. Feng Rui joined the Guangdong provincial government during the same month that the military leader Chen Jitang (1890-1954), the Commander-in-Chief of the First National Army stationed in Guangdong, consolidated power as the province's *de facto* ruler. Chen ruled with the support of the military leaders of Guangxi and of a southern wing of the Nationalist party that was openly critical of colleagues in Nanjing. Despite General Chen's formal position in the hierarchy of the National Revolutionary Army, where he was a subordinate of Chiang Kaishek, he did not follow orders, and the autonomy of Guangdong before 1936 was well-known.⁸⁴ Charged with responsibility for directing agricultural affairs for the province, Feng stated that his goals were to apply agricultural science and formulate macro-level policies to revive Guangdong's rural economy. Over time, as his efforts became a comprehensive provincial three-year development plan, Feng Rui focused increasingly on efforts to revive agriculture through industrial development.

Chapter 2 also examines the financial basis of Feng Rui's program of agricultural development for Guangdong. Financing was evidently closely connected to the provincial government's reliance on the taxation of manufactured imports and to the establishment of import substitution industries. Chen Jitang allocated tax revenues collected in the commercial sector to programs of investment in the modernization of production in agriculture and modern industry. Provincial spokesmen justified the taxes on imported commodities during the 1930s in terms of economic protectionism. Referring to provincial import taxes during an interview with a journalist in May 1936, for instance, Feng Rui declared that the provincial sugar program required protection because it was an "infant industry."⁸⁵ For a regional government to foster industrialization by means of protectionist measures in support of a program of import substitution is unusual in economic history. Yet it was even more remarkable that several new factories

in Guangdong were import-substituting enterprises in a literal sense. Substituting imported goods for their own manufactures, these enterprises repacked imported fertilizers, cement, and medicines in addition to imported white sugar. From the beginning, Feng Rui's work in Guangdong was linked financially to an entire set of "smokeless" manufacturing enterprises.

Guangdong's independent taxation of grain imports became a controversial issue in 1933. Chapter 3 discusses the provincial implementation of a national program aimed at self-sufficiency in grain supplies. China's imports of foodstuffs, primarily rice, had risen in recent years and were viewed as draining of national wealth and damaging to the agricultural sector. Guangdong's consumption of imported rice accounted for between one-third and one-half of China's total grain imports by value. In 1933, Feng Rui helped to draft and confidently promoted a plan to completely eliminate the importation of rice into Guangdong within three years. Feng also played the role of Chen Jitang's emissary to the central government, travelling to the capital in Nanjing as Chen's representative in discussions on the regulation of rice imports. He therefore became associated with a provincial commitment that proved difficult to uphold to the satisfaction of the central government and unpopular in Guangdong as well. As three years went by, the real goal of the provincial tax on imported grain came to be seen as increasing provincial revenues through the official control of the valuable trade in rice between Southeast Asia and southern China.

Thanks to the remarkable spending spree in industrial construction that occurred in Guangdong under Chen Jitang, Feng Rui became prominent and nationally known as the active leader of the program that received the largest share of the province's investments in economic development programs. The sugar factory construction program is described in Chapter 4. Feng Rui played a key role in negotiations between foreign businessmen and government authorities. Furthermore, the construction and operation of enormous sugar mills required an extension of official control over other parts of the provincial economy. Chapter 5 outlines the sugarcane cultivation program, analyzing the results of Feng Rui's planning of agricultural production to meet goals dictated by the newly built capacity to process sugarcane. Chapter 6 discusses Feng's efforts to mediate between state and merchant interests as a director of trade control measures designed to support the provincial sugar-milling program. In each of the three parts of Guangdong's "Sugar Industry Revival Program," Feng Rui faced enormous challenges. The charges laid against him in 1936 arose in all three. The scale of imports of "smokeless sugar" appeared to increase sharply in connection to Guangdong's investment in sugar mills. Thus the link between sugar milling and Guangdong's practices of "official smuggling" contributed most significantly to his disgrace in 1936.

The arrest of Feng Rui as part of the reintegration of Guangdong within a unified nation governed from Nanjing is examined in Chapter 7. The situation was also international, and Feng's death is examined as one of the events of the Nanjing era that cannot be fully explained without reference to the escalation of tensions between China and Japan during the years before full-scale war broke out in 1937. To resolve a critical regional-central standoff in 1936, Chiang Kaishek travelled south and made Guangzhou his base for several weeks. He was in Guangzhou on the day of Feng Rui's death and referred to Feng obliquely in a major speech that day. Guangdong's leaders played a pivotal role as they contended with rivals in regional and national politics during the 1930s. As Feng Rui's case reveals, propaganda also linked them to a dispute over smuggling that occupied the diplomatic representatives of China and Japan and other nations as well. The autonomous power of China's Southwest shaped the response of China's national leaders to the looming threat of invasion by Japan.

As Chapter 8 describes, the sugar-milling program established in Guangdong during the 1930s was the basis for tremendous expansion in the same direction in the province after 1949. In this case, a rural reform program of the Nanjing era laid important foundations for the agricultural policy of the Mao period (1949-76). Official efforts to control supplies and monopolize markets in support of Guangdong's sugar-milling program were resumed after 1949. Thus Feng Rui's career is significant for understanding continuities in China's official agricultural policy from the prewar period into the 1950s.

Chapter 8 also discusses the significance of provincial investment in industry for China's later path of economic reconstruction. Guangdong's sugar industry is a significant example of how many of the state-owned factories built in China before 1949, mainly in separate construction booms occurring in various parts of the country during the period 1927 to 1937, were built by municipal and provincial governments rather than by agents of the central government in Nanjing.⁸⁶ The various factories that were built by the autonomous government of Guangdong and survived the war became the property of the new Communist-led government of Guangdong in the name of "the people" in 1949. Among these, the sugar mills built under Feng Rui's direction were the most important. They are an example of how the industrial sector of the People's Republic of China (PRC) was first built on a foundation of inherited state-owned investment rather than nationalized private property and how this state-owned sector existed in regional pieces. Whereas the continuity of industrial development has been demonstrated in recent scholarship, the regional foundations of China's state-owned industrial sector have not received close attention.

Chapter 9 reviews the context of Feng Rui's career and the circumstances of his death, summarizing his contributions to economic nation-building. It then

offers concluding remarks on his role as a broker before turning once again to his personal life. The harsh punishment that he received is the most singular aspect of Feng Rui's story. His violent death was a tragic rupture on the eve of a disastrous return to world war. Illuminated through an examination of Feng's case, the context of mobilization for war also sheds light on his death.

The Formation of Agricultural Expertise: Feng Rui's Education and Early Career

An Agronomist Oppressing the People?

The official statement announcing and explaining the execution of Feng Rui emphasized that he had oppressed the farmers of Guangdong, arousing universal resentment and anger. Feng's shadowy official accusers attacked him on the basis of a principle upheld by China's professional agriculturalists, namely that the nation's rural population should be governments' primary concern. The accusation linked Feng's alleged misdeeds to his official duties as director of Guangdong's Bureau of Agriculture and Forestry, the post he held from 1931 until he was imprisoned in August 1936. It also evoked the image of a virtuous ruler protecting the people from the depredations of a "corrupt official." Thus the claim that the resentful indignation of the agrarian population justified a severe punishment for Feng Rui was an effective condemnation despite the absence of detail about how Feng had acted oppressively. In part, this was because rhetoric about the need to protect villagers and restore village society had become familiar to China's news-reading public during the 1920s and 1930s. Yet in his role as a cultural broker between the academic and policy-making worlds, Feng Rui was himself an active participant in the development of an influential set of ideas about reforming agrarian China.

Feng Rui expressed ideas about agriculture that had become widely accepted by Chinese academics, journalists, and public administrators. Intellectuals and activists alike had come to believe that China's basic nature was agricultural, that the Chinese people were predominantly agricultural, and that modernizing Chinese agriculture would modernize China. Contrary to the admiring view of an earlier academic generation that Chinese farming methods had been perfected over many centuries to squeeze maximum returns from available resources,¹ Feng's mentors and peers believed that Chinese agricultural production was falling far short of its potential. They argued that reforms directed by agricultural experts were necessary to promote progress for China. After 1929, Chinese intellectuals generally believed that reforms were urgently needed to rescue their nation from a crisis sparked by international financial conditions and based in the weakness of China's agricultural sector.² During his early career, Feng contributed to the development of a set of principles that formed the

foundation of official policies aimed at modifying the free-market system so as to protect and strengthen the national economy.

Given Feng Rui's credentials as an agriculture expert and his writings that contributed to the formation of ideas about overall national economic reform through reorganization at the grassroots level, a review of his early career sheds light on the formation of China's antimarket economic policies. Like other Chinese agriculture experts of the era, Feng was an advocate of cooperativism and also a spokesman for rationalization through the application of scientific methods. Above all, he became a leading proponent of an activist role for government in the implementation of progressive policies. As Feng argued in his doctoral dissertation, the more enlightened a government became, the more advanced its system of agricultural administration would be.³

Agriculture as a Vocation: Feng Rui's Education

It seems apt to turn now to Feng Rui's own description of his goals as a professional agriculturalist, as stated in a draft "Autobiography" composed six months before his death.⁴ Feng Rui began his autobiographical account with a description of his early education and his reasons for choosing agriculture as a vocation:

Born and raised in a village, I have been familiar since childhood with village life through personal observation of the village environment and people. From the time I first entered primary school through my secondary school days, I was distinctly aware that all of China was like a single village. Cities had begun to flourish only during recent years. I came to understand that a certain degree of reform and progress was needed in the production, customs, society, and every other form of organization in this village that was China. Without reform at the village level, progress for the nation as a whole would not be possible.⁵

Other sources confirm Feng's declaration that he understood China as one big village from the time he began elementary school. He was indeed born in a village.⁶ But he was not a typical rustic child. His father, who died when Feng Rui was very young, had been a village-level postmaster. It is possible that the elder Feng represented an agency of the Qing imperial government.⁷ The institution that Feng Rui attended for elementary and secondary school was Lingnan College, located a few miles away from his home village on the large island of Henan south of the city of Guangzhou. As a sugar industry specialist named Xian Zi'en later wrote, Feng Rui thus had the privilege of attending Guangdong's "most elite school" for his early education.⁸ On his graduate school registration form, Feng recorded that he had graduated from the University of Nanjing in

1920, indicating that he was probably sixteen years old when he completed his studies at Lingnan. According to catalogues of the college, students were admitted to grammar school at age eight and could continue studies through a college-freshman year for a total of ten years of study. If Feng Rui can be assumed to have proceeded through the usual course of studies at Lingnan College, he entered in 1907 and lived there for nine years. During the period from 1907 to 1916, totals of between 130 and 300 students at all levels were registered at the college.⁹

As Xian suggested, access to Lingnan College was expensive. According to one of its administrators from the United States, high tuition fees had long put Lingnan “out of reach of most of the families of Guangdong.”¹⁰ Nonetheless, Feng Rui’s attendance at an elite school is not at odds with his claim to an early familiarity with agriculture. The most thorough scientific training in a science field that Lingnan College provided to its students happened to be in subjects related to agriculture. Lingnan was the first missionary-founded school in China to provide systematic instruction in agricultural science. Later, Feng was qualified to enter the new program in agriculture at the University of Nanjing thanks both to the proficiency in English that he attained in nine years of partly English-medium instruction at Lingnan and to his basic education in agriculture-related subjects.¹¹

Although hardly a typical Chinese community, Lingnan College was a village in its way. Lingnan was a Christian college in the sense that its teachers and administrators sought to promote progress in China. Unlike the other missionary-founded schools in China, however, it was not affiliated with any particular church or denomination. Like most of his fellow students at the school, Feng Rui did not become a Christian. Because the Lingnan educational mission was not direct evangelism but the promotion of Christianity and general social progress in China through practical activities, instruction in “science” was upheld as a means of promoting improvements in Chinese living standards and moral values as well.¹² Lingnan College was unusually advanced among schools anywhere at that time because of the inclusion of students’ cultivation of individual garden plots as a compulsory part of the curriculum.¹³

The emphasis on horticulture at Lingnan College reflects the influence of the longest-serving faculty member in the history of the school, George Weidman Groff (1884-1954). Groff was one of the first instructors in China to teach agriculture as an academic subject. A Pennsylvania native and an alumnus of the program in agriculture studies at Pennsylvania State University, he decided to work in China so as to combine missionary activities with teaching courses on agricultural sciences. Throughout the period of Feng’s education, Groff was systematically at work applying his knowledge by planting trees, including the palms and banyans that still grace the campus, and establishing experimental

plots, flower gardens, and herbarium.¹⁴ As an instructor, Groff taught practical subjects such as biology, botany, garden and field crops, orchard management, and landscape gardening.¹⁵ His conspicuous material work on the Lingnan campus perhaps had an especially strong influence on students' attitudes.

Declaring in his autobiography that he recognized the importance of agriculture while still a child, Feng Rui recited a lesson learned early in life. Groff frequently expressed the idea that China was characteristically a village society. For instance, in a pamphlet publicizing the agricultural work at Lingnan College, published when Feng was halfway through his studies there, Groff declared:

China is a country chiefly of farmers and villagers, whose lack of contact with the outside world and with human progress has kept them from enjoying all the possibilities and blessings of life that await them. In China village life is probably more important and influential than in any other country in the world. The rural population is therefore the best point of contact for a lasting influence upon the people.¹⁶

Although Feng Rui chose the occupation of agriculturalist just as it was becoming established as a profession in China and elsewhere, its roots were deep enough that practitioners recognized outstanding centres in their field of expertise.¹⁷ Feng was trained in well-known programs in agricultural studies. Feng Rui's education at the high school level thus prepared him for further studies at the University of Nanjing's new School of Agriculture, which had been established by another set of teachers and administrators from the United States, opening in 1914 with a class of eight students. It was just a few years later that Feng Rui had the chance to learn from the best-known specialist on Chinese agriculture of the era, John Lossing Buck (1890-1975). Buck began teaching as head of a new Department of Agricultural Economics and Farm Management in February 1920, when Feng Rui was beginning the final semester of his program. Feng recorded on his Cornell University registration card that he graduated from Nanjing in 1920 with a bachelor of science degree in genetics and agricultural economics. Buck later described how students chose majors at Nanjing's College of Agriculture in the departments in which the most recently arrived professors were teaching. After a new teacher arrived from the United States, the agriculture students would "flock" to his classes to learn something new.¹⁸ Feng Rui apparently joined the rush to hear Buck lecture. Because no other instructor was teaching agricultural economics at the time, Feng must have studied avidly with Professor Buck between February and July 1920 in order to minor in the newly offered subject.

Feng Rui worked for a year after graduation as an assistant to J.B. Griffing, an agronomist from the United States who had joined the faculty of the University of Nanjing in 1919. Rather than teaching in the classroom, Griffing directed a large project in cotton-crop improvement funded by an association of British and American owners of cotton mills in China.¹⁹ Feng Rui was one of dozens of young men hired by Griffing over the eight-year duration of the project to perform the monotonous tasks of “roguing” cotton and recording data.²⁰ Feng described the work in his autobiography: “This open-air training was extremely demanding. We worked in hot and cold weather. I not only spent many long days exposed to the wind and sunshine but also travelled with the American expert to many other places to select cotton varieties.”²¹

Chinese cotton varieties were not suitable for machine-loom weaving because Chinese cotton lacked density, elasticity, and length compared to varieties commonly grown in the other major cotton-producing nations. Imported strains of superior seeds quickly deteriorated, providing only two or three years of good crops.²² To “rogue” cotton plants was to walk up and down rows in cotton fields plucking degenerate plants. This and the selection of “thousands of plants” in preparation for the detailed study of their seeds and lint in laboratories are the outdoor work in all weather that Feng described. Griffing reported that the availability of many student assistants to do the lab work and low-cost labour for “simpler operations” made possible an intensive, accelerated cotton-improvement project involving a larger accumulation of technical details than had been handled in any previous study of cotton breeds.²³

This was not standard experience among Chinese agricultural college students. According to Buck, Chinese agriculture students typically lacked practical experience and held attitudes of condescension mixed with timidity when they encountered actual farmers:

Later I had an advantage over my students at the University because I was a farm boy and knew how to talk to farmers, whereas the students were mostly not the sons of farmers, had little experience with farmers, and actually looked down on them. In a way they were afraid of the farmers because they did not know what to say.²⁴

Buck's emphasis on the importance of personal experience close to the soil explains why Feng Rui claimed to be a village native. Feng's emphasis of the all-weather field work he performed suggests how unusual it was for a university graduate. Yet despite the physical efforts required, cotton-improvement workers distinguished themselves from full-time farmers. According to photographs from the period, educated agriculturalists worked in fields on crop-improvement

tasks wearing clothing that was considered urban and modern. Buttoned white shirts were the norm, tucked into belted trousers; straw hats of Western style were preferred.²⁵ Moreover, although Feng conveyed the impression that work in the cotton fields occupied him ten hours a day all year, the roguing was actually done only at a certain point in the growth of the plant. Griffing's report confirmed, however, that this was during the hottest weather of the year and that his team worked especially hard in 1920 and 1921.²⁶

In his autobiographical account, Feng Rui also mentioned another unusual experience for a young student who was about to leave China for study abroad. He had the opportunity to visit some unfamiliar parts of his country during extensive travel with Griffing. The visits to several distant cotton-improvement stations (in Anhui, Jiangsu, and Shandong provinces)²⁷ took Feng to villages much poorer than those of his native district south of Guangzhou. Actually, stays with missionaries were the norm during the cotton researchers' travels.²⁸ Yet there was an immense gap between the Chinese village of Pearl S. Buck's *The Good Earth*, a book inspired by the author's childhood in a remote mission station, and the suburban campus of Lingnan College in semitropical southern China.²⁹

Feng's participation in the cotton study also provided him with basic experience as a social surveyor as well as a plant breeder, apparently contributing to a shift of his interests toward rural social organization and agricultural administration. A few years later, he recorded his impressions of the poverty of the cotton farmers encountered while travelling with Griffing. However, as he explained, the main cause of their poverty was not degenerate cotton seed but poor social organization:

The writer has seen the suffering of the cotton farmers and the dishonesty of the local buyers. The cotton farmers have no cooperation of any sort, and on account of their financial difficulties, they are forced to consign their crops to the traveling agents and local buyers several months before the crop is harvested ... The writer worked out the wages of a number of cotton farmers, and he found that if we suppose them paying themselves fixed wages, all of them had operated their farms at a loss which ranged from \$1.00 to \$5.00 per mow.³⁰

Thus we see Feng applying agricultural economic analysis to his own experiences to conclude that agents cause farmers to suffer losses, prompting him to suggest that they establish a cooperative marketing organization. His early held conviction that Chinese farmers were prey to middlemen was later an important component of his explanations of the aims of government programs in Guangdong.

The next major event in Feng Rui's life was his successful competition in the Tsinghua Examinations for Fellowships for Advanced Study:

Hoping to win one of the scholarships, I spent my evenings that year reviewing all texts relevant to the exam, while continuing to work in the cotton-improvement program during the day. I would usually stay up half the night, catching only four or five hours of sleep before getting up to start another ten-hour day of work in the fields. Since then, I have maintained a similar routine of work.³¹

The fellowships were part of a fund retained for educational purposes after being paid by China to the United States as part of the Boxer Indemnity imposed in 1901.³² Selection criteria for the fellowship included consideration of the candidate's experience and schools attended, and they were quite rigorous on concepts, although not on quantitative skills, judging from a set of questions on farm crops and soil fertility composed for the fellowship-selection examinations by Professor Harry H. Love (1880-1966) at Cornell University's College of Agriculture. The examination also asked candidates to describe their educational and other experiences.³³ Tsinghua University records confirm that in 1921 Feng Rui was selected to receive a scholarship for three years of study in the United States.³⁴

As noted above, Feng Rui joined an eager group of agriculture college students to hear Dr. John Lossing Buck lecture on agricultural economics at the University of Nanjing. The idea of reforming farm management and rural social organization also echoes the instruction he received from George Weidman Groff. Having established a direction, he chose agricultural economics rather than plant genetics as his main field of graduate study. But first he submitted a master's thesis on sericulture, which he illustrated with a set of photographs of sericulture processes.³⁵ The photos were provided by Professor T.H. Chien, one of Feng's former teachers at the University of Nanjing, who was engaged in a long-term project aimed at perfecting the process of producing disease-free silkworm eggs. The thesis comprehensively outlines the processes and problems of sericulture, including the pathology of silkworms and the identification of species. Despite the interest in agricultural economics that Feng later professed to have developed, the thesis makes no mention of the silk trade, industry economics, or village socio-economic organization.³⁶ Rather than working on doctoral-level research with Harry Love, who was a leading member of the Plant Breeding Department and the faculty member at Cornell's College of Agriculture most interested in research in China, Feng Rui then departed from the crop-improvement path. Between his graduation from the University of Nanjing in 1920 and completion of his doctoral dissertation, Feng's attention shifted from the technical to the

economic aspects of agriculture. In a letter to a colleague, Love later described how he selected graduate assistants; they were postgraduates who shared his interests closely and were experienced in plant-breeding research. Under his supervision, these assistants were occupied in the collection and analysis of statistical data.³⁷ Perhaps Feng Rui was not well trained in quantitative analysis; as he acknowledged in his autobiography in 1936, the training in Nanjing had been incomplete.³⁸ By the time Feng enrolled in Cornell's College of Agriculture, however, five students from China had already graduated with advanced degrees from the Plant Breeding Department and were employed at institutes in China.³⁹ It is evident that data analysis relating to plants, requiring tedious work of the sort he had experienced as an assistant to Griffing, was simply less appealing to Feng Rui than matters related to agricultural administration and policy making. By this time, Feng was clearly becoming a social scientist with a foundation of expertise in agronomy rather than an agronomist pursuing an agenda in basic research.

Feng Rui's next major work indicates that at the age of twenty-two he was already gaining recognition in China as an academic expert with concerns related to national policy. This work was a substantial article published in 1923 in the widely read journal *Dongfang zazhi* (Eastern Miscellany). The main point of the article was that China should develop an activist national trade policy in response to the tariff policies and other measures of the United States. China's economic development could proceed only in close association with comprehensive and carefully designed official policies. He stressed the need for a national program of capital investment in Chinese agriculture, one to be formulated by a national council on the basis of thorough research into agrarian conditions nationwide. This was necessary, according to Feng Rui, because international "economic warfare" had continued following the war.⁴⁰ His article was a response to China's increased vulnerability to dislocations in distant places, such as Depression in Europe following the First World War. It is revealing to compare the arguments Feng Rui presented in Chinese in 1923 with points made in his doctoral dissertation completed the following year. The contrast shows what he learned or at least provisionally accepted from his Cornell professors. There are a few indications that he wrote in accordance with his professors' views.

Feng's dissertation advisors at Cornell were James E. Boyle (1873-1938) and E. Dwight Sanderson (1878-1944). Boyle was an agricultural economist and well known for the textbook *Agricultural Economics*,⁴¹ while Sanderson was both an entomologist and a pioneer in rural sociology, later well known for the survey methods that he developed during his study of Oswego County.⁴² When he was not studying, Feng had extracurricular pursuits. He was an active member of Cornell's Chinese Students' Club, serving as vice president for the 1922-23 year.⁴³

By 16 June 1924, Feng had completed the requirements for a doctoral degree in agricultural sciences.⁴⁴ He had also been accepted as a six-month intern in the United States Department of Agriculture in Washington, DC. Submitted in its final form during the second half of 1924, Feng's doctoral dissertation was called "A Program of Chinese Agriculture."

Feng Rui's doctoral dissertation is a descriptive and prescriptive statement that calls for fundamental reforms and identifies China's agricultural problems as the nation's greatest economic weakness. The main theme of Feng's discussion was that a rational program of reform should be adopted to guide and coordinate national development efforts. His concerns were not limited to the agricultural sector. Feng considered that it was urgently necessary for China to industrialize rapidly and emphasized the need for a closer integration of agriculture and industry in order to overcome problems of backwardness in both sectors. The development experience of the United States features in Feng Rui's analysis as a guide to the path China should take in promoting mutually supportive agricultural and industrial development.

In his dissertation, Feng Rui diagnosed China's agricultural problems as caused primarily by social and technological backwardness and by vulnerability to worsening terms of trade in international markets for agricultural products. Compared to his article of 1923 on the foreign trade policies of the United States, Feng's dissertation expresses similar urgent concern but lacks the militant tone. In the conclusion to his dissertation, Feng declared that China must industrialize for the sake of world peace. Yet the work also contains references to the need to struggle for national progress in a competitive world economy.

Feng Rui's prescriptions for progress in Chinese agriculture were practical ones. He discussed methods that had been developed to improve farming in the United States and considered how to apply them in China. He concluded that to overcome the problem of low labour productivity in Chinese agriculture, various improvements could be made at the micro-economic level. Consolidation of cultivated land units, the reorganization of labour, and redesigned farm implements could increase technical efficiency. Scientific knowledge could be applied in programs to improve crops and livestock. From a broader perspective, it was clear that to raise efficiency in the allocation of resources in the rural sector, commercial, financial, and transport networks had to be improved and more closely linked to village producers.

China's agrarian nature was a conceptual touchstone for many writers during the early twentieth century. It expressed the conventional idea that China was more essentially agrarian than other countries and thus possessed a society and culture that were somehow rooted in rustic ways. The invented concept of "agrarian China" contained an explanation of China's backwardness. However,

not only did the notion of progress identify China's position in the trajectory of human development from primitive stages to modernity, but it also provided a solution to the agrarian problem. Those who conceived of "agrarian China" believed that by applying scientific knowledge and specialized expertise to agricultural production, China's progress from its essentially agricultural state could be accelerated.

Feng Rui's doctoral dissertation is an example of how the United States provided Chinese intellectuals and policy makers with a model of rapid progress toward an advanced economic condition. During this period of discussion on how to rationalize, regulate, and industrialize farming, the young discipline of agricultural economics, born in the United States in the previous century, gained in respectability. It moved from agricultural colleges to the capital in 1922 when a Bureau of Agricultural Economics was opened in the United States Department of Agriculture.⁴⁵

The transformation of farming into an industrial activity was an appealing theme in the United States as well in those days. Henry Ford, for instance, was one of the most prominent advocates of the application to farming of the "business" acumen that was believed to have led the advance of industry in the United States. At a site in Northville, Michigan, Ford experimented with the newly developing notion of decentralizing industry to draw on the resources of underemployed rural labour and reported, "We have not drawn men from the farms, we have added industry to farming."⁴⁶ In those days, the future was industrialized. Across the political spectrum, people embraced visions of mechanization, speed, and expanding scale. Paradoxically, the industrial vision was of special interest to agriculture experts.⁴⁷

Another new branch of social science, called rural sociology, also gained formal status in the United States during the interwar period.⁴⁸ Although it did not reach the heights of separate office space in the national Department of Agriculture attained by agricultural economics, the conceptual development of rural sociology followed a similar logic. Both fields split off from their parent disciplines as agriculture became a "problem." Sociology had been particularly pessimistic from the beginning. It had been created by efforts to make social-work training and practice more "scientific." Moreover, more than any other field yet systematized as a science, sociology was defined in relation to cities and industry. Industrial progress had side-effects such as the overcrowding of cities, labour agitation, clashes between immigrants and the "host culture," and the "cultural lag" society was suffering while new urban populations were shedding their rural values. Sociologists talked about "social control," preoccupied with disturbances to order.⁴⁹ Because social workers and physicians had been

colleagues in the slums they had explored together during the nineteenth century, sociology borrowed language and research methods from medicine, including pathological terms, visits to households, and statistical analysis based on epidemiology.⁵⁰

Whereas sociology proper was concerned with keeping up with urbanization and industrialization, rural sociology identified the problems of the other half of society, a section left behind by modern progress. Rural sociologists dealt with the effects of not enough progress rather than of dizzying change. Their concerns contrasted with those of the original urban-based sociologists, who were concerned with their subjects as groups of residents. The working lives of city dwellers, who ranged from model citizens to disturbers of the peace, were regulated in a separate sphere of concern. Rural sociologists, in contrast, hoped to shake their part of society out of its traditional rhythms and to make it more active. A greater concern with production distinguishes rural sociology from its parent.

During the period of Feng's studies in the United States, academic observers of agricultural affairs there stressed these issues related to rational management. In economic terms, they stressed technical efficiency rather than investment. Their optimism about the possibility of improving output through rational management was exaggerated. In fact, experts and the public shared a fundamental misconception about agricultural history in the United States. Academic studies tended to overestimate the influence of improved farm-management methods in explaining the growth of output in agriculture that had occurred in the United States. The remarkable expansion of farm output per capita in the United States since the mid-nineteenth century was explained as the result of reorganization in the use of resources. The more significant contribution of capital investment in the American agricultural sector, including new outputs of land, to increasing production and labour productivity during the period from 1850 to 1920 was neglected by leading authorities in the developing discipline of agricultural science.⁵¹ Since then, researchers have demonstrated that the contribution of organizational improvements to increased production was in fact slight, accounting for about 10 percent of increased output between 1910 and 1929, for instance, while the remainder was created by substantial increases in inputs.⁵²

Attitudes about the American farm sector during the 1920s reflected a sense of urgency about market conditions. Depressed markets for farm products persisted from a slump following the First World War. Agriculture became a problem for public discussion. Rising to a crescendo with President Franklin D. Roosevelt's New Deal in the 1930s, a chorus of discordant voices praised a

variety of potential cures for agrarian problems in the United States, such as agricultural corporations and cooperatives, economies of scale, cost accounting and control, and market studies.⁵³

To a large extent, the belief that rational management could promote progress in agriculture became a keystone of the body of scientific knowledge taught in the United States to Feng Rui and a whole cohort of young men from China who returned to take up positions as researchers and administrators during the interwar period. Influenced by instruction partly based on an inaccurate analysis of the economic history of the United States, Chinese agricultural reformers were overly confident in the potential of reorganization, even in the absence of new inputs, to increase production in rural China. Reflecting this emphasis, the greatest difference between Feng Rui's article of 1923 and his doctoral dissertation was that the latter lacked discussion about the need for capital investment in agriculture. At Cornell, it seems, he imbibed confidence that agricultural production could be increased through the reorganization of farm work.

Nonetheless, Feng Rui was an independent thinker and one concerned with particular Chinese problems. Accepting the need for reorganization, he stressed the improvement and expansion of government administration of agriculture. Although a strong theme of Feng Rui's doctoral dissertation was that the government must define and implement agricultural policies in order to reform China's economy, this theme received only general discussion for the most part. His analysis was limited by a scarcity of quantitative data. Even for grain production and consumption at the national level, only rough estimates were available. More detailed data and statistical series were available only for import and export trade flows as a result of the work of China's Maritime Customs Administration. Reflecting this situation, the most well-focused, rigorously analyzed section of Feng Rui's dissertation is the discussion in his sixth chapter of China's foreign trade in farm products. He argued that China's balance of trade in agricultural products required remediation. Yet he did not dwell on the lack of development of China's transportation sector, as in his article in Chinese, where he pointed out that China's international trade was physically in foreigners' hands. Weak links in the domestic transportation network, furthermore, made China vulnerable to serious competition from low-cost imports.⁵⁴

One of the most interesting parts of Feng Rui's doctoral dissertation comes at the beginning. Introducing his subject, he wrote that it was difficult to determine precisely the size of China's farming population. This is because many people in China, even city dwellers, were part-time, or "avocational," farmers. Feng then discussed methods of estimating the size of China's full-time agricultural workforce, pointing out that because part-time farming activities were

so widespread, standard estimates of China's farming population as amounting to between "80 percent and 90 percent" of the population should be revised downward. Overestimation of the population specializing in agricultural production, he pointed out, failed to account for the large proportion of farmers who combined the cultivation of crops with other activities. In Feng's estimation, about one-quarter of China's population should be classified as "avocational" agriculturalists. Continuing his discussion, however, he noted that after raising this question with his academic mentors in the United States, he had revised his view. Deferring to the wisdom of the specialists, he accepted their estimate that China's farmers constituted about 80 percent of the total population.⁵⁵ Yet Feng Rui might not have sincerely accepted the view that such a high proportion of working Chinese were engaged in agriculture. An indication that he was cautious in expressing views that diverged from those of his teachers is that elsewhere in the dissertation, he followed quite closely his advisor James E. Boyle's pessimistic views on the rural cooperative movement.⁵⁶ After graduation, however, he wrote enthusiastically in Chinese about the potential of cooperativism. Nonetheless, in his article of 1923 and after returning to China, Feng used high estimates of the proportion of "peasants" or "farmers" in the Chinese population in many of his published articles and reports. It seems clear that for Feng Rui, as for many other writers then and now, the figure of "80 percent" had a rhetorical function.

Feng's education in agriculture-related subjects in Guangzhou, Nanjing, and the United States provided him with respectable credentials and entrée to his field and to the academic world in general. As a finishing touch to his education, Feng made a tour of agricultural research institutes in Europe with scholarship funds provided for that purpose.⁵⁷ Soon after his return from the United States with a doctorate in agricultural sciences, Feng joined a well-known "rural reconstruction" project based in Ding County (Dingxian) in Hebei province.

Participating in China's Reconstruction: Feng's Early Career

At the time of his departure from Cornell University in June 1924, Feng Rui gave his address in China as the College of Agriculture at National Southeastern University (NSE) in Nanjing, providing the name of the dean of the college as a contact.⁵⁸ He had been offered a position as the director of a new program in rural sociology at NSE before his graduation from Cornell. The position was held for him until the fall of 1925 for the period of his internship in Washington and his subsequent six months of travel in Europe. By the time Feng returned to China, however, political and financial problems were causing so much disruption of academic functions at NSE that he did not take up his appointment at the school. His plans to pursue a university career were stalled.

The fortunes of NSE happened to be at a low point during the fall of 1925. The government-sponsored university had been caught up in a political crisis that caused the suspension of instruction. Classrooms were closed and faculty morale was low because of a withdrawal of government funding as well as student unrest. During the fall of 1925, the payment of salaries to many faculty members fell into arrears, and paltry payments made in December amounted to only 5 percent of the regular monthly salaries. The nationwide May Thirtieth Movement of 1925, in which patriotic students led protests against imperialism, was particularly heated on the NSE campus, and by September it had become entangled with the Guomindang's "participation" movement (*danghua yundong*). Guo Bingwen (1879-1969), the popular founder and president of the university, was ordered to resign by the Ministry of Education. Soon afterward, NSE's newly appointed president was trapped in his office by a large group of students demanding his resignation. The new appointee might have been injured by the crowd if several more moderate students from the Department of Physics had not intervened to bundle the administrator off in his horse-drawn carriage.⁵⁹ There were soon other setbacks at NSE. A serious blow came when the Boxer Indemnity fund turned down the Agriculture College's application for expanded funding. Asked to assess the soundness of NSE's proposals, the dean of agriculture at the University of Wisconsin had warned that investment might be wasted in schools that "struggle even to keep their doors open."⁶⁰

Feng Rui returned to Guangzhou to start his teaching career. He stated in his autobiography that he first taught for a brief period at Lingnan University on his return to China. During the fall of 1925, he conducted social survey work in villages near the university campus south of Guangzhou and presented the results in seminars at the Lingnan School of Agriculture (founded in 1921), where he served as an instructor. Two articles resulted from this work.⁶¹

During Feng's time back at Lingnan University, interestingly enough, Mao Zedong (1893-1976) was also in Guangzhou for several months to participate in the Nationalist party's efforts to mobilize peasants to support revolution and national reunification.⁶² Although Mao and Feng Rui moved in different circles and are not likely to have met, they were both participants in the rural social-survey movement of the era. While teaching at the Guomindang government's Rural Training Institute in Guangzhou, Mao began to classify members of rural society into distinct groups as part of his responsibility for mass mobilization in Guangdong. It was in Guangzhou that one of his most famous essays was first published, in a journal issue that also featured an article by Chiang Kaishek. The essay on "Analysis of China's Social Classes" offered revolutionaries a guide to distinguishing between "enemies" and "friends." In Mao's analysis, Chinese society was under the oppressive domination of an alliance of landowners,

compradors, and foreign imperialist interests. These groups were holding back the development of society's productive forces, he argued.⁶³

In later years, both Feng Rui and his contemporary Mao Zedong continued to study and report on rural society in provinces to the north. A record survives of Mao's 1927 survey of conditions in the county town of Xunwu in Jiangxi. Mao enumerated shops and periodic markets in the town, made lists of the varieties of goods for sale, and described religious and educational institutions. All of these matters, he felt, were relevant to his main concerns: land tenure relationships and the struggle of peasants to bring about land redistribution.⁶⁴ Feng Rui also developed ideas on how to reorganize social relations while conducting rural social surveys. However, it appears that he did not find redistributionist socialism appealing, looking instead to existing government to expand its support of institutions dedicated to agricultural reform and to replace exploitative middlemen with a rational system of bureaucratic administration. Feng Rui thus tended to argue that rural problems could be solved through education, science, and the attention of enlightened officials. Although radical and mainstream observers of rural China disagreed about the interpretation of their data, they shared the conviction that policy makers should be provided with detailed information systematically collected by experts, informing them about social and economic conditions at the village level. This emphasis is evident in Feng Rui's dissertation and in his articles published during the 1920s as well.

According to Feng Rui's elder daughter, a marriage was arranged for him during the year following his return from the United States. Believing that it was her responsibility to help him get settled in life, his mother had betrothed him to a young village woman. Feng was unenthusiastic about the marriage because the woman was uneducated, but he felt duty-bound to obey his mother. This was a rather typical attitude among the young men of his generation.⁶⁵ But Feng's method of handling it was unusual. He formally accepted the woman as his wife in a traditional ceremony but disappeared soon afterward. After spending the night in a shed, he departed for Beijing. As his younger brother reminisced, although Feng's unfortunate bride spent many years thereafter working as a servant to his mother, and later entered a Buddhist convent, it had been better for Feng Rui not to consummate the marriage than to father children toward whom he would have felt no affection.⁶⁶

With his departure from Guangzhou, Feng Rui not only avoided an arranged marriage but also escaped unsettled conditions in Guangzhou during the years from 1925 to 1927, when the city was the Nationalist party's base for popular mobilization in support of revolutionary goals.⁶⁷ He later claimed in his autobiography, however, that idealism drew him into collaboration in Ding County with James Yen (Yan Yangchu, 1893-1990). Yen was a well-known Yale University

alumnus, educator, and social reformer from Sichuan.⁶⁸ Yen later recounted that Feng was taking a holiday in Beijing when the two got together for an evening of conversation, and Feng became enthusiastic about the rural education program Yen directed. Feng Rui recounted that he urged Yen to go forward with his plan for rural-survey work with the comment that after all, “90 percent of the Chinese people are in the villages.”⁶⁹ During the summer of 1925, Yen had travelled to Hawaii to help organize the Institute of Pacific Relations. In Honolulu he enlisted the help of the Chinese Chamber of Commerce to raise funds to support the work of his Mass Education Movement (MEM) in China, netting US\$20,000 in donations from the Hawaiian Chinese community. When Yen offered to pay Feng Rui a salary out of this fund, Feng accepted.⁷⁰ Around the same time, Sidney Gamble, a scholar of independent means, became associated with the MEM. The political unrest of 1925 had caused Gamble to suspend his rural-survey work near Beijing, and, looking for another research field, Gamble decided to direct funding to the MEM. He offered to support a three-year rural sociological survey if Yen could find a peaceful location to carry it out.⁷¹

Yen appointed Feng Rui director of the agricultural research division of the Mass Education Movement’s program in Ding County in Hebei province. According to his own account of the mission of the MEM to educate the rural population in production, Feng Rui became the director of an Agricultural Extension College established by the MEM in the spring of 1926.⁷² Over a year earlier, Yen had recruited Fu Baochen (Paul Fugh), who had also completed doctoral studies at Cornell University in 1924, submitting a dissertation on “Reconstruction of the Chinese Rural Elementary School: Curriculum to Meet Rural Needs in China.” Fu returned to China during the summer of 1924 and began work in the Beijing office of the MEM. In November 1927, he moved to Chaicheng, the MEM’s rural outpost. James Yen was proud of his two educated recruits and their commitment to living like ordinary villagers. In a letter to Huang Yanpei of Beijing University, he praised their dedication and austerity.⁷³ Staff with doctoral degrees increased the prestige of his organization; scholars willing to rough it in a village were true assets.

James Yen stressed how simply MEM staff lived in Ding County, declaring that except for ensuring good ventilation, the MEM built huts for Feng Rui and the other staff that were just like the primitive dwellings inhabited by the local people and cost a mere 100 *yuan* each.⁷⁴ Another Sichuan native named Hu Guangbiao visited Chaicheng in about 1928 and was struck by the simple conditions in which Feng and Fu were living; their cement hut lacked running water and electricity. The two “scholars,” nonetheless, were continually occupied in efforts to improve the lives of their village neighbours, discussing how to build



Figure 2 Feng Rui at work in Ding County, Hebei, 1928. Source: *Nongmin* [The Farmer] 1 (1929). Photo courtesy of Mann Library of Agricultural Sciences, Cornell University

sanitation facilities, for instance, when they went without running water themselves.⁷⁵ According to other observers, however, life in Ding County was quiet but not uncomfortable. MEM staff took to Ding County some of the comforts to which they were accustomed in city life, such as a supply of coffee and a bathtub in the case of James Yen and his family.⁷⁶

Although he and James Yen sometimes promoted the impression that he lived like an ordinary villager in Ding County for years on end, Feng Rui in fact spent most of his first two years on the project in Beijing.⁷⁷ During this period, he met and courted Chen Zhaoyu, a Beijing native who had studied in a bachelor of science program at Beijing Normal University. Born in about 1905, Chen was the child of a concubine and a wealthy man, both of whom had died when she was young. She grew up feeling shunned by all but one of her many older half-siblings.⁷⁸ Feng and Chen married, and their first child was born in Beijing in

1927. The baby's name was Punong, meaning "extend agriculture to the world," which reflected his father's idealistic enthusiasm. Unfortunately, the child died before the age of two. But he was followed by two girls, Puyu and Puzheng, born in 1928 and 1930 respectively, whose unusual names (meaning "universalize education" and "universalize government") still remind Puyu that she had impractical intellectual parents.⁷⁹

While settling down to family life in Beijing, Feng worked in close association with Sidney Gamble, making preparations for their path-breaking rural survey. Drawing up sets of questions and guidelines for analysis was Feng's first and most important contribution to the Ding County survey project. Under Gamble's direction, he set forth the survey method, defining categories, composing questions to be asked, and suggesting how to gather and organize the information. These plans were drawn together and prepared for printing and circulation by January 1927, when Fan Yuanlian contributed a preface. Two years later, the 800-page outline was published under Feng's name as a reference work for the direction of rural social surveys.⁸⁰

Although his main responsibilities were in other areas of the work in Ding County, Feng Rui continued to participate in the survey project as a financial manager. When the leading surveyor brought in to replace Feng fell ill in 1929, James Yen decided to recruit a new staff member to replace him, reporting to Gamble that Feng Rui was assisting on the project by keeping track of finances.⁸¹ Thus Feng was not active in the final stages of synthesis and analysis of the survey data. A comprehensive report of the results by Li Jinghan was published in 1933.⁸² Sidney Gamble's English version, titled *Ting Hsien: A North China Rural Community*, appeared in 1954.⁸³ In the preface to his work, Li Jinghan was effusive with thanks to Feng Rui, declaring his regret that Feng had been unable to work on the project to the end. Li stated that Feng Rui had agreed to carry out agricultural economic analysis of parts of the data collected but that he had unfortunately become ill through overwork and had retreated to a mountain resort for a period of convalescence.⁸⁴ Following his recovery, Feng had been occupied with other work.⁸⁵

During his years in North China, Feng Rui built up a reputation as an agricultural specialist and social reformer. His association with James Yen, who was widely respected, even praised as a "young genius" by one foreign writer, apparently helped Feng to become prominent.⁸⁶ The expansion of his connections through James Yen's social network probably contributed to Feng's success in publishing numerous articles on China's rural economy and society during this period of his career. He discussed a wide range of topics in these publications, indicating the broad scope of his concerns as an agronomist, administrator, and advocate of national economic reform. In 1927 two of Feng's articles appeared

in journals devoted to research in education. In an issue on rural education, *Jiaoyu zazhi* (Education Magazine) published an article by Feng Rui and another by Fu Baochen. In his contribution, Feng outlined the work in Ding County on practical instruction for farmers that aimed at improving their production techniques and encouraging them to adopt better tools. He called for universal implementation of the programs of instruction that had been developed in Ding County and for increased government support of agricultural reform at the grassroots level.⁸⁷ In his other article on education in 1927, Feng focused on the particular projects, reporting that the peanut crop of Ding County had been improved quickly thanks to the introduction of a superior strain and describing his efforts to improve fruit crops in a project for pear-tree grafting and the work of animal husbandry and poultry specialists under his direction who introduced European breeds to make the raising of pigs and chickens in Ding County more remunerative. Other specialists were working on developing a labour-saving waterwheel and redesigning plows and harrows to replace some of the inefficient tools that were in use in the county. In addition to these efforts, Feng also directed the establishment of a demonstration station that would serve to introduce advanced techniques to local farmers.⁸⁸ The management of experimental wheat fields was another of Feng Rui's varied responsibilities in Ding County, along with a cotton-improvement program. The Cotton Mill Owners' Association, which had supported J.B. Griffing's project, continued to provide free seeds through the University of Nanjing and Feng Rui to the MEM.⁸⁹ Feng's association with cotton-improvement efforts, continuing from his work as one of Griffing's assistants, later led to another publication, a co-authored guide to the cultivation of American cotton varieties.⁹⁰

In addition to writing for academic audiences, Feng Rui was committed to using his writing skills to spread technical knowledge to the wider public. He regularly composed short articles for inclusion in the MEM journal *Nongmin* (The Farmer). Published every ten days, the journal was written in clear *baihua* (colloquial Chinese) and contained reports on current events and amusing stories as well as useful information on farm and household management. One of Feng Rui's contributions was a lesson on the essential elements of plant growth. Others provided instruction on seed selection, diseases affecting wheat, protection against insect pests, fruit-tree grafting, construction of a seed-warming bed, and the propagation of potatoes.⁹¹

Regarding the culture and social organization of rural China, another of Feng Rui's publications of this period reveals that he understood some of the obstacles to rapid reform of the national agricultural economy. In an interesting discussion of "the psychology of village society" published in 1928 in a journal devoted to sociology, Feng generalized that Chinese villagers were set in their ways and

wary of change because of their subsistence-level economy and their social isolation. He identified the isolation as an enormous barrier to progress, explaining it as the preference of self-reliant rural Chinese families as well as a reflection of undeveloped transport networks and the vastness of China's countryside. Having stated the problem, however, Feng proceeded to present an optimistic argument that villagers' isolation reflected important strengths as well, such as their spirit of self-reliance and independent thinking.⁹²

According to Hu Guangbiao, Feng Rui was a very energetic and capable person (*ren hen jinggan*). During a visit to Chaicheng, Hu observed Feng Rui making repeated attempts to perfect the design of a basket to hold newly hatched chicks. Hu wryly recalled how impressed he was that Feng had the patience to keep working on this trivial problem until he had arrived at a solution.⁹³ His observation supports Feng Rui's own claims to results-oriented pragmatism.

Another visitor to Ding County observed Feng's work in 1930. An organization called the Layman's Foreign Missions Inquiry sent two representatives to China near the end of Feng Rui's service in the MEM.⁹⁴ In observations at the headquarters of the MEM in Ding County, they were particularly struck by Feng Rui's confidence in the potential for technological progress in the programs under his direction. As one representative reported on Feng's project to replace farmers' old tools with more efficient ones,

It should be stated that while a considerable degree of success has unquestionably attended Dr. Feng's efforts, it is probable that he has not counted the cost adequately, nor the elements of risk in such work as his ... It is also to be noted that as far as I could learn, there is little demand for the improved machinery because, while it is cheaper and better, the farmers will not discard what they have in order to get the new. The process will take place in time but will be very slow.⁹⁵

The organizations supporting the MEM had high expectations of Feng Rui as a well-trained agriculture specialist. This was partly because his training had been shaped by their views on China's needs. Throughout his education and the first half of his working life, Feng was exposed directly and indirectly to the opinions of Christian missionaries. His choice of the agriculturalist's occupation was presented and shaped by an early-twentieth-century type of American expatriate, namely the agricultural missionary. Whether or not he shared their standards, the logic followed by the representatives of the Layman's Foreign Missions Inquiry in forming a judgment of Feng Rui is evident in a statement published in the journal of an association that one of them headed, namely the World Agriculture Society. The statement summarized the aims of agricultural evangelism overseas:

What would be the work of an agricultural missionary? He would bring to the less progressive parts of the world where the state has not yet awakened to the need, the latest and best in the way of farming and use his training to help the people adapt newer and better methods until the governments awaken. At that time of awakening, there will be trained native recruits all ready to step in and extend the work, to the everlasting good and uplift of their country. He will use the friendships that he makes among the people to influence them to accept higher and better ways of living. In the why and wherefore of agriculture, he will teach science, the connecting link between all parts of life, and the greatness of God and his wonderful programme for men.⁹⁶

These observations and statements of principles shed some light on Feng Rui's attitudes. His advocacy of a role for enlightened government in the reform of Chinese agriculture drew on views shared by respectable supporters of efforts to promote progress in China, including those influential in directing funds into the Ding County projects and other educational and social reform endeavours.⁹⁷ Idealism about the enlightened direction of educational and, eventually, administrative reform efforts in China also matched Feng Rui's ambitions to advance from the stage of waiting "until the governments awaken," as prescribed for agricultural missionaries.

Continuing his autobiography in 1936, Feng wrote,

In the course of this work in Ding County, I came to believe that reform efforts could be applied to many of China's economic problems. So I drafted a book called, "A Plan for the Creation of a New Economic System for China," convinced that it was necessary to work out practical solutions to address specific problems. My book discusses a new national economic system for China as a solution to the problems of the entire Chinese economy. It is a proposal that I worked out over a ten-year period.⁹⁸ What I wished for was an opportunity to implement my plan for a new economic system, dealing both with the economic foundations of the Chinese nation and with the various systems making up the livelihood of the Chinese people.⁹⁹

While Feng Rui was growing up, a new language was invented to translate the names and principles of the new rural social sciences in Chinese journals. As the work in Ding County illustrates, the provision of services was intended to raise both the cultural and material well-being of Chinese villagers. Associated from its inception with mass education, medicine, and the Christian Church, the study of rural society was introduced to China by educators and Christian missionaries, in association with Western medicine.

Yet Chinese intellectuals were not passive recipients of knowledge; they shaped it to meet China's needs as they understood them. As discussed above, there were important differences between Chinese and foreign views of China's weaknesses. Moreover, advanced knowledge was continually being reshaped as new problems demanded expert attention. Feng Rui was part of a generational cohort of intellectuals who responded to conditions and concerns in China on a foundation of Western training in agriculture as an academic subject. That this led to breaks with approaches learned abroad may be seen in some of his writing. Perhaps Feng Rui's most serious departure was his enthusiastic embrace of the idea of the cooperative agricultural enterprise. Advocacy of cooperatives was also the most ambitious of his projects during his years in North China.

As an intellectual concerned with the reorganization of Chinese agriculture and a proponent of official administration of the agricultural sector, Feng Rui became associated with a leading rural reformer named Liang Shuming (1893-1988). Liang was an idiosyncratic social theorist convinced that rural reconstruction on the basis of Confucianist nationalism could solve China's crisis of economic backwardness.¹⁰⁰ In influential writing and lectures, Liang opposed both capitalism and socialism, hoping to design a path for China's progress that would be spiritual as well as material. He was particularly interested in education for China's rural population.¹⁰¹ During a visit to Ding County in 1929, Liang gave a public lecture in which he expressed disagreement with the approach of the MEM. In his address on that occasion, Liang endorsed the ideal of mass education but advocated limiting advanced education, for the time being, to persons whose backgrounds enabled them to make use of it.¹⁰² Despite his reservations about education for the masses, Liang seems to have been impressed by the Ding County projects and by Feng Rui. It appears that the two met during or around the time of Liang's visit to the county and that Feng Rui became Liang's informant on advanced agricultural knowledge. Beginning in 1930, Liang Shuming publicized his ideas by editing a journal called *Cunzhi* (Village Government). Feng Rui was one of the leading contributors to *Cunzhi*. During its first year, the journal featured his seven-part discussion of the potential of the cooperative movement to restructure the Chinese economy. Called "Using cooperativism to create a new economic system for China," Feng's series of articles supported Liang's view that neither capitalism nor communism offered viable paths for China's development. His articles on cooperativism grounded the theory of a Chinese development alternative through analysis of the Chinese economy in comparative historical perspective and summaries of capitalist and communist doctrines. He then provided details on the principles and functioning of agricultural cooperatives. Referring to cooperatives in various countries around the world, Feng drew his examples of policy and practice mainly

from reports of experiences in the United States. Therefore, his discussion was almost entirely devoted to marketing cooperatives rather than forms of cooperative agricultural production. As in his doctoral thesis, Feng Rui advocated and outlined a new program of action for the national economy. However, this series of articles was left incomplete; Feng began but did not complete his discussion of the concrete methods through which a cooperativist system could be instituted in China.¹⁰³

Liang Shuming advocated a rural reconstruction program that would establish village "self-government" and agricultural improvement on the basis of existing Chinese culture. He was doubtful about the necessity of redistributing village land. Feng Rui, similarly, was not inclined to include the redistribution of land in his program for comprehensive reform of the Chinese economy on a collectivist basis. The surveys of landholdings and rental arrangements conducted in Ding County, he wrote, showed that 90 percent of farmers already owned their land. Moreover, the size of their landholdings was adequate.¹⁰⁴

In his discussion of cooperatives, Feng Rui did not follow the guidance of his graduate school advisor James E. Boyle. In his textbook on agricultural economics, Professor Boyle had declared that agricultural cooperatives had become "a vague thing endorsed by all," and he stressed the importance of distinguishing clearly between marketing and production cooperatives. He also warned against underestimating the difficulties and costs of operating a cooperative.¹⁰⁵ Although the idea of cooperation and abundant descriptive details on agricultural cooperatives were readily available in journals, newspapers, and books published in the United States, reports on results were scanty. Feng observed from afar a sometimes contentious public discussion on whether the United States Department of Agriculture should actively promote cooperativism.¹⁰⁶ Because most of the publicity about the issue originated with the proponents of cooperatives, Feng Rui might not have realized the extent to which views differed on the American scene.¹⁰⁷ Moreover, in 1930 the debate had not yet become as polarized and politicized as it did later. Boyle expressed increasing skepticism over time in his writings on cooperatives.¹⁰⁸ Nonetheless, whether or not Feng Rui was aware that he had simplified the issues, it would have been possible for readers of Liang Shuming's journal to gain the inaccurate impression that agricultural cooperativism had taken root across the United States.

James Yen and Liang Shuming were China's best-known rural reformers during the interwar era. The expert status Feng Rui had gained by the time of his departure from Ding County and North China is indicated by his association with well-known academic experts beyond the agricultural field. The highpoint of Feng Rui's career as an agricultural specialist in the service of a nongovernmental organization was his participation in the 1931 meeting in

Hangzhou of the Institute of Pacific Relations. Sharing the program with Hu Shi and other prominent intellectuals, Feng contributed a paper to the published version of the proceedings. Feng's paper on "Agriculture" was a revision of the first chapter of his doctoral dissertation. In revision, however, Feng strengthened his prescriptive emphasis. He added a detailed proposal for a government-established agricultural research program and updated his original introduction with praise for cooperativism.¹⁰⁹

In 1931 Feng Rui's thinking diverged from conventional views in the United States and had changed since he completed his studies. A point of contrast between Feng's analysis of China's agricultural problems in his doctoral dissertation of 1924 and his 1931 presentation concerns his treatment of the example of Denmark as a model of government-directed agricultural reform. In the conference paper, Feng included a reference to Denmark as part of a discussion recommending thorough research and other government-supported preparations to expand China's nascent cooperative movement.¹¹⁰ In his dissertation, by contrast, he had criticized other writers for overenthusiastic references to Denmark as a model of reform to be emulated by Chinese policy makers. "These writers have overlooked the difference in conditions and situations in these two countries," Feng warned, explaining that cooperativism was only a partial cause of Denmark's success in agriculture. More important was the fact that Denmark had been able to specialize narrowly in the production of foodstuffs such as dairy products for which large markets existed in neighbouring countries. China could not count on disposing of a large share of total national farm production in foreign markets.¹¹¹ It was not a lapse on Feng Rui's part, however, that in Hangzhou in 1931 he discussed cooperativism in more optimistic terms. As repercussions of the financial collapse of 1929 were being felt in China, many intellectuals were anxious to hear about possible alternatives to the economic systems that had led to economic depression worldwide. The potential of collectivist economic enterprise was widely appealing during the 1930s, leading in 1935 to the establishment of central government organizations to promote cooperatives.¹¹² Feng helped to embed the idea in the mainstream.

In addition to their actual achievements in rural education, participants in the programs Feng had directed in Ding County gained faith in technical progress and helped to spread belief in the value of rural reconstruction models. They were confident about creating practical knowledge that could be emulated nationwide. Part of this knowledge related to credit associations and other forms of cooperation, offered as the basis of a development path for China that would avoid both capitalist and socialist pitfalls. Feng Rui helped to promote optimism about progress for agrarian China through the replication elsewhere of the successful aspects of an experimental model county. In this phase of his career,

however, he also paid serious attention to improvements in the techniques of farming, adaptations of tools, and the development of higher-yielding seeds. Such basic research reflects his awareness of the need for material investment in agriculture. His contributions to the Ding County model were not limited to general discussions of forms of rural association. His interest in cooperatives was related to his efforts in Ding County to promote practical training and to establish extension programs through which new techniques and equipment would be introduced to isolated farmers.

A lecture that Feng Rui delivered in Guangdong indicates his recognition of the problem of underinvestment in rural China. In 1932, soon after he joined the government of Guangdong, Feng was invited to speak at Sun Yatsen University in Guangzhou to an audience interested in the rural education program that he had directed in Ding County. According to the published version of his lecture, Feng presented a lively analysis of the causes and effects of rural poverty. Without mentioning cooperatives, he emphasized the need for government-led investment, particularly in basic healthcare, to promote poverty alleviation. Without a stronger foundation in physical well-being, he argued, rural people could not benefit from a mass education movement.¹¹³

Rural China, the Real China

It is a striking characteristic of Feng Rui's life that he was frequently involved in new projects and programs. His studies at Lingnan College began when that school was settling on recently purchased farmland, at about the same time as George Weidman Groff began to transform the site with his systematic tree-planting program. Proceeding to Nanjing to study agriculture, Feng entered the College of Agriculture at the University of Nanjing just as it was being organized. After graduation, he participated in a cotton-improvement project during the first year of what became a long-term program. Next, he was one of the first in a lasting flow of graduates from the University of Nanjing's School of Agriculture who continued their studies at the College of Agriculture at Cornell University.¹¹⁴ Later, after returning to China with advanced degrees in agriculture and knowledge of government administration of agricultural sectors in Europe as well as in the United States, Feng helped to launch a large sociological survey carried out in Ding County in Hebei province. As with his high school and college, the Ding County project eventually developed into a well-known institution. Later, as will be seen below, as a government official and one of the first directors of Guangdong's new Bureau of Agriculture and Forestry, Feng built new institutions.

In his autobiography, Feng Rui described how he participated in developing a new set of ideas about China. He gave himself credit for persuading James

Yen to extend his educational efforts to the countryside. “Where are most Chinese people?” he reported asking Yen. “They are in the villages [*nongcun*].”¹¹⁵ During his years in northern China, Feng Rui participated in the formation of a new set of ideas about the nature of China and its place in the world. The first step toward the redefinition of China was to identify Chinese villagers as a distinct group. One of many new terms that came into general use in China during the late nineteenth and twentieth centuries was *nongmin*, first drawn from classical Chinese obscurity to translate the terms “peasant” and “peasantry” in Meiji Japan.¹¹⁶ Along with China’s agricultural essence and agricultural backwardness, China’s ancient peasantry was in fact invented during the twentieth century. In this process, the *nongmin* were objectified and problematized. In some of his writing, Feng Rui expressed a paternalistic attitude toward the Chinese peasantry, one shared with other intellectuals of the era. Even the optimism about the improvement of villagers’ lives can be seen as inherently condescending in its emphasis on their current backwardness compared to what was possible.

Like others among his contemporaries, Feng Rui tended to equate China’s “masses” (*pingmin*) with the “peasantry,” and to relocate sociological concern from the urban scene to villages, where society was more grounded in production problems. Certainly he contributed to the creation of a definitional divide between urban modernity and rural backwardness. But Feng Rui was more engaged than others in the application of practical knowledge. His efforts in Ding County involved concrete investments. Thus he was engaged in introducing new techniques, tools, seeds, and crops to farmers, as well as ideas about new rural associations to promote mutual assistance among farming households. Feng Rui’s career thus illustrates how the emphasis of rural reformers could shift and alternate between concrete measures and abstract proposals for new organizational forms. As will be seen in the following chapters, the emphasis of his work as a government bureaucrat in Guangdong shifted away from efforts to rectify directly what has been described as an “abysmally low” level of public investment in China’s agricultural sector during the era of his education and career.¹¹⁷ Instead, he adopted the Fordist approach of “add[ing] industry to farming.”¹¹⁸ In effect, this approach directed resources, including Feng Rui’s time, into industry rather than agricultural production. His experiences suggest why China as a whole made this shift, for the rest of the century.