that social disapproval and the risk of reprisal "did not stop [them] from pursuing socially and even legally risky desires" and developing "extreme feelings and violent actions stemming from sexual and romantic relationships" (p. 152). The final few chapters foreground politics, hierarchies, the military and particular cleavages that emerged on the Small Third Front in one-time workers' narratives, with the final chapter delving into appraisals and critiques by those who toiled on the Small Third Front and experienced working and living those lean years.

As Everyday Lives is more of a compilation of translations with helpful guides and activities for the classroom - a textbook of sorts - than a study that picks up the mantle of Meyskens, Naughton and others, this reviewer will approach this review differently than usual. The introduction reads as a comprehensive summary of Meyskens's work - 17 of the chapter's 27 footnotes reference either Mao's Third Front or Meyskens's 2015 article on the topic for Twentieth Century China - rather than a more robust survey of the extant literature on the Third Front. Indeed, per Meyskens's introduction, the corpus of literature on this topic is much larger than the opening pages of Everyday Lives betray to the reader. Where, for instance, are references to work by Hans van de Ven, Rana Mitter, Sigrid Schmalzer, Judd Kinzley or Naughton's 2007 book The Chinese Economy? Hirata's articles "Steel metropolis" (Enterprise and Society, 2020), "Mao's steeltown" (Journal of Urban History, 2021), and "Made in Manchuria" (American Historical Review, 2021), though recent releases, were available to the authors during the review process and appear to this reviewer as glaring omissions from the introduction. Where is engagement with other studies on military industrial development in the socialist world, notably Lennart Samuelson's 2000 book, Plans for Stalin's War Machine? Another minor issue for this reviewer concerns the logic of decision-making of whose narratives, reflections and recollections made the cut, and whose did not. This is somewhat elusive. Are all respondents Han Chinese, and if so, why not broaden the proverbial net and interview non-Han workers on the Small Third Front, if available? A note somewhere in the introduction would suffice and guide the reader to the editors' methodology of selection.

Such queries, however nit-picking, aside, Xu and Wang have provided an eminently useful collection of translated first-hand accounts and have made an invaluable contribution to the study of labour history in Maoist China. The editors' inclusion of guided questions and activities provide for an especially useful teaching resource for students with a keen interest in approaching 20th-century Chinese history, especially the Mao era, from below.

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Carbon Technocracy: Energy Regimes in Modern East Asia

Victor Seow. Chicago: University of Chicago Press, 2022. 376 pp. US\$40.00 (hbk). ISBN 9780226721996

Shellen X. Wu

Lehigh University, Bethlehem, USA Email: shw722@lehigh.edu

During the past year, countries around the world have experienced devastating natural disasters as a result of record-breaking extreme weather. In China alone, extended heatwaves, flash flooding and drought struck different parts of the country in turn. The bill for the effects of our dependence on fossil fuels has arrived and is now due.



In this new normal for the Anthropocene, the "age of man," Victor Seow's timely new book, *Carbon Technocracy*, offers a deeply researched account for how China came to construct its carbon economy. Seow argues that a technocratic class not only engineered the mass excavation of fossil fuels but also promoted a set of ideals "inextricably linked to the energy regime of coal" (p. 11).

Seow's account begins with the Japanese empire at the start of the 20th century. Japan expanded its control over northeast China after the Russo-Japanese War (1904–1905). In 1906, the Japanese government set up a "semi-public, semi-private" corporation, Mantetsu, to manage the railroad and oversee extensive surveys of Manchuria. These early geological studies revealed the rich potential of the Fushun coalfields.

Ogawa Takuji, a graduate of Tokyo Imperial University's geology department, and mining engineer Ohashi Takichi were among the first of a generation of Asian technocrats whose vision of an industrial state run by fossil fuels would transform Fushun, Asia and the modern world (p. 45). What follows is a richly entangled narrative of how the technology of energy extraction and the mechanisms of surveillance both helped to enforce the labour regime, from fingerprinting, electric fences and watchtowers, to, during the war, the use of forced labour (p. 105).

From the beginning, Japan's new acquisitions in Manchuria combined scientific efforts with the colonial project of domination and control. The latest technologies and mechanization helped Fushun become the coal capital and largest coal mine in Asia. The Longfeng mine's winding tower, one of the tallest in the world, and the colossal open pit mine vied as the primary symbol of the colliery (p. 179). Beneath these vast technological wonders, human beings toiled in a harsh labour regime that valued the machinery more than expendable lives. An explosion at the mines in 1917 killed 470 Chinese workers. Japanese managers blamed such accidents on the ignorance of the Chinese labourers and their failure to follow safety regulations.

The increasingly harsh labour conditions at the colliery mirrored the growing violence in Manchukuo, where incidents like the 1932 massacre of civilians in the village of Pingdingshan in southeastern Fushun saw the Japanese military execute three thousand villagers as retaliation for Chinese resistance and sabotage of mining facilities (p. 162). The violence is both shocking and a natural extension of the systemic violence of the Japanese empire's industrial vision – at whatever cost to local workers and the environment. Japanese war aims in the 1930s and 1940s intensified demands at the colliery, a centrepiece of the imperial industrial plan in the wartime "managed economy" (p. 164).

By the autumn of 1936, the Manchukuo government had issued the Manchurian Industrial Development Five-year Plan, designating the coal industry as a major area for development (p. 175). The intensification of production met with a shortage of skilled labour and equipment. In turn, these shortages contributed to the deterioration of safety at the mines in a vicious cycle. By the second five-year plan in 1942, the carbon technocracy had reached its limits through exhaustion and overreach (p. 197). Spraying workers with chemical disinfectants, enforcing quarantine on sick workers and murdering those suspected of illness failed to prevent the outbreak of cholera. From 1943, Fushun failed to meet production targets because of these "unfavorable conditions" (p. 203).

The two and half years the Chinese Nationalist regime controlled Fushun and the subsequent Communist takeover after 1949 replicated the same top-down control of the carbon resources the Japanese empire had enacted. During the war, the Nationalist regime created the National Resources Commission (NRC), which focused on developing coal mines to meet the energy needs of a society at war and of relocated industries (p. 232).

In the 1950s a newly established Chinese Communist regime continued similar patterns of development based on resource extraction established in earlier regimes. On the eve of the Communist takeover, eight Japanese mining engineers and technicians remained at Fushun (p. 265). These men were treated well by the new management at the colliery and received more work points than skilled

Chinese workers. They helped Fushun to recover and eventually exceed its pre-war production levels by 1960.

The coal never ran out. But by the 2010s decades of wasteful mining practices at Fushun created geological instabilities that threatened to destroy the entire city. It is hardly a stretch to see in the giant sinkhole about to swallow Fushun a metaphor for humanity in the Anthropocene. Through Fushun, Seow succeeds in demonstrating how the broader global embrace of development based on fossil fuels was built on similar unstable grounds at enormous costs to human lives and the environment.

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Elusive Capital: Merchant Networks, Economic Institutions and Business Practices in Late Imperial China

François Gipouloux. Cheltenham: Edward Elgar, 2022. ix + 311 pp. £100.00 (hbk). ISBN 9781800889897

Kent Deng

London School of Economics, London, UK Email: k.g.deng@lse.ac.uk

François Gipouloux's *Elusive Capital* is the result of the author's decades-long research into the economic history of China's traditional commercial sector, with its unique dynamics, growth peculiarities and consequences, from *circa* 1370 to 1910, a period commonly known as the "Ming-Qing Era."

The reader will first be impressed by the author's ground-breaking effort, embodied by a total of 719 footnotes and 513 references, of which 176 (34 per cent) are in the Chinese language, including classical Chinese. As a result, Gipouloux has fully covered all the main findings published on this subject over the past 50 years in English, Chinese and Japanese. He thus provides the reader with an updated and comprehensive review of the on-going debate on indigenous commerce in Ming-Qing China.

Structurally, the eight substantial chapters (chapters two to nine) address three interwoven topics: 1) the scale and scope of merchant activities in China's interior, along its frontiers and beyond its territory (chapters two, three and five); 2) the main players and agents of China's commercial sector both in urban centres and across inter-regional networks (chapters four and six); and 3) the issues of capital formation, capital accumulation, capital investment and commercial skills ("human capital"), as well as the growth limits for China's traditional commercial sector (chapters seven, eight and nine).

About a third of the author's source materials come from China's historical records, including macro-level records for the whole empire and selected local gazetteers at the provincial/prefectural level. The remaining two-thirds come from academic research, particularly on the topic of China's offshore sea trade with Japan, South Asia and Southeast Asia. Such a combination of materials is necessary since primary sources for the Ming-Qing period are highly fragmented and those on overland trade tend to be biased. These issues explain the author's reluctance to compile datasets, and why, methodologically, this book is essentially a qualitative study.