

BOOK REVIEW
Joshua Eisenman,
*Red China's Green Revolution:
Technological Innovation, Institutional Change, and
Economic Development Under the Commune*
(New York: Columbia University Press, 2018)

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The people's commune undergirded Chinese collective farming from 1958 to 1983 and radically changed millions of lives, but it existed for only around two decades. In the first chapter of *Red China's Green Revolution*, political scientist Joshua Eisenman starts his inquiry by explaining the reasons scholars and official accounts usually give for the abolition of the commune: low economic efficiency (largely due to lack of work incentives under collectivization).¹ Eisenman, in a revealing reinterpretation of the history of the people's commune, argues to the contrary that the commune was able to incentivize villagers and substantially increased agricultural productivity during the 1970s, which laid the foundation for China's later economic "miracle" (p. xxiii).² Building on the existing literature, Eisenman reveals a less-discussed political perspective behind the start of decollectivization by arguing that the Deng regime abolished the commune not for economic reasons but for consolidation of political power.

The increased agricultural productivity under the commune pointed to an image of thriving green farms. Policymakers and scholars in both the US and China normally use "green revolution" to refer to a substantial increase in agricultural production, usually accompanied by substantial improvement of agrarian facilities and wide application of new farming science and technologies, such as new crop varieties, pesticides, and chemical fertilizers. In the 1970s China, the green revolution was more than that, for it also included ideological redness – the political fervor of Maoism. As shown in the book's title, the contrast between red and green effectively conveys the institutional and ideological uniqueness of agricultural production in the 1970s. Eisenman demonstrates throughout the book that the 1970s green revolution in China featured a hyper-productive alliance between the commune's productive and organizational system on one hand and Maoism as its religious backbone on the other hand. The close alliance between green and red determined that knocking down either of them would mean burying both the commune structure and the cult of Mao, as was done by the anti-commune faction led by Deng during 1979-1983.

Geographically, the book is not limited to one locality. Officially published nationwide quantitative data, primarily

agricultural statistical data about grain, pigs, and edible oils from eight provinces, allow Eisenman to support his thesis that there was a large increase in rural productivity during the 1970s. Other sources, including data on population growth and life expectancy published by the World Bank, corroborate the official sources. The abundance of both statistical data and other qualitative sources, including official archival documents, lyrics, photos, and posters, demonstrates the quality and diversity of the primary sources used in the book.

Eisenman lucidly periodizes of the commune's history into four phases. He delineates the development of the institution over time and shows how its transformations were related to disagreements over agricultural policy among high-level political factions within the party. Chapter two presents the first three phases, all before 1970, during which the changing organizational structure of the commune system paralleled the political rise and fall of party leaders who disagreed on agricultural policy. The first phase, the Great Leap Forward (GLF, 1958-1961), prioritized political correctness over economic performance. Sponsored by Mao and his leftist followers, communes during the GLF advocated free supply in public canteens, rigid exclusion of the private sector, high procurement quotas, and fast-paced construction, which led to the issues of low work incentives, hastily built facilities, and the state's over-extraction of grains from rural households. These policies resulted in a disastrous famine. Following the disaster of the GLF, the "rightist" faction, including Liu Shaoqi and Deng Xiaoping, reformed the commune system and ushered in the second phase, the rightist commune, lasting from 1962 to 1964. The rightist policies reduced the size of communes and added two levels of subunits to improve the remuneration system and provide sufficient work incentives. To lessen extraction from households and promote rural consumption, the second stage also introduced the private sector, known as the "three small freedoms" (private plots, rural markets, cottage enterprises, p. 30). Moreover, the rightist commune advocated large centralized trusts, which challenged the autonomous commune system and intensified discord over agricultural policy among top leaders. The third phase, the leftist commune (1965 – 1969) led by Mao, featured a return to a higher level of extraction through the campaign to "learn from Dazhai" (p. 54), a decentralized agricultural model with higher household

savings rates to ensure commune-led agricultural mechanization.

Chapter three delineates the fourth phase, in which the Northern Districts Agricultural Conference (NDAC, *Beifang Diqu Nongye Huiyi*) in 1970 reconciled the disagreements over agricultural policy among high-level party leaders and created a hybrid commune system. The new model incorporated both private production and sufficient local control over planning and construction by communes. This change also included the establishment of a research and extension system, which supported agricultural investment and technological innovation. Together, these adjustments, Eisenman argues, boosted agricultural productivity during the 1970s and responded effectively to the three major crises that faced China in agriculture (population growth, reduced arable land, rapid capital depreciation).

Part II (chapters four through eight) introduces three factors underpinning the increase in agricultural productivity. First, chapter four analyzes “super-optimal investment” (p. 125), an economic pattern with high saving rates and a successful channel from rural household savings to agricultural investment. Using two economic models (the Solow-Swan and Lewis modified models), this chapter shows that increasing savings rates via coercive extraction under the commune system accumulated considerable capital, which was largely channeled into investments in agriculture. Coupled with nearly unlimited labor supplies, Eisenman argues, this investment pattern ensured high returns in agricultural production.

Chapter five highlights another source of “red China’s green revolution,” which was the political and cultural network of the commune. Eisenman argues that various ritual performances of the cult of Mao in everyday rural life, including texts, songs, films, and posters, incentivized villagers to work hard and tolerate extraction and other forms of dissatisfaction towards the commune. The link between the commune’s ideological indoctrination and its productivity was further reinforced by other configurations of the commune, including social pressure of self-devotion, militarized commitment to the commune, and the spirit of self-reliance. This collective identity facilitated the extraction of household resources and revitalized the commune. In addition to the investment pattern and the politics of the commune, the managerial capacity of the commune was also crucial to its economic efficiency. Using robust statistical evidence on grain production in Henan Province, chapter six argues that the organizational structure of the commune was a third source of increased agricultural productivity. Agricultural output varied significantly as the relative size of the commune and its subunits changed. In particular, two types of the commune -- small communes with small brigade and team size (thus with better supervision) and large communes (with more capital investment) -- yielded better agricultural output. Together with super-optimal investment and the religious beliefs in Maoism, the organizational structure of the commune successfully promoted agricultural productivity after the GLF.

The three sources of the commune’s productivity point to a puzzling question: why was the economically efficient

commune abolished despite its considerable success in promoting agricultural production? Chapter seven demystifies the puzzle by arguing that the state abolished the commune mainly because of political struggles among elite party leaders. The ultimate success of anti-commune reformers led by Deng Xiaoping over pro-commune factions, which included the “radicals” led by the “Gang of Four” and the “loyalists” led by Hua Guofeng, determined the demise of the commune system (p. 214). A quotation from the former top party leader Zhao Ziyang in his final years is particularly revealing: “Implementing the household contract scheme nationwide would not have been possible without Deng’s support. The fact that it did not meet much resistance from central leaders had a lot to do with Deng’s attitude” (p. 210). Alongside the demise of the commune came the burial of Mao’s cult of personality and the ideological impact of Maoism, which paved the way for a new generation of political leaders to rise and consolidate their rule. Eisenman’s account of the commune history stops at the early 1980s, when this short-lived yet critical grassroots institution officially came to an end. The last chapter restates the commune’s economic efficiency and proposes power struggle as the critical factor that ultimately buried the commune.

In the foreword, Professor Lynn White III, who has written extensively on the era of People’s Republic of China (PRC), describes Eisenman’s book as “startling” (p. xv) in effectively disproving the widely acknowledged claim about the commune’s backwardness. Echoing White’s comment, I think the main highlight of the book is its alternative interpretation of the history of China’s commune system. Eisenman challenges two major conventional ideas about the commune. The first is that the commune failed to achieve economic efficiency. Using both quantitative and qualitative data, Eisenman shows that in the 1970s the commune system substantially improved rural productivity as measured in food production. To advance this argument, the book first explains how the commune functioned economically. Eisenman points out that high savings rates were essential for countries like China, with nearly unlimited labor but limited capital and land, to accumulate the capital needed to kick-start development. This argument speaks to the scholarly discussions of the growth trap linked to intensive land cultivation in China. When labor intensification reached a high level, more inputs of labor only resulted in diminishing returns in rural productivity, which Philip Huang has described as the pattern of “growth without development” or “agricultural involution.”³ But there is little agreement upon when the turning point came and how the trap of intensive cultivation was resolved, and researchers tend to see more uniformity in the collective period with no substantial breakthrough in agricultural productivity.⁴ Eisenman contributes to this discussion by identifying the kick-start point in the early 1970s. In doing so, he also shows that the collective period was better seen as being transformative and dynamic than monolithic.

As I see it, in addition to arguing that the commune substantially increased agricultural productivity, Eisenman also makes a strong argument in opposition to the commune’s alleged economic inefficiency by focusing on the organic integration of the commune’s economic and organizational configurations

with its political and cultural base, which made the commune both green and red. A crucial component of the political economy underlying the commune was that, under religious communes as the “Church of Mao” (pp. 151-152), ideological incentives facilitated the high saving rate that sustained state investment in agriculture, lowered management costs, and solved the problem of low work incentives. Eisenman’s history of the commune system indicates that its abolishment was not purely economic but largely political, taking place with the support of party elites. In fact, the history of decollectivization told in textbooks in China still begins with the story of Fengyang County in Anhui Province, where several brave farmers in Xiaogang Village dared to take the gamble of signing a secret contract that later ignited the nationwide abandonment of the commune system. Eisenman convincingly argues against this conventional account of bottom-up abandonment. Instead, he highlights the political considerations that led to the elimination of the commune system during the power transfer from the loyalists under Hua Guofeng to the reformers under Deng Xiaoping.

As well as contributing to the discussion about religions and economic growth, the book follows a similar sociological logic with Max Weber’s theory regarding Protestant religious ideas and the rise of capitalism.⁵ Eisenman sees the commune’s red religious devotion to Maoism as organic parts of the commune system that promoted China’s green revolution. From this angle, Eisenman shows a solidity in the Chinese Communist Party’s ideological base, a solidity that the Kuomintang regime probably never realized despite painstaking efforts to propagate the cult of Sun Yat-sen to consolidate its rule.⁶ It was through the institution of the commune that the Communist Party disseminated its political indoctrination in rural eras to an extent that the Nationalist government simply could not achieve.⁷ Successfully-propagated Maoism laid the ideological and spiritual foundations for the productivity of the commune, just as, in Weber’s book, Puritan asceticism, which similarly sponsored self-restraint in consumption, rationalized the accumulation of wealth and encouraged the expansion of capitals.

Eisenman’s book also stands out for its interdisciplinary methodology, which brings together history with the social sciences. Interdisciplinary insight allows Eisenman to add to discussions of the economic productivity of the commune system by effectively contextualizing economic models using historical analysis of local conditions. For example, chapter four historicizes high savings rates by showing how the institutional structures of the commune, such as remuneration and taxes, maintained excessive state extraction from rural households. Nevertheless, applying economic modeling still risks making assumptions that did not necessarily fit into historical experience on the ground. For example, the models in chapter four hardly consider urban-rural relations during the collective era. As a result, chapter four gives the impression that a smooth channel ran from rural savings to agricultural investment. But variations over time made the channel rough. Many scholars working on this time period have emphasized the transfer of agricultural surplus from rural areas to the industrial sector in urban areas.⁸ Because rural surplus was

extracted, the question of urban-rural relations always underlay the question of investment in agriculture. I would have appreciated reading more about how changes in urban-rural relations and interactions between industrialization and mechanization affected the pattern of agricultural investment during China’s green revolution.

The book sparks several questions for me. One is about historical continuity between the pre-1949 and post-1949 eras. It is understandable that a book with a focus on the PRC era does not discuss much pre-1949 history. Still, readers might be curious about whether the persistence of social and political configurations in rural areas interacted with the historical transformation of the commune system. Scholars have observed rural dwellers resisting against penetration from outside their villages in various historical settings. James Scott discusses Malaysian villagers’ everyday forms of resistance, such as slander and feigned ignorance, against those who sought to extract resources from them.⁹ Teodor Shanin points out that the rural community under collective farms in the Soviet Union remained coherent and homogenous, and that the resistance on the part of villagers derived more from the split between the coherent rural community and outside forces than from inner social stratification as claimed by Lenin.¹⁰ With specific reference to Mao-era China, Friedman et al. argue that peasant consciousness persisted through the 1949 rupture, some of which took the form of rumors about the Communist Party that circulated among villagers.¹¹ Meanwhile, Anita Chan, Jonathan Unger, and Jacob Eyferth observe that, despite prohibited, rural black markets and pilfering continued existing in many Chinese villages during the collective era.¹² Indeed, in oral histories and even in some official documents, rumors, folk songs, and mocking verses about the party and the people’s commune are not at all uncommon. Could various forms of cultural resistance have indicated more unrest and friction between the state ideology and rural people in the communes than Eisenman acknowledges? How would recognition of the continuities in the existing social structures in rural China make the story slightly different? Was the state able to impose high extraction rates and propagate the Maoist ideology in the countryside without any substantial resistance?

Second, I would have appreciated an engagement with literature from science, technology and society studies (STS) to reflect on the discussion of technological progress in the book. Eisenman presents development of rural productivity as mostly a top-down process, which diffused from the state-initiated agricultural universities and laboratories to the communes. Rural people are usually invisible or seen only as recipients. Nevertheless, recent STS research has drawn attention to the importance of innovations from below and call for critical reflection on the linear model of diffusion which sees innovation spreading only from academia to industries and practices, from the core to the periphery, from the West to the non-West, from men to women, and from white people to people of color.¹³ With respect to the PRC era, Sigrid Schmalzer observes a complicated image of agricultural innovation where scientific farming incorporated indigenous and grassroots knowledge and technology.¹⁴ Was it possible that villagers or grassroots technicians might have used local

materials or made alterations to facilities, in which they also contributed to the innovation process that research institutes alone could not have realized?

Lastly, through an in-depth investigation into collective farming, Eisenman's book opens up new avenues for future research. One inspiring finding in the book is the counterintuitive but important co-existence of the improvement of labor-saving technology (pp. 99-104) on one hand and nearly unlimited labor supplies and the still-growing population (pp. 21, 140) on the other hand. It is worth taking a step further and exploring the interactions between agricultural mechanization and the intensification of agricultural labor. Was there negotiation and cooperation between work done by manual labor and by machines? Or perhaps the replacement of manual labor was seasonal or confined to certain types of work? Were there local adaptations and negotiations between innovation from above, field laborers, technicians, and other intermediaries? These are questions I would like to pursue in my dissertation.

Overall, focusing on the commune's rise and fall, Eisenman's monograph provides an insightful and refreshing analysis of

China's collective past. Its reinterpretation of the commune system adds to cutting-edge discussions of PRC history about agricultural growth and politicization of collective farming. In addition, the carefully structured organization of chapters makes it easy for readers to navigate through the book. I also appreciate Eisenman's plain and resourceful writing style, which makes abstract economic models and terms accessible to readers. In tandem with the structured perspective, a multi-layered historical storyline provides not only the stories of state elites but also the everyday life of rural commoners, improving readability and thickening the argument. In that case, the book can be assigned to graduate seminars as well as advanced undergraduate students in history and other social sciences. I have no hesitations in recommending this incisive book to both students and scholars interested in the political economy of the PRC and those broadly interested in the history of collective farming.

¹ Scholars discussed in the book who advocate the view of unproductive communes mainly include John Fairbank, Merle Goldman, Carl Riskin, and Kate Xiao Zhao. Beyond scholars mentioned in the book, Felix Wemheuer, Mark Selden, and Kenneth Walker also hold a similar view, although Walker tends to attribute low work incentives more to the state's over-purchasing of grains from villages. See John King Fairbank and Merle Goldman, *China: A New History*, 2nd ed (Cambridge, MA: Harvard University Press, 2006); Carl Riskin, *China's Political Economy: The Quest for Development since 1949* (Oxford: Oxford University Press, 1987); Kate Xiao Zhou, *How the Farmers Changed China: Power of the People* (Boulder, CO: Westview Press, 1996); Felix Wemheuer, *Famine Politics in Maoist China and the Soviet Union*, Yale Agrarian Studies Series (New Haven: Yale University Press, 2014), 250; Mark Selden, *The Political Economy of Chinese Development* (Armonk, N.Y.: M.E. Sharpe, 1993), 52, 197; Kenneth R. Walker, *Food Grain Procurement and Consumption in China* (Cambridge: Cambridge University Press, 1984), 176-77. The official account discussed by Eisenman (pp. 11-12) includes criticism on the commune's low productivity in government-sponsored publications since the 1980s.

² This alternative explanation is also shared among other scholars. Examples discussed in the book primarily include Sigrid Schmalzer, John Wong, Lynn White, Chris Bramall, and Barry Naughton. Apart from scholarship cited in the book, Gail Hershatte's and Jacob Eyferth's works reveal that overworked women in rural areas also substantially contributed to the accumulation of capitals during the collective era, especially regarding cotton cultivation and textile work, but they focus more on material scarcity in rural everyday life than increased living standards. Sigrid Schmalzer, *Red Revolution, Green Revolution: Scientific Farming in Socialist China* (University of Chicago Press, 2016); John Wong, "Some Aspects of China's Agricultural Development Experience: Implications for Developing Countries in Asia," *World Development* 4, no.

6 (1976); Lynn T. White, *Unstately Power* (Armonk, NY: M.E. Sharpe, 1998); Chris Bramall, *Chinese Economic Development* (Taylor & Francis e-Library: Routledge, 2008); Barry Naughton, *The Chinese Economy: Transitions and Growth* (Cambridge, MA: MIT Press, 2007); Gail Hershatte, *Gender of Memory: Rural Women and China's Collective Past* (Berkeley and Los Angeles, CA: University of California Press, 2011), 264-66; Jacob Eyferth, "Women's Work and the Politics of Homespun in Socialist China, 1949-1980," *International Review of Social History* 57, no. 3 (December 2012): 365-91.

³ Philip C. Huang, *The Peasant Family and Rural Development in the Yangzi Delta, 1350-1988*, (Stanford, Calif.: Stanford University Press, 1990), 11-13.

⁴ Dwight H. Perkins, *Agricultural Development in China, 1368-1968*, Originally published in 1969 by Aldine Publishing Company (Abingdon, NY: Routledge, 2017), 189-91; Mark Elvin, *The Pattern of the Chinese Past* (Stanford: Stanford University Press, 1973), 315; Riskin, *China's Political Economy*, 2-3, 185-6, 376; Huang, *The Peasant Family and Rural Development in the Yangzi Delta*, 15-17.

⁵ Max Weber, *The Protestant Ethic and the Spirit of Capitalism*, trans. Stephen. Kalberg (New York: Oxford University Press, 2011), ch5.

⁶ In particular, the images of Sun Yat-sen appeared not only in classrooms but also in weddings, funerals and other ritual ceremonies. See Yue Du, "Sun Yat-Sen as Guofu: Competition over Nationalist Party Orthodoxy in the Second Sino-Japanese War," *Modern China* 45, no. 2 (March 1, 2019): 201-35; Susan L. Glosser, *Chinese Visions of Family and State, 1915-1953*, (Berkeley: University of California Press, 2003), 84-90.

⁷ I thank Professor Micah Muscolino for this insight.

⁸ For example, Perkins, *Agricultural Development in China, 1368-1968*; Selden, *The Political Economy of Chinese Development*; Jacob Eyferth, *Eating Rice from Bamboo Roots: The Social History of a Community of Handicraft Papermakers in Rural Sichuan, 1920-2000*, vol. 314 (Harvard Univ Council

on East Asian, 2009); Wemheuer, *Famine Politics in Maoist China and the Soviet Union*; Jeremy Brown, *City versus Countryside in Mao's China: Negotiating the Divide*, 1st pbk ed (New York: Cambridge Univ Press, 2014); Thomas P. Lyons, "Planning and Interprovincial Co-Ordination in Maoist China," *The China Quarterly*, no. 121 (1990): 36–60.

⁹ James C. Scott, *Weapons of the Weak: Everyday Forms of Peasant Resistance*, ACLS Humanities E-Book. (New Haven: Yale University Press, 1985), preface.

¹⁰ Teodor Shanin, *The Awkward Class; Political Sociology of Peasantry in a Developing Society: Russia 1910-1925*. (Oxford: Clarendon Press, 1972), intro.

¹¹ Edward Friedman, Paul Pickowicz, and Mark Selden, *Chinese Village, Socialist State* (New Haven: Yale University Press, 1991), 145–53.

¹² Anita Chan and Jonathan Unger, "Grey and Black: The Hidden Economy of Rural China," *Pacific Affairs* 55, no. 3 (1982): 452–71; Eyferth, "Women's Work and the Politics of Homespun in Socialist China, 1949–1980," 387–88.

¹³ For example, Lucy Suchman and Libby Bishop, "Problematizing 'Innovation' as a Critical Project," *Technology Analysis & Strategic Management* 12, no. 3 (September 1, 2000): 327–33; Clapperton Chakanetsa Mavhunga, *What Do Science, Technology, and Innovation Mean from Africa?* (Cambridge, Massachusetts: The MIT Press, 2017); Lilly Irani, "Can the Subaltern Innovate?," in *Chasing Innovation, Making Entrepreneurial Citizens in Modern India* (Princeton University Press, 2019), 172–204; Benoît Godin, "In the Shadow of Schumpeter: W. Rupert Maclaurin and the Study of Technological Innovation," *Minerva* 46, no. 3 (2008): 343–60; Rayvon Fouché, "Say It Loud, I'm Black and I'm Proud: African Americans, American Artifactual Culture, and Black Vernacular Technological Creativity," *American Quarterly* 58, no. 3 (2006): 639–61; Katrien Pype, "Smartness from Below: Variations on Technology and Creativity in Contemporary Kinshasa," in *What Do Science, Technology, and Innovation Mean from Africa?*, by Clapperton Chakanetsa Mavhunga (The MIT Press, 2017), 97–116.

¹⁴ Schmalzer, *Red Revolution, Green Revolution*, intro.

Response

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In reading Han Shumeng's comprehensive and thoughtful review of my book *Red China's Green Revolution* I was reminded of the impetus that first drove me to write it – the desire to better understand what, if any, role the commune played in China's emergence as an economic superpower and why it was abandoned. The review accurately explains the book's key interventions – that Maoism was closely tied to the organizational, remunerational, and agricultural extension systems that produced a green revolution in 1970s China, and that it was China's leaders' desire to consolidate their political power, not the will of the people, that produced decollectivization – in a way that summarizes while still remaining true to, rather than reinterpreting, the original text. I appreciate Han's meticulous reviews of each chapter and her excellent summary of the book's periodization of the commune era – stretching from the calamities of the Great Leap Forward (1958-61) through the productive Green Revolution (1970-79) period.

Han's description of the commune's fourth phase, the Green Revolution, which came after the 1970 Northern Districts Agricultural Conference, is particularly well done. The review accurately notes how these important reforms came in response to three major crises that rural China faced: population growth, reduced arable land, and rapid capital depreciation. The Green Revolution commune reconciled high-level policy disagreements among party leaders about how to address these problems, thus creating a hybrid institution that combined the strengths of its antecedent institutions. The system adopted local control over planning, production, and remuneration, incorporated private sideline production, and supported a research and extension system, which transferred agricultural capital, technology, and techniques among localities.

Toward the end of her review, Han makes several valuable observations based on the book. She convincingly compares how Maoism used ideological and spiritual indoctrination to motivate people to increase production and reduce consumption, with Max Weber's explanation of how Puritan asceticism fostered the expansion of capital. I agree with this assessment, and would add that the book also pairs well with *Time on the Cross: The Economics of American Negro Slavery* (1974) by economists Robert Fogel and Stanley L. Engerman. Like my book, it also shows how an economic system designed to keep a large, immobile rural work force toiling day after day in austere conditions for a sustained period was able to increase economic productivity. To be sure, the racial component of American slavery and commune members limited political participation were critical social and political differences; from a purely economic perspective, however, both systems produced development through collective immiseration.

I was particularly fascinated by Han's point that the political and ideological solidity the CPC was able to generate using Maoist indoctrination went beyond anything the Kuomintang regime was able to achieve with its cult of Sun Yat-sen, or, I would add, Chiang Kai-shek. Based on the book, Han surmises that using the commune the CPC was able to spread its political indoctrination into rural areas beyond what the urban-based Nationalist government was able to achieve. This is an interesting, and almost certainly true, comparative point that could inform future research. Why was the CPC more successful than the KMT in this regard? Was there something about Mao in particular that enabled a cult of personality to be created around him?

Han's point that the book does not "consider urban-rural relations during the collective era" and that "variations over time made the channel (from rural savings to agricultural investment) rough" is well taken. The result, she says, is that "chapter 4 gives the impression that a smooth channel ran from rural savings to agricultural investment. But many historians working on this time period have emphasized the transfer of agricultural surplus from rural areas to the industrial sector in urban areas." Indeed, Han is correct that grain continued to be transferred to urban areas throughout the commune era, and that more clarification on this point may have been helpful. She is also correct that the economic models used do not fully account for these transfers.

That said, grain transfers from rural areas, where it is grown, to population centers are normal and acceptable as long as they remain at reasonable, as opposed to rapacious, levels. The 1970s commune was able to constrain these flows because it institutionalized political agency in rural areas, and because the system protected the most productive rural assets, the families' sideline plots and enterprises, from *all* extraction. Commune, brigade and team leaders adopted countless methods to underreport the true amount of production with an eye toward reducing their tax burden. The predictable result of these systemic concealments at the grassroots level is that the grain production data presented in the book is almost certainly an *underestimate* (p. 21).

Moreover, during the 1970s physical capital (e.g., tractors and irrigation), technology (e.g., nitrogen fertilizers and hybrid seeds), and human capital (e.g., agricultural experts, teachers, and "bare foot" doctors) flowed into and between rural communes and their subunits via the research and extension system. As discussed in chapters 3 and 4, these investments produce a virtuous cycle of development and food productivity growth. The commune's most important objective was to ensure all that remained in its jurisdiction was saved and invested in productive rural capital and technology rather than

consumed. This ethos of austerity and collective investment was also baked into Maoism. Those flaunting material wealth or exhibiting selfish behavior would be punished, often publicly, by local political leaders. Moreover, as the book demonstrates, the cycle of extraction, investment and increased productivity also lessened the burden of urban transfers, with the result being a larger and longer-lived rural population (p. 21-24).

Han also raises the important question of whether “various forms of cultural resistance have indicated more unrest and friction between the state ideology and rural people in the communes than Eisenman acknowledges?” This question was dealt with, although perhaps incompletely, beginning on p. 147 in the subsection on Commune collective action problems, including shirking and foot-dragging, which are common to communes in different cultural and political contexts. Based on historian Li Huaiyin’s work, I identify three types of grassroots resistance in the 1970s commune: long-term reputational costs among other team members, recurrent political campaigns against corruption, and remuneration transparency under the workpoint system (p. 130-131).

Perhaps Han’s most curious assertion is that “Eisenman presents development of rural productivity as mostly a top-down process, which diffused from the state-initiated agricultural universities and laboratories to the communes. Rural people are usually invisible or seen only as recipients.” On this point, however, there may have been an oversight, because much time is spent detailing all manner of grassroots institutions including the rural credit coops (p. 132-133), household private production (p. 133-141), grassroots research and extension work (p. 66-72), local population control measures (p. 73-76), and commune and brigade enterprises (p. 76-80).

These and many other local attributes produced extensive variation in terms of commune size, the location and size of private plots, and the secondary products produced or sold at the regular rural markets. That said, all Chinese communes shared three characteristics that made them a distinct typology: Maoist ideology, workpoint remuneration, and a focus on increasing agricultural productivity through high-modernist development.

I am flattered by Han’s appreciation for the writing and organization of the book, a process that required countless edits, restructures, rewrites, and sleepless nights. It was a struggle to understand the abstract economic and statistical models and apply them to the facts, let alone make the analysis accessible to most readers, who, like me, are not economists or statisticians. I was glad to see her recognition that: “The abundance of both statistical data and other qualitative sources, including official archival documents, lyrics, photos, and posters, demonstrates the quality and diversity of the primary sources used in the book.” Indeed, this was precisely my goal in writing about the commune, to “seek truth from facts” in an objective fashion about an institution that has long been at the heart of mythmaking and self-serving narratives. To this end, I became a collector of everything from Mao pins, to PLA hats,

local stories, and of course, most precious of all, the provincial and county level agricultural statistics, which hid within them the secrets of China’s economic success.

Finally, I am most grateful to Han for her generous review, which demonstrates her firm grasp on the topic and leaves me very excited to read her future work. Special thanks to Professor Yidi Wu and the other editors at PRC History Review for making it possible for authors and readers to share and discuss the impact of important works in our field.