

Revisiting “the Great Divergence”: Clarifying the Two Major Modes of Agriculture in China and the West

Modern China

1–13

© The Author(s) 2023



Article reuse guidelines:

sagepub.com/journals-permissions

DOI: 10.1177/00977004231164778

journals.sagepub.com/home/mcx

Philip C. C. Huang^{1,2}

Abstract

Kenneth Pomeranz and Li Bozhong have recently conceded that they had been wrong that “the great divergence” between China and the West occurred only after 1800, but they continue to insist that when it came to agriculture and its labor productivity, their earlier argument still holds. This article summarizes the broad differences between eighteenth-century England’s crops cum animal husbandry agriculture and China’s crops-only agriculture to demonstrate the fundamental differences between the two. It is time we recognize fully how very different the two were and are, and how and why each follows an entirely different pattern to modern development. It is simply wrong to continue to obscure those basic differences by insisting on equivalence between them.

Keywords

crops cum animal husbandry agriculture vs. crops-only agriculture; development vs. involution; equal rural-urban trade vs. unequal involutionary commercialization; capital intensive agriculture vs. capital and labor dual intensifying agriculture; economies of scale vs. de-involution

¹Institute for Advanced Historical and Social Research, Beijing, China

²University of California Los Angeles, Los Angeles, CA, USA

Corresponding Author:

Philip C. C. Huang, 332 Grenola Street, Pacific Palisades, CA 90272, USA.

Email: huang@history.ucla.edu

Twenty years have passed since I first wrote on this topic (Huang, 2002; Huang Zongzhi, 2002). Kenneth Pomeranz had chosen to argue that “the great divergence” between China and the West occurred only during the “modern” period after 1800, insisting that, before 1800, the level of China’s economic development was actually equal to the West, seeking thereby to find equivalence and not difference between China and the West in that period (Pomeranz, 2000). It was quite an influential point of view for a time.

The new change is that Pomeranz has since agreed that he had been wrong about the date 1800 and that he would now push the divergence back to “the mid-18th century and perhaps earlier” (Pomeranz, 2011: 21; see also Pomeranz, 2017). That is at least in part because of the wave of new scholarship on early modern Europe, based on a variety of new basic-level source materials employed in a host of new economic history studies. For Pomeranz, the key was especially the study by Li Bozhong and Jan Luiten van Zanden (2012) that compared Holland with Huating and Lou xian, that is, present-day Songjiang county, of the Yangzi delta in 1820, the most advanced area of China at the time. That study concluded that Holland’s per capita output was about twice as high as the latter (Pomeranz, 2017: pages unnumbered, see the discussion at footnote 5; see also the broad summary of the discussion and the issues involved in Broadberry, 2013, 2021; Broadberry, Guan, and Li, 2018).

Li, moreover, informs the academic world that “revisionists such as Pomeranz have based their reassessment of the economy of China—and in particular of the Yangzi Delta—to a large extent on the detailed research published by Li” (Lee and van Zanden, 2012: 966). And Pomeranz himself wrote that he had revised his views because of Li’s new research comparing Songjiang with Holland in 1820 (Pomeranz, 2017: pages unnumbered, see the discussion at footnote 5).

Even so, Pomeranz and Li both assert repeatedly in the articles cited above that when it came to agriculture, most especially labor productivity in agriculture, Songjiang was as developed as or even more developed than its contemporary Holland (or England), and that “the great divergence” occurred only after 1800. Clearly, they both have tried to cling to at least part of their original argument that China before 1800 was as advanced or more advanced than the West.

Given the fact of China’s longstanding urban-rural gap, the fact that Li and Pomeranz would insist that, even though urban China was well behind England and Holland already before 1800, rural China was yet still somehow more advanced in labor productivity than England and Holland at that time is very surprising indeed.

In my long and detailed review article of 2002, I dealt comprehensively with their many errors of fact and understanding, and will not repeat those

details here. I am revisiting the issue mainly because of their new assertion. My focus will be on the big picture, of the most basic and important well-known facts about Chinese agriculture. I will leave the fine points to my original long review article and to my two detailed monographs on *The Peasant Economy and Social Change in North China* (Huang, 1985; Huang Zongzhi, 2023a [1986, 2000, 2004, 2009, 2014]) and *The Peasant Family and Rural Development in the Yangzi Delta, 1350-1988* (Huang, 1990; Huang Zongzhi, 2023b [1992, 2000, 2006, 2014]). In addition, I will include in this article also findings from my two subsequent monographs that bring the story of Chinese agriculture down through to the present, including prospective views for the future (Huang Zongzhi, 2020a, 2020b).

The main focus of this article is on agriculture, but that is not because I think it is the only important part of the story, but rather because I think it is one major and basic factor among several. We do need to grasp Chinese and English agriculture in the eighteenth century accurately in order to understand England's subsequent urbanization, including its protoindustrialization and the development of its market economy. And this is not to rule out the important and rather coincidental subsequent early development of its coal industry. Those were all major factors in England's being the first in the world to enter into modern industrialization and development. We need to grasp the fundamental differences between England's and China's early agricultural development in order to understand the differences and similarities in their subsequent development.

Two Major Modes of Agricultural Production: Cropping cum Animal Husbandry vs. Cropping Only

First, we need to grasp clearly the two basically different models of agriculture and agricultural change in eighteenth-century England and China. One combined planting with animal husbandry, and the other was focused almost entirely on planting only. The eighteenth-century English agricultural revolution was of the former type. Before it, farmers mainly grew crops, and animal husbandry was done mainly on "common land." Over the course of the eighteenth century, however, common land came increasingly to be privatized, leading to the emergence of farms that combined animal husbandry and crop planting. But farming at that time in Songjiang had long since become exclusively crop growing, with virtually no animal husbandry. In England, the scale of farms was typically 100 to 150 acres, but in Songjiang, just one or two acres (6 to 12 Chinese mu). The former was

distinctive for the wide use of horses, while horses were virtually unseen in the latter, its farm animals being above all the scavenging pig, and oxen, less expensive than horses. A horse can work fifteen to twenty years, but an ox only eight to ten years; and a horse also requires more feed, such as corn, beans, or wheat bran, in addition to grass, while grass suffices for an ox. As the well-known agricultural specialist John Lossing Buck, who studied Chinese agriculture in the 1920s and 1930s, explained succinctly, the former mode of “farming” required at least six or seven times more land per capita than the latter (Buck, 1937).

According to the fine research of Xu Xinwu, one of contemporary China’s two outstanding economic historians (“In the North, Wu Chengming, and in the South, Xu Xinwu”), since the widespread introduction of cotton farming to China from the fourteenth century on (before that, no one wore cotton cloth; by the eighteenth century, almost everyone did), a typical cotton farm put in 160-180 days per mu of labor for the cultivating of cotton, spinning of cotton yarn, and weaving of cotton cloth, compared to 10 days for one mu of wet rice and 7 for one mu of winter wheat. China’s cotton economy was in fact an extremely labor-intensive mode of production, requiring eighteen times more labor per unit land than rice and twenty-five times more than wheat (Xu Xinwu, 1992).

What does this mean? The former required much higher input of labor per mu, the latter much less; the former used comparatively less land, the latter was the opposite; the former had much higher output value per unit land; the latter much lower. Under those differential objective conditions, the former had much lower labor productivity, the latter much higher, while land productivity was the opposite. This is what I mean by “involution” and “growth (in per mu output) without development (in per laborer productivity).” This was the key difference between the crops cum animal husbandry mode of agriculture and the crops-only mode. The above are obvious contrasts and also basic agricultural knowledge.

Not as obvious is that I demonstrated through the example of Yangzi delta agriculture the economic implications of a switch from wet-rice to cotton small-peasant farming. Precisely because of the very intensive labor requirements of cotton growing, spinning, and weaving, those tasks could only be done with the assistance of the supplementary, low or no-cost family labor of the women, the elderly, and the children. That mode of operation could generate three to four times more output value per mu than wet rice. Its special characteristic was exceedingly low per unit labor productivity, but very high per unit land output. Given those basic characteristics, in places that could grow cotton, there was no way that wet rice could compete. That was above all because of the rise in the unit price of land that accompanied cotton

growing, up to three to four times that of wet-rice land. England, however, was very different: it grew no cotton of its own, only importing it from outside.

Under the rise in the price of cotton-growing land (*vis-à-vis* rice-growing land), there was simply no way that rice growing could compete with cotton. Nor could the labor-hiring managerial farms that had been fairly prominent until the Ming-Qing transition survive against the competition of cotton farms that relied on low-cost family labor. The end result was the spread of small peasant cotton farms against wet rice, as I demonstrated in my monograph *The Peasant Family and Rural Development in the Yangzi Delta, 1350-1988* (Huang, 1990; Huang Zongzhi, 2023b [1992, 2000, 2006, 2014]).

As a matter of fact, Li Bozhong himself had noted how mulberry farming cum silk reeling (silk weaving required complex looms, not something the small peasant household could afford, and was done only in town by silk-weaving firms) showed the same pattern. Compared to wet rice, it required nine times the amount of labor per mu, but yielded only three to four times the output value (Li Bozhong, 1998: 95, 148). But Li did not arrive at the same clearcut logic of change as what I outlined above about cotton farming. In the areas that could grow mulberries and silkworms and produce silk thread, rice farms simply could not compete, and labor-hiring managerial farms too were similarly eliminated.

Faced with the basic realities outlined above, Li managed somehow to arrive at the entirely different and most surprising argument that labor productivity in agriculture was actually higher in Songjiang than in Holland. What he did was to separate out the family subsidiary labor that spun and wove cotton, and helped to grow the silkworms and reel silk thread, by removing them from their farms statistically and classifying them instead under the separate category of industry in town. That ploy enabled him to arrive at estimates of labor productivity for farming that included only the higher labor productivity of the men, and not the lower productivity of the women, thereby greatly expanding his estimates of agricultural labor productivity in the Yangzi delta, to arrive at his conclusion that it was higher than that in contemporary Holland of the time.

How did he perform this sleight of hand? He did so by applying the latest (and supposedly most advanced and “scientific”) approach of the “National Account System” (SNA), not in use until after the mid-twentieth century, to the pre-1800 Yangzi delta agricultural economy, classifying workers by the three sectors of primary industry (agriculture), secondary industry (manufacturing), and tertiary industry (services) as one might modern economies. Thereby, he removed the women and other auxiliary labor who spun and wove cotton, and raised silkworms and reeled silk, from their family farms

and placed them under manufacturing. It is a maneuver that in fact completely misrepresented the realities of peasant family production of the time, but allowed him to arrive at the conclusion that he wanted. But we know that the husband and wife (and other family members) in fact made up a single production unit in the peasant family farm; it simply makes no sense to treat them as individualized entities of different “industries” as if in a modern economy.

Involuntary Commercialization of the Peasant Economy vs. Anglo-American Style Market Economy

We need to consider in addition how the cotton and silk farms of the Songjiang area helped drive the rise of towns in the Yangzi delta. Cotton cloth, because of its relatively low price, high durability, and sundry other qualities, quickly became the fabric of choice for all commoners, and much more expensive silk, because of its extraordinary comfort, elegance, and other qualities, that for the elites. The Yangzi delta, because of its high concentration of the above-described farm production and the area’s access to convenient transport, quickly came to supply “the entire country” 衣被天下. It was thus the rise of involuntary farm production of cotton, cotton thread, and cotton cloth, and silk and silk thread, that drove the rise of countrywide trading in those fabrics, centered in Songjiang, helping thereby to propel the development of towns in the delta, already by the eighteenth century.

But that was not the same as the spiraling and relatively equal rural-urban trade that propelled England’s subsequent modern economic development. In China, peasant production of cotton, cotton thread and cloth, and silk and silk thread, because it was sustained by low-cost family auxiliary labor, could not become separated out from peasant family farming. In England, however, cotton was entirely imported from outside, with the country itself engaging mainly in spinning and weaving that eventually led to “protoindustrialization,” with spinners and weavers becoming entirely self-supporting and based in town, thereby becoming the prelude to later mechanized industrial production. But in Songjiang, cotton growing, reeling, and weaving, and silk growing and reeling (excluding silk weaving) remained tied to family farming down into the twentieth century. It did not lead to anything like the “protoindustrialization” that took place in eighteenth-century England.

The market exchanges that those farms led to were also different from what happened in eighteenth-century England. We know from the probate records of late seventeenth- and early eighteenth-century England that rural people purchased goods like mirrors, oil paintings, books, clocks and watches,

tablecloths and silverware, and such from the towns. (See, e.g., Weatherill, 1993; esp. 219-20, tables 10.2 and 10.4.) That was very different from the unequal rural-urban trade in Songjiang, with the rural people purchasing just simple, low-cost necessities like cooking oil, salt, soy, and vinegar, along with some liquor and tobacco, while supplying the towns and cities with their best products (such as cotton yarn and cloth, silk thread, fine grains, and meat-poultry-fish), all the way down to the 1930s.

It was unequal market exchange, which is why I call it involutionary commercialization. The urban-rural trade of early eighteenth-century England was a kind of equal two-way trade, as envisioned and theorized by Adam Smith in his classical-liberal economic theory. But the realities of the Yangzi delta's unequal rural-urban trade are more nearly captured by longstanding Chinese terms such as "the three great differences" 三大差别 between city and countryside, industry and agriculture, and mental and physical labor, characteristics seen as the "basic national condition" 基本国情, even today. The differences between the two paths are traceable finally to those between a cropping cum animal husbandry mixed agriculture and a crops-only agricultural system and their basic disparities in terms of unit labor productivity and income. They are also traceable to the great differences between England's protoindustrialization based on imported raw cotton, and the higher payments and higher labor productivity of its protoindustrial production that were capable of supporting the worker in whole, as well as its urbanization, and Songjiang's persistent reliance on low-return and non-self-supporting auxiliary family labor.

Involution and De-involution in Contemporary China

Even though the Chinese economy today is already the world's largest economy (in terms of purchasing power parity), its per capita income (according to World Bank data) remains just at the medium-income countries' level. The relative involutionary growth of total output without concomitant growth in unit labor productivity remains a serious problem. It is still a fundamental feature of the Chinese economy. The most illustrative example is the 300-million-strong peasant "informal economy" (i.e., without work security or welfare benefits) of low-cost cheap labor from the countryside. They make up the labor force of China's becoming "the world's factory," the cheap labor that so attracts foreign investments. One outstanding example is the one million people who work for the Apple company, which manages with just 10 percent of the world's total production of cell phones to attain up to 90 percent of the total profits of all cell phones sold worldwide. The company itself

focuses on the highest-earning ends of design and marketing, at profit rates of better than 30 percent, while leaving the employment of workers for producing and assembling components to the Taiwan firm Foxconn, which operates with a profit margin of just 7 percent or so. That formula has given Apple one of the highest profit rates (better than 30 percent) of all companies, propelling it to become the world's largest company with the highest profit rate and the most desired stock-holding of virtually all stock market investors (Barboza, 2016). That combination of outside capital with China's cheap labor has become a key feature of China's development, and is added proof of the involutory nature of Chinese farming since the Ming and Qing, of growth in total output without development in labor productivity, and also evidence of the longstanding rural poverty and the persistent "urban-rural gap" 城乡差别 in China.

In recent decades, even though China has inherited its early involutory pattern of change, it has also seen new capital investments in labor-intensive production, which have led to a definite degree of de-involution. One important example is what I have called the "labor and capital dual intensifying" high value-added "new agriculture," such as the 1, 3, or 5 mu tented (including also hothouse) vegetable farming, fruit orchards of a few mu, and farming cum animal raising farms of 10-20 mu (still to be distinguished from the larger-scale Anglo-American style cropping cum animal grazing mode of operation), which together account for about one-third of all cultivated land and two-thirds of all farm output value today. That kind of change has come together with the transition from China's original diet model of 8:1:1 of grain, meat, and vegetables, to a new 4:3:3 model. The 8:1:1 model had been the pattern of food consumption under agricultural involution; the new 4:3:3 model is among the first steps toward de-involution of that involuted agricultural economy.

As for small-scale farming of crops, it is today still the standard mode of Chinese foodgrain agriculture. Even so, that too has become fairly highly mechanized, but not through large farms but rather small peasant farms operating with the assistance of heavy government investment in and provision of farm machinery at relatively low prices. Today, under the stimulus of competitive off-farm incomes, small peasants have come quite extensively to hire in machine-ploughing, planting, and harvesting services provided by small for-hire entities that have sprung up across the nation. The number of days required for one mu of wet rice, for example, has been widely reduced from 10 to 5 or 6 days of hand-labor input. What that tells us is both about the involutory farming of the past and the beginnings of the gradual Chinese-style de-involution of the present. Whether one or the other, Chinese agriculture is still very different from the English (or American) farming cum

husbandry mode. What is indisputable is the longstanding reality of highly intensive labor input and relatively low output per unit labor of Chinese farming, still prevalent today, even though there has also been unmistakable de-involution.

Today's Chinese agriculture, when compared with the Anglo-American mode, still clearly very much remains in the lots-of-people and relatively-little-land mode, still relatively labor-intensive and low in per unit labor payment or output. It is also still very much a mainly crops-only economy, with little of the Anglo-American style of farming cum animal husbandry.

At the same time, there is still only a low percentage of labor-hiring larger farms. The total number of agricultural workers employed full-time remains just a mere 3 percent of the total number of people engaged in agricultural production (according to the last two authoritative decennial agricultural surveys of 2006 and 2016). To be sure, there has emerged a significant number of cropping cum animal raising farms, but the majority of them are self-farming small entities, not labor-employing large operations. The small peasant economy, and its strong tradition of involution, remains one of the fundamental realities of China today. What we see is still a mode of farming fundamentally different from the Anglo-American mode. The key difference therein being the relatively high labor intensity per unit land and relatively low productivity per unit labor.

China's Involutionary Small Peasant Family Farming and Its De-involution of Today and Tomorrow

The basic reality and logic of the Chinese peasant farm outlined above have been fundamentally the same from the Ming-Qing to the present. Its size and output value per unit labor was and remains far below that of the English farm (not to speak of the American farm). Its basic characteristic was and remains a crops-only farm economy, very different from the English farm of mixed cropping and animal husbandry, which was and is not labor-intensive but rather land-intensive, with high unit labor productivity but low unit land productivity. The transition of the Anglo-American farm to machine-based farming represented a natural development. (It is no accident that mechanical power came to be counted in terms of horsepower.) Chinese farming was and remains the opposite—high labor intensity and high productivity per unit land but low productivity per unit labor, and growth in per unit land output but without development in per unit labor output. That was the case in the past, and to a considerable extent is still the reality of the present, with just 7 mu of land per farming labor unit and 10 mu per farm household.

Under those objective conditions, what is most striking is the differential “modernization” pattern of the two. The Anglo-American mode of lots of land but few people led naturally to a crops cum animal husbandry farming, used a relatively large amount of horse power, and later machine power, and led early on to relatively high labor productivity. Its fundamental origins lay in its relative abundance of land. China’s pattern was the opposite. Under its “basic national condition” of lots of people and relatively little land, it developed early on an intensive labor input per unit land model of agriculture, and eliminated the combining of animal husbandry with cropping, resulting in relatively low per unit labor productivity but relatively high per unit land productivity and leading thereby to agricultural involution and rural-urban gaps that remain to this day. What the two represent to this day are two opposite types of “basic national condition” and differential development paths.

The path to modern development of Chinese agriculture is to face clearly and directly its basic realities. First and foremost is its crops-only basic production mode. What we need to do is seek realistic paths to raise its labor productivity, not to try to cover up its basic realities and obscure its basic differences from the Anglo-American mode, nor to simply equate it with Anglo-American realities. To do that would be only to aggravate the mistakes that have been made in the past, to seek only the scale economies based on their model, and to obfuscate once more China’s recent (especially since 2018) turn to appreciating the basic differences between the Chinese and the Anglo-American models to set the direction of China’s own development. Its basic path is to move from the past labor-intensive model into a labor and capital dual intensifying mode of development. That is most certainly not a matter of merely imitating the Anglo-American model or of simply equating Chinese realities with theirs. That is where the basic error lies with Li Bozhong’s view—to insist that there were no differences between China and the West, only equivalence. That kind of view can only lead to an imitative approach that is unrealizable and wrong for China.

Further Thoughts

Li Bozhong and Kenneth Pomeranz have tried to find equivalence in China’s past agricultural history with that of England. They acknowledge China’s weakness and poverty in its modern period under imperialism but have insisted that, outside of that period, there was and is equivalence with (or superiority to) England (and Holland) in agriculture. Their arguments clearly misrepresent China’s past.

The purpose of my article is to explain just how the path of change of Chinese agriculture and overall political economy, past and present, can only

be very different from the Anglo-American model. Only with a clear and precise grasp of those differences can we see the path that is actually needed for China today and in the future, not to merely try to imitate or find equivalence unrealistically between China and England-America.

If we look at all this from a still larger and longer perspective, we can see that the combination of a highly centralized imperial system with a small peasant economy has in fact been a distinctive and abiding characteristic of China. It began in the Warring States period and was established with the rise of the Qin and Han dynasties. Its roots lay in the struggles for hegemony among the different warring states, exemplified by the principles and strategies of the Qin state as espoused by Shang Yang 商鞅, well summarized in the (multiauthored) “Guanzi” 管子: “a large and wealthy territory, with lots of people and a strong army, that is the way to hegemony.” This core principle was concretized under Shang Yang through a number of key policies: granting of private ownership of land to peasants, encouragement of early marriage, and partible inheritance among all sons, all in stark contrast to landownership by the feudal lord, later marriage, and singular inheritance by one son under the feudal system of Europe. Under Shang Yang’s plan of “drawing in people” 徕民政策, these policies led to the development in the core Wei River valley area of a small peasant economy system in which each cultivating peasant had 20.7 mu of good land plus 10.4 mu of poorer land. It was precisely that kind of system that led to the triumph and unification of the empire under the Qin state, setting the basic pattern of imperial rule + a small peasant economy, in sharp contrast to the West. That was of course also a fundamental reason for China’s earlier and more advanced development than the West (Huang, 1990: chap. 16; Huang Zongzhi, 2023b [1992, 2000, 2006, 2014]: chap. 16).

Moreover, under that basic system, the fundamental logic of change in the size of the population was that, so long as there were no wars, the population would grow at a rate of something like 0.7% a year. That was the case with the Tang and Song dynasties. The so-called “population explosion” of the 1700-1850 period in fact also saw an increase of just 0.7% per year, doubling every 100 years (*ibid.*). The key difference therein was that the base number grew larger and larger, and basic realities changed gradually from the Qin-Han condition of the “big and rich state” 地大国富 to the Qing condition of “lots of people and little land” 人多地少, making its society and political economy starkly different from eighteenth-century England.

Declaration of Conflicting Interests

The author declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author received no financial support for the research, authorship, and/or publication of this article.

References

- BARBOZA, DAVID (2016) “How China built ‘iPhone City’ with billions in perks for Apple’s partner.” *The New York Times*, Dec. 29. <https://www.nytimes.com/2016/12/29/technology/apple-iphonechina-foxconn.html>.
- BROADBERRY, STEPHEN (2013) “Accounting for the Great Divergence.” London School of Economics and Political Science, Department of Economic History Working Papers No. 184. <https://eprints.lse.ac.uk/54573/1/WP184.pdf>.
- BROADBERRY, STEPHEN (2021) “The Industrial Revolution and the Great Divergence: recent findings from historical national accounting.” Pp. 749-71 in Alberto Bisin and Giovanni Federico (eds.), *The Handbook of Historical Economics*. London: Academic Press.
- BROADBERRY, STEPHEN, HANHUI GUAN, and DAVID DAOKUI LI (2018) “China, Europe, and the Great Divergence: a study in historical national accounting, 980-1850.” *J. of Economic History* 78, 4: 955-1000. <https://doi.org/10.1017/S0022050718000529>.
- BUCK, JOHN LOSSING (1937) *Land Utilization in China*. Shanghai: University of Nanking.
- HUANG, PHILIP C. C. (1985) *The Peasant Economy and Social Change in North China*. Stanford, CA: Stanford Univ. Press.
- HUANG, PHILIP C. C. (1990) *The Peasant Family and Rural Development in the Yangzi Delta, 1350–1988*. Stanford, CA: Stanford Univ. Press.
- HUANG, PHILIP C. C. (2002) “Development or involution in eighteenth-century Britain and China? A review of Kenneth Pomeranz’s *The Great Divergence: China, Europe, and the Making of the Modern World Economy*.” *J. of Asian Studies* 61, 2 (May): 501-38.
- HUANG ZONGZHI 黄宗智 [Philip C. C. Huang] (2002) “发展还是内卷? 十八世纪英国与中国——评彭慕兰《大分岔: 欧洲、中国及现代世界经济的发展》” (Development or involution in eighteenth-century Britain and China? A review of Kenneth Pomeranz’s *The Great Divergence: China, Europe, and the Making of the Modern World Economy*). *历史研究* 4: 149-76.
- HUANG ZONGZHI [Philip C. C. Huang] (2020a) 中国的新型小农经济: 实践与理论 (China’s new-style peasant economy: practice and theory). 桂林: 广西师范大学出版社.
- HUANG ZONGZHI [Philip C. C. Huang] (2020b) 中国新型的非正规经济: 实践与理论 (China’s new-style informal economy: practice and theory). 桂林: 广西师范大学出版社.
- HUANG ZONGZHI [Philip C. C. Huang] (2023a [1986, 2000, 2004, 2009, 2014]) 华北的小农经济与社会变迁 (The peasant economy and social change in North China). 桂林: 广西师范大学出版社.

- HUANG ZONGZHI [Philip C. C. Huang] (2023b [1992, 2000, 2006, 2014]) 长江三角洲的小农家庭与乡村发展 (The peasant family and rural development in the Yangzi Delta). 桂林: 广西师范大学出版社.
- LI, BOZHONG (1998) *Agricultural Development in Jiangnan, 1620-1850*. New York: St. Martin's Press.
- LI, BOZHONG and JAN LUITEN VAN ZANDEN (2012) "Before the Great Divergence? Comparing the Yangzi Delta and the Netherlands at the beginning of the nineteenth century." *J. of Economic History* 72, 4 (Dec.): 956-89.
- POMERANZ, KENNETH (2000) *The Great Divergence: China, Europe, and the Making of the Modern World Economy*. Princeton, NJ: Princeton Univ. Press.
- POMERANZ, KENNETH (2011) "Ten years after: responses and reconsideration." *Historically Speaking* 12, 4: 20-25. <https://muse.jhu.edu/article/449546/pdf>.
- POMERANZ, KENNETH (2017) "The data we have vs. the data we need: a comment on the state of the 'divergence' debate (part I)." <https://nephist.wordpress.com/2017/06/06/the-data-we-have-vs-the-data-we-need-a-comment-on-the-state-of-the-divergence-debate-part-i/#comments>.
- WEATHERILL, LORNA (1993) "The meaning of consumer behaviour in late seventeenth- and early eighteenth-century England." Pp. 206-27 in John Brewer and Roy Porter (eds.), *Consumption and the World of Goods*. New York and London: Routledge.
- XU XINWU 徐新吾 (1992) 江南土布史 (A history of native cloth in Jiangnan). 上海: 上海社会科学出版社.

Author Biography

Philip C. C. Huang's lifelong five-volume study of Chinese peasants-agriculture and the "informal economy" from the Ming-Qing down to the present (two of them in their sixth and fifth editions), and four-volume study of Chinese law and justice of the same period, plus his four-volume study of the methods and theories of "the social science of practice," are being republished in a new thirteen-volume collection from the Guangxi shifan daxue chubanshe. Six of the volumes have appeared thus far.