

## Chapter 8

# The Involution Debate

This chapter discusses an important current debate that illustrates many of the indeterminacies and historiographical challenges that have been raised in earlier chapters: a debate over the nature of China's economic development since 1600. Was China on a path of steady growth or asphyxiating involution? Neither the facts, nor the institutional descriptions, nor the interpretations of these facts and descriptions, are yet settled. So the case presents an excellent opportunity to observe the historians at work.

### 8.1 China's Early Modern Rural Economy

China's rural economy was extremely poor; it was stagnant or even declining in per capita terms; and it embodied substantial inequalities of land, tenancy and security—or so conventional wisdom would have it. R.H. Tawney's bleak observations in the 1930s set the stage for much work on the economic history of the late imperial period in the 1960s and 1970s. Tawney emphasizes extortionate taxation and credit relations, warlordism, minute landholdings, poor soils, and population pressure as the chief causes of increasing rural misery in China. He wrote, "There is even some reason to believe that, with the increased pressure on the land caused by the growth of population, the condition of the rural population, in some parts of China, may be actually worse than it was two centuries ago. . . . It is difficult to resist the conclusion that a large proportion of Chinese peasants are constantly on the brink of actual destitution" (Tawney, 1966, pp. 71–72). Western scholarship in the 1960s and 1970s emphasized the poverty and stagnancy of the Chinese rural economy, thus confirming the broad outlines of Tawney's analysis. And this interpretation of Republican China echoes the Malthusian and Smithian interpretations of China's rural economy in the early-modern period (1600–1850), according to which population growth, limited resources, and stagnant technology doomed rural Chinese people to low and falling standards of living.

However, in the 1990s several important bodies of scholarship have challenged this conventional wisdom. Treating the last decades of the nineteenth century and the first 30 years of the twentieth century, Thomas Rawski (Rawski, 1989) and

Loren Brandt (Brandt, 1989) argue for a substantial degree of growth in agricultural output, rural incomes and living standards. And in their important treatments of the longer duration of Chinese economic development, Kenneth Pomeranz (Pomeranz, 2000) and R. Bin Wong (Wong, 1997) argue that early-modern Chinese agriculture was roughly as productive in 1800 as that of its contemporary European farming, and that the standard of living in the countryside was comparable in China and England. Further, James Lee and his collaborators (Bengtsson et al., 2004; Lee and Campbell, 1997; Lee and Wang, 1999) have challenged the Malthusian interpretation of Chinese historical demography. They argue that China's population history shows moderate growth and socially regulated rates of fertility—thus contradicting the idea that population growth made modern economic growth impossible to achieve in China.

These more favorable views of the economic potential of early modern China have stimulated a vigorous debate. Against Pomeranz, Philip Huang (1990) argues that the rice economy of the Yangzi Delta was locked in a pattern of “involutionary growth” with little or no improvement in per capita output and living standards and a pattern of declining labor productivity. In a major critique of Pomeranz's interpretation, Huang (2002) and Brenner and Isett (2002) offer fundamental and sweeping criticisms of the empirical and theoretical case that Pomeranz advances; Pomeranz responds forcefully and at length in the same journal (Pomeranz, 2002), and James Lee and his colleagues rebut the demographic assumptions made by Huang (Lee et al., 2002).

Highly relevant to both debates is Bozhong Li's extensive body of work on agricultural inputs, outputs, costs, and rents in the family farm economy of the lower Yangzi Delta. Li provides a crucial empirical basis for assessing the claims in these debates (Li, 1998). Li provides for the Jiangnan region of China a body of empirical assessment that is comparable to the impact of the work of Robert Allen on the productivity of the English farm economy (Allen, 2005). These bodies of research permit evidence-based estimates of the standard of living in England and Jiangnan that provide the basis for some conclusions about involution, growth, or stagnation in these rural economies, especially in the early modern period.

These disagreements raise a number of important issues for China scholars more broadly: the nature and rate of agricultural development (output, productivity and application of new technologies), the direction and nature of change in rural welfare during the period, and the character and pace of social change during this period (rural to urban migration, land tenure change, concentration of landholdings). If the generally upbeat assessment offered by Rawski and Brandt is sustained, then a rather deep reassessment will be needed of the status of welfare and social change in China's countryside in the early twentieth century. If Huang's view is validated, then customary assumptions about the nature of economic development in an agrarian economy need rethinking.

This chapter focuses on these important dimensions of disagreement in the literature today about economic change in the Qing and early Republican period. The substantive issues may be summarized along the following lines. First are issues directly concerned with processes of development within the agricultural sector.

Was there significant productivity growth in Chinese agriculture during the period? Were there significant processes of technological change under way? Was commercialization stimulating greater efficiency and investment? To what extent did new communication and transportation technologies stimulate change in the rural sector? Second, each author is forced to arrive at assessments of China's population trends during the period, and there is significant controversy about China's historical demography. What is the best estimate of the rate of increase of the population? How much urban migration or inter-rural migration was occurring? How significant were large "positive checks" such as famine, disease, and warfare in China's population history? Third is the question of the status of structural economic transformation of the Chinese economy in the Republican period. To what extent was the proportion of agriculture to manufacturing and handicraft output changing during this period? How much growth of manufacturing and industrial employment was occurring? How extensive was the growth of commercialization of agriculture? How rapidly was modern industry eroding traditional manufacturing? Finally, there are a host of issues relating to the net effects of these various processes on the welfare of the rural population. What was happening to rents and wages? Was population pressure on resources placing increasing strain on the rural economy? Were rural incomes subject to greater instability? Are there available data that would indicate the direction of change of nutritional adequacy in the rural population? To put it crudely: was the rural population in a state of immiseration during the period? Was it holding its own? Or was there significant, if slow, improvement in rural welfare?

It is evident that there is a very wide range of disagreement across these several schools of thought on China's rural economy. The disagreements between Pomeranz and Huang, or Brandt and Lippit, are not over minor points of empirical detail; they involve fundamentally differing assessments of the overall nature and direction of Chinese economic change in the relevant periods. Moreover, these disagreements matter a great deal to our understanding of China's development in the twentieth century. To what extent is it possible to resolve these issues? What obstacles stand in the way of our reaching relatively definitive conclusions on these central economic issues? How much resolution is it possible to reach concerning the main economic characteristics of the Chinese rural economy?

## **8.2 Involution or Revolution in the Early Qing?**

Let us begin by considering the "involution debate" between Pomeranz and Huang (and numerous other experts). Eurasian economic history has been dominated in the past several years by a sustained debate over the developmental status of late imperial China relative to England: was the early modern Chinese agricultural economy "involutionary," "stagnant", or "revolutionary"? This section considers the main features of this debate. Since there is a substantial range of empirical disagreement between the two perspectives, it is logical to hope for some degree of resolution through more detailed factual and empirical research.

The involution debate involving Pomeranz, Brenner, Huang, Lee, and others has been heated, complex, and sometimes illuminating (Brenner and Isett, 2002; Huang, 2002; Pomeranz, 2002; Wong, 2003; Lee et al., 2002; Goldstone, 2002; Li, 2002b). The debate has revolved around several important and somewhat independent dimensions. There is a core set of factual disagreements over the status of a number of important variables, including especially the comparative standard of living and the level of agricultural productivity. There is also a degree of disagreement over conceptual issues. How do we define “sustained economic development”, standard of living, or productivity? What constitutes a good causal explanation? And there is disagreement concerning the causal and institutional factors that might be thought to have created “stagnation” or involution in China.

Philip Huang argues forcefully for the involutory nature of China’s rural economy. He maintains that China’s agricultural economy in the late Qing and early Republican economy experienced extremely low levels of per capita productivity and was able to increase output only at the expense of ever-increasing inputs of labor per unit of output (Huang, 1990). The family-farming unit was one that was highly vulnerable to self-exploitation (the use of “free” family labor well past the point of reasonable marginal return), and the pressure of limited land, population increase, and technological stagnation resulted in falling productivity and stagnant to falling standard of living. According to Huang and his supporters, the Yangzi Delta was on an involutory trajectory in the early-modern time period, involving Malthusian crisis (population exceeding food production), falling labor productivity, rising intensity of land use, falling marginal product, and falling living standards.

Huang’s book covers a very long time horizon; he treats the Yangzi rural economy over a 600-year period, leading through the post-Mao reforms. He maintains that the Yangzi Delta economy was characterized by a system of subsistence-level farming based on peasant family production; “only in the 1980s did transformative development begin to come to the delta countryside, to result in substantial margins above subsistence in peasant incomes” (Huang, 1990, p. 1). Huang holds that this rural economy was heavily involuted, organized around self-exploiting family production. The stimulus of population increase led to intensive rather than productivity-enhancing growth, and the results were stagnant levels of welfare for the rural population. The farm family system drove out hired labor managerial farming because of low opportunity cost of family labor (p. 14). Thus in Huang’s view the farm economy was characterized by “growth without development” (p. 11). It was highly involuted due to population pressure and did not show significant growth in productivity through this whole period. Agricultural output expanded just enough to keep pace with population increase, largely through intensification of production. “There was little or no expansion until the introduction of modern inputs after 1950” (Huang, 1990, p. 14). Finally, Huang rejects Rawski’s and Brandt’s arguments that living standards were rising appreciably around the turn of the twentieth century (pp. 137–143) (discussed below).

Kenneth Pomeranz disagrees profoundly with the involutionist interpretation when applied to the early modern period (1600–1800). In order to provide a more adequate comparative economic history, he proposes a detailed comparison between

England and Jiangnan in the early stages of the modern period. Pomeranz maintains, against the involutionists, that China's rural economy was roughly as productive as England's in 1700, and that the rural standard of living in the lower Yangzi region was approximately the same as that of rural England in the same period (Pomeranz, 2000). "It seems likely that average incomes in Japan, China, and parts of south-east Asia were comparable to (or higher than) those in western Europe even in the late eighteenth century" (Pomeranz, 2000, p. 49). Pomeranz holds that Huang gives too little attention to the importance of the differences between land-intensive and labor-intensive agriculture. Pomeranz agrees that China's economy did not emerge into a period of sustained modern economic development following the beginning of the eighteenth century (this is the significance of his title *The Great Divergence*); but he contests Huang's explanation for this fact (Huang's argument that involutory agriculture prevented productivity-enhancing innovations). Pomeranz asserts that broad features of Yangzi Delta agricultural productivity, handicraft productivity, standard of living, and demographic behavior were generally similar across the two cases, and that economic "breakthrough" in the English case was the result of a highly contingent, non-systemic factor—the acquisition of significant natural resources and labor in the Americas.

There is an important conceptual point that must be emphasized in considering this debate. Both "revolution" and "involution" imply a sustained tendency to change: either dramatically rising labor-land productivity or gradually falling labor productivity. But there is a third logical alternative: generally flat productivity in the face of many other changing variables—new fertilizers, rising population, ecological challenges, falling land-labor ratios, technological changes, or environmental challenges. (Broadly speaking, this is the view advanced by Dwight Perkins, 1969.) This is a coherent and historically defensible position: that Chinese agriculture was neither leading to revolution, nor was it experiencing a longterm trend towards involution. It was instead stable and progressive, from the point of view of labor productivity, per capita output, and farm incomes. But is this position supported by the facts?

One thing we can say confidently is that there was substantial intra-regional diversity in levels and rates of change with respect to defining economic variables across Eurasia: standard of living, total output, output per capita, etc. Robert Allen's research demonstrates this diversity for Europe; England, Scandinavia, and Italy show very different profiles of development, real wage, and institutional setting (Allen, 2000). But likewise, it is possible to document a similar range of diversity within China and across Asia. We can also say confidently that there were significant regional variations with respect to background institutions and conditions: political institutions, market institutions, environment, and social property systems (governing land and labor). This degree of variation should lead us to expect significant differences in economic history as well across regions.

In the next several pages we will consider the central areas of disagreement among the participants in the involution debate: population trends, farm productivity, the level of the real wage, and the impact of differences in the institutions governing agriculture.

### **8.2.1 Population Trends**

The issue of population dynamics is central to this debate. The involutory interpretation depends heavily on the Malthusian view that China's population consistently showed rates of increase that pushed against the limits of agriculture and land. However, Pomeranz, Lee, and Li maintain that the lower Yangzi River basin was not characterized by a Malthusian crisis. Instead, they argue that China's demographic regime was stable and resulted in controlled fertility. James Lee and his colleagues maintain that more detailed study of China's demographic systems at the level of the family result in similar demographic outcomes to those experienced in early modern Europe (Lee and Wang, 1999; Bengtsson et al., 2004). Lee and Campbell conclude, "Even though Huang (1990) and others have speculated that Chinese populations were distinguished from European populations by the elevated importance of mortality . . . , reductions in birth rates played a much more important role in slowing the increase of population in Daoyi than changes in the death rate. . . . Increases in Malthusian pressure not only triggered a demographic response, but a social one as well: processes of household formation were permanently transformed, fundamentally changing the social context of daily life in Daoyi" (Lee and Campbell, 1997, pp. 47, 49).

Lee, Bengtsson, and Campbell find that their results cast doubt on the Malthusian conclusions and generalizations about positive and preventive checks in Europe versus Asia. "Our project studies how changing economic conditions—food prices and wages—and different socioeconomic contexts—household, kin, and class composition—affect individual demographic outcomes. By comparing the patterns of demographic responses, we can understand better the socially and culturally conditioned decisions that families and individuals make as they struggle to cope with changing conditions" (Bengtsson et al., 2004, p. 5). They find that family practices, demographic institutions, and economic settings vary sufficiently across the map of Eurasia as to make it impossible to arrive at grand differentiating statements about European and Asian demography (or English and Chinese demography). In particular, they find that the evidence shows that Chinese demographic behavior resulted in fertility rates that were broadly comparable to those of Western Europe.

### **8.2.2 Productivity**

The behavior of agricultural productivity is crucial to this debate. How are we to attempt to resolve the disagreements involved here? Here the careful empirical work provided by Robert Allen and Bozhong Li is crucial to the debate. Bozhong Li's major studies of Jiangnan farming (Li, 1998, 2002a) provide much of the empirical base that is used by other scholars in attempting to arrive at estimates of farm productivity and rural incomes in the lower Yangzi region. And Li's studies contradict

the assertion that labor productivity was declining in the early modern period in the lower Yangzi Delta. According to Li, the Chinese farm economy experienced steady to rising labor productivity and rising land productivity, resulting in a level standard of living for rural workers and farmers. After a careful analysis of the amount of labor employed over the course of a year in the several farming sectors, Li writes: “My conclusion is the opposite of the conventional view that ‘heavy population pressure’ reduced laobur productivity in farming in early and mid-Qing Jiangnan. The reduced size of Qing farms did not reduce per worker labour productivity on the farm. On the contrary, labour productivity rose” (Li, 1998, pp. 140–141). Finally, Li and Pomeranz observe that the two paths (England and Jiangnan) separated in the mid-eighteenth century, with sustained productivity increases in manufacturing and agriculture in England, and static or worsening productivity in Jiangnan.

Robert Allen contributes to the debate by assembling a detailed and historically rigorous framework for aggregating costs on historical farming systems (England and the lower Yangzi), and arriving at estimates of labor and land productivity, farm wage incomes, and farm family incomes (Allen, 2003). His farm model permits a consistent framework for estimating costs and outputs of Yangzi farming. His analysis supports detailed comparison of labor productivity in England and the lower Yangzi Delta, and his findings are two-fold. First, he finds that the overall level of farm labor productivity in the Yangzi Delta is a bit lower than that of England, but higher than several other regions of Europe; and second, he finds that this level of labor productivity is roughly constant between 1620 and 1820 (Allen, 2003, Table 5). In other words, his analysis contradicts the “involutionary” hypothesis of falling labor productivity during these centuries. He also contradicts the “revolutionary” thesis of rising productivity; he finds that gross output of rice per day of labor increased significantly between 1620 and 1820; but—contrary to Li—when we take into account the cost of beancake fertilizer, net output is roughly constant (Allen, 2003, p. 11). “Labour productivity in the Yangzi Delta was about 79% of that in England in 1800. While this was, of course, less than the English or Dutch achievement, it was considerably above that of most countries in Europe” (p. 11).

Allen’s overall finding is supportive of the judgment that the rural Chinese standard of living was comparable to that of rural England, and that there is little evidence of productivity increase or decline in Chinese agriculture in the early modern period. There was significant change in the intensity of agriculture and fertilizer use (beancake); these changes led to rising output; and the cost of new inputs kept overall labor productivity roughly constant. And, most significantly, he finds that labor productivity was roughly unchanged through the two centuries between 1620 and 1820—a finding that contradicts the expectations of the involution theory. Thus Allen finds that neither the involutionary nor the revolutionary model is adequate to the Chinese data. This supports the view that Chinese agriculture was neither leading to sustained per-capita growth, nor was it experiencing a longterm trend towards involution. It was instead stable and progressive, from the point of view of labor productivity, per capita output, and farm incomes.

### ***8.2.3 Real Wage Comparisons***

Robert Allen's work on real wages in Europe and Asia provide a substantially stronger basis for empirical assessment of the question the rural standard of living than we have had hitherto. The central question here is, how did rural real wages compare in England and China? Allen is able to address this problem using the farm economy model developed in "Agricultural Productivity and Rural Incomes" (Allen, 2003). This model incorporates data on crops, prices, and labor expenditures for Yangzi and English Midlands farms. He is able to calculate estimates for family incomes in the two settings. He finds that the Yangzi Delta family income per day was 34.2d in 1620 and 21.0d in 1820; and the latter figure compares to 19.8d for the English Midlands (Allen, 2003, Table 8). These data indicate that Yangzi family income fell during these centuries but remained slightly higher than rural English family income in 1820. And based on trends in English rural wages reported in (Allen, 2005), we can infer that the Yangzi family income was measurably higher than its English counterpart in 1620. These points vindicate Pomeranz's claim that Chinese rural incomes were comparable to their English counterparts in the early modern period.

In "Real Wages in Europe and Asia" Allen (2005) provides a methodology that involves careful estimation of a "cost of living" index for England, India, Japan, and China. This index is based on a wage basket of staple food and clothing, for which there are very good price data in England and sporadic price data in China. He also provides a simpler index based on the price of a calorie of the basic foodstuff in each country. He then converts money wage data from several countries into a common real wage, and uses these estimates for England, India, Japan, and China to provide a quantitative answer to some of the most basic issues in the involution debate. Centrally, he concludes for the middle of the eighteenth century, that "using the price of a calorie as a deflator indicates that there was little difference in the standard of living of English, Chinese, and Japanese farm workers. . . . Asia did not lag behind Europe" (Allen, 2005). This estimate is for a time period that falls within the period of dispute between Pomeranz and Huang, and it clearly favors the Pomeranz position. Moreover, he finds that the Chinese standard of living rose substantially between 1700 and 1900: "The standard of living in the Yangzi rose by over 40% between the early eighteenth and early twentieth centuries" (Allen, 2005).

### ***8.2.4 Institutional Settings***

Throughout his writings Robert Brenner makes a causal argument about differences in the profile of economic development, based on the two kinds of differentiation noted here; he argues that high and low economic developers correspond to differences in social-property systems (Brenner, 1976, 1982). This is a simple causal argument with two foundations: first, an analysis of co-variation between outcomes and institutional settings, and second, an account of a possible social mechanism that shows why social-property systems of a certain sort should be expected to



result in sustained economic growth. Brenner brings this perspective to bear in his contribution to the involution debate (Brenner and Isett, 2002). (Brenner's comparative treatment of English and French agrarian development is discussed briefly in [Chapter 7](#).)

Brenner's (and apparently Huang's) explanation of English case, in contrast to China, involves three large factors: (a) Property relations permitted capitalist agriculture in England (Brenner, 1976, 1982). (b) Chinese demographic practices permitted high fertility, moderate mortality in China—leading to endemic population pressure on resources. And, (c) implementation of technological innovation was rapid in England as a result of the incentives for capitalist farmers. The result of this combination of factors is a steady increase in productivity in England, sustained improvement in the standard of living, and the gathering financial capacity of elites to invest in modernizing technologies in manufacturing. By contrast, Brenner characterizes China as witnessing erosion of the standard of living and a failure to introduce modern technologies and agricultural improvements; and by inference, the explanation of this outcome is the less favorable institutional setting that Chinese society created for innovation and investment in agriculture.

Pomeranz takes issue with both aspects of this theory. He disputes the premise that Chinese agriculture failed to make progress in implementing new technologies of irrigation, cropping, and fertilizers. And he disputes the thesis of “superior institutional setting” as an explanation of England's later economic takeoff. Instead, he argues that England shoots forward because of resources from the Americas, cotton and agriculture imports, extension of land in the Americas, and the exploitation of slave labor in the Americas. Here again Bozhong Li's analysis of farm productivity and the standard of living in the lower Yangzi appears to support Pomeranz.

### ***8.2.5 Environmental Exhaustion***

Mark Elvin provides a different basis of analysis of the “involutionary” character of Chinese economic development in his pathbreaking environmental history of China, *Retreat of the Elephants* (Elvin, 2004). Elvin closes his treatment of China's environmental history, and the history of agricultural development that is deeply entangled within this history, by offering a way of thinking about the level of “environmental pressure” within a given economy. Elvin introduces this concept as an alternative way of assessing the degree of intensity with which the Chinese farming system had developed in its use of labor and environmental resources; extremely high environmental pressure would imply something very similar to the high-level equilibrium trap he had hypothesized earlier in his writings (Elvin, 1972).<sup>1</sup> Elvin also argues that “environmental pressure” might have functioned as a formidable barrier to China's adoption of modern economic forms and manufacturing systems:

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<sup>1</sup>Elvin's concept of the high-level equilibrium trap is discussed in Little (1998, [Chapter 8](#)).

the sunk costs of control of the environment made it difficult to consider adoption of an entirely different system of production.

Elvin attempts to begin the project of assigning a quantitative measure to “environmental pressure” by offering a definition. He singles out the quantity “cost of restoring existing resources to their prior level of output for the same level of input” and the ratio of this quantity to total output, and he suggests that we consider the rate at which this ratio changes over time (Elvin, 2004, pp. 455ff). An environment under severe “pressure” is one in which the cost of restoring it to its prior level of productivity exceeds the total output of the economy for that period. Elvin observes that innovations in technology, or the discovery of new external sources of resources, can dramatically change the degree of pressure experienced by a given economy; so a new water control technology can potentially greatly reduce the costs of restoration of the water system at the end of the production period. That said, the judgment that a given environment is under severe environmental pressure appears to represent an alternative basis for arguing for the conclusion that this economy is undergoing involution.

Elvin then asks the question whether there is a basis for comparing China and Europe according to this measure (Elvin, 2004, p. 460). Here he explicitly considers Pomeranz’s claims about seventeenth century parity between England and the lower Yangzi, and he suggests that we have reason to judge that China was under substantially greater environmental pressure than Europe in the early modern period. He notes that the decisive empirical basis for establishing this conclusion is currently unavailable, but he argues that the evidence of contemporary observations and comparisons offered by Jesuit observers permits some preliminary conclusions. He offers this conclusion: “Overall, the Jesuit evidence . . . makes a persuasive *prima facie* case that the ‘pressure’ of the late-imperial Chinese productive system on the natural environment . . . was significantly heavier than that at least of France around the beginning of the modern era. This can probably be extended, though with less certainty, to other parts of northwestern Europe” (Elvin, 2004, pp. 469–470). Significantly, Elvin counts the cost of hydraulic maintenance work as a large component of the renewal cost for resources; other large components include the intensity of Chinese farming and the need for annual labor to replace soil fertility (because of the lack of fallow).

Elvin links this discussion to the involution debate, but we may question whether the circumstance of “environmental exhaustion” that he analyzes is significantly related to the condition of involution that Huang postulates. One line of thought serves to link the two conditions together: if we consider the example of an irrigation system that requires more labor for dredging of silt each year in order to produce the same output of grain, then we can infer falling productivity (grain/total labor input). So rising “environmental pressure” in this instance leads directly to falling labor productivity—or in other words, involution. Sustainability requires restoration of the production system to its initial level of productivity. If producers choose not to invest the full amount needed for restoration, then the production system will have lower productivity in the next cycle—with the consequence, once again, of involution in the technical sense (declining labor productivity). But the connection is not always so tight.

For, as Elvin notes, there are multiple ways of dealing with environmental pressure. As he emphasized in his earlier work on the high-level equilibrium trap (Elvin, 1973), innovations in technology and technique provide the means for pushing back the productivity frontier. But here Elvin's earlier conclusions are directly relevant to his analysis of environmental pressure; in his arguments surrounding the theory of the high-level equilibrium trap, Elvin argued that the Chinese production system had fully exploited the available repertoire of technological and technical innovations that could shift the system to higher productivity. And on this assumption, the conclusion that "rising environmental pressure entails falling labor productivity" is economically inescapable.

Consider briefly the treatment that Pomeranz provides of resources and environment. Pomeranz makes a great deal of the fact that European exploration and colonialism provided vast sources of natural resources into the control of European nations, including England. The "underground forests" of England's coal reserves, the "hidden acreage" of South American and Caribbean plantations, and the labor of colonial peoples all provided infusions of resources into the English economic system; and when these inputs are incorporated into the calculation of "environmental pressure" that Elvin provides, they have the effect of relieving environmental pressure.

So it would appear that Elvin is providing a conceptual basis for a new line of criticism of the thesis that England and China were in comparable economic situations at the beginning of the modern era. This approach is worthy of further empirical and historical investigation.

### ***8.2.6 Conclusions on the Involution Debate***

It is now possible to delineate some areas of best judgment with respect to the primary disagreements involved in the involution debate. Thanks to detailed and rigorous empirical work by Bozhong Li and Robert Allen, the situation of agricultural productivity and the real wage in England and the Yangzi delta is somewhat more clear today than it was when this debate originated. It appears reasonable to conclude with Robert Allen that the real wage for Yangzi peasants was roughly equal to that of English farm laborers in the seventeenth and eighteenth centuries. This finding supports Pomeranz and Lee in their assertion that conditions for ordinary people in England and China were roughly comparable.

Second, it seems reasonable to conclude on the basis of work by Bozhong Li and Robert Allen, that agricultural labor productivity was roughly comparable in these two regions as well. As Pomeranz emphasizes, we must take full account of the very different circumstances of agriculture in the two settings; but careful measurement by Robert Allen of the inputs and products of English farms, combined with Bozhong Li's analysis of the Jiangnan farm economy, suggests that farm productivity, measured in terms of working days per calorie-equivalent of grain, was comparable as well. These data do not support Huang's assertion of a longterm tendency towards falling labor productivity in the Chinese rice economy.

Third, the substantial progress that has been made in Chinese historical demography in the past decade effectively eliminates the crude Malthusian interpretation of Chinese population behavior. There was no unconstrained tendency towards population increase up to the carrying capacity of the land; instead, fertility rates and rates of population increase were essentially comparable to those of European populations. This finding too casts doubt on the involution hypothesis, since unrestrained population increase is the central causal mechanism that was hypothesized to push the process of involution.

These findings sound “final”; but, as Robert Allen emphasizes, the quality of the economic data that is available for measurement of productivity and real wages in Asia remains sketchy and questionable. The best evidence available today supports the summary conclusions rehearsed above; but it is also possible that subsequent research will call some of these specific findings into doubt.

What remains unresolved in the debate is the large causal question: what accounts for the “Great Divergence” between Western Europe and East Asia in the seventeenth and eighteenth centuries? Here the most promising perspective is that of R. Bin Wong, in his insistence on the necessity of pursuing an economic history that does not privilege the “master narrative” of western economic revolution. Instead, we need to attempt to identify the conjunction of circumstances in Western Europe and East Asia—environmental, international, political, demographic—that created the characteristic patterns of development in the two settings. And we need further historical and theoretical research to come to conclusions about the relative importance of a variety of causes of the “great divergence” between England and China around 1800.

### **8.3 Immiseration or Gradual Improvement in Republican China?**

Let us turn now to a related debate that focuses on more recent Chinese history—the status of the Chinese rural economy since roughly 1900. This debate raises some of the same issues, but in a later and shorter period of Chinese economic history: the transition from the final years of the Qing empire into the early decades of the Republican period. Many observers have regarded this period as one of agricultural stagnation, falling real rural incomes, worsening tenancy relations, and increasing rural inequalities. These unfavorable economic developments are often taken as preparing the ground for the successful peasant revolution in China. In the 1980s several economic historians offered substantial criticism of this prevailing wisdom. Arguing from a neoclassical economic perspective, Thomas Rawski (1989), Ramon Myers (1970), and Loren Brandt (1989) have argued that the early Republican economy was more dynamic and forward-moving than this interpretation would suggest. According to these historians, agricultural productivity was rising, rural incomes were improving, and labor markets permitted a degree of social opportunity to the rural poor. These are important and controversial claims; if sustained, they require

a significant reevaluation of the state and direction of change of the Chinese rural economy in the early twentieth century.

### 8.3.1 *The Received View*

Many observers have regarded the late Qing and Republican period as one of agricultural stagnation, stagnant or falling real rural incomes, worsening tenancy relations and increasing rural inequalities. These unfavorable economic developments are often taken as setting the stage for the successful peasant revolution in China: increasing rural misery gave peasants a strong motive to support a party that promised land reform and a program aimed at improving the lot of the rural poor. Dwight Perkins holds that China's rural economy in the early twentieth century was almost stagnant, with little or no per capita growth in gross domestic product. There was growth of output, but it occurred at essentially the rate of population increase—resulting in stagnant per capita incomes (Perkins, 1975a, 1975b, pp. 121–122). Perkins acknowledges that there was sustained growth in certain modern sectors (e.g. cotton textiles, transport, banking), but reminds us that agriculture and traditional manufacturing dwarfed the modern sector; and he argues that these sectors showed little or no growth (Perkins, 1975a, pp. 120–125). The benefits of modern-sector growth would only be realized in living standard improvement in later decades. Perkins' target is the position that held that living standards were falling during this period (represented by R. H. Tawney, 1966). Against this position, Perkins maintains that the balance of evidence suggests that this was not the case: “the view that the incomes of all or of the vast majority of the people were declining during the first half of the twentieth century is not supported by currently available evidence” (Perkins, 1975a, p. 124). Perkins also makes an effort to assess the direction of change in land concentration, tenancy and income distribution during the period. He holds that tenancy rates remained approximately the same during the period, and he denies that there was an abrupt increase in tenancy or landlessness during the early twentieth century (Perkins, 1969, p. 100).

Another important statement of the received view of the 1960s is Albert Feuerwerker's *The Chinese Economy, Ca. 1870–1911* (Feuerwerker, 1969). Feuerwerker's assessment too emphasizes economic stagnation: “Fundamental economic change and modern economic growth, however, in so far as they have been accomplished in twentieth century China, did not come of their own momentum out of the late-Qing economic system. They were preeminently the by-products of a new and possibly still tenuous political integration which itself was achieved only after decades of political strife, foreign invasion and civil war” (Feuerwerker, 1969, p. 1). Feuerwerker maintains that agricultural techniques remained roughly unchanged throughout the period (1880–1930s), with output increasing in pace with population growth through small increase in cultivated acreage (Feuerwerker, 1969, p. 3). He takes it as certain that rural living standards did not improve throughout the period, but doubts that evidence exists to demonstrate a significant decline in living standards (p. 5). Feuerwerker believes that tenancy rates probably did not

increase in the early decades of the twentieth century, and he doubts that effective rent levels increased during the period (p. 14). He thus adopts roughly the same view as Perkins: that output approximately kept pace with population increase, with the result that average rural welfare remained about constant.

Scholarship in the 1970s focused more attention on distributive issues in the rural economy: the status of tenancy, landlessness, wage labor, peasant welfare and rural inequalities. Such authors as Mark Selden, Victor Lippit, Carl Riskin and Joseph Esherick argued that inequalities increased during the period. Mark Selden emphasizes the deterioration of living conditions in Shensi. He details the destructive effects of warlordism and famine in Shensi, and he argues that tenancy in Shensi increased substantially in the 1930s, accompanied by increasing landlessness (Selden, 1971, pp. 7–8). These worsening conditions are a central causal factor in Selden's analysis of the successes of Communist mobilization in Shensi. Likewise, Carl Riskin emphasizes the significance of income and land inequalities in the Chinese rural economy (Riskin, 1987, pp. 24–26). And Victor Lippit focuses attention on the disposition of the rural surplus: through rent, taxation and usurious interest rates the peasant was separated from the surplus available within the rural economy (Lippit, 1974). He argues that incomes based on these sources represented a significant portion of China's national income in the 1930s: rent (10.7%), farm business profits (3.4%) and rural interest payments (2.8%), for a total of 16.9%. Moreover, Lippit argues that, for reasons internal to China's rural elites, these incomes were not devoted to productive investment but elite consumption.

In short, the received view represents the Chinese rural economy as being largely stagnant during the early Republican period. Technological change in agriculture was sparse. Living standards for peasants were stagnant or falling. The main fissure of disagreement within the field concerned the causes of the stagnation. One school of thought (the *technological* school) held that the chief obstacles to development were technological and demographic; population pressure on resources led to an economy in which there was very little economic surplus available for productive investment. The other theory was the *distributional* school, which held that the traditional Chinese economy generated substantial surpluses that could have funded economic development, but that the elite classes used those surpluses in unproductive ways.

### 8.3.2 Revision

Brandt and Rawski focus their work on Chinese economic development in the late Qing and early Republican periods. They disagree about some issues; but they agree in rejecting many features of the received view. Consider first some of Thomas Rawski's central findings. Rawski argues that economic growth was significant and sustained in pre-war China. It was driven by modernization of transport, factory industry and commercial banking (Rawski, 1989, p. xx). Much of Rawski's

book focuses on industrial growth, but he maintains that agriculture expanded in per capita terms as well. He estimates that agricultural growth averaged 1.5%—about 0.5% ahead of population growth. This process of growth led to sustained increase in output and income per capita (Rawski, 1989, p. 268), and this increase led to rising living standards. Rawski provides a new analysis of Buck's data on rural living standards, to support the conclusion that rural welfare was rising during the pre-war period (Rawski, 1989, pp. 287ff). He argues that there is good evidence of rising consumption of cotton cloth, which he takes to support the conclusion that living standards were rising (Rawski, 1989, p. 289). Rawski summarizes his findings relevant to the rural economy in these terms: "This study has produced a variety of direct and indirect evidence of increasing per capita output, income and living standards in large areas of rural China prior to the outbreak of the Pacific War in 1937" (Rawski, 1989, p. 320).

Loren Brandt shares many of Rawski's assumptions (Brandt, 1989). He holds that commercialization progressed rapidly during this period, bringing greater integration between domestic and international markets in rice, cotton, and other important commodities; and that commercialization in turn induced growth in agricultural output, improvement in the agricultural terms of trade, rising real incomes for farmers and laborers alike, and a probable overall reduction in the range of income inequalities in the countryside of central and eastern China. In fact, Brandt draws a parallel between the performance of the Chinese rural economy during this period of rapid commercialization and its performance during the period of the post-Mao rural reforms; in each case, he asserts, the gains were the result of greater market activity and specialization. He maintains that the early Republican period witnessed rising real incomes for farmers and laborers alike and a probable overall reduction in the range of income inequalities in the countryside of central and eastern China. Brandt uses these conclusions about real wages to argue that labor productivity increased between 40 and 60% during the time period (Brandt, 1989, p. 132)—suggesting that the rural economy was improving rather respectably during the period. And he argues that commercialization of the rural economy had the effect of significantly narrowing income inequalities in rural China (Brandt, 1989, p. 138), by increasing the demand and opportunities for labor. Finally, he denies that land concentration was increasing during this period, arguing that the relative share of income flowing to the bottom of the income distribution (tenant farmers, small owner-farmers, landless workers, peddlers, handicraft workers) improved during this period relative to landlords (Brandt, 1989, pp. 169–170).

Brandt's position depends on several premises: his argument for the extensive integration of rural China into the world economy, his argument that rural wages and labor productivity were rising in this period, and his argument that income inequalities probably improved somewhat throughout this period. How convincing are Brandt's arguments for these claims? Here I will maintain that the evidence that Brandt puts forward, while suggestive, falls far short of clinching his case, and the interpretation of the early twentieth century rural economy as static or worsening continues to be more credible.

### 8.3.3 *Price Integration*

Brandt makes the strongest case for his first point—China’s extensive commercialization and integration into the world economy. Brandt concedes that only a small fraction of China’s economy depended on internationally traded goods, but he argues that the small volume was sufficient to link commodity prices to international levels rather than domestic demand. Surveying rice price data for South China, Siam, Burma, India, and Saigon (the latter being the chief rice exporting markets in Asia), he finds that there are high and rising price correlations between South China and each of the major exporting markets (Brandt, 1989, p. 19). And he finds, further, that the interior Chinese economy showed similar integration with respect to rice prices. Without providing comparable detail from other locations, Brandt suggests that these results obtain as well in markets for cotton and wheat—supporting the contention that the Chinese rural economy was highly commercialized, reasonably competitive, and extensively integrated into the international economy.

Brandt’s arguments here are fairly convincing. At the same time, this is the least novel portion of the argument; few would disagree with the conclusion that the Chinese rural economy was price-responsive and competitive in the period in question. And the well-documented shock to the Chinese economy produced by the Great Depression—through its disruption of cotton prices—would be unintelligible except on the assumption that Chinese cotton markets were integrated with international prices. (Philip Huang discusses this aspect of Chinese commercialization in *The Peasant Economy and Social Change in North China*; Huang, 1985.) So this line of thought is reasonably well grounded, but does not provide much support for the view that conditions in the countryside were improving.

### 8.3.4 *Output*

Let us turn now to a more controversial part of Brandt’s argument: his contention that output outpaced population growth during this period (Brandt, 1989, pp. 106ff) and that rural real wages and labor productivity were rising significantly. Brandt argues, contrary to much received opinion, that per capita output was rising in the farm economy during this period: “Between the 1890s and 1930s, agricultural output in Central and East China increased more than two times the estimated rate of population growth of 0.6% per annum” (p. 178)—or in other words, a 1.2% increase in output, accumulating to an increase of 70% over the 45 year period. Is this a credible conclusion? Brandt holds that other interpreters have been misled by the fall in grain commerce flowing from the Middle and Upper Yangzi paralleled by a rise in foreign rice imports (p. 39). He believes that this shift represents a reorganization of Chinese agricultural markets rather than a decline in agricultural product. Because of shifts in international rice prices, South China came to import rice from Indochina and Siam for its urban population rather than the Yangzi delta (p. 51). But Brandt estimates that this drop in rice trade between the Yangzi and South



China was more than matched by an increase in demand in Yangzi cities, resulting by the 1920s in an increase in demand of more than 20 million *piculs* of rice (p. 53).

This argument, however, depends entirely on estimates of rising demand (through rising urban and non-agricultural populations); it is unsupported by any direct estimate of rice output. Aggregate output is affected by two chief variables: amount of acreage sown and changes in labor productivity. Dwight Perkins judged that productivity remained constant and rice acreage declined between 1914–1918 and 1931–1937, resulting in a decline in domestic rice production of about 5.8% for China as a whole and 11.9% for East and Central China (Perkins, 1969, p. 276). However, these declines are offset by substantial increases in wheat cultivation (Perkins, 1969, p. 250), implying a small net increase in grain production. Brandt disputes Perkins's rice production data, largely on the ground that it is implausible that there was a drop in cultivated acreage in the early twentieth century. However, Perkins's data does not have this implication; Brandt ignores Perkins's data on wheat cultivation showing that wheat acreage increased more than the amount of decline in rice cultivation. And Brandt's positive case is weak, since he does not provide any direct evidence of rising rice output in the region, and (as he himself notes), there are alternative possible explanations that could account for the required increases in rice marketing (p. 54). His case here is unconvincing, therefore; his arguments do not establish that there was an increase of per capita rice output between 1915 and 1936. This does not show that there was *not* such an increase; it may have been so, but the data offered in this study does not establish it.

### 8.3.5 Real Wages

A crucial part of Brandt's argument is his analysis of farm wages. Brandt argues that real farm wages were rising during the period; that farm wages were closely linked to other forms of employment; and that it is reasonable to conclude on the basis of these points that rural welfare was rising during the period. The data that Brandt employs here take the form of scattered cross-sectional studies of wages for seasonal and long-term agricultural laborers. Upon inspection, this data is insufficient to the task, however. The Royal Asiatic Society compiled wage data for 1888 in fifteen places; there is cross-sectional data for about 700 counties for the 1930s; and the Buck surveys reported time series wage data for about 100 counties in the 1930s. Brandt converts the data from each of these sources into grain-equivalence wages (*piculs* of rice). Between three and four *piculs* of rice are required for subsistence. On the basis of the Royal Asiatic Society reports Brandt concludes that the grain equivalent of the cash component of the annual agricultural wage for the 1880s was about 5 *piculs*; for the 1930s he finds that the corresponding value was between 4.21 *piculs* (Sichuan) and 13.86 *piculs* (Shandong), with a mean of 9.87 *piculs* (Brandt, 1989, Table 5.2, pp. 114–115). This suggest a rough doubling of the rural real wage and an annual increase of about 1.5%—or does it? The argument is questionable.

First, these data sources are not particularly convincing, particularly for the earlier period. The 1888 estimate depends on a very small data set on the basis of which to estimate the level of the wage for rural China (fairly casual observations in fifteen locations, only six of which provide data on the annual wage). And since this data does not allow Brandt to estimate the value of in-kind payments (which were substantial), it is impossible to estimate the total value of the wage. The 1930s data are more extensive but show substantial variance, suggesting that the data is not particularly reliable (it is hard to imagine that the real farm wage—and on Brandt's argument, rural welfare as well—in Shandong would be three times that in adjacent Henan). Here too the problem of the value of in-kind payments arises; if in-kind payments declined in value in the later period (as would be expected with the advance of commercialization), then comparison of changes in the cash component overestimates the increase in the wage. If, for example, the value of in-kind payments declined from 60 to 40% of the wage, then a doubling of the cash wage represents only a 33% increase in the total wage. (Brandt considers the problem posed by in-kind payments, but does not take it seriously enough.) So it is hard to regard these data sets as establishing reasonable estimates of the farm wage for either period; the most they allow us to conclude is that it is unlikely that the real wage fell during this period.

The final source that Brandt analyzes on this topic is the time series data collected by John Lossing Buck in the 1930s (Buck, 1937b, a). This data was collected by a number of investigators in about 100 places in China for the time period 1901–1933. Investigators were asked to collect the recollections of three well-informed villagers in 1933 on the level of the cash farm wage for this time period. Brandt normalizes these cash estimates using his own price index and then computes growth rates for each place surveyed by regressing the resulting real wages against time. He finds a range of positive growth rates for twenty-one out of twenty-nine places, with an average rate of growth for all places of 0.9%. Over a period of 45 years this would result in a 50% increase in the real wage. If taken at face value this is a significant, though hardly startling, improvement in the real wage. However, it is difficult to take this finding at face value. First (as Brandt himself acknowledges), the data themselves are questionable, since they rely on the recollections of observers over a 30 years lapse of time. Second, this data reports only the cash component of the wage; so if there was a decline in the value of in-kind payments, this data will overestimate the rate of increase in the total wage. Finally, other researchers have arrived at substantially lower estimates of growth on the basis of the same data. Thomas Rawski analyzes the same data using the same regression technique but a different price series; his estimates for the provinces included in Brandt's study (Jiangsu, Zhejiang, Anhui, Jiangxi, Hupeh, and Hunan) imply average growth rates of  $-0.03\%$  (1901–1933),  $0.43\%$  (1914–1933), and  $0.13\%$  (1925–1933). Aggregating these rates over a 45 years period, these values imply a *fall* of 1%, a rise of 21%, and a rise of 6% depending on the time period considered.<sup>2</sup> In the best case, then,

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<sup>2</sup>Rawski (1989). Rawski too concludes that real wages were rising during the period, but more slowly than Brandt's estimate; he suggests an average annual rate of increase of about 0.4%.

Rawski's analysis implies a growth rate less than half that estimated by Brandt; in the worst case his data implies a slight drop in the real farm wage in East and Central China.

There are enough uncertainties in these calculations of the behavior of the real rural wage, therefore, to make Brandt's conclusion that the real wage was rising significantly largely unconvincing; it may have been so, but this data does not establish the point. If anything, reconsideration of this data appears to imply that any increase in the rural real wage was less than 0.5% per year over the 45 years period in question, and may have been zero. Rawski's estimate of an average rate of growth of the real wage of about 0.4% is more credible on the basis of this evidence; but the uncertainty of the available evidence affects his conclusion equally severely.

We might also consider what implications a slow rise in the real farm wage (if established) would have for the state of rural welfare. For it is possible for the farm wage to rise slowly while average rural income is falling—if, for example, there is less employment overall, fewer days worked, or a larger pool of unemployed or underemployed rural people. In other words, a slow improvement in the farm wage paid is consistent with the common perception of a general worsening of rural conditions in the first several decades of the twentieth century.

### **8.3.6 Productivity**

What inferences about productivity does this analysis of farm wages permit? Brandt reasons along neoclassical lines: the wage is determined by the marginal product of labor; if wages are rising, we can infer that the marginal product is rising, from which Brandt infers in turn that the average product (a measure of productivity) was rising as well. And in a competitive labor market with few barriers between types of employment, the level of the farm wage ought to be closely correlated with the returns to other forms of labor—with the result that we can conclude that other forms of rural income were rising as well. On the basis of this line of reasoning, Brandt estimates that labor productivity increased between 40 and 60% during the time period (p. 132)—suggesting that the rural economy was improving rather respectably during the period.

Brandt also makes an attempt to provide an indirect estimate of changes in labor productivity by estimating population growth, agricultural labor force growth, and output; this permits him to infer a growth rate in labor productivity (pp. 130ff). Assuming that per capita consumption remained constant, Brandt estimates that labor productivity must have increased 16.5% between 1893 and 1933. This is a figure substantially lower than that implied by his analysis of real wage data (between 40 and 60%)—which might lead one to conclude that the real wage estimates are flawed. Brandt, however, does not draw this conclusion; instead he postulates that output must have risen more rapidly than population increase, leading to rising per capita consumption of rice. And he computes that a 50% increase in labor productivity would correspond to a 63% increase in output—an annual increase of 1.21%. This calculation is the basis for his conclusion that output increased at about double

the rate of population increase in the period (0.6%). But note how highly conjectural this line of thought is; it would seem more reasonable to conclude that labor productivity did *not* increase as rapidly as Brandt's wage data implies. And if per capita grain consumption tended to decline during this period—as some observers believe that it did—then even the modest 16.5% increase in productivity disappears; a constant level of productivity implies a fall of 14% in per capita consumption, given the population data that Brandt employs.

A careful reading of Brandt's arguments on these points suggests, then, that the increase in labor productivity, if any, was small, and that Brandt's upbeat appraisal of the improving state of the rural economy during these decades is unsubstantiated.

### 8.3.7 *Distributive Consequences*

Turn finally to Brandt's interpretation of the distributive performance of the commercializing Chinese economy. He argues that commercialization of the rural economy had the effect of significantly narrowing income inequalities in rural China (p. 138), by increasing the demand and opportunities for labor. And he denies the common view that land concentration was increasing during this period. He maintains that the relative share of income flowing to the bottom of the income distribution (tenant farmers, small owner-farmers, landless workers, peddlers, handicraft workers) improved during this period relative to landlords (pp. 169–170). However, he provides surprisingly little support for this conclusion, devoting well over half the relevant chapter to a discussion of patterns of farm household behavior across large and small farms. He counts the increases in the rural real wage discussed above as probably raising the lower quintiles of income earners relative to the top quintile; as we found above, however, he appears to substantially overestimate the magnitude of this increase. Second, he doubts the common belief that land holdings became more stratified during this period, and he believes that the terms of tenancy had improved for the tenant by the 1930s, reducing the effective rent from about 50% of output to about 40% (Brandt, 1989, Table 6.20, p. 171)—thus improving tenant incomes at the expense of landlords. And he holds that the increasing opportunities for sideline activities (textiles, refining oils, sericulture, etc.) primarily benefited the poorest strata. These claims do not receive much empirical support, however. Almost all the investigations made in the 1930s suggest the reverse conclusions. For example, his discussion of the data about rural labor, landlessness, and tenancy is unconvincing. Brandt accepts the National Land Commission estimate (1934) that only 1.57% of rural households were pure farm-laborer households; Joseph Esherick (Esherick, 1981) shows convincingly, however, that this figure is substantially too low and argues for an estimate of 8% in this category (based on Chinese surveys and economic gazetteers from the 1930s), and Thomas Wiens reports an average of 10% (Wiens, 1982).<sup>3</sup>

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<sup>3</sup>Philip Huang also makes an effort to estimate the extent of hired labor in North China, and arrives at a rough estimate of 14–17% of farm work being performed by hired labor (Huang, 1985).

### **8.3.8 Conclusion on Brandt**

Brandt's arguments for improving productivity, output, real wages, and inequalities are unconvincing, and his view of the Chinese rural economy experiencing substantial improvement in these decades is unsubstantiated. In each case the empirical arguments that Brandt constructs are too soft to justify the strong conclusions that he draws. And Brandt's case is single-minded in its sole attention to available quantitative data on wages, prices, volume of trade, and the like. There is no attempt to buttress or test the economic interpretation that he offers through consideration of more qualitative information that is available concerning the state of the rural economy in these years (village studies, travelers' reports, and the like). Many readers will prefer an approach that makes an effort to construct an interpretation of the Chinese economy that balances quantitative and qualitative data; in this regard Philip Huang's work—which Brandt sharply criticizes—provides a better model.

## **8.4 A Puzzle**

There is an apparent tension between the two debates we have considered here that ought to be addressed directly. In the first debate, our analysis supports the “non-involutionary” position of Pomeranz and Wong for the period of 1700–1850. We conclude with Pomeranz and Wong that the rural economy of the lower Yangzi was improving, that the standard of living was comparable to that of the rural population in England, and that the agricultural system was capable of incorporating improvements in technique leading to some rise in farm productivity. In the second debate, our analysis supports the “impoverishment” interpretation of the early twentieth century: farm productivity and output were outpaced by population, the standard of living for peasants and other rural people was falling, and the economic system was falling short of its central challenge of supporting a rising quality of life for its population. Are these conclusions inconsistent? Or are there important historical factors that distinguish between China's economic experience in the early modern period and the early Republican period?

Here it is worth recalling the severity and breadth of the economic, social, and environmental circumstances that China encountered in the first 40 years of the twentieth century. The century from 1850 to 1950 was one of unprecedented hardship and disruption for most of China. The Taiping Rebellion brought widespread devastation to China at mid-nineteenth century, at the cost of millions of lives and great destruction to the economic structure. Rebellion, civil war, and the period of warlordism brought additional destruction to most parts of China; these circumstances made coordinated economic efforts difficult, they interfered with inter-regional economic activity and trade, and they created local insecurity that made even small improvements in agriculture and manufacture difficult. And rampant, extortionate taxation under warlords increasingly impaired the ability of peasant families to satisfy their most basic needs. Further, China experienced severe economic costs in the form of reparations to foreign powers early in the century.

Following the Boxer War, the European parties forced reparations of 450 million taels of silver, and reparations to Japan following the first Sino-Japanese War amounted to payment of 230 million taels—compared to an annual Qing revenue of only 89 million taels. These vast amounts of resources were consequently not available for the project of modernization of China's economy. Finally, China experienced an unusual number of natural calamities during the first part of the twentieth century: changes of course and flooding of the Yellow River, flooding of the Yangzi in 1931 and 1935, and devastating droughts in North China in the 1930s and 1940s.<sup>4</sup>

Given this series of severe challenges to China's economic prosperity—the financial cost of reparations and foreign indemnities, the economic and political disruption created by warlordism in the early decades of the period, the stresses of wartime occupation by Japan beginning in the 1930s, and the cumulative costs of natural calamities—it is unsurprising that the farm economy would suffer and that the rural standard of living would fall. We might regard the “involution” of the twentieth century as a clear example of the contingency of economic history and the crucial role that non-systemic factors play. It was not an underlying “logic of development” that led to China's impoverishment in the first part of the twentieth century, but rather a series of historically contingent and tragic circumstances that combined to bring about impoverishment and decline for China's population.

## 8.5 Import for Chinese Studies

Why are these debates important for China scholars outside of the precincts of economic history? There are several important reasons. First, it has seemed important to many China historians to arrive at judgments about China's potential for autonomous economic development independent of western intervention. Were there economic institutions and processes at work within China's domestic economy in the late Qing that might, in other circumstances, have led to a process of modernization and change? Or was China caught hopelessly in a high-level equilibrium trap, from which it could be liberated only through some exogenous shock (Elvin, 1973)? Much of the import of Rawski's book is the conclusion that there were powerful processes of modernization and growth already at work in China in the 1880s. This conclusion supports a counterfactual historical judgment: if China's domestic and international circumstances had been somewhat different; if the Qing had survived in a reformist mode, or if the Republican revolution had installed an effective national government; if China had not been invaded by Japan; if China had not been drawn into civil war and the warlord era—then China might well have developed into a modernizing market economy. This conclusion is sympathetic to

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<sup>4</sup>Conversations with Bozhong Li and his generous sharing of an unpublished manuscript permitted me to see the importance of the circumstances described in this section for interpreting the performance of China's rural economy in the early twentieth century.

those who offer a “China-centered” approach to the study of China (e.g. Cohen, 1984).

A second reason these debates should be of interest to China historians more generally has to do with the causes of the Communist revolution. Our construal of the Chinese Communist Party’s successes in rural mobilization and ultimate seizure of power depends a great deal on our assumptions about the material welfare of the rural population. If things were bad and getting worse, then mobilization is easy to understand. If the economy was generally improving and if the results of improvement were being experienced as a generally rising standard of living, then we cannot cite immiseration as a cause of the revolution. And if (as Rawski and Brandt believe) the processes of commercialization and the extension of ever-more-efficient markets were undercutting the forms of pre-capitalist exploitation that existed in rural China (extortionate rents, bonded labor relations), then we cannot explain the success of mobilization as the consequence of the Chinese peasantry’s willingness to challenge an exploitative and worsening social order. If, on the other hand, this benign view of the neoclassical school is unpersuasive, then the immiseration and worsening inequalities interpretation remains salient for our interpretation of the success of rural mobilization strategies.

One important result of study of these important current debates about China’s economic history is this. Let us consider China’s historical development—economic, agricultural, political, social, military—in its own terms, but informed by the best available social theoretical insights and concepts; let us identify China’s own “paradigms” of development, its own pathways of political development and economic change; and let us use those new-found paradigms to inflect our understanding of the processes of other parts of the world. Finally, let us recognize that the hypotheses of social theory takes us a ways down the road of being able to explain particular pathways of historical development in a variety of contexts; but social theory does not permit us to make confident predictions about uniquely determined outcomes. In place of the overtones of inevitability—population increase, technological change, improvement in agricultural productivity—we get more nuanced narratives of diversity and contingency, and the recognition that historical outcomes are under-determined by any particular and limited set of causal factors. And in fact, Wong, Lee, and Pomeranz show that careful comparative study of the economic histories of different regions of Eurasia will establish this plasticity of outcome. For example, Wong carefully assesses the literature on proto-industrialization in Europe; finds that very similar processes of rural manufacture are present in both Europe and China; and argues that the causes of European “breakthrough” must therefore be sought elsewhere. More generally, he argues that similar processes of commercialization and population dynamics are associated with very different paths to (or away from) industrialization (Wong, 1997, pp. 46–47).

The comparative studies of Europe and China that are central to the involution debate invite us to reflect on the question of the role of social theory in historical inquiry. Wong recognizes that reliance on current social theory is inescapable in historical analysis (what else would provide the analytical basis for comparison and hypothesis?), but he emphasizes the importance of doing so with care and critical

intelligence. As Susanne Rudolph puts the point, “At this stage we need fragile theoretical templates, made of soft clay rather than hard steel, that adapt to the variety of evidence and break when they do not fit” (Rudolph, 1987, p. 738). Crucially, Wong insists on the point that the researcher must be critical in extending ideal-typical concepts of structures and processes from the European context to an Asian context. More acutely, we need to find new ideal-typical configurations of institutions and processes in Asia (and other world civilizations), to add depth to our understanding of European history. Finally, Wong, like other scholars, emphasizes the plasticity of large historical developments. There are multiple contingent factors involved in any large historical process, and there is room for choice by agents at all points along the way.