

1 Introduction: local variations and social change in Ch'ing China

How dynamic was Chinese society during the last phases of its imperial era? How homogeneous in development were the various parts of this vast country? Some answers to these broad questions have been proposed, but remarkably little evidence has been assembled in support of systematic measurement of social change and of local variations.

The need to take a closer look at changing local conditions arises, in part, from the misleading interpretation of China that prevails in the macrosociological and macrohistorical literature. More than any other great power in the contemporary world order, China is burdened with the historical image of an unchanging monolith. Our understanding of China has been mesmerized by the accumulated evidence of continuities at the most visible tip of the historical iceberg. Where else can one find such preoccupation with a recurrent sequence of events, that is, the dynastic cycle as the standard for dividing premodern history? Where else can one find such continuity of administrative divisions? To move beyond these familiar impressions to a modern social scientific understanding of deep-seated, and less visible, social forces – to analyze temporal and spatial dimensions – is now a widely espoused objective in Chinese studies. It is my objective in writing this book.

Numerous publications on the Ch'ing dynasty (1644–1911) describe repercussions at the national level from the dual challenge of mounting foreign incursions and spreading domestic rebellions, but we still know little about long-term transformation on the local level away from the bustle of the nineteenth-century treaty ports and the majesty of the offices of the provincial governors-general and governors. How pronounced is the contrast with recent scholarship on Tokugawa Japan (1600–1868)! Scholarly understanding of local conditions in that society has grown by leaps and bounds over the past quarter century. The example of Japan, cited on occasion in this book, is instructive about the kinds of information that can be gained through studies based on local indicators of social conditions. Although comparisons of countries do not figure prominently herein, they light the way by showing the promise of research on statistical indicators of local and regional change.

Can the goal of measuring and interpreting local variations and cumulative

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changes be realized for the Ch'ing dynasty? I am encouraged to proceed by three favorable circumstances: (1) the preservation of large amounts of local data amidst China's voluminous historical records; (2) the existence of social indicators that can be measured or approximated through these data and that may provide insights into changing circumstances of life for large masses of people; and (3) the recent advances in the interdisciplinary fields of historical demography and central-place studies, each of which offers guidance in the use of these data and in the interpretation of these indicators. Nevertheless, it is necessary to recognize that the Chinese data pose more than the usual array of problems. There are questions of statistical reliability, complicated by the availability of no more than aggregate figures for geographical units. There are problems of interpretation of isolated indicators in the absence of information on economic conditions within the areas in question. And there are difficulties because statistics are often not in a form that corresponds to the widely understood demographic rates and settlement distributions on which most analysis elsewhere has centered. Researchers have long faced the challenge of overcoming these limitations; yet few have taken a close look at local statistics on a large scale or sought answers to basic questions about the extent and quality of the data and their utility for achieving a new understanding of Chinese society.

This book introduces large amounts of data gathered from primary sources. Chapter 1 reviews the way social indicators have been treated in the literature on China and identifies variables that appear to warrant further examination. Chapter 2 focuses directly on the data and on some of the problems in data analysis. Chapters 3, 4, and 5 deal with different types of data. Chapter 3 draws on statistics for separate villages, clusters of villages, and cities within a corner of Chihli (Hopei) province. Chapter 4 relies on county-level and prefectural-level demographic and household indicators to take a composite look at North China. And Chapter 5 presents figures on marketing settlements across two provinces, Chihli and Shan-tung. Chapter 6 briefly summarizes the conclusions of the preceding chapters about the quality of the data, the types of analysis that are possible, and their significance for understanding variations within Chinese society. Because almost all of the data are taken from North China, the findings pertain chiefly to that region.

Review of the international literature

Writers on premodern development have responded in various ways to the challenge of working with Chinese demographic and market settlement figures. Some have yielded to the temptation to generalize, with scant attention to statistics on local and regional variation; they have relied primarily on descriptive evidence and perhaps on a smattering of national statistics even in studying issues that seemingly beg for more exact reformulation, such as Marxist discussions of "sprouts of capitalism" attributed to the first phase in the breakdown of feudalism. Others have chosen to repeat local statistics without scrutinizing them, perhaps as illustrations or as steps

limited to localized studies. Still others – a growing number in recent years – have met the challenge more directly and have already established that systematic variations can be identified by working with figures that show the changing numbers, distribution, or composition of populations and marketing settlements. The varied response should become clear from a brief review of the ways in which separate schools of sinology have treated temporal and spatial variations in Ch'ing China.

There is some justification for dividing Chinese studies into five national or language groupings. Of these the two centralized, communist-controlled establishments – Chinese and Russian – display the least diversity. The other three groups – Japanese, Chinese outside the PRC, and Westerners – are more diverse in their outlook and have been quicker to appreciate the potential of quantitative records.

In the PRC, prior to the devastation of the Cultural Revolution, questions about progress from feudalism to capitalism were at the forefront of historical research and discussion. The development of a commodity economy figured prominently in the debates. With all the attention given to changes in commerce as feudalism was on the decline, one would expect the relevant quantitative evidence to have been carefully studied. Yet the collections on late Ming and Ch'ing origins of capitalism – the disagreements between Shang Yüeh and his critics reported in Albert Feuerwerker, ed., *History in Communist China* (1968), the studies of Fu I-ling (1956) and others on social dynamism, and the statistics compiled in collections on the nineteenth-century economy – were not accompanied by much analysis and comparison of data. Furthermore, Chinese were obliged to ignore foreign scholarship that introduced new methods. Thus there existed an enormous discrepancy between the high-sounding affirmations about periodization and the little-studied statistical records most pertinent to establishing actual periods. One can extract from these writings no more than imprecise statements, not a basis for hypotheses about how marketing data might show changes in commerce over the Ch'ing period, and virtually nothing about the significance of population growth.

By 1980 the post-Mao resurgence of scholarship had produced positive trends toward empirical research. In principle, Chinese historians of imperial China have accepted the desirability of systematic use of quantitative methods, of explicit comparisons with other premodern societies, and of detailed investigation of primary sources. In fact, the first publications that realize these goals are only beginning to appear. An encouraging sign is that Ju Deyuan, the assistant curator of documents at the Number One Historical Archives of China in Peking, announced to the 1980 Symposium on the Social and Economic History of China from the Sung Dynasty to 1900 that a wide array of previously unknown population records from the Ch'ing period can be found in the archives. Thanks to Mr. Ju, I was able to see certain of these records (detailed reports on births, deaths, and marriages for the imperial banner households and, as reported in Appendix 7, household population records for Han Chinese living on lands assigned to the banners for revenue). The degree of availability of these records to foreigners is still uncertain. Nor is it yet

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clear when Chinese scholars will begin to use them or to what extent they will be able to interpret them independently of a class-struggle approach that remains the orthodox viewpoint.

Soviet specialists have also extended the application of the Marxist framework of socioeconomic formations to China. Although many of their recent publications are usefully focused on narrow themes, studies that do address general questions are unanimous in characterizing the Ch'ing period as one of relatively slow development or even stagnation. There are, to be sure, differences in the timing proposed. Whereas E. P. Stuzhina, the author of *Kitaiskoe remeslo v XVI-XVIII vv.* [Chinese crafts in the sixteenth–eighteenth centuries] (1970) and *Kitaiskii gorod XI-XIII vv.* [The Chinese city in the eleventh–thirteenth centuries] (1979) places the transition to late feudalism in the sixteenth to seventeenth centuries, A. N. Khokhlov, who has written articles on rural conditions, sees this shift to the beginnings of feudal disintegration as a late-eighteenth-century occurrence (1971), and O. E. Nepomnin, the author of three books on economic history related to the development of capitalism, finds no signs of the new stage until the mid-nineteenth century (1966). These scholars take a stand on periodization, but how much evidence do they have to support it? When it comes to using statistical indicators to measure China's social change, Soviet specialists have accomplished little. Khokhlov wrote about internal marketing with no indication of the existence of data on periodic markets. Only in the late 1970s did Nepomnin begin to refer briefly to urban and population data, but his references were to secondary Western studies. Otherwise, he focused exclusively on data pertinent to the growth of the modern sector. In spite of advances in other types of analysis, for example, Stuzhina's study of urban conditions, Soviets virtually ignore local gazetteer statistics on Ch'ing China and pay scant attention to the secondary literature abroad that makes use of these and other data.

For fifty years or longer, Japanese scholarship has made the fullest use of Chinese historical data. From Katō Shigeshi's early research on provincial variations in periodic markets to the recent analyses of county and subcounty data by Ishihara Hiroshi (1973) and Nakamura Tetsuo (1974, 1978), Japanese historians have gathered historical statistics on marketing and raised questions about their significance. They have also examined aspects of China's population; one example is Makino Tatsumi's 1944 studies of household size. These publications contribute to the identification and interpretation of sources, to the preliminary understanding of variations across space and time, and to the formulation of questions for further research. It is important to recognize that contemporary research builds on the dual foundation of the raw data in Chinese primary sources and the understanding of these data achieved by Japanese secondary sources. In my opinion, both PRC and Soviet historians are seriously handicapped by neglect of the Japanese writings.

Since the 1920s, Japanese specialists have taken an active part in debates over periodization and geographical divisions. Their debates have been wider-ranging than in the PRC and the USSR because all scholars are not bound to a particular Marxist framework or to a single hierarchy of control and censorship. Yet the

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Japanese have not gone far in drawing together their valuable, but limited, analyses of data and relating them to general issues. There have been recent signs of change, partly under the influence of Western scholarship; for example, Shiba Yoshinobu's work on periodic markets is influenced by and published with G. William Skinner's 1977 writings. Nevertheless, on the whole, Japanese sinologists have been slow to tap the specialized resources of the social sciences in their use of data. Much remains to be done, and one can expect Japanese to continue to be in the forefront of this scholarship.

It seems reasonable to treat as a fourth grouping, having its roots in pre-1949 Chinese scholarship, authors outside the PRC who write in Chinese. This category has been largely depleted, because many outstanding Chinese scholars, such as Ho Ping-ti and Wang Yeh-chien, have taken teaching positions in North America and have switched primarily to writing in English. In addition, Ch'üan Han-sheng in Hong Kong has coauthored in English (with Richard A. Kraus) a major study of Ch'ing dynasty prices (1975). The contributions of Chinese outside the PRC, including the extensive research in progress in Taiwan under Wang Yeh-chien's direction, are leading the way in the investigation of price history – a topic that promises to open new vistas on comparisons over space and time.

Under the impact of Western writings, Chinese in Taiwan are also involved in research on marketing and on population. In 1978 alone, Liu Shih-chi published three articles on periodic markets in the Kiangnan area. At the same time, Liu Ts'ui-jung drew attention for her writings on population. Through training, collaboration, and research inspiration, the Chinese in this field outside the PRC are now well integrated into a world network including the United States. Whether they write in Chinese or in English, they often demonstrate superior use of primary sources.

Western-language studies of Chinese local data gained impetus from surveys conducted or translated during the Republican era, for example, the ambitious Buck survey's reports on local population (1937) and C. K. Yang's 1944 report on periodic markets in an area of Shantung Province. But it was only in the late 1950s and 1960s, when social-science-oriented historical investigations were winning popularity, that a new stage was reached in Chinese studies. Two of the most deservedly acclaimed publications were by Ho Ping-ti and G. William Skinner. Each introduced data on population or marketing and took a giant step forward in the assessment and analysis of these data. A preliminary study based largely on an effort to uncover national trends, Ho's *Studies on the Population of China, 1368–1953* (1959), drew attention to the relatively accurate enumerations during the late eighteenth and the first half of the nineteenth centuries. His research pointed the way to a full-scale analysis of changes over time and variations across China. Not long thereafter, Skinner's series of articles "Marketing and Social Structure in Rural China" (1964–5) explored diverse statistics on marketing settlements. His work stimulated widespread interest in many subjects, among them the analysis of variations in the number of markets over time and from area to area. Neither study

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gave major attention to evaluating the types of sources and data that would prove most useful for local comparisons – nor, of course, actually carried out large-scale comparisons – but each clearly established the existence of vast quantities of statistics that meet at least some checks on validity and reliability.

In the aftermath of these studies, new interest has focused on the use of local data for distinguishing time and space in China. Dwight H. Perkins (1969) and Wang Yeh-chien (1973*a*) have used population data in the study of changing agricultural conditions and in classifying regions for the analysis of taxation. G. William Skinner (1977) and Gilbert Rozman (1973) have used population data for calculations of urbanization by area and for studies of the urban hierarchy. These studies, as well as Evelyn S. Rawski's 1972 book and Ramon H. Myers's 1967 article, have made use of data on periodic markets. In Europe, Mark Elvin has also studied periodic markets (in Skinner 1977) and has separately looked at long-term economic development (1973). Others – for example, Irene B. Taeuber (1970), George W. Barclay et al. (1976), Lawrence Crissman (1976), and Arthur Wolf (1979) – have examined twentieth-century records for clues about earlier conditions. Recent Western studies have gone furthest in combining the use of historical data, the incorporation of social science advances, and the search for general explanations of spatial and temporal variations. A review of some of these studies will establish the general contours of the field at the end of the 1970s.

The state of the field

The dynastic cycle remains a useful device for generalizing about many phenomena, for instance, the marked population losses and partial suspension of marketing that accompanied the rebellious overthrow of the Ming dynasty and the early decades of consolidation of the Ch'ing dynasty. However, for explanation of long-term changes and of the pattern of development during the course of the Ch'ing, other approaches must be invoked. One was proposed by Mark Elvin (1973), who contrasts the rapid transformation of the ninth to thirteenth centuries (the medieval economic revolution) with the relative stagnation of the fourteenth to eighteenth centuries. His suggestion of a turning point in the fourteenth century is buttressed by information on technological innovation, migration, foreign trade, and the history of thought. Elvin concludes that China was in a high-level equilibrium trap characterized by "the continuing growth of the population under conditions of relative technological standstill" (p. 301). Increasing demographic pressure on resources in the Ch'ing period with technology close to its premodern limits signifies to Elvin a trap from which no escape was possible until the modern West opened the country to the world market (p. 315).

What are the implications for data analysis of this characterization of Ch'ing China? Elvin incorporates into his discussion summaries of data originating from local gazetteers. Contrasting the growth of large cities during the medieval eco-

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conomic revolution to the proliferation of markets in the subsequent period, he speculates that the difference relates to the greater inventiveness of the earlier period (p. 178). He argues that in “the seventeenth century the number of market towns, at least in the more economically advanced part of China, began to multiply at a rate exceeding that of the population increase” (p. 268). His explanations of overpopulation are, of course, also premised on historical data. Yet Elvin does not present much quantitative evidence on any of these points, and his concern with variations over time is not supported with attention to variations by area. His book serves neither as a summary of data nor as a presentation of hypotheses that offer a clear guide for the analysis of data.

In *Agricultural Development in China, 1368–1968* (1969), Dwight H. Perkins (with the assistance of Wang Yeh-chien) takes another approach to long-term change by drawing on large numbers of local gazetteers to estimate population, tenancy, cultivated acreage, grain production, and other measures of the rural and urban economy. Perkins’s approach, utilizing both population and marketing variables, introduces considerable data. He assesses their quality, noting, for instance, “It is my judgment that the early nineteenth-century totals do reflect in a rough way the true total population by province in that period” (p. 206), and concluding that the expansion of grain output “more or less matched the increase in the number of people” (p. 185). He also argues that economic forces favored regional rather than centralized power – increasingly so by the middle or late Ch’ing (p. 174) – and “that rural marketing appeared about the same to an observer in, say, the fifteenth century as to one in the nineteenth” (p. 115). Some figures and some discussion focus on variations among provinces, such as variations in population pressure (Kiangsu, Anhwei, Chekiang, Kiangsi, and Fukien are singled out for overpopulation on p. 208) and in per capita grain production. But the primary emphasis is on the relatively constant nationwide relationship between population and output. Variations among “overpopulated” and less-populated areas or among periods of rapid growth and those of slow population growth are not examined in detail.

Wang Yeh-chien further analyzes local data in his books, *Land Taxation in Imperial China, 1750–1911* (1973a) and *An Estimate of the Land-Tax Collection in China, 1753 and 1908* (1973b). Although population data do not figure prominently in this careful effort to determine the level of taxation in China, Wang looks closely at regional and local variations in taxes and relates them to a classification of provinces by economic development. He lists ten provinces – all relatively populous, most coastal, all with a high ratio of population to land – as developed; the remaining eight inland provinces, the island of Taiwan (separated here from the rest of Fukien Province), and Manchuria as developing areas; and the separately administered pastoral territories far inland as undeveloped (1973a:84–92). Comparing these three regions, Wang considers migration, population growth, trade, and adjustments in the land-tax burden. He documents a shift in favor of the developing regions in various indicators of development. Because Wang’s interest is primarily

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taxation, he does not analyze these regional divisions further or consider the implications of subregions. Yet he offers a tantalizing glimpse of how population data can be used for spatial analysis.

Evelyn S. Rawski carries the analysis of data below the province to the prefectural and county level. Her work makes little use of demographic variables; indeed, she finds Ming dynasty population totals for counties useless for comparing changes over time (1972:9). But she presents many other kinds of statistics, including for several prefectures the numbers of periodic markets by county in the Ming and Ch'ing periods. Rawski characterizes an increase in these numbers as "one indicator of the transmission of commercial influence from the market city to the agricultural countryside" (1972:9). Her comparisons of prefectures show widening disparities, some areas thriving, with access to water and commercial growth potential, and others "blocked from access to the profits of the rice trade" (1972:106). The absence of population data complicates the interpretation of periodic market increases, but Rawski has indicated the utility of further comparative study of this type. Her later book (1979) also draws on quantitative sources, including efforts to estimate literacy in Ch'ing China and specifically in Ch'ing hsien – an area examined in Chapter 3.

My own books on urban networks (Rozman, 1973, 1976) also use Chinese local data in an effort to estimate numbers of marketing settlements by area and population size, in order to calculate rates of urbanization. My main objective was to compare China with other countries; only in the case of Chihli Province, therefore, did I make systematic efforts to show variations below the provincial level. In comparative perspective, there appeared to be little change per capita in the urban indicators for Ch'ing China (to the mid-nineteenth century). Although this research established the main lines of variation in urbanization from province to province, it made scant reference to the important demographic and marketing indicators necessary for the analysis of local areas.

Our understanding of population change during the Ch'ing period remains heavily dependent on the research of Ho Ping-ti (and the record-gathering of Lo Erh-kang as reported by Yen Chung-p'ing, 1955, and partially by Ho, 1959). Ho's interest primarily centers on assessing the quality of the data, not on using the data to compare areas. Thus he offers a periodization based not on population changes, but on the quality of enumerations: (1) 1651–1740 (for 1644–50 there are no records), when only adult males between 16 and 60 years old were to be counted in the official enumeration as *ting*, but when, in fact, the figures given for "ting in most parts of the country had become completely divorced from the adult-male population" (p. 34); (2) 1741–75, when recommendations for assessing all adults and children were partially but not uniformly implemented, with underenumerations of at least 20 percent as a result (p. 46); (3) 1776–1850 (the system became uniform only in 1779), when the emperor demanded a true and uniform count of the population, although omissions and superficial reporting can still be identified in some cases; (4) 1851–1902, when population registration lapsed in many areas or was

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conducted under confusing regulations; and (5) 1902–11, when the old system was abolished and a new patchwork census organization rushed to carry out an enumeration that proved to be seriously flawed. It seems clear that the bulk of the data assembled with relative care concerns the period 1776–1850, but some records from the decades just prior to 1776 and more records of the 1850s to 1890s from parts of China without serious disruptions may also be relatively satisfactory.

Ho gives examples of many types of information that can be obtained from the population records, and shows some interest in comparisons of areas. But he notes comparisons only in passing, for example, in a table on household size in fourteen provinces and in a comment that the sex ratio of males to females was generally higher in the south than in the north (pp. 56–7). Reviewing the national rates of population growth, Ho draws the important conclusion that from 1779 to 1794 the rate was 0.87, whereas from 1822 to 1850 it was only 0.51 percent. Although he acknowledges that the rates may not be very accurate, he concludes that “their general order of magnitude nevertheless fits in with what we know of economic conditions of the time” (p. 64). Along with others, he also notes sharp losses in population at the time of the Taiping rebellion in the 1850s and 1860s, followed by gradual recovery. This pioneer study begins the process of using local population data; it serves as an essential guide for all who follow. Unfortunately, the process of tying together the loose ends in Ho’s book has scarcely advanced in the two decades since he completed it.

Of all the approaches to the use of data in generalizing about variations over time and space, the most fully worked out is that of G. William Skinner. Among other objectives, Skinner seeks to account for variations in the distribution of periodic markets. He suggests ways in which the per capita distribution of marketing settlements relates to population density, commercialization, urbanization, transportation, and other conditions. He also attempts to explain changes during and after the Ch’ing period (1964–5:II, 195–208); for example, he leaves the impression that the population of marketing systems varied systematically around an average of about 7,000 (1964–5:I, 32–3). What he does not do on a large scale is to compare the actual Chinese data, that is, to test his hypotheses about marketing across China.

Skinner suggests that the area of the eighteen provinces of agrarian China divides into eight macroregions. He defines these macroregions by drainage basins, choosing boundaries that mostly follow watersheds and the crests of mountain ranges and that cut the great river systems into regions on the basis of transport efficiency and trade flow. Skinner argues that, during the period in question, each regional system was “only tenuously connected with its neighbors” (1977:211), each had a distinctive process of urban development, and each operated as a functionally interrelated unit with its own internal differentiation.

Skinner discusses the impact of decisions about the location of the imperial capital and the allocation of regional monopolies over overseas trade on the appearance of long-term cycles, which he calls macrocycles. In the process, he introduces the concept of regional macrocycles characterized by upswings and downswings in

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which conditions of ‘economic development and decline, of urban development and devolution, and of population growth and reversal within each region were closely interrelated’ (1977:219–20).

Indications of uniform conditions center largely on zones within macroregions referred to as the core and the periphery. Although the distinction was presented in 1977 strictly as a dichotomy, Skinner and others have since used some criterion such as population density to subdivide macroregions further into, for example, inner core, outer core, inner periphery, and outer periphery. From this framework emerges a set of hypotheses about areas that are homogeneous in demographic and economic respects.

The distinctions between core and periphery and upswing and downswing, coupled with the classifications of territory into macroregions and of history into regional macrocycles, serve to order space and time. Where possible in this book, I test hypotheses drawn from Skinner’s approach and compare new findings to his.

The spatial dimension

What are the variables and the units that have proven useful in comparisons across China? Which variables appear to have explanatory value in distinguishing social conditions in many areas? Which geographic units are both adequately represented by data and sufficiently representative of the local diversity within each region? Answers to these questions can guide new research while they add another perspective on the current state of the field.

In premodern settings agricultural productivity is normally the most pervasive factor differentiating one area from another. Attention has long focused on three obvious differences in productivity within China: (1) the sharp gap between agrarian inner China (from the early eighteenth century divided into eighteen provinces) and the vast arid or pastoral expanses of outer China, forming a broad arc from Manchuria to Tibet that before the twentieth century supported as little as 1 percent of the recorded population of the country; (2) the general distinction between northern areas (virtually the entire territory of six provinces) dependent on relatively low-yield, dry field crops such as wheat and barley, and southern areas covered with rice paddies that required labor-intensive cultivation, perhaps extended over longer growing seasons through double-cropping; and (3) the gradual transition from the inhospitable mountainous areas forming a jagged chain across almost all of the provinces to the fertile, low-lying river basins that cut through the mountains, in some cases spreading out into broad plains. A full-scale analysis of agricultural productivity must take into account not only these distinctions but also conditions such as altitude, terrain, soil quality, climate, and availability of water.

In China, to an unusual extent, human intervention also warrants close examination, for it markedly altered natural conditions. Irrigation works, canals, and dikes, all requiring regular maintenance, channeled the flow of water. Deforestation caused erosion and contributed to large deposits of silt. Accumulations of night soil