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Rural industrialization in China's lower Yangzi delta: Institutionalizing transactional networks

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Abstract

Understanding the nature of spatial economic change in China's most rapidly developing regions requires a conceptual and methodological shift away from the conventional macro-perspectives. An analysis of the processes and mechanisms which underlie the unique patterns of transformation in China's lower Yangzi delta is undertaken. The paper focuses on the emergence of small scale institutional and transactional activities as they relate to the location of nonagricultural enterprises in the countryside. The way in which networks of interactions and interrelationships are embedded within specific local exigencies and opportunities for development reveals much about the wider regional spatial economic patterns and trends. The historical, administrative, and territorial contexts and some detailed examples of the resulting institutional frameworks are also highlighted. The paper proposes a framework whereby spatial economic transformation in China is reconceptualized in relation to intensely localized place-based institutional structures.

Introduction

The shift from a planned to a market economy in China and the (dis)articulation between the two has had a profound impact on the nature of spatial transformation. Nowhere is this more clearly demonstrated than in the growth and spatial proliferation of rural nonagricultural enterprises particularly in the manufacturing sector. This article will adopt a new institutionalist perspective to analyze the emergence of intensely localized institutional structures as they relate to the patterns of spatial economic transformation in China's lower Yangzi delta. Conventional views of the structure of a production system tend to focus on transaction costs ignoring the local institutional context and the detailed character of enterprises. An examination of the relevant institutional and transactive contexts, on the other hand, necessarily combines analysis of micro-scale decision patterns of enterprises, their networks of transactions, and place-specific socio-cultural and political-economic particularities to explain patterns and processes of spatial economic change. In this context, the nature of the transactional activities of local actors, and the institutional frameworks in which they are embedded, in and of themselves are as important as the production activities of enterprises. Thus, while the interactions and interrelationships which constitute the transactional networks are constructed over space, the key perspective adopted here is that they are also largely determined by, and embedded within the unique intersection of circumstances which constitute place.

The next section begins by positioning the region of the lower Yangzi delta in China and introducing the area in which the detailed case study investigations were undertaken. The findings presented throughout this paper are based upon extensive interviews and field observations between 1992 and 1997. In addition to the official macro-statistics, a number of other local sources were also consulted. Taken together, these data highlight the patterns and processes of rural industrial development. This is followed by a brief discussion which seeks to conceptualize the spatial economic changes which have occurred in the lower Yangzi delta in terms of the networks of transactional relationships and their geography. As will be demonstrated below, the historical context also becomes important in this context. The means by which transactional networks have become embedded in their administrative and territorial contexts are then highlighted. Examples of the detailed processes and mechanisms which underlie the functional outcomes of these institutional structures are also discussed. The paper concludes by suggesting a conceptual framework in which spatial economic change in the lower Yangzi delta is understood in relation to the emergence of these intensely localized institutional structures.

The Lower Yangzi Delta Region and Kunshan

The lower Yangzi delta as defined for this paper includes the 8 prefectural regions of Suzhou, Wuxi, Changzhou, Zhenjiang, Nanjing, Yangzhou, Taizhou, and Nantong adjacent to the Yangzi River in southern Jiangsu, and the Shanghai Municipal region. Figure 1 illustrates the 9 major cities and 42 county level administrative units that comprise the lower

Yangzi delta region, and the position of Jiangsu Province and Shanghai in East China. It is the southern Jiangsu region of the lower Yangzi delta (often referred to as Sunan) wherein the spatial economic transformation was most dramatically demonstrated. The clearest indication of this transformation arose when passing through the delta's countryside. Infused into the agricultural landscape, among the dense clusters of rural settlements and crop production, were tens of thousands of industrial enterprises. 'Rural' is defined here initially as areas that were administratively classified below the county level including towns (*zhen*), townships (*xiang*), and villages (*cun*). County level administrative seats, usually large towns (*xianshu zhen*) or small cities (*xian cheng*) were excluded. Thus, rural industry will refer to industrial enterprises owned and operated at or below the level of towns, townships, and villages.

Table 1 positions the 54,645 square kilometres of the delta in a national context as the most important economic region in China (Chreod Ltd., 1996; Zhou, 1991). More than 51 million people – 4.22% of the national total – live here, on only 0.57% of China's territory, making the delta one of the most densely populated contiguous concentrations of people in Asia. It generated 10.77% of China's gross domestic product in 1996, and 5.06% of total agricultural output. However, the delta's most significant contributions to the national economy were in terms of industrial production. Nearly 15% of China's industrial output was concentrated here in 1996. The relative importance to China of industrial output in the lower Yangzi delta was almost 4 times its population and 29 times its area. Even more noteworthy was that 52.4% of industrial output in the delta was generated by rural enterprises, accounting for well over one-fifth of the nation's total rural industrial output. The 1980–1996 average annual growth rates in agricultural output (7.6%), industrial output (21.0%), and rural industrial output (30.2%) shown at the bottom of Table 1 were also substantial. These latter figures refer to all of Jiangsu Province excluding Shanghai, and should be considered the minimum average values for the region of the lower Yangzi delta within southern Jiangsu. The average annual growth rates in Shanghai over the period 1979–1996 were 3.7% for agriculture and 10.4% for industry, while for China the growth rates (1981–1996) in agriculture and industry were 6.9% and 15.8%, respectively (*SHTJNJ, 1997*, p. 5; *ZGTJNJ, 1997*, p. 27).

The institutional dimensions of this restructuring will be explored in a detailed case study of Kunshan, a county level city (*xianji shi*) located in southern Jiangsu Province adjacent to the Shanghai Municipal region (see Figure 1). The centre of Kunshan is located 55 km from downtown Shanghai and 36 km from the city of Suzhou. Comprised of 20 towns and 466 villages, Kunshan covers an area of 865km^2, 60.8% of which was arable land in 1996, with another 22.3% containing lakes, rivers, and canals (*SZTJNJ, 1995*, p. 15; *SZTJNJ, 1997*, pp. 12, 76). At the end of 1996 the population was 583,364 (*SJTJNJ, 1997*, p. 46). The average annual growth rate of industrial output in Kunshan between 1979 and 1996 was 32.7% (*JSSSN, 1949–1989*), pp. 317, 318, 393, 394; *KSTJNJ* [*Several Years*]; *SZTJNJ*, 1997, p. 12).

Table 1. The lower Yangzi Delta in China, 1996

Area (km^2)	54645
Share of national area (%)	0.57
Population (millions)	51.63
Share of national population (%)	4.22
Population density (people/km^2)	945
Gross domestic product (GDP) (billion RMB[a])	739.06
Share of national GDP (%)	10.77
Gross value of agricultural output (GVAO) (billion RMB[a])	118.48
Share of national GVAO (%)	5.06
Gross value of industrial output (GVIO) (billion RMB[a])	1464.89
Share of national GVIO (%)	14.71
Rural GVIO (billion RMB[a])	766.98
Share of national GVIO (%)	21.58
1980–1996 Average annual growth in GVAO[b] (%)	7.6
1980–1996 Average annual growth in GVIO[b] (%)	21.0
1980–1996 Average annual growth in rural GVIO[b] (%)	30.2

[a] $US 1 = RMB 8.3 in December 1996.
[b] Figures here are for Jiangsu Province.
Sources: *HDDTNJ, 1996*, pp. 105–117; *JSTJNJ, 1997*, pp. 349–373; *SHTJNJ, 1997*, pp. 2, 4, 8; *ZGTJNJ, 1997*, pp. 4, 24–27.

More detailed data for the growth and restructuring in Kunshan for the period 1988 to 1998 are presented in Part A of Table 2. Total GDP rose from RMB 1.63 billion in 1988 to RMB 15.05 billion in 1998. The share of GDP from industry showed a modest increase from 45.4% to 53%, while growth in the share of GDP from construction, transportation, and commerce increased from 28.9% to 39.3% in Kunshan over the same period. Meanwhile, the proportion of GDP from agriculture declined significantly from 25.7% in 1988 to just 7.7% in 1998.

Comparable data presented in Part B of Table 2 show much less intensive, though still significant, restructuring for China as a whole over the same period. Perhaps the most noteworthy phenomenon is that nearly one-fifth of the nation's total GDP is still attributed to the agricultural sector. This is well over twice the proportion in Kunshan which sits in the heart of one of the nation's most productive agricultural regions. Moreover, while the importance of agricultural production has not diminished in terms of the output of staple grains, new roles in industrial production and other nonagricultural activities have emerged that create locally specific opportunities for accumulation making rural areas the foci for socio-economic transformation. The unit area yield of staple grains in Kunshan, for example, was 7000 kg/hectare in 1996, 56% more than the national average. Per capita GDP in Kunshan in 1998 was RMB 25,625, the fourth highest in Jiangsu Province behind three other areas in Suzhou and Wuxi, and 6 to 10 times larger than the seventeen least developed counties in the province (*JSTJNJ, 1999*, p. 427). The gross value of agricultural and industrial output per-capita in Kunshan in 1998 was 55,969, fifth highest in Jiangsu and 6 to 10 times that of the fifteen least developed counties in the province (*JSTJNJ, 1999*, p. 429).

However, the rapid growth of industrial activity in Kunshan has neither required nor resulted in a commensurate shift in residential urbanization. That is not to say that there

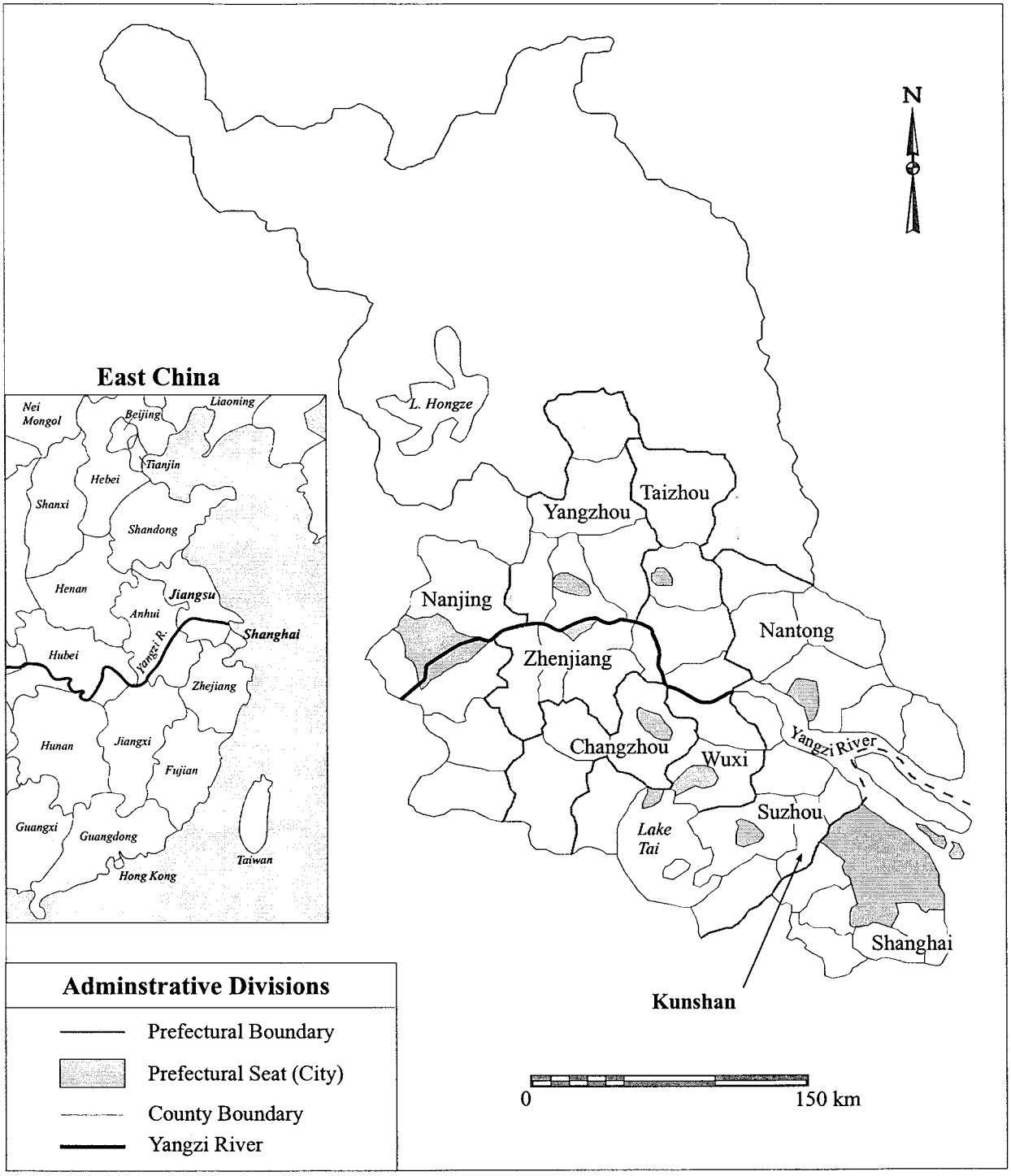

Figure 1. East China and the lower Yangzi Delta, 1996.

has been little or no mobility of local labour and population. In fact, significant proportions of the officially designated peasant population either resided in or commuted on a daily basis to work in or near the town centres resulting in an in-situ shift of rural labour into nonagricultural activities. According to the official statistical classification, 20.2% of the population in Kunshan in 1992 was considered nonagricultural (*fei nongye renkou*) (*HDDTNJ, 1993*, p. 330). This administrative designation conceals the numbers actually residing in the built-up township centres, but it does provide a useful baseline. Combined with data provided by informants, it is possible to estimate an adjusted level of urbanization in Kunshan of approximately 25 to 30%. While there have been many attempts to generate longitudinal estimates of urbanization for all of China the same is much more difficult for small jurisdictions such as Kunshan (Zhang and Zhao, 1998). Data in the most recent gazetteer does suggest, however, that Kunshan was probably about 12 to 15% urbanized on the eve of reforms in the late 1970s (*KSXZ, 1990*, pp. 131–141). While the level of urbanization in Kun-

Table 2. Gross domestic product and sectoral distribution: Kunshan and China, 1988–1998 (selected years)

Billion RMB (current values for the year shown)

Year (%)	Total (%)	Agriculture (%)	Industry (%)	Other[a] (%)
		Part A: Kunshan		
1988	1.63	0.42	0.47	0.47
	(100)	(25.7)	(45.4)	(28.9)
1991	2.44	0.46	1.36	0.62
	(100)	(18.9)	(55.7)	(25.4)
1993	6.04	0.58	3.13	2.33
	(100)	(9.6)	(51.8)	(38.6)
1996	11.43	1.15	6.10	4.18
	(100)	(10.0)	(53.4)	(36.6)
1998	15.05	1.16	7.98	5.91
	(100)	(7.7)	(53.0)	(39.3)
		Part B: China		
1988	1492.83	383.10	577.72	532.01
	(100)	(25.7)	(38.7)	(35.6)
1991	2161.78	528.86	808.71	824.21
	(100)	(24.5)	(37.4)	(38.1)
1993	3463.44	688.21	1414.38	1360.85
	(100)	(19.9)	(40.8)	(39.3)
1996	6788.46	1384.42	2908.26	2495.78
	(100)	(20.4)	(42.8)	(36.8)
1998	7955.30	1429.90	3354.10	3171.30
	(100)	(18.0)	(42.2)	(39.8)

[a]Includes construction, transportation, and commerce.
Sources: Calculated from: *KSTJNJ, 1989* p. 10; *KSTJNJ, 1991*, p. 8; *KSTJNJ, 1993*, p. 21; *KSTJNJ, 1996*, p. 21; SSB (1999), p. 1; *SZTJNJ, 1997*, pp. 40–41; *SZTJNJ, 1999*, pp. 42–43; *ZGTJNJ, 1998*, p. 55; *ZGTJNJ, 1999*, p. 55.

shan has increased from perhaps 12 to 30% in the twenty or so years of reform since 1978, it is important to clarify the nature of this transition. Firstly, approximately 60% to 70% of the urban population in Kunshan in 1996 resided in 19 small towns outside the largest central urban settlement. Second, from 1978 to 1996 these small towns, which grew on average from about 2000 to 5000 people, accounted for nearly 90% of the growth in Kunshan's urban population over the same period (*KSXZ, 1990*, pp. 131–141; *KSTJNJ, 1991*, p. 14; *KSTJNJ, 1996*, p. 31). The level of urbanization, its rate of increase, and the structure of urban settlement in Kunshan strongly suggest that rapid industrial growth here has not resulted in large scale urban agglomeration. This finding becomes even more significant when we consider that the 1998 per-capita gross value of industrial output in Kunshan (RMB 51,945) and per-capita GDP (RMB 25,675) were both substantially larger than the figures for Suzhou City (RMB 42,206 and RMB 18,426 respectively) which was at least 90% urban! (*JSTJNJ, 1999*, pp. 363–367, 384, 385).

It is striking that the lower Yangzi delta can retain its national prominence as China's premier agricultural producer region, while at the same time undergoing rapid industrial growth. While cities are commonly viewed as the nexus of economic growth, regional development in the delta appears to be more complex than merely in terms of its purported dependence upon urban centred forces (see Kwok, 1992; Pannell, 1992). The critical parameters and the vitality of regional development in the lower Yangzi delta were in fact centred within the multitude of localities, fundamentally challenging the conventionally perceived role of large cities (see Fei, 1984, 1986). It would seem there are aspects of the delta's spatial economic patterns not fully captured in the conventional explanations of the dynamics of regional industrial expansion and urbanization.

Spatial proliferation of enterprises

Motivated by the desire to generate extrabudgetary revenues, every town and village administration in Kunshan wished to establish their own enterprises leading to the scattering of factories across the countryside. While a number of these enterprises were located in or near the town seats, most were built among the rice paddies, wheat fields, and canola crops. The locational distribution of town and village enterprises was closely linked to the structure of ownership and the territorial extent of the respective administrative jurisdictions. The most important group of enterprises in Kunshan included town and village level industries which together comprised 69.8% of the 2205 industrial enterprises and 58.5% of the gross value of industrial output in 1996. Town and village level enterprises included collectives (396), village factories (745), domestic joint ventures and cooperatives (252), and sino-foreign joint ventures (147) scattered throughout rural Kunshan. Of the 132 wholly foreign owned industrial enterprises, which accounted for 31.0% of gross output value in 1996, 91 were located in the Special Economic and Technological Development Zone just east of Yushan Town (see Figure 2). The 59 Kunshan level state enterprises were located in or near the built-up core of Yushan, throughout several towns and in the Red Flag Industrial Area. Most of the 470 private enterprises were established in Kunshan's 466 villages. Kunshan had 4 joint stock enterprises in 1996. These figures do not include 997 small scale household based individual industrial enterprises which were listed separately in the official statistics (*KSTJNJ, 1996*, p. 115).

In addition to the development of broadly similar industrial structures across the region, this spontaneous and haphazard growth created enormous problems related to the provision of infrastructure, duplication, and the waste of capital and land. Allusions to such conditions were captured in the local slogan: *cun cun dianhuo, chu chu maoyan* (in every village fires stir, and everywhere is belching smoke) (Qinghua University Urban-Rural Development Research Group, 1995). While such industrial development was 'comprehensive' and relatively successful at the local scale, in regional terms (county level and higher) it remained 'irrational' and spatially scattered. In conceptual terms, the diverse structure and spatial proliferation of industrial activities in Kunshan strongly suggests that the rural transformation observed here occurred largely as a response to intensely localized development imperatives. The result was a dense mixture of residential, industrial, and agricultural

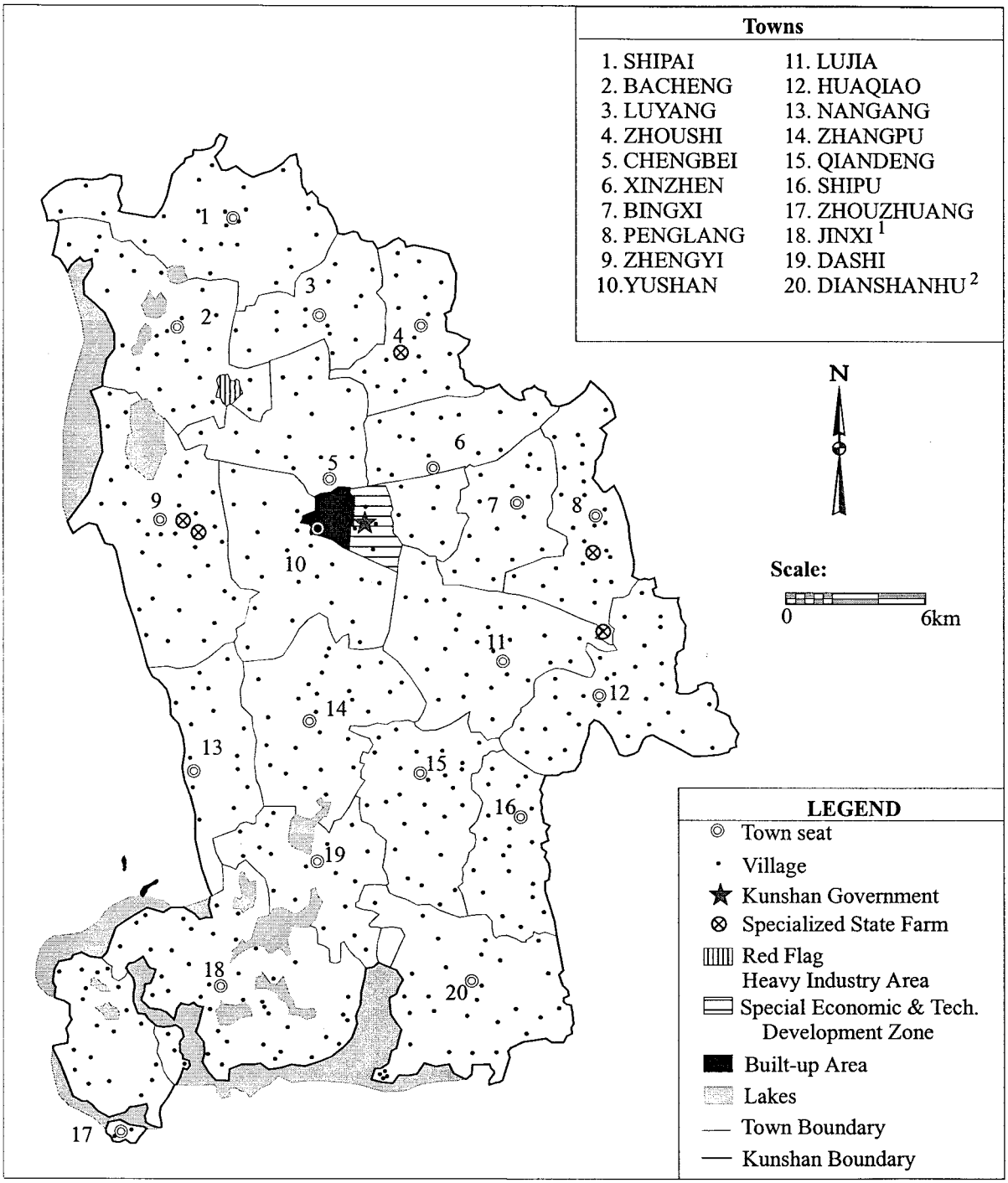

Figure 2. Kunshan: Administrative divisions, 1997.

land uses. Inherent within this spatial economic transformation were a number of tensions and conflicts associated with the proliferation of nonagricultural activities. The means by which these issues were negotiated and resolved, and the institutional structures that emerged to control and manage the networks of transactions which drive the local economy are the conceptual and analytical focus of the remainder of this paper.

Embeddedness and the geography of institutions

One set of arguments in the regional development debate revolves around how processes of urbanization or rural change liberate, constrain, or otherwise influence each other. What has unfolded along another path is a set of arguments that 'transcend' rural-urban relations – most notably class and politics (Koppel, 1991). Here I must echo criticisms from Corbridge (1982) who points out that construction of a simple political economy with a reductionist concept of politics that concentrates on issues of class (urban, rural, or

otherwise), cannot readily explicate complex individual or institutional political and organizational allegiances. Instead, I wish to shift the focus to an examination of the structure and function of local and regional institutional frameworks. The objective is not to seek a more sophisticated political model *per se*. Rather, it is to develop at once more refined and more dynamic ways of thinking about organizational forms and functions which will enable us to discern the patterns of socio-political and economic relationships as they impact upon regional spatial economic change. This suggests a theoretical framework that emphasizes analysis of process as part of the effort to trace mutually conditioning interactions between state and society in the Chinese space economy. Furthermore, it points toward a methodology by which the finest details of institutional structure, roles, and capacities are repeatedly juxtaposed with larger patterns and trends (Shue, 1988).

Analysis of the functional dynamics of institutional parameters, and the transactional relations and social networks that create and drive circulation, needs to be merged with an examination of territorial practices, including enterprise strategies, to understand local and regional level industrial development. The proliferation of industrial activity in the lower Yangzi delta, insinuating itself as it has into all corners of the rural landscape, can be explained neither by abstract generalizations nor by mere empiricist micro-level descriptions. Issues of industrialization, and industrial location, provide a forum for building an analytical framework for understanding the geography of economic development, and the institutional structures, processes, and mechanisms, shaped in part by their geography, which underlie such development (Storper and Walker, 1989).

The essence of these arguments can be distilled down to a set of theoretical tools involving three interconnected dimensions of industrialization and regional development: (1) their underlying institutional parameters; (2) the mechanisms and processes of their evolution, and; (3) their geographical foundations and territorial specificity. This framework accepts that political, economic, and social processes are largely determined by the ways in which they are embedded in place and social relations. However, this perspective does not willingly adopt social theory at the expense of economic theory. Important insights can be accrued from an analysis of the enterprise dimension.

It is necessary to recognize the role played by enterprises, and local actors who control them, in the processes which determine how complex production systems are organized over time and space (see Dicken and Thrift, 1992). Enterprise location and the organization of nonagricultural production in the lower Yangzi delta occurs within a dense web of administrative power and influence tied to particular places and articulated through complex networks of institutional and transactional relationships. Furthermore, as I will contend in the following section, rather than emerging merely as a result of new or evolving social relations of production over time and space, the proliferation of industrial development in the delta is also linked to the recapturing of former transactional networks – the shapes (morphology) are new, but the patterns have existed in one form or another since at least the late imperial period.

Rural-urban relations and the urban penumbra

Highly productive agriculture and the structure and intensity of intraregional transactional activities in the lower Yangzi delta historically depended upon an intricate network of waterways and canals. The complexity of the task of managing and maintaining the canal and irrigation system was reflected in the structure of local level administration. Frequently haphazard and inconsistent over the centuries, the issue of water control provides a historical context for understanding contemporary local administration in the lower Yangzi delta. Unlike north China, which depended on massive state led intervention to control the Yellow River, state water control in the lower Yangzi delta, like the central administration, essentially stopped at the county level. Localities were basically left to fend for themselves until the situation degenerated into widespread inundation. This led to the emergence of strong local interests and highly localized organizational structures. Thus, the scale of water control projects in the lower Yangzi delta, usually too small for state concern and too large for individual households, necessarily resulted in a complex set of interrelationships, driven at the community level (township and village), between the central state, peasants, and beginning around 1350, the urbanizing mercantile and land-owning elites.

Sustained high levels of agricultural output and abundant water transport led to a highly commercialized rural economy in the lower Yangzi delta. Commercialization of cotton and sericulture, and the marketization of grain contributed to a dramatic growth in the number of small towns during the late imperial period. Linked to the marketing of cloth, silk, and rice this region became the most highly urbanized and commercialized in China by the late nineteenth century. Yet in southern Jiangsu only 10.6% of the population lived in towns of 2000 or more at this time (Skinner, 1977). Meanwhile, the walled city of Suzhou probably became the largest metropolis in China based on the cotton cloth processing and silk weaving industries (Huang, 1990; Johnson, 1993).

While the increasing involvement of peasants in the commercialization of the delta contributed to the proliferation of small towns, a number of related factors acted to keep by far the greatest proportion of the population residing in the countryside. Relatively stable and productive agriculture stimulated population growth which in turn exerted pressures on food production and per-capita incomes. An increasing proportion of labour in excess of that needed for cultivation assumed a greater share of the household's productive activities in agricultural sidelines to offset these pressures. As a result, the household economy in the delta became relatively more stable with a given unit of land able to support more people. Moreover, since small towns emerged mainly as centres of commercial activities, with the exception of a certain amount of silk and cotton cloth production, most processing activities were dispersed throughout the countryside (Shih, 1992).

The increasingly dense peasant population was so well-linked to higher level markets that the standard periodic market towns, which supplied a range of daily necessities and around which socio-economic life in most of rural China was organized, did not exist in the lower Yangzi delta (Skinner, 1985). By the end of the nineteenth century a complex system of markets, commercial services, and production had emerged that enabled peasants to engage in non-agricultural production without having to leave the farm.

The rise of new industries with the penetration of international capitalism through the late nineteenth century and the Republican period, added a further dimension to change in the lower Yangzi delta. New sets of interrelationships emerged which relied upon commercial services, especially the trade and investment activities of merchants and their organizational and transactional networks. Profiting mainly from the circulation of capital in the exchange of goods and not from investment in production, these activities did nevertheless stimulate the proliferation and modernization of agricultural sidelines and household based processing activities in the delta (Huang, 1990; Shih, 1992).

This helps to explain the lower Yangzi delta's rather underdeveloped urban hierarchy through the late imperial period described so well in Skinner's (1977) seminal study and reiterated in more recent investigations (Pannell and Veeck, 1989). Along with larger cities such as Suzhou and Nanjing, the region became crowded with many smaller towns deeply linked to the peasant economy, without a commensurate growth in small and medium sized cities. Regional prosperity and urbanization in this underdeveloped hierarchy of settlements was seen to be more 'general' throughout the delta (Mote, 1973, p. 44). Even the explosive growth of Shanghai after its founding as a Treaty Port in 1842, did not diminish the economic and cultural prosperity of the delta, although by many measures Shanghai quickly surpassed older cities like Suzhou.

The transformation of sericulture and cotton production during the late imperial and Republican periods embedded small towns and large cities within an extensive network of reciprocal exchange relationships. This meant that rural communities assumed a greater variety of roles and, as the density of villages and small towns in the lower Yangzi delta increased, their functional integration with the larger cities became increasingly complex. Such integration tied large cities to the growing concentration of rural populations in what Marmé (1993, p. 38) describes as the 'urban penumbra'. With the transformation and expansion of agricultural sidelines then, major cities emerged as part of 'an area of widely diffused urbanness', a region with whose fortunes their own prosperity tended to move in tandem (Rowe, 1993, p. 12). In conceptual terms, these historical preconditions help determine the character of contemporary patterns of interactions and linkages.

Embedding transactional networks in local institutional structures

Transactional networks in Kunshan are mediated through a number of formal and informal administrative and institutional parameters. These are linked to bifurcation of the role of local governments both as community administrators and as owners and managers of enterprises. Processes of representation, embedded in various administrative and institutional structures which capture the key interactions and interrelationships, allow for the local mobilization of indigenous and external means of production. These locally determined representations manipulate the transactional networks, sometimes creating new ones, in order to maximize community-based production opportunities. In the absence of a meaningful legal and regulatory framework localities are free to exploit all means at their disposal to achieve this objective. Local actors, often with apparently conflicting roles, exercise their influence through these intensely localized economic and bureaucratic structures. This helps to explain the intensity and diffuse nature of local transactional networks, both within structures and across space.

These networks of transactions, and their underlying interactions and interrelationships, are embedded and manifest in territorially based institutional structures which have emerged to manage, negotiate and manipulate local economic activity. The processes by which these institutional structures are linked to the wider patterns of regional economic development in China are complex, usually ill-defined, and frequently quite puzzling. By undertaking an analysis that is sensitive to local cultural and historical circumstances, however, particular insights can reveal how spatial economic change is affected by evolving institutional structures, and conversely, uncover the socio-political consequences of recent reforms and the resulting transformation within China's rapidly developing regions. Understanding and explaining spatial patterns within such regions rests upon a detailed examination of local institutional structures, within their administrative and territorial contexts, as they relate to the networks of transactional activities and the precise location of industrial enterprises.

At this point the nature of the administrative or bureaucratic space over and through which such patterns emerge is worthy of some elaboration. The reform period has been characterized by an array of important changes in the broad mid-level administration of local government bureaucracies in China. Analysis of the structure and development of the Kunshan administration between 1978 and 1997 reveals two fundamental trends. The first is the enormous expansion in the size and range of responsibilities of the local bureaucracy since 1978. The second might be described as the corporatization of the bureaucratic-administrative mid-section of the Kunshan government. Both trends were linked to the disengagement of the central government from local administration and the reduction of state allocations which financed many of its functions. Thus, while central and provincial authorities still determined local obligations through economic and administrative policies and regula-

tions, their financing and implementation at the county level and below were a largely local enterprise.

The term 'enterprise' is used here deliberately to connote the way in which local government in Kunshan bifurcated into the dual roles of community administrator, and owner and manager of several companies and corporate-like economic entities. By 1997 there were at least 120 companies directly or indirectly affiliated with some part of the Kunshan level government bureaucracy. Some of these firms emerged as a result of the partial commercialization and marketization of government functions within the old state run command economy structures. The most important of these companies became integral components of the various industrial and commercial bureaux and related exchange and distribution organizations under the Planning and Economic Commissions. Also apparent is the emergence of specialized organizations which were created to manage and promote networks of exchange and distribution for the large number of enterprises which were not part of the planned economy. Agencies such as the Rural Industry Bureau, the Economic Cooperation Commission, and the Economic and Technical Cooperation Office facilitated access to the means of production, technical and management expertise, and markets necessary for the successful development of local industrial enterprises. The nature of these linkages, and the institutional parameters which embodied the resulting networks of interactions and interrelationships, are discussed in more detail below. It is suffice to say at this point that the emergence of these organizational structures, and their affiliated corporate-like entities, reflected dramatic changes in the local and regional space economy.

The findings presented thus far highlight the need to understand the way in which specific cultural, political, and historical circumstances contribute to the emergence of institutional structures which controlled and managed economic activity in Kunshan. It turns out that these localized structures embodied stratification by bureaucratic hierarchy rather than by market competition and opportunity. What emerged during the pre-reform period as local strategies and sub-cultures of economic (and political) survival had blossomed by the late 1980s into a kind of bureaucratic capitalism whereby 'socialist wheeler dealers' pertinaciously served local interests while enhancing their own power (Shue, 1988). This power was manifest and exercised in several ways. The power and prestige of local cadres in Kunshan was based upon their capacity to negotiate their community's relationship and obligations to the centre. These interactions occurred through personal relations or *guanxi* and via intensely localized administrative and institutional structures that represented local interests. Kunshan was thus able to accumulate resources for its own development by engagement with, and manipulation of the partially reformed command economy structures. Kunshan and community level bureaucrats would reinterpret and distort the rules of the partially reformed planned economy structures and bend the guidelines of state managed finance to 'make full use of the official policies in as flexible a way as possible' to benefit local development (Interview notes).

The spatial economic implications of such intense localism were reflected in the emergence of what some have termed 'palace economies', in which economic efficiencies were subordinated by administrative imperatives linked to areas of jurisdiction, authority, and power (Watson, 1992; Wu, 1994). Taken together, these factors contributed to the downward dispersion of economic power away from the centre. As a result, Kunshan was able to manage its economy as a discrete, autonomous entity and to strongly influence the way in which it related to the regional, national, and global economies. By the early 1990s, the Kunshan level bureaucracy and town and village governments had established institutional structures to promote, control, and manage this increasingly interactive transactional environment.

Horizontal and vertical linkages

Transactional linkages, and other economic interrelationships relevant for local economic development in Kunshan, were cultivated along two sometimes intersecting streams (*shuang gui, shuang cheng* – literally 'double tracks, double levels'). The first included horizontal linkages (*hengxiang lianxi*) were seen more as commercially based arrangements that crossed regions and administrative boundaries. These linkages also tended to eschew bureaucratic hierarchies taking advantage of opportunities to 'capture' talent, capital, information, and markets within and outside Kunshan. While often pursued and promoted through locally determined institutional structures, the development of such linkages relied less on the functional relationships of government bureaucracies than on the connections between individuals, enterprises, and local collective entities.

The second type of interaction cultivated by the local government was referred to as vertical linkages (*zhongxiang lianxi*). These linkages followed the established bureaucratic and administrative hierarchy more closely. While they were also frequently based on personal connections and *guanxi*, the resulting transactional relationships relied on negotiated access to, and frequent subversion of, the partially reformed command economy structures. It is clear, for example, that a large number of institutional structures emerged in Kunshan to manage and manipulate these linkages. Those concerned with specific industrial sectors, for example, were hived off from the local Economic Commission in the early 1990s.

The Kunshan Machinery, Electronics and Metallurgical Industries Bureau, and the Textiles Bureau, for example, were both established in 1991 to strengthen linkages with the respective provincial and prefectural level bureaux responsible for these sectors. Most of the benefits for local enterprises were of a commercial nature, including assured and subsidized access to raw materials, energy, skilled labour, and increased access to stable sales channels in the state sector. In addition to their regulatory functions, and the provision of professional, technical, and management services (for a fee), these bureaux also allowed Kunshan authorities to play a greater role in provincial and prefectural level decisions regarding planning and policy and, most importantly, to lobby for preferential treatment. In close collaboration with the Economic Cooperation Commission,

discussed below, these bureaux established and cultivated the horizontal linkages described above, while their corporate branches executed the commercial transactions directly on behalf of local enterprises.

Entirely locally financed, these Kunshan based institutional structures emerged to provide a link between local development interests and the hierarchies of the partially reformed command economy structures. It is noteworthy, perhaps even ironic, that the rapid development of rural enterprises in Kunshan outside the command economy was fuelled in part by an equally rapid expansion in the power and intervention of local government. Of course, the local bureaucracy was profoundly more responsive and flexible than the former planned economy structures as it was able to pursue and cultivate opportunities quickly and independently for the benefit of local enterprises. Despite official policies which attempted to separate government administration and the economy, it is clear that the emergence of various institutional structures in Kunshan in fact strengthened and exploited this relationship. The nature of this relationship is explored further in the following section.

The Economic Cooperation Commission

Perhaps the most interesting of the bureaucratic arrangements devised to encourage and manage these horizontal and vertical linkages, and the resulting transactional activities, was the Kunshan Economic Cooperation Commission (ECC) (*Jingji Xiezuo Weiyuanhui*) mentioned above. By the mid-1980s local governments in Kunshan realized that rapid industrial growth would not continue unless town and village enterprises could gain more stable access to inputs, markets, investment, and technological and management expertise. While enterprises technically had the freedom to arrange commercial and other linkages, usually through local level purchasing and sales companies, acting on their own they often confronted obstacles. With the opening up of markets the sales of output were generally less problematic than the procurement of inputs.

Thus, in 1984 Kunshan responded to these concerns by establishing the ECC with the goal of providing a conduit to the means of production and sales opportunities for the increasing number of town and village enterprises. Through town offices of the ECC, local enterprises became linked to a complex set of networks and transactional relationships coordinated by 'agents' in the Kunshan level bureaucracy. Most personnel in the ECC had previously worked in local branches of the command economy system such as the Goods and Materials Bureau or the Supply and Sales Office. Other employees included representatives from the Kunshan Planning and Economic Commissions who were interested in obtaining information about procurement and sales opportunities for state run and Kunshan level enterprises in order to supplement their planned quotas. Not only were these individuals familiar with the circumstances of local industrial development, they also had intimate knowledge of and connections within the hierarchies of the planned economy.

The specific tasks of the ECC included facilitating the exchange of materials by organizing special transactions, and the brokering of economic and technological cooperation between town and village enterprises in Kunshan and enterprises and other organizations outside Kunshan. The dealmaking coordinated by the ECC was innovative and wide ranging. While many of the linkages and contacts were still based upon networks of personal relations, through family, friends, and business or bureau associates, the resulting transactional arrangements had become quite sophisticated. Before the early 1980s, for example, a typical transaction might have involved a state run factory in Shanghai supplying old equipment to a town or village enterprise in exchange for agricultural products. These one-time barter agreements still occurred and usually involved Kunshan providing quantities of rice or edible oil for coal and other materials. However, with the establishment of the ECC in 1984, transactional relationships became more complicated, sometimes involving different types of investment including the sale of local enterprises to outside interests. While the ECC might coordinate investments, or other joint technological or management arrangements, most enterprises remained locally owned and operated, even as they acquired a more flexible and open attitude based on these experiences. The ECC also cultivated critically important transactional arrangements across hierarchies of the planned economy. These relationships did not follow the conventional vertical patterns of interaction as in the state plan. Rather, they tended to intersect where opportunities arose, usually among enterprises at a similar levels of the command economy hierarchy, and cutting across the administrative and geographical boundaries, or bureaucratic space, that delineated the flow of goods and materials.

Perhaps the most fascinating transactional relations brokered by the ECC involved the exchange of quotas or allocations (*zhi biao*). Although there was usually no direct documented exchange of quotas or allocations *per se*, as with state controlled procurement and sales of key commodities for example, transactions were negotiated as if there were. Through a kind of administrative arbitrage the ECC might arrange for the relevant bureau to sell a portion of Kunshan's state allocation of subsidized rice to another region in exchange for the opportunity for local enterprises to purchase required inputs. More often, however, the ECC would arrange for town and village enterprises to sell popular consumer goods or industrial products to enterprises and bureaux outside Kunshan in order to secure inputs or sales opportunities for other local enterprises. Coordinating particular exchanges, and helping to establish other linkages between enterprises, was also facilitated by providing relevant information regarding available resources and markets.

County level agencies with functions similar to the ECC existed in most advanced regions throughout China, so there was ample scope to facilitate the transactions necessary to support local industrial development in Kunshan. In addition to the increased opportunities for production and sales stimulated by market-like economic reforms, therefore, the ECC and other local institutional structures coordinated access to more stable and subsidized supplies of inputs and to

'assured' or 'contracted' markets for town and village enterprises. Taken together, the emergence of particular local administrative and institutional parameters were a central element of regional spatial economic transformation in the lower Yangzi delta. These institutional structures embodied a complex web of interactions and interrelationships tied to particular places. Kunshan, town, and village level cadres, who exercised powerful influence through these intensely localized structures, managed and manipulated the transactional networks, frequently creating new ones, in order to maximize community based productive opportunities. This helps to explain the diffuse nature of rural industrial development in Kunshan. Also obvious from this analysis was the paradox of local institutional structures, which sought to manipulate and overcome the administrative boundaries and bureaucratic space of the partially reformed command economy, while at the same time constructing their own protected space for local industrial development.

Conclusion

By taking advantage of their position to influence crucial linkages in the transactional network, community governments and their agents strengthened their role in local development in Kunshan, rather than separating from the economy as they were obliged according to official policy. In fact, the intersection of new market-like opportunities and incentives that arose from the reform measures initiated in the late 1970s, and the monolithic structures of the planned economy, were manifested in Kunshan by the emergence of administrative and institutional structures which have assumed many of the features of the old system rather than changing it. While the result has been a flourishing of networks of interactions and interrelationships, the concomitant downward dispersion of economic and administrative power has deepened the parochialism and balkanization of localities, even as it has empowered them to develop economic linkages with other regions and to determine, and sometimes redefine, the way in which local industrial concerns conducted their exchange relations and other transactional activities.

This article has provided insights into the processes and mechanisms whereby rural communities in Kunshan constructed industrial space by utilizing certain forms of representation. The emergence of densely populated nonurban regions with highly productive agriculture, infused with spatially dispersed nonagricultural activities responsible for significant proportions of regional and national GDP, without a commensurate level of urbanization is unique. The creation of new transactional networks, and the recapturing and modification of former networks, led to the emergence of intensely localized administrative and institutional structures which managed and were in turn influenced by the processes and mechanisms of spatial economic transformation in Kunshan. It was these transactional networks, moreover, which played a fundamental role in determining the geography of production in Kunshan and which also provide the key to understanding what it is that determines the unique patterns and processes of rural-urban transformation in China. This also highlights the relationships between locale and institutional structures by focusing on the transactional activities and networks of local actors which determined local and regional patterns of development.

Some might prefer to characterize this perspective in terms of the political geometry of power relations, or to emphasize the way social relations of production constructed social space and production systems (Cox and Mair, 1991; Massey, 1991, 1995). Inevitably, however, these approaches tend to reduce the relevance of locale merely to that of a 'meeting place' of intersecting, usually externally determined layers of agency, interests, and social relations. The approach advocated in this study paid a great deal more attention to the constellation of circumstances uncovered in the Chinese countryside which elevated locales and places there to a more fundamental role in the production of industrial space.

Patterns of location and the production of industrial space in the lower Yangzi delta were determined through processes and mechanisms of growth, rather than through the efficient allocation of enterprises across the economic landscape. Industrialization itself, largely depended upon the capacity of local actors to negotiate and manage access to the means of production and markets. Under such conditions, decisions about the precise location of enterprises were in most cases not subject to the economic logic of conventional factors. That is, industries in the delta produced economic space without being 'held hostage' to pre-existing spatial distributions of supply and demand (Storper and Walker, 1989). Moreover, while the efforts to create and promote networks of access to inputs and markets were operationalized via intensely localized administrative and institutional structures, this did not necessarily translate into the formation of dense industrial clusters, or even in the building-up or expansion of urban centres, although this was a frequently stated regional development objective.

That is not to say that these phenomena were absent in the wider space economy. However, transactional activities and their networks, while spatially dispersed, remained heavily focused on the development of 'rural' locales. Thus, industrialization and the location of enterprises were functionally situated within their administrative and institutional parameters, which were themselves deeply embedded within their territorial milieu. That is, the administrative area in which networks of transactional relationships where subjected to a high degree of implicit or explicit control by local actors. While this attachment to local interests and place resulted in greater flexibility and responsiveness, it also meant that the most fundamental exigencies and opportunities which stimulated and sustained industrialization were largely immobile.

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