

## Review on Chinese Urban Geography Since 2000

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### Abstract

Urban geography has developed rapidly in China since the 1980s. There are a lot of important findings in the research of critical problems in China, and some significant theoretical frameworks have also been developed about urban development and urbanization. Urbanization in China has been going its own way, resulting in considerable fruits in the fields of urbanization, dynamic mechanisms, metropolis and urban system. This paper has reviewed the papers about urban geography sourcing from 9 key geographical journals published by the Geographical Society of China during recent 10 years. The research of urban geography in China, mainly concentrates on three aspects, including urbanization, urban system and urban spatial structure.

Key words: China; literature review; Urban geography

### Introduction

Compared to the West, China moved later in introducing urban geography. Since reforming and opening up in 1978, Chinese urban geography has become one of the hottest research fields in human geography, and even, in the whole geography circle. The founding of Special Committee of Urban Geography of Geographical Society of China in 1994 marked that the research of Chinese urban geography reached a new phase.

Since 2000, a number of famous Chinese urban geographers illustrated the development course of Chinese urban geography in different aspects. The research of Chinese urban geography is mainly focused on urbanization concept, dynamic mechanism, urban space and urban system as well as urban functions, urban nature and on urban development[1,2]. Chinese urban geographers have successfully developed their own theoretic mechanism independently in following research fields as urbanization, dynamic mechanism of suburbanization and megalopolis. They have made significant contribution to formulation of Chinese Planning of Urban System[3]. Chinese urban geography has been getting unprecedented prosperous since entrance in the 21st century. At the same time, we also saw tremendous change in philosophical paradigm research, research technique and in research topics[4,5,6,7].

### Research Topics of Chinese Urban Geography since 2000s

#### *A. Research on Characteristics and Dynamic Mechanism of Urbanization*

Research on urbanization characteristics and dynamic mechanism has long been a core topic in urban geography. But now, it is fading obviously. Today, on the basis of relatively matured urbanization theory, most researchers focus on following issues: dynamic mechanism of urbanization, overall evaluation of urbanization level, impact of urbanization to utilization of urban land, evolution of urban spatial pattern amid urbanization, and relations between urbanization and ecological environment. Most of them conducted empirical studies on megalopolis with quantitative approaches. From this, we can see, Chinese urban geographers have been more and more tending toward scientism, since the beginning of 21st century[8].

China's urbanization progress is a result driven by several major factors, such as market power, outward force and administrative force. In study of Beijing's urbanization progress and mechanism, He Chun-Yang (2002) [9] drew the conclusion that Beijing's modern urbanization progress is fundamentally determined by its existing pattern as an old capital of China over past 3000 years and by official actions like urban planning and industrial policies. Some other urban geographers paid their attention to the coupling relations between urbanization and ecological environment and relations between urbanization and change in land utilization.

#### *B. Research on Urban System*

Research on urban system is a key topic to Chinese urban geographers. In the initial phase, the research was mainly focused on urban scope, urban functions and urban characteristics. But, in recent 10 years, the target has been gradually shifted to urban cluster, metropolitan area, urban belt and metropolis. Although Chinese geographers have made great achievements in study of urban system, there are few theoretical works, because their studies are mainly focused on case analysis and basic application from the perspective of regional economics. Basic research of urban clusters started in the 1980s, in order to serve Ministry of Construction in planning spatial urban distribution across China. After China's access to WTO in initial 21st century, coastal urban clusters grew into a national export-oriented "World Factory". This attracted the attention of economists and Development and Reform Commission, who advocate boosting Chinese urbanization process based on urban clusters[10,11]. China's urban geographers have been

planning a significant role in the studies concerned to China's urbanization progress.

Urban spatial structure and division of urban cluster are two major subjects targeted by Chinese pioneering researchers on urban clusters, including Gu Chao-Lin, Zhou Yi-Xing, Yao Shi-Mou, Yan Chong-Nin and Ning Yue-Ming and so on. Today, there have many works covering urban system mainly in following aspects:

a) *Research of urban spatial structure.* Many scholars put emphasis on characteristics of urban spatial net structure, by evaluation of crowd, logistics, technology, information and finance. Gravitation model was adopted in studying the economic connections among cities. For instance, Gu Chao-Lin and Pang Hai-Feng (2007) [12] use a quantitative calculation by gravitation model on how close the spatial connection is among Chinese cities. By this, they illustrated the hubs of the spatial connection of Chinese cities. Miao Chang-Hong and Wang Hai-Jiang (2006) [13] discuss how an urban cluster is formed, through research of economic connections among cities on the basis of gravitation model.

b) *Research on growth of Chinese urban clusters.* Economic globalization, new industrialization and information technology are regarded as important driven factors for urban cluster. Scholars pay more and more attention to spatial urban structure in the context of information age [14].

c) *China has made great achievements in empirical studies of urban clusters,* mainly involving following regions as Pearl River Delta, Yangtze River Delta, Central China, Suzhou-Wuxi-Changzhou urban cluster, Shandong Peninsula, Northeast China and Wuhan Metropolis. These studies involved competitiveness, characteristics and combination mode of urban clusters spatially. Chinese cities are agglomerated more complicated, compared to advanced countries and regions. So, relevant studies must be made through innovative approaches on the basis of China's current situation. Gu Chao-Lin [15] argued in the near future, studies on China's urban clusters should be focused on following three aspects: (1) Spatial pattern of China's urban clusters amid economic globalization; (2) Spatial and regional structure of China's urban clusters amid deindustrialization; (3) Public policies on unbalanced spatial expansion due to urbanization.

### C. Research on Urban Space

"Urban space" has long been the core subject of urban geography. At present, the meaning of urban space is being extended gradually. It has been seen as a dialectic unity of substantial and social attributes [16]. Classification of urban space may vary, depending on the research view we take. In 1999, from the perspective of land functions, Gu Chao-Lin classified urban space into 6 sorts: industrial land, commercial land, service and office land, mobile land, residential land and living land. Instead, from the perspective of geography, Chai Yan-Wei classified it into 3 sorts: substantial space, economic space and social space. From the perspective of fundamental urban functions, Nie Cheng-Feng sorts it into living space, commercial space, service space, special parks and urban activity space. Wang Kai-Yong and Chen Tian classified it into living space, production space and ecological space, from the perspective of space function

and ontology.

Amid the rising thought tide of humanism and post-modernist, hot topics of human geography research are being shifted gradually to mechanism and culture, with that of urban space research gradually to substantial space, economic space and living space. In past 10 years, urban space research covered following fields:

a) *Social space research has been a hot but difficult topic in urban geography.* In research, scholars made studies in consideration of China's current social problems arising in social transformation, such as unemployment, class split, social polarization, social justice and urban crimes. Macroscopically, studies were mainly focused on urban social spaces, such as split in urban residence, social polarization, spatial separation, and on interaction between urban pattern space and social space. Microscopically, studies were mainly targeted at classification of urban communities and its approaches, evaluation of living quality in urban communities, spatial structure of urban daily behaviors, and at sustainable development of urban communities.

Following special human groups and spaces were mentioned most frequently in major journals [17,18]: "Outdoor Activity Space for Children", "Living and Activity Space for the old", "Female Performance Space", "Urban Living Space for Migrant Workers", "Employment Space for Varied Classes of people", "Medical Action Space for Migrant Workers" and "Living Space for Gays". This indicated that China's urban geography has been deeply influenced by new thoughts, such as humanistic care, feminist perspective, ecological community and new urbanism.

b) *Research on economic space:* in terms of economic space, studies were mainly targeted at CBD, RBD, logistic area, retailing area, office business area, hi-tech industrial parks, and at economic development zones [19].

c) *In terms of urban cultural geography:* much attention were paid to small-sized cultural space, such as urban public cultural sites, urban plazas, urban cultural streets and traditional business areas.

### D. Research on Urban Economic Development and Urban Issues

a) *Research on urban economic development.* In recent 10 years, China's urban geographers paid much attention to how the progress of urban economy is affected by new economic factors [20,21,22]. As two powers for urban development, globalization and new economy have drawn broad attention. It has been a new focus to study the interactive relations between globalization and regional development. The key and difficulty lie in research on multi-spaced diversified power games among actors. Scholars discussed how to develop a city and how to cooperate in urban development amid globalization, by theories and approaches of international division of labor, world cities, global production net and insertion.

Studies involved following aspects:

(1) As an important dynamic mechanism for a city's economic growth, a number of scholars focused their

research on investment destinations of FDI from different countries.

(2) Importance should be attached to the significance of great events upon regional development amid globalization.

(3) The significance of official decisions about urban and regional development.

(4) Urban cooperation, prompted by globalization and regional competition, was a consequence of mixed actions of several environmental and historical factors. Thus, many scholars have made studies on urban clusters and their competitiveness.

(5) Development issues of industries involving tourism, manufacturing, information and culture, amid new economy.

b) *Attention to urban healthy development.* In terms of urban construction and planning, we should pay attention to improvement of urban living quality. (1) Development and reconstruction of traditional cities; for instance, transition of resource-based to sustainable development, involving forests cities and coal cities; (2) Remarkable change in urban planning concepts, to develop "Ecological cities", "Tourism cities", "Leisure cities", "Livable cities", "Low-carbon cities" and "Innovative cities"; attach importance to planning of urban cultural landscape, cultural streets, tourism sites and of leisure areas. (3) Pay attention to housing and traffic. (4) Pay attention to social issues, like poverty and crimes.

### Summary and Prospect

Chinese urban geography has been growing rapidly, since reforming and opening up in 1978. In the 21st century, China's urban geographers have successfully developed an international unique subject system of urban geography with Chinese characteristics, in consideration of China's current situation, on the basis of theories introduced abroad. We find following characteristics in reviewing core research topics of Chinese urban geography:

First, studies on characteristics and dynamic mechanism of urbanization are declining gradually. Studies involve relations between urbanization and measurement, urbanization pattern and dynamic mechanism, urbanization land utilization, and between urbanization and environment. The application of measurement is a typical characteristic in such research topics. Research targets mainly lie in east coastal cities, as China's hot economic regions.

Second, China has made great achievements in research of urban system, in particular to urban clusters. These study outcomes have been widely applied in state strategies and urban construction. But little efforts are made in studies of global cities, multinational urban system and metropolis.

Third, in terms of urban spatial research, Chinese urban geographers pay much attention to studies on reconstruction of urban space, which is driven jointly by three major factors mechanism, economy and society, amid spread of globalization and information technologies. China's urban geography has been deeply influenced by new thoughts, such as humanistic care, feminist perspective, ecological community and new urbanism. In addition, Chinese urban geographers also keep an eye on the development of Western human geography, and often make exchange with the West.

Four, in terms of urban industrial development and urban issues, Chinese urban geographers pay attention to the effect of new economy upon the development of China's urban

industries. They extend the research scope and introduce the new idea of healthy urban development, which has been applied to urban planning and construction.

In the future, China will narrow the development gap with developed countries, in terms of urban geography [23]. China sees challenge on the one hand and development trend on the other hand, from the new trend of urban geography in developed countries. Future studies should cover following aspects: world cities, transnational urban system, metropolis, relations between urban transformation and globalization and regionalization, urban economy, urban environment, human well-being, and urban sustainable development. At the same time, since China is in a development phase different from developed countries, Chinese urban geography should remain focused on urban social and economic development, in particular on spatial and regional problems with China's urban development, in the face of industrialization, urbanization, update of information technology and globalization [3]. In terms of research scope, we should enhance multi-layer analysis and made studies by application of international vision into local actions. In terms of research approaches, we should further strengthen the integration of different subjects, while pay attention to integration of science into applicability.

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