



Urban Planning Reform in China's Urbanization Process

Qiu Baoxing

China Architecture & Building Press

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Part One:
**Defining the Problems
and Objectives**

Chapter I: Recognizing Properties of Urban Planology and Research Methodology: Significance, Methodology and Structure of this Book

In the end of 1995, Dr. Wally N'dow, UN Assistant Secretary-General and Secretary-General for United Nations Human Settlements Program (UN-Habitat), pointed out with deep worry in the introduction to *An Urbanizing World Global Report on Human Settlements 1996* that, "as we approach the new millennium, the world stands at a veritable crossroads in history. Urbanization holds out both the bright promise of an unequalled future and the grave threat of unparalleled disaster, and which it will be depends on what we do today".

Joseph E. Stiglitz, American economist and 2001 Nobel Laureate in Economics stated in a World Bank conference that the new technological revolution and China's urbanization are two key factors that affect the progress of human world in the 21st century. According to Professor Stiglitz, China will face three big challenges in the new century, the first of which is the challenge of urbanization. If China can develop into a highly urbanized country with over one billion urban population in the middle of the 21st century, its economic and science & technology influence will significantly change the world political and economic patterns, which will create a turning point in human's history.

In the foreword of *Cities in a Globalizing World: Global Report on Human Settlements 2010*, Kofi A. Annan, UN Secretary-General, stated that: "*cities present some of the starkest of these contrasts: homeless people living in cardboard boxes, next to skyscrapers occupied by corporations whose budgets exceed those of many countries; growing gaps between the salaries offered by labor markets and the housing costs determined by urban land markets; enormous levels of consumption alongside great pyramids of waste that threaten the environment and human health; and hitherto unseen patterns of segregation, with pockets of wealth at the centre and vast enclaves of poverty on the periphery*".

In June 1999, thousands of architects from all over the world gathered in

Beijing, and expressed their common aspirations in <Beijing Charter>: “Human beings have made remarkable achievements in utilizing and changing the natural world since the Industrial Revolution, but we have also paid a high price for this. The population boom, the destroyed farmland, the increasingly degraded air, water and land resources, these environmental disasters have been threatening human beings. We have not yet uncovered secrets of the ecosystem on the planet, but the ecological crisis has become an imminent peril. Seen from the historical perspective, we, instead of being the owner of the world we are living in, are temporarily safekeeping the world we borrowed from our descendents. What kind of cities and villages will be returned to them in the future...”¹

Prof. Wu Liangyong, academician of both the Chinese Academy of Sciences and Chinese Academy of Engineering, pointed out in 1999 that the whole world will be facing irresolvable urban problems. On the one hand, over 50% of the world population live in cities, which are the biggest bases for creating public wealth; on the other hand, cities are the haunt of poverty, social differentiation, pollution and traffic jam. Therefore, people realize that “cities may be the source of major problems, but they can also be the key to solve some of the most complex and urgent problems in the world.”

Although the urban planning system, as the major control measure for urbanization, cannot solve all the problems in cities, it is still “unbearable lightness”.

As is defined in the canonical *Encyclopedia Britannic*, urban planning is “design and regulation of the uses of space that focus on the physical form, economic functions, and social impacts of the urban environment and on the location of different activities within it. Because urban planning draws upon engineering, architectural, and social and political concerns, it is variously a technical profession, an endeavor involving political will and public participation, and an academic discipline.”²

Urban planning actually plays two roles in regulating and controlling urbanization: on the one hand, planning should conform to the law of the market economy, such as protecting property rights, providing public facilities, guiding urban development and safeguarding legal rights of investors; on the other hand, it should, based on social rationality, reflect the principle of fairness,

1 International Union of Architects. *Beijing Charter: The Future of Architecture*. Beijing: Tsinghua University Press, 2002: 178.

2 The translator's note: the original Chinese text is cited from Wang Jianguo. *Concept and Tactics of Modern Urban Design*. Nanjing: Southeast University Press, 1999: 49~50. The English translation is cited from the definition of “urban planning” in *Encyclopedia Britannic*.

so as to prevent the irrational and unlimited expansion of market from coming into being and affecting the public interests.

For China, a country in rapid urbanization, urban planning has irreplaceable regulative functions. Premier Wen Jiabao pointed out on many occasions that urban planning is the blueprint of urban construction and development and the fundamental basis of construction and administration of cities. Whether urban planning is poorly or well designed affects directly the effectiveness of the overall functions of a city and harmonious development of economy, society, population, resources and environment. Urban planning is a comprehensive and strategic task of overall importance, which involves every field ranging from politics, economy, and culture to social life. A good urban planning should, according to the general requirements of modernization, meet present needs with a view to long-term development and be planned jointly with rational allocation so as to take every aspect into consideration. Part and whole, short-term and long-term interest, demands and possibilities, economic construction and social development, urban construction and environmental protection, modernization and historical heritage conservation—all these relations should be well balanced. It is to create a favorable working and living environment for people by improving social planning and promoting the steady and sound development of cities. In the course of formulating urban planning, opinions from various fields of the society, especially those from experts, should be taken into consideration, and decision should be made by meticulous comparison, repeated demonstration and through statutory approval. Once urban planning is approved, it should be authoritative and be followed strictly; no one is allowed to alter it at will.¹

However, the current urban planning system in China fails to punish such phenomena as “image and vanity projects that waste manpower and money, planning changes due to putting too much emphasis on efficiency and immediate results, enclosure movements that recklessly embezzle farmers’ land, overdevelopment of fragile resources, disorderly and unsystematic land use in suburban areas and illegible buildings that remain incessant after repeated prohibition”.² Moreover, the urban planning system itself has some problems.

1 Speech delivered by Premier Wen Jiabao in the 3rd Congress of China Association of Mayors: *Some Issues on Urban Planning, Construction and Management*.

2 Qiu Baoxing, *Urbanization in China: Opportunities and Challenges*. Beijing: China Architecture and Building Press, 2004: 13~17.

For example, the legal construction seriously lags behind the urban planning, regional planning is short of coordination, general planning lacks predictability, planning at the city-level is short of authority-control mechanism, supervision from higher authorities is insufficient, urban development and administrations are out of control and public involvement is not yet started. Facing these problems, we can start from analysis of the theoretical background of urban planning, then the methodology in urban planning researches, and finally the main ways of thinking and countermeasures for urban planning reform in the course of urbanization, the latter of which should be the central part of this book.

I. Recognizing the Natural Scientific Properties and Humanistic Properties of Urban Planology

Since the emergence of modern urban planology around a century ago, numerous urban planning theorists both at home and abroad have been devoted to making a precise prediction of urban development, so as to arrange various kinds of construction rationally. The theory of urban planning, in essence, is combined by rules and knowledge related to objective predetermination and process control under certain socio-economic conditions and in a definite period of time. Seen from the order when planology was set up in China, here lie the differences between urban planology and architecture: the essential property of urban planning is prediction and control based on time, whereas architecture is creation based on space.¹

Dr. Zou Deci, academician of the Chinese Academy of Engineering, regarded modern urban planning science as a cross disciplinary (or interdisciplinary) subject which absorbs and integrates information of natural science (including that of engineering technology), social science and visual arts (including aesthetic knowledge of architectural art, landscape art, etc.) and gradually shapes into a unique knowledge system of its own through plenty of practice.²

Prof. Zhang Tingwei from University of Illinois at Chicago (UIC) once made two conclusions on issues related to urban planology. The first one was

1 Wu Zhiqiang. "Historical Outline of the Western Urban Planning Theories in the 20th Century" . *City Planning Review*, 2000 (2): 91.

2 Zou Deci. "On Science of Urban Planning" . In the Memoir of Annual Conference 2002, Urban Planning Society of China: 12.

about the planning theory. As a practice-oriented science, urban planning is considered by some theory-oriented subjects as “being lack of specialized theory”. To date, urban planning theory is still thought as being “general” by some celebrated socialists (lectures delivered by John Logan in UIC in March, 2001). The second conclusion made by Prof. Zhang was about the methodology. A lot of quantitative research methods are used in the planning, which made some rigorous critics believe that planning is more a descriptive subject than an analytical subject. In my opinion, a descriptive subject is not fully scientific, at least not a really mature science.

Natural science should have certain distinct features:

Firstly, it should conform to the “Occam’s Razor”¹, which means that the logic should be simple instead of being loaded with trivial details; it should not contain a lot of hypothesis or prerequisites, which may leave room in case of its future failure. Unfortunately, urban planology cannot afford to this “razor”, because urban planology not only has to solve problems on urban space, but also various social and economic issues that lead to these problems. As a matter of fact, to meet the future development requirements of cities effectively, the objective of planning researches is no longer to find out the best scheme, but to choose the possible paths for future development. That is to choose among different potentials and corresponding countermeasures. Therefore, it is involuntarily that the biggest difference between urban planning scholars and scholars of natural science is that the former should give support and interpretation to the “correctness” of any possible results.

Secondly, natural science can be falsified by experiments. That is to say, it can be denied by repeatable phenomena and evidences. Although after more than one hundred years’ development (which has a much longer history than some emerging natural sciences), urban planology has become a “complex and unique process focusing on urban land use distribution and redistribution and crossing multiple social systems for the overall interest of city and public interests in the context of urban development, and it is also a process integrating social movements, government actions and vocational technology”.² Unfortunately, precise and controllable urban development has never come true

1 Occam’s Razor, Ockham’s Razor was put forward by a 14th-century English logician and Franciscan friar Father William of Ockham. According to this principle, “entities should not be multiplied unnecessarily”.

2 Urban Planning and Redevelopment in Encyclopedia Britannica Macropedia, Vol.18:1081.

in the history of planology. History cannot be repeated. Therefore, planning scholars may use “there are no birds of this year in last year’s nests” as an excuse in any circumstance to disguise the wide gap between their theories and reality.

Thirdly, in the course of its development, new theories of natural science should explain all the conclusions of former theories, as well as the unexplainable basic phenomena and irresolvable problems in the former theories. That is to say, as a scholar of natural science, one cannot merely target on explanations of favorable phenomena or data while neglect unfavorable ones. A scholar of natural science should remain neutral and have no value orientation or be affected by any ideology. But urban planology is completely different in this aspect. As is said by French scholar Jean-Paul Lacaze, the only thing that distinguishes urban planning from urban geography is the will to act and the perspective of power execution in modifying urban spaces.¹ Obviously, there is no planner in the world who can execute the power without following his/her values or being affected by any ideology.

Therefore, modern urban planology, instead of being a natural science or mature engineering science, should be considered as a multidisciplinary subject with vivid humanistic features. We have to admit that, compared with other similar subjects, the “scientific” features of urban planology are not so mature although urban planology emerged from science and engineering background and has a long history.

Prof. L. Rodwin, former director of Harvard and MIT Joint Center for Urban Research, reviewed in his last book *The Profession of City Planning*, the development of five humanistic studies in the western world since 1950, namely economics, political science, philosophy, literature and city planning. According to him, the most significant similarity among development of these studies is the application of quantitative study. Of the five subjects, economics receives the highest appreciation because the method of quantitative analysis is the best and most widely applied in economics. City planning, as an emerging study, is facing all kinds of “adolescent” problems, such as positioning its identity, and exploring application of the method of quantitative analysis...²

To be a “smart” handicraftsman who rationally follows architecture, or to construct a scientific system of its own? Facing this question, no urban planning scholar would willingly surrender to the study of architecture. But the problems are, after a-hundred-year’s painstaking pursuit, “the urban planning field still

1 Jean Paul Lacaze. *Method of Urbanization*. Beijing: Commercial Press, 1996: 6.

2 Zhang Tingwei. “Case Study and the Quantity Analysis”. *City Planning Review*, 2001 (9): 57.

lacks a theoretical platform of its own.” “Although planning theories and concepts have been introduced one by one, the full view of development process of modern planning theories still remains unclear to the public, and a complete and dynamic theoretical framework is still out of reach.”¹ Meanwhile, many realistic problems also make urban planology less scientific and reliable, which thus bring severe challenges to the rationality and authoritativeness of urban planning.

II. Issues Concerning the “Scientific Level” of Urban Planning

If we consider urban planology as a humanistic study with significant features of the engineering disciplinary, or as an interdisciplinary study that has humanistic features, the most important task in the development of urban planning study is to enhance its scientific level. There are many discussions and assumptions on the scientific level of a study. But the history of scientific development has proven that the acceptance or rejection of one theory is not merely determined by the result of experiment. Dr. K. Popper, distinguished logical empiricists and falsification master, concerned only on supporting or denying the evidence, therefore failed to uncover the rationality of science; Dr. T. Kuhn also failed to provide an objective standard for the selection of theory, and was caught in the quagmire of relativism.

Prof. Imre Lakatos, Hungarian-British scientist and philosopher who inherits and criticizes the aforementioned two masters, gave an outline of five points for methodology of scientific research program which were important in his eyes.² Comparing the basic properties of urban planning with this methodology, we can figure out how “immature” this study is.

1) A mature science is constituted of a research programme, which is different from series of hypothesis and refutations that are short of imagination. A set of research programme, rather than isolated scientific hypothesis, is the benchmark for measuring scientific achievements. For example, classic physics is not a combination of four hypotheses, namely the three laws of mechanism and the law of universal gravitation. These four laws only constitute a “hardcore” of this programme. Any scientific research programme is evidently different from its “hardcore”. However, the weak basis of urban planology is that “it is more of

1 Wu Zhiqiang. “Historical Outline of the Western Urban Planning Theories in the 20th Century” . *City Planning Review*, 2000(2): 9.

2 Imre Lakatos. *The Methodology of Scientific Research Programs*. Shanghai: Shanghai Translation Publishing House, 1986: 5.

an art than real science”.¹ Many concepts, terms and schools of urban planning emerged in the past century, all of which were popular only for several years; and the hardcore of a scientific research programme was not formed. Or the originality of a new programme has not yet been used to explain, assist, describe or protect the hardcore. That is to say, the urban planning theory, rather than being the pathology that racks its brain to explore the problems, is like a quack that rushes to make a prescription for epidemic problems of cities.

2) All the scientific research programmes have one common feature, that is, they all forecast novel facts. These abundant achievements are unimaginable for former programmes. However, neither the past nor the current urban planning theories can predict the common problems in various countries in the world. For example, the rationalism-oriented urbanization mode in former British, French and Spanish colonies has created serious “urban crisis” in Latin American, African and South Asian countries; the inner city core in North American metropolis has been declining, a “black hole” harmful to social economy has been formed in the center of overexpansion metropolis; shortage of water resources is found in Asian cities such as Bangkok, Manila, Dacca and two thirds of China’s cities. Some cities tend to kill the goose that lays the golden eggs, and the excessive exploration of underground water has led to substantial ground subsidence, which is threatening most urban buildings; many cities in developing countries are at the edge of broken down due to the increasing gap between the rich and poor, the growing ethnic and religious conflicts, and the deteriorating social security; a few international metropolises that are actually controlled by the “transnational capitalist” has become new fortune centers in the course of globalization, and the result of globalization and the objective of urban planning are diametrically opposite; as urban environment keeps deteriorating and ecological crisis is increasingly severe, no city in the world can claim that sustainable development has been realized in it... These “facts” in urban development were discussed superficially or completely neglected in the predictions made by different schools of urban planning theories (including various urban science topics). Therefore, it is no doubt that the mid-term and long-term development planning based on these theories are not so applicable.

3) The history of science should be a history in which multiple research programmes compete with each other (few research programmes can occupy

¹ Wu Zhiqiang. “Historical Outline of the Western Urban Planning Theories in the 20th Century” .
City Planning Review, 2000 (2) : 9.