"New quality productivity and urban and rural planning" academic pen discussion

王凯，赵燕菁，张京祥，袁昕，赵志荣，王兴平，于涛方，王伟，王富海，王世福，王兰

（Wang Kai, Zhao Yanjing, Zhang Jingxiang, Yuan Xin, Zhao Zhirong, Wang Xingping, Yu Yifang, Wang Wei, Wang Fuhai, Wang Shifu, Wang Lan）

[Editor] During the two sessions in 2024, the word "new quality productivity" was written into the government work report for the first time, attracting deep attention from all walks of life. In the 2024 government work report, "vigorously promote the construction of a modern industrial system and accelerate the development of new quality productive forces" was listed as the first of the top ten work tasks for this year, and a series of arrangements have been made. Developing new-quality productive forces is an inherent requirement and an important focus for promoting high-quality development. Various sectors of society have held extensive discussions on important topics such as the development of new quality productive forces and the development of new quality productive forces enabling industries.

The development of new quality productivity and urban and rural planning have multi-layer correlation logic: first, the development of new quality productivity requires urban space innovation and creation to form a strong spatial support; second, urban and rural planning is gradually creating new quality productivity in some urban areas through digital intelligence technology innovation; moreover, the birth of new quality productivity depends on the reorganization of multiple functional genes. Which cities and urban areas have rich innovative gene communities? After the birth and development of new quality productive forces, what significant impact will it have on the development of Chinas cities and the status of Chinas urban groups in the world? All of these questions are worth further discussion.

To this end, the editorial department of this magazine took "new quality productivity and urban and rural planning" as the theme, invited 11 experts and scholars in the planning field to have a full discussion, which can be summarized into the following three topics.

(1) In the overall context of developing new productive forces, how to understand the new productive forces from the perspective of urban and rural planning and construction? How to explain the relationship between new quality productivity and urban and rural planning?

To understand the concept of "new quality productivity" from the perspective of urban and rural planning, the experts shared their understanding and thinking. Associate Professor Yu Tao Xiaofang pointed out that the new quality productivity and urban and rural living are typical complex systems, with a high degree of openness and diversity, self-organization and dynamic adaptability, nonlinearity and emergence, and the two interact and are inseparable. Director Wang Wei believes that the new quality productivity and urban renewal construction have a "new" natural fit, and can achieve the same frequency resonance. Many experts and scholars analyzed the relationship between new quality productivity and urban and rural planning from different perspectives. President Zhao Zhirong believes that accelerating the development of new quality productivity will further promote the new changes of urban and rural spatial form, the new mode of regional economic development and the new life of urban and rural residents,

"production relations", and updating the "production relations" is the urgent task of urban planning.

(2) What kind of urban and rural space is needed for the development of new quality productive forces? How does the planning provide the new quality space needed for the development of new quality productive forces?

Productivity elements are attached to the bearing of space, and the development of new quality productive forces will be accompanied by the demand of new space use. Many experts and scholars put forward ideas on the characteristics of "new quality space". President Yuan Xin believes that the new quality of urban and rural space is not a new spatial form, but an innovative combination of traditional spatial elements. These new combinations can stimulate new behaviors and create new drivers, new forms of business and new services. Professor xing-ping wang based on urban operation logic put forward different points of view, specific idea of new urban space four types of new trends, including all kinds of knowledge and technology production space active, laboratory and the emergence of intelligent production space, knowledge youth industry group become the main body, and "cross-domain link" and "cross-border integration" new characteristics. In the aspect of spatial shaping, President Wang Kai emphasized that "meeting peoples needs is the focus of the development of new quality productive forces", focusing on the living difficulties of four "200 million people" (new citizens, residents of old urban areas, the elderly and children). Professor Zhang Jingxiang proposed more systematically that from the three aspects of space organization, space construction and space control, urban and rural planning can form a strong promotion and effective support for the development of new quality productive forces through the innovation of space supply and management.

(3) In what aspects, does urban and rural planning itself need to be reformed and improved, so as to develop into a new quality productivity?

As cities enter the era of inventory development, urban and rural planning, as an important guidance for urban construction, will play an important role in optimizing resource allocation and improving total factor productivity. Starting from the two-way relationship between urban and rural planning and new quality productivity, President Wang LAN pointed out that urban and rural planning itself can become a new quality productivity and make greater contribution to the development of social economy through digital transformation and discipline integration. Professor Zhao Yanjing accurately identified the needs of the transformation of urban and rural planning from "urban assembly manual" to "urban operating system", and proposed a new planning architecture composed of three parts: "agreement", "interface" and "application". Professor Wang Shifu put forward the concept of "new quality space force", which enables the new quality state of urban and rural planning through scientific and technological innovation, triggering multi-dimensional comprehensive reform, so as to promote the production of new quality space.

The rapid transformation of new productive forces and new relations of production is reconstructing the global economic map at an unprecedented speed, and is profoundly driving the transformation and reshaping of cities. In this context, urban and rural planning has been given a new mission of The Times, and it is urgent to constantly innovate ideas, methods and means to better adapt to and lead the sustainable development of the city. I hope that this academic discussion will provide strong ideas and references for the practice of urban renewal,

and I hope that all readers will feedback their experience and thoughts to the editorial department of Urban Planning Journal.

New quality productivity and urban planning reform

Wang Kai (President of China Institute of Urban Planning and Design, professor-level senior planner, National Master of Engineering Survey and Design)

1. New quality productivity is the inevitable choice for Chinas economic transformation and development

After 45 years of rapid development, Chinas economic aggregate has reached the second place in the world. The driving force of economic development is changing from the past development model of "export, investment and consumption" to relying more on "innovation, consumption and optimizing the allocation of factors". According to statistics, Chinas export dependence decreased from 25.97% in 2010 to 18.86% in 2023, showing an overall downward trend, while the contribution of scientific and technological progress to the economy showed an upward trend. According to statistics, the contribution rate of scientific and technological progress to the national economic growth has reached more than 60%. China as the worlds second largest consumer market after the United States, in 2023 residents final consumption spending reached 38 trillion yuan, in the past 45 years of rapid economic development has basically solved the urban and rural residents of general consumer demand, completed from subsistence consumption to the pursuit of quality and brand product consumption process, is experiencing from product consumption to service consumption, experience consumption upgrade process. However, we should also see that the proportion of household consumption in GDP is only about 38%, far lower than the proportion of household consumption in GDP of 60-70%. The momentum of household consumption on the economy needs to be further stimulated. The core of optimizing the allocation of elements is to give priority to ensuring the space demand of high-quality life and services in the city, so as to improve the ability to attract and gather talents. Only gathered the diversified, high-qualityTalent is the permanent movement to achieve high-quality economic development

According to multiple forecasts, Chinas urbanization rate will reach about 75% in 2035, when the urban population will be nearly 1 billion. Cities will be the most important place for employment, life, rest, various public services and public management, and can also be said to be the most important application scenario of science and technology empowerment. Therefore, from the perspective of planning and construction, it is the need of The Times to promote the development of new quality productivity.

2. Meeting human needs as the focus of developing new quality productivity

People are the most active and decisive factor in the productive forces. Only when they better meet peoples needs, can they release their creative ability to the greatest extent. To meet the needs of the new economy, new consumption and new people, constantly create new space in the course of development, and promote the new economy is the main task in the new stage of urbanization development. First, conform to the trend of consumption changes. At present, urban consumption is transforming from general consumer goods to an experiential economy that pays more attention to environment, culture, service and digitalization, and the basic material needs are shifting to spiritual needs such as leisure, health and culture, which requires the pursuit of relaxed and comfortable public space and public facilities. The younger generation

pays more attention to personalized consumption, cultural consumption and virtual consumption, and prefers more diversified service modes. In this way, we need to release the potential of the "third space" through the transformation of more stock space, and promote the development of the new economy with characteristic events and special consumption modes. Second, we need to accurately serve the needs of people. At present, we should focus on four "200 million people": 200 million new citizens and young people, about 70% living in cities with poor living quality and outstanding housing difficulties; 200 million residents living in old urban areas with aging facilities, imperfect functions and potential safety problems also need to be gradually improved through housingThe improvement of community environmental quality; 200 million elderly people, housing facilities and community aging environment are seriously insufficient, it is difficult to meet the basic needs of home care; 200 million children, their new demand for safe and healthy living environment is the focus of modern countries and cities. The space needs of the four "200 million people" are also the main scene of science and technology empowerment, and also an important embodiment of the urban people. Third, the realization of space sharing. A city is a place of consumption, a network of production, and a public space for face-to-face communication. Such a complex and changeable scenario is not only a carrier for creating new knowledge and stimulating new drivers of growth, but also an important force to optimize the combination of jumping elements

3. The reform of urban planning should conform to the new needs of The Times and innovate the supply mode

The past planned reforms have always been needed by The Times. In the first 30 years of reform and opening up, the overall direction of reform in terms of content and mode is to promote the rapid development of social economy through the incremental supply of spatial elements, and solve the problem of spatial guarantee for development and the problem of reasonable spatial structure. At present, urbanization has entered the stage of medium-low speed development, and the theory and method of planning should be changed accordingly along with The Times. In short, from "expansion and development" to "stock renewal" is the basic judgment of Chinas urban development, and from "construction" to "governance" is the underlying logic of planning.

Some new thinking is needed: the understanding of the space value, the analysis of the analysis of the space value, and the diversity of the space value from the fixed location and the different nature of the conditions, to realize more knowledge of economics, culture and information science, to promote the implementation of various spatial renewal actions. In short, the continuous transformation of the power of urban development needs to use innovative thinking to promote the sustainable development of the city and meet the peoples continuous pursuit of a better life.

Urban planning and new quality productivity

Yanjing Zhao (Double Professor, School of Economics and School of Architecture and Civil Engineering, Xiamen University)

According to the Political Bureau of the CPC Central Committee on January 31,2024, promoting high quality development 11th collective learning explanation: new quality productivity is "by technology revolutionary breakthrough, innovative configuration of production factors, industry depth transformation and upgrading, to laborer, labor materials and labor object

and its optimization combination as the basic connotation, with total factor productivity as the core mark" advanced productivity quality.

In the past 40 years of reform and opening up, China has creatively relied on land finance, forming an unprecedented asset in human history. Most of these assets exist in Chinese cities in the form of infrastructure. In terms of hardware alone, China leads many of its infrastructure in the world. But having good infrastructure is not being efficient. Cities are like computers. If there is no good operating system, even if you have the top hardware configuration, it can not give full play to the ability of the computer.

Only the operating system of urban planning can achieve the "breakthrough of technological revolution", realize the "innovative allocation" of all kinds of production factors in the city, and complete the "deep transformation and upgrading" of the city. Through urban planning, city operators can efficiently organize the coordinated actions of different infrastructures to help easily use the citys infrastructure by various economic activities. The higher the efficiency of the urban operating system, the more various applications connected to the city, and the more the industrial ecology formed can form a "moat" for the city to participate in the market competition.

Understanding urban planning as the operating system of cities is crucial to understanding the role of urban planning in new quality productivity. No operating system, even the high configuration of the computer is also a scrap metal. Similarly, without good urban planning, a city is just a pile of steel and cement that is difficult to use. When Chinas urbanization changes from incremental to inventory, urban planning is the new quality productivity of cities. Only through planning, the city can achieve "workers, labor materials, labor objects and their optimized combination" and achieve "substantial increase in total factor productivity".

Traditional urban planning is more like an manual for assembling different infrastructures, and the main task is to combine roads, utilities, transportation, logistics, and public services in optimal spatial order. When the city is assembled and enters an era dominated by inventory, urban planning will be quickly transformed into an operating system that drives these infrastructure. The problem with urban planning is that we have not started the transition from the "urban assembly manual" to the "urban operating system", not even realizing the need for this transition. Planners suddenly realized that Party A no longer needed them, and did not understand the reason why urban planning has suddenly become useless. When planners still insist on using the "city assembly manual", urban planning does not drive the city, but becomes a resistance to new quality productivity.

What content should urban planning constitute it as an operating system? Its like Android and Hongmeng, whose architecture depends on how different planners understand the urban system. Here I propose an architecture for peers to discuss. The urban operating system consists of three parts: protocol protocols); interface (interface) and application (applications).

The so-called "agreement" is the condition that a project needs to be "landed". There are three main ones: first, use; second, floor area ratio; and third, service life. In reality, there is almost no new quality productivity that can just meet the preset planning indicators. This is also the fundamental reason why the planning is always adjusted frequently. In theory, only the "tailored" indicators can meet the needs of new quality productivity landing. A good planning agreement should give up the three indicators given in advance, but stipulate the rules and paths that meet these three conditions. —— The chess rules are preset, and the chess game is completely the result of the market game.

The "interface" is to facilitate the planning users. The main result form of traditional planning is text + drawings. Even if it is published online, it is difficult for potential land demanders to solve the landing problem of new quality productivity with the help of planning. In order to make the planning "easy to use, useful and effective", it is necessary to change the "entrance" of the planning from the land use map to the land property right map, and "customize" the indicators of the new quality productivity of the land through the interaction of the project related stakeholders (property owners, operators and approvers).

And finally, the "app". As driving the optimal allocation of urban production factors, urban planning should promote the transformation of urban elements from inefficient users to efficient users. The more economic activities (apps) are used in the city, the application ecology of the city platform will be developed and rich. This requires the planning to further extend to the investment promotion link. Only by entering this link, the planning will only know where its own bugs are. Only by constantly repairing these bugs, can the planning agreement and interface be continuously improved and upgraded.

Good planning is just like a good operating system, which can maximize the value of urban assets and realize the optimal allocation of urban element combination. It can be said that a good urban operating system itself is a new quality of productivity. The transition from the "urban assembly manual" to the "urban operating system" means the overall migration of the planning discipline system. This process is necessarily painful —— We need to give up familiar knowledge and learn unknown knowledge. But this process is also bound to be exciting —— we are going to start the voyage and discover the unknown continent.

Promote the development of new quality productivity with the innovation of space supply and governance

Zhang Jingxiang (Professor, School of Architecture and Urban Planning, Nanjing University, Executive Director of Urban Planning Society of China)

To achieve the goal of high-quality development, we need the strong support of new-quality productivity. As General Secretary Xi Jinping has pointed out, " New quality productive forces play the leading role of innovation, get rid of the traditional economic growth mode and the development path of productive forces, are characterized by high technology, high efficiency and high quality, and are in line with the new development concept."Obviously, through the development of innovation function to accelerate the cultivation of new quality productivity, has become an important measure and key grasp to shape the city and the national core competitiveness in the new round of economic competition.

The development of new quality productive forces is inevitably accompanied by the demands and changes of new space use, which correspondingly needs "new quality space" to carry. Facing the requirement of cultivating and developing new productive forces, urban and rural planning needs to promote the adaptive adjustment of planning thinking and technical methods in the process of actively recognizing, actively responding and actively supporting the development of new productive forces through the innovation of space supply and governance. In short, we can expand on it from the following aspects:

1. In terms of spatial organization, pay attention to the positive utility of innovation network, and build and link innovation clusters with cooperative carriers

With the continuous improvement of technology complexity, the increasingly fierce

competition between time and cost, and the stimulation of the diversified needs of users, innovation activities put more emphasis on high-frequency communication, multi-subject cooperation and systematic support, and thus bring about the network transformation of the space organization of innovation activities. The construction of innovation network is a powerful means to stimulate innovation activities, and is the basis to promote the orderly flow and rational allocation of innovation elements. Therefore, it is also the key to cultivate and develop new quality productive forces. The core mechanism of building an innovation network is to build a carrier of innovation cooperation with significant network link effect, and to promote the formation of a wide and close innovation cooperation network inside and outside with the help of the supply of such functional space. Spatial planning should be based on the demands of local innovation and upgrading, and actively promote the link generation of innovation network. On the one hand, the innovation cooperation carriers, such as generic technology development center, innovation station, and public pilot plant, are the communication platform for generic innovation demand and innovation infrastructure for the "two-way opening" cooperative carrier, and attract the "innovation anchor" of leading enterprises, universities and institutes, so as to be direct and effectiveTo promote the rapid integration of local governments into innovation networks. At the same time, we should encourage those places with poor geographical conditions and resource endowment to set up "science and technology innovation enclaves" in innovation leading cities, and adopt enclave parks (enclave buildings) with "remote research and development incubation" to actively link high-quality innovation capital in larger areas

2. In terms of space construction, pay attention to the diversified needs of innovation subjects, and adapt to innovation activities with differentiated spatial units

The essence of new quality productivity is innovation-driven. Therefore, the space that can effectively promote the development of new quality productivity should first be able to meet the spatial needs of the innovation subject. The spatial demand of innovation subject depends on many factors such as the characteristics of innovation subject and the path of innovation transformation. There are significant differences in the characteristics of different types of innovation subject and the requirements of elements. These differences make them have different location and layout preferences in space, and form different spatial distribution and organizational characteristics based on this. In the specific spatial practice, the innovation subjects of different industrial types, different development stages and different innovation paths have differentiated requirements for space site selection, land use scale demands and functional organization requirements. For many innovation subject flexible diverse space demand, urban planning should change the past modularity, standard unified space supply mode, according to the specific demand situation of different innovation subject, "classification ShiCe" set to match the space supply scheme, by building differentiation space unit to meet the different innovation subject, innovation transformation path of space demand.

3. In terms of space control, we should pay attention to the uncertainty of innovation development and activate the innovation space in a combination of bullets

Facing the requirements of The Times of cultivating and developing new quality productive forces, it is necessary not only to identify a series of new features in the form of urban innovation space, but also to form corresponding effective planning and control measures combined with these characteristics, so as to guide the planning and construction practice of innovation space. In general, the innovation-driven economic development model has strong uncertainty, and the

spatial organization and spatial demand of innovation activities will continue to be in the "normal" changes, which puts forward the requirements for the ability of spatial planning to adapt to the dynamic changing needs. In practice, therefore, need to explore established just play combined planning control way, in the safeguard principle, under the premise of baseline requirements, "soft" in the traditional planning of the strong rigid, absolute control standards and process, so as to better meet the development of new quality productivity increasingly diversified space, improve the space bearing capacity of the new economy, new formats. For example, in practice, it is found that creating innovative scenes of mixed land use structure and composite functional space will be conducive to the formation of micro-ecology and subsystems suitable for the development of new quality productive forces, which requires the establishment of inclusive land use standards and the construction of a planning and control mechanism to promote the composite use of land use.

We will develop new-quality productive forces and promote innovation in urban and rural planning

Yuan Xin (President of Beijing Tsinghua Tongheng Planning and Design Research Institute Co., Ltd., Executive Director of Urban Planning Society of China)

The development of human society is driven by the interaction of productive forces and production relations. The three elements of productive forces include: labor force, the means of labor and the object of labor, and the three elements of production relations include: the ownership of the means of production, the status and relationship between laborers, and the way of product distribution. In 1978,18 xiaogang village farmers secretly signed the land contract agreement, changed the production relations of the land use way and the distribution of labor results, also changed the relationship between workers, greatly promoted the laborer production enthusiasm, also changed their poor life, opened the prelude of Chinas reform. Subsequently, the third Plenary Session of the 11th CPC Central Committee held in December 1978 determined a new development path of reform and opening up, creating a miracle of Chinas rapid development in the past 40 years.

Science and technology are the primary productive force. We have long adhered to the strategy of rejuvenating the country through science and education and strengthening the country through human resources. The quality of the labor force has been greatly improved. More than 40 years later, Chinas urbanization level has increased from 18% in 1978 to 66% now. The total population, population distribution and population structure have all undergone profound changes. With the development of the manufacturing industry, we have 41 industrial categories, 666 industrial subcategories, 207 industrial categories, becoming the only country in the world with all the industrial categories listed in the United Nations Industrial Classification. It has become a manufacturing power in the world and the second largest economy in the world. With the continuous emergence of new technologies, the proportion of natural resource elements in social production has decreased year by year, and data assets and human resources have become the main labor objects. The accumulation of these changes in productivity factors promotes the development of new quality productive forces, and innovation drive is brewing more subversion of traditional and backward ideas and technological products.

New quality productivity is not a new productivity, but supported by scientific and technological progress, the combination of various productivity elements through innovation, so

that it has the ability to promote the great progress of things., Since the media platform, for example, we can understand for chip, smartphone, editing software and artificial intelligence algorithm innovation combination, although each technology is not a new invention, but after a long-term technology iteration and innovation integration, not only created a new social and business model, even is promoting the change of social governance model. Smart cars that integrate radar scanning, image recognition, machine learning and other technologies with electric vehicles will also change the way people travel in the future and create more future life prospects.

All productivity elements need space to carry them. As the planner of urban and rural space, it is our mission to create a spatial carrier more in line with the development needs of various productivity factors. Actively promote the process of urbanization, follow the law of social and economic development, coordinate regional and urban and rural development, balance regional development, reasonably distribute population distribution, actively respond to the problem of population aging, promote the optimization and reasonable matching of labor force and industrial layout, and provide a better urban and rural living environment suitable for living and working. Follow up scientific and technological innovation, understand the progress of labor tools, the development of power, energy, transportation, information and other systems may bring changes to the mode of production and life style, and make space preparations in advance to support the substantial increase of social total factor productivity.

The development of new quality productivity needs new quality space. Like new quality productivity, new quality of urban and rural space is not a space form never appeared, but the traditional space elements combination of innovation, these new combination, can stimulate new behavior, create new kinetic energy, new forms, new services, provide more application scenarios for new quality productivity, better meet peoples quality of life. For example, the combination of new light sources, soilless cultivation technology, community distribution and urban underground space can give birth to urban underground plant plants, reduce the packaging, transportation and storage costs of vegetables and fruits in traditional planting methods, reduce the loss during transportation, better preserve the nutrition and taste of food, and increase community employment.

The development of the new quality productive forces also needs to adapt to the new production relations and needs the new quality social governance. With the emergence of the integration of new technologies and new technologies, the traditional old technical standards, governance means, control methods and legal norms are difficult to meet and meet the changing needs of the new era, which must be adjusted accordingly, and the level of social governance and governance capacity also need to accelerate the pace of modernization with the help of new technologies. For example, the main object of urban and rural construction is no longer land development, but more the revitalization of the stock space. Should the space use guidance, approval process, tax policy and other reuse and transformation of a building continue the traditional two-dimensional logic based on land use control? Is the plant factory in the basement of the urban housing a community supporting service facilities or an agricultural production space? Can the roof garden of a large complex be open to the public as a city park? The vertical superposition of Chongqing Plum ba Light Rail station and residential functions not only lets us see the value of this innovation, but also is the result of innovative governance. The innovation of the management mechanism of urban and rural planning is the premise of space innovation.

The development of new productive forces can promote the innovation of urban and rural planning and spatial production, and urban and rural planning can also enable the cultivation and development of new productive forces through innovative spatial production and management mechanism.

We will accelerate the development of new-quality productive forces and the transformation of Chinas urban and rural planning

Zhao Zhirong (Dean, Professor of School of Public Administration, Zhejiang University)

The 2024 Report on the Work of the Government calls for "accelerating the development of new quality productive forces", emphasizing improving production efficiency and product quality and promoting through innovation-driven and technological progress to upgrade the economic structure. The concept of "new quality productivity" was proposed because China faces the transition from high-speed growth to high-quality development. Driven by economic globalization and technological progress, the traditional resource-intensive and labor-intensive production models in China are no longer sustainable, and new growth drivers and development models are urgently needed."New quality productive forces" provides a new direction and path for Chinas economic development. On the one hand, we should promote high-quality economic development by promoting industrial upgrading and structural adjustment; on the other hand, we should emphasize green development and shared development, strive to solve environmental problems and social equity, and build a more harmonious and sustainable society. These ideas put forward new requirements and challenges to urban and rural planning, and will profoundly influence the theory and practice of urban and rural planning in many aspects.

The core of urban and rural planning is the rational allocation and comprehensive utilization of urban and rural space resources, aiming at promoting the coordinated development of society, economy and environment. Over the past few decades, Chinas urban and rural planning has played a major role in its rapid economic and social growth. Through large-scale construction of urban and rural infrastructure, optimizing the allocation of land and other resources and industrial distribution, urban and rural planning has promoted economic growth and industrial upgrading, and improved the quality of life of residents. As an important starting point for the strategy of integrated urban-rural development and rural revitalization, urban and rural planning has improved the level of rural public services, enhanced the vitality of the rural economy, and narrowed the gap between urban and rural areas. Urban and rural planning is also increasingly paying attention to environmental governance and the protection of historical and cultural heritage, improving disaster prevention and mitigation capabilities and emergency management, and promoting the development of smart cities and rural areas. These achievements have provided a solid foundation for Chinas economic prosperity, social harmony and a beautiful environment.

With the slowdown of urbanization, the transformation of urban economy and the change of urban population size and structure of urban population, the planning in urban areas gradually transforms from incremental to stock or even reduced quantity, with the focus on optimizing the existing space through urban renewal, and improving the livability by transforming old communities and improving public service facilities. Old city renewal involves a large number of stakeholders, including government agencies, local communities, private developers, businesses and residents. Therefore, the focus of the planning should also shift from development and

construction to public governance, so as to coordinate different interests, ensure that the renewal projects can fairly balance the needs and expectations of all parties, and prevent the interests of specific groups from being damaged. In rural areas, the planning should take various goals into comprehensive consideration, on the basis of environmental protection and rational utilization of natural resources, promote the diversified development of local economy, and improve the living conditions and convenience of residents.

Accelerating the development of new quality productive forces will further promote the new changes of urban and rural spatial form, the new modes of regional economic development and the new forms of urban and rural residents life. Therefore, Chinas urban and rural planning needs to make corresponding changes and improvements.

First of all, accelerating the development of new quality productive forces will lead to profound changes in urban and rural spatial forms. First is to build smart city and smart countryside, make full use of the Internet of Things, big data, artificial intelligence and other technologies, realize efficient resource management and optimal allocation, and promote the digital transformation of urban and rural areas; second, to form industrial integration space, break the traditional urban-rural division, promote the coordinated development of agriculture, industry and service industry and create new industrial agglomeration area; the third is to create green ecological space and build more green corridors and nature reserves to promote ecological protection and sustainable development. All these changes will promote urban and rural planning to be comprehensive, intelligent and ecological, and realize the sharing and coordinated development of urban and rural resources.

Secondly, accelerating the development of new quality productive forces will lead the new model of regional economy. The rapid development of the digital economy and sharing economy has crossed the boundary between urban and rural areas, promoted the rise of emerging industries such as e-commerce, digital agriculture and shared services, and enhanced the vitality of regional economy. Urban and rural planning should be the assistant of regional cooperation. Through cross-regional resource integration and industrial linkage, the free flow of resources, information and technology between urban and rural areas should be promoted to realize economic integration. In addition, we should actively build platforms and incubators for innovation and entrepreneurship, promote the transformation of scientific and technological achievements, and support the development of emerging industries and small and medium-sized enterprises. Through the new model of urban and rural spatial resource allocation, we will boost the technology-driven, resource-sharing and coordinated development, inject new momentum into the regional economy, and enhance the overall competitiveness and sustainable development capacity.

Finally, accelerating the development of new quality productive forces will bring about new forms of life for urban and rural residents. Services such as smart home, smart transportation and smart medical care will improve the convenience and quality of life of residents. The sharing of cultural and educational resources will be realized through the Internet to narrow the gap between urban and rural areas and enable rural residents to enjoy high-quality education and cultural services. At the same time, new quality productivity promotes the transformation of employment models, and telecommuting and flexible employment increase. Urban and rural planning needs to be adjusted accordingly, and high-speed Internet infrastructure should be fully built to ensure that both urban and rural areas can obtain stable network connections. On this

basis, intelligent transportation systems, regional medical centers and flexible office Spaces suitable for "digital tourists" are being developed and built to improve the freedom and happiness of urban life.

The conceptual progress of new quality productive forces, technological development and the realistic needs of social economy and life transformation will all promote the reform and improvement of Chinas urban and rural planning. It is conceivable that technology drive and data support will become an important means of planning. The use of big data, artificial intelligence and Internet of Things technology can improve the scientific and accurate planning, establish an intelligent planning platform, and realize real-time monitoring and dynamic adjustment. Through technological empowerment, we will strengthen public participation, social joint construction and diversified collaborative governance, extensively solicit residents opinions in urban renewal, improve the transparency of planning and public recognition, and form a benign mechanism for the participation of the government, enterprises and residents. In addition, green and low-carbon development, ecological protection and sustainable resilience will also be the core content of the plan. In urban and rural planning, we should more actively promote energy transformation, reduce pollution and carbon reduction, build low-carbon eco-cities and villages, strengthen ecological protection measures, and maintain the natural environment and biodiversity.

New quality productivity and new space and new planning

Wang Xingping (Professor, School of Architecture, Southeast University, Director of the International Cooperation Research Center for Development and Planning of Sustainable Industrial Park, Southeast University)

New quality productivity is future-oriented, driven by innovation, supported by new industrial groups, new production technologies and new industrial business forms, and also creates new urban space scenes. Specifically, the urban space features the following four new trends and characteristics:

1. Active production space of all kinds of knowledge and technology. Science and technology is the primary productive force, It is also the source of new quality productivity, New quality productivity is highly dependent on new technologies, new technologies and their derivative new industries, new products and new scenarios to develop, Therefore, the science and technology innovation space carrying all kinds of innovation activities is the anchorage, source and incubation place for the development of new quality productive forces, Including university scientific research institutions, laboratories and their concentrated high-tech parks, university towns, etc., Gradually from the traditional economic era of supporting, service, auxiliary facilities and functional space to the development of new quality productivity leading, leading, core facilities and functional space, This requires the new urban space dominated by new quality productivity to reorganize with various types of scientific innovation space as the center, Promote the comprehensive integration of various urban Spaces and scientific innovation space and provide supporting facilities for them, To form an overall spatial environment for the release of the kinetic energy of science and innovation factors, Eliminate the long-standing phenomenon of science and innovation institutions self-admiration and isolated separation of science and innovation space.

2. The emergence of laboratory transformation and intelligent production space. In order to form the new quality productive forces and become the new driving force of development, the

new technology must realize industrialization. Therefore, the new quality industrial space carrying the new quality productive forces is an important part of the new urban space. Compared with the traditional industrial space, The industrial space of new quality productivity can be roughly divided into two types and two trends: one is lightweight, clean and laboratory, Mainly the manufacturing space of biological, chemical and electronic information products, Its manufacturing does not rely on the large import and export of material products, Even in the molecular, atomic and other substances in the space level of high-tech experimental instruments to carry out scientific and technological manufacturing, Therefore, its production space can be arranged in the building-type office space, Instead of laying in a large plant; One is the manufacture of large-scale, large-volume high-tech products, For example, the manufacturing of new energy vehicles and intelligent equipment, It still needs dedicated space to accommodate production lines and place large equipment, store large volume products and logistics, But along with the popularity of intelligent manufacturing, Its industrial space presents a highly intelligent and unmanned characteristics, And saw a small number of industrial workers and technicians working together with robots, Its industrial space and traditionThe space scene of large manufacturing industry is gradually different, and the activities and demands in the space are also different from the functions of traditional industries. Scientists, engineers and highly skilled talents have replaced labor-intensive industrial workers as the subjects of the new quality industrial space

3. Knowledge-based young industrial groups become the main group in the space of new quality productivity. New quality productivity relies on new technology, new manufacturing and creates new scenarios and stimulates new demand, therefore, The practitioners of new quality productive forces take new knowledge, new technology and young people with new vitality and new needs as the main group, This new type of workers has a group of characteristics different from the previous industrial workers, With a higher quality of life needs and communication needs, Need an efficient, quick and instant life service system, Need for diverse urban scenes and personalized living places, And tends to integrate its various activity requirements in a limited small-scale space, Mobile Internet and efficient distribution system are important ways to connect itself with the outside, Therefore, its survival presents a new life mode of high consumption, low mobile, "fingertip" and "tiptoe".

4. The urban new quality productivity space presents the new characteristics of "cross-domain link" and "cross-border integration". Based on the new operating rules of new knowledge, new technology, new production and new crowd, the correlation logic of urban industrial space under the background of new quality productivity is also undergoing new changes. The new spatial relationship network based on industry margin-network and the rules based on geographical-geographical proximity cooperate with each other. Cross-boundary association and cross-domain integration become the important rules and characteristics of the new quality productivity space. At the regional scale, on or beyond the traditional parks with clear material space boundary, "unbounded parks" and reverse science and innovation enclaves have quietly emerge and drive the formation of a distributed new quality productivity spatial layout system with cross-domain links such as global-regional coordination and wide city distribution. Within a single park, across the boundary of space fusion, including industry and innovation space fusion, production and living space, digital space and entity space coupling, as well as the new industrial space of human and human robot coexistence collaboration, is creating

a highly convenient, complicated new future industry community of the new scene and new space mode.

In any era, it is the basic requirement and task of planning to promote the integration and matching and coordination of industrial business forms, spatial forms and the state of people. Urban and rural planning in the era of new quality productive forces still needs to follow this basic logic. The vitality of new quality productivity lies in "new" and "change". New technologies iterate rapidly, new technologies are constantly updated, and new industries and products emerge in one after another, but the life cycle becomes shorter, and versatility and flash have become important characteristics of industries related to new quality productivity. At the same time, the new building materials and the construction of the new construction technology material space more and more strong and durable, and limited by the relationship and land resources tightening, the new industry space of incremental production gradually stopped, how to improve the stock of industrial space more appropriate to match the new variety of productivity, realize the limited space bearing and adapt to unlimited production, become a new quality industry space planning and reproduction important problems and problems. The new logic and new rules of new industrial forms, new spatial forms and new crowd states in the development of new quality productive forces provide new opportunities for the planning profession, and also promote the end of the traditional planning knowledge system. To this end, the planning industry needs to:

1) Give full play to the synergistic advantages of human intelligence and artificial intelligence to make planning decisions in the era of new quality productivity. As based on practice, service practice and facing the future leading the new practice of professional, planner as "human intelligence", cannot, must again "to", get rid of "data" dependence, personally to the classroom, laboratory and workshop of new productivity breeding, incubation and bearing place, in practice and real new productivity and their needs and the characteristics of space, concise new planning principle and law guide to adapt to the demand of new quality productivity new planning, abandon the old planning and create new planning. In terms of planning methods, it is necessary to give full play to the advantages of artificial intelligence provided by human intelligence and new quality productivity, avoid the "machine" comprehensive replacement of human decisions in planning, and ensure the comprehensiveness and integrity of "people-oriented" planning.

2) Give full play to the new role of planning in providing new production relations. In the past era of incremental development, Urban and rural planning used to be an important link and tool in incremental space production and land finance formation, Thus, it was once regarded by many leaders and experts as an important "productivity", But in the era of new-quality productive forces and stock development, The "productivity" attribute of urban-rural planning itself by providing land and directly involved in production and wealth creation has actually disappeared, Planning, as a governance tool and plays a more prominent role in integrating and coordinating various spatial elements, coordinating spatial relations and optimizing spatial functions, In a certain sense, The planning itself has changed from a "productivity" to a tool to provide "new quality relations of production" and a new development environment, This is an important change in the orientation of the new urban and rural planning, therefore, We cannot expect urban and rural planning to create wealth again, Instead, we should return to the standard and provide support and empowerment for the creation of social wealth.

The "two-way rush" of new quality productivity and human settlements requires not only complex system thinking, but also simple solution action

Yu Taofang (Associate Professor, Doctoral Supervisor, Director of the Department of Urban Planning, School of Architecture, Tsinghua University)

"Great changes unseen in a century" rapidly breeds changes in new productive forces and new production relations, and rapidly affects the transformation and evolution of urban and rural human settlements in the world. The development of new quality productive forces has become the inevitable choice to promote the iterative evolution of productive forces, promote the high-quality economic development and realize the Chinese-style modernization. Therefore, the proposal of "new quality productivity" will inevitably bring new opportunities and new requirements to human settlement and urban and rural planning.

1. New quality productivity and urban and rural human settlements are very typical complexity systems

From the perspective of traditional economics, management or urban science, new quality productivity and urban and rural living are typical complex systems: they have high characteristics of openness and diversity, self-organization and dynamic adaptability, nonlinearity and emergence.

At the same time, the new quality productivity and urban and rural living two huge systems are inseparable. Urban and rural living is the result of the reshaping of new quality productive forces, Whether it is the direct effect of science and technology, Or the indirect effect of the combination of production factors, at present, On the one hand, information technology makes New York, London, Tokyo and Beijing, Shanghai, Hong Kong, Mumbai and other cities as the core of the giant urban area or giant area in the global control and command status increasingly strengthened, The factors of production continue to gather, iterate and upgrade, "Agglomeration urbanization" remains strong; on the other hand, Information technology and others allow urbanization and productivity to expand globally, Form the so-called "expansionary urbanization" or "planet urbanization", Human settlement patterns and habitats have been profoundly reshaped. At the same time, more and more theoretical attention, economic and social development, including the core of new quality productivity (scientific and technological change and innovation) fundamentally leave the agglomeration effect of increasing urban and urban areas, also cannot leave the unique urban and urban areas, such as comfort of rural areas and ocean, forests, mountains, outer space, increasingly integration of living system complexity and organic more enhanced, emergentent and dynamic adaptive effect constantly, these for the traditional urban and rural planning, is a huge challenge.

How to make new quality productivity and living system promote each other, urban and rural planning have to keep pace with The Times, in the original engineering, technology, humanities, management, further enhance the complexity of the system thinking ability discipline advantage, in a sense, urban and rural planning can further play its unique role of "general" discipline, such as history, philosophy and other disciplines.

2. Facing the new quality productivity and urban and rural residential giant system, urban and rural planning should pay attention to simple solution action

The ultimate idea of solving complex problems is basically simplifying problems. For example, the dynamic planning, gradual planning and communication planning formed on the basis of operations research, management and even sociology and political science have played

an important role in urban and rural settlements and multi-scale territorial and spatial resource allocation decisions.

For the complex new quality productivity, urban and rural planning can decompose it into relatively simple sub-problem solutions. Solutions of these subproblems can be constructed into solutions of new qualitative productivity. By solving the sub-problems one by one, the overall solution is constructed step by step. First, the public policy attribute of urban and rural planning plays a very good role in matching productivity with production relations; second, urban and rural planning involves economy, engineering, geography, and other interdisciplinary science; and third, urban and rural planning is a very typical and irreplaceable important "new productivity" attribute in design creativity, future technology, residential prospect and architecture, and intelligent urban management.

3. Action thoughts on Chinas new quality productivity and urban and rural human settlements development during the 15th Five-Year Plan period

"New quality productivity" accurately captures Chinas future development trend and inevitable path. No matter from the perspective of scientific and technological innovation and reform or the efficiency of production factors, new quality productivity needs long-term unremitting exploration and efforts, follow the operation law of complex system, and make scientific decisions according to local conditions and current conditions. Recently, the new quality productive forces and urban and rural human settlements development in the domestic and foreign environment and development path are still very uncertain, but it is undeniable that the new quality productive forces and human settlements development still have some very certain "rules" for our reference.

On the whole, the scale of a city follows a certain superlinear law between factor allocation, input-output, and scientific and technological innovation (namely "power law"). Due to toughness, agglomeration effect, city (region), the higher the level, the higher the scientific and technological innovation and creative output, the faster resource allocation transformation, the lower the risk, therefore, in the "15" and even the longer future, city circle (or giant urban area) and urban agglomeration (or giant area) should be Chinas new quality productivity "infrastructure" and public resources, public policy priorities, especially the core of these areas.

Under the complex system features such as "emergence" and "dynamic adaptability", the autonomy of multiple market entities and local settlements; in history, technological and industrial changes are often "emerging" in some "unknown" areas, such as Manchester during the first industrial Revolution, such as Silicon Valley in the United States and Shenzhen in China.

Draw lessons from the ancient and modern Chinese and foreign whole national space layout experience (such as special economic zones and opening to the outside world experience and the "three line construction" project, national science and technology innovation city, etc.), foster strengths and circumvent weaknesses, play the socialist market economy, in the Tibetan plateau southwest dian region, each region, northwest region, northeast and Inner Mongolia in northeast Asia, facing the beibu gulf region of southeast Asia corresponding network and stronghold combining strategic and tactical deployment as a whole.

Planning leads to release the ten major effects of urban renewal to enable new quality and productivity

Wang Wei (Associate Professor, Director of the Department of Urban Management, School of

Government, Central University of Finance and Economics)

The city is undoubtedly the core stage for the incubation, cultivation, growth and development of new quality productive forces, providing a fertile soil for the prosperity of this innovative force. The action of urban renewal is not only a multi-dimensional and multi-level systematic reform, but also a new shaping of the value of urban development. Urban renewal and new quality productivity have a "new" natural fit, and can achieve the same frequency resonance. In this regard, the author believes that urban planners should take the initiative to plan and act actively, promote the two-way rush of urban renewal and new quality productivity through planning guidance, release the ten effects, and help Chinas cities transform and upgrade from the city in the traditional industrial era to the future city in the era of digital civilization.

1. Spatial upgrade effect. Through the renewal and optimization of urban spatial structure, function and quality, the digital and intelligent cutting-edge technologies and products are implanted into the traditional space, so as to realize the function enhancement and state improvement of "fitness" and "intelligence" of urban life, and provide solid factor support for the breeding and development of new quality productivity. The upgrading practice of space can be shown in the three dimensions of production, life and ecology. Make the production space into a high-tech incubator; transform the living space into an efficient paradise; improve the ecological space into a high-quality green space, and comprehensively improve the ecological livable quality.

2. Industrial field effect. As the core carrier of new quality productivity, emerging industries can make innovative planning and precise positioning according to regional characteristics, create a new quality space of "place + scene + field" for the development of emerging industries, and become the potential demand discovery, innovation scene generation and product integration application of emerging industries. System update specialized and intelligent building economy, industrial community, mass innovation space, high-quality park and other physical space; the system construction of digital twin virtual space, and urban planning and managers should learn to design, operate and manage in the virtual and real symbiotic environment, making the new industrial field full of creativity, innovation, entrepreneurship, creative atmosphere, hardware and software service and sustainable competitiveness.

3. Platform network effect. New quality productivity has faster diffusion, stronger penetration and better sustainability, and the release of these characteristics cannot be separated from the strong support of cutting-edge technologies such as wisdom cloud."On deepening the wisdom city development to promote the global digital transformation of urban guidance" clearly put forward to promote the city "digital update", multi-scale construction perfect the digital infrastructure, integrity reshape wisdom city technology architecture, systematic change city management process, integration to promote city depth fusion, which promote city information model, national spatial basic information, real 3 d China based platform function integration, coordinated development, application can assign, for urban digital transformation of unified space and time framework, will provide the traditional urban planning transformation break cocoon butterfly opportunities.

4. Factor coupling effect. By promoting the deep integration and collaborative innovation among the five factors of land, labor, capital, technology and data, urban renewal comprehensively improves the efficiency of factor collaborative allocation of new quality productivity. This is mainly reflected in three aspects: the close coupling of new space and new

industry, the effective connection between new technology and new market, and the comprehensive construction of the relationship between new object and new market. By optimizing the supply and layout of space resources, we can realize the efficient docking with the development of new industries, and create an innovative and dynamic environment for the industrial elements in the new quality productive forces. In the reform of land management system, optimization of industrial land supply, revitalization of stock land in a market-oriented way, and establishment and improvement of the unified construction land market in urban and rural areas, we should pay attention to the role of data elements, build new trading mechanisms, market rules and social relations, and build new production relations adapted to the new quality productive forces.

5. Cataptic cascade effect. Urban renewal strategically injects new elements, stimulate the internal interaction of the city like a catalyst, activate the sleeping resources of the city, so as to trigger the deeper cascade reform and breakthrough, and build a new driving force for urban development from the material and non-material levels. Material aspects, such as the construction or reconstruction of landmark buildings, the upgrading of urban infrastructure and the construction of creative space. At the non-material level, focusing on the shaping of spiritual and cultural space, by formulating forward-looking urban planning policies, strengthening the expression of urban culture, deeply excavating and actively spreading the unique cultural heritage of the city, using the opportunity of major events to enrich the connotation of new culture, shape the spirit of new quality citizens, and enhance the soft power of the city.

6. Customized long-tail effect. City is a service, the market advantage of Chinas super-large urban population provides a unique opportunity for the new quality productivity to achieve customized long tail effect.first, Urban renewal is committed to meeting the diverse needs of the people for a better life, By balancing the needs of people-oriented customization and standardization, Provide fine, personalized products and services, Promote the production and marketing cycle efficiency of new quality productivity; next, To build a new city of "unlimited scenes, unlimited services and no city of people", By continuously expanding the space-time boundary of product category supply, To achieve the seamless connection between market supply and consumer demand; last, Building an all-age-friendly urban service and consumption environment, Based on a deep understanding of the target population and the product, Innovate business models, Improve the consumption scene experience, Stimulate the new impetus for consumption.

7. Main body synergistic effect. The core goal of urban renewal is to build an efficient collaborative system composed of the guidance of the government, the spontaneous regulation of the market and the active participation of the citizens. First, focus on the cooperative cooperation between the government and the residents. Strengthen the interaction and integration of new quality productivity in social responsibility and environmental protection. Secondly, the coordination between the government and enterprises. The efficient coordination ability of the government is conducive to the reasonable allocation of public resources, while the innovative spirit of enterprises brings vitality to practice, and jointly promotes the deep integration of technology, capital and public service elements with new quality productivity. Finally, the coordination between residents and enterprises can realize the harmony and unity between workers, the objects of labor and the materials of labor, and promote the overall improvement of social productivity.

8. multiplier leverage effect. Urban renewal can be regarded as a lever fulcrum to leverage the development of new quality productive forces. By creating new space, upgrading new functions, introducing new technologies and serving new people to stimulate the multiplier effect of regional assets operation appreciation, enabling the construction of new quality productive forces. As the source of power, urban renewal leverages the development of new space, and uses high and new technology and careful spatial planning to enhance the carrying capacity of space and the potential of value creation. At the same time, the renewal will stimulate the vitality of the industry, innovate the traditional industries, expand the emerging industries, and cultivate the future industries, so as to improve the profitability of the industry. In addition, urban renewal also deeply excavates the characteristic needs of different groups, fully releases the consumption potential, and brings new vitality and vitality to the society.

9. Value fission effect. In the wave of digitalization, flow economy has become an important password for urban prosperity. Urban renewal should respect the law of flow economy and the value fission effect, and inject continuous flow power into the vigorous development of new quality productivity. First of all, with scientific and technological innovation as the core entry point, the refined demand for services and the continuous evolution of scientific and technological innovation ability will promote the continuous deepening and subdivision of urban industrial supply capacity. Secondly, fully explore and use the intrinsic value of human resources. The essence of the cultivation of new quality productivity depends on the cultivation of high-quality talents. Through continuous talent training and investment, urban renewal constantly stimulates the new power of industry innovation and development. Finally, unlock the liquidity and openness of the traffic operation mode, and jointly build an operation ecosystem with efficient value added.

10. Innovate the rainforest effect. The rainforests, with their complexity and comprehensiveness, are a model of the earths biodiversity. New quality productive forces place "innovation" at the core of their development, emphasizing the use of scientific and technological innovation to promote industrial innovation, especially the creation of new industries, new models and new driving forces through disruptive technologies and cutting-edge technologies. Urban renewal and enabling new quality productivity should draw on the ecological wisdom of the tropical rain forest, and make the city become an ecosystem full of innovative vitality and sustainability. Facing the decentralization of digital technology, distributed, fragmentation trend, to maintain continuous innovation, must create high quality in the city public, public relations and public space, broader, more depth to promote multiple subject across industries, across professional, interdisciplinary, cross culture, across time and space communication, collaboration, generated as the innovation of the rainforest ecological chain network, the high quality public force will become an important guarantee of a city new quality productivity. Innovative "public media", urban planners have innate advantages.

To sum up, in the long river of human history, "city" has become the greatest invention, and the "new" of urban renewal and the "new" of new quality productive forces echo each other, and will jointly write a new chapter of new urban development. We should firmly believe that as long as urban planners can uphold the learning belief and action ability of "getting new, getting new every day by day", they will always have an important place in the new situation, change, first situation, overall situation and dilemma of future urban development.

Treat cities as the "relations of production" for the development of new quality productive forces

Wang Fuhai (Chairman of Shenzhen Leo Planning and Design Consulting Co., Ltd., Executive Director of Urban Planning Society of China)

1. Positioning "relations of production" is a subjective choice for urban planning for the future

Since its origin, cities have occupied the position of the source of productive forces development and the agglomeration center of productive forces elements, and have been continuously consolidated in the long history. So far, it has become the most active, most advanced and most innovative region in the world. To some extent, urban size indicates the scale of productivity, and urban function reflects the level of productivity. But in the traditional economic theory, the city is more regarded as a production site and classified as the factors of production, resulting in China more than forty years of reform and opening up development, more accustomed to the city as derivatives of economic and social development, despise the urban development of social economic and cultural construction, and urban work has not really become the center of national governance. As a result, urban planning is naturally used as a technical productivity tool.

This writing topic —— "new quality productivity and urban planning", rarely opened up a new topic of understanding cities and planning from the perspective of productivity, triggered my interest in the city is more inclined to "productive forces" or "relations of production" thinking.

New marxist space production theory, points out that "space is not only the carrier of material and existence, more important is a process of social and cultural production", can be understood as the city is not only an important carrier of productivity factors, but also is the concentration of production relations, belong to the "productivity" and "production relations". This causes two kinds of scenarios: one is the continuation of the past habit, the city focus on "productivity" to understand, urban planning more tools for space production properties, in the context of "new quality productivity", urban planning through technological progress and system improvement to develop themselves, become a new quality productivity, not behind The Times. Second, the pioneering city focus on "production relations" to define, study how to adjust to improve production relations to adapt to and promote the development of new quality productivity, the mission of urban planning will cross out of its instrumental improvement category, thinking about new technology revolution, urban new stage and national new development "multiple superposition" under the condition of new pattern of urban development new task, open up a new era.

2. Adjusting the "relations of production" is an important achievement in the past practice of urban planning

In fact, in the elements of productivity (laborer, means of production, labor object), Chinas rapid urban development and western countries in modernism under the influence of urban expansion construction and no essential difference, really made more than forty years of urban construction development achievements and make the city become the important engine of Chinas modernization today, it is the production relations category of a series of innovation and change.

In the ownership of the means of production. Public ownership of land use right transfer system and the establishment of the system of "land finance" mechanism, greatly released the

land of the value of the most basic productivity elements, for the whole Chinese economic development has created a low-interest financing environment, to support the China in human history scale and speed of unprecedented urbanization process.

In the relationship between individuals in production. The height of the division of urban economy created a lot of jobs and rich public service products, greatly promoted the people the most active productivity elements of energy release and value realization, both for the industrial upgrading and development of science and technology provides a steady stream of human talent resources, also significantly improve the level of modernization of the national whole.

In terms of product distribution. The reform of the housing system enables workers and families entering cities to buy property and share the growth of social wealth through property appreciation, and to enjoy urban public services equally.

In the above process, although urban planning is often narrow as technical rational tool, but its nature and the space rights, the concept of human development, profit distribution of production relations category, affects each citys economic, social, cultural, political life, contribute to the outbreak of social productivity.

3. Renewal of "relations of production" is an urgent task for urban planning

Chinas urban planning and development has been achieved in the era of industrialization and urban construction in the past 40 years. There is no experience and little preparation for the era of urban operation that China has entered. "New quality" points out the direction of the future development of productive forces, and cities should update their corresponding production relations as soon as possible.

First, we should pay attention to the influence of the intelligent development of cities on the form of spatial organization. Smart city itself will become the most important development direction and application field of new quality productive forces. Revolutionary technologies such as telecommuting, network public services, intelligent transportation and low-altitude economy are constantly making breakthroughs and developing in cities, bringing disruptive changes to the economic and social organization and spatial mode. For example, breaking the time boundary of daily work and life, change the traditional central unit urban structure, and build a "twin city" that pays equal attention to material space and digital space. How to make more detailed and more complex segmentation and management of the rights and interests of the new urban space, and further promote the innovative allocation of production factors, requires urban planning to make a leading judgment again.

Second, it is necessary to highlight the influence of the diversified development of the city on the urban innovation activities."New quality productivity is innovation plays the leading role", and innovation is defined by Joseph Schumpeter as "building a new production function". Therefore, from the perspective of production relations, urban planning needs to devote itself to the research and design of a diversified soft and hard environment around the needs of innovators. It includes: cultivating fine particles, low cost and high concentration of flexible space to make innovation easier to occur, testing the market value of innovative products by trying to create rich, fresh and huge application scenarios, and introducing more spatial policies to support the market-oriented and bottom-up path of scientific and technological innovation.

Third, we should pay attention to the impact of inclusive urban development on the planning and management mode. The development of new quality productive forces objectively requires further release of the vitality of various production factors. In the transition period, it is

necessary to adopt a more inclusive attitude towards the new functional business forms and construction methods of cities, so as to make the management style of urban planning more "relaxed". At the same time, another major role of planning is still to adhere to the public interest, adhere to the development of healthy and regular urban economic and social structure, and must not expel the "old quality" for the "new quality", and maintain the temperature of the peoples city.

Cultivate new quality space force through planning and innovation

Wang Shifu (School of Architecture, South China University of Technology, Guangdong Provincial Research Center for Urban and Rural High Quality Development, Professor and doctoral supervisor)

New quality space force refers to the innovation force released in the reform of the space and its planning, production and use mode, driven by the new quality productivity. It is reflected in the innovation in the spatial dynamic change brought by the innovation of productivity, and is the embodiment and extension of the new quality productive forces at the spatial level. The new quality space force not only focuses on the optimization of physical space, but also reflects the innovation of planning as a productivity, which is a new dynamic mechanism to empower the Chinese urban and rural modernization.

1. Scientific and technological innovation enables the new quality of urban and rural planning

Marxism believes that the laborer, the means of labor and the object of labor constitute the three elements of the productive forces. As the core connotation of the new quality productivity, scientific and technological innovation will comprehensively improve and reform the urban and rural planning with the attribute of productivity.

New quality productivity will foster new planners, namely workers. Scientific and technological innovation can improve planners scientific literacy and innovation ability, make them master cutting-edge technology and advanced methods, and become the main force of new quality productive forces. New planners have rich expertise to drive the innovation of space production methods.

New quality productivity will change the planning of production tools and working methods. As a decisive factor in the means of labor, through new technologies, planners can more accurately conduct space perception, evaluation, simulation, design and management, better predict and respond to the needs of future development, improve the scientific and operational planning, and realize more efficient space utilization and urban and rural governance.

The new quality productivity will innovate the urban and rural space itself and realize the expansion of the space as the labor object of planners. Scientific and technological innovation has expanded the types and scope of labor objects. The application of virtual reality technology enables planning and design to be carried out in digital space, improving the visualization and interactivity of design; the application of quantum computing in the future expands the value connotation of urban and rural space and opens a huge imagination space for the new quality spatial planning.

2. Planning and innovative new ways of enabling space production

The traditional planning mode mainly focuses on the layout of physical space and the optimization of economic and social benefits. The planning innovation driven by new quality

productivity will pay more attention to the realization of multi-dimensional comprehensive reform and enable the production of new quality space.

The versatility and initiative of the space itself will be greatly enhanced. Through innovative planning and design, space become compound diversity, can meet the basic functional demand of production and living, also can serve the leisure, education, and disaster prevention, emergency purposes, space use way will be from passive demand to actively adapt to change, have the ability to cope with demand change.

The sustainability of green and low-carbon development in space development will become the norm. Through green building, low carbon city and other new technology innovation and application, ecological toughness, environmental friendly sustainable concept in the space development strategy and the specific industry construction standards get better practice, new quality space to reduce carbon emissions, improve the efficiency of resource utilization, enhance the ability to address climate change and natural disasters, also can promote the normalized green low carbon way of life.

The deposition of humanistic connotation in space production will be more organic. The digital recovery, virtual reality technology applied in the heritage protection and activation, can accurately identification and protection of cultural heritage, and the historical resources into modern urban life scene, local culture and historical context of cultural elements can organic fusion in the process of urban renewal, become an important place of cultural experience and community interaction.

The embeddability of intelligent control in space governance will be significantly improved. Through big data, Internet of things and artificial intelligence technology, intelligent control system can not only real-time perception of various environmental changes, can also predict the future trend through data analysis, dynamic regulation and preventive adjustment, more efficiently match space resources and social demand, significantly improve the efficiency and effect of urban governance.

3. Space innovation enables Chinese urban and rural modernization

In a very short period of time, Chinas urbanization has driven the largest rural population in human history to the urban migration. Almost all Chinese cities have achieved remarkable material growth and made remarkable economic achievements and social progress. With the mass migration of domestic population basically ending, high-quality urban life and high-quality rural revitalization are equal importance, which also opens the historic social practice of Chinese-style urban and rural modernization. Space innovation through the combination of scientific and technological progress and planning innovation, building with Chinese characteristics, meet the demand of peoples better life of modern urban and rural space, not only have efficient, intelligent urban and rural interconnected material infrastructure, also rich cultural connotation and harmonious urban and rural social interaction, gradually realize the efficient allocation of urban and rural resources and wisdom management. The development of new quality productivity will further promote the integration of urban and rural areas, information technology and future technology application between urban and rural information flow, material flow more smooth, the gap between urban and rural development gradually narrowed, urban and rural social production relations will be changed by more advanced productivity progress, to common prosperity of urban and rural integration.

In short, new quality productivity and Chinas urbanization has a profound interaction,

through science and technology can assign urban and rural planning, planning can assign space production, with space innovation foster strong new quality space force, promote the comprehensive change of space production mode, create matching new production relations, inject new vitality for urban and rural quality development, in order to achieve high quality of urban and rural modernization provide important new power.

Urban and rural planning discipline and new quality productivity

Wang LAN (Dean, distinguished Professor, School of Architecture and Urban Planning, Tongji University)

Urban and rural planning has always provided space resources support for the progress of human society and created space-based solutions for economic development. The new productivity is the iteration of the rapid development of science and technology and society, and the new innovation idea, new technological method and new organization as the core. This includes not only the emerging digital economy, artificial intelligence, the Internet of Things and other industries, as well as the transformation and upgrading of traditional industries driven by these technologies. Therefore, on the one hand, this means that urban and rural planning needs to provide space for new productivity, on the other hand, it means that new productivity may change the compilation, evaluation and implementation of urban and rural planning.

In terms of urban and rural planning providing space for new quality productive forces, urban and rural planning directly promotes the development of new quality productive forces, including production and living space, by optimizing spatial layout, improving infrastructure and creating a good innovation ecology, and infrastructure, and can promote the construction of innovation ecosystem. Production space is mainly a new space suitable for the development of innovative enterprises, including incubators, accelerators, innovation parks, etc. New quality productivity usually requires a flexible office and production space. For example, shared office space, creative workshops, and modular production workshops. These production spaces should have good variability and can be adjusted and transformed according to demand. In addition to these good working environments, there is also a need to attract high-quality talented people, such as quality educational, medical and cultural facilities accessible by walking or cycling, as well as a comfortable and healthy living environment. At the same time, urban and rural planning can support the provision and optimization of interconnected infrastructure, and high-speed Internet, Internet of Things facilities and intelligent transportation systems are the foundation for the development of new quality productive forces. These infrastructures can improve productivity and innovation capacity. Moreover, new quality productivity requires innovative ecosystems; urban and rural planning can be acilitated through mixed land use and third space (for both work and recreation)Universities, scientific research institutions, enterprises and public service facilities

In terms of new quality productivity enabling urban and rural planning, the digital transformation of urban and rural planning is always on the way. The use of big data and artificial intelligence technology can be and has successively improved the level of scientific and refined planning. For example, based on multi-source data such as mobile phone signaling, cycling data and POI, spatial analysis and digital twin technology can simulate and predict various scenarios of urban development, greatly improving the accuracy of decision-making. New quality productivity is also conducive to promoting the deep integration of urban and rural planning with other disciplines (such as economics, sociology, environmental science, etc.), forming a comprehensive

planning scheme, and better dealing with complex urban problems.

Finally, the development and promotion of urban and rural planning itself can also become a new quality of productivity. Through these changes and improvements, urban and rural planning can not only better support the development of new quality productive forces, but also become a new quality productive forces itself, and make greater contribution to the development of social economy. Urban and rural planning (the same as architecture and landscape architecture) has the characteristics of space, diversity and complexity, which is the integration of science and technology with art and humanities. We are committed to creating an ideal space for the human society. In my opinion, the key scientific issue of urban and rural planning is how to seek the optimal solution of multi-factor configuration, design and operation at various spatial scale under the constraints of complex conditions, so as to achieve more beautiful and sustainable human life (low-carbon, healthy and resilient). We need to strengthen the core of disciplines through interdisciplinary and artificial intelligence, which is to provide space-based solutions for the development of human society; this means that we focus on space, with sustainability and beauty as the value goal, to provide the optimal solution for development. New quality productivity will help the multi-modal problems in discipline information processing, solve the balance of multiple demands, and improve the rapid interaction between norms, functions and aesthetic innovation. We need to deeply understand and promote the coordinated development of new quality productivity and urban and rural planning,To provide a strong support for the high-quality development of urban and urban-rural integration