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East Asian Architecture in Globalization

Values, Inheritance and Dissemination

Springer

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ISBN 978-3-030-75936-0 ISBN 978-3-030-75937-7 (eBook)
https://doi.org/10.1007/978-3-030-75937-7

This Springer imprint is published by the registered company Springer Nature Switzerland AG
The registered company address is: Gewerbestrasse 11, 6330 Cham, Switzerland

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Configurative Urbanism:
The Forgotten Theory for Our Urban Future

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Abstract. Configurative Planning Process, a design method developed by Aldo van Eyck, belongs to the structuralist movement of Dutch architecture in the 1950s and 1960s. With Aldo van Eyck working as a theoretician and Piet Blom as a designer, both of them clearly realized the imperfections of modernist architecture and new cities. They were trying to design architectural structures based on the life of the vital community. They focused on the social and cultural aspects of urban environments. In this sense, their projects can provide us with great inspiration in our effort to design sustainable cities.

This article reviews the configurative design method and the possibilities for its application in current architectural and urban planning practice. In this point of view, the configurative design process is examined as an inspiration for dealing with some problems of rapid urbanization in China, but not only there.

Keywords: Society · Urban planning · Aldo van Eyck · Piet Blom · Inspiration · Development · Hutong · Beijing

1 Preface

Since the beginning of its economic reforms in 1978, China has faced a great amount of urbanization. New cities such as Shenzhen have been founded. Shanghai, Beijing, and other important cities have changed into global metropolises, and they have been rebuilt for that reason. Monotonous housing blocks based on Western modernist architectural theory have spread across the country. There was almost no reconstruction of old residential quarters during the past decades. Between 1978–1985, funds for repairs of old houses accounted for only 1.78% of the total investment on housing construction in Beijing. [1] It was expected that old residential buildings would sooner or later be cleared out to make way for new constructions which should represent a new, modern lifestyle.

At the same time, a massive criticism of modernist city planning took place in Western countries. The main reproach aimed at the oversimplification of the complex organism of cities, which does not fit in with the sense of community and traditional society. Before modernization, Beijing's society, with thousands of years of tradition, was based on strict rules of daily life. Extended families lived together around closed courtyards in *Siheyuan* houses. Jointly these houses created a neighborhood called a *Hutong*. It corresponds to the community sense of traditional Chinese society.

S. Xu et al. (Eds.): *East Asian Architecture in Globalization*, pp. 37–49, 2021.
https://doi.org/10.1007/978-3-030-75937-7_3

To do research in this field, first we have to ask the question: do the traditional urban forms have the capacity to accommodate the huge population of our current metropolises? There is important information for us to answer the question. "Until 1989, within the 62 km^2 of the inner city of Beijing, about 30% of the land was occupied by traditional buildings including courtyard houses which totaled about 11 million m^2, and housing 1.2 million people." [2] It means that the population density of the inner city of Beijing was 19350\km^2, which roughly corresponds to the situation and needs of most metropolises today. Traditional urban forms therefore have the potential to accommodate a large number of people. It depends only on the specific case of how we design the city. It is true that housing in the old town of Beijing mostly provides very low comfort but, as mentioned above, the reason is largely due to the lack of investments in repairs and reconstruction of the houses in the previous period, when the state owned all of the real estate (1950s–1980s). The result of this low investment in repairs and maintenance of the old quarters is that even the former residences of rich families from the Ming and Qing period were turned into ruins for demolition, which have been replaced by new "modern" buildings (Fig. 1).

2 Urban Layout Influenced by the Traditions of Chinese Society

The traditional Chinese society, its philosophy, medicine, culture, and so on, are based on the seeking of balance and harmony on different levels in life (the harmony of earth and heaven, the harmony of individual humans, the harmony of society and daily life). This is the key for understanding the Chinese culture. In the life of Chinese people, searching for harmony used to be a part of everyday life. A balance of society is meant not only in the context of the complex system of interpersonal relationships between humans but also amongst and with supernatural beings and other phenomena. Houses and cities were built to serve as a tool which helps us to reach this harmony. This was the rule for creating the urban layout. Achieving a balance in interpersonal relationships has always been considered the highest value in Chinese culture, and it is one of the deepest-rooted features of Chinese civilization, which is still alive within Chinese families.

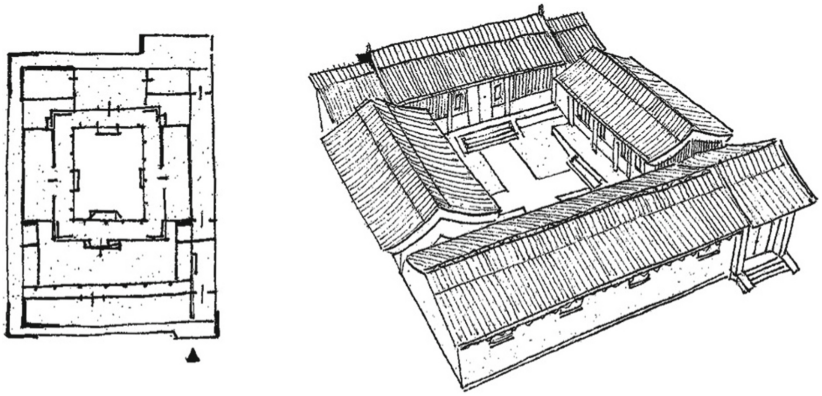

Fig. 1. Traditional house in Beijing; Image: Tatiana Uhríková (Brno University of Technology).

Modernist buildings in their rationality and practicality don't fit into the social aspects of Chinese culture. Big modernist projects usually bring feelings of great uniformity and anonymity that stand in contradiction to the classical Chinese lifestyle.

At the turn of the 80s and 90s, there was an architectural experiment to join modernization, local Beijing architecture, and Chinese culture—*Ju'er Hutong*. It was a project to renew an area of 82000 m^2 in old Beijing. Professors Wu Liangyong and Mao Qizhe led a design team based at Tsinghua University. The project aimed towards "reflecting modern spirit, traditional culture, and local characteristic" [3]. "The *Ju'er Hutong* project is an early and significant prototype of how an existing family model might be extended to encompass a new vocabulary. Professor Wu and his colleagues are seeking to translate traditional design concepts into a modern setting, thereby creating *hutong*-style neighborhoods with modern plumbing and facilities" [4].

Despite the fact that the *Ju'er Hutong* project was awarded with the World Habitat Award in 1993, its principles haven't yet been accepted and used on a wider scale in the urban development of Chinese cities. However the political authorities in the 90s adopted the propaganda of super-fast modernization (namely, the Western style of modernization, in which case the American and European life styles were widely accepted), and rational modernist architecture was one important iconic part of this propaganda. In his speech in 1992, Deng Xiaoping, one of the leaders of the Chinese communist party in the 80s and beginning of 90s, said: "The essence of socialism is the liberation and development of productive forces, the elimination of exploitation and polarization, and the final achievement of common prosperity. More planning or more marketing is not the substantial distinction between socialism and capitalism. Intensifying the pace of reform-and-opening-up, taking the opportunity to develop ourselves, and developing the economy are the key. Development is the absolute principle." [5] From this, we can see that the official propaganda clearly focused on promoting fast economic development. At the beginning of the 90s, it was too early for thinking of the Chinese traditions and special characteristics of local cities and their urban layout.

However later, after the year 2000, these questions were introduced into the general architectural discourse. The new generation of Chinese avant-garde architects such as Wang Shu, Liu Jiakun, Zhang Lei, Li Xiaodong, Ma Yansong, Zhang Ke, and many others, were highly fascinated by local topics of traditional architecture. They started to integrate traditional principles into their designs. The problem is that the masterpieces of Chinese avant-garde architecture are mostly exclusive and unique buildings such as schools, museums, libraries, hotels, spa resorts, tourist centers, shopping malls, and so on. Unfortunately, these tradition-inspired ideas are not usually used in large-scale, mass housing projects, so they have a low impact on the daily lives of ordinary people (Fig. 2).

Fig. 2. The evolution of urban typologies during the second half of the 20th century in China; Image: Radek Toman.

3 Configurative Urbanism as Inspiration

To rethink the pure rationality of modernist planning and development, we need to check the real basic foundations of its theoretical background. In the *Athens Charter*, written in 1933 and published by Le Corbusier in 1943, early modernist architects called city inhabitants "*typified humans*". A *typified human* doesn't mean a human, but it is an average summary of human characteristics. Le Corbusier said: "The city is planned to human scale. It puts us in touch with the infinite cosmos and nature. It provides us with places and buildings for all human activities by which the citizens can live a full and harmonious life. Here the radiance of nature and heart are within our reach" [6].

According to the European modernists, there are no cultural differences, so modern architecture should follow the same principles around the world and ignore local specifics. Later, these ideas were regarded as big mistakes, because local characteristics form the spaces for a specific society and transform that space according to the decisions of ordinary people. The problem is that the local culture influences our activities a lot. We can't say that all people around the world are the same, and that they have the same needs.

To improve the environment for housing of ordinary people today, our efforts should aim at designing housing forms which will combine both, the traditional and the modern

city. These urban forms should allow for a lifestyle corresponding to the 21st century, as well as the cultural and community aspects of society with its specific heritage and habits.

In this effort, paradoxically, we can also find great inspiration in European architecture. Since the beginning of the 50s, the criticism of modernist architecture was introduced into European architectural discourse. During this time, the Dutch architect Aldo van Eyck created his theory of Configurative Planning.

Aldo van Eyck took inspiration from contemporary writings of anthropologists. He was highly interested in Ruth Benedict's book *Patterns of Culture.* Under its influence, he studied the *pueblos* of American Indians or the traditional settlements of African tribes. He also conducted research in the archaic art of different cultures. He considered such heritage as equally important as the classical patrimony of Western culture. He developed the conviction that all cultures are equally valid and that Western civilization should not be regarded as the superior system it pretends to be.

According to his interpretation of *Patterns of Culture*, he created an opinion that each culture has its own unique spatial pattern, which corresponded to local habits, society, language, history, folk art, and so on. He called this pattern as a configurative layout of culture. Every sociocultural entity around the world should have its own configurative layout, which was developed during centuries and which fits into the daily life of the people and community. So, if we can unravel this unique spatial configuration, its features and principles, and if we keep up and respect this configuration in our design process, we can create urban structures that match the needs and social dispositions of local people, so that they can identify themselves with the city. It means that modern architecture (and modern cities) should be different around the world because they are based on different cultural backgrounds—different spatial configurations. When we see our current cities, we have to ask the question if it is correct to build similar buildings and cities everywhere around the world. To apply this theory into the current situation in Beijing, we can use the premise that the traditional layout of *hutongs* is the configurative layout of traditional Chinese culture. In that sense, this article can be considered as an experimental contemplation, or inspiration, showing one possible alternative way for the next redevelopment of Chinese cities that will combine history, the present and future of society and its architecture in a new creative manner.

The results of van Eyck's theory are based on the overlapping of private and public urban functions. To provide differentiated and more intimate spaces, the juxtaposition and concatenation of housing units intends to blur the boundaries between inner and outer spaces. It is essential that architecture accounts for the complexity of social groupings. Urban space should be conceived as collective domestic space. In that sense we can consider the city as a viable home containing a sense of communal harmony similar to the *hutongs* of Beijing, which have been in place for hundreds of years (Aldo van Eyck's projects and his sense for architecture have, surprisingly, a lot in common with traditional Chinese urban forms). The revision of the theory and works of van Eyck and his companions could be a useful guide for us to reflect on the future of our cities worldwide (Fig. 3).

Fig. 3. Traditional hutongs of Beijing, vs. the new modernist blocks of flats. Image: Google Earth.

4 Configurative Discipline

4.1 Twinphenomena

In 1962, van Eyck published in the Dutch magazine Forum his manifesto called *Steps Toward a Configurative Discipline*. He wrote: "I am again concerned with twinphenomena; with unity and diversity, part and whole, small and large, many and few, simplicity and complexity, change and constancy, order and chaos, individual and collective; with why they are ignobly halved and the halves hollowed out; why too they are withheld from opening the windows of the mind!" [7]

If we try to rethink the main aspects of traditional and modern urban structures we will surely come across the question of the relationship between interior and exterior (one of the twinphenomena). As we can see in the example of huge blocks of flats, large suburbs or skyscrapers situated in downtown areas, the modern city creates a fairly clear border between the interior and the outside. It can seem that the modern city in its effort for maximum hygiene and privacy has created some sort of simplifying duality—people live in flats that usually have no, or a very small, relationship to their outside surroundings. Housing has become increasingly anonymous, hidden behind the barriers of fences, blinds and curtains. For instance, Yoshiharu Tsukamoto (Atelier Bow-Wow) in the book *Tokyo Metabolizing* calls it the "spiral of intolerance". He states that: "Occupants close windows, draw curtains, and generally make sure that the inside of their house is completely hidden from view. At that point, the desired relationship between the balcony, the garden, and the interior is destroyed and the house ceases to be a vital place. Starting with the third generation of houses in particular, due to the popularization of air-conditioning, almost all behaviors were shut inside, and as a result, even when walking through a residential neighborhood, it is extremely rare to catch sight of a person's face or form" [8].

On the other hand, the traditional city is much more complex. Its space and functions are more interconnected, interwoven, and overlapped. The interior of houses is connected

to the exterior through a number of courtyards, atriums, verandas, terraces, narrow alleys, etc. These interspaces bring the daily life from an individual interior to a collective exterior. Being part of an urban community means identifying more easily with the city as a real home. Belonging to the community is as important as one's personal connection to a place. In a traditional city, shops or manufacturing spaces are usually located inside houses. There are large numbers of users who enter and leave them, so there is a completely normal contact between strangers (customers) and family members inside their home. In a traditional city, the border between the interior and exterior is much more blurred. There is a more gradual sequence of relationships between the individual, the family, the community and public space. This range is important for a colorful urban lifestyle.

In the 1950s, Aldo van Eyck became one of the most important persons of TEAM10, a group of progressive architects who realized and solved the imperfections of modernist city planning (under the *Athens Charter*), and they were trying to change the urban planning approach at that time. In 1956 van Eyck wrote: "We are not only breathing in, nor are we exclusively breathing out. This is why it would be so beneficial if the relation of interior space and exterior space, between individual and common space inside and outside, between the open and the closed (directed towards the inside and outside) could be the built mirror of human nature, so that man can identify with it. These are formal realities because they are mental realities. Moreover they are not polar but ambivalent realities. The dwelling and its extension into the exterior, the city and its extension into the interior, that's what we have to achieve" [9].

4.2 Vital City

In *Steps Toward a Configurative Discipline*, modern cities are described by the following words: "The amorphous and additive character of all New Towns—their heterogeneous monotony—is the immediate result of the complete absence of right-size. Those urban functions which were not forgotten were compartmentalized. the actual build elements were subsequently arranged academically according to a trivial infill habit, and the open space between them is so casually articulated and emptied of every civic meaning that they loom up like oversized objects, pitilessly hard and angular, in a void (what Candilis justly calls 'espace corridor'). Within the tyrannical periphery of such objects there is no room for emotions: nor is there any in the resulting emptiness between these objects. Emptiness has no room for anything but more emptiness. All urban ingredients curdle. All urban colors clash. Just planned wasteland" [7].

As mentioned in the beginning, this critique was related to the awareness of the crisis of modern cities and was part of a wider critical wave across the planning disciplines in the US and West Europe in the 50s and 60s (for example, just a year before, in 1961, Jane Jacobs published her critical book *The Death and Life of Great American Cities*). The main reservations lie in the fact that modernist approaches simplify the complex organism of the city too much and underestimate its social significance. Modernist urban typologies have been often built without any cultural and historical coherence in their context.

For a better understanding of this problem, Aldo Rossi introduced the term *urban artifact*. [10] The *urban artifact*, as defined by Rossi, is not only a building, but a

fragment of the city. It is all of its history, geography, structure and connection with the general public life of the city. Thus for Rossi, the differentiating factor would have to be its individuality which comes from its quality, uniqueness and definition. This individuality depends on its complex entity that developed over space and time, its historical richness, its certain original values and function that persist, and its sum of all experiences and memories included in the city [11].

Every city is in an actual phase of its evolution—it is therefore an ongoing, endless process. Each historical epoch adds a new unique layer onto the *urban artifact*. A vital city contains plenty of layers that originated in different periods of its historical development. New layers—new buildings—are not copies of old houses, but they respect the scale and structure of the previous layers. There is no way to totally clear one layer and replace it by another one. All the layers of a successful city have to be complementary to each other so that all layers work together as a whole entity. If we look at prosperous and popular cities such as Paris, London, Prague, Shanghai, Tokyo, we can find many layers, incredible diversity and spatial richness that all create one urban unity of an entire vital city.

For example, in the 1970s, architect Ivo Oberstein designed a large residential quarter in the suburb area of Prague. He described the process in these words: "We studied the other parts of the city to get the knowledge of how to design the spatial composition of new urban quarters. In the same scale as we drew our proposal, we redrew some of great Prague's urban spaces such as the Old Town Square, which we can call 'the living room of the city'. Then we used tracing paper to compare the character of Old Prague's public spaces and the attributes of the new housing estate. We put the tracing papers with the drawing of Prague's favorite squares across the sketch of our design proposal so in that way we controlled and corrected ourselves" [12][1] (I am wondering whether the current planners of Beijing also control and correct their designs in a similar fashion to be consistent with the scale and atmosphere of traditional urban forms).

4.3 Van Eyck's Configurative Planning

"Starting from the idea that 'a house must be like a small city if it's to be a real house, a city like a large house if it's to be a real city,' he proposed to evolve new cities based on a structural similarity of the successive urban scale levels, more specifically, to conceive urban components on the basis of a ground pattern susceptible of multiplying into a cluster of a similar pattern. These components would be formed in such a way that their identity does not disappear in the process of repetition but, on the contrary, is confirmed and enriched in the very shape of the cluster they compose" [9].

For this purpose van Eyck created what he called the *configurative discipline*. This design method aims to create a widely-varying range of functions and spaces of different scales in an urban environment, thus creating a spatially, socially and functionally diverse city. In this method the architect should create a basic, thoughtful spatial configuration based on a deep analysis of culture, society, morphology, etc. This configuration can be constantly repeated and multiplied. The housing unit often became the basic constitutive element of the configurative planning. As Herman Hertzberger said: "dwelling-unit is

[1] Translated by the author.

the ‘primary entity’, the ‘smallest complete building unit’ and basis of a configurative design process” [13]. In this sense, housing is not only a necessity but it also effectively shapes public community spaces. In this point of view we can see a metaphor for a society that is shaped by the number of individuals. There is an important premise that meaning can arise through, not from, form. Simple spatial archetypes are used to encourage the creative appropriation of domestic and urban spaces (Fig. 4).

Fig. 4. The configurative layout of Old Beijing. Image: Google Earth.

4.4 Projects by Piet Blom

“Architecture is more than creating a place to live,” stated Piet Blom, “you create a society” [14].

Aldo van Eyck taught Piet Blom during his first year at the Amsterdam Academy of Architecture. Blom’s projects are great examples of configurative planning. Later, when van Eyck became the editor of *Forum* magazine, he published several student works by Piet Blom there. In 1959, *Forum* magazine published Blom’s project from his second grade of study, called *Cities will be inhabited like villages*. The project deals with the proposal for a new residential district for 800 inhabitants on the outskirts of Amsterdam. The design is based on apartment buildings called *Bouwsteen*, each of which has 24 apartments of different disposition and size, with each apartment having a different entrance. This layout of residential buildings allows them to be composed into large clusters that contain intimate courtyards and semi-public collective spaces. It is also possible to arrange together entire neighborhoods and districts.

This proposal stands in sharp contrast to the monotonous apartment blocks filled by uniform flats which we can see in every contemporary city. In the project description Piet Blom wrote that his focus was to: “create a communal dwelling in which the dividing walls could be torn down so that men would be more complete in number and association. Forcibly, in order to bring home the fact that there is no dualism between individual and

collective existence. It means striving towards giving life a greater chance to express itself fully" [9] (Fig. 5).

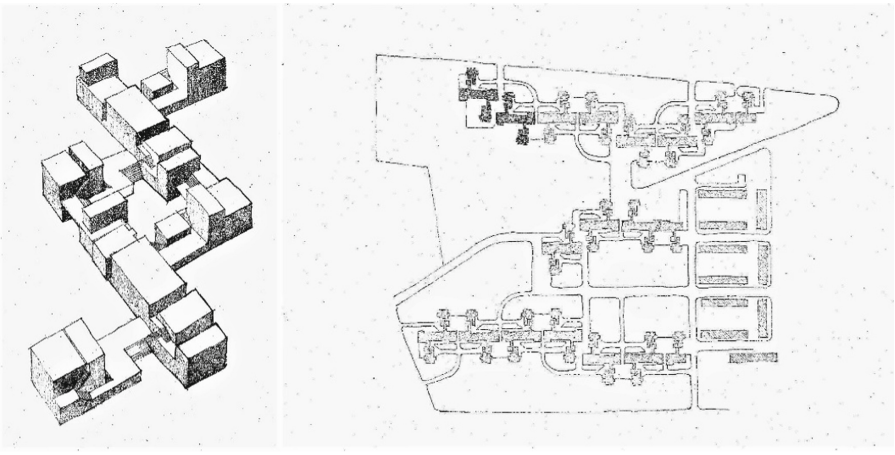

Fig. 5. Piet Blom's proposal for a repeatable housing cluster from "The towns will be inhabited like villages". Student project for the Amsterdam Academy of Architecture; axonometric perspective of the project's basic spatial configuration (left); scheme for repetitive urban composition (right). Image source: sketch by Radek Toman.

Another of Blom's projects presented in *Forum* magazine was the *Practical Planning Exercise*. This time the plan called for 500 residential units. In contrast to existing modernist structures, Blom designed modular units of adjacent flats and family houses around small compact courtyards. There are two high-rise houses situated in the diagonal corners of each courtyard. Different combinations and configurations of whole structures are possible in this solution again. Blom sought to encourage people to encounter each other; in both projects he searched for a colorful public life, and a lively community. He designed architectural elements such as open stairs, gates, narrow alleys, and courtyards into a sophisticated pattern to create a unique sequence of trails, pathways and public squares in a manner which allows for the meaningful use of these places. In order to provide a better environment for its inhabitants, Blom designed and linked individual units in novel ways, so that the boundaries between public and private, internal and external, have been blurred. In this approach, the configurative method means to create a highly-sophisticated spatial pattern, and then to accommodate the constitution of meaning into the built structural configuration. Blom commented later: "l hate the word dwelling, because it is directly associated with the idea of a roof over your head. Dwelling means also the neighborhood, the street, the communal facilities, the atmosphere of a quarter" [9].

In 1973, the construction of The Kasbah apartment building project in Hengelo, Netherland was completed. The project represents the main ideas of the configurative design method. "The Hengelo Kasbah is a kind of serialist ordered 'mat' of houses with red-tiled, pitched roofs that are raised off the ground. Because of this repetition of the

iconic individual brick house the project's 'image' is somewhere in between the then current mix of brutalism and structuralism, plus pop art and incipient postmodernism. It's still quite astonishing to see how it totally captured the mood of the day" [15]. There are a number of small atriums and other open spaces in the configurative pattern of the Hengelo project. The houses partially sit on pillars; it makes the free moving of pedestrians through the site possible. The result is the pleasant atmosphere of a residential quarter, similar to the atmosphere of traditional towns. The project seeks to find new possibilities to join traditional and modernist approaches to create a vital, built environment and to show alternatives for the suburbs of our cities (Fig. 6).

Fig. 6. Aerial view of Piet Blom's project De Kasbah housing in Hengelo. Image: Wikimedia Commons: https://commons.wikimedia.org/wiki/File:De_Kasbah,_Hengelo_(6921528471).jpg

5 Conclusion

Configurative urbanism aims to restore social integrity into the urban environment. In this aim and in its investigative nature and vitality, configurative planning provides us with great inspiration and shows us possible solutions for urban structures of the 21st century. The topic of urbanization is now a complex matter observed by many fields of science. Its complexity means that the knowledge of many science fields has to be engaged and implemented through cross-disciplinary approaches. Since our urban world has become characterized by change, uncertainty, ambiguity, and an increasingly high degree of complexity, more than ever we need to understand real-world problems and orientate

ourselves in them through our truly holistic sense of understanding. Aldo van Eyck's and Piet Blom's view on architecture and planning moved across different research fields, truly showing their ability to think outside the box, which is a really important skill for current planners when dealing with today's urban challenges.

Current cities are under the pressure of rapid population and globalization; furthermore, they face the problems of losing their local culture and uniqueness. The task for the 21st century will be to focus on the social sustainability of our cities. According to UN HABITAT, the urban population was 7.349 billion in 2015. There is a premise that the urban population will reach 8.5 billion in 2030. So it means that the population growth of urban inhabitants might be 1.151 billion in just 15 years [16]. This rapid population growth means something we have never faced before. In 1903, when Letchworth, the first English garden city, was built, the population was just 1.65 billion. In 1924, when Le Corbusier introduced his Ville Radieuse, the population was still less than 2 billion. Even now we continue studying these urban theories at our universities, but since then the conditions on the planet have changed. Today we should look for an urban theory which will serve the needs of a population of almost 10 billion. During subsequent years, it will be our big challenge. Unfortunately, due to its schematic nature and considerable formality, the configurative design strategy itself will not solve these problems. But it can move our thinking about the city to another level.

According to my experience of two years of living in China, in my opinion, it is highly needed for Chinese architects and planners to focus more on housing and the lives of ordinary local people. The ideas and theory of configurative planning, which join architecture, urbanism, culture, sociology, anthropology and other research fields into one discipline, could bring many new impulses and inspiration into the architectural discourse in China, where the revision of commonly-used planning methods is absolutely needed. I hope that young, open-minded Chinese architects will successfully make this revision and introduce a new theory for the unique urban development of Chinese cities in the near future.

References

1. Zhu, Y.: Urban housing renovation in China. Master thesis, MIT, Department of Architecture and Urban Planning (1986)
2. Zheng, L.: Urban renewal in Beijing, observation and analysis. Master thesis, McGill University Montreal (1995)
3. Wu, L.: Rehabilitating the Old City of Beijing. University of British Columbia Press, Vancouver (1999)
4. Heikkila, E.: Beijing: lost in translation? J. Archit. Plan. Res. **28**(1), 76–90 (2011)
5. Chinadaily (2011) Jan 18—Feb 21,1992: Deng Xiaoping visits 4 cities, and delivers important speeches. https://www.chinadaily.com.cn/china/19thcpcnationalcongress/2011-03/25/content_29715131.htm. Accessed 25 Feb 2020
6. Kolíbal, S.: Le Corbusier: Kdysi a Potom. Arbor Vitae, Prague (2003)
7. Van Eyck, A.: Steps toward a configurative discipline. Forum **3**, 81–94 (1962)
8. Kitayama, K., Tsukamoto, Y., Nishizawa, R.: Tokyo Metabolizing. Gardencity, Tokyo (2014)
9. Jaschke, K.: City is house and house is city, Aldo van Eyck, Piet Blom and the architecture of homecoming. In: Di Palma, V., Periton, D., Lathouri, M. (eds.) Intimate Metropolis, Urban Subjects in the Modern City. Routledqe, London and New York (2008)

10. Rossi, A.: The Architecture of the City. MIT Press, Cambridge (1982)
11. Lee, C. (ed.): Common Frameworks: Rethinking the Developmental City in China. Harvard Graduate School of Design, Cambridge (2012)
12. Oberstein, I.: Život na sídlišti. In: Jirkalová, K., Novotná, E., Steinbachová, M. (eds.) Matadoři/junioři, texty o architektuře 2006–2009. Kruh, Prague (2010)
13. Strauven, F.: Aldo van Eyck – shaping the new reality from the in-between to the aesthetics of number. Paper presented at the CAA Mellon Lectures, Paul Desmarais Theatre, 24 May 2007 (2007)
14. PENCCIL (n/a). http://www.penccil.com/gallery.php?show=8767&p=790997085710. Accessed 21 Nov 2018
15. van den Heuvel, D.: Piet blom's domesticated superstructures. DASH (Delft Archit. Stud. Housing) **5**, 31–38 (2011)
16. United Nations (2015) World Population Prospects: Key findings & advance tables (2015). https://esa.un.org/Unpd/wpp/Publications/Files/Key_Findings_WPP_2015.pdf. Accessed 12 Apr 2017

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S. Xu et al. (Eds.): *East Asian Architecture in Globalization*, pp. 613–614, 2021.
https://doi.org/10.1007/978-3-030-75937-7