

# Co-build City “SMILE PLACE”- The History and Future of Urban Furniture

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## Abstract

Urban furniture, as an element of the city, is closely related to the development of the city. The nature, type, function and form of urban public space change with the development of The Times. The nature, type, function and form of urban furniture also change accordingly. Urban furniture gradually develops from monomer to group, from group to subsystem, and then from subsystem to the large-scale system, which has become an indispensable component and element in the urban system. As an important component of the urban public system, the importance of urban furniture is being gradually amplified, and the systematic construction of urban furniture has become a trend. Its construction level is closely related to urban environmental quality, urban culture, urban brand construction and urban sustainable development. Through the construction of the urban furniture system, the urban space will become a "SMILE PLACE"— Subtle, Maintained, Integrated, Lively and Enjoyable.

**Keywords:** urban furniture, urban space, smile place

If the city is compared to "home", the urban public space is the living room of the city, while urban furniture is all kinds of furniture-street lamps, seats, garbage bins, bus shelters, road signs, public works of art, etc. (Bao, Song, Wang, & Yang, 2019), is a general term for all kinds of facilities that are set in urban public spaces such as streets, squares and green spaces to provide services for people. The history of urban furniture exists with the development of the city, and the types and functions of urban furniture also change with the development of urban public space.

The development of cities is closely related to the development of politics, economy and science and technology. It has experienced ancient cities dominated by agriculture and handicraft industry, early modern cities dominated by industry, and modern cities dominated by computer and information age. Urban furniture, as an element of the city, is closely related to the development of the city. Urban economic, political, scientific and technological development determines the characteristics and form of the city, determines the nature, type, function and form of urban public space, and also determines the nature, type, function and form of urban furniture.

The development history of urban furniture is also the development history of urban public space. The change of its service object and function reflects the change of urban development concept. Urban furniture has gradually developed from monomer to system, which has become an indispensable component and element in the urban.

## 1. Urban Furniture in the Ancient Cities

Through the excavation of the Pompeii site, people found that the ancient city of Pompeii almost had the most complete urban elements at that time: market, temple, theater, park, library, commercial street, school, villa and so on, which undoubtedly showed the diversity and richness of Pompeii as a classical city (Banks, 2019). From the above remains, we can know that Pompeii people love public life, which promotes the appearance of primitive forms of urban infrastructure such as public toilets, parks, public baths and so on. Drinking water facilities (Figure 1), roadblocks, signs, sculptures and other classical urban furniture are widely used in Pompeii to meet the living needs of Pompeii citizens.

Although ancient cities have made great achievements and built a large number of urban facilities, they have not formed a modern urban system in the true sense. Most of them are unitary or pluralistic urban forms such as administrative centers, religious centers, military centers, handicraft centers, etc., which leads to cities serving the ruling class, and the construction of urban space has strong political and military attributes. At this time, most

of the facilities in urban furniture served the political and commercial life at that time, such as gatehouses, urban sculptures and fountains in the west, archways, archways and horse pegs in the east, etc.



Figure 1. Drinking water facilities in Pompeii Site

After the 10<sup>th</sup> century, with the prosperity of the handicraft industry, a small number of urban economies emerged, which led to the prosperity and development of cities such as Venice, Florence, and Milan. The appearance of the city changed with the development of commerce. Urban form and layout make full use of natural conditions, mostly naturalistic non-intervention planning, resulting in a rich and varied medieval town. Urban furniture in different cities has regional characteristics to meet local needs.

Until the rise of the Renaissance, the ancient Greek and Roman architectural style, urban facilities, and urban secular architecture began to revive, together with religious architecture became the new city center. Renaissance urban planning emphasized the subjective initiative of human beings and pursued the "ideal form" of cities (Figure 2).



Figure 2. The Ideal City - Urbino (1480-1490?) (Francesca)

In the 17<sup>th</sup> century, France under Louis XIV carried out the "urban renewal" of Paris. He rebuilt neighborhoods, ancient buildings, bridges, squares and numerous city sculptures. He ordered the removal of the fortifications protecting Paris and the construction of "boulevards" with sidewalks. On a day in late 1667, the first oil lamp was lit on the dark streets of Paris. Then, some 3,000 lights lit up the Paris night. From then on, the night was filled with songs and laughter, something like a bonfire in a Stone Age woodland, and the Paris street lamp banished the darkness (DeJean, 2017). Nobles from all over Europe competed to visit and consume in Paris, bringing the urban flavor of Paris to all parts of Europe. With the rise of urban public life in Europe, urban public space has been revitalized and reconstructed.

## 2. Urban Furniture in Early Modern Cities

In the 1760s, the Industrial Revolution arose in Britain. With the rapid development of the economy, modern cities arose. Along with the Industrial Revolution, the form of cities changed greatly with the establishment of many factories and the rapid gathering of urban residents, which led to a huge change in the industry and function of cities. The urbanization rate in Europe developed rapidly during this period. The role and demand of urban public space are more urgent. Cities have been more artificial and functional planning, more and more streets, parks, squares and a series of urban spaces have been established, the rapid expansion of the city.

After the rise of modern cities, urban furniture in the modern sense was gradually popularized. Street lamps, public seats, newsstands, traffic lights, postal facilities, public transport-related facilities and other urban furniture gradually appear and form a system.

As the area where the industrial revolution in Europe first took place, deeply influenced by the industrial revolution, the promotion of science and technology and the outbreak of productivity promoted the germination of modern design thoughts. A large number of industrial products are rapidly produced, and the era of design standardization and industrialization is coming, which further promotes the development and rapid popularization of urban furniture. Developed cities in Europe have gradually established the urban furniture system in line with industrial civilization, and many classic urban furniture products and examples have emerged. These products have become important components and elements of cities, providing functions and symbols of urban development level.



Figure 3. The sights of Paris around 1870 (Caillebotte, 1877)

The most famous case is the great transformation of Paris in the 19<sup>th</sup> century. From 1853 to 1871, Baron Haussmann carried out a great renovation of the cities and streets of Paris. He demolished 60% of the old medieval buildings, built straight, neat and spacious streets, and numerous sculptures, monuments, green spaces, parks and squares, standardized the architectural form, and planted trees on both sides of the avenue to become the boulevard (Figure 3). It can be said that, under the leadership of Osman, the urban public facilities system was gradually established, and the citizens' multiple needs for leisure, entertainment, memorial and landscape from private space to public space were constructed. The city was redefined. Osman also paid attention to microcosmic detail, and commissioned well-known designers to build a systematic urban furniture system

including street lamps, poster kiosks, chairs, drinking fountains, poster kiosks, public toilets and even manhole covers (Figure 4). Perhaps in Haussmann's eyes, countless families in Paris have indoor "small homes", while the outdoor space is the real "home" of the city.

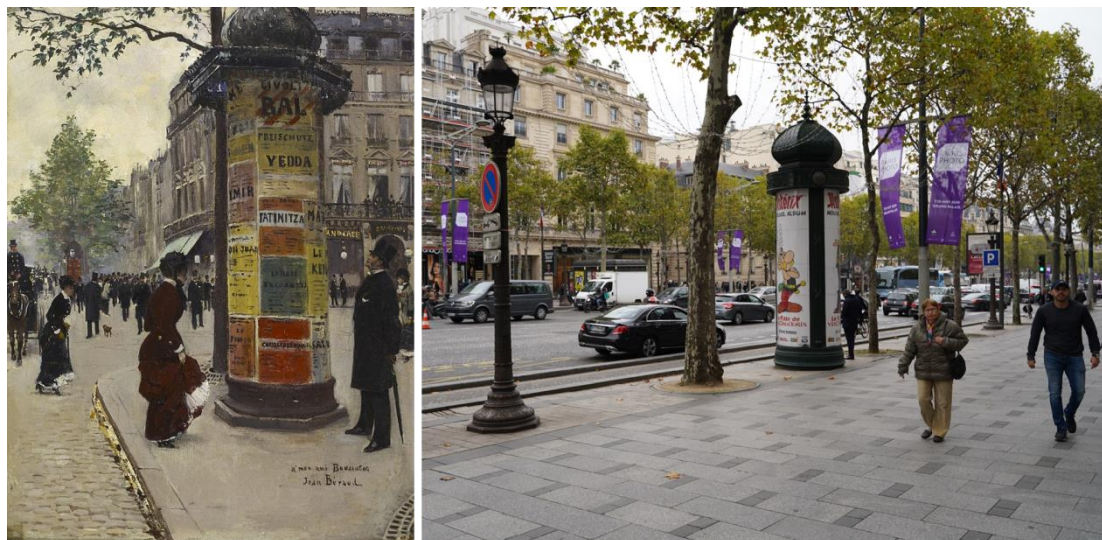


Figure 4. Paintings in the 1880s (B éraud, 1880-1884) and urban furniture on the Champs Elys ées in Paris in 2019  
The success of the great transformation of Paris has attracted the attention of the world and triggered the worldwide reference and imitation of Paris's urban construction achievements. Urban furniture was nurtured and developed rapidly in this period.

### 3. Urban Furniture in Modern Cities

After the Second World War, a large number of cities in countries participating in the war were destroyed, and post-war reconstruction became an important historical proposition. With the rapid development of science and technology after the war, productivity has been greatly improved, and the economy has been rapidly restored and developed, urban construction has developed rapidly. The concept of urban furniture rises and develops in the process of urban renewal and revitalization. The term "Street furniture" appeared in Britain in the 1960s.

After the 1970s, humanism thought rose again, and people gradually realized that urban open spaces should adapt to the humanized development of human behavior and emotion. With the rise of commercial pedestrian streets in cities, the functions of urban public space have been redefined, deriving more diversified functions such as rest, sports and social public activities. As people gradually realize the important role of urban public space, urban infrastructure develops accordingly. This also promoted the modern development of urban furniture. Professional urban furniture enterprises began to emerge one after another, providing professional urban furniture design, construction and operation services for the city (Figure 5).



Figure 5. Urban furniture products of JCDecaux (JCDecaux, 1973)

With the rapid urbanization, urban disease follows. People began to seek solutions to urban diseases, urban furniture is one of them. Western developed countries began to upgrade urban furniture in the 1980s, and the urban furniture system has been gradually improved and developed. With a large number of the new town, new

district construction and urban renewal actions, systematic urban furniture construction has appeared all over the world.

#### **4. Urban Furniture in the 21<sup>st</sup> Century**

With the revolution of information technology and the rapid development of the Internet and Internet of Things, social productivity has been greatly improved, economic structure and industrial system have been greatly changed, and many new industries and concepts have emerged. Cities are facing new transformations. What kind of city do people need? What kind of urban public living environment and urban services are needed? How do realize the fair and healthy development of cities? Such as Smart cities, green cities and resilient cities, a series of problems have become important urban issues.

##### *4.1 The Rise of Urban Public Space Research Has Promoted the Systematic Development of Urban Furniture*

At the beginning of the 21<sup>st</sup> century, Danish architect Jan Gehl put forward how people use public spaces such as streets, squares and parks, and discussed how to support social communication and public life. He put forward three types of outdoor necessary activities, autonomous activities and social activities, and proposed following the law of people's activities, building slow traffic, comprehensive and multi-dimensional space functions, and dividing spatial scale levels. Many cities have carried out systematic research on the environmental function, constituent elements, economic development and sustainability, and environmental beauty of public space from the perspective of integrity. Urban public space and public life have become important components of urban value, and systematic research and construction in urban furniture have become popular.

##### *4.2 The Rise of Urban Street Design Guidelines Has Standardized the Development of the Urban Furniture System*

In 2004, Ken Livingstone, the then-mayor of London, made "Towards a Better City for People" the core part of his campaign for the second term. This research influenced the way planners, politicians and citizens think and talk about London as a place where people live. With this as a guide, a series of strategies such as "STREETSCAPE GUIDANCE" and "Improving Walkability" were promoted (Architects, 2003).

Many major cities in the United States have also compiled their guidelines for urban street design, such as Seattle (2005), New York (2009) and Los Angeles (2008 and 2011). The American Urban Transportation Association published the Urban Street Design Guide in 2013.

Many world-class cities have issued a series of standards, such as their street design guidelines, to change the cities with systematic ideas. The rise of design guidelines has regulated the development of urban furniture, and at the same time stipulated the contents covered by the urban furniture system. Each guideline has made basic requirements for the location, types and functions of all kinds of urban furniture, and some guidelines have made guidelines for the intensive and modular setting of urban furniture. The quality requirements of urban furniture are improved with the improvement of street design quality.

##### *4.3 Smart City Promotes the Innovation and Development of Urban Furniture System*

Urban operation plays a dominant role in the development of human civilization, and cities are regarded as organic living bodies because of their internal operation (Organized by National Pulse Research Institute, 2017). With the deep development of the Internet and Internet of Things, artificial intelligence, big data and blockchain technology have been widely used, which has promoted the evolution and progress of urban life, and "smart city" came into being. Intensification, combination and informatization have become important issues in urban furniture. Urban furniture is no longer just the carrier of the function, culture and art of the entity. Through network twinning, big data processing, platform construction or integration, the urban furniture system has been injected with "thoughts and wisdom" and has become an important infrastructure and service port in the construction of smart cities.

#### **5. Building "SMILE PLACE" by Urban Furniture System**

As an open system, the urban furniture system is dynamically innovated with economic and social development, scientific and technological progress, and development concept renewal. Since the 21<sup>st</sup> century, with the new trends of sustainable development and green and low-carbon new concepts, information technology and smart city construction, diversified city construction needs and other new trends, as well as the global epidemic, the transformation of human urban lifestyle have been promoted. Health has become a hot topic in urban design systems. The urban structure and development mode has undergone great changes. The urban public space is more diversified than ever before, and the need for humanization is more urgent. "From Space to Place" has become a widespread issue in the world of urban design. As a medium linking people and urban public Space,

urban furniture is an important carrier for the transformation of public space into a human living place. Urban public space is a limited space, which needs to meet different application scenarios, resulting in an overload of types and quantity of urban furniture, seriously affecting the urban landscape, but also reducing the urban efficiency and service experience of the urban furniture system. With more diversified urban development needs, the role of urban public space is expanding. The planning of a "15-minute metropolitan area" has sprung up infamous cities all over the world, putting forward more extensive demands and suggestions on the use of urban public space (Figure 6). Within a 15-minute walk, it is equipped with functions such as working, shopping, learning, walking and rest, community parks, amusement facilities, facilities for the elderly and so on. Multi-function and multi-scene are becoming the goal of urban public space construction. "Pocket parks" and other functional urban "micro" public Spaces have been developed and utilized.

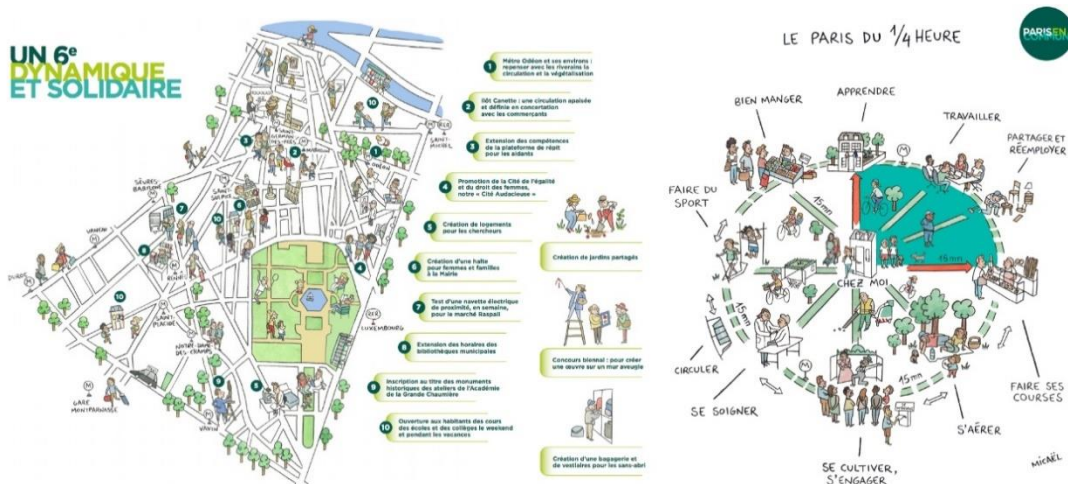


Figure 6. Paris 15-minute metropolitan area Plan (Paris en commun, 2020)

Facing the great changes of the city, urban furniture designers must design urban furniture with innovative thinking, to adapt to the new urban scene and lifestyle. At the same time, the urban furniture system platform is constructed to realize the interconnection, coordination and sharing of various types of urban furniture through the design of smart city furniture, to realize the systematic management, application and service of urban furniture and give full play to its maximum system value. Through the systematic construction of urban furniture, optimizing the allocation of urban resources has become an important option for future cities.

The road of urban development should perfectly grasp the two elements of power and harmony, successfully balance the social participants and social components such as history and modernity, young people and old people, scholars and craftsmen, economic and technological research, technology and art, and balance urban space and human space. Let people enjoy life in urban space. Through the construction of the urban furniture system, the urban space will become a "SMILE PLACE"(Figure 7).

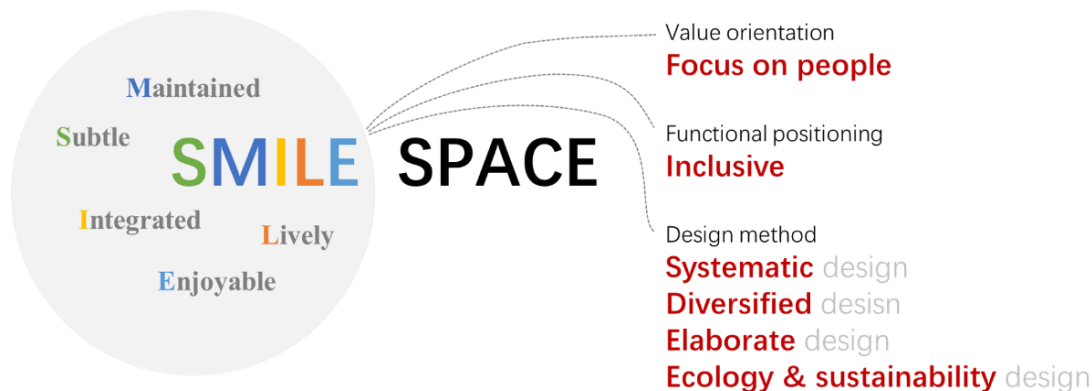


Figure 7. SMILE PLACE

"SMILE PLACE" consists of five words: Subtle, Maintained, Integrated, Lively and Enjoyable. There are three main meanings: 1. People-oriented in value orientation; 2. Emphasize inclusiveness in functional orientation; 3. In terms of design methods, pay attention to the systematic design, diversified design, refined design and

ecological-sustainable design. SMILE PLACE may be an important way to meet people's demand for public space, urban furniture is an important part of it.

## 6. Conclusion

Urban furniture gradually develops from monomer to group, from group to subsystem, and then from subsystem to the large-scale system, which has become an indispensable component and element in the urban system.

Throughout the development history of urban furniture in the world, the emergence and development of urban furniture include the following four thoughts:

- 1) Organic composition of urban homes;
- 2) More diversified functional requirements;
- 3) Higher quality aesthetic requirements;
- 4) The sense of belonging and affinity to urban culture.

Urban furniture evolved with the development of the city, and its type, connotation, form and quantity are matched with the different needs of the urban development stage.

As an important component of the urban public system, the importance of urban furniture is being gradually amplified, and the systematic construction of urban furniture has become a trend. Its construction level is closely related to urban environmental quality, urban culture, urban brand construction and urban sustainable development.

Systematic construction of urban furniture is an important way to construct "SMILE PLACE".

## References

- Architects, J. G. (2003). *Towards people's beautiful city*. Retrieved from <https://gehlpeople.com/story/>
- Banks, S. (Translated by Li Guoqiang). (2019). *Lost Cities* (Chinese Edition). Beijing: China Pictorial Publishing House.
- Bao, S. D., Song, S. D., Wang, Y. M., & Yang, M. (2019). *Urban Furniture Construction Guide*. Beijing: China Architecture Publishing & Media Co., Ltd.
- B éraud, J. (1880-1884). *Paris Kiosk*. Retrieved from <https://art.thewalters.org/detail/27564/paris-kiosk/>
- Caillebotte, G. (1877). *Paris Street; Rainy Day*. Retrieved from [https://en.wikipedia.org/wiki/Paris\\_Street;\\_Rainy\\_Day](https://en.wikipedia.org/wiki/Paris_Street;_Rainy_Day)
- DeJean, J. (Translated by Zhao Jinsheng). (2017). *How Paris Became Paris: The Invention of the Modern City* (Chinese Edition, p. 154). Beijing: Yilin Publishing House.
- Francesca, P. d. (1480-1490?). *The Ideal City - Urbino*. Retrieved from <http://www.gallerianazionalemarche.it/en/the-museum/>
- JCDecaux. (1973). *Urban furniture products*. Retrieved from <https://www.jcdecaux.com/fr/le-groupe/notre-histoire>
- Organized by National Pulse Research Institute. (2017). *Smart City: People-oriented Urban Planning and Design* (p. 10). Beijing: China Machine Press.
- Paris en commun. (2020). *Paris 15-minute metropolitan area Plan*. Retrieved from <https://www.groupepec.paris/2021/06/01/communication-le-paris-du-quart-dheure-big-bang-de-la-proximite-a-paris/>

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