

Study on the Adaptive Utilization of Urban and Architectural Heritages under Urban Renewal from a Human-oriented Point of View

-- Taking York and Pingyao as Examples

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Abstract: How to protect the urban and architectural heritages from being damaged and how to utilize and develop these heritages to satisfy the demand of people against the background of rapid economic and social development are two significant subjects in urgent need of solution. Taking Pingyao and York as examples, this paper studies the utilization of urban and architectural heritages under urban renewal from a human-oriented point of view.

First of all, on the basis of the humanistic theory, urban renewal theory, urban and architectural heritage protection theory, this paper adopts the method of document research and theory deduction, to provide solutions for the protection of urban and architectural heritages under city renewal from the perspective of cognition.

Secondly, by applying the comparative study and empirical study to compare and study the protection and utilization of urban and architectural heritages on national level, urban level (Pingyao and York), and on specific instances (the South Avenue of Pingyao and the Shambles of York) of Britain and China, this paper analyses and concludes different architectural utilization methods under different environments that are applicable to the development demand of human, so as to provide instruction and guidance for the protection and utilization of urban and architectural heritages.

1. Background

With the rapid growth of our economy and the vigorous promotion of urbanization process, the ecological environment of architectural and urban heritages have been subjected to severe threats, especially in the process of urban renewal. Under the banner of “Transformation of the Old City” and for the purpose of maximizing economic returns, some cities have invented the “crew-cut” demolition strategy to blindly build new high-rise buildings in the old city, as a result of which both cultural heritages and historic environments have been severely damaged. 1 In face of these circumstances, what we can do, besides feeling the unavoidable pains, is to reflect in depth on the roots of these problems. To fundamentally address these problems, the first step is to employ the dialectical thought to clarify the important role of the protection and succession of architectural and urban heritages in promoting urban, social and economic development (why protecting architectural and urban heritages?). RUAN Yisan et al. (2003) hold that “The historic heritages of a city constitute its precious wealth and strategic resources, and a rational and effective use of these historic heritages on a long-term basis is of significant importance for achieving the sustainable development of the city.” ZHANG Song (2005) believes that “Protecting historic environments does not mean that we freeze historic buildings and protect them like museums; instead, such protection should constitute an important strategic part of urban development. Besides protecting cultural relics and historic sites as well as historic streets, it is also supposed to integrate the positive factors of urban economy and social culture to become a deep control force of social development.”2 CAO Changzhi (2012) claims that, “The basic attributes of historic and cities include not only the authenticity of historic heritages, but also the succession of historic contexts and the dynamics of conservation patterns. Each historic

city itself is a social space and a dynamic survival environment, and must be developed under protection and protected through development.”³ The second step to be taken is to properly deal with the relations between protecting and using architectural and urban heritages (how to protect architectural and urban heritages?). Some scholars propose that “Adaptive reuse provides the best protection of existing buildings (HE Jing, 2004)⁴; Professor CAO Changzhi, based on his theoretical study of the intrinsic attributes and characteristics of historic cities and the laws of their protection and development, believes that the critical conjunction point of the success of the renewal of historic cities lies in rationally using architectural and urban heritages, and he has preliminarily generalized and abstracted several patterns of protecting and using architectural and urban heritages. Each of these patterns emphasizes different aspects in terms of protection objects and protection methods, and their applicability and theoretical basis still need to be discussed in depth. Then, have they embodied the inherent laws of urban development? Do they have any universal relevance in urban renewal? How should we select a proper pattern of rationally using architectural and urban heritages? Questions like these will become the points of penetration for further studying how to achieve a harmonious win-win situation between the protection of architectural and urban heritages and the development of cities and societies at large.

2 Theoretical basis

2.1 Ideological basis of people orientation

According to great American philosopher Frome, “The so-called humanism means that each person embodies all the humanities, thus each person has all that the mankind has.”⁵ Fundamentally speaking, “Humanism means that human is the measure of all things, and that the comprehensive development of the mankind is the goal and criterion of all social efforts.”⁶ For Marx and Engels, the history of social development is the history of the purposeful activities of the mankind. They think that the objective regularity of the development of human society can not be separated from the analysis of the purposiveness of the mankind. On that account, the present paper attempts to explore the purposes of both the renewal of cities and the protection of architectural and urban heritages from the perspective of “human development”.

2.2 Maslow's Hierarchy of Needs

Maslow holds that the inner strength of individual growth and development is the motivation constituted by various needs of different natures, that these needs follow a an order of priority and a hierarchy, and that the needs at various layers and their satisfaction will determine the realm or degree of individual personality development. In *Maslow's Hierarchy of Needs*, he divides human needs into five layers according to their order of priority from low to high: (1) physiological need, (2) security need, (3) social need, (4) need of self-esteem, and (5) need of self-actualization, among which the former three are needs of lower layers and the latter two are needs of higher layers.

2.3 Practical patterns of rationally using cultural heritages

When exploring the patterns of rationally using cultural heritages, Professor CAO Changzhi mainly summarizes five major patterns: viewing pattern, practical pattern,

experiential pattern, memorial pattern and composite pattern.⁷ To be specific, the viewing pattern refers to those cultural heritages which have distinct characteristics, rich connotations and precious values but have lost the space available for use by the modern society, can only be used as historical memories and physical evidence and must be repaired and stored completely according to their original form. The practical pattern refers to those historic buildings and structures which have direct use values and whose appearance, internal facilities and so forth can be partially and properly changed to satisfy the needs of contemporary life on the basis of protecting and keep authentic historical information, styles and characteristics.⁸ The experiential pattern mainly refers to those cultural relics and historic buildings which have special functions and cultural significance. The memorial pattern mainly refers to those buildings and structures which imply important historic, revolutionary or memorial significance. The composite pattern refers to those which require at least two patterns of protection. Among these five patterns, the practical pattern, as the basic pattern of rationally using cultural heritages, is mostly widely applied to the practical cases of the protection and use of architectural and urban heritages in urban renewal. Thus, the further theoretical study conducted in the present paper mainly concentrates on “the practical pattern”.

2.4 Life cycle of buildings

The length of the life cycle of buildings is determined by two factors: its material life and functional life. The material life of buildings points to the life that can be normally sustained by their structures, maintenance systems, equipment and so forth under the conditions of adequate maintenance, repair and transformation, and it constitutes the premise and basis of the sustaining and development their life. The functional life of buildings refers to their use functions endowed by the society when they adapt to its needs. The adaptive reuse of buildings directs attention to the adjustment of the gap between their material life and functional life in their full life cycle. When the material life of a building still remains but its functional life has gone, it's necessary to inject new functions into the building to extend its functional life; conversely, when the functional life of a building still remains but its material life can no longer adapt to the needs of development, the building must be transformed, repaired or otherwise treated to extend its material life. In the full life cycle of buildings, these two circumstances are mutually dependent and take turns to dominate until the full life cycle is over.⁹ From the perspective of humanistic thought, attention is paid to the material life of buildings for the purpose of satisfying people's physiological and security needs, and to the functional life of buildings for the purposes of satisfying people's social need and need of self-esteem and further providing a guarantee for satisfying their need of self-actualization. The innovative point of the present paper lies exactly in selecting the pattern of using architectural and urban heritages based on human needs.

3. Conceptual Framework

3.1 Relations between protecting and developing architectural and urban heritages

As proposed by the *Venice Charter* in 1964, “The goal of protection is not only to protect

a specific historic site to satisfy people's remembrance of history and culture, but also to continue our culture or even our life itself at the material level. Using historic sites for the goal of social sharing is always favorable for the protection of historic sites, and this constitutes the tenet of such protection." The *Charter of Machu Picchu* further fully elaborated the above viewpoint in 1977. As explicitly proposed by the Charter, "The protection, restoration and reuse of existing historic sites and historic buildings must be combined with urban construction, thus to ensure that these cultural relics continue to have their economic significance and vital force." In other words, to better bring into play the role of architectural and urban heritages in contemporary social life, it is logical that they must be rationally and effectively put into use.

There is a dialectical relation between protection and development, that is, while protection is a relatively static concept and points to the preservation and succession of the essence of history, development adapts to the needs of historical development and innovatively uses and continues architectural and urban heritages. After being influenced, renewed and used by social development, architectural and urban heritages tend to have richer contents and more use values, so adapting to the needs of social development constitutes the path of sustainable protection and development. Thus, in correctly dealing with the relations between protection and development, the key lies in identifying the integration point between "protection" and "development" and finding an effective approach of inseparably interconnecting them to achieve a harmonious and win-win situation.

3.2 Goal of protecting and developing architectural and urban heritages -- Promoting social and human development

The protection of historic and cultural heritages is a relative protection concept, and its significance lies in summing up the course of development of human civilization and getting people to understand the developing venation of human culture. Generally speaking, the goal of protecting architectural and urban heritages can be interpreted from the following aspects: First, to improve people's life quality. Architectural and urban heritages are embodiments of people's traditional lifestyles and living environments, and protecting them helps to alleviate the destruction of people's life quality by the abruptly-changing urban environment. Second, to reflect urban diversity. Due to the increasingly intensified trend of homogenization in building techniques and architectural styles, the architectural environments created all over the world tend to follow the same pattern. In the face of such danger, the protection of historic regions can not only greatly contribute to the preservation and development of each country's culture and social values, but also enhance the richness and diversity of the world's cultural heritages and historic buildings. Third, to promote sustainable social development. Just as pointed out by the *Venice Charter*, it's our responsibility to pass on the heritages we have inherited from our ancestors to our children "in such a way as to embody their authenticity". Fourth, to improve the competitiveness of cities and drive urban revitalization. In short, the goal of protecting architectural and urban heritages is to employ the special values possessed by these architectural and urban heritages for the purpose of promoting urban development in various aspects, or, to say it in another way, the development of the mankind and society at large.

3.3 Study on the adaptive use patterns of urban and architectural heritages in the renewal of historic cities from a humanistic perspective

Starting with the above researches, the present paper has taken the perspective of human development to analyze the common value orientation between urban renewal and protection of architectural and urban heritages, and cited two typical historic cities (Pingyao Ancient City, China and York Ancient City, UK) as cases to conduct a horizontal (among several patterns)/vertical (between China and UK) comparative study with regard to the patterns of using architectural and urban heritages they have adopted in their urban renewal. It also attempts to further construct a theoretical model of the adaptive use pattern of architectural and urban heritages in urban renewal and answer the question of how to architectural and urban heritages, with the expectation of providing a scientific basis for selecting a proper pattern of rationally using architectural and urban heritages in urban renewal in the future.

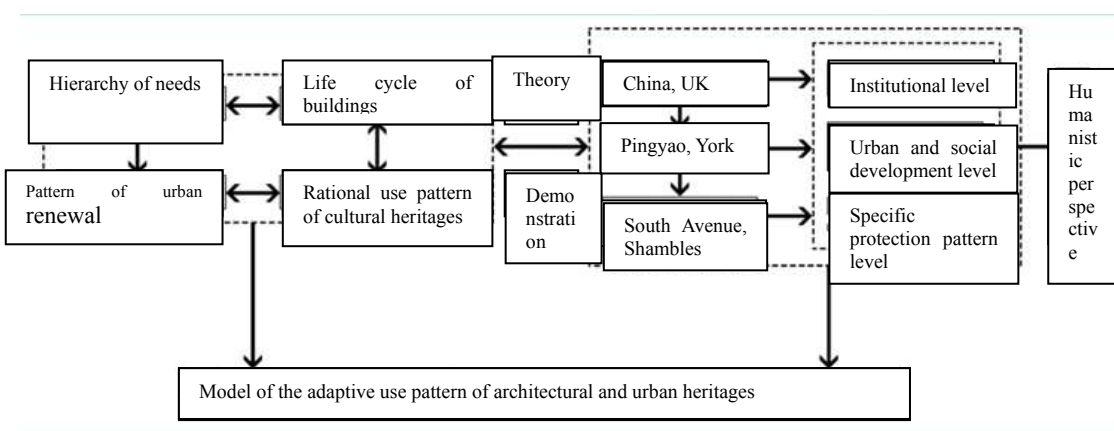


Figure 1. The study Framework

4. Case Study

4.1 A case study of Pingyao and York in terms of urban heritage protection

4.1.1 Protection of urban heritages in Pingyao

Pingyao Ancient City is located in central Shanxi Province, on the south edge of Jinzhong Basin. Since the Tang Dynasty, it has gone through the rises and declines of the Five Dynasties as well as the Song, Liao, Jin, Yuan, Ming and Qing Dynasties. In the era of exchange shops in the late Qing Dynasty, driven by the prosperity of commercial economy, the building of the ancient city saw a golden time, and, with the gradual increase of luxurious mansions, the architectural style of the ancient city basically took shape then.

(1) Style and features of the ancient city

Pingyao Ancient City was built in strict accordance with the codes of etiquette in a square layout, basically facing the south in direction; taking into consideration local terrain and sunshine conditions, it was slightly shifted eastward by 15 degrees. As a county jurisdiction, Pingyao followed the codes of etiquette to set the size of its city wall and moat (1.5km in side length), and was built with six city gates (i.e., one south gate, one north gate, two east gates and two west gates). Taking the south as the superior direction, there were

upper east gate, lower east gate, upper west gate and lower west gate, respectively named as Taihe, Qinhan, Yongding and Fengyi. It can be said that Pingyao Ancient City has provided a living example of the form system of city wall and moat at county level in the ancient China. The overall spatial layout of Pingyao Ancient City fully reflects the historic and cultural features of the Chinese Han nationality: Adopting the South Avenue as the central axis of the city, and laying out various buildings facing the south; following the traditional codes of etiquette regarding “left as superior and right as inferior” and “left honoring civil and right honoring martial” and adopting a balanced and symmetric layout to deploy Confucian temple, academy of classical learning, Wenchang pavilion, Kuixing tower and other buildings with civil connotations on the east (left) side of the central axis and to deploy the temple enshrining and worshipping Guan Yu, military drill field and other buildings with martial connotations on the west (right) side; properly laying out the city god’s temple and county government office also according to the codes of etiquette, etc. As for the street layout, there is a grid road system constituted by four avenues, eight streets and 72 narrow alleys, so there are arterial roads, sub-arterial roads, streets and alleys arranged and interconnected distinctively and in strict sequence, retaining the neighborhood system prevailing in the Ming and Qing Dynasties.

(2) Protection strategies

Methods of protecting the ancient city: The ownerships of all the cultural relics protection units within the ancient city belong to the government, and they are put under the centralized management of the protection and management committee of the ancient city; the ownerships and power of operation of other buildings basically belong to individuals and enterprises, however, in the case of any individual or enterprise wanting to transform their buildings or change their use functions, the approval of the protection and management committee of the ancient city must be obtained. The ancient city is divided into protection zones of three levels, for which different protection strategies are employed.

When renovating traditional dwelling houses, it is required that the original external appearances of these architectures (architectural complexes) be maintained, and that their original structural forms, configuration modes and decorations be retained; that the buildings, structures and appurtenances of the original architectures with historic and artistic values be repaired and reinforced with original materials and by original processes in situ; that original doors and windows be repaired or replaced with traditional wooden doors and windows; and that the painting of wooden structures after repairing these traditional dwelling houses be conducted in strict accordance with the traditional practice. Buildings built in violation of relevant laws and regulations or out of tune with the style and features of the ancient city should be dismantled; the ancient Confucian temple, city god’s temple, Qingxu Temple, Rishengchang Exchange Shop and a series of other architectures and dwelling houses from the Ming and Qing Dynasties and with the value of cultural relics have been successively put under protection, and reinstated to the largest extent. The damaged city wall, city gate towers, barbican entrances and other facilities have also been reinstated to exhibit the integrity of the form system of the ancient city; the county government office, city god’s temple, Confucian temple and so forth have also been renovated to embody the features of the codes of etiquette implied by the layout of the ancient city.

4.1.2 Protection of urban heritages in York

York is one of the four key protected historic cities in the UK (and is about to be applied for the list of world heritage), and, having been well preserved, it mainly concentrates on the development of the tourist industry and is similar to the Pingyao Ancient City of China in many aspects. York is famous for its history, which is also preserved in its architectures. Each year tens of thousands of tourists pour into York to visit the survived Middle Ages architectures and the relics of the Romans and the Vikings interspersed among these architectures.

(1) Style and features of the ancient city

The distribution of the 35 protection zones in York roughly surrounds the core protection zone to form a large area, and the rest protection zones are dispersed in radial pattern on the seven main passages extending outward, which is consistent with the outward extension of the ancient city itself and has well reflected the traditional pattern of the ancient city.

The core protection zone of the ancient city has inherited the spatial characteristics of cities since the eras of the ancient Rome, Anglo and Middle Ages. At those times the lanes, alleys, public spaces and internal architectural spaces were very narrow and compact in cities, showing apparent traces of planning, and York is very much similar to many frontier cities in China, in that they all developed due to the needs of wars. The core protection zone of the ancient city includes the entire ancient city and the traditional blocks on its northwest side. On its east, south and north sides it is demarcated by the circular road outside the city wall, and on its northwest side it includes the entrance areas of two main entry passages outside the city. Within the scope of the core protection zone of the ancient city, both historic architectures and environments have been well preserved, like the relics and residual city defense system of the ancient Rome, the ancient city wall and city gates, etc., and even a segment of dilapidated wall is protected by a grass lawn. To protect historic environments, besides building circular roads outside the city along the city wall, pedestrian streets, half-pedestrian streets, one-way traffic lines and so forth have also been planned, supplemented by the green spaces both inside and outside the city wall to combine heritage protection and park construction. In addition, many historic parks and gardens have also been designated here.

(2) Protection strategies

Having gone through a series of urban transformation, York Ancient City has saw some changes in its urban pattern, however, the transformation of York is based on urban protection. The historic blocks of York have distinct local characteristics, and the traditional shops beside the streets are not only the favorite of tourists but also provide the daily necessities of residents. Thus, to maintain the vitality of historic architectures, the functions of some historic architectures may be correspondingly changed according to market needs. For example, the lower layers of historic dwelling houses beside some historic blocks may be transformed into commercial facilities, but the upper layers can still be reserved for use as residential facilities or office space. A rich variety of mixed use is insisted and encouraged to achieve the building of a sustainable residential quarter. To balance the traffic needs of the city, a pedestrian system is also planned in the urban center.

4.2 A case study of South Avenue and Shambles

4.2.1 Study on the use pattern of architectural and urban heritages on the South Avenue

The South Avenue is the central axis of the symmetric layout of Pingyao Ancient City, and is a south-north avenue facing the south gate (Yingxun Gate), serving as the backbone of the city. Starting from the gate of Xingguo Temple in the south and ended at the junction of the East Avenue and West Avenue in the north, it runs through the city, and is 690m in length (738m calculated from the south city wall).

(1) An operation type-based analysis on the adaptive use of shops on the South Avenue

Among 22 shops which have adopted the use pattern of continuing the original functions, 21 (95.5%) are dwelling houses and one is a shop. It can thus be seen that the continuity of residential function is stronger than that of other operation types. Among 48 shops which have adopted the use pattern of leaning close to the original functions, 42 are shops (87.5%) and six (12.5%) are cultural facilities (like museum, etc.). It can thus be seen that people have sometimes chosen to transform historic architectures into commercial and cultural facilities to memorize their original states. Among 51 shops which have adopted the use pattern of renewing the original functions, 30 (58.82%) are shops, 18 (25.30%) are hotels and restaurants and the other three are respectively residential, cultural and financial facilities. It can thus be seen that people mainly transform historic architectures into service facilities for the purpose of adapting them to the needs of modern society.

(2) An architectural life cycle-based analysis on the adaptive use of shops on the South Avenue

Among 22 shops which have adopted the use pattern of continuing the original functions, all of them have a weak material life and a normal functional life. This suggests that, as far as the historic architectures adopting the use pattern of continuing the original functions are concerned, a higher demand is imposed on the adaptability of their functional life in comparison to their material life. Among 48 shops which have adopted the use pattern of leaning close to the original functions, 41 (85.4%) have a normal material life, six (12.5%) have no material life and one (2.1%) has a weak material life; none of them has a functional life. This suggests that, as far as the historic architectures adopting the use pattern of leaning close on the original functions are concerned, a higher demand is imposed on the adaptability of their material life in comparison to their functional life. However, given that people usually have relatively strong emotional appeals with regard to the historic architectures for which the use pattern of leaning close on the original functions is adopted, further demonstration is always required before decision making. Among 51 shops which have adopted the use pattern of renewing the original functions, 49 (96.1%) have a normal material life, and two (3.9%) have a weak material life; none of them has a functional life. This suggests that, as far as the historic architectures adopting the use pattern of renewing the original functions are concerned, a higher demand is imposed on the adaptability of their material life in comparison to their functional life.

4.2.2 Study on the use pattern of architectural and urban heritages on the

Shambles

Starting from the Newgate Street in the north and ended on the Belfrey Street, the Shambles is 103m in total length, and is not only the most ancient street in York but also one of the most well-preserved streets from the Middle Ages in Europe. Many houses on the street were first built in the 15th century, and protruding arcades were designed on the second and third floors of these houses in a ladder pattern.

(1) An operation type-based analysis on the adaptive use of shops on the Shambles

Among 38 shops which have adopted the use pattern of continuing the original functions, all of them are dwelling houses. It can thus be seen that the continuity of residential function is stronger than that of other operation types. Among five shops which have adopted the use pattern of leaning close to the original functions, three are shops (60%) and two (40%) are restaurants. It can thus be seen that the use pattern of leaning close to the original functions is adopted in York in only a few cases; they have chosen to adopt the use pattern of continuing the original functions for most architectures which can still basically adapt to the needs of modern society, and, for those which can not adapt to such needs, they have adopted the relatively thorough use pattern of renewing the original functions. To put it simply, there are not so many cases in which the eclectic use pattern of leaning close to the original functions is adopted, which reflects the characteristics of British culture which are different from the Confucian mean characteristics of Chinese culture. Among 51 shops which have adopted the use pattern of renewing the original functions, 35 (68%) are shops, seven (14%) are office spaces, six (12%) are restaurants and the other three (6%) are cultural facilities. It can thus be seen that people mainly transform historic architectures into service facilities for the purpose of adapting them to the needs of modern society.

(2) An architectural life cycle-based analysis on the adaptive use of shops on the Shambles

Among 38 shops which have adopted the use pattern of continuing the original functions, all of them have a weak material life and a normal functional life. This suggests that, as far as the historic architectures adopting the use pattern of continuing the original functions are concerned, a higher demand is imposed on the adaptability of their functional life in comparison to their material life. Among five shops which have adopted the use pattern of leaning close to the original functions, four have a normal or weak material life, and all of them have a normal functional life. This suggests that, as far as the historic architectures adopting the use pattern of leaning close on the original functions are concerned, a higher demand is imposed on the adaptability of both material life and functional life, because, when Shambles adopts the use pattern of leaning close on the original functions, they have introduced some new functions which can better adapt to the needs of modern society than original functions. To put it simply, although the original functions can adapt to the needs of modern society as well, they can not adapt as well as these new functions. Such a practice is different from that employed by Pingyao which adopts the use pattern of leaning close on the original functions in cases where the original functions can no longer adapt to the needs of modern society but people still have relatively strong emotional appeals for these original functions. Among 51 shops which have adopted the use pattern of renewing the original

functions, 49 (96.1%) have a normal material life, and two (3.9%) have a weak material life; 47 (92%) have a normal functional life, and the other four have no functional life. This suggests that, as far as the historic architectures adopting the use pattern of renewing the original functions are concerned, a higher demand is imposed on the adaptability of both material life and functional life.

5 Conclusion

Based on a field survey of the above cases and related analysis, it can be seen that, no matter it's in the rapidly-developing China or relatively stable UK, the goal of urban renewal, i.e., the adaptive transformation of cities and architectures, is always to adapt to the needs of modern society. The adaptive applications of these protection patterns have shown certain laws, as described below.

(1) To continue original functions

When an architectural or urban heritage has both its material life and its functional life, it means that it can not only satisfy people's basic needs (physiological and security needs) but also meet their higher needs (social need, need of self-esteem and need of self-actualization). In this case, the use pattern of continuing the original functions should be adopted to well preserve their original style, features and use functions. Correspondingly, urban renewal should employ the mode of comprehensive improvement, mainly covering fire protection facilities, infrastructure, public service facilities, street fronts, environments, energy conservation transformation of buildings, etc., but should not change their main structure or use functions.

When the material life of an architectural or urban heritage has gone (or is already very weak) but its functional life still remains, it means that it can no longer satisfy people's basic needs but can still meet their higher needs. In this case, the use pattern of continuing the original functions should be adopted to cautiously restore (or repair or transform) its material remains, so that it can satisfy people's basic needs. Correspondingly, urban renewal should employ the mode of comprehensive improvement.

(2) To lean close on original functions

When the material life of an architectural or urban heritage still remains but its functional life has gone (that is, its original use functions can no longer adapt to the needs of modern society) and people still have relatively strong emotional appeals for its original functions, it means that it can satisfy people's basic needs but can not fully meet their higher needs. In this case, the use pattern of leaning close on the original functions should be adopted to retain the characteristics of its original use functions in a special way, so that it meet people's higher needs. Correspondingly, urban renewal should employ the mode of comprehensive improvement to partially or wholly change the use functions of the architecture without changing the subject of right or the term of the land use right. The original main structure of the architecture should be retained, so that, on the one hand, its overall style and features can be continued, and, on the other hand, its internal functions can still meet the needs of modern society.

When the material life of an architectural or urban heritage has gone (or is already very weak) and its functional life no longer exists (that is, its original use functions can no longer adapt to the needs of modern society) but people still have relatively strong emotional appeals for its original functions, it means that it neither satisfies people's basic needs nor fully meets their higher needs. In this case, the use pattern of leaning close on the original functions should be adopted to cautiously restore (or repair or transform) its material remains, so that it can satisfy people's basic needs; meanwhile, a special way should be employed to retain the characteristics of its original use functions, so that it meets people's higher needs. Correspondingly, urban renewal should employ the mode of comprehensive improvement.

(3) To renew original functions

When the material life of an architectural or urban heritage still remains but its functional life no longer exists, it means that it can satisfy people's basic needs but cannot meet their higher needs. In this case, the use pattern of renewing the original functions should be adopted to replace the original functions with new functions which can adapt to the needs of modern society, so that it can satisfy people's higher needs. Correspondingly, urban renewal should employ the mode of functional renewal to partially or wholly change the use functions of the architecture without changing the original main structure of the architecture, so that, on the one hand, its overall style and features can be continued, and, on the other hand, its internal functions can still meet the needs of modern society.

When the material life and functional life of an architectural or urban heritage have both gone, it means that it can neither satisfy people's basic needs nor meet their higher needs. In this case, it should be allowed to disappear without making any efforts to restore it. Correspondingly, urban renewal should employ the mode of rational transformation to orderly transform the architectures in the city, and to rationally use the land in the city in a way that adapts to the development of the city.

Table I Model of the adaptive use pattern of architectural and urban heritages from a humanistic perspective

			Architectural life cycle			
			Material life	Functional life		
Pattern of rationally using cultural heritages	To continue original functions	Cautious restoration, repair or transformation	No or weak	Yes	Comprehensive improvement	Mode of urban renewal
		Daily maintenance	Yes	Yes		
	To lean close on original functions (retain the characteristics of its original use functions in a special way)	Cautious restoration, repair or transformation	No or weak	No, people still have relatively strong emotional appeals for its original functions	Comprehensive improvement	
		Maintenance of appearance, and internal transformation	Yes	No, people still have relatively strong emotional appeals for its original functions		
	To renew original functions (replace the original functions with new functions which can adapt to the needs of modern society)	Maintenance of appearance, and internal transformation	Yes	No	Functional renewal	

	Others	Allowed to disappear	No	No	Rational transformation	
			Basic needs (physiological and security needs)	Higher needs (social need, need of self-esteem and need of self-actualization)		
			Maslow's Hierarchy of Needs			

Note:

Material life: No: The heritage no longer exists;

Weak: The heritage is incomplete, and only has a few remains that can not be put into normal use;

Yes: The heritage can still be normally used.

Functional life:

No: The original use functions of the heritage can no longer adapt to the needs of modern society;

Yes: The original use functions of the heritage can still adapt to the needs of modern society.

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PhD Thesis Theme

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Current State of the Research

There are several specific features in dramatic art: awareness that it is being created, that it is being felt, taken notice of, respectively spectator's and actor's awareness of being present. Furthermore there are repetitions, process hic et nunc, impermanency, primary display function and last but not least there is the fact, that for interpreter (actor, performer) his own body is the most important material for creation. From the above mentioned, only the first feature is the most important basis, i.e. spectator's and actor's awareness of being present for taking into account relationship between architecture and theatre.

Theoretical Background - Scenology

Common interface between architecture and theatre is dealt with in the scientific branch called scenology. According to Prof. Vostry, Czech theatre researcher, scenology which is dealing with scenic situations in general, i.e. "someone is made to watch something". It has two basic axes – specific and non-specific. Specific scenic situation means "actor playing a role" and non-specific scenic situation is used for real daily situations. The latter mentioned is the one to be considered within the ephemeral part of public space.

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Figures

Fig. 1: Evers, Veronica. Canary Wharf [photo] [online]. GB: London 2010 [seen June 2, 2015]. Available: <http://www.photoserver.eu/galerie.php>

Fig. 2: Charles Bridge [photo] [online]. CR: Prague 2006 [seen June 2, 2015]. Available: http://es.wikipedia.org/wiki/Archivo:Karl%C5%AFV_most-2.jpg

Fig. 3, Fig. 4: Barta, J.: 1999: *Letem českým světem. Obraz proměny českých zemí v odstupu století 1898 – 1998 (Going through the Czech World. Changing Image of the Czech Country during 1898 – 1998)*, Studio JB, Lomnice nad Popelkou.

Motivation

Present disappearing of image of the cities, the way how we would like to have it, and effort to find a solution for this unpleasant state, lead to various considerations. For public space, consisting of substantial part (material and spatial part) and non-substantial part (scenic or ephemeral part), the latter mentioned seems to be more important one (Fig. 1).

Goals

Public space could be symbolically understood as a scene where a number of interactions – social rituals take place. The key question is to define architectural and urbanistic procedures used for urban scene design of public spaces in the cities during their problematic situation today. Image of public spaces should be of communicative, meeting and of „theatre“ nature. What kind of role can theatre (which is based on social rituals) play in vitalization of public spaces in more detailed way of understanding?

Conclusion

If ephemeral part is considered essential for public space design, it is possible to define for this part of public space design principles used in theatre production. In both, similar creative processes are used. It seems that it is possible to design public space as a scenic space, particularly for non-specific scenic situations, with the use of theatre creative processes (Fig. 2). So let us design enjoyment and catharsis of public spaces.

A scene of public space cannot be, by its nature, a theatre scene but this scene of public space could (and should) use elements of theatre namely to support its ephemeral part (Fig. 3 and Fig. 4). If we try to consider urban design procedure using the theatre point of view, interesting conclusions can be derived. From historical contexts of theatre and urbanism, the analysis of their present situation and especially different and common items defined, it follows that a scene of public space cannot be, by its nature, a theatre scene. The reason is, that there does not exist conscious current relationship of actor-spectator.

Fig. 1 Public Space as a Scenic Image.
Prague, Charles Bridge, 2006



Fig. 2 Theme of Public Space.
London, Canary Wharf, 2012



Fig. 3 Ephemeral Part of Public Space.
Coaly Market in Prague, 1916



Fig. 4 Ephemeral Part of Public Space.
Coaly Market in Prague, 2005

