

## Conditions of small towns' historic environment formation and development

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**Summary.** To create competent reconstruction projects in historic urban environment it is necessary to carry out pre-project analysis of formation and development conditions and factors of architectural urban environment of a small town's historical center. Historic environment is viewed as an object of the research, the components of which have been created during a certain historical period of the town's development. The historical period must be characterized by certain evolutionary development patterns. The aim of the historic urban environment redesign is to preserve the town's originality in the process of historical center reconstruction. Taking into consideration the results of preconception studies, it is essential to carry out further research of historical center's values. The article deals with the analysis of the main formation and development conditions of small towns' historic environment.

**Key words:** continuity principle, historic environment originality, time-layers, forming factors, the evolutionary process.

### INTRODUCTION

The architectural experience suggests that numerous reconstructions of historically formed urban center environment results in significant changes of traditional town's space, which has been formed for centuries. The towns are constantly developing and never considered as completely constructed objects. As a result, it is impossible to pre-

serve their genuine historic environment. «The historical center of a small town is considered to be an indicator of the society's evolutionary development, its cultural traditions, taste, spiritual energy, historical memory of the nation. Each stage of the historical process is characterized by a new urban development according to the time requirements. The historic urban areas must be preserved with their inherited «atmosphere» with all the essence and spirit of the past centuries» [13].

One of the most relevant issues today is the problem of a small town's historic center reconstruction. The urban environment is characterized by sporadic development, absence of preservation principles and individual development of the towns as well as the lack of awareness in studying of historic environment morphology on various time stages.

The studying of historic and archive documentation as well as modern urban planning are performed within the framework of the pre-project research of the urban environment [17]. «The required and essential component of the pre-project research in the sphere of historic urban reconstruction is the historic and genetic analysis. It provides studying and contrasting of historical plans, revealing of the most stable structural elements, specific peculiarities of a certain

town evolution» [13]. Its main objective is to identify the genetic code of a town [17].

The preservation of originality, individuality, identity and continuity of historic environment of a small town is achieved only under the conditions that architecture is understood as a process of historic environment formation. A research in this sphere is an important, essential and qualitative stage for understanding the process of small towns' historic environment reconstruction.

### PURPOSE OF WORK

Under the conditions of reconstruction, small towns' historic environment should be studied from the perspective of its main characteristic features and values, the importance of which is analyzed in the article. These indicators can be used in the process of analyzing small towns' historic environment formation and development in dynamics, its evolution peculiarities, and reasons for existence of its various properties in order to evaluate them properly and to develop the forward-looking master plans.

### MATERIALS AND METHODS

Research of small towns' historic environment and its main characteristics should be carried out with using the method of graphic and analytic analysis of the conditions and factors of small towns' historic environment formation and development, the method of comparative analysis and, as a result, the generalization method for drawing up the result recommendations schemes.

### RESULTS AND DISCUSSION

Changes and reconstruction of the historic urban environment can be observed on all stages of their evolutionary development. The considerable portion of modern redevelopments of historic towns takes place under the conditions of reconstruction. Reconstruc-

tion must be viewed as a principle of urban environment improvement and development, as the new construction objects have an influence on the already formed parts of the town and later can become the candidate reconstruction objects. The historic urban environment reconstruction is closely connected with early layers of the town rather than with the construction of a new town or environment. To evaluate the morphology of transforming environment and understand its further development, it is essential to generalize the conditions of small towns' historic environment formation and development according to the basic characteristics.

A significant role on this stage of research is played by the analysis and importance of the following objectives:

- recognition of town's historical center value;
- recognition of town's historic environment originality;
- application of historical and cultural continuity principles;
- comprehension of town's historic environment formation process in the result of cultural layers with the course of time;
- consideration of factors, which influence town's historic environment formation and development;

The significance of every abovementioned objective warrants their further analysis.

#### **Recognition of town's historical center value**

Towns are considered to be the centers of national traditions and continuity principles. They are also characterized by large open spaces, social structure and a way of life, the features, which are not peculiar to cities.

Towns are considered to be historical if they have the longest period of formation and development as well as cultural heritage, in particular architectural [5]. Every «small historical town has its distinct character, determined by its history; level of economic development, industrial arts and trade; people's cultural awareness; natural resources of the vicinity; geographical location; level of

communication access; landscape, which creates the town's ground; peculiarities of planning and architecture» [19].

However, the influence of various factors and changes of society demands require the systemic analysis and new approaches to the organization of historic environment of small towns.

Each stage of evolution and transformations of every historic urban environment part, which appear on various stages of historical development, should form the integrated harmonious space. It depends on recognition of this process as a spatiotemporal system.

The main emphasis is put on the historical center, as it is also a cultural, business, religious and commercial center with all its main and important monuments of different periods and styles. The image of every town is associated with the impressions created by its historical center, the «heart» of the town. Each historic environment is characterized by the range of unique peculiarities, which influence the specifics of its research:

- individual character and uniqueness;
- multifunctionality and permanence;
- multiplicity and historical continuity [19].

### **Recognition of town's historic environment originality**

Originality and architectural uniqueness are considered to be the main value determiners of historical town center.

The complex of identifying characteristics, which have been formed in the process of historical development and depend on conditions and factors of urban development as well as the character of evolutionary processes, maintain the town's originality, which is identified as a unique artistic value of every historic urban environment.

«The UNESCO World Heritage Convention (February 5, 2005) declared the necessity of monuments' preservation as well as saving of all social, cultural and historical evidence, traditions and records, which form the construct of a historical town. According

to the Convention, heritage authenticity is determined not only by the integrity of material heritage, but also by the preservation of its functions, immediate surrounding, language and other forms of immaterial heritage, spirit and beliefs as well as other inner and outer factors» [13].

Since its formation, historic environment of a small town is characterized by its special «genetic» code, character of a town, which is passed on from generation to generation. This code is defined as originality of a town.

### **Application of historic and cultural continuity principles**

Despite its history and values, constant improvement of the environment, which is based on social, economic, scientific and technical changes, must include such a constituent element as historical and cultural continuity [12]. Historical and cultural continuity maintain the preservation and development of the integrated environment, its identity, distinctive character, originality and value of every historical town center.

The end of the XIX century was characterized by some changes in architecture, which influenced the formation of historical and cultural continuity.

«The dominant values, which guided the bourgeois-democratic society, were personal-ity instead of class hierarchy; the freedom of choice instead of set rules; variety of behavior patterns and self-expression forms instead of canons of style. The most important change of this period, which is significant for understanding the nature of architecture and urban development, is historical thinking. The modernity was considered as the logical consequence of the past and a motivation for the future» [13].

As a result, historical thinking encouraged the architects and urban development constructors to apply the art of the past. Applying the continuity principle, the architects of the historic urban environment, based on the historic experience, have created many theoretical and practical building patterns, which combined present, past and future.

A. Hutnov gives the following description of this period: «A town is viewed as a process, which takes course in certain spatial environment, but not as an environment by itself or as an inactive special characteristic of this process. The process implies the «socialization» or «humanization» of a town as a design and research object and is considered to be the main distinctive feature of the modern evolution stage in urban development thinking. Earlier the urban planning project dealt with the question of spatial town organization. Today an urban planning architect has to take into account not only space, but also time, which is the most important characteristic feature of the process of town's life-sustaining activity» [11].

The idea of a historical town as an object of heritage was studied and carried out in the projects by the range of architects.

The most outstanding architect of that period was Camillo Sitte (1843–1903). Sitte was the first who started to study a town from the historical perspective in the end of the XIX century. According to his ideology, the first step was to investigate the morphology and typology of the environment and then to offer modern ways and models of its development [22]. His idea of continuity played a significant role in further development of historic towns' principles and environmental protection.

His ideology was supported by the leading architects and theorists. Among them were Raymond Envin (England), Werner Hegemann (Germany), Patrick Geddes (Scotland), Gustavo Giovannoni (Italy), Kevin Lynch (the USA) and the others [11, 8, 6, 21, 18].

Werner Hegemann (1881–1936) investigated the universal character of town formation principles in various countries at different period of historical development. Hegemann described a town as a collage, within which all the components, preserving their authenticity, interact for creating a new conceptual environment, where a town is viewed as a specific physical outcome of the long-term formation process and serves as an architectural statement for its future development [8].

Patrick Geddes emphasized the importance of local values and studied them in connection with architecture. In the book «Cities in Evolution» (1915) about the development of urban environment, the researcher claimed that every generation contributes to the physical space of a city, changing and adding new structures and imparting it with new functions [6].

Gustavo Giovannoni made the greatest contribution into the investigation of historical continuity principle. «He introduced the important principle of necessity to preserve the town's tissue, historically built-up urban environment, which reflects all the time-layers. Within the framework of a new paradigm, a town was considered as the territory, which could be imparted with new functions that had to conform to the town's traditional morphology» [21].

The 70s-80s of the XX century were the period of inobservance to the preservation of traditions and heritage. Kevin Lynch in his books claimed that the historic heritage had to be preserved, but at the same time, people should start a new life on the territory of historical centers. However, this new life must conform to the values of previous historical periods [18].

The wide range of documents and charters on protection and development of historic urban environment are based on the above-mentioned approaches and conceptions.

### **Comprehension of town's historic environment formation process in the result of cultural layers with the course of time**

«The town-planning formation exists not only in space, but also in time. Space is the form of material environmental components existence, which characterizes their properties, structure, co-existence and interaction of the elements. Time designates the town-planning formation period of existence, the succession of condition changes in the process of transformation and development of all material components. The course of time can be clearly observed in formation, and the ar-

chitectural monuments are considered to be the documentary sources of historical and cultural information prior to corresponding period. Usually the environment of town-planning formations is created and developed during many centuries. The duration of its development, chronological inhomogeneity, connection between formations of different periods and styles are becoming the important features of the environment» [3].

Town's historic environment in the process of its formation and further development is characterized by various changes, which can be defined as certain tendencies of evolution theory. The town-center reconstruction projects must be based on this evolutionary approach. The latter provides the analysis of the environment's long-term development, the designation of initial reasons and conditions of such development, its characteristic periods with specific peculiarities. The genetically conditioned factors of historic urban environment development are preserved.

The town-planning principle of various historic periods reintegration was already discussed during the Brest Colloquium (France, 1983) [2]. The discussion was devoted to the preserved and lost types of town centers during various periods. These types must be analyzed in unity and in terms of urban environment reconstruction. To unite all the chronological periods together in a modern town, it is essential to combine various time samples with definite homogeneity.

Value, significance and intensity of reconstructed environment are defined by various layers of historical periods and by their chronological rate.

«The material basis of historical town-planning formations in temporal dimension is not homogeneous. Constant reconstructions, transformations and redesign have led to numerous built-ups in development, redounded upon streets and squares' planning projects. However, inherited built-ups on the material basis of space frame formations or generated on the course of historical development architectural and stylistic updates of various periods to the design of these formations are

considered to be the traces of certain social and cultural processes, historical events; they are the witnesses of history, but only within definite chronological dimension. Consequently, there is a problem of measuring the chronological rate of historically developed spatial frame of formation within the framework of which is appropriate to emphasize the authenticity of its material basis» [20].

### **Consideration of factors, which influence town's historic environment formation and development**

To determine the consistency of town's historic environment formation and development, it is essential to emphasize the factor analysis, which implies the description of factors basing on the role of town-planning during various time periods, the influence and interaction of factors and time dynamics.

The research in this article is also carried out on the materials, which are studied in various related fields, such as history, geography and the others. It requires a comprehensive analysis of the territory [7, 16, 24].

Town's historic environment is based on human activity, demand of society and the way of life, that is why it is constantly changing. It is impossible to stop these changes, as it contradicts the development of the environment in general. An interdiction of changes causes the destruction or substitution of the existing environment. Moreover, in the process of transformation only some stable and relatively permanent elements are preserved.

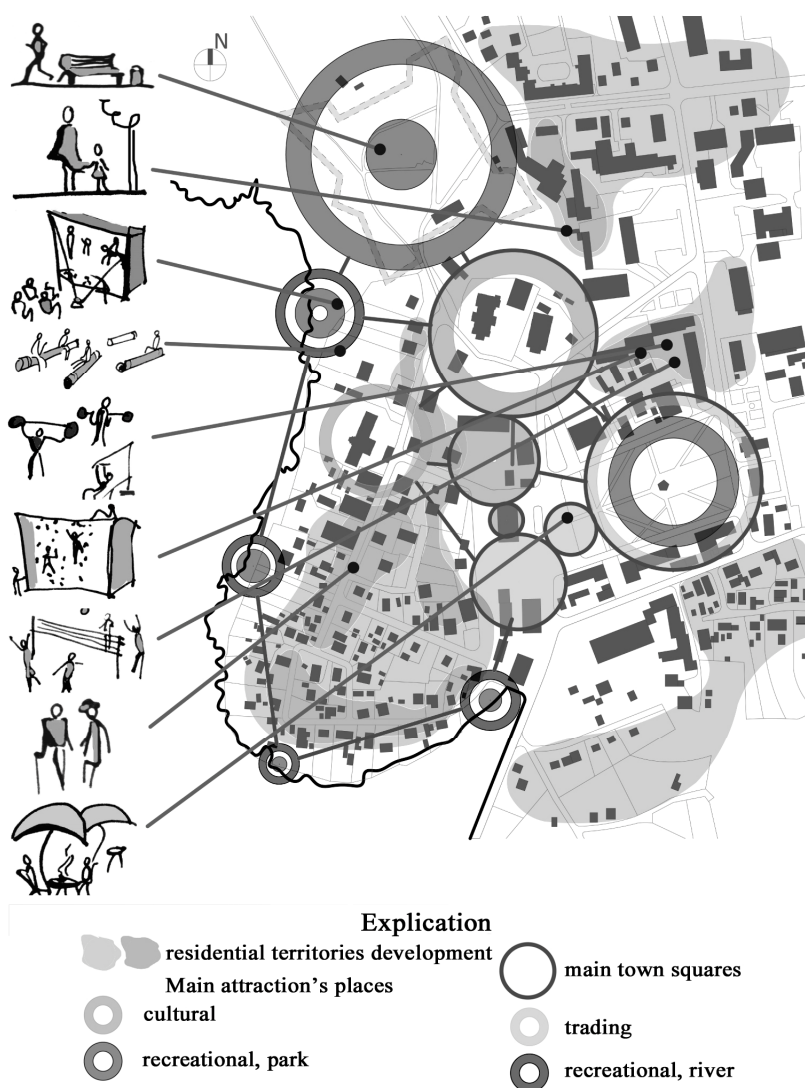
«N. Hulyanitskiy describes a range of factors, which influence the individual characters of a town and have stable or relatively stable nature. These factors include local natural and climatic conditions, traditional peculiarities of architecture and town-planning techniques. The researcher also singles out national architectural originality, which is considered to be a slowly varying factor. Historical elements of a modern town with valuable architectural heritage should be the natural part of the whole. According to

N. Hulyanitskiy, natural landscape is also an important factor, as its diversity and uniqueness are the basing elements of historical town's individual character» [10].

Preservation of stable and permanent factors, which are the basis for formation and development of town's historic environment, is the guarantee of proper comprehension of historic heritage, originality, continuity and settings, which imply transformation of some most permanent elements. As a result, the realization of conditions and factors, which influence the formation and development of town's historic environment, is possible only under thorough analysis of the interaction between stable and dynamic components. The

main forming factor of a town is its historic center, which also includes other factors that influence differently the evolution and reasons of formation of various spatial peculiarities.

All these problems were taken into account when developing the project of reconstruction of the historical center of the small town of Bar in Vinnytska region (Fig. 1). A project envisages creation of architectonically-spatial accents of market, temple and town hall area. They are the center of attraction for citizens, habitants of nearby cities, tourists and unite the historical, cultural, trade, business, recreational, tourist, dwelling and spiritual function of the city.



**Fig. 1.** The project of reconstruction of the historical center of the small town of Bar in Vinnytska region. Velichko Svetlana, 2013

The factors can be divided into three groups: forming, stable and obligatory; dynamic, changing, but having relatively long influence; dynamic, changing, but having fast influence.

Forming, stable and obligatory factors:

- geographic (geographical location; influence of climatic conditions; isolation regime; temperature conditions and character of precipitations);

- natural (the amount of local natural-appearing materials; the spirit of the place; available water resources (rivers, seas) and peculiar relief; type of planting; soil structure).

Dynamic, changing and durable factors:

- cultural (peculiarities of traditional culture, religion, art; character of traditional urban development; human-created material and spiritual values);

- historic (events; historical figures; military activity places; memorial events; place mythology, formed under the influence of historic memory; character of environment depending on people lived there);

- town-planning (architectural and spatial peculiarities; historic block size; streets location; landmarks and background development);

- social (predominant sector of employment; social status of the citizens; the age structure of a population; security situation; hospitality);

- architectural (primary urban structure; arrangement of important historical objects, landmarks; character of environment; scale; various architectural styles; stylistic peculiarities);

- national (mentality of the citizens, which influences their way of life and the character of urban development);

- religious (temples, which were built as landmarks in the center of a historic town; interaction of various faith-based communities);

- ethnic (traditions; folklore).

Dynamic, changing, but not durable factors:

- economic (operating mode; the functioning of main transport routes; modes of com-

munication with other towns; resource endowment; well-being);

- political (town-planning politics; town symbols);

- technological (traditional material processing techniques; building opportunities; the number of experienced builders);

- technical (infrastructure of the town center);

- ecological (protection level against harmful impacts).

## CONCLUSIONS

Thus, small towns' historic development under conditions of reconstruction is determined by various peculiarities, value and importance of which are analyzed in the article. All these peculiarities provide the analysis of small towns' historic environment formation and development in dynamics of its creation, character of its evolution, reasons of formations of various characteristic features for evaluating them properly in future.

1. Value of the historical town center. Generalization of importance and features of the historical town center environment.

2. Originality of small towns' historic environment. Designation of importance of town's individual character preservation.

3. Principle of historical and cultural continuity of a town. Continuity principle provides the preservation and development of the integrated environment and its identity.

4. Process of small towns' historic environment formation in the result of cultural layers in the course of time.

5. Factors, which influence the formation and development of small towns' historic environment. Analysis of the main factors, their importance depending on the level of influence on the historic town center.

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#### УСЛОВИЯ ФОРМИРОВАНИЯ И РАЗВИТИЯ ИСТОРИЧЕСКОЙ СРЕДЫ МАЛЫХ ГОРОДОВ

**Аннотация.** Проектам реконструкции исторической среды малых городов обязательно должно предшествовать изучение условий и факторов формирования и развития архитектурной городской среды исторического центра малого города. Историческая среда рассматривается как объект, компоненты которого возникли в течение исторического периода существования города, который имеет определенные закономерности эволюционного



развития. Целью трансформации такой среды является сохранение своеобразия города в процессе реконструкции исторического центра. Принимая во внимание результаты проведенных поисково-аналитических работ проводится дальнейшее определение ценности этой территории. В статье проводится анализ основных ценностных характеристик форми-

рования и развития исторической среды малых городов.

**Ключевые слова:** принцип преемственности, своеобразия исторической среды, временные наслоения, формирующие факторы, эволюционный процесс.