Vol. 4, No. 2, 2018

Iryna Dyda

# SIMILAR URBANISTIC APPROACH TO FOUNDATION OF THE EARLY MIDDLE AGE CITIES (UP TO 13<sup>th</sup> CENTURY) IN POLAND AND IN UKRAINE

Lviv Polytechnic National University 12, S. Bandery Str., Lviv, 79013, Ukraine irdyda@gmail.com

Received: June 15, 2018 / Revised: September 28, 2018 / Accepted: October 19, 2018

© Dyda I. 2018

**Abstract:** The visual image of the architectural environment of historical cities in Poland and Ukraine significantly differs in the last centuries. Nevertheless, it has not been the constant feature. The research is devoted to the search for common compositional principles of forming early medieval cities in Poland and Ukraine in order to adequately assess their contribution to the world culture.

**Key words:** architectural environment, landscape, urbanistic composition

#### 1. Introduction

The spatial arrangement of architectural environment of historical downtowns of Polish cities over the last few centuries reveals all the features characteristic of the Western urbanistic tradition. The presence of visually enclosed, interior spaces of market squares surrounded by dense high buildings is of particular importance for a city to be identified as "European". Most clearly this approach to the urban environment design was manifested in Italian cities that developed the urban planning traditions of Ancient Rome. C. Sitte (1993, 71) in the course of analyzing the technique of forming a visually closed city squares of medieval Europe, found that streets that extend away from each corner of the square are pointed at some angle to the main viewing direction, and thus tears in the square perimeter construction got out of sight. He also noted that in terms of a five-angled square of Santa Maria Novella in Florence it appears to be four-angled from inside through visual comprehension illusions due to the perception of the square perimeter construction planes at different angles. C. Sitte, in his works, stressed that the conventional axiom that straight continuous construction line around the visually closed urban spaces are the features that create the true identity of a European city.

Such idealization of visual isolation of urban space spread across Europe along with the political and cultural influence of the Roman Empire and became the basis for the own architectural identity of the countries emerging on its ruins. Due to historical and political situation, which lasted at least for the last seven centuries, cultural and thus architectural influences have spread around Europe from its west to east part. A common algorithm of the European architecture development was well confirmed by D. Antonovych (1988, 13):

All European styles, starting from the Romanesque, originated from the Italians or the French and were sooner or later followed by other nations..., in addition, there was something added from their own, original, and in that way both the Germans and the English, and the Ukrainians have their national art.

Ukraine and Poland are closely located on the map of Europe, and Poland was the main supplier of the West-European approaches to architectural environment arrangement in Ukraine. The process of cities' location as required by the Magdeburg Law also came out of there. It has only partially spread along the Ukrainian area due to various reasons. By 19<sup>th</sup> century, most Ukrainian cities, especially in the central and eastern part, were built up on the principle of visual openness and integration with the landscape, and their architectural environment is still somewhat different from the West European tradition. At first glance, it seems that this

significant conceptual difference between the compositional "openness" of urban space of the Ukrainian and the "closeness" of the architectural environment of the Polish cities has always existed; and following the algorithm D. Antonovych (1988, 13) suggests that one might even conclude on existence of some mythical "civilizational boundaries" in the Ukrainian territory that separate the areas with different levels of urbanistic development. To explore this issue we need to consider the establishment of the local urban setting in historical perspective. Although the history of urban planning of both Poland and Ukraine has been studied in detail and has a wide reference base, scholars, for various reasons, do not pay enough attention to the comparative analysis of the urban heritage of the two neighboring European nations, and in particular to the fact that it has a lot in common at the early stages of development, though the majority of the similarities were lost yet in the 13<sup>th</sup>-14<sup>th</sup> centuries under the influence of peculiarities of historical development, including the introduction of the Magdeburg Law in some cities. The present article is aimed at comparative analysis of the historical cities formation concepts both in Poland and Ukraine in the early medieval period, and the objective assessment of their joint contribution to the development of the European architecture and the world culture.

## 2. Basic Theory Part

Iconic and bibliographical sources, including scientific papers by V. Vecherskyi (2001), who held a detailed analysis of the urbanistic structure of the Ukrainian cities of the 17<sup>th</sup>-18<sup>th</sup> centuries, confirmed that Ukrainian historical cities, especially in the left-bank Ukraine, had free planning integrated with the landscape, low farmsteads buildings and the surrounding landscape was visually accessible from urban areas and streets until the early 19th century (when most of them underwent radical rearrangement according to the compositional principles of the Classicism). Regardless of the administrative status of a city and the number of its inhabitants, the principle of its architectural environment establishment was similar everywhere. For example, in the capital city of Hlukhiv in the middle of the 17<sup>th</sup> century there were no visually closed urban spaces. Instead, V. Vecherskyi (2001, 95) states:

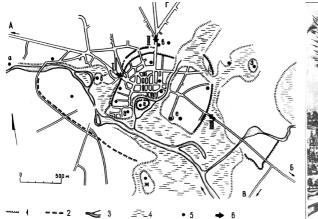
When new churches or simply considerable buildings were constructed they were usually erected with a slight spacing... for the buildings not to overshadow each other. As a result, a complex, multifaceted, artistically perfect composition of a city was formed which incorporated the basic principles of the national urban planning.

At the same time in Ukrainian cities, which were built on the river banks, "river facades" as the basis of the panorama of city architectural identity continued to develop. The most famous example of such river facade is Kyiv's panorama, where a dominant chain oriented on the Dnipro River backwater was being created along the high river banks up to the 1770's. Back in the late 17<sup>th</sup> century Kyiv streets were irregularly planned with the predominance of farmsteads building. This situation was the natural outcome of the consistent implementation of traditional local urban planning concept. The fundamental issue of urban space arrangement for the Kyivers was to ensure its visual accessibility from different viewing points since ancient times, and this demand was even legally approved.

City planning structure and general composition of urban construction in the historical Ukrainian cities was always consistent with the geographical features of the locality. Therefore, depending on the landscape situation two types of cities are pointed out. The first one includes cities that have been formed in complicated terrain; the other embraces the cities which emerged on the plain plot of land. Cities in complicated terrain had defensive center on the highest hill, main municipal buildings and retail squares which were located just below, then the suburbs stretched out with additional architectural dominants located on the visually distinct landscape points. Ukrainian capitals – Kyiv, Lviv and Halych – and many smaller historic towns belong to this design type. The example of a town which arose on the hilly terrain is Terebovlia that was the capital of the Terebovlia principality in the 11<sup>th</sup> century. The basis of the Terebovlia urban planning composition was a citadel located above the Hnizna River on the mountain with a flat top and steep slopes. A stone castle was built there in the 17<sup>th</sup> century. Basic urban development, suburbs with numerous temples were located in the valley at the foot of the fortress. Large areas on both banks of the river were occupied with the dispersed suburban development, as if divided by greenery. A suburban fortress – original Terebovlia gate – stood at about 5 km from the citadel, where the Hnizna River runs into the Seret River. An old monastery could be seen behind it on the mountain slope. In general, there it comprised multiple urban planning composition closely tied to the local landscape, which was consistently percepted while approaching the central city core.

166 Iryna Dyda

Downtown of the cities set up on the plain, usually swampy riverine areas, was located on the island amid water or marshland, and another nearby island - smaller in size but higher -was chosen for the fortress. Such "island" lowland cities are represented in Ukraine by, inter alia, Volodymyr (Fig. 1). The citadel of Volodymyr city was surrounded by ramparts and occupied a part of the island in the swamps. Inside and outside of the citadel there were churches - architectural dominants. Immediate environs were located to the north and east from the citadel. Its defenses were supplemented by natural barriers - impassable wetlands. A significant compositional role of Volodymyr's panorama was given to three small islands, each of which has a church on. The overall city panorama composition was geared towards Luha River – an important communications route. Starting from the monumental church of the 10<sup>th</sup> century, 10 km from the citadel, near the main pier on the Bug River the travellers gradually encountered city views and architectural dominants located as if in an arch to the riverbed. Plain landscape did not prevent from contemplating the panorama since there was large free area in front of the city formed by green meadows and marshes. The urban environment composition was solved comprehensively and included not only the territory inside the city fortifications but also extensive suburbs which gradually evolved into the open countryside area. Thus the reaction of Hungarian King Andrew, who declared war in 1232 to Volodymyr city, recorded in Galician-Volhynian Chronicle, when he said in amazement: "I have not come across such a city even in the German lands" is understandable (Halytsko-Volynskyj litopys, 1994, 43). The similar compositional approach was characteristic to other Ukrainian cities located amid the plain terrain – in Busk, Belz, Zvenyhorod, and Lutsk.



**Fig. 1**. Volodymyr city in 12<sup>th</sup>–13<sup>th</sup> centuries (Scheme of streets at the beginning of the 20<sup>th</sup> century) (Rudnytskyj, 1971, 5)

Fig. 2. Chernihiv city plan in 1706. Multicomponent structure of urban space (Vecherskyj, 2003, 222)

Ukrainian historical cities were formed gradually and had multicomponent structure composed of sites of different functions that slowly emerged and together occupied substantial area. Features of the urban planning of the Ukrainian cities can be well seen in Chernihiv. This city, which became the center of the Chernihiv principality since the 9<sup>th</sup> century, consisted of several functional parts. The main administrative and defensive center was the citadel. It occupied the territory of about 15 hectares on the coastal terrace ledge above the Desna River. The town of Okolne covering about 40 hectares adjoined to the citadel from the field. A separate compositional element within Okolne was Tretiak district with the Yeletskyi monastery fortified complex on a high hill above the river. Nearby, in the Boldyni Mountains above Desna, another architectural dominant -Illinska Church – was built in the 12<sup>th</sup> century. To the northwest from Okolne town and on the left bank of the Stryzhen River, suburbs evolved with the main trade square of Chernihiv and another dominant - Paraskeva church. Podil district emerged near the pier on the Desna River. The complex urban planning structure of Chernihiv was emerging and developing gradually, according to the local landscape. After Chernihiv was destructed by Mongols in 1239, its growth slowed down but the principle of multiple components of its urban composition and a close relation with the landscape was also preserved in the next century (Fig. 2). Chernihiv, like most Ukrainian cities such as Kyiv, Nizhyn, Novgorod-Siverskyi, Pereyaslav, Putyvl, and Poltava, in which the important compositional role was given to the architectural dominants amid the landscape, continued evolving by the traditional concept in the 18th century. The historical basis was supplemented by new high-rise accents: a high bell tower of the Yeletskyi monastery and tower on the Collegium building were constructed; the old wooden church of St. Catherine was replaced by a new and much larger one made of stone. The researchers emphasize that composite breaks in construction that contributed to visual contact with the landscape were still left during this period. Basic urban construction was predominantly low-rise buildings of farmstead type. Chernihiv, like most Ukrainian cities, obtained regular planning just in the 19<sup>th</sup> century under considerable administrative pressure. According to V. Vecherskyy (2001), up to the mid-19<sup>th</sup> century, downtowns of the majority of Ukrainian cities were rearranged. This new planning scheme had led to radical changes of a three-dimensional arrangement of cities. Most cities of Nadniprianshchyna received identical rectangular and straight-lined planning. The transition to regular redesign in Ukrainian cities was everywhere met with resistance and protests of the local dwellers as it is evidenced by reports of contemporary city management (V. Vecherskyy, 2001, 227).

Bibliographic sources pertaining to the history of the Polish city planning and urbanistic concepts of the Polish cities establishment in the early medieval period, including the studies of M. Książek (1992), prove the existence of two categories of plans which were tied to the landscape features of the area: lowland cities and highland cities.

H. Samsonowicz, the author of the research Life of a Medieval City (1970), explaines that in Poland large city formations like Kraków, Wroclaw, Gniezno, Gdańsk, Poznań, and Sandomierz occupied large areas and comprised a complex of different villages which together formed the city. A castle in such agglomerations was an inaccessible place convenient for defense – on a hill with steep slopes or in the swamp, surrounded by a river; immediate environs limited by its own fortifications were located near the castle, and a market was located in the most convenient place if to consider the topography aspect. The trading district had the best opportunities for spatial development and was attractive place both for the locals and strangers.

M. Książek (1992) also confirms that multi-component settlements that developed around these urban centers, such as Gniezno (Fig. 3), Poznań (Fig. 4), Kruszwica, Kraków, Kalisz, Wrocław, formed polycentric structures that gradually occupied vast territories.

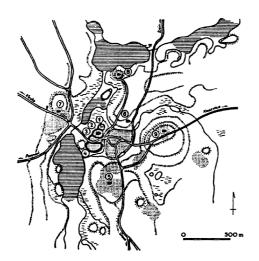


Fig. 3. Gniezno city in 9<sup>th</sup>-12<sup>th</sup> centuries (M. Książek, 1992, 40)

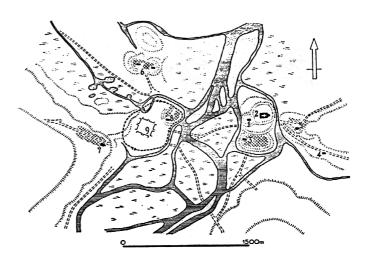


Fig. 4. Poznań city in 9<sup>th</sup>–12<sup>th</sup> centuries (M. Książek, 1992, 43)

Polish scientists B. Kalinowski (1996) and W.Ostrowski (1996), confirming the polycentric planning structure of the Polish cities or pre-location period, as well pay attention to the picturesqueness of their composition. Thus, the medieval city of Poznań lies on several islands of the Varta River, its architectural composition is based on the contrast of flat river surface and marshy meadows with urban development and high-rise architectural dominants which surround the river valley from all sides.

An example of close connection of urban composition with landscape is the ancient Polish city Kraków. Its defense center on Wawel developed in the 10<sup>th</sup> century on an oval rocky terrace over the Vistula River, housing the residence of a duke and sacred buildings. A part of the terrace separated by the ravine was occupied by immediate environs - residential district with two churches. At the foot of Wawel, craft and trade district 168 Iryna Dyda

"Okil" (neighborhood) had been developed together with the construction of its temples. Separate settlements were also formed at the church of St. Trinity and St. Wojciech, and a number of settlements which were connected to the churches were located along the main roads. The settlements spontaneously arising in the vicinity of the Wawel together formed the vast agglomeration that occupied about 50 hectares at the end of the 12<sup>th</sup> century. In the 12<sup>th</sup>—13<sup>th</sup> centuries Kraków developed mainly in the north direction where the landscape contributed to the trade arrangements, and where separate dwelling centers united within the locational city (M. Książek, 1992).

Another example of gradual development of a Polish city that evolved on the hills on the right bank of the Vistula River is Kazimierz Dolny. It comprised the Zamkova Góra hill (Castle mountain), Wietrzna Góra hill (Windy mountain) and Krzyżowa Góra hill (Cross mountain), and a few hills – on the outskirts. Kazimierz Dolny was established near the crossing of the Vistula River. A trade route from the Western Europe to the east, up to Kyiv was laid there. A wooden fortress with a tower has long been placed at Zamkowa Gora. In the 10<sup>th</sup> century at the crossroads of the trade route and the castle road there was the first settlement – the basis of future Kazimierz. But it was not the only one. The developed centers were concentrated along the road that led to the crossing of the Vistula; development cluster emerged on the Wietrzna Góra, neighboring hills were also occupied by individual estates. Thus, the city initially was set up as a complex of several settlements and development centers, scattered among the hilly terrain. Just in the 14<sup>th</sup>–15<sup>th</sup> centuries, when king Casimir the Great constructed a new fortress between the medieval city center and Zamkowa Góra and the city was granted the Magdeburg right, Kazimierz Dolny began its development under a regular planning scheme in new lowland area that was more favourable for the development (W.Ostrowski, 1996).

## 3. Results and Discussion

These examples of urban composition of some historical Polish and Ukrainian cities, as well as research findings recorded in bibliographic sources give reason to speak about a number of similarities of architectural environment of cities of early Middle Age in Poland and Ukraine. Primarily, it is a direct correlation of city urban planning structure, its visual image and the overall composition of the urban architectural ensemble with the local landscape. The researchers outline two types of organization of urban space both in Ukraine and Poland depending on the terrain – low-land cities and highland cities. In both cases, the location of architectural dominants and the sequence of their perception are individual for each city and village due to the unique terrain the development of which is related to. Secondly, visually open urban space over the surrounding landscape and the location of the major dominants is well perceived from different distances. Thirdly, multi-components' urban structure: urban centers both in Poland and Ukraine were formed out of urban planning elements, different in functionality, size, and requirements to their location in the landscape. They necessarily included a fortified fortress and the main settlement which were supplemented, if needed, by fortified monasteries, river piers, trade markets and other architectural dominants. The similarity is also traced in details. For example, on the outskirts of the Polish Poznań, there is a St. George hill with the eponymous church (analogy of St. George Cathedral placed on the in the Ukrainian Lviv), and one of the old Kraków districts is entitled "Okol" (analogy with numerous "okolni towns" of the Ukrainian cities). The common feature is the same preferred use of wood as construction material for buildings of different functionality, including the city fortifications (defensive walls of wooden structures in Gniezno (M. Książek, 1992, 42)).

Therefore, integration with the landscape, which distinguished the Ukrainian cities' development until the 19<sup>th</sup> century, actually was the continued application of architectural environment concept, which was also wide-spread in Poland till the 12<sup>th</sup>–13<sup>th</sup> centuries, when the main European territory was undergoing intense processes of the cities' new location. The cities' new planning schemes strictly adhered to the plan and usually was accomplished on a new and maximally flat area. As the location requirements had to be adjusted to the Magdeburg Law regulations, the cities had to order all legal documents, adopt a new development plan with a rectangular market square, and creat a new and improved fortifications system. The process of location setting was historically determined. Formally, it moved across Europe from west to east, and was much connected with the cultural, economic, and legal impact of contemporary German cities. H. Samsonowicz (1970) writes that locating in fact was the final stage of a durable process of forming civil, industrial, and domestic legislation

based on local customary norms of a medieval city. The use of Magdeburg and Lubecz legal samples accelerated the completion of this process a lot, although sometimes new standards were taken reluctantly on sites. He also notes that the location has not negated the significance of old urban settlements and larger location cities, such as Gdansk which consisted of several centres with a different production specialization, and formed a large city planning and economic complex up to the 15<sup>th</sup>-16<sup>th</sup> centuries. It confirms that the changes in the planning structure of Polish cities, which eventually have led to the formation of visually closed spaces of city squares and streets and their compositional unification, were likely the result of social processes in the economic and legal aspects and not of philosophical or aesthetic ones.

Polish researchers distinguish a specific typological group of cities that preserved old planning structure connected to the landscape due to the location conditions. Also noteable is an opinion by W. Ostrowski (1996, 200) about this phenomenon:

Probably, it would be correct to divide the cities into those built according to certain local plan and those built without it. Thus, not only the first ones must be attributed to "urban works", considering the others as having arisen by chance... There were excellent examples of cities and towns among them that have been developing "organically", according to the code that existed in their creators' imagination – and in symbiosis with the natural environment.

It means that if we correspond the mentioned above idea to our reality, the achievements of the Ukrainian urban science that has developed over many centuries, forming a cities' composite structure according to their own methods, in close correlation with the landscape are in close connection with the European city planning tradition.

## 4. Conclusions

- 1. Analysis of architectural construction of the ancient cities of Ukraine and Poland allows to trace similarities in traditional architecture of both countries in many aspects, especially if it comes to the concept of the urban space arrangement. This similarity was largely lost due to historical changes in the 13<sup>th</sup>-14<sup>th</sup> centuries.
- 2. The old concept of urban space arrangement used in Poland and Ukraine in early medieval times was significantly different from the urban concepts which were traditional for the Mediterranean countries. But it does not cease to be European due to this, and has its own compositional features and benefits. Therefore, the question of which approach to urban space arrangement should be considered to be the best or the worst is incorrect, since each of these two concepts solves its own compositional task - to create visually closed environment, or vice versa, maximally open to the landscape. Ukrainian cities for various reasons have preserved compositional features that were common in Poland and Ukraine in the early Middle Ages for much longer.
- 3. Comparatively old regional urbanistic traditions were revealed in prelocation development of the Polish and Ukrainian cities, and their study is necessary for the adequate evaluation of the joint contribution of both countries into the world culture.

## References

- [1] Antonovych D. 1988. Ukrajinska kultura. München: Ukrajinskyj tehnichno-hospodarskyj instytut.
- Halytsko-Volynskyj litopys. 1994. Lviv: Chervona Kalyna. [2]
- Kalinowski W. 1996. Zarys historii budowy miast w Polsce do polowy XIX wieku. Toruń: Uniwersytet im. Mikołaja [3] Kopernika.
- Książek M. 1992. Zarys budowy miast średniowiecznych w Polsce do konca XV wieku. Kraków: Politechnika Krakowska [4] im. Tadeusza Kościuszki.
- Ostrowski W. 1996. Wprowadzenie do historii budowy miast. Ludzie i środowisko. Warszawa: Oficyna wydawnicza [5] Politechniki Warszawskiej.
- Rudnytskyj A. 1971. Rozvytok mist zakhidnykh oblastej URSR ta jih sotsialistychna rekonstruktsija. Lviv: LPI.
- [7] Samsonovich H. 1970. Zycie miasta sredniowiechnego. Warszawa: Państwowe wydawnictwo naukowe.
- Sitte C. 1889. Stadte-bau nach seinen kunstlerischen grundsatzen. Wien: Carl Graeser (russian translation 1993. Moskwa: [8]
- [9] Vecherskyj V. 2001. Arhitekturna i mistobudivna spadshchyna doby Hetmanshchyny. Kyjiv: NDITIAM.
- Vecherskyj V. 2003. Spadshchyna mistobuduwannia Ukrainy. Kyjiv: NDITIAM.

170 Iryna Dyda

Ірина Дида

## ПОДІБНИЙ УРБАНІСТИЧНИЙ ПІДХІД У ЗАСНУВАННІ МІСТ РАННЬОГО СЕРЕДНЬОВІЧЧЯ (ДО ХІІІ СТОЛІТТЯ) В ПОЛЬЩІ І В УКРАЇНІ

Анотація: В останні століття візуальний образ архітектурного середовища історичних міст Польщі й України суттєво відрізняється. Архітектурна організація історичних осередків польських міст, що грунтується на застосуванні візуально закритих просторів, виявляє ознаки, характерні для західноєвропейської урбаністичної традиції, тоді як більшість українських міст аж до XIX ст. розбудовувалися за принципом візуальної відкритості та інтеграції з ландшафтом. Складається враження, що ця істотна концептуальна відмінність архітектурного середовища існувала завжди, хоча обидві країни розташовані поруч на карті Європи. Але спосіб заснування польських та українських міст у період раннього середньовіччя (до XIII століття), а також наукові бібліографічні джерела, дають підстави говорити про наявність у тогочасних містах ряду подібних композиційних характеристик. Це, зокрема, залежність містобудівної структури, архітектурного образу і загальної композиції архітектурного ансамблю міста від місцевого ландшафту, візуальна відкритість міського простору на околиці, розміщення основних домінант так, щоб вони добре сприймались з різної віддалі, а також формування міських осередків з кількох містобудівних елементів, різних за функціональним призначенням, розміром і потребами до розміщення в ландшафті. Таким чином, інтеграція з ландшафтом, яка аж до XIX ст. характеризувала забудову українських міст, може бути продовженням застосування тісї самої давньої кониепиії формування архітектурного середовища, яка в період раннього середньовіччя, до часу інтенсивного поширення на європейський схід процесів нової локації міст, застосовувалась також у Польщі, і яка щойно в XIII–XIV століттях, через історичні обставини, була здебільшого втрачена. В долокаційному розвитку польських і українських міст проявилися дуже давні регіональні урбаністичні традиції, і їх дослідження необхідне для належної оцінки спільного внеску обох країн в загальносвітову культуру.

Ключові слова: архітектурне середовище, ландшафт, урбаністична композиція

Translation was made by Linguistic Centre (Translation & Localization Company) 32 Arkhypenka Str., Lviv, 79005, Ukraine; email: lingvo@mail.lviv.ua skype: linguistic.centrephone: +38 (032) 275-48-43fax: +38 (032) 225-60-68