Town of Zhovkva (Żółkiew) in western Ukraine – an example of urban complex built at the end of the 16th century on the concept of the renaissance "ideal town"

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Abstract: The town of Zhovkva (Żółkiew) belongs to the late Renaissance foundations of private resident cities in Halychyna in the late 16th century. Urban-spatial structure of the town was designed according to the Renaissance ideal city. The city consisted of two conjugated parts: the owner's castle and the fortified downtown. The combination of these two parts was of a specific nature – when the central square of the town is combined with the facade of the castle complex.

On the base of the historical and urban studies presented the hypothesis that town of Zhovkva (Żółkiew) is an unique example of late Renaissance urbanism. The start of town build was in 1594 according to a project based on the concept of "ideal town". We are thinking, that the author of the project and plan of town was Paolo Clamensi – Italian architect, worked in Lviv at the end of 16th century. The towns have a well-preserved original Renaissance planning structure and a number of architectural monuments that are connected with it. Reconstruction of the original historical town plan allows us to express the hypothesis of its similarity to the projects of cities published in the treatise of the Italian architect of the 16th century Pietro Cataneo.

Keywords: town of Zhovkva (Żółkiew), town planning structure, Renaissance, "ideal city" model, urban composition, development of a town, Pietro Cataneo.

Introduction

In recent years, interest in historic cities has grown significantly in connection with the intensification of international scientific cooperation in the Eastern Europe related to studying and popularizing the architectural and urban heritage. This interest is also related to the identification of applicants for inclusion in the UNESCO World Heritage List [1]. In the list of historic cities of Ukraine, the attention is first of all drawn to the well-known large objects – Lviv, Kyiv, Kharkiv, Kamianets-Podilskyi and Chernihiv. The ensemble of the historic center of Lviv has been in the list of UNESCO heritage sites since 1998. A part of the town center of Chernivtsi (anensemble of sacred and administrative buildings of the Residence of Bukovinian and Dalmatian Metropolitan of the 19th century) was listed in 2011. There are very valuable urban complexes in the structure of small Ukrainian towns as well. Even today, the value of such cities or towns in Ukraine is often not very noticeable either because of insufficient scientific study of their architectural history or due to insufficient coverage in leading scientific journals. To a large extent, this situation can be explained by the fact that in 1950–1980 no thorough research was carried out in the field of historic urban planning. That is why, one of the small historic towns in the Western Ukraine was selected for study and present its urban and architectural values.



Fig. 1. The reconstruction of planning structure of town of Żółkiew (Zhovkva) by Jan S. Zubrzycki [J.S. Zubrzycki, 1901]. The defensive towers author located in western and eastern parts of townn walls only.

Analysis of urban development of town of Zhovkva

Zhovkva belongs to one of the insufficiently studied, but highly important urban-planning formations in the Halychyna region (Western Ukraine). The town is located 23 km north-west of Lviv. Zhovkva is the modern title of the town. In the historical documents, it is named Zholkiev (or Żółkiew, pol.) – this was also the name the family town of Żółkiewski in the Lublin region [2]. Next to the official name, Ukrainian casual "Zhovkva" was also used, which was established as a modern name. During the times of the Soviet Union, for a short period, it was inappropriately called "Nesterov" [3].



Fig. 2. Photo of central square of town of Zhovkva at the beginning of 20th century. The blocks of late Renaissance buildings with loggias-arcades in parter (northern part of square) [http://:www.polona.pl].

Scientific and academic works which have appeared in the recent years state that Zhovkva is an example of late Renaissance urbanism and was built in late 16th century according to a project based on the concept of "ideal town" [4, 5, 6]. In accordance with historical sources, this town was founded by Stanisław Żółkiewski (Zholkevski) [7] in 1594 on the territory which was part of the village Vynnyky [8]. Wysocki's family owned the village at that time. Foundation of the town took place on the eastern bank of the Svynia River, near the old castle of the Wysockis. It is interesting that in the middle of the 19th century, the bridge over the river which led to the western gate of the town did not belong to the town, but to the territory of the village. That is to say, the agreement between Stanisław Żółkiewski and Michał Wysocki on the transfer of the part of the settlement territory, gave the old owner control over the bridge and, of course, over the bridging tax collection. Unfortunately, only archeological traces remain from the castle of Wysockis.



Fig. 3. Today photo of central square of town of Zhovkva, M. Bevz, 2018.

Nowadays, Zhovkva has become the object of broader studies by historians and architects [9,10, 11]. In particular, in 2016 was published the so-called "atlas of the town" [12] in which the general stages of its development are reconstructed. In 1995, according to the decree of the Government of Ukraine, the historical part of the town received the status of the State Historical and Architectural Conservation Area. The Conservation Area is still functioning, managing the restoration works in the castle and in the central part of the town.

Today one of the architectural objects of Zhovkva is included to the UNESCO list of world cultural heritage from Ukraine. In 2013, the wooden church of the Holy Trinity, located in the Zhovkva suburb at the road from Lviv, was added to this list. The church is one of the 16 shrines of the joint Ukrainian-Polish nomination "Wooden churches of the Carpathian region of Poland and Ukraine" [13]. This church, which was built in 1720, has a unique, renaissance iconostasis of high art value. It is characteristic that the iconostasis was created by masters of the local Zhovkva painting guild. It was probably transferred to the Church of the Holy Trinity from an older church. It is evidenced by the very architecture and design of the iconostasis, showing the rebuilt parts of it, "fitted" to the size of the church interior.

According to the characteristics of its historical architectural and urban structure, Zhovkva complies with the main requirements of the "List of historical settlements of Ukraine" regarding to the uniqueness, authentic town and consistency of the heritage. The town has a well-preserved original Renaissance planning structure and a number of architectural monuments that are associated with it. The existence of a Renaissance plan makes the town to some extent unique both in Ukraine and in the Eastern Europe as a whole. The wooden church of the Holy Trinity is one of the reference objects of the Renaissance town planning. It is located in the place where a defensive gate at the entrance to the fortified suburbs on the road from Lviv was [14].

By the time of foundation, Zhovkva is among the cities of the late Renaissance, which arose on the eastern borders of the Polish-Lithuanian Commonwealth, creating a system of fortified settlements to strengthen the defence capacity of territories which were often attacked by southern neighbours (Tatars and Turks). However, the architectural and planning features of this fortress town have not yet been the subject of special scientific

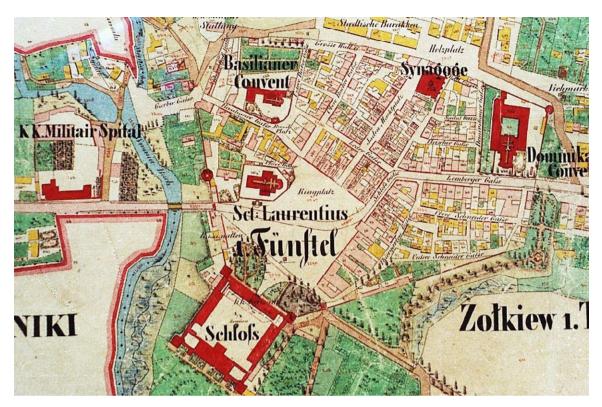


Fig. 4. Central part of town of Zhovkva (Żółkiew) on the cadastral map 1854 [12].

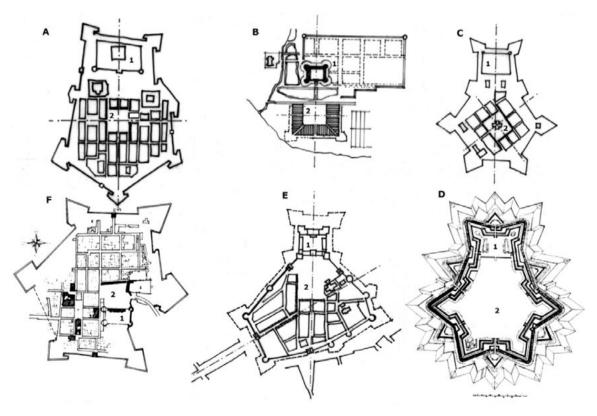


Fig. 5. Comparative analysis of town plans (towns located at 16–17 century): A – Zamość; B – Krasiczyn; C, D – Stanislav; F – Sabbioneta; E – Zhovkva; 1 – castle, 2 – inner town.

consideration in comparison with the defining examples of European Renaissance urbanism (fig. 2, 3). Today, the researchers have not yet elaborated on the genesis of the Zhovkva Planning Pattern; the specific characteristics of its Renaissance town-building composition have not been identified and compared with similar implementations in other parts of Europe, although in general, the identity of the town plan was emphasized in the work of architects-scientists O. Sosnowski [15], V. Chornovus [16], S. Kravtsov [17], A. Martyniuk-Medvetska [18], and I. Krypyakevych [19], M. Książek [20], K. Kuśnierz [21,22], H. Yaremych, Y. Kalika [23], and others. In our previous publications, we have already covered the issues of uniqueness of urban studies in Zhovkva [24, 25, 26], so now we are trying to develop this topic further. We believe that the immediate task of academics should be to explore the scheme of the planning structure of Zhovkva at the time of its foundation, to find out its prototypes and compare the architectural and urban composition of Zhovkva with other objects of European urbanism of the Renaissance age (fig. 3, 4, 5).



Fig. 6. Buildings with loggias-arcades in the central part of town of Zhovkva (drawing of beginning of the 19th century) [Zhovkva. Atlas ukrayinskych istorychnych mist. T. 3. Sc. Editor M. Kapral, Lviv, 2016, p. 32].

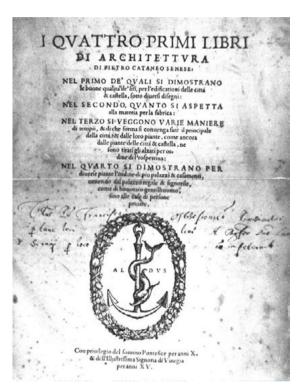


Fig. 7. Title page of the book of Pietro Cataneo Senese [Quattro primi Libri di Architettura di Pietro Cataneo Senese. – Venetia: 1567. – P. 1. Photo by M.Bevz].

The history of the appearance of Zhovkva on the historical map of Halychyna is special. This town was founded in the last years of the 16th century as a private fortified residence town. The times of the town's foundation were marked by a constant threat of military actions in the territory of the Western Ukraine and, in particular, in Halychyna. Poland, Ukraine (which strived for autonomy), Turkey, Austria, Tataria, Wallachia and Transylvania confronted each other here. Constant wars made our territory to one of the most active new fortress-town construction areas in Europe in the 16th-17th centuries. Almost all these new cities were private, that is, they were founded by the rich owners of large land latifundia [27].

The development of the construction of private cities in Ukraine in the 16th and 17th centuries, unfortunately, has not yet been studied. The causes and geography of such cities are also not highlighted. However, citing the article of K. Kuśnierz can be argued that urbanization processes in Halychyna at this time occurred in much larger scale than in the rest of Poland [28]. This era left extremely valuable examples of urban planning, most of which, unfortunately, have been reconstructed or completely destroyed in later times (for example,

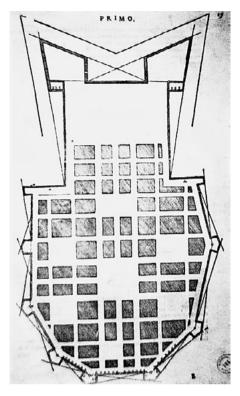


Fig. 8. The planning model of town plan with aunregular perimeter in the book of Pietro CataneoSenese [I Quattro primiLibri di Architettura di Pietro Cataneo Senese. – Venetia: 1567, p. 19. Photo by M. Bevz].

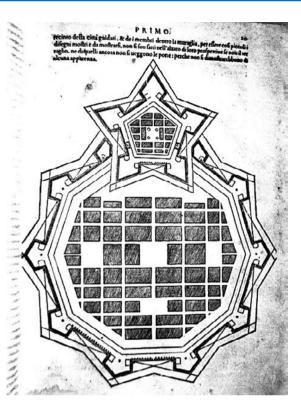


Fig. 9. The planning model of town plan with a regular perimeter in the book of Pietro CataneoSenese [I Quattro primiLibri di Architettura di Pietro Cataneo Senese. – Venetia: 1567, p. 20. Photo by M. Bevz].

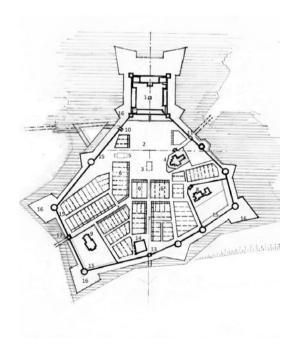


Fig. 10. The planning scheme of town of Zhovkva; on the time of 17 century [by M.Bevz].

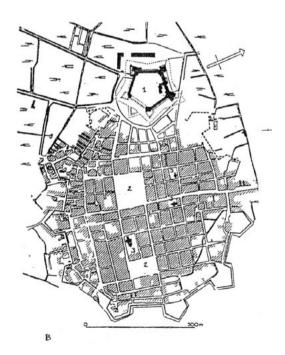


Fig. 11. The planning scheme of town of Brody; on the time of 17 century [by M.Kalinowski].

the planning structures and fortifications of the cities of Berezhany, Rohatyn, Uhniv, Kukeziv, Vasiuchyn, Kniahynychi, Burshtyn, Svirzh and many others [29].

Another characteristic feature of urban planning at the end of the 15th century is the emergence and expansion of new concepts of the town planning in Halychyna and Ukraine, based on the imitation of Italian planning structures for the construction of the "ideal town" of the Renaissance. Italian architects, many of whom worked at the princely or noble courts, at monastic orders (for example: Pietro Sperendio, Bernardo Morando, Aurelio Passaroti, Giacomo Briano, Paolo Clamensi etc.), or those who settled as practicing architects in larger cities, encouraged this. For example, about ten architects of Italian origin practiced in Lviv at the turn of the 16th and 17th centuries – Paolo Dominici, Pietro di Barbona, Ambrosio Nutklaus and other [30].

The inspiration and the implementation behind the state-of-the-art urban planning ideas were the princely or noble ranks of the Polish state [31], which included Halychyna at that time. Halychyna and then all of Ukraine, through hereditary law, passed under the control of the Polish king at the end of the 14th century. Accordingly, all the Ukrainian (Ruthenian) gentry or prince's families were in the service of the Polish king and occupied some of the high posts in the Polish state. Particular efforts in such activity were shown by the ancient Ukrainian noble families who owned huge estates in the east of the Polish state i.e. in Halychyna, Podillya, Kyiv region, and belonged to the cohort of the richest people in the kingdom (for example, the Ostrogskis, the Vyshnevetskys, the Sieniawskis, and others as well as the Žółkiewskis). At the time of the founding of Zhovkva, Stanislav Žółkiewski had a high state office and title of crown hetman and had significant estates in the Ruthenian, Belz, Lublin and other voivodeships [32].

The creation of well-fortified private residential cities in Ukraine, as we see, was a well-prepared and characteristic phenomenon for that time. In addition to military factors, the construction of such cities was determined by the presence of relevant customers and by their financial capacity, by the corresponding development of engineering and architectural thought; there was economic reasonability of building new cities (fig. 4, 5, 14).

Zhovkva was one of the earliest realizations of the concept of "ideal town" on Ukrainian lands. There are not many Ukrainian cities that have preserved the Renaissance structure to this day. A part of the specialists include Sharhorod in Vinnytsia region which was founded in 1580 by the Chancellor of the royal court Zamojski with the participation of architect Bernardo Morando to such objects. However, the detailed study of the building system which was conducted in 1988 (Yu. Nelhovskyi) and in 1994 (T. Trehubova) [33] did not find traces at the site that would sufficiently confirm the Renaissance planning and fortification which were characteristic of that time. According to T. Trehubova, the structure of the central part of Sharhorod, which is preserved to our time in rather full historical form, does not confirm the Renaissance principles of its planning layout [34]. Therefore, the planning model of the town and the nature of its lost fortifications from the 15th century remain the subject of theoretical scientific discussions and hypotheses.

To the later implementations of the ideal town concept belongs Stanislav (Ivano-Frankivsk; fig. 5). Until the 1970's, this town still retained the remains of its bastion fortifications, but they were destroyed during the reconstruction of the town center for the construction of a Soviet administrative building. This construction destroyed the unique layout of the town center, which distinguished this town from other historic cities of Ukraine.

Experts estimate that there are many more cities in Halychyna, which, at the time of foundation, did not receive a purely Renaissance but a transitional architectural and planning style with elements of a medieval and of a Renaissance town. These include Berezhany, Ternopil, Nemyriv, Novi Strilyshcha [35] and other cities.

Brody also belonged to one of the earliest Renaissance cities in Ukraine. Interesting is that this town, which in the beginning was called Lubycz, also belonged to the possessions of Żółkiewskis. The founding of the town, like in the case with Zhovkva, was carried out at the initiative of hetman Stanislav Żółkiewski, but 14 years earlier, i.e. in 1580 (S. Kravtsov presents another date of the laying of Brody – 1584 year) [36]. The town is located relatively not far away from Zhovkva, 70–80 km to the north-east. It consisted of a castle and a town located on an island in the middle of a large pond. The original planning of the town has not survived to the fullest. In 1630, Stanisław Koniecpolski, the new owner of the town, carried out a radical reconstruction, enlarging its territory and transforming its planning structure [37].

Discussion and main achievements

Based on the stated before, we can assert that in this way Zhovkva remained the oldest preserved example of the Renaissance ideal town in Ukraine. And, what is important, the state of preservation of the town's building and planning system is relatively good and allows us to rely on its fruitful studies in various fields – archeology, history, study of architectural and art monuments, study of Renaissance urbanism and architecture [38].

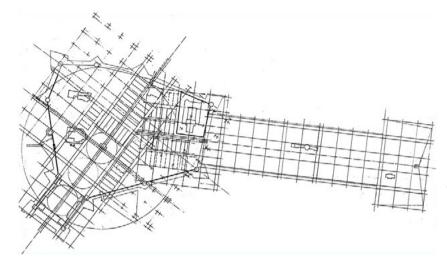


Fig. 12. The reconstruction of planning model of of town of Zhovkva (at the time of 16–17 century); by M.Bevz. Basic module – 43.2×43.2 m; left part – middle town (founded 1594; right part – Lviv suburb (founded – 1609).



Fig. 13. Drawing of Rynok square in Zhovkva with the church and town hall building at the last years of the 18th century [https://polona.pl/item/zolkiew-w-koncu-18-wieku, NDAyMTqyMTY/0/]

The analysis shows that the general spatial composition, the layout of the town, the nature of its development, the original planning structure of functional zoning is fully consistent with the principles of Italian Renaissance urbanism. In support of this, it should be said that there has been a common main planning axis of the town and the castle that has run from the Turynetska Gate through the modern Zaporizka Street, divided in half the Market Square, run through the main gate to the castle complex, and after having entered inside its courtyard, it ended at the main entrance and facade of the palace. The characteristic techniques of Renaissance urbanism and architecture used in Zhovkva include:

- "framing" of public spaces of the town (central square and main streets) houses with loggias-arcades (fig. 2, 3, 4, 6, 14, 15);
- application of Renaissance attic completions in decorating of the top of facades of houses (fig. 6, 13);
- location of the temple on a characteristic platform and with elevation above the square (fig. 2, 3, 10, 13);

- application of a democratic multi-ethnic scheme of settlement with the location of the temple in each national district (fig. 12, 14);
- presence in the town of an educational academic institution (functions of which could be hypothetically attributed in the beginning to the so-called Zhovkva fraternity and its school, which operated from 1612, and later to the Basylian Monastery, well-known for its educational activities [39; Bevz, 2000]);
- typical Renaissance planning composition of the central square with the presence of streets or alleys in the middle of the framing quarter (fig. 3, 4, 12, 14).

A special feature of the Renaissance cities was the rule of planning a special square in front of the residence of the owner of the town. Most often, these squares were planned separately from the rest of the more utilitarian squares of the town and formed a special front space in front of the owner's palace (for example, here can be mentioned the cities of Zamość, Quastalla, Sabbioneta etc.) [40]. One of the most important features of Zhovkva is that this square was combined here with the main public and commercial square of the town. That is, on the one hand, Zhovkva belongs to the so-called classical planning type of the Renaissance town, when the ring or square of the defensive walls of the castle touches the town ring of fortifications with one side, and on the other, it is an example of the so-called "compositional combination" of the owner's castle and the main square of the town [41] (fig. 14). This type of layout was not very common. Two similar cities from this list can be mentioned here (except for Zhovkva) – Krasiczyn in Poland and Sabbioneta in Italy [42] (fig. 5).

In the early Italian version, the residential square in front of the castle was formed at the entrance to the prince's palace through the expansion of the street (along the entire length of the palace facade). The example for this is thee square-street in front of the Palazzo Pitti in Florence. Therefore, it can be argued that the planning of the square used in Zhovkva has certain associations with early urban building experiments in Italy. On the other hand, the combination of ceremonial (castle) and public town functions in the Zhovkva's main square is very interesting for contemporary urban planning practices. Especially, since the final assignment of the solemnly-representative functions (ceremonial places near the palace) to main squares of the residential cities took place only in the middle and second half of the 17th century, mainly in the French projects of ideal cities, in particular in the projects of Jean Errard Bar-le-Duc [43, 44], also in the project of ideal town by Adam Freytag (1631) [45].

It is important to highlight another prerequisite for the emergence of Zhovkva – the state of development of urban science at the time of laying the foundations of the town. In view of this, among the theoretical works of the architects who worked out the principles of the planning layout of the ideal town, we must highlight exactly those treatises which preceded our construction in the time of their appearance. Their list is not very long. These are the treatises of Francesco di Giorgio Martini (1501), Pietro Cataneo (1550, 1567), Daniele Barbaro (1567) and Bartolomeo Ammanati (1570) [46]. In particular, the works of these authors could have served as a model for the planning works in Zhovkva, since they were published and distributed among architects before 1580–1590s. In these works, we often find suggestions for the installation of defensive urban fortifications, mainly in the form of walls with semicircular bastions [47].



Fig. 14. Hypothetical view of town of Zhovkva in 17th century. Authors: Mykola Bevz, Olga Okonchenko, Ihor Okonchenko [54].

In view of this, it becomes clear to some extent why the old system of fortifications (defensive walls, towers and bastions) were used in Zhovkva, rather than a completely new bastion one. However, it should be noted that the entrance gates to the town are already implemented under the new system, as well as the fact that along with the defensive walls was implemented an additional line of earth bastions. However, the researchers do not have a unanimous opinion about the time of its occurrence. It is believed that it might have appeared somewhat later. Though, one should pay attention to the fact that documents from 1621 mention almost finished defence structures of the town and Zhovkva is named there as "complete fortress" [48]. It should be noted also that the documents of 1621 indicate the existence of builded four town gates – Lvivka, Zvirynetska, Glynska and Jewish. Thus, we can assume that they are also not products of later time. This fact makes it possible not to doubt that the town had already had a bastion defence line. That is, it is quite probable that the entire system of urban fortifications was built in a relatively short time – from 1594 to 1621. Such a combination of new and old defence construction systems in Zhovkva is very interesting and requires more detailed study and more precise dating. In particular, a comprehensive archaeological study of selected sections of the defensive walls and adjacent bastions could be very useful.

If we carefully analyse the plans of cities proposed by the aforementioned Italian theorists of urbanism, it is easy to notice the great similarity of Zhovkva's planning style to one of the theoretical projects of Pietro Cataneo [49, 53] (fig. 8–9, 10–11).

Even more interesting is the following fact: in the treatise by Pietro Cataneo two versions of the planning layout of the ideal town are worked out. The first has an irregular configuration of the outline of the plan and the second with a regular one (fig. 8–9, 10–11). Actually Zhovkva is similar according to the general compositional layout to the first irregular type. The second (regular) type is very similar to the planning of Brody. The planning structure of Brody was changed in the 1630s, when the town was enlarged and reconstructed. But there is enough evidence to suggest that this reconstruction was based on the previous planning pattern. This was particularly stressed in the studies by B. Chornovus [50]. And later, S. Kravtsov convincingly showed that the town consists of two parts – the Old and the New town, which have different planning basics and metric conformity [51] (fig. 11).

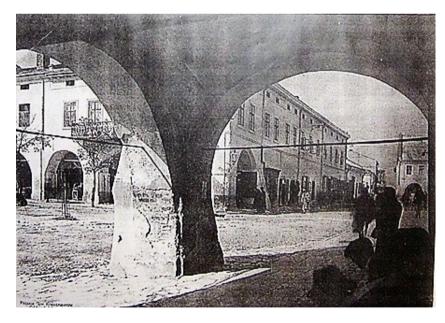


Fig. 15. Photo of the northern part of Rynok square and the beginning of Lvivska street, 1910. [55].

If we recall that both Zhovkva and Brody were founded almost simultaneously by the same owner – Stanislav Zholkevski (Žółkiewski) – and perhaps by the same architect Paolo de Dukato Clamensi (called also as Pavlo Shchaslyvyi, Pawel Szczęśliwy) [52, 56], then this resemblance appears to be not accidental. We can suggest that these Western Ukrainian cities are a unique realization of the theoretical project concepts of the ideal Renaissance town of Pietro Cataneo.

Of course, our hypothesis requires even more in-depth research, a serious sequential argument, and a meticulous comparison with the theoretical or realized models of Renaissance town-planning in Italy and in other countries. However, even the above facts suggest that Zhovkva and Brody should be regarded as worthy of more attention in the field of national and European urbanism in the late 16th – early 17th centuries.



Fig. 16. Building with loggias-arcades in town of Żółkiew. Drawing by O. Mann, 1923 [polona.pl]. This building was located on the corner of today Korotka street and Zaporizka street. On the cadastral map of 1854 p. in this place is marked wide building (fig. 4) with loggias-arcades from the side of the Juden Marktplatz.

Conclusions

- 1. The town of Zhovkva belongs to the late Renaissance foundations of private residential towns in the territory of the Polish state at the end of the16th century. The urban-spatial structure of the town was designed according to the scheme of the Renaissance "ideal town". In case of Zhovkva, the spatial structure of the town consisted of two conjugated parts: the castle and the fortified inner town. The combination of these two parts, when the central square of the town is combined with the main facade of the castle complex was rare.
- 2. Zhovkva is one of the towns where the author is known the Italian architect Paolo de Ducato Clamensi (known in Lviv under the name «Pavlo Shchaslyvyi», "the Happy Paul"), a member of Lviv craft masonry gild, who at the time was in service of hetman Stanislav Zholkevski. In 1601–1612 he was appointed by the owner of the town for the position of head of the town court. The construction of the castle and the town became an ambitious project and a life-long affair for the architect.
- 3. The materials of the analysis allow us to state the hypothesis, that the architect planning the town used theoretical treatises in its architecture. We believe that he implemented one of the schemes of an "ideal town", which was described in «Four Books on Architecture» by Pietro Cataneo (published in Venice in 1567). Thus, Zhovkva is one of the only Europian towns built on the base of the Cataneo's theoretical model.



Fig. 17. The corner of this building loggias-arcades from the side of Korotka street (Skorzana street in the past) on the post card of 1909. [polona. pl]. Basylian monastery on the second plan.

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