Contemporary Landscape and the Historical Arrangement of Localities Rebuilt in Late 18th Century on the Initiative of Antoni Tyzenhauz

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Abstract
Antoni Tyzenhauz’s (Lithuanian treasurer from times of Stanislaw Augusta and the Hrodna district administrator) activity at the end of the 18th century was aimed at economic activation of north-eastern part of Rzeczpospolita. About 50 manufactories were made near Hrodna on his initiative. Important effect of Tyzenhauz’s activity was also change of spatial form of chosen towns (Krynki, Dąbrowa Białostocka, Sokółka, Suchowola, Janów, Nowy Dwór, Lipsk, Jeleniewo, and Krasnopol). Small towns had regular plans with geometrical urban planning composition. Elements of spatial culture from the end of 18th century survived apart of their difficult history. They are important features of towns' contemporary identity now. The article is devoted to legibility of the historical composition from the end of the 18th century in the contemporary townscape of Krynki, Dąbrowa Białostocka i Sokółka.

Key words: Tyzenhauz’s towns, townscape.

Introduction
In Europe, the second half of the 18th century, among other things, saw creation of pre-industrial settlements. Small localities where production was conducted on a manufactory basis would often gain orderly urban development plans inspired by layouts of classic ideal cities (Salt Works of Chaux 1775-79, Nicholas Ledoux) (Benevolo, 1995; Kostof, 1991; Ching, Jarzombek, Prakash, 2007; Lakotka A.I., 2007; Paszkowska, 2011). In the Polish-Lithuanian Commonwealth, of special prominence in this regard was the activity of Antoni Tyzenhauz, the Treasurer of Lithuania. Between 1765 and 1780, he supervised the Grodno Table Land [a subdivision of a crown estate]. His area of responsibility included 22 towns in the area of the Grodno Table Land (15) and the Olita (Alytus) Table Land (7) (Borowik, 2001; Borowik, 2003; Lakotka A.I., 2007). Currently, the territories under discussion are located in the Polish-Lithuanian-Belarusian borderland.

The governor’s activity, conducted on behalf of King Stanislaw August Poniatowski, aimed at economic stimulation of the historically under-invested region of the Commonwealth’s northern borders. Tyzenhauz would combine establishment of manufactories with reconstruction of settlements (if the conditions allowed) and giving a new town-planning quality to the space of these
centres. In many cases, he was accused of excessive scale and expensiveness of his investments, or even of megalomania, inadequate to the scale of the provincial settlements where these investments were conducted.

In the literature on the subject of history of urban planning, or economic and political history of Poland, the most frequently evoked example of Antoni Tyzenhauz’s activity is Kunsztów near Grodno (Lakotka A.I., 2007; Słodczyk, 2012; Szafer, 1955; Wróbel, 1971).

Among the towns supervised by Tyzenhauz, the largest spatial changes affected the ones that had suffered from fires in the 1760s and 1770s. The destruction provided the opportunity to introduce a new urban structure. Typical projects, developed for settlements of varied scale, were applied (mansion and garden complexes constituting a seat of governorate administration), the localities were also provided with objects with defined functions (i.e. surgeon’s house, tavern, inn, etc.) (Sulerzycka, 1969; Borowik, 2002; Lakotka A.I., 2007). Urban development plans corresponding to the aesthetic criteria of the era were modelled on arrangements combining the features of Baroque solutions (governorate administration seats), concentric/radial layouts of ideal cities of the Renaissance, as well as axial arrangements of Classicism. The structure of localities deliberately employed view and spatial connections of main squares (market squares) and landmark buildings (temples), also connected with location of a farming estate serving as a seat of the administration centre. Geometrized schematic diagrams of plans had to be adjusted to the topographic conditions.

Despite the changes in the development and spatial structure of the localities, that have taken place for more than two hundred years, the preserved urban layouts (or their parts) as well as view connections can still be recognized today in the landscape of the assorted settlements. In the author’s opinion, the most valuable spatial arrangement features have survived in Krynki, Dąbrowa Białostocka, Sokółka, Suchowola, Janów, Nowy Dwór, Lipsk, Jeleniewo, and Krasnopol (currently, the Podlaskie Province of Poland).

**Aim of the research**

The aim of the research is to present the surviving landscape features being a result of urban arrangement established in late 18th century in the localities of Janów, Jeleniewo, Dąbrowa Białostocka, Krasnopol, Krynki, Lipsk, Nowy Dwór, Sokółka, and Suchowola. The spatial arrangement of these settlements combined the features of axial residential complexes with a geometrically ordered structure of an ideal city. The spatial shape given to provincial localities of the northern borderlands of the Commonwealth ideologically corresponded with the solutions implemented throughout Europe and in central Poland at the time. Provincial towns gained the features of centres with plans modelled on pre-industrial towns of the Classicist era.

**State of research**

The hitherto research on the activity of Antoni Tyzenhauz, conducted by representatives of various scientific disciplines, applied to a wide scope of issues. These included topics connected with the history of socio-political and economic conditions of the northern part of the pre-partition Commonwealth (Dobroński, 2014; Bończak-Kucharczyk, Maroszek; Borowik, 2001, 2002, 2003; Jakovlevas-Mateckis, 2011; Lakotka A.I., 2007; Sulerzycka, 1969), monographs of assorted localities (Bach, 2009; Gabri, 2012; Jaskanis, 1975; Krachało, 1992; Spostołowicz, 2009), the history of spatial development of assorted towns (Borowik, 2001, 2002, 2003; Lakotka A.I., 2007; Słodczyk, 2012; Szafer, 1955; Wróbel, 1971), or research concerning farming estates with composed garden complexes (Bończak-Kucharczyk, Maroszek; Ciołek, 1978).
Results of research

The conducted analyses of contemporary spatial layouts of the localities in the context of surviving historic plans and maps of the region, developed reconstructions (Fig.1) as well as source materials concerning the activity of Antoni Tyzenhauz, enabled identification of particular urban development and landscape features.

Fig. 1. Theoretical plans of localities: a) a plan of Krynki from 1780 (Józef de Sacco) (Borowik, 2003, p. 46); b) a theoretical plan of Dąbrowa Białostocka (developed by K. Glapińska) (Borowik, 2003, p. 43); c) a reconstruction of a plan of Sokółka (developed by P. Borowik) (Borowik, 2002, p. 34)

In the group of localities under analysis, one can distinguish two essential types of urban arrangement: 1) with features of a radial layout; 2) with features of a mono-axial or multi-axial linear layout in the cross or parallel form (Fig. 2). The first group includes Krynki (the richest spatial urban structure) and Dąbrowa Białostocka. The second group includes localities where a linear layout is mainly connected with the direction of transit through the settlement. In this group, the following ones should be distinguished:

- Sokółka and Jeleniewo, where the essential linear direction is predominant;
- Janów and Suchowola, where the urban frame is based on a cross layout near the main square of the settlement, whereas one of the directions is superior and gives extended proportions to the town;
- Krasnopol, Lipsk where the linear layout has been multiplied to several parallel roads, transversely connected with the main square location.

An ordered spatial structure positively affects the individual contemporary landscape of a locality.

Characteristic spatial features of the localities under study were their spacious main squares. Their original clearness was probably relatively weak, close to a large-area square with walls of low-rise buildings (single-storey or two-storey houses) around. Over the years, spacious squares were filled with later elements of development. Today, the probable size of old market squares can be recognized in the street networks of secondary urban divisions. Their area is filled with blocks of buildings (Dąbrowa, Suchowola), transit roads (all examples), green areas (Krynki, Suchowola, Dąbrowa, Sokółka). The most peculiar element of late 18th-century urban arrangement has lost much of its relevance and clearness in the contemporary landscape of the settlements.
Fig. 2. Diagrams of late 18th-century spatial arrangement elements in the contemporary layout of the localities (own study).
The analysis of late 18th-century urban arrangements developed for the localities under study enabled identification of analogous spatial solutions. They consist in use of similar, almost modular values (Fig. 2). These values were probably utilized to determine the sizes of market squares, temple plots and settlement plots. Approximate results of measurements enabled determination of the following modular sizes (1):

\[
A = \sim 5 \text{ cords } [\text{sznur, an old Polish unit of length}] ( \sim 220 \text{ m}), \\
B = \sim 3 \text{ cords } ( \sim 130-135 \text{ m}), \\
C = \sim 2 \text{ cords } ( \sim 85-90 \text{ m}),
\]

where: \( A/B = \sim 1.69-1.62 \) and \( B/C = \sim 1.58-1.44 \).

In the form of a hypothesis, three essential modules have been determined: A, B, and C, additionally related to each other in a relation similar to the “golden ratio”, amounting to approx. 1.61, following the formula (2):

\[
A/B = B/C,
\]

where: \( A = B+C \).

Occurrence of comparable spatial dimensions could have resulted from application of typical solutions developed in late 18th century for settlements of varied size, implemented on the initiative of King Stanisław August Poniatowski and Antoni Tyzenhauz.

Another characteristic of spatial layouts of the localities is their adaptation to the topographic conditions. Geometrized theoretical plans were adjusted to the terrain and natural conditions of the given settlement. Deviations from geometric regularities of the plans did not affect the loss of compositional advantages. Axial connections, typical of Classicist arrangements, remained clear (Krynki, Dąbrowa, Sokółka, Suchowola).

In the contemporary landscape of the localities, view axes leading to monumental sacred objects are clear (Dąbrowa Białostocka, Janów, Jeleniewo, Krasnopol, Krynki, Nowy Dwór, Sokółka, Suchowola). Such axes often have a course stressed by the course of the streets (linear complexes – Janów, Jeleniewo, Suchowola) (Fig. 3a), but landscape connections occur as well, employing the town’s location on two sides of a valley. In such case, a sectional course of streets indicates a view closing. A monumental body of a temple is visible in a very distant perspective on the other side of the valley (Krynki, Dąbrowa) (Fig. 3b).
Of interest is also the view connection of main streets with landscape openings to the outside of the town (Krynki, Sokółka, Suchowola) (Fig. 4 a, b). This usually results from location of market squares on high ground within the area of these towns.

Fig. 4. External view openings: a) a landscape opening from the market square in Sokółka, b) a view opening from the market square in Suchowola (both photos by D. Gawryluk, 2013–2016)

Conclusions

The results of a contemporary analysis of the landscape of the towns indicate the preserved clearness of parts of the late 18th-century urban arrangement. They are visible despite adjustment of the concept of plans modelled on ideal cities to diverse terrain conditions. The essence of the spatial layout is confirmed by location of temples (landmark buildings). Buildings erected in later centuries, after Tyzenhauz, located in sites suggested by the urban layout, confirm their advantages and logics of the spatial order. The resulting layers consolidate the identity and build an individual genetic code of the space of the towns. A disadvantage of the contemporary landscape of the settlements under study is the blurring or partial loss of clearness of the market square space in the structure of the centres.

The literature on the subject usually treated the adjustment of geometrized plans to the existing terrain conditions as degrading for the spatial arrangement of a given settlement. However, in the author’s opinion, it resulted in obtaining of beneficial, individual landscape features.

The surviving partial clearness of the 18th-century urban arrangement of provincial towns constitutes their significant cultural advantage that continues to build the landscape identity of a locality.

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List of literature

Современный ландшафт и историческое расположение местностей, отстроенных в конце XVIII века по инициативе Антония Тизенхауза

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Резюме

Цель изучения – показ сохранившихся современных ландшафтных решений на конец XVIII столетия градостроительной системы городов в местностях: Янов, Еленево, Белостокский Дубняк, Краснополь Крынки, Лейпциг, Новый Двор, Сокулка, и Суховоля. Пространственная композиция этих центров соединяла качества осевых композиций доиндустриальных городов с геометрическим порядком структуры идеальных городов. Пространственное решение, свойственное провинциальным местностям северных границ Республики, соответствовало стилистическим решениям, существовавшим в эту пору в Европе и центральной Польше. Пронциальные городки в планировке своих центров подражали доиндустриальным городам периода Классицизма.

Результаты современного анализа ландшафта городов указывают на сохранившиеся фрагменты градостроительной композиции конца XVIII столетия. Они прослеживаются, несмотря на использование концепции планов идеальных городов, приспособленных к условиям разнообразной ландшафтной характеристики местности. Основной особенностью пространственной системы городов является размещение храмов (доминат градостроительной композиции). Строения, построенные во времена Тизенхауза, расположенные в указанных местах композиции, подтверждают ее достояния и логику пространственного порядка. Возникшие таким образом исторические наслаждения создают индивидуальный градостроительно-генетический код пространства городов. Современное состояние ландшафтной организации исследуемой местности показало, что произошла частичная потеря местоположения пространства рынка в структуре центров.

Приспособление геометрической структуры планов к местным условиям рельефа в литературных источниках обычно указываются как пример вырождения пространственной композиции местности. По мнению автора оно, наоборот, повлияло на создание выразительных, индивидуальных ландшафтных качеств местности.

Сохранявшаяся и существующая градостроительная композиция провинциальных городов 18 века представляет собой существенную культурную ценность и формирует в современных условиях ландшафтную характеристику местности.