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LESSONS FROM THE PAST

Applicability of Urban Development Concept of a Podlasie Town in Modern Planning Works

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Introduction

The presentation is composed of three distinctive parts. The first one will deal with historic background of urban developments concepts in the region of Podlasie (south-eastern Poland). In the second part we will present historic model of a Podlasie town. The third part will focus on applicability of the model in planning of modern housing estates. The history of urban development of the region dates back to the XV century. By historic model we mean here simplified urban development plan of a Podlasie town. We will prove that the model needs only some adaptation in order to meet current urban requirements.

There are about a hundred of small towns located in the Podlasie region. They were set up following the requirements of the Chełmno legislation, which is a variation of the Magdeburg legislation. Majority of the towns was set up during the so called "Golden Age". For our case study we selected 5 towns of the region. We comprehensively studied development patterns and came up with the model of a Podlasie town. Typical for the model is the logic behind principles applied to urban development. The town served three functions – center of manufacturing, trade and agricultural activities. The functions led to unique solutions, rarely found in other regions of Europe. Original for the

town was the concept of close concentrations of multi-cultural population (centers) living in full harmony with each other and with the environment.

The model is readily applicable in the planning of modern urban development. The presentation will describe three successful attempts and adaptation measures required to meet modern needs. We will prove that there are lessons in the past that should be learnt. In the first attempt the model was adopted for suburban residential areas of a major city (4.5 ha of area). In the second attempt the model was applied during planning of a modern downtown area of a 20 thousand plus city. On the third occasion the model was used to set up a small urban center next to the existing village.

It is worth to note that the Podlasie towns were under heavy influence of Latin, Greek and Hebrew cultures. The urban solutions of the model draw from multi-cultural background, which makes it even more applicable in activities of urban planners throughout the united Europe.

1. History of Podlasie towns

Historic region of Podlasie is located in the north-east of Poland. The area used to cover a historic district of the Republic of Both Nations (Poland and Lithuania - before Poland was partitioned in the end of

XVIII century). Currently the name Podlasie is assigned to one of 16 regions (voivodeships) in Poland.

A number of towns were established within the historic borders of Podlasie, in XV to XVIII centuries, which is over 400 years. The towns were located either in the place of former stronghold towns (e.g. Wizna) or were built from scratch in completely new locations (so called “raw root”).

Location of Podlasie towns followed the same pattern. The example of the location pattern of Chemno town was taken and developed for new purposes. It is therefore said that those Podlasie towns follow the location pattern of Che³mno legislation (*Ius Theutonicum Culmense* in Latin). Che³mno, in the northern part of current Poland, was located on the Vistula river in 1233, and was used as a pattern for location of majority of towns throughout historic territory of Poland, which means current Poland, Lithuania, Belarus and Ukraine.

Che³mno in turn drew heavily from the location pattern of Magdeburg (founded in 805). Magdeburg was located in Germany on the Elba River. Therefore it is said that the Che³mno location legislation is based on the Magdeburg legislation (*Ius Theutonicum Magdeburgense* – in Latin). This is however not the end of the story behind location patterns of Podlasie towns.

Locating Magdeburg the founding fathers followed Roman legislation. Northern limits of antic Roman Empire ran across the territory of current Germany. The north-easternmost post of the Roman Empire, being at the same time the closest one to Magdeburg, was Regensburg founded by the Romans in IV century. Therefore we concluded that original source of location patterns for Podlasie

towns was the Roman legislation on location of towns.

Figure 1 presents history of location patterns for Podlasie towns. In simplified terms it follows the following path: ancient Roman towns – Regensburg – Magdeburg – Che³mno – Podlasie towns.

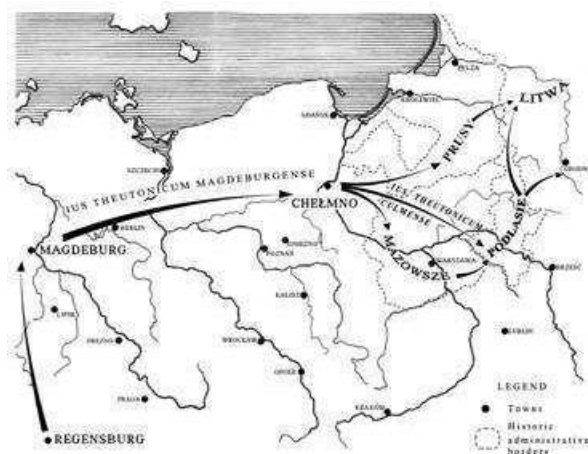


Figure 1. History of location rights in the Podlasie region.

Historic area of Podlasie sometimes extends beyond the area of current Podlasie region (voivodeship) – southern part of historic Podlasie is missing – and sometimes includes areas of other historic regions – northern and eastern borders of the region are at the same time national borders of Poland, Lithuania and Belarus.

Over 400 years of Podlasie history 40 towns were located in the region (XV-XVIII). Majority of them was founded during so called “golden age” on the verge of XVI and XVII centuries (about 24 towns). Transposing these data on current territory of the Podlasie Voivodeship the numbers are the following:

- total number of towns located in the period (400 years) - 46 ,
- number of towns founded during the golden age - 40.

In XIX and XX centuries new towns were founded, which increased the number of towns in the historic region of Podlasie by



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Towns and date of location

- XVw.
- XVIw.
- XVIIw.
- ~ Rivers
- Lakes
- Historical border of Podlasie
- Current border of Podlasie region (voivodeship)
- Current state border
- XVIIIw.
- XIXw.
- XXw.

Figure 2. Map of Podlasie towns

4 and on the area of current Podlasie voivodeship by 8. Figure 2 presents a map of Podlasie towns with location dates including both regions of historic and current Podlasie. A number of towns developed at slower pace and their status deteriorated. Therefore in XIX century a number of smaller towns lost their municipal powers by Russian order (at that time Poland was partitioned). Some of them regained municipal powers early in XX century. Others deteriorated even further to the so called nursery stage (*in statu nascendi* – in Latin).

Following the Roman town location principles, location powers were held by central authorities. In case of historic Poland, including historic Podlasie region, location powers were held by monarchal authorities. The towns, so called monarch towns, were located on land owned by Polish kings (king domains). Additionally large landowners located private towns. Such private towns were often endorsed by monarchal authorities.

Even in current Polish legislation a provision may be found that municipal powers are granted by decree of the Council of Ministers (the Government).

2. Model of a Podlasie town

Podlasie towns have unique characteristics that make them slightly different than other towns located in other regions of Poland. Shortly they may be described in the following manner:

- firstly, the towns were located on the slopes of river valleys bordering plains,
- secondly, the towns were of open nature – were not constrained by any limits therefore there were no obstacles to flexible growth,
- thirdly, all buildings and structures in the towns had only one owner (user) and were located on a separate piece of land,

- fourthly, the towns were developed along three functional lines: commercial, service and agricultural,
- fifthly, residents of towns formed often multi-national, cultural and ethnic social groups,
- sixthly, residents elected local judiciary authorities in the form of a municipal authorities (council).

For the purpose of this case study we reviewed municipal development patterns of Podlasie towns. The review was made at two levels:

- general level, in terms of all towns of historic and current Podlasie and locations for XV-XVIII and XIX-XX centuries,
- particular level – in terms of selected 5 towns of two sets: Boæki, Kleszczele, Milejczyce, Narew and Orla, which were located during the golden age.

The general review was based on generally available cartographic and iconographic documents of different scale, publications describing the patterns and a number of site visits.

The general review of municipal development patterns in the region brought us to the following conclusions. Typical feature of a Podlasie town is a large, rectangular market square used as a local marketplace. Sides of the market square are the front line of residential and commercial buildings, while buildings of agricultural and farmstead character are located along main streets leading to the market square. The number of farmsteads depends on the average area of croplands located within 3 km from the town center.

The particular review of development patterns for selected 5 towns was based on information coming from the following three sources. First source was a collection of about 1:10 000 aerial photos. Second source was a set of topographical maps

(1:10 000) and plans of towns. The third source was study tours to the locations, direct inventory of and photos documenting development patterns in the towns.

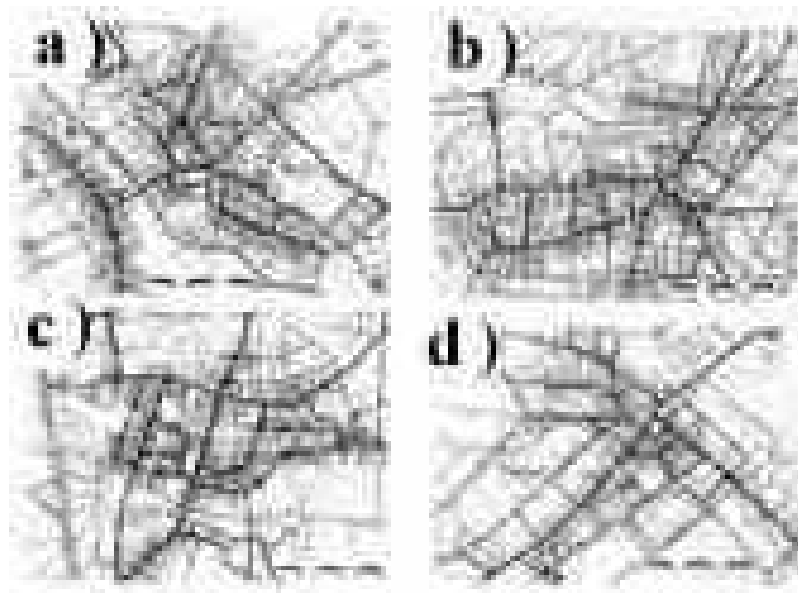


Figure 3. Development patterns of: a)Boæki, b)Kleszczele, c)Milejczyce, d)Narew and e)Orla

Figure 3 presents development patterns for selected towns (particular review). The patterns are indicated by location of market squares, streets, rivers, churches and buildings.

The towns follow generally the same development pattern based on central location of a market square. The market square is rectangular in shape, about 1.5 ha in area and is located on the crossroads of two main axles – the axle crossing the river and the axle parallel to the river. The axles fork creating a regular network of streets leading to the market square. Additionally, the street pattern is enriched with ring streets and exit streets running to the fields.

Usually, a number of churches of different religions were peacefully located in the towns. Other buildings in the towns

generally fell into the following two categories: market square buildings of commercial and public functions and street side buildings. The street side buildings were of agricultural and farmstead nature.

Residential houses were located with the front side facing the market or a street, while farmstead buildings were kept at the back of land parcels. A service road ran along the border of the land providing access to the farmstead buildings.



On the basis of our review of particular development patterns of selected 5 towns in the region we developed a development model of a Podlasie town.



The model is presented on figure 4 and includes the elements, which are similar to actual development patterns of towns presented on figure 3. Particular feature of the model is the fact the pattern is simple and open.

Figure 4. Podlasie town model

The simplicity results from development of the model along two axes:

- main axle of the development pattern – crossing the river,
- secondary axle of the development pattern – running in parallel to the river.

This feature is derived from the principle of locating Roman cities in the vicinity of rivers. While the fact that the pattern is open means that the city may be developed to any size as the needs may be.

Another feature, which is typical for Podlasie towns is flexibility. A town may be located at each major crossroads, while the best location for a town is a gentle slope of a river valley close to the river crossing. The best orientation for the main axle of the development pattern is the direction of heliometric axle on a given site.

All the above features make the model of Podlasie towns applicable in the planning of modern urban environments. Functions of towns and cities may have changed but features of development pattern remained

the same. Therefore the model is readily applicable.

3. Applicability of the model – case studies

The model of a Podlasie town was applied in practice on three occasions (various elements have been based on the model): a residential district of large city outskirts, market and residential center, and a recreational and residential facility.



Figure 5. “Mój Dom” Residential District in Piastów

The cases come from planning experience of the authors. Development patterns for the cases are presented respectively on figures 5, 6 and 7.

The first case deals with “Mój Dom” residential district located in Piastów on the outskirts of Warsaw. On the area of oblong rectangle (5,2 ha) 500 apartments were located in one or two floor semi-detached buildings. On the ground floor of buildings located at the market square, about 2400 m² of retail and office area was leased. Parking places (for 1020 cars) were located in underground facilities and on the ground level. Despite only low buildings, the area was used very extensively.

The intensity was at the level of 288 inhabitants per 1 ha of land and 460 m² of retail and service area for 1 ha of land. High intensity is not the only feature of this pattern. Another feature is the perception of inhabitants, who get the idea that the area and residential functions are individually dealt with. A main characteristic of the development pattern is

central location of the square with a network of parallel streets running to the square.

Ground floors of buildings located at the square were designed for retail and service use, while parking places were located beneath the square. The areas not built-up for residential purposes were used to create a generally accessible green zones.



Figure 6. Retail and Residential downtown of Wyszaków

The second case deals with a market and residential downtown located in Wyszaków, 55 km to the north-east from Warsaw. The downtown area is composed of a new city hall, a market square in front of the city hall and new residential and retail/office buildings. The buildings are of modular design based on traditional “noble house” with retail area located at the ground floor, and residential apartments on higher floors and attic. The downtown area is about 4,35 ha, the number of apartments is 250, retail/office area is 10 000 m² and the number of parking places is 630 (parking facilities are located at ground and

underground levels of buildings). In this case the intensity of residence is 230 inhabitants per 1 ha and significant area of public space.

The third case is the case of a recreational/residential complex located in Brańszczyk on the Bug river, next to the



Figure 7. Recreational residential park in Brańszczyk

existing communal residential district of the same name. The area was located on the open land of 23±25 ha. It is possible to get as many as 180±200 individual plots of 1000 m² each for recreation construction.

There are two triangular squares surrounded by multi-apartment buildings – potentially the complex may be extended by another individual plots. Low intensity of residence comes from the assumptions that the plots will be developed in a pro-ecological manner, which means that not only residential buildings will be located on the plots but also a space will be provided for small gardens – which will create a kind of “garden city” image. Historically speaking, towns of the Podlasie region are filled with permanent and seasonal vegetation. Brańszczyk is located between the wide forest complex of Puszcza Bia³a and meadows extending along the Bug river, expected to be covered by a national park form of protection shortly.

Final conclusions

We can draw a number of conclusions from the above presentation. We classified the conclusions in three groups following contents of the presentation.

First group of conclusions deals with historic background of Podlasie towns. Original source of the planning concept was always a Roman town concept adapted for local purposes. The gradual adaptation went through Magdeburg concept and finally the Che³mno location concept used extensively in the region. Certainly the

The third group is conclusions of presented case studies of application. Evidently it is possible to apply the model in modern planning solutions. The model is particularly useful in case of towns and ecologically valuable areas. The adaptability of the model is increased by the fact that all towns of Podlasie have the one thing in common, which is flexibility of development pattern.

Additionally, we would like to underline another aspect of the Podlasie towns. The towns are multicultural melting pots and

gold age of locations in Podlasie region is the period of most intensive locations over 6000 year long history of the Podlasie region.

Second group of conclusions refers to the development model of a Podlasie town. The model is based on central location of a rectangular market square with main axle crossing the river and secondary axle running in parallel to the river. This is the model of Roman town adapted for local purposes of Podlasie (the element of rivers).

the good examples of ethnic integration, which is of particular importance to the united Europe.

The general conclusions coming from this summary is that the concept of Podlasie town draws heavily from Roman development patterns. The patterns were on many occasions adopted over the centuries and culminated in creation of a highly flexible municipal development pattern, which meets local needs. This flexibility makes the model adaptable to modern urban requirements and solutions.