

Dominika Kuśnierz-Krupa  [orcid.org/0000-0003-1678-4746](https://orcid.org/0000-0003-1678-4746)  
dkusnierz-krupa@pk.edu.pl

Faculty of Architecture, Cracow University of Technology

Joanna Malczewska  [orcid.org/0000-0003-0778-2052](https://orcid.org/0000-0003-0778-2052)

Faculty of Civil and Environmental Engineering and Architecture, Rzeszow University  
of Technology

## SPATIAL DEVELOPMENT OF MIELEC IN THE MEDIEVAL PERIOD COMPARED TO THE THEN TENDENCIES TO FORM URBAN LAYOUTS IN LESSER POLAND

### ROZWÓJ PRZESTRZENNY MIELCA W OKRESIE ŚREDNIOWIECZA NA TLE ÓWCZESNYCH TENDENCJI W KSZTAŁTOWANIU SIĘ UKŁADÓW URBANISTYCZNYCH NA TERENIE MAŁOPOLSKI

#### Abstract

This article addresses the issue of the medieval spatial development of the town of Mielec, located in today's Podkarpackie Voivodeship, and in the Middle Ages in the area of historic Lesser Poland. An important element of the presented research is a discussion of the issue of the typology of the urban models applied in the discussed period. One should pay attention to the fact that studying the origins of the founding and development of the town is important from the viewpoint of the current urban planning and conservation policy in this town. It also has an educational dimension and contributes to popularising knowledge about the town's history and cultural heritage.

**Keywords:** Mielec, spatial development of Mielec in the Middle Ages, urban model

#### Streszczenie

Niniejszy artykuł dotyczy problematyki rozwoju przestrzennego miasta Mielec w okresie średniowiecza. Ośrodek ten położony jest obecnie na terenie województwa podkarpackiego. W okresie średniowiecza należał zaś do Małopolski. Ważnym elementem prezentowanych badań jest także omówienie typologii modeli urbanistycznych, jakie stosowano w przedmiotowym okresie. Należy zwrócić uwagę na fakt, że podjęcie studiów z zakresu genezy powstania i rozwoju miasta jest istotne z punktu widzenia bieżącej polityki planistycznej i konserwatorskiej na terenie Mielca. Ma także wymiar edukacyjny oraz przyczynia się do popularyzacji wiedzy z zakresu historii tego zabytkowego ośrodka i jego dziedzictwa kulturowego.

**Słowa kluczowe:** Mielec, rozwój przestrzenny Mielca w średniowieczu, model urbanistyczny

## 1. Introduction

This article addresses the history of the spatial development of the town of Mielec in the medieval period against the background of the urban models that crystallised in other towns in Lesser Poland at that time. The subject will be outlined on the basis of research that has been conducted by the Authors for several years. This involved preliminary research in archives (e.g. in the Main Archive of Old Records, where one can find the Archive of the Crown Treasury I, Conscriptio Records, as well as inspection surveys of Sandomierz Voivodeship, and in the Diocesan Archive in Tarnow, which contains documents entitled *Mielec Documenta. Documenta Proventus Mansionaria Demonstrentia* from the years 1599, 1630, 1736 and 1899, respectively), field research, and an analysis of the literature available on the subject. So far, several scientific works have been written on the topic discussed in this article. These are the most important publications: F. Kiryk, *Towns of the Mielec Region Until the mid-17<sup>th</sup> Century. Mielec, Przecław, Radomyśl Wielki, Rzochów* [1] and the *Royal Permit for the Foundation of Mielec* [2]; a study by S. Brekieszka, *Foundation of Mielec in the Light of the Town Charter from 1470* [3]; M. Maciąg, *A Geographical–Historical Outline of the Mielec Region* [4]; M. Dobrowolska, *Settlement in the Sandomierz Forest Between the Vistula and the San* [5]; J. Malczewska, *Towns Along the Lower Wisłoka River in the Sandomierz Voivodeship with Medieval Origin until the mid-17<sup>th</sup> c.*, which was published in 2017 [6].

Administratively, modern-day Mielec is in Podkarpackie Voivodeship. It is located in a valley of the Wisłoka River – the Sandomierz Valley. Previously, this area was in historic Lesser Poland. Currently, the town has a population of around 61 thousand and is an important industrial centre of the voivodeship. It should be mentioned that the town has a very eventful history which has not been very thoroughly studied so far, particularly with regard to spatial development.

The authors hope that the presented studies concerning the origins of the town and its functional-spatial structure will contribute to broadening the knowledge about the origins of Mielec, popularising historical knowledge about the town, as well as supporting the issue of protecting the architectural and urban monuments in this culturally valuable centre.

## 2. Urban models of towns in medieval Lesser Poland

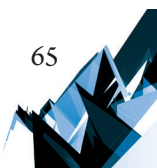
When writing about the spatial development of Mielec, including the urban model which was used to lay out the town, one should briefly describe the typological classification of urban layouts occurring in Lesser Poland during the discussed period. The classification was prepared by a team of research workers from the Chair of History of Architecture, Urban Design and Popular Art at the Faculty of Architecture, Cracow University of Technology, whose research focused on the origins and development of urban layouts. The described classification was created as a result of lengthy studies on the medieval history of urban layouts in Polish towns carried out by M. Książek, M. Wójcikiewicz, K. Kuśnierz, and currently continued by R. Malik and D. Kuśnierz-Krupa.

When characterising the aforementioned classification, one should assume (to simplify matters) that during the high Middle Ages (in the 2nd half of the 13<sup>th</sup>, and in the 14<sup>th</sup> and 15<sup>th</sup> centuries) two basic groups of towns could be found in Poland.

The first group comprises towns that adapted previously existing elements to form a trade settlement [7] which, according to Mieczysław Książek, was a structure that could be found in Poland from the second half of the 11<sup>th</sup> century until the 13<sup>th</sup> century. Its growth was related to the disappearance of service settlements and the development of the manufacturing sector. Trade settlements were located along vital trade routes, at their junctions, or at the border of economic regions with diverse production profiles. They became a significant factor in the development of medieval towns and cities [7, p. 49]. Their structure can be discerned even today in the spatial planning of towns which evolved by adapting them, or grew in their direct vicinity [8].

The second group consists of new towns that were orthogonal structures with market squares. Their spatial planning was an effect of the developing economic, political, and social relations, and was shaped by the influence of the urban planning tendencies that were predominant in Europe at the time [7, p. 49]. In this group one should distinguish so-called simple layouts, i.e. relatively small towns with an uncomplicated functional-spatial structure, and so-called complex layouts that were larger urban centres whose structures will not be analysed here.

In the subgroup of simple layouts one can distinguish four types of layouts which could be encountered in the towns of medieval Lesser Poland. The most frequent layout in this area was the so-called 9-square layout and its variations. According to this model, a town is enclosed within 9 squares (most often square shaped). The central square was occupied by the main market, while the parish church usually stood on the diagonal block. In this model the main market square might have had the following proportions: 1:1, 1:1.5, 1:2, or similar. The second type in the subgroup of simple layouts is the so-called turbine layout, also known as the windmill layout. This is based on a diagram in which streets run in different directions, usually towards town gates, from each of the four corners of the main square. The market square in a layout of this type is a square or rectangle, and buildings surrounding the market square continue along the main streets leading out of the market square. The third type encountered in the subgroup of simple layouts is the pseudo-oval model, also known as the Silesian model. In this model, two parallel streets run across the market square along opposite frontages, only to converge into one route in front of the town gate. Such a solution was dictated by economic and practical reasons as it minimised the number of town gates within the defensive perimeter of the town. The town gate constituted the most expensive element of such a perimeter and was at the same time its weakest link. The fourth type is defined as an orthogonal model enclosed within an oval (or circle). This oval is outlined by defensive fortifications, the shape of which is adjusted to the lie of the land [7, 9, p. 26–28].



### 3. Spatial development of Mielec in the medieval period

The origins of Mielec go back to the medieval settlement campaign, which resulted in serious deforestation in the western part of the Sandomierz Forest, the consequence of which was a significant widening of the settlement strip along both banks of the Wisłoka River [9]. The first settled areas were those that were considered the easiest to explore because they had favourable soil conditions. They were mainly the valleys of the Wisłoka and the Vistula rivers and their immediate surroundings [10].

It is suspected that the origins of Mielec date back to the 13<sup>th</sup> century. It is worth noting that the name Mielec appeared for the first time in the records concerning the process of demarcating the village of Pełczyska near Wiślica in the year 1224 [11]. In turn, the privilege granting permission to found the town comes from March 17, 1457, and was issued by the Royal Office of King Kazimierz Jagiellończyk at the request of Jan Mielecki, a royal courtier. It contains a mention of a right to a royal market which, when granted, would allow the town to host weekly markets on Saturdays and two fairs a year. Such privileges were intended to accelerate the development of newly established towns. The privilege indicates the village of Mielec as the site where the new town would be laid out. The village was located in the Sandomierz region, in the then Pilzno district. However, the privilege does not contain detailed information about the location of the site selected for measuring out the town, or the size of the area [2, p. 11]. Because the privilege was rather general in its character, it was necessary to have a foundation charter urgently drawn up by the founder. Such a document was issued 13 years later, and it stated that the town would be founded on freshly cleared fields.

Traffic routes running through the town determined the shape of the urban layout of Mielec. Market squares, church yards, and the main streets of the described town were directly related to these routes. Such considerable dependence of the urban layout on these routes was related to the hope of the town becoming a middle-man in trade along the north-south route to Hungary, and between Krakow and Sandomierz.

As in other towns, in the case of Mielec ownership relations were probably taken into account when the town was founded. The town was encircled by villages belonging to one owner, which made it possible for locals to visit the town and return home within a day.

We are guessing that in the case of the town of Mielec, it was assumed from the very beginning that its agricultural function would be just as important as its trade and manufacturing functions. When locating the town, more attention was paid to economic than defensive factors. In Mielec we cannot see any relics of defensive fortifications, nor can we find any information on this subject in historical sources. It is most likely that only a policing-defensive perimeter existed there.

The documents concerning the foundation of the town of Mielec, which have been preserved until the present time, contain no information about the size of plots and other elements of the urban layout. The research confirming that medieval towns were laid out on a module that was usually a large cable whose length depended on the size of the foot serving as its basic unit – together with analyses of research by other authors and spatial analyses

of town plans [12] – allowed us to determine the set of units of measure that were applied when the town was laid out. These units were as follows: 1 large cable = 10 rods = 150 feet, or 1 small cable = 10 rods = 125 feet. Mielec was laid out using a foot that was 0.3 m long, which resulted in a cable being 45 m long [13].

The market square in Mielec was initially laid out on the plan of a regular rectangle; however, as has been mentioned, as a consequence of fires in the 16<sup>th</sup> and 17<sup>th</sup> century this plan was slightly disrupted. The market square in Mielec was originally located to the east of the village of the same name. Two main traffic routes crossed at the market square: to Sandomierz from Dębica, and the road from Hungary, Krakow and Pilzno. When it was first laid out, the market square in Mielec measured 2.2 x 2 cables, therefore the proportions of the building blocks must have been 5:6. As a result of later transformations, the original shape was obliterated, yet the eight streets running out of the corners of the market square remain clearly visible.

The buildings encircling the market square were grouped into four blocks: those to the north and south are shorter, while those to the west and east are longer. These blocks constitute market frontages, and the plots in them were measured out at right angles to their fronts.

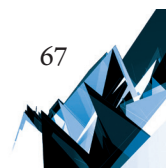
In Mielec, whose urban layout resembled the pseudo-oval one, initially all the streets ran out from all the corners of the market square and were parallel to one another. The street network in the town formed (or most probably had been laid out as such during town planning) a rectangle and an oval. The oval was made by the junction of streets at the entrance to and exit from the town, running behind the market building blocks within the policing-defensive perimeter and the service lanes.

The road that led from the south-east to Mielec split in front of the church at the town border into two branching roads that enclosed the church yard and the building blocks behind the church yard (the market block and the block measured out between the market block and the church). This lens comprised the church yard and the church within it.

The highway, which was also a trade route, led across the market square and joined all the exit routes into one after it left the town behind the building blocks. The perimeter streets were created after the town had been measured out and laid out, and after the policing-defensive perimeter had been built. They are most clearly visible on 18<sup>th</sup>- and 19<sup>th</sup>-century military maps and cadastral plans from the mid-19<sup>th</sup> century. The main function of these streets was to allow access to defensive devices on the embankments as quickly as possible.

The network of main streets that served as thoroughfares and allowed transit traffic was complemented by a network of access roads; these serviced the backyards of the market blocks where utility machinery and workshops were situated, as well as the previously mentioned perimeter streets.

Until the mid-17<sup>th</sup> century, Mielec had a relatively modest street network, primarily because of the little-developed functions of the town. The town featured streets of various types. Settlement plots occupied by the most impressive residential buildings were oriented to the main streets, which were usually wider, and the buildings along them were more compact. Less important streets were perpendicular to the main ones, and adjoining buildings were on



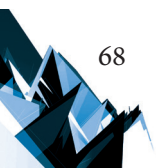
a smaller scale and less significant; in general, they were utility buildings with gardens. Streets that evolved from former baulks also served a vital utility function. The type of a given street was determined by changes in street functions, replacing timber buildings with masonry ones, divisions or mergers of plots, or altered functions of buildings, e.g. from housing to production [14]. Main streets were usually 2 or 3 rods wide (8.6–13 m). Second category streets were more diverse as their width was closely related to that of the main streets: they measured 1–2 rods. Streets in the lowest category were 0.5–0.75 rods wide (2–3 m).

The plan of a chartered town that was laid out at the initial stage of its founding was very important and had a huge though not decisive impact on its shape. Both the shape and the programme of these towns were defined over time, often at the first stage of their creation. The main factors that considerably influenced these features were fires, floods, and invasions by enemy armies. Undoubtedly, economic prosperity in the initial stage of a town's existence also had a significant impact on its shape as it could lead to modifications in the town plan if the implemented economic features did not fulfil their role satisfactorily and had to be modernised or expanded. The period when Mielec was established was a time of peace on the eastern border: the port in Gdańsk had opened to trade in Polish agricultural produce with Europe (after the 13-year war), and the military danger from the south of the kingdom was relatively insignificant.

It is worth noting that the traffic routes running through the town determined the shape of the town plan because the market square, church yard and main streets had been planned in such a way that they were directly linked to these trade routes. This considerable dependence of the urban layout on the trade route was related to the hope of developing its basic function, i.e. participating in and becoming a go-between in the trade along the north-south route to Hungary, and between Krakow and Sandomierz.

From the very beginning, the plan of Mielec was realised in a very simple way, yet for residents it was very clear as far as their existential needs were concerned because components such as the market square, market building blocks, and streets had been laid out first. In Mielec the church-graveyard infrastructure had already existed in the previously functioning church yard, long before the town was founded. At the stage of measuring out the chartered plan, the church yard was adopted to the newly created urban layout.

The town of Mielec is an example not only of a defined orthogonal layout, but also of a mutation of the pseudo-oval model with single building blocks surrounding the market square which facilitated control of trade since commercial structures such as abattoirs, stalls, or houses adapted to commercial purposes were located on the side of the market square. The majority of plots had the shape of extremely elongated rectangles with buildings situated at the front. The town plots were relatively poorly developed and in most of them three basic functional zones can be distinguished: residential, garden and utility. This arrangement was typical of the majority of small towns where the role of farming was essential [6, 15].



#### 4. Conclusion

In conclusion, it should be stated that the conducted research of the urban development of Mielec during the medieval period – in correlation with studies on the urban models applied then for founding towns – yielded concrete findings concerning both the history of the urban design of the discussed centre, and the process of protecting and popularising the cultural landscape.

It should also be emphasised that the history of the town – as far as its original urban structure is concerned – is not yet fully known and could be the subject of further urban research.

The importance of similar research is confirmed by the relatively poor condition of medieval towns, especially small ones, the predominant reason for which is insufficient knowledge about their past. Thus, it is necessary to conduct further research in this respect, the results of which should support the activities of conservation services and raise social awareness concerning the history of such towns as well as their architectural and urban design monuments.

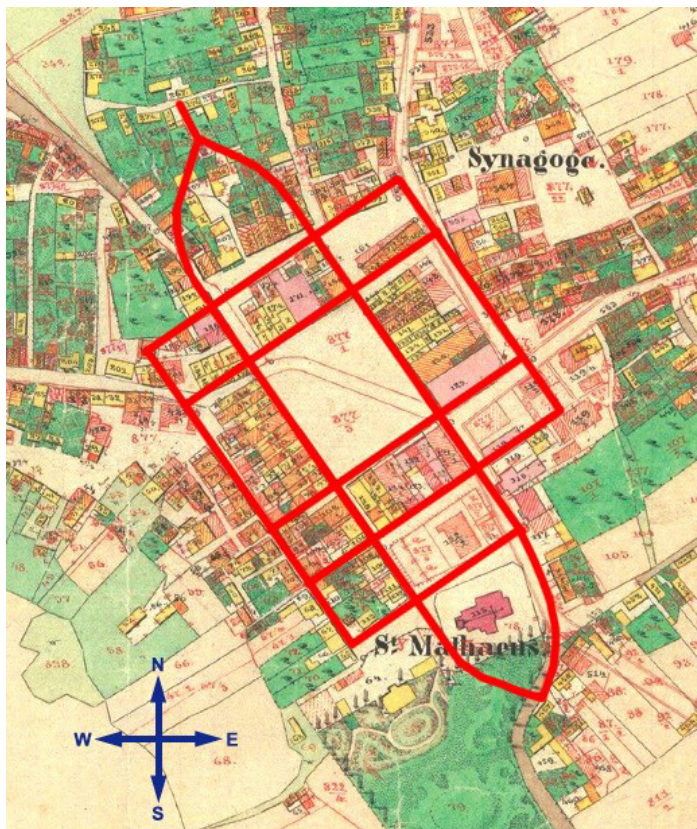


Fig. 1. Urban model of Mielec imposed on the cadastral plan from 1850 (AP in Przemyśl, Geodetic Archive, sygn. 1054M); prep. by Author

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