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STUDIES OF HISTORICAL MODIFICATIONS TO THE BERNARDINE MONASTERY GARDEN IN KRAKÓW AS THE BASIS FOR ITS REDISIGN

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Summary

Characteristics rules of composition of the Polish monastic geometric gardens, combined with the information on the history and the spatial changes in the Bernardine monastery garden in Kraków and the iconographic research on the discussed garden design, show its clear architectural and landscape character. The study indicates that there are no *de facto* differences in the views on its original form and underlying principles of composition. The Bernardine monastery garden was similar to other such garden designs in Poland, and its composition was based on the earlier medieval idea of the division of space into quarters planted with trees. Although over the centuries, modifications were made to the course of the borders and the general form of the garden, it remains in the very same location and invariably presents its geometric layout. Currently, the original composition is less intelligible, and the land use is different from the historical one. This fact justifies the need to redesign the garden based on the spatial studies of its historical transformations.

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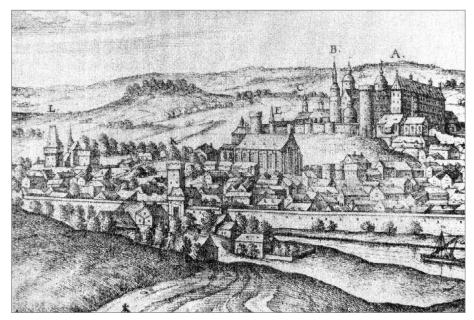
monastery • historical Kraków • monument conservation and protection • cultural heritage • geometric garden • garden redesign

1. Introduction

The aim of the research was to perform queries into the Bernardine monastery garden in Kraków, in order to provide grounds for the later execution of garden redesign within its current borders.

Founded in the fifteenth century, the oldest Bernardine monastery in Poland, along with its extensive gardens, lies at the foot of the Wawel Castle Hill, between the streets of Bernardyńska, Stradomska and Koletek. This location within the urban layout of Kraków, emphasized its importance for centuries, and made it one of the most recognizable landmarks of the city; thus it has been drawn repeatedly, and marked on historical drawings and maps of Kraków as one of the most important elements of the city's landscape (Figure 1). Despite the continuous increase in the density of buildings in the

centre of Kraków, staking of new roads and changes to the course of the Vistula river, the size of the monastic garden has undergone only minor changes over the centuries. Currently, the entire compound is situated in the area of strict monument conservation zone, under the care of the Małopolska Regional Monument Conservation Authority, and it is a registered monument. Furthermore, it falls within the area of the "Krakow – historical city zone", recognized in 1994 as a monument of history, and within the limits of the entry of the historic centre of Kraków in the UNESCO World Heritage list (1978).



Source: Banach 1983

Fig. 1. Kraków from the south, seen from Krakus Mound, before 1600. Bernardine monastery – marked in the figure with the letter E. Author: E. van der Rye

2. The object and methods of the study

The study aimed to analyse the historical transformation of the Bernardine monastery garden in Kraków, in order to develop the concept for the garden's redesign. The research covered both the monastery garden itself, as well as the principle of composition of the geometric Polish monastic compounds in general; therefore it takes into account the historical character of the compound in question and theoretical design principles of similar sites, resulting from the principles of garden art. Complementing these considerations was the analysis of vegetation, its value and importance as an element of the whole garden compound.

The article presents the results of the research: the studies of historical and contemporary literature on the monastic garden, as well as the synthesis of the information available on this topic. Furthermore, an analysis was performed on the historical plans and principles of design. Information about the contemporary care of the trees was obtained through consultations with the Bernardine Order, and obtained during site visits by the author of the article.

3. Study results and discussion

3.1. Monastic garden composition in the historical context of the Polish garden art

Ever since the Middle Ages, Polish monastic gardens were designed and planned according to specific principles. One could say that the monastery garden is "in principle, not available to the public [...] intended for use by the monks, mostly characteristic for the mediaeval era." [Siewniak, Mitkowska 1978]. Garden was characteristically divided into different spaces, or quarters, and contained ever-present elements, which were the inherent parts of his layout: an orchard, a vegetable garden and a herbarium [Stępniewska 1977]. "The viridarium [...] was accompanied by a vegetable garden, and other gardens of purely practical function, as well as the herbarium. The orchards, which in their essence were the beginning of a later compositional idea of a park, gradually take the geometrized, chessboard form, broken down into quarters of a kind." [Bogdanowski 2000]. This "chessboard form" was characteristic for the formal principles of monastic gardens composition; moreover, it was their domain also after the Middle Ages era has ended. "A chessboard garden is a composition based on geometric divisions of space, therefore it has regular quarters, with no clear marking of axes, or even an important communication course leading to the adjoining building. This simple form, derived no doubt directly from the design principles of medieval monasteries, showed remarkable durability. Even disregarding the different variations, it has survived in the same form until the end of the eighteenth century." [Bogdanowski 2000].

The chessboard form of the monastic garden survived during the Renaissance and Baroque periods, drawing on the achievements of the Middle Ages, however, also rendering some garden elements more decorative. "Monastery gardens of the Baroque era exhibited a greater degree of arbitrariness and compositional diversity, resulting from a variety of religious rules and orders; having said that, usually they were still based on the concept of a *viridarium*, a pleasure garden, and orchard and checkerboard quarters of the outlay." [Siewniak, Mitkowska 1998]. Seventeenth-century garden transformations entailed the tendency to bring out the compositional axes, and give the quarters a more ornate form. "The designers of chessboard gardens, above all, sought to accentuate the axes and give the quarters a new, dynamic, and ornate format – star-shapes were particularly popular, as well as introduction of different levels of greenery." [Bogdanowski 2000] Furthermore: "the edges of the quadrangular or rectangular quarters were mostly planted with trees, thus creating walking alleys, or surrounded with a manicured hedge, while the middle of the quarters housed flower beds for the cultivation of flowers, herbs, vegeta-

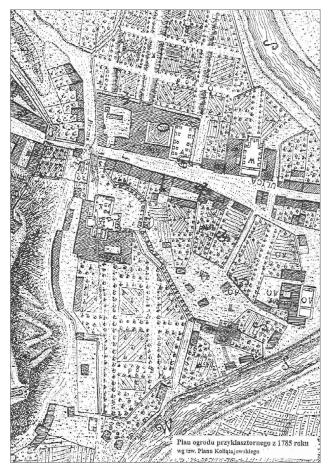
bles and fruit trees, and sometimes a pond." [Majdecki 2008] Gerard Ciołek notes that, in a modified form, this form of the historical layout – in addition to the "viridarium" garden and the "broad" garden, which also originated from medieval tradition – was still used in the nineteenth century. It should be noted that some researchers, including Longin Majdecki and Barbara Stępniewska, do not use the term "chessboard garden". However, their descriptions of the composition of the monastic gardens are fully in line with the theses of Gerard Ciolek and Janusz Bogdanowski, who are using this concept.

3.2. Composition of the Bernardine monastery garden and its transformations throughout the centuries, in the light of historical and contemporary sources

Garden of the Bernardine monastery in Kraków, dating back to mid-fifteenth century, presented geometric forms, and its composition was based on a medieval orchard – just like in other Polish monastic compounds of this period. Uniform paths led along the borders of the square or rectangular quarters, planted with fruit trees. Gerard Ciolek and Janusz Bogdanowski, when describing the garden in question, are in agreement: they both define it as a "chessboard garden". [Ciołek 1978, Bogdanowski 2000].

After the Swedish wars in the seventeenth century, the monastic compound was rebuilt following its complete destruction by the invaders. It was recreated in an area with irregular borders, approximating the current one (the present state of the garden). [Kantak, Szablowski, Żarnecki 1958, Sroczyńska 1989, Daranowska-Łukaszewska]. It was then that the garden acquired its Baroque character, while remaining a chessboard garden, and retaining all the medieval and Renaissance compositional principles; however, in the spirit of the Baroque, it was made more decorative. The garden retained its uniform, parallel quarters (divisions), which, however, have been given a more beautiful appearance – in the form of coaxial or star-shaped layout. [Rejduch-Samkowa, Samek 2000]. Increasing attention was paid to the alignment, or axial system, where the axis of the composition led from the monastery into the garden chapel or a gazebo [Bogdanowski 2000].

Historical descriptions of the Bernardine monastic garden in Kraków perfectly complement its historic plans. One can say that they provide the equivalent source of information on the composition of the discussed compound over the last two centuries and more. The most famous historical plan is called *Plan Kołłątajowski* (Kołłątaj's Plan) and it dates to 1785 (Figure 2). It shows a garden of irregular shape, somewhat similar to today's borders, divided with wide paths into several quarters. All paths are of the same width; all are also planted as identically labelled trees. The main axis of the composition follows a longitudinal path, leading through the centre of the garden. The designated quarters are hatched with diagonal lines, with a varying gradient and form, suggesting the existence of plants within the quarters (rather than just the lawn) – it may be presumed that the hatched areas on the drawing designate a vegetable garden and a herbarium. The quarters on the south side (at today's Koletek street) present irregular shapes – resulting from the layout of the garden, and the borderline that bends in this spot – and they play a complementary role within the garden system.



Source: Kantak et al. 1958

Fig. 2. Kołłataj's Plan, 1785

Further archival material confirming the designations of the Kołłątaj's Plan, while providing further information on the changes in the land use within the garden, include: "Plan of the surroundings of the Vistula river bend near the Wawel Castle and Stradom" of 1796 (Figure 3), Förstl's Plan of the same year (Figure 4) and the so-called Senate Plan, drafted in the years 1802–1805 (Figure 5). All these present the contemporary boundaries of the garden, its surroundings and the position relative to the buildings of the monastery. The first plan is the most precise, and it presents the layout of several quadrangular and rectangular quarters, designed so that they filled almost the entire area. At the same time, longitudinal axis of the composition is marked, coinciding with the course of the longest garden path, shaped by the quarters and accentuated with the trees growing mostly in the quarters' corners. Importantly, this axis runs through the whole garden, and thus does not begin at the church, which is located on the side

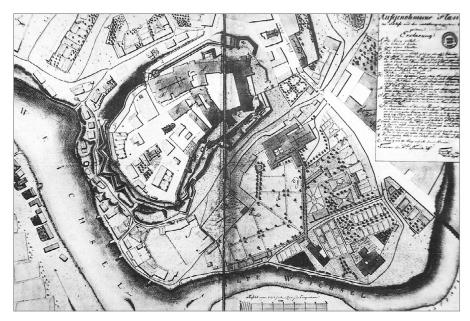
of the whole compound. The importance of the monastery buildings is highlighted by another road, which leads out of these buildings and into the garden; parallel to the said, and axis passing with its distinctive compositional element.



Source: Banach 1953

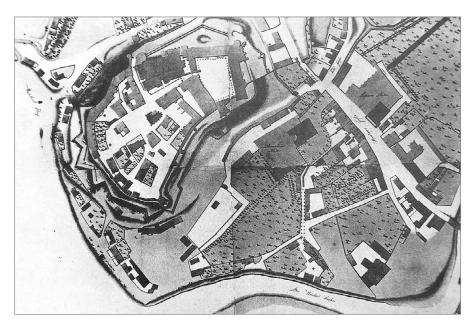
Fig. 3. Plan of the surroundings of the Vistula river bend near the Wawel Castle and Stradom, 1796. Authors: Mosano i Chavanne

Förstl's Plan confirms the existence of geometric layout of paths (the main path leading through the middle of the compound, and the peripheral path, running along the borders); the shape of quarters following regular geometric figures, and the aforementioned square; as well as the trees growing along the paths and in the corners of the quarters. However, it also points to a quite a different layout of quarters, and a different course of paths, compared to the "Plan of the surroundings of the Vistula river bend near the Wawel Castle and Stradom."



Source: Pianowski 1991

Fig. 4. Förstl's Plan, 1796



Source: Pianowski 1991

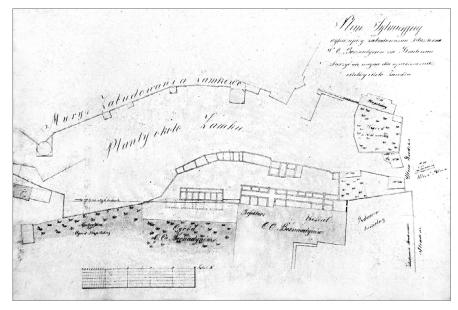
Fig. 5. So-called Senat Plan, 1802–1805

The third of the aforementioned plans shows the area of the garden planted with trees, most of which grow irregularly, and only some forming alleyways – including one major avenue, leading from the monastery's corner to the opposite borders of the compound. Why such differences on plans drawn within the space of just ten years? The analysis of the development of adjacent plots indicates that the authors do not strive to faithfully reproduce the form of greenery on individual estates, and only its character, while maintaining uniform graphic presentation for the entire part of the city as depicted in the drawing. After all, the first one of the discussed plans accurately shows the green areas around the depicted area (in the vast majority, it is geometrical in character), while the third shows it the least precisely (mostly depicting freely planted trees). Therefore – in this author's opinion – what we witness here isn't inconsistencies or contrast of the information presented, but rather the degree of precision resulting from the manner of drawing and the considered importance of the adequate mapping of the composition layout and the significance of the location of individual trees.

Subsequent historical changes of the monastic buildings and their surroundings are widely described in the manuscript by the already mentioned Joanna Daranowska-Łukaszewska. As part of her historical research – based largely on the archives of the monastery – she paid much attention to the description of border changes and the appearance of the fence around the compound of the monastery, as well as the demarcation of new streets, which surrounded it. She explains, among other things, the thickening of the wall, seen on the plan on the side of Koletek street: "Wall fragment between the corner of the Koletek nunnery, and the Bernardine church, marked on the Kołłątaj's Plan as an arcade wall, probably corresponds to the passage existing between 1727–1830, which allowed the nuns to walk from the nunnery to the church." [Daranowska-Łukaszewska]. She also mentions that in the later years of the nineteenth century, the Order agreed to give up a fragment of the garden in order to extend the Koletek street.

Joanna Daranowska-Łukaszewska also describes the changes and the shrinkage of the monastic compund, which took place on the other end, from the side of the Wawel Castle. "In the 1920s, the 'way around the castle' was set out – this is today's Bernardyńska street; the new road was planted with Italian black poplars, fashionable at the time, but in 1868 they were replaced with clipped acacias." [Daranowska-Łukaszewska]. The description of that same area is also found in "Gazeta Krakowska" daily paper from the year 1830, cited by Jan Banach: "beautifications to the eastern side of the castle by the plantations continue. Soon the most wonderful view shall open between the Bernardine church and the said edifice. Beautiful road of macadam with sidewalks, lined with poplars around the castle, is forming a dazzling harmony of this serious retreat." [Banach 1980].

The above information on the garden, at the turn of the late eighteenth and the early nineteenth century, and particularly the presence of trees within it, is complemented by two figures presented in the "Historical transformations of the Wawel Castle surroundings", where they are described as "The plan of the Bernardine Church surroundings" (Figure 6) and "The Slopes of the Wawel Hill and the Bernardine church, seen from the west" (Figure 7). The first plan shows the northern part of the compound with the afore-



Source: Banach 1953

Fig. 6. The plan of the Bernardine Church surroundings, around 1825. Unsigned

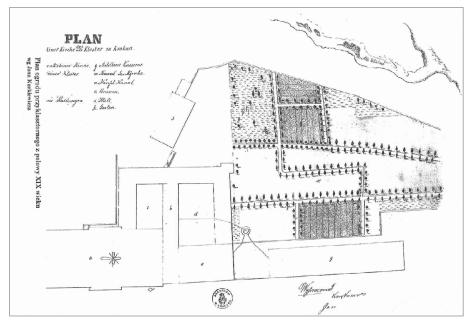


Source: Banach 1953

Fig. 7. The Slopes of the Wawel Hill and the Bernardine church, seen from the west, around 1830. Author: Józef Brodowski

mentioned new road (the so-called Planty around the Castle), with a string of additional demolition of the existing buildings. At the same time, it depicts many trees belonging to the Bernardine compound, planted partly regularly. The second figure – a perspective drawing – shows the view of Bernardyńska street with single trees along the road, as well as numerous, low trees in the garden of the monastery. This would confirm the claims that the garden was planted in the form of an orchard, which still existed in the first half of the nineteenth century, and referred to the earlier historical form of the medieval garden.

Another interesting document, pertaining to the form of the garden in question around mid- nineteenth century, is a plan drawn by Jan Kurkiewicz (Figure 8). It is tempting to analyse it more closely. Just like on the Kołłątaj's Plan, the two paths leading along the entire compound of the monastery deeper into the garden are clearly marked, which facilitated the main compositional axis to be maintained. The location of quarters and paths on the north side – symmetrically to the building – retains the earlier, transverse compositional axis, mentioned by Gerard Ciołek. The overall chessboard plan, with quarter divisions, has been somewhat blurred, because the paths n longer divided the garden into quarters of identical, modular plan.



Source: Daranowska-Łukaszewska

Fig. 8. Plan of the monastic garden, second half of 19th century. Author: Jan Kurkiewicz

Jan Kurkiewicz's plan clearly confirms the designations of the Kołłątaj's Plan in terms of planting trees along all garden paths (two types of trees are visible – with spherical and conical shape of the crown). It can therefore be concluded with the high-

est probability that fruit trees of various species grew along all garden paths. Symbols of the plan also confirm, that at least in some quarters, low greenery was planted (rather than lawn) – the hatching in these quarters is much more explicit and detailed than on the 1785 plan. With almost certainty, it can be concluded that one of the two types of hatch used in the drawing denotes a vegetable garden.

It is also worth mentioning that the plan here described envisaged piercing of a route, through the Bernardine gardens, connecting the Bernardyńska street and the then-called Kopernika (today's Koletek) street, but this was not realized.

The turn of the nineteenth and twentieth century brought with it changes to the boundaries of the garden from the side of Koletek street. "...Along the Koletek street there stood a tall, brick plastered wall; after it was breached by the flood of 1903, it was built from scratch, which is confirmed by the chronicles of the monastery. [...] Surviving is a design for the demolition of the wall on the Koletek street, and to raise its further part higher, also dating from 1910. [...] Adjoining the wall is a stone grotto with a statue of Our Lady of Lourdes." [Daranowska-Łukaszewska].

4. Conclusions

Summary of the information about the geometric Polish monastic gardens, and descriptions of the composition and history of the Bernardine garden as well as iconographic materials pertaining to that compound, demonstrate its consistent architectural and landscape character. Although over the centuries, the garden underwent transformations, its appearance – called "chessboard" by some – remained one of the most popular and unchanging forms in the history of Polish monastic gardens. Currently, the garden under discussion still retains its function as an orchard, although the number of fruit trees growing there significantly decreased, and the former compositional layout is difficult to read afield. Hence the necessity of performing the study described herein, which will serve for the development of the redesign concept for the compound in question.

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