REDESIGN PROJECT FOR THE BERNARDINE MONASTERY GARDEN IN KRAKÓW, BASED UPON GUIDELINES RESULTING FROM ITS HISTORICAL MODIFICATIONS AND CONTEMPORARY FUNCTIONAL CONSIDERATIONS

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Summary
Bernardine monastery garden in Kraków boasts a history of several centuries, while the spatial changes that occurred therein have been described and illustrated by many authors. The present state of the compound in question is not contrary to the general principles of monastic gardens’ composition or to historical sources about this particular garden realisation. As a result, it was possible to develop a project for the redesign of the garden (approved by the Małopolska Regional Monument Conservation Authority), under which specific design solutions were adopted, legitimised by the data contained in written sources or resulting from the analysis of the historical plans of the garden.

Keywords
monastery • historical Kraków • cultural heritage • monument conservation and protection • geometric garden • spatial planning concept

1. Introduction
The aim was to develop a design concept for the re-composition (redesign) of the Bernardine monastery garden in Kraków, resulting from the study of changes in its spatial arrangement over the centuries.

The results of the research into historical records, cartographic materials, as well as the analyses of studies by many scientists who dealt with this issue, have shown a consistent architectural and landscape character of the garden, although it has experienced certain transformations over the centuries.¹ In the course of research, no doubts arose that would result from discrepancies between written and graphic sources, while

¹ Results of historical research were presented in the article titled Studies on the historical modifications to the Bernardine monastery garden in Kraków as the basis for its redesign in an earlier issue of this journal (No. 2 • 2016).
differences between certain signs or markings used on particular historical plans do not necessarily signify any controversy in the presented content.

The resulting design concept was based on the above studies, but it also took into account the expectations of the Bernardine Order regarding the construction of the House of Religious Formation and the associated detailed spatial solutions. Furthermore, the concept remains in line with the standards imposed by fire regulations. The documentation has been reviewed and approved by the Małopolska Regional Monument Conservation Authority.

2. Subject and methods of the research

The subject of the study was a project for the redesign of the Bernardine monastery garden in Kraków. The article summarizes its current and planned spatial transformations, by combining the characteristics of individual designing solutions with historical information justifying the introduction of each.

The concept for the redevelopment of the garden was made based on the design method of “resources – valorisation – guidelines – design”, taking into account the main principles of garden redevelopment [Bogdanowski 1999a, b; Mitkowska 2012]. At the same time, basic intermediary research methods were used, as applied in the protection and conservation of historical gardens: the historical cross-section method, the comparative method, and the historical method [Majdecki 1993]. Under the commonly used methodology, project documentation includes design boards and description of the actions taken, beginning with the current state of the garden and ending with specific design solutions; the article presents a synthesis of the information contained in the description and design drawings.

3. Presentation and discussion of results

3.1. Current state (Figure 1)

Located in the immediate vicinity of the monastery, surrounded with a stone wall, the Bernardine monastery garden continues to function as an orchard. The most distinctive form within the garden comprises of dozens of fruit trees, most of which grow in several parallel rows. Others are mainly found in the most remote part of the monastic garden, in the form of freely distributed groups. Among lesser items, we should mention a few trimmed hedges and several shrubs. Along the border of the garden on the side of Koletek street, we find various species of plants, which are clearly new plantings, unrelated to the historical composition of the garden. Between them, we can see a partly hidden stone grotto with a statue of Our Lady of Lourdes.

Despite the blurring of the many historical spatial solutions, the current form of the garden is not inconsistent with a number of those descriptions and engravings listed below, as well as with the general layout. For example: *Gardens for growing plants were established in the immediate vicinity of the monastery, within an enclosure of a common*
Source: authors’ study

Fig. 1. The present state; situation map with heights, original scale 1 : 500. From the resources of the Geodesy Department of the Kraków Municipal Office.
or an additional wall. They consisted of square or rectangular quarters or plots, divided by paths. Within these quarters, fruit trees were planted and vegetables, spices, herbs and flowers were cultivated [Majdecki 2008]; Orchards, which in their compositional essence announce the formation of the park section of the compound, gradually take the geometrized, chessboard form, broken down into a kind of quarters [Bogdanowski 2000]. This current state allows a redesign of the garden, while keeping the vast majority of the existing compositional elements and defining the ideas, which underpin the actions taken.

3.2. Basic design principles – ideas behind the garden’s renovation

1. Restoring all historical elements and solutions, the re-composition of which is possible in the current urban conditions. The latter include: changes in the size and form of the garden area to date, creation of Bernardyńska and Koletek streets, construction of buildings along Bernardyńska and Smocza streets.

2. Using the rules of “chessboard” garden composition, well known in the history of Polish garden art.

3. Preserving as many of the existing trees as possible, especially fruit trees.

4. In the project under development, taking into account the preserved seventeenth-century so-called “Gardener’s House” and the newly established House of Religious Formation. Furthermore, including an additional element, which influences the adopted design solutions: access through the gate from Koletek street, which is to be created (and thus meet the requirements of fire access).

3.3. Detailed designing guidelines and solutions versus historical information (Figure 2)

The following design guidelines were provided, which were compared with historical quotations relating to the composition of the garden in question, with a direct impact on the solutions adopted:

1. Boundaries of the projected area of the garden were established within the contour of the current walls of the monastery (and therefore with respect to historical changes in the boundaries of the garden): Since the beginning, the monastery was surrounded by a garden, whose area was further enlarged with gifts by oligarchs and endowments by the King. [...] In the second half of the seventeenth century, the area was already close to the present one, and it had a shape of an irregular oval, its ends facing toward the old road (today’s Stradomska street) and the Vistula river. Its size and the outline are quite well known from the so-called Kołłątaj’s Plan (1785). At the turn of the nineteenth and twentieth centuries, The Convent understands the need to widen the Koletek street and understands the reasons behind that need, however resigning with regret from the royal endowments granted to the Convent so many years hence [Daranowska-Łukaszewska].
Fig. 2. Guidelines and principles for the redesign of chessboard monastery garden, original scale 1 : 500
2. In accordance with the principles of designing a “chessboard” garden, geometric shapes of regular, mostly square plots were drafted. A chessboard garden is a composition based on geometric division of space, so it has a regular quarters, with no clear demarcation of an axis, or even of an important main route associated with the building structure. This simple form, derived no doubt directly from the medieval principles of monastic design, showed remarkable durability. Various mutations notwithstanding, it had survived in the same form until the end of the eighteenth century [Bogdanowski 2000]. The project assumes dividing the garden into eight quarters, equal in size, with a side of about 23.0 meters, with the reservation that the two easternmost quarters will be expanded to a trapezoid shape so that their sides coincide with the road, which is currently the end of the garden.

3. The shape of the quarters was highlighted by the rows of fruit trees and cropped hedges, with the maximum possible use of the existing vegetation. The above-mentioned principles were found in gardens composed according to medieval division of quarters, which in principle were planted with trees [Stępniewska 1977]. The edges of the quarters, on the plan of a square or a rectangle, were mostly planted with trees, creating walking alleys or surrounding them with a cropped hedge, and in the middle of the quarters, flowers, herbs, vegetables and fruit trees were cultivated [Majdecki 2008].

4. Between the quarters, passageways of uniform character were introduced, intersecting at right angles. A chessboard garden, a form similar to a medieval orchard. Founded within irregular limits (as in Kraków’s Bernardine monastery) or quadrilateral limits (as in the Wiśnicz castle), divided into rows of uniform, criss-crossing paths [Ciołek 1978].

5. The main pedestrian route was delineated between the quarters (plots), along the whole garden, which is also a fundamental compositional axis and the line of view. Due to the fact that the chessboard variety is the domain of the monastery gardens, axial alignment becomes like an autonomous factor of the structure, developing from a modest monastery exit to the garden chapel or gazebo. This is evident in almost all the examples, beginning with the Kraków Bernardine garden (late seventeenth century) [Bogdanowski 2000]. The line of view, designed along the main pedestrian route along on both ends, closes the perspective. From the monastery side, it is enclosed by a representative entrance to the newly formed House of Religious Formation, and from the west, by an architectural element in the form of a grotto with the statue of Our Lady of Lourdes (transferred from the southern part of the garden, next to the wall bordering on the Kołtek street). The grotto with the statue is located on a specially designated site, emphasized by the outline of fruit trees (mostly the presently existing ones), forming transverse garden interior of a one-plot width.
3.4. Detailed designing guidelines and solutions versus historical plans/drawings
(Figure 3)

1. Leaving the part of the garden, which is the farthest from the monastery, outside the outline of quarters, in the form of loosely planted trees in reference to Kołłątaj’s Plan.

2. Forming eight square quarters (plots), which largely stems from trying to adapt as much as possible to the existing trees. Each historical plan represents a different number and shape of the quarters, hence the possibility of adopting the amount of quarters in accordance with the present conditions, that is the form and shape of the plot occupied by the current gardens and related buildings.

3. Introducing regular, square quarters, also next to Koletek street, in contrast to the historical quarters which had a regular, albeit different, shape. Such a solution is possible due to the nineteenth-century regulation of the said street, even though the earlier irregularity of the border would have hindered the application of such forms.

4. Filling in the quarters with a lawn; while the design allows, but does not impose filling them with vegetable or herb patches. Compare: Kołłątaj’s Plan (Figure 4), Plan of the surroundings of the Vistula river bend near the Wawel Castle and Stradom (Figure 5), Förstl’s Plan (Figure 6), Kurkiewicz’s Plan (Figure 7).

5. Creating a plaza located on the main compositional axis between the four quarters closest to the monastery. The plaza integrates, so to speak, the composition of this part of the garden, in the same way that a distinctive element facing the monastic buildings, seen in the plans, used to do (Compare: Förstl’s Plan, Plan of the surroundings of the Vistula river bend near the Wawel Castle and Stradom).

6. Highlighting the shape of the four quarters in the eastern part with trees planted in their corners (Compare: Förstl’s Plan, Plan of the surroundings of the Vistula river bend near the Wawel Castle and Stradom). In the case of the four quarters in the central part, highlighting them by planting rows of additional trees along all sides of the quarters (Compare: Kołłątaj’s, Förstl’s, and Kurkewicz’s Plan). Other, accidental plantings of fruit trees existing at present within all eight quarters are designed to be removed or replanted to another location.

7. Access paths leading to the limits of the garden, moved a few meters away from the fence and joined with paths perpendicular to them, represent the realization of the

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2 Given in brackets are the plans, on which the discussed spatial solutions were modelled. The following plans were subjected to analysis: Kołłątaj’s Plan (1785), Förstl’s Plan (1796), Plan of the surroundings of the Vistula river bend near the Wawel Castle and Stradom (1796), The Senate Plan (1802–1805), the Plan of the Bernardine Church Surroundings (1825), Kurkiewicz’s Plan (second half of the nineteenth century).

3 On three plans: Kołłątaj’s, the surroundings of the Vistula river bend near the Wawel Castle and Stradom, and Kurkiewicz’s, 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) – presumably a vegetable garden and a herbarium.
Bernardine monastery garden
Redesign of the chessboard garden composition

Legend
- New entrance to the garden
- New location of the chapel of Our Lady
- Entrance to the House of Religious Formation
- Fruit trees
- Walnut trees
- Coniferous trees
- Hedges
- Parking garages
- Squares
- Paths

Source: authors’ study

Fig. 3. Project for the redesign of chessboard monastery garden, original scale 1 : 500
idea of designing a ring road in the garden within its geometric outline. (Compare: Kołłątaj’s Plan, Förstl’s Plan, Plan of the surroundings of the Vistula river bend near the Wawel Castle and Stradom).

8. Retaining the entry road along the border of the garden from the side of Bernardyńska street. (Compare: Kołłątaj’s Plan, Senate’s Plan).

9. Retaining an empty courtyard next to the site of the House of Religious Formation, in the location, which has been excluded from the outline of quarters. (Compare: Kołłątaj’s Plan, Plan of the surroundings of the Vistula river bend near the Wawel Castle and Stradom, Kurkiewicz’s Plan).

10. Retaining, along garden paths, the fruit trees of different species (Figure 8).

Source: Kantak et al. 1958

Fig. 4. Kołłątaj’s Plan, 1785
Fig. 5. Plan of the surroundings of the Vistula river bend near the Wawel Castle and Stradom, 1796. Authors: Mosano and Chavanne
Fig. 6. Förstl's Plan, 1796

Source: Pianowski 1991

Fig. 7. Plan of the monastic garden, second half of 19th century. Author: Jan Kurkiewicz

Source: Daranowska-Łukaszewska
Bernardine monastery garden
Management of green spaces
Areas of necessary additions of trees and hedges
Trees to be relocated or removed

Legend
- Scope of the study
- Garden quarters in the geometric section
- Existing fruit trees
  - Apple tree
  - Plum tree
  - Pear tree
  - Cherry tree
  - Peach tree
- Ornamental cherry tree
- Common sea-buckthorn
- Fruit trees to be removed
- Fruit trees to be planted
- Existing hedges
- Hedges to be planted
- Coniferous trees
- Walnut trees

Source: author's study

Fig. 8. Management of green areas, original scale 1 : 500
4. Conclusions

All of the changes proposed within the developed outline concept would allow the achievement, with a relatively small outlays of work and financial resources, of the form of monastic garden, based on the type of medieval “chessboard” gardens but adapted to the current requirements of urban planning. The project takes into account the historical buildings (“Gardener’s House”), as well as a newly constructed building of the House of Religious Formation. The concept does not infringe on the historical composition or its character. It does not cause any impoverishment of the garden in terms of views and axes, or elements of composition characteristic of this type of gardens.

References


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