# TRANSFORMATIONS OF OLD HOSPITAL AREAS – VALORIZATION OF HEALING GARDEN VALUES

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### ABSTRACT

Old hospitals today usually don't meet current health care requirements, requirements of new generations of medical facilities and technologies. For all these reasons the old hospitals and their areas often undergo urban transformation processes – change of use, revitalization or restoration. However, old hospitals and their areas often possess high architectural, landscape architectural and cultural heritage values, which should be preserved. Green areas of hospital healing gardens and old hospital parks with mature woody plants often represent high-quality green spaces and important components of urban green infrastructure. We use the example of an old hospital – Stummer's hospital in Topol'čany to examine its architectural, landscape architectural and cultural heritage values and to explore those possibilities of its new use, which respect preservation of these values. We focus specifically on the analysis of the values of the hospital park and the possibilities of its transformation valorizing healing garden qualities.

**Keywords:** cultural heritage, green infrastructure, healing gardens, hospital gardens, urban transformation

# **INTRODUCTION**

Innovations in healthcare, advances in medical science and technologies create new requirements towards architectural setting of hospitals. Old hospital buildings and hospital areas are restored, revitalized, or if they are not able to meet the new requirements they are often transformed to host new urban functions. Processes of transformation depend on character and condition of buildings, on locality and urban setting. Old hospital complexes often possess high architectural, landscape architectural and cultural heritage values, which should be preserved. Green areas of hospitals often represent important components of urban green infrastructure – old hospital parks with mature woody plants represent high-quality green spaces.

European and American hospitals in the 1800s commonly contained gardens and plants as prominent features [1], [2]. Gardens became less prevalent in hospitals during the early decades of the 1900s, when administrators and architects were concentrated on creating complete healthcare buildings as functionally efficient settings for new medical technology [2]. Planning green spaces in healthcare environments based on the idea that plants and gardens are beneficial for patients is very old and appears both in Asian and Western cultures. During the Middle Ages in Europe, for example, monasteries created elaborate gardens to bring pleasant, soothing distraction to the ill [2], [3]. Currently the "healing gardens" concept evolves to "therapeutic gardens", from walking areas for patients and visitors, to the gardens associated with therapeutic activities for patients, which can form a significant part of the hospital treatment, not only its appendix. As noted by Cooper Marcus [4] it is important to recognize "that "healing" is not synonymous with "cure" and a garden cannot mend a broken leg or cure cancer", but as she summarizes "it can facilitate stress reduction which helps the body reach a more balanced state, help a patient summon up own inner healing resources, help a patient come to terms with an incurable medical condition, provide a setting where staff can conduct physical therapy, horticultural therapy, etc. with patients, provide staff with a needed retreat from the stress of work, and provide a relaxed setting for patient-visitor interaction away from the hospital interior" [4].

Hospital parks are integral elements of many historical hospital complexes in Slovakia, as for example in Košice, where the historical park of the University hospital of Louis Pasteur established in 1924 in "French style" contains many rare exotic trees, and still serves as relaxation area for patients, visitors and staff. The garden of the Koch's Sanatorium in Bratislava was designed in 1929-1930 as a healing garden for rehabilitation and relaxation of women patients. The assortment of mostly evergreen woody plants in the garden reflected the idea of having the garden green all the year round, and aimed to make the stay in the hospital pleasant also during the wintertime [5]. The sanatorium building and its atrium was restored in the years 2008-2011, but the garden was not used and maintained by hospital and it fell into decay. Today its conversion to a public park is discussed.

The financial situation of many Slovak hospitals today does not allow them to maintain vast gardens and parks. In the socialist period the suggested planning norm for the size of the hospital park recommended at minimum 100 square meters per bed, optimally 200-300 square meters per bed [6], [7]. Hospitals today are not able to cross the doorsteps of their buildings and to pursue the reconstruction and completion of their campuses from the point of view of parks, gardens and outdoor therapeutic devices. The financial demands of restoration of interiors and medical equipment exceed the demands of generous solutions and comprehensive approaches towards transformation of the old hospital campuses. Nevertheless, a comprehensive approach to the transformations of the hospital campuses, with new approaches towards hospital parks is possible, and for their future perspective required.

Within the project KEGA – Interdisciplinary approach to protection of cultural and natural heritage, which is aimed at identification and assessment of cultural and natural heritage values of the old hospital in Topol'čany, we have examined the landscape architectural qualities of the hospital campus, and the possibilities of its functional transformation, preserving and valorizing the green space values and the healing garden specifics.

# MATERIAL AND METHODS

The old Stummer's hospital in Topol'čany was established by baron August Stummer (\*1827 – † 1909) in 1885 on his own land. It was very modern at that time and baron Stummer, as patron of the hospital, financed also all the costs of its maintenance and repair. The original campus from the year 1885 on the area of 1700 square meters was created by four buildings forming a rectangular courtyard with a fountain in the middle, surrounded by circular communication connecting the buildings. The area outside the courtyard was maintained as park, for relax and healing purposes. The entrance building

hosted the chapel and the flat for gate-keeper, the main building hosted the patient bed department, the flat for churchman, and the storage room for clothing, the service building served for kitchen, food storage, wood storage and flats of nuns. The fourth administration building served for office room, flats for doctors and the caretaker. Later in 1904 the building of infection pavilion was built. In 1940-1943, initiated by MUDr. Eugen Gressner (\*1907 – † 1998), the new functionalist architecture pavilion was built in the south-eastern part of the hospital area. In the second half of the 20<sup>th</sup> century the mortuary building and gate-house were added (**Figure 1**).



# Figure 1: The hospital area from the entrance in 1937, on the left the gate-house, in the middle the chapel. Source: Archive of the Monuments Board of the Slovak Republic

The hospital campus is listed in the List of Cultural Monuments of Slovakia, no. ÚPZF: 11466/1-7, consisting of 7 objects: hospital main building, chapel, fence wall, service building, infection pavilion and park.

For identification and assessment of cultural and natural heritage values of the old hospital in Topol'čany, we have examined the resources and documents of the Monuments Board of the Slovak Republic, historical map sources, literary and visual sources. We have conducted on-site field surveys with students of Faculty of Architecture, Slovak University of Architecture in Bratislava aiming to analyze the current state and to identify the landscape architecture values of the hospital area and its park.

As the last step the "research by design" method was applied, to test different design solutions for the hospital area, checking different approaches towards its transformation and new uses. Students at the Faculty of Architecture Slovak University of Technology in Bratislava have elaborated landscape design proposals for the area and formulated the visions of its new uses, preserving and valorizing its green space values and its healing garden specifics.

# RESULTS

On the basis of on-site field surveys we have analyzed the ties of the old hospital area to the city and to the monument zone at Stummerova Street. We have identified functional and operational relations of the old hospital area with the adjacent new hospital. The area of the old hospital and most of its buildings today are not fully used. Few new buildings were added to the area in the second half of the 20<sup>th</sup> century, which do not respect its historical character and landscape architecture values of the park.

The original landscape architectural concept represented by symmetrical composition is well preserved in the entrance part of the park and in the courtyard area. The current state of the whole hospital area, in spite of negative interventions, keeps the qualities of the original urban design and landscape architectural composition. Park to the present day preserves a high degree of authenticity. We have analyzed the composition and vegetation elements in the area. According the dendrological analysis many of the woody plants, both domestic and introduced exotic, are in satisfactory condition (Figure 2).



Figure 2: The old hospital area, with vegetation analysis by students Katarína Janošková and Olena Lemak, supervisor Katarina Kristianova. Source: Archive of the Centre for Landscape Architecture FA STU

Various design solutions for the hospital area elaborated by the students of the Faculty of Architecture Slovak University of Technology took into the consideration the values of the park and aimed to valorise its healing garden specifics.

According Ulrich's theory of supportive garden design in healing gardens is important to create opportunities for physical movement and exercise, provide opportunities to make choices, seek privacy and experience a sense of control, provide settings which encourage people to gather together and experience social support, provide access to nature and other positive distractions [8]. Cooper Marcus [4] formulates potential activities in healing gardens ranging from passive to active: viewing garden through window, sitting outside, dozing/ napping/meditation/prayer, gentle rehabilitation exercises, walking to preferred spot, eating/reading/doing paper work outside, taking a stroll, child playing in garden, raised bed gardening, vigorous walking, sports.

Students proposed new functional uses for the buildings of the old Stummer's hospital which allow to take an advantage of the activities of healing gardens, for example: centre for seniors, rehabilitation centre, art school and art centre, community centre for all age groups. They succeeded to propose functions which open the area to the public use, too.

The proposed functions provided opportunities for students to design various spaces from passive to active relaxation or rehabilitation in the hospital park – from rest places with park benches, to places for exterior exercises with outdoor fitness equipment, from places for exterior exhibition of artworks to children playgrounds for pupils of art school. To enhance the effect of healing gardens students used also the ability of visual, aromatic and acoustic performance of trees, plants and water (**Figure 3, 4, 5**).



Figure 3: Landscape design for the central courtyard of the Stummer's old hospital, proposed for the new use as rehabilitation center, by students Romana Bonková and Dominika Bošáková, supervisor Katarina Kristianova. Source: Archive of the Centre for Landscape Architecture FA STU



Figure 4: Spaces designed for rest and walking in the park of the rehabilitation centre, using the effect of flowering trees and lawns designed for exercises, visualized by students Romana Bonková and Dominika Bošáková, supervisor Katarina Kristianova. Source: Archive of the Centre for Landscape Architecture FA STU



Figure 5: Perspective view to the central court in the proposed senior centre, with spaces for sitting, surrounded by with flower beds with aromatical plants and fountain. Landscape design by students Katarína Janošková and Olena Lemak, supervisor Katarina Kristianova. Source: Archive of the Centre for Landscape Architecture FA STU

### CONCLUSION

How a culture views illnes, cure, and healing radically affects medical care and settings in which it is practiced [9]. Health care system today is oriented toward profitability, economic rationality and cost containment. The fact that the old Stummer's hospital is legally protected as cultural heritage, prevents the area to be parcelized and sold, and prevents the deterioration of its cultural heritage values. The student works explored the possibilities of transformation of the hospital and its park to a modern relaxation and therapeutical complex. The proposals succeeded to combine nonprofit with for-profit functions and to valorize the landscape architectural qualities of the campus. These impulses are important for decisions about its future use. The proposals, as impulses for cultural, urban and social improvement of the hospital area aim to serve and help the regional government as owner, the municipality, the users, and stakeholders, to formulate recommendations for the revitalization of the area and for their inclusion into the strategic local and regional development plans and master plans, and for further planning activities. The case of the old Stummer's hospital shows the potential of change from dysfunctional hospital toward new urban functions, keeping the character and aspects of healing centre. As Verderber says, "a hospital/medical centre can no longer think of itself as an island, or for whatever reasons exempt from its urban ecological context" [10]. Trends in transformations of healthcare sites must go alongside with revitalization of their gardens and parks, whether they will serve as healing gardens and focus on the progress in the treatment of patients, or as public parks bringing the green space quality in the urban environment of the city.

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