

Banská Štiavnica – Educational Space for the Preservation of Cultural Heritage

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Abstract – The historic town of Banská Štiavnica is not only famous for its architectural value, but also for one of European centers of education and science since the 18th century, with the Mining Academy, the first university of its kind in the world. The Faculty of Architecture at the Slovak University of Technology (SUT) in Bratislava established one of its departments in a historic building near the town hall in 1986. This building itself has become a training place for more than 400 students, who took part in its restoration. In 2000, the Research and Education Center of the Faculty of Architecture (SUT) was opened in this building. Since that time it has become a place of experimental research and educational activities.

Keywords – Architectural conservation, Banská Štiavnica, education of cultural heritage preservation.

The historic mining town of Banská Štiavnica is one of three historic towns in Slovakia included in the UNESCO World Heritage List. Štiavnica (originally Schemnitz in German) obtained its town character before the attack by the Tatars in 1238. The town began to develop quickly. By the year 1230 Banská Štiavnica boasted two 3-naved cathedrals located 500 m apart each other. Aesthetically attractive and artistically, historically and culturally important buildings, mainly of Late Gothic and Renaissance origin, still constitute the heart of the city at St. Trinity Square and tell of enormous income earned during the 15th and 16th centuries by the mining industry in Štiavnica. The representative centre of town is characterised by a city hall and Late Gothic Church of St. Catherine together with large houses of burgesses. In the same period of time, the fortification system was built. The system also included Piargská Gate that was preserved to present times with Baroque adaptation. The system was strengthened by the Old Castle, re-built from the original Romanesque church, and Renaissance New Castle [3]. The significance and picturesque of the town are also intensified by the surrounding protected countryside of the Štiavnica Mountains, which are one of the largest volcanic mountain ranges in Slovakia.

This old mining royal town is important not only for its history (town was established already in the Romanesque period) and architecture, but also for large complexes of technical facilities related to exploitation and processing of gold and silver. The extraction of gold and silver reached its peak in the 18th century, when Štiavnica produced about 600 kg of gold and 23 000 kg of silver, i.e., four times as much as the Saxon mines and nine times as much as the Bohemian iron mines. The transition to such an increasingly intensive extraction from deeper and deeper mines demanded a new source of energy. In the 18th century, it was decided to construct an elaborate system of interconnected artificial lakes, whose waters not only propelled mining crushers but also the pumping facilities. The system consisted of more than 60 lakes with more than 72 kilometers of interconnected channels. During the mid 18th century, Štiavnica experienced its second

heyday as the third largest town in Hungary with approximately 24 000 inhabitants. The town is not only famous for its historical, architectural, natural and technical values but also for one of European centers of education, science and technology since the 18th century, with the Mining Academy, the first university of its kind in the world.

This fact resulted in a decision made by the Faculty of Architecture (SUT) in Bratislava to establish one of its departments in a historic building near the town hall in 1986.

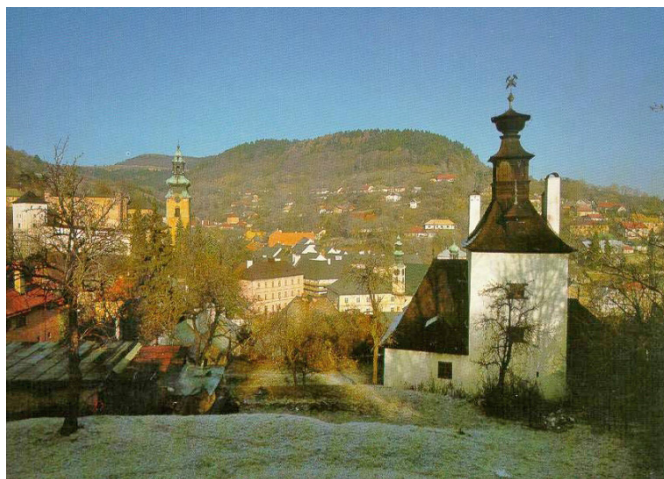


Fig. 1. Banská Štiavnica – historic mining town, since the 18th century it has been one of European centers of education, science and technology with the Mining Academy, the first university of its kind in the world.



Fig. 2. Research and Education Center of the Faculty of Architecture in Banská Štiavnica, a place of experimental research and educational activities of national and international character.

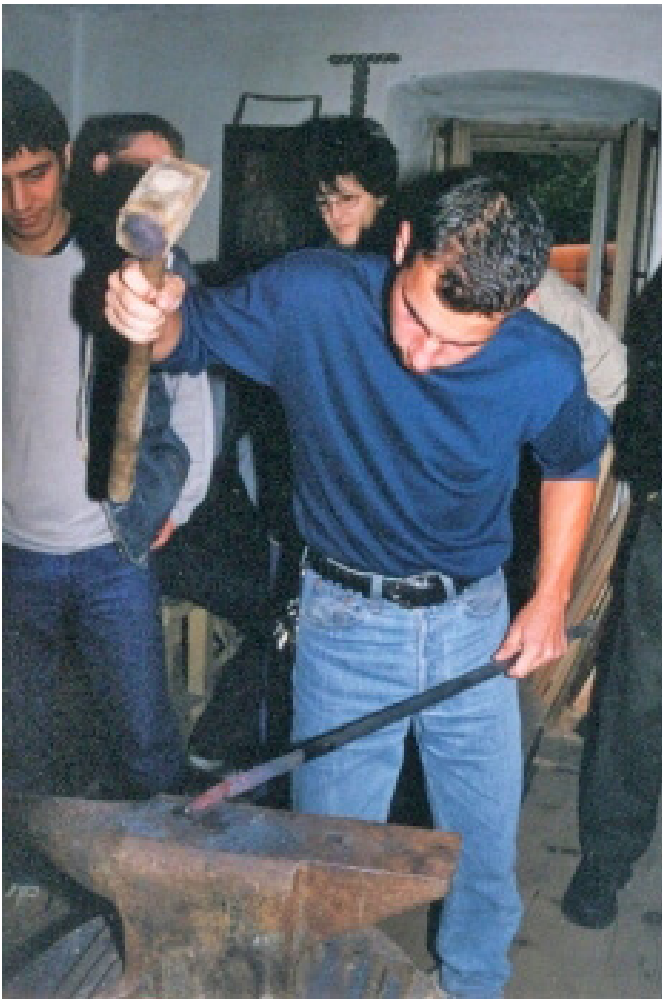


Fig. 3. Forging: training was conducted in an original blacksmith's workshop with an explanation of the technology and some examples of the steel shaping.

In fact, this building itself has become a training place for more than 400 students, who participated in its restoration during a five-year period.

After the period of conservation and restoration work, in 2000 the Research and Education Center for Architectural Heritage Restoration (RECAHR) of the Faculty of Architecture was opened in Banská Štiavnica. Since that time it has become a place of experimental research and educational activities, as well as a place of workshops, summer schools and conferences on the national and international levels.

In the same year (2000), the Faculty has obtained financial support from the Open Society Foundation within the framework of the project "Creation and Utilization of Progressive Training Methods for the Preservation and Conservation of Architectural Heritage". Within this project, we organized more training activities for various study courses of bachelor's and master's study programs in architecture. The study course of Architectural Restoration (for the 3rd year students of bachelor's study program) was one of the courses implemented in form of lectures and individual assignments. Training was focused on preparing work of conservation (inventarisation, measurement, documentation,



Fig. 4. Making objects of stone: it focused on short examples of basic tools and methods of surface adjustment.



Fig. 5. Traditional plastering: training consisted of theoretical part (technologies, materials and tools), as well as practical exercises of preparation of various kinds of plaster mixtures on the base of lime, and wall plastering.



Fig. 6. Carpentry: training involved making objects of the natural wood and using the necessary tools. The next step was an exercise that was related to the creation of the truss construction model in real dimension.

analyses, research etc.) as well as on the architectural restoration methodology, concept and architectural design, paying special attention to an important role of the work in terrain. The students could undertake the outdoor activities in specific environment conditions of Banská Štiavnica – on the background of its architectural, historical and technical values.

The training consisted of two parts, each one week long:

- The first one concerned documentation, recognizing and interpretation of cultural and historical values of architectural heritage in terrain [4]. This part comprised an exercise of obligatory course “Monument Preservation” taken by the majority of students in classrooms at the Faculty of Architecture in Bratislava; discussions with the students as well as the questionnaire enables us to compare their experience, knowledge and opinions of this kind of “terrain” education.
- The second part focused on the training of crafts used in historical architecture. Integration of craft training to the study program of architecture pursued two main goals: to broaden architects’ (creators of conservation concept) personal experience with historical materials and to enable better understanding of the original techniques and

technologies as the best way of authenticity conservation and creation of private relation to architectural heritage and craft work of their forefathers.

All students could improve their forging, plastering [5] and carpentry skills [6]. This was possible thanks to collaboration with other educational institutions in Banská Štiavnica and with some craftsmen.

The project “Creation and Utilization of Progressive Training Methods for the Preservation and Conservation of Architectural Heritage” was carried out for more than 3 years. Within this project, more than 300 students changed at the centre [7]. Based on the valuable experience gained, we have introduced this training module into the regular education of architectural conservation, and the Research and Education Center for Architectural Heritage Restoration in Banská Štiavnica has become part of the Faculty of Architecture in Bratislava, which is actually the only one university in Slovakia with a possibility of obtaining specialization in conservation on a graduate level.

REFERENCES

1. **Gregor, P.** Surveys, researches, analyses and evaluation in monument preservation. *Priestorové plánovanie v územiach so špecifickým režimom (Spatial planning in areas with a specific mode)*. Bratislava: FA STU-ROAD, 2001, p. 315–323. ISBN 80-88999-05-7
2. **Gregor, P.** Education in Conservation – state of the art and perspectives : Faculty of Architecture, Slovak University of Technology, Bratislava, Slovakia. *Workshop on education in conservation in Europe : State of the art and perspectives*. Leuven, 2002, ISBN 2-930301-17-1
3. **Dvořáková, V., Tóthová, Š.** *Banská Štiavnica, World Cultural Heritage*. Bratislava: PÚ Bratislava, 1995. p. 6–10.
4. **Gregorová, J.** *Prezentácia architektonického dedičstva II (Presentation of Architectural Heritage II)*. Bratislava: Perfekt, 2008. p. 100–120.
5. **Vošková, K.** *Tesárstvo a drevené konštrukcie v architektúre : Tradičné remeslá pre dnešok: historické východiská, súčasné podoby a perspektívy uplatnenia vo vidieckom priestore*. Zvolen: Lesy Slovenskej republiky, 2012. p. 72–83.
6. **Vošková, K.** *Stone in built heritage conservation*. Banská Štiavnica: Spolok Banskej Štiavnice, 1991. p. 12.
7. **Vošková, K.** Technológie a špeciálne prístupy pri obnove pamiatkových objektov z Banskej Štiavnice. *Eurostav*, 12 (2008), p. 34–37, ISSN 1335-1249



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He is an expert on methodology of architectural heritage conservation and design at historical sites, history and theory of architectural heritage restoration.

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Previous publications:

- **Gregor, P.** *Surveys, researches, analyses and evaluation in monument preservation*, In: *Priestorové plánovanie v územiach so špecifickým režimom*. Bratislava: FA STU - ROAD, 2001. p. 315-323
- **Gregor, P.** *Obnova pamiatok (Restoration of Monuments.)* Bratislava, Perfekt 2008, 110 p.
- **Gregor, P.** *Prezentácia architektonického dedičstva (Presentation of Architectural Heritage)*. Bratislava, Perfekt 2008, 270 p.

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