

WHAT WILL BE THE FUTURE SAS CAMPUS LIKE?

HISTORY AND PERSPECTIVES OF URBAN AND ARCHITECTURAL DEVELOPMENT OF THE CAMPUS OF THE SLOVAK ACADEMY OF SCIENCES IN BRATISLAVA

Henrieta Moravčíková, Laura Pastoreková

The campus of the Slovak Academy of Sciences in Bratislava is one of the oldest modern campuses in the city, which still remains its original function. During the 20th century, its urban and architectural plans were designed by the best Slovak architects. The primary construction of the campus was divided into three main stages: The first part was prepared under the guidance of the architect Karol Paluš, the second stage was designed by the team of the architect Martin Kusý and the last segment resulted from an architectural competition, won by the architect Marián Marcinka. Already during the planning process of these stages the architects emphasized, that the urban structure of the campus is not ultimate. The voids designed between the buildings allowed future spatial growth of the existing institutions and further construction. To maintain these architectural and urban values and develop the potential of the area, it is necessary to follow this long tradition of complex urban planning.

Such opportunity was given to the youngest generation of Slovak architects – students in their sixth year of study at the Faculty of Architecture SUT in September 2015. Their design studio project was divided into two sections: the first task included a deep analysis of the surrounding environment and the relations of the urban elements inside the campus, the second stage task was to design a building for the selected research institutions or related

public facilities. The connection of excellent architects-teachers and the current topic provided a whole series of new ideas and verified the development potential of the property. On the other hand, pedagogues and students got the opportunity to work on an ambitious project, present their designs in public and even to enter potentially the real planning process.

Result of this cooperation of students, architects-teachers and researchers was an exhibition, dedicated to the history and future of the SAS campus, which was opened during the Week of Science and Technology and was a worthy culmination of their year-long work.

WINERIES ARCHITECTURE IN THE CZECH REPUBLIC AND THEIR CONTRIBUTION TO LANDSCAPE PROTECTION

Petr Dýr

The history of winemaking dates back to the 8th millennium B.C. It is connected to vineyard buildings. The historical traditional form of vineyard buildings and cellars in our country started to develop in the 13th century A.D. and in various forms has been preserved until now. The late 20th and the early 21st century, in the context of new production technologies and development of wine tourism, forms a new wineries architecture of such structures that try with their function, morphology or materials combine wine with an experience. This creates a new distinctive architectural style.

This new architectural form gives some hope for the revaluation of the former agricultural premises, which after 1989 started to use only 40-50% of their potential for conventional agriculture. Many

of them disappeared completely and thus appear in the landscape as unwanted brownfields. Places suitable for grapevine growing are almost predestined to this function. Other areas, however, do not need to be left behind. In addition to wine, also hops, sugar beet and other “technical” crops can give these areas new, meaningful content. Regarding these areas not only from agricultural point of view, they can serve for manufacturing, crafts or services. Even their conversion into public and residential buildings is not rare. Interest in living in the country is growing. Why to invest into expensive open green spaces, when we can reevaluate the existing abandoned ones. It would surely contribute to better social integration of new residents of villages.

The study major Architecture at the Faculty of Civil Engineering in Brno has been doing research and study project work in rural areas for several years with the aim to find the most universal methodological approach to increase the value of the former areas of agricultural cooperatives and to facilitate the formation of the rural landscape of the 21st century: economic, ecological and aesthetic. The attempt is to unite these imaginary triple E into one A as architecture. With a difficult goal – to influence the way of thinking of the people who are in charge of building in agricultural setting and try to restore architecture of these buildings, respecting the tradition developed and implemented in projects of many Baroque farmsteads by the Czech architect of international importance Jan Blážík Santini-Aichel.

ERGONOMICS AS AN IMPORTANT PART OF PRODUCT DESIGN

Mária Šimková, Jana Požgayová

Ergonomics is an interdisciplinary system-oriented scientific discipline which comprehensively deals with the interaction of human, products and the environment. Its goal is to optimize psychophysical load and to ensure the development of human personality. Compliance with the ergonomic principles is an inseparable part of the design process. The common goal of ergonomics and product design is the humanization of products and their adjustment to the physiological and psychological capabilities of humans in order to gain the highest affectivity in the product use and the lowest health risks and negative impacts on human health by using a product.

At the Department of Design, Faculty of Architecture (Slovak University of Technology) there were elaborated two dissertation theses, which in this context focused on creating a laboratory of ergonomics at the university. Laboratory is a facility that provides controlled conditions in which scientific or technological research experiments and measurement may be performed. The laboratory of ergonomics enables scientific and research activities in controlled conditions. The research shows that in this time scale it is impossible to create a universal laboratory of ergonomics because every segment requires an extensive autonomous research and it is necessary to deal with each of them specifically. This is the reason why we decided to solve the issue partially and we focused on two fields which demonstrate the interconnection between ergonomics and design.

The first field of dissertation research is focused on design of a simulation suit as a tool which enables empathizing with a physically disabled person and through personal experience contributes to better understanding of the issue.

The second field of dissertation research is focused on redesigning an existing, unsuitable product. It is a health aid for handicapped users. The currently used and accessible product creates a health risk. A long-term and daily use of such products may dramatically influence health of the user. Therefore, the product will be created in a simulated laboratory of ergonomics – it means that the design process will be primarily influenced by the strict ergonomic criteria and subsequently with other factors.

FURNITURE DESIGN AFTER THE YEAR 1954 – FURNITURE SETS VERSUS INDIVIDUAL FURNITURE PIECES

Katarína Trnovská

Our research concentrates on production of Slovak national furniture enterprises, which in 1958, when there was a statewide reorganization of industry, underwent fundamental changes, enabling them to proceed to innovation of their manufacturing schedule.

The dynamic development of new types of furniture was powerfully determined by the mass construction of apartments launched at the end of the 1950s. In an attempt to make the construction of settlements maximally effective, apartments were standardized, with emphasis on the functional difference of the individual apartment zones. Designers subsequently responded to these changes with designs for

practical, functionally variable furniture sets.

Also of interest to our enquiry was the way in which development proceeded and the process of bringing new types of furniture into serial manufacture, and the significance of design in this process. We investigated production of that period mainly in the production of the companies Vývojový závod nábytkárskeho priemyslu in Bratislava and the internal development of products in selected national enterprises – Mier Topoľčany, n. p., Nový domov Spišská Nová Ves, n. p., Tatra nábytok Pravenec, n. p. and Západoslovenské nábytkárske závody, n. p. The usual procedure was creation of four to five prototypes yearly, which subsequently underwent technical and usage checks, resulting usually in one approved prototype per year. From the standpoint of centrally directed furniture production, design had only a secondary role in this process, the principal concerns were fulfillment of the plan and keeping within the economic limits. It is somewhat paradoxical that the design level of the standardized furniture was relatively high.

A turning point occurred around the year 1955, together with the introduction of what were for that time formally progressive furniture sets. In catalogues of that time one finds modern component furniture, multifunctional bed units and new types of seating and tables. Apart from the furniture standard, which form adhered closely to basic industrial norms, designers showed more firmness in their artistic opinions, especially with individual items of seating and tables.

Our attempt was to indicate the significant difference between the serially manufactured

furniture and types with original formal resolution which in most cases remained at the prototype stage, despite the fact that formally they met all criteria for effective industrial manufacture. These latter were furniture types which design moved local furniture production closer to current design trends in the world, with inspiration from the Scandinavian and American settings being particularly evident.