

Summaries

Kamila Gołąbek, Marek Gosztyła, Agata Mikrut-Kusy

Veronika Miškovičová, Jiří Masojídek

Romana Hajduková, Alžbeta Sopirová

Marek Lüley

Lívia Búliková

Matúš Kiaček

RZESZOW CASTLE: HISTORY AND CONTEMPORANEITY - PROPOSAL FOR A NEW INTERIOR ADAPTATION

Kamila Gołąbek, Marek Gosztyła, Agata Mikrut-Kusy

Keywords: castle, architecture, heritage conservation, revalorization, culture

This paper discusses the adaptation of Rzeszow Castle in Rzeszow, Poland (also called the Castle of the House of Lubomirski in Rzeszow), which is a key building on the Subcarpathia's map of monuments. The paper outlines the history of the castle as one of the city's most important monuments. The characteristics of the building are then presented, with focus on its architectural value, and the current state of preservation of the monument is described. The current functional programme regarding the castle is also mentioned, as the aim of the future modification of the monument is to completely change the purpose for which the building is used: from an administrative and office space to a cultural facility with complementary functions.

The history of the construction of the castle located to the south of Rzeszow's main square dates back to the early 17th century and the times of Mikolaj Spytek Ligeza (the owner of Rzeszow, who lived sometime around 1562-1637). After his death, the ownership of the castle was passed to the Lubomirski family and the castle received further extensions and underwent another modernisation based on a design by Dutch architect Tylman of Gameren (late 17th century). In the 18th century, another project to modernise the building was developed and supervised by architect Karol Henryk Wiedemann. The castle enjoyed a period of splendour in the middle of the 18th century. Then, as a result of the partition of Poland by neighbouring countries, the castle was taken over by Austrian authorities. The residence was used for new purposes as a court and a prison.

The current shape of the castle is the result of a reconstruction at the turn of the 19th and 20th century, in accordance with the conservation trends popular at the time. The project was commissioned to conservationist and architect Zygmunt Hendel.

Until the early 1980s, there was a functional prison within the castle walls. Today, the castle houses the District Court and, as a result, access to the castle and its bastions is restricted. The castle is awaiting an adaptation that will give more members of the public the opportunity to use the monument. Based on extensive analyses, a contemporary vision of a plan of use for the castle has been created, one that casts a new light on the opportunities that the Rzeszów palace complex can offer. The concept includes a complete relocation of the District Court to a new building, followed by the adaptive modification of the castle to enable contemporary functions, specifically those associated with culture, art and the promotion of local heritage. Therefore, the objective of the paper also included the elaboration of a contemporary design based on the current conservation concepts. The design focused on presenting possibilities for the future development of the castle space as a historical building.

The priority was to identify the latest trends in conservation art, and, subsequently, to create a proposal for a contemporary interior arrangement for the castle and its site development. The aforementioned design work focused on creating new, innovative concepts for the revalorization of historical buildings, oriented towards development and modernity. The work presents bold, novel – and most importantly – workable solutions for a new functional programme for Rzeszow Castle. The proposals presented in the paper are aligned with new principles of cultural environment preservation, and primarily emphasize ideas that facilitate the development of culture and art, social engagement, and support new initiatives.

Therefore, this new functional programme complements cultural facilities and events offered by the city of Rzeszow - the capital of the Subcarpathia Voivodeship (one of Poland's sixteen provinces). The presented concept aims not only to bring out the architectural qualities of the castle, but also to introduce new solutions in the form of light illumination and elements of the so-called small architecture (e.g. contemporary benches) in the remodelling of the courtyard and the castle surroundings. The article also mentions other, earlier ideas for the adaptation of the castle's premises, which, so far, have not been transformed into an architectural concept.

TRANSDISCIPLINARY COLLABORATION IN ARCHITECTURE: INTEGRATING MICROALGAE BIOTECHNOLOGIES FOR HUMAN AND NON-HUMAN PERSPECTIVES

Veronika Miškovičová, Jiří Masojídek

Keywords: architectural research, environmental challenges, symbiotic ecosystems, microorganisms, microalgae, interdisciplinary collaboration, biotechnologies, public education, integrated problem-solving

In recent years, the architectural community has faced many ecological, geopolitical, and socioeconomic challenges. This paper delves into the potential of algal biotechnologies, with a specific focus on microorganisms, such as microalgae, for architectural and design applications. With the ability to offer a wide range of applications in architecture and design, they encompass small-scale objects, living systems on building exteriors, and urban (rural) scenarios, thus enabling systematic research.

This study investigates the integration of microalgae biotechnologies in architectural designs, considering factors such as maintenance requirements, material and technological adjustments, potential environmental impacts, and the possibility of enhancing public spaces and society across various dimensions from both short-term and long-term perspectives. Considering these factors, potential environmental and social impacts should be analysed within the design process and the further implementation of microalgae-based systems in real-life scenarios. The paper delves into a series of interdisciplinary projects and research revolving around the study of microbiology, architecture, and design. The projects propose various hypothetical scenarios exploring the integration of human and non-human perspectives. Collaborative academic efforts invested in the projects showcase the potential for combining microalgae cultivation with architectural applications.

Microalgae-based architectural systems offer potential benefits, but some concerns must be addressed. Energy consumption is a significant issue, as cultivating microalgae often requires artificial lighting and temperature control, potentially negating environmental advantages. Additionally, the maintenance and operational requirements for microalgae-based systems can be both resource-intensive and time-consuming. Ensuring optimal conditions for microalgae growth may necessitate regular monitoring, cleaning, and maintenance procedures. Also, the scalability and adaptability of microalgae systems remains a challenge. Translating the accomplishments seen in controlled laboratory settings or small-scale prototypes to a large scale might prove difficult in practical applications. Elements such as regional climate, environmental conditions, and building orientations can considerably impact the effectiveness and efficiency of microalgae systems in architectural contexts. To ensure the long-term viability of microalgae-based architectural strategies, detailed knowledge of these aspects and adaptable design solutions are needed.

Several projects are highlighted within the paper, including the project entitled Photosynthetic Landscape: a modular photobioreactor system that demonstrates the potential for integrating living systems into building exteriors and landscapes, thus contributing to the aesthetics and sustainability of the built environment. Synthesizing/Distancing addresses the challenges of coexistence in global epidemics by examining how these systems, integrating humans, microalgae, and other aquatic microorganisms, could enhance the relationship between the natural and technological, and human and non-human to understand the individual or collective roles in these systems. A permanent interior installation, Biotopia, demonstrates the potential for integrating living systems into interior spaces. This project highlights the role of microalgae in enhancing air quality, providing natural insulation, and potentially contributing to the internal microclimate. The Exchange Instruments project deals with a semi-closed cultivation system that allows for microalgae's growth. Cultivated Environment is a user-friendly microalgae cultivation apparatus that enables individuals and communities to harness the potential of microalgae biotechnologies on a smaller scale. The project aims to encourage the widespread adoption of microalgae-based systems. Further research, interdisciplinary collaboration, and innovative design strategies are needed to overcome the challenges associated with energy consumption, maintenance requirements, and scalability. To achieve this, adopting a non-human perspective in architectural design and practice is imperative, acknowledging the interconnectedness of these entities and ecosystems.

In view of the importance of rethinking our relationships with the environment and non-human species, we must strive to design architectural systems that foster further dialogue with other systems, both natural and technological. This approach encourages us to consider the mutual benefits and co-evolution of human and non-human entities, fostering relationships that promote all living systems' overall well-being. Enhancing the integration of design and architecture research, material science, and technological adaptations with the fields of microbiology and biotechnology necessitates a multidisciplinary approach that promotes innovation and synergy among these diverse areas of expertise. To achieve this, it is vital to create a collaborative environment that encourages sharing knowledge, ideas, and resources, ultimately enabling the design and creation of new mechanisms and apparatuses that harness the potential of microorganisms and biotechnologies. Incorporating this interdisciplinary approach is particularly important for research by design, as it enables a more comprehensive understanding of complex challenges and fosters the development of innovative, context-specific solutions. By integrating insights from diverse fields, research by design can address the multifaceted aspects of the built environment, taking into account the ecological, technological, and sociocultural dimensions. This holistic perspective ultimately results in more effective, sustainable, and adaptable designs that cater to the needs of both human and non-human inhabitants.

TPOLOGY OF TERRAIN VAGUE AND EMERGENCE MECHANISMS IN POST- COMMUNIST, POST-INDUSTRIAL SMALL AND MEDIUM-SIZED TOWNS IN SLOVAKIA: CASE STUDY OF HUMENNÉ, STRÁŽSKE AND VRANOV AND TOPLŤOU

Romana Hajduková, Alžbeta Sopirová

Keywords: terrain vague, typology, post-communist, post-industrial, small and medium-sized towns

These days, the importance of brownfield regeneration and reuse of vacant land is crucial for sustainable development, particularly in post-communist, post-socialist countries, where a series of key historical events caused socio-economic and political changes leading to urban decay. However, if we want to provide a comprehensive picture of the current urban structure and its issues in any city, all unused areas cannot be labelled as brownfields. Instead, we should study urban structure from the perspective of inverse urbanism, which uncovers many unused areas serving their primary function and still appearing as vague areas without any function at all.

The terms commonly used to describe such areas include terrain vague, lost spaces, non-places, white areas, voids, buffer zones and many others. The common denominator of the emergence of unused areas are political and socioeconomic changes after

transitional periods, which all the quoted authors refer to. However, geographic and cultural nuances play a huge role in defining and naming unused areas. We chose the term *terrain vague* for our research, but there are only few studies focusing on it in Central Europe. The one that is the closest to our research is the case study of Prague.

As we mapped and discovered *terrain vague* in model towns, we recognized the need for creating a typology of *terrain vague* and for identifying the emergence mechanisms in model towns of Humenné, Strážske and Vranov nad Topľou. Currently, these towns face several challenges, from declining population to surplus of underutilized areas; therefore, our results will provide us with a better understanding of *terrain vague* in our model towns and help us to design coping strategies. Our research results could be generalized and used for all small and middle-sized towns in Slovakia that were greatly affected by socialist industrialization.

The aim of our paper is to create a typology of *terrain vague* and to identify the emergence mechanisms of *terrain vague* in the context of post-industrial small and middle-sized towns in Slovakia using the case study of towns of Humenné, Strážske and Vranov and Topľou. We combined field survey and desktop analysis methods to map *terrain vague* based on set criteria. After the evaluation of the data, we used it to create a typology of *terrain vague* and we identified key emergence mechanisms and their subcategories.

While creating our typology of *terrain vague*, we decided to use some terms defined in scholarly literature (urban wildscapes, white areas, voids, vacant land), together with 3 types dedicated to green spaces (residential greenery, public green spaces and restricted (campus) green spaces) and a descriptive name – terraced garages.

In our research, we identify 3 main emergence mechanisms, which are further divided into subcategories. We chose this approach based on the key factors influencing the development of urban structures in model towns since the second half of the 20th century until the present. The first emergence mechanism is related to political and socio-economic changes, particularly those occurring in post-communist countries: socialist industrialization, deindustrialization and urban shrinkage. The industrialization and deindustrialization have had opposite effects on urban structures, but in some cases, we cannot completely separate these processes from one another. The second emergence mechanism is an unintended product of urban planning with the following subcategories: remnants of the urban-renewal days, places (deliberately) deprived of a function and places without a function. These processes are solely related to spatial planning, urban design and mostly, a complementary image of an ideal industrial town and a way of reaching such ideal. Remnants of the urban-renewal days are the result of unfinished projects and their realized fragments, while places (deliberately) deprived of a function are the outcome of the consistent effort to organize cities and places without function are transit areas, unstructured landscapes, basically any and every space without a clearly defined function. The third and last emergence mechanism is the cycle of urban development, which is inherent to every town, regardless of the context. It is a common, even inevitable part of the urban development of cities as living, constantly evolving organisms. The emergence of unused objects is a common phenomenon unless they are not neglected for a long period of time and do not emerge suddenly in huge numbers. A similar common occurrence is the vacant (undeveloped) land, providing a spatial reserve for further development and places excluded from construction that cannot be developed for their terrain configuration. Predictably, 6 out of the 9 types are related to some type of green space, 2 types represent buildings and developed areas and 1 type represents paved open spaces. Therefore, we can assume that under-maintenance and the lack of activities in green spaces are the main issue in the model towns.

Our typology and identified emergence mechanisms could be used as a basis for further research related to *terrain vague* potential in Slovak small and medium-sized towns, and for developing strategies for their management and transformation. It provides a deeper understanding of the potential of *terrain vague* for urban regeneration and re-development in post-communist, post-industrial towns.

EPHEMERAL OCCUPANCIES: NON-LINEAR APPROACH TO ADAPTABLE ARCHITECTURE

Marek Lüley

Keywords: adaptability, capacity, tendency, narrative, feed-back, interpretation, polyvalence

An adaptable approach understands architecture as a non-linear process, which enables a dynamic response to changing environmental and contextual conditions with the aim to extend the life of a building. The application of adaptability is as ambivalent as the term itself. Therefore, the paper opens a discussion on different perceptions of adaptability in architecture. Adaptability cannot only be understood as moving partitions or vast open spaces. There is a variety of different principles leading to adaptability that can prove the versatility of use - from the basic understanding of flexibility to comprehensive polyvalence. Longevity should not be about programs, functions, or typological characteristics. It should refer to a building and its construction system, which we perceive as hybridlike. An important factor in longevity is the independence of the shearing layers of a structural system and their time scale. In a construction system understood in this way, we perceive the function as ephemeral. An important aspect is the time scale of the intervention. The study deems the design process to be divided into two streams: a) a linear, initiated, top-down design process. The linear system can lead to a clearly defined and legible typology limited to one function, or a set of predefined functions; b) a non-linear, cyclic, evolutionary, bottom-up process that can lead to ambiguity and indeterminacy with different possible interpretations, thus providing an adaptable solution. This paper explores the phenomenon of non-linear design processes expressing our perception of the adaptability application to carbon-neutral construction using the concept of ephemeral occupancies. Ephemeral occupancies are activities and events occurring within a building system that is ambiguous, generic, or specific. They require an open, polyvalent, free, democratic, and adaptable form. They work with hybrid material compositions of different temporal material flows, with dynamic settlement processes and new forms of ownership. Ephemeral occupancies establish a new way of thinking, lifestyle, and approach to climate change. The phenomenon is examined using the scientific method of conceptual analysis based on examining the relationship between capacity and tendency in the context of adaptability. The study explores the creation of a conceptual system of applying adaptability approaches and strategies in architecture in relation to the capacity and tendency of building systems and architecture. The terminology based on the most cited definition of adaptable architecture puts capacity in the prominent position as the main property of an adaptable system. On the other hand, Manuel DeLanda distinguishes the philosophical difference between property and capacity. Properties are always actual because an object, at a given time, has or does not have a certain property. But the capacity is not necessarily actual if the object, in the given state, does not require it. This means that capacity can be real without being actual. Subsequently, DeLanda explains the structure of the virtual and introduces tendency as a supporting phenomenon. The result of the conceptual analyses is a framework distinguishing the non-linear strategy supporting the divergence of capacity and tendency in the context of adaptability. In such an established context, we can understand a non-linear system as a system of several variables entering the system, the result of which is significantly disproportionately greater than their input. Another concept of non-linearity can be the cyclic evaluation of variables. Such a procedure is called iterative and uses tools such as a narrative (a scenario that defines the desired state under certain conditions), feedback, and interpretation. Narrative strategies are supported by Schumacher's understanding of scenarios that define function not statically, but dynamically and variably. Henri Achten approaches the problem in a similar manner. He proposes "Interaction Narratives" as the organization of moments of interaction between a user and a system following a story, which is consistent with the style of interaction. Another type of narrative is provided by Nigel Coates, which we understand as a narrative connecting the urban context, which contains several functions and events that are mutually supportive, and yet independent, to dynamic systems of building's functional parts. Feedback as a system of constant evaluation of variables is an intermediate step to interpretation that was in our case inspired by the finding of an autopoietic function and intra-architectural codes described by Mitášová and Zervan. Although the authors

mainly focus on the investigation of existing buildings using their method of interpretation, it can also be used for non-linear forms of design, such as: 1. Contextual reconstruction of the autopoietic function and the internal-architectural code, where we can perceive the context as a relationship between two states of the architectural space at the point of the critical threshold – the need to change the function; 2. With the help of the feedback and the scenarios of possible anticipated development, we can infer a hypothetical reconstruction of spatial situations; 3. We can subsequently encode these into building system components and spatial configurations in order to provide answers for future interpretation. The final observation is based on the principle of polyvalence as one of the key features in adaptability. It can be expressed using a single component, spatial organisation, position of access points, etc., as presented in the author's own practice.

INNOVATIONS IN SACRAL ARCHITECTURE: THE RESETTLEMENT CHURCHES OF EMIL BELLUŠ

Lívia Búliková

Keywords: innovations, sacral architecture, evangelical church, Emil Belluš

This article focuses on two buildings by one architect – Emil Belluš (1899–1979), a doyen of Slovak architecture, whose work significantly influenced the sacral architecture of the Evangelical Church of A. C. His innovative contributions can be seen in the design and later in the construction of two evangelical churches in Nesvady and Senec, built in the 1950s. The aim of this article is to examine and define the manifestations of innovation in the architecture of the two evangelical churches, the creative contribution of the architect Emil Belluš to the field of sacral architecture, and also the influence of the client—the Evangelical Church of A. C. Through a detailed examination of the tectonics of the churches, their layout, the materials used, morphological elements, design principles and technical equipment, we are looking for innovative ideas and principles that bring a change or progress in sacral architecture.

The churches were part of a project originally intending to build ten new churches for people who had been resettled as part of the government's post-war migration policy. After the Second World War ended, there was a period of great migration between European countries. The territorial and administrative structure of the countries has changed, and new borders have been drawn. With the regaining of its independence, the Czechoslovak Republic also established its own migration policy with several objectives, part of that being the expulsion of the inhabitants of foreign nationalities. Thus, on 27 June 1946, an agreement between Czechoslovakia and Hungary was made, which spoke of the exchange of an equal number of the population of Hungarian nationality for the population of Slovak (and Czech) nationality. In the end, more than 70,000 Slovaks returned, mainly to towns and villages in southern Slovakia, where Evangelical Church of A. C. congregations were also restored or re-established.

Taking a closer look on the figure of Emil Belluš himself, we can see that he was quite interested in the field of sacral architecture. Among his work as a prominent architect of a wide range of buildings in both the public and private spheres, we also find a few designs for sacral buildings for different denominations. None of them, except for the two studied in this paper were ever built.

Thanks to a unique preserved lecture “On the construction of an evangelical church” by Belluš from 1947, we gain a clear look of his view on this subject. His enthusiasm and deep immersion in the field of evangelical sacral architecture are clearly evident in the text. Emil Belluš' aim was to make an appeal to use new constructions, principles, and innovative layouts that would also meet the needs of the churchmen of his time. Overruling to all practical ideas stands the idea of creating a high quality and valuable sacred space, which would be able to support and positively influence the religiosity and culture of the society.

To search for and identify innovative trends in the architecture of the two selected churches, we used different research methods that were interrelated and intertwined. The main focus and most used method was the architectural-historical research in

situ. Helped by the oral history technique, we gathered unique and necessary information needed for next steps in the research process. We focused on a detailed characterisation of the building, its construction system, layout arrangement, mass-spatial composition, materials used and other aspects, including newer renovation changes of the churches. We were able to obtain original plans by the architect Emil Belluš himself, along with historical documents, comprising pictures and writings from the years around the completion of churches. These and other materials were the starting point for naming the researched innovative trends in the sacral architecture of the Evangelical Church of A. C.

As a result, we compared the two churches between themselves. We looked closely on their mass-spatial design, construction systems, inspected materials and layout, looking for innovative approaches either by the architect or the investor—Evangelical Church of A. C. Even now, 70 years later, we can evaluate the timelessness of the functionalism and its use in the forms of sacral architecture. The architect Belluš used morphological elements of the new style, which also reflected the programmatic content in the mass-spatial division. He was not afraid to bring new matters, materials, and systems to the traditional form of the church that were up-to-date and of high quality. The quality and accuracy of the overall design is evidenced, for example, by the location of the choir room within the church and its extensive use today, where the parishes organise various prayer meetings, children's meetings, and meetings of the young, middle, and older generations. The active use thus confirms Belluš' thesis and insistence on a modern and updated approach to the spatial design of temples.

So how did Emil Belluš and the Evangelical Church of A. C. contribute to architectural innovation? The Evangelical Church was open to development, changes in liturgy, new ideas and the needs of the community. Belluš actively used the resulting demands to devise a new form and method of temple construction and was able to translate them into the design of a functional and spiritually valuable temple, benefitting from current trends in construction and architecture.

CONTRIBUTION OF RUDOLF FRIČ TO THE SOCIAL ARCHITECTURE OF INTER-WAR CZECHOSLOVAKIA

Matúš Kiaček

Keywords: social policy, social housing, housing cooperatives, block of flats, apartment block, rental house, interwar Czechoslovakia, Rudolf Frič

Social policy during the First Czechoslovak Republic was characterised by a focus on the development of institutional health and social care and social housing. The task reflected the socio-economic, cultural and political changes brought about by the continuing industrialisation and urbanisation of the population. Social housing was a complex issue that expanded beyond the housing conditions of workers with a view to accommodating the needs of the dynamically growing middle-class, especially civil servants.

In Bratislava the establishment of new institutions and the related arrival of the Czech middle class and intelligentsia of civil servants and employees induced a significant social change in the composition of the population and the necessary improvement in its social and housing conditions. This necessitated the construction of modern residential buildings and urban units, which stabilised the internal urban structure and urbanised the outer city along the urban radials. Moreover, the new legislation enshrined framework standards for architecture and urbanism, social standards and legally binding conditions and provided financial support for all potential developers.

A significant contribution to that field would be attributed to construction entrepreneur Rudolf Frič (1887–1975). Even though the Slovak historiography of interwar architecture almost exclusively presents him as a builder of civil engineering structures, his portfolio and contribution would be more complex. The aim of the paper is to identify and critically evaluate Frič's both architectural and construction work in the field of social housing in interwar Czechoslovakia in the social and urban context of Bratislava. The study focuses on projects of housing cooperatives and private rental blocks, or residential colonies, and partly on examples of city social housing. Their social and

architectural qualities are being confronted with the urbanistic impact on the modernizing city.

Housing cooperatives provided their members with more affordable social housing. Cooperatives with the highest socio-economic relevance were founded by the Bank of the Czechoslovak Legions (Legiobanka). Those were the Construction Cooperative of the Czechoslovak Legionaries and the Construction Cooperative of Civil Servants and Railway Workers, for which Frič designed and constructed several buildings. In early 1920s he built residential urban structure "Legiodomy", designed by Dušan Jurkovič and Jan Pacl, which urbanised the then former city suburbs along the Račianska radial. Later, Frič's firm also designed a legionary colony of detached houses and functionalist elementary school in the newly founded Bat'ov (Batu) in Subcarpathian Ukraine. The colony and the town itself are among the few examples of planned Czechoslovak settlements in the region. Frič designed a similar project based on the ideas of the garden city for the cooperative of railway workers in Koliba. In late 1930s Frič's practice carried out the last two projects for the Legionary Cooperative in Bratislava – the polyfunctional residential house of the Legiopožiš'ovna designed by Vojtěch Kerhart and the polyfunctional LUXOR department store designed by Jan Víšek.

Frič's construction portfolio also includes individual projects of rental houses for smaller cooperatives. From the urbanistic point of view, they could be divided into two groups: those in the compact city centre, e. g. the "DŽOS" cooperative block of flats in Gajova Street designed by Josef Nowotný, and those urbanising the outer city radials like the Construction Cooperative block of flats in Šancová Street designed by Frič.

A specific category of social housing directly financed by the state was housing for members of the army. The residential blocks for military veterans in Bratislava, designed by Frič, also created a new foundation for block urbanism in the territory of the former northern suburb between Mýtna and Šancová radial streets.

A critical category of social housing was social housing for the poorest and unemployed which is represented by the City rental house with habitable kitchens and the smallest flats, designed by Josef Marek and built by Rudolf Frič and Ján Petri. The lodging house and dormitory in Jelenia Street, designed by Vojtěch Šebor and built by Rudolf Frič, demonstrates that the state's social policy also intended to improve the living conditions of seasonal workers.

Besides the state, the city and housing cooperatives, private investors played a significant role in the accessibility of social housing. Their clientele of tenants consisted of those who could afford the commercial rent. Such an example is the rental residential block of Irma Hanke and Helena Hudečková, designed by Frič at the corner of Suché Mýto and Panenská Street, where it brought a new urban scale. At urbanistically exposed crossing of Mýtna and Šancová urbanising radials, he built the Trojan & Švarc company polyfunctional department designed by Vojtěch Šebor. Frič, as a construction entrepreneur, designed and built rental houses for his own employees in Lazaretská Street, Račianska radial and at the axis of the emerging Koliba district. They all reflect the influence of private investors on the social and urban changes of then modernising Bratislava metropolis.