

The Juliánov Housing Estate in Brno

Its Art and Landscape Architecture

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Juliánov Square with the small paddling pool
and part of the large water surface
Source: Brno City Archives, Sig. 45,
XIX e 125, neg. B 2289, 27 Sept 1967,
photo by S. Pařenica

The study deals with public space in the Juliánov housing estate in Brno, built in the 1960s, examining it as an exceptionally coherent environment where architecture, landscape and visual art – including a rare ensemble of functional sculptures – were conceived as an integrated whole. Based on archival research, fieldwork and comparative analysis, it interprets Juliánov as a *Gesamtkunstwerk* and an important reference for the assessment and preservation of post-war housing ensembles.

Introduction

The Juliánov housing estate in Brno represents an early example of postwar residential development in which architecture, landscape architecture, and public visual art were deliberately integrated into a unified whole. The circumstances of the late 1950s and early 1960s, when the estate was conceived, still allowed for an individual authorial approach and experimental work with space, landscape, and artistic elements – in contrast to later housing estates, which were increasingly constrained by economic pressures and construction typification.

Despite relatively extensive research on Czechoslovak housing estates in the 1950s and 1960s, Juliánov remains insufficiently assessed in terms of the complex synthesis of disciplines that constitutes one of its most distinctive features. The existing literature has focused primarily on urban and architectural aspects, while the layer of landscape and public art has been examined only marginally, without attention to their mutual interconnections. The aim of this study is therefore to interpret Juliánov as an authorially unified environment, shaped by the interplay of three components: the urban structure, the landscape concept, and the ensemble of visual and functional sculptures. The study proceeds from the assumption that their integration represents the principal value of the estate and explains its distinctiveness within the context of the Czechoslovak postwar development.

Three theses guide the analysis: Juliánov may be understood as a *Gesamtkunstwerk*, based on the synthesis of disciplines; landscape architecture plays a decisive role in forming the identity and spatial legibility of the place; and visual art functions as an active formative element of public space rather than as a decorative addition.

The study examines how these components jointly shaped the residential environment and situates Juliánov within the broader framework of its contemporary building production to identify both its representative features and its specific exceptional qualities.

Methodology

The study is based on an interdisciplinary approach combining historical, urban, landscape architectural, and visual-analytical methods. The core of the research consists of archival sources (project documentation, historical photographs, records of the committee for architect-artist collaboration), which allowed reconstruction of the original authorial intent and the development of the estate's design. The archival materials were complemented by fieldwork focused on spatial structure, vegetative composition, and the current condition of architectural and artistic elements.

The research also included semi-structured interviews with the project's authors, which provided insights that expanded the archival material, clarified the roles and working relationships of contributors from different disciplines, and shed light on the procedures and motivations of the time. The findings were confronted with both period and contemporary literature on the residential environments of housing estates and the integration of art and landscape in postwar construction.

To identify the specific characteristics of Juliánov, a comparative approach was used, referencing selected Czechoslovak and international housing estates of the 1950s and 1960s. This methodological framework enables the urban, landscape and artistic components to be



Legend

- boundary of the Juliánov housing estate
- axis of the housing estate – Krásného Street
- original cemetery, preserved trees
- green center – Juliánov Square
- ten-storey landmark and civic-amenity wing
- paddling-pool – symbol of South Moravia
- rest area with a view

Freestanding sculptures:

- *Spring (Vysočina I)* – Jiří Marek
- *Family* – František Šenk (missing)
- decorative grille – Ervin Sauerstein and Karel Řezníček

Functional sculptures, original scope and location:

- Tamara Divišková (in the garden of nursery school, missing)
- Zdeněk Macháček
- Ervin Sauerstein and Karel Řezníček

Layout of the Juliánov housing estate
Author: Anna Magni

read not only separately, but above all in their mutual interrelations, which are essential for interpreting the estate as an authorially unified whole.

The Urban and Landscape Framework of the Housing Estate: Spatial Context

The site designated for the newly planned complex was outside the existing development, situated on the western edge of the city of Brno. It was defined by two prominent hills: nearby Bílá hora and the more distant Stránská skála. Both hills clearly stand out from their surroundings, and their distinct geological characteristics with limestone bedrock make them dominant features of the landscape. The highly fertile soils of the locality were used for agriculture until the construction of the housing estate began. The long narrow land parcels, oriented east-west, belonged to what then consisted of a small street-organized village, Juliánov (Julienfeld), incorporated into the entity of Greater Brno in 1919. In the 1950s, the name Juliánov was temporarily removed from official maps; the new name, Hybeš Quarter, referred to the local workers' movement of the 1890s. With population growth at the turn of the 19th and 20th centuries, with development of row housing with front gardens spreading toward the area from the west and north, a cemetery¹ was established here (still on agricultural land). Its elongated shape followed the orientation of the fields, occupying roughly the width of three of them, visually distinguished from the surrounding open space thanks to its mature trees. After the mid-20th century, the cemetery found itself in the middle of the planned housing estate.

The area of the future estate was bounded on the north by Bělohorská Street and on the south by the edge of the former sandpit. Historical sand extraction had created a steep terrain break with an undulating edge, descending sharply toward the road and railway connection between Brno and Olomouc (today Ostravská Street).

Spatial Organization

Under the leadership of Pavel Krchňák (1924–1979), and in collaboration with a team of Stavoprojekt architects and the landscape architect Ivar Otruba (1933–2022),² an urban and building scheme took shape in Juliánov in organic connection with the landscape concept. Both emerged simultaneously, grew out of the site's context, and drew on the conclusions of the International Movement for Modern Architecture and the Athens Charter. The composition of greenery was also consistent with the period's general principles for organizing residential areas³ and included three basic types of green spaces: residential, designated, and public. Designated greenery spatially and functionally complements the civic amenities – two nursery schools and a primary school. Residential greenery surrounds the apartment buildings or their groups, primarily serves their inhabitants, and is intended to ensure operational and calmness functions. It transitions smoothly into public greenery, with its recreational and social functions.

The segregation of transport modes is another guiding principle of the spatial organization of the complex. Movement of private cars, and originally also public transport, is concentrated along the longitudinal backbone road – Krásného Street – and is largely excluded from the interior spaces. However, the segregation is not entirely rigorous here, and pedestrian movement (apart from the viewing terrace) occurs at the same level as vehicular movement. By contrast, other Czechoslovak housing estates of the same period offer more radical solutions: in Karlova Ves in Bratislava (1964–1968), pedestrians use elevated walkways and terraces, while in Lesná in Brno (1962–1970), the entire green core of the estate is reserved exclusively for pedestrians.

Pedestrian paths in Juliánov follow multiple alignments: they run along roads, lead alongside buildings, or form functional connections cutting across open spaces. Unintended compositions emerge – characteristic of modernist housing estates – and grow more complex over time as newly paved shortcuts are added. Even in the two more clearly spatially defined, semi-enclosed blocks, it proved impossible to anticipate all necessary pedestrian routes in advance. Twenty years after construction, a team of researchers and designers⁴ examined these spaces and identified many worn paths and degraded surfaces, or conversely, unused areas. Based on their proposals, a comprehensive reorganization of the spaces was implemented in the 1980s, with new pedestrian routing and a unified composition based on a diagonal motif.

In Juliánov, we also observe a fundamental consequence of the interwar criticism of perimeter-block development: the absence of traditional urban spaces such as streets, squares, or parks. Although socialist housing estates reject the urbanism of the traditional city and develop modernist principles of open building schemes, they do not entirely manage to evade traditional terminology. Various typological units of greenery are compared e.g. to residential gardens or described as parks;⁵ in Juliánov, the estate's author refers to streets, promenades, the Juliánov Square, or individual gardens,⁶ even though these are not present in their characteristic forms. The spaces described lack clear spatial definition; they are not delimited by the volumes of buildings that otherwise divide space into private and public. Unbounded open space exists here together with a siting scheme that is entirely open in one part of the complex and semi-enclosed in another. Housing estates from the same period show various adaptations of modernist schemes: from Prague's Pankrác (constructed 1962–1967), which resembles a traditional urban structure with a commercial promenade, to the completely open arrangement of Brno's Lesná, where minimal obstacles are placed in the way of the free green space, representing a fully implemented concept of living in greenery.

Landscape Concept

Alongside the period's dominant principles for organizing housing-estate space, the defining creative approach

in Juliánov was a heightened sensitivity to the site – its topography, natural conditions and the contrasting landscape types that framed the locality. The authors were highly aware of the locality's characteristics, attentive to the features representing contrasting landscape types and deliberately thematizing them. Krchňák⁷ used a romantic tone when describing the site, writing about its position on “the boundary of two charming landscapes, (...) the rolling plains of southern Moravia, which stretch like a vast sea all the way to the terrace,” and “the last outcrop of Vysočina,” represented by the two hills to the north. Period photographs of the site before construction – still without the visual obstacles of vegetation and buildings – attest to how strongly the landscape could affect its observer.⁸ The authors translated the relationship to the site into a clearly readable thematic line present both in the urban design and in landscape detail: the two landscape types symbolically meet at the centre of the housing estate, represented by the sculpture “Spring” and, opposite it, the large water surface of the paddling pool. While highlighting the most significant spaces of the housing estate using artworks and water features was a common practice, the generous area of the water surface in Juliánov provides the square and the wider estate with values that reach far beyond contemporary practice. It enriches the public space with a new function – an openly accessible bathing pool with facilities for summer use, yet can be transformed into an ice rink in winter. In addition to the central sculpture, the landscape of the Bohemian-Moravian Highlands is evoked by the abundant planting of groups of black pines, though the theme or natural conditions of the site are not reflected in more detailed species selections.⁹

A similar principle was employed by architect Krchňák, landscape architect Otruba, and sculptor Marek at the Řečkovice estate in Brno. In the different context of northern Brno, they stylized the foothill landscape connected with the housing estate by a line, metaphorically oriented toward it through its terrain slope. They expressed their authorial approach through both living and inanimate materials: compact groups of trees (pines, rowans, larches, birches) shrub undergrowth and deliberate placement of large granite boulders to individualize the environment. In both complexes, the authors succeeded in expressing unique spatial relationships through architecture and landscape – an achievement remarkable given the context of extensive typification and prefabrication in housing construction.

The gentle slope of the Juliánov housing estate, with a vertical difference of approximately 30 meters along its length, enables views into both open and urbanized landscapes. The authors worked with visual axes using landscape tools known in garden art at least since the Renaissance. Four small viewing points are oriented toward the landscape and the wide urban panorama, with the unexpectedly prominent silhouette of the Cathedral of St. Peter and Paul. The resting areas have irregular outlines,

each framed by a low concrete or stone wall with a broken-line form, and the orientation of the benches determines the viewing direction. At the edge of the housing estate, the somewhat dramatic terrain itself predetermined the treatment of its boundaries: the slopes of the ravine are planted with shrubs and trees forming a dense vegetative belt composed primarily of native species. Belts of shrubbery are repeated in places where the estate borders a street or older development. In the new type of dispersed housing-estate structure represented by Juliánov, isolation greenery becomes a tool for delimitation and enclosure and for protection against negative external influences – a typical feature of the 1960s and later developments.¹⁰

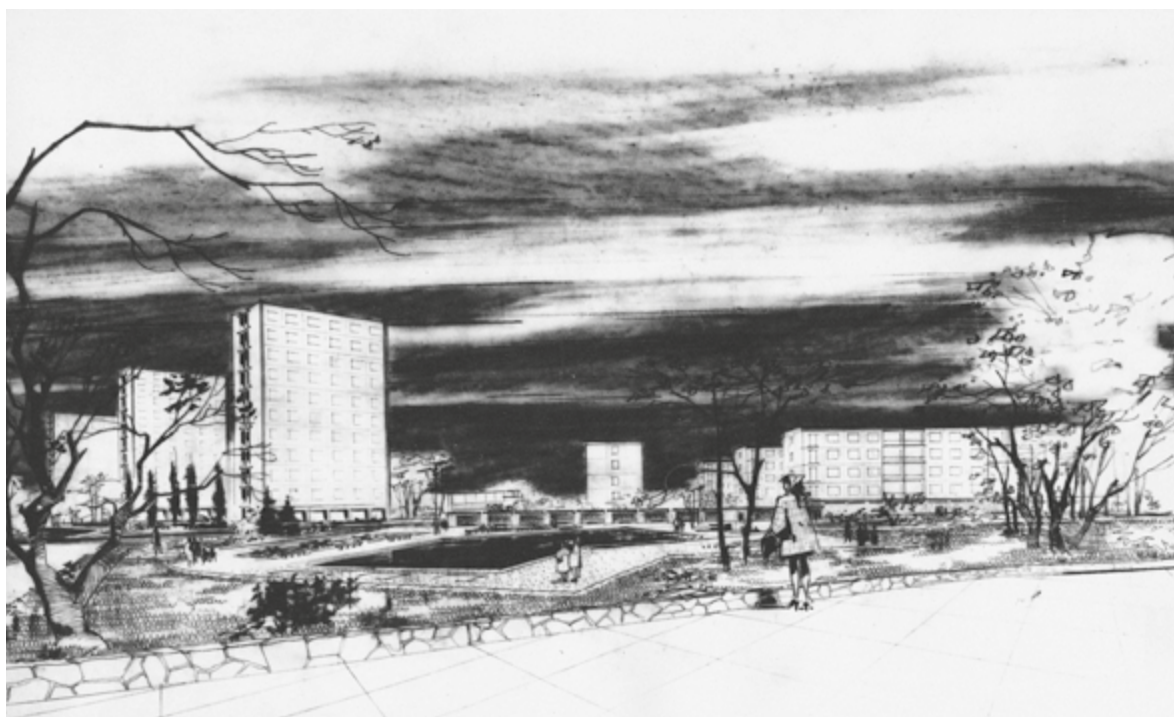
As for the Juliánov cemetery, the authors integrated its presence into the building plan and architectural and landscape detail with extraordinary respect. In the initial design phase, they were confronted with the physical traces of the abolished burial ground – remnants of gravestones, mature trees, and the perimeter wall. They decided to leave the space unbuilt and to situate within it the main centre of the housing estate, the Juliánov Square, accentuated by a ten-storey residential building with an attached civic-amenity wing. Preservation of the trees provided an already functional vegetative mass in the open, clearly readable space. The importance of the new centre was underscored by the placement of the most symbolically significant elements – the sculpture *Spring* and the paddling-pool complex – framed by the original trees. Despite the removal of the original white cemetery wall,¹¹ its presence is recalled by a new wall made of white lime bricks. Shaped as a perforated screen on the ground plan of a wide arc, it defines the southern boundary of the bathing pool and integrates auxiliary functions: benches and niches for changing cabins are set into the individual modules.

Yet if in the 1960s the collaboration between architect and landscape architect succeeded in implementing a fully individualized approach to the site and its history, such an achievement became almost impossible later. Beyond its political and ideological influence, the socialist regime exerted increasing pressure toward economic efficiency and typification in construction. In this context, Pavel Krchňák, as chief designer in the 1970s, oversaw the construction of the Bohunice housing estate in Brno, where he was forced to work with a very high building density.¹² In consequence, the large-scale residential buildings were arranged into formally complex siting schemes that failed to respect the historical village development and affected it in a destructive way. Housing estates that engulfed older development without regard, erasing the site's memory and creating a stark contrast between the small scale of the old and the massive new structures, became characteristic of the 1970s and, in most cases, also the 1980s.

Use of Woody Plants

Thanks to their volume and longevity, woody plants play a significant role in the spatial concept of the housing

One of a set of perspective drawings
Source: Brno City Museum, Inv. no. 200088



Zdeněk Macháček, climbing structures, 1965
Source: estate of Zdeněk Macháček

estate. Ivar Otruba created loose, irregular compositions, most often grouping woody plants into larger single-species clusters. Pines and maples appear repeatedly, while more diverse combinations of native species of trees and shrubs occur in peripheral groups. Otruba's design for Juliánov represents a transitional phase within his housing estate projects.¹³ His earlier design for the *Paradise* housing estate in Karviná (1960) was based on species diversity and on "horticultural composing" of individual woody plants. In Juliánov, Otruba simplified these schemes, and in Řečkovice (1969) introduced new methods – using, for the first time in his work, planting catalogues for so-called bed-type shrub plantings,¹⁴ meaning coherent, compact groups. The increasing concentration and densification of plantings became established in the second half of the 20th century as a new method of typification and rationalization intended to reduce costs and accelerate the processes of designing, establishing, and maintaining vegetated areas. Comparison may be drawn to the prefabrication and typification processes in construction, although it entered the field of horticulture with a delay of several decades. One of the main drivers of this development was the construction of socialist housing estates. Although various drawbacks of this method became apparent later,¹⁵ the simplification in Řečkovice contributed to the efficient planting of extensive open surfaces and simultaneously achieve a striking aesthetic effect.

With its predominance of mature trees, the present form of vegetation in Juliánov creates an adequate volumetric counterbalance to the large-scale buildings, and the entire housing estate is given a harmonious scale. An interesting tension is revealed by the surviving sets of draft visualizations of Juliánov.¹⁶ Emphasizing architecture, spatial clarity, and material detail, they nonetheless render the trees more as picturesque accents without spatial-forming effect. The difference between the realized outcome and the interim visualizations demonstrates the emancipation of landscape architecture in Otruba's interpretation and the equal role of the discipline in shaping the spatial composition of the residential complex.

Landscape Detail

The characteristics of the open green space between the buildings are shaped by several creative approaches, among which we might stress a pronounced oscillation between differing scales and the use of contrast. The smallest scale is that of the plants themselves: flowers in circular concrete planters enliven the building entrances; shrub beds bordered by low walls rhythmically accompany paths along slab blocks; a circular planting bed set in pebble paving brightens the enclosed space between the high-rise building and the shopping centre. These elements stand out against the backdrop of expansive lawns and groups of trees, framed by distant views and the sky reflected in the water surface of the paddling pool. Detail is most concentrated in the symbolic and social centre of the housing estate, the Juliánov Square, expressed most

freely in the treatment of terrain and the forms of small architecture. In the gentle slope, abstractly shaped broken lines of low retaining walls are embedded; these recur in the form of the paddling pool and adjoining terraces, in the arc of recessed perforated walls with changing cabins, and somewhat further away in the boundaries of the viewing terraces. Similar variations of form are characteristic of Otruba's work; he employed them extensively, for instance, in the Botanical Garden and Arboretum of the (then) University of Agriculture.¹⁷ In other parts of the housing estate, particularly in the semi-enclosed blocks, the articulation of space between the buildings is more subordinate to functional relationships and is designed in a more utilitarian manner.

Despite these details, a clear unity of space is evident throughout the housing estate. It was achieved through several landscape strategies: the repetition of identical elements (single-species tree groups, most often pines and maples; viewing rest areas; estate edges), the distribution of varied elements with a connective function and conceptual affinity (the ensemble of artworks and functional sculptures), and the compositional arrangement itself. The space contains no barriers; it flows uninterruptedly and permeates the entire estate.

Art as Part of the Urban-Landscape Concept "Living Environment"

Unlike later housing estates, where the pressure for economisation and construction standardisation had already taken full effect,¹⁸ Juliánov represents a thoughtfully designed and authorially coherent project whose value lies not only in its urban structure and landscape concept but also in its extensive ensemble of artworks, reflecting the contemporary effort to "humanise" standardised panel construction.¹⁹

In the context of the dismantling of the traditional urban fabric and the acceleration of mass housing construction,²⁰ discussions on the "living environment" emphasised the need for new spatial elements fulfilling aesthetic, social and educational functions.²¹ Architects were encouraged to conceive housing estates not only as technical solutions to the housing shortage but as comprehensive urban environments, supported not only by civic-amenity buildings and greenery but also by children's playgrounds, water features, and works of art. A crucial impetus for transforming the use of visual art in public space was the success of the Czechoslovak exhibition at the EXPO 58 World's Fair in Brussels, which popularised the emphasis on the synthesis of architecture and art.²² The idea of organically interconnecting disciplines began to permeate everyday practice as well, and in 1965 it was formalised by a government resolution that obligated the allocation of a certain percentage of the total budget of each major construction project to "artistic decoration".²³ This specific form of state patronage was at the time regarded as a path toward integrating art into everyday life and rehabilitating public space.²⁴

In Juliánov, this ambition materialised most clearly in the central part of the estate, where architect Pavel Krchňák sought to “humanise [the space] as much as possible”²⁵ by combining civic amenities, greenery and works of art into a single spatial composition. Contemporary reviewers praised it as an urban composition based on the rejection of block development by means of an analogy to a village: “normal life in a normal urban district (...) as if it were taking place on a large village green with a pond in the middle.” They highlighted the carefully conceived ground floors of the buildings, the greenery, and the small-scale structures,²⁶ which together demonstrated close cooperation between disciplines.

This interdisciplinary approach is echoed not only in the original concept but also in later reflections: Ivar Otruba returned to the theme of habitability in his landscape-architectural motto: “‘Housing estate’ is as ugly a word as ‘homeless shelter’; the estate should be the people’s home. For life, for love, for death. This new form of housing and living needs to be given a unity of space, originality, landscape character. The calm of an enclosed garden, the bustle of a promenade, the freedom of a meadow or the colonnade of a deep forest. People should live within a true landscape, if a newly created one. Avoid the schematic and the routine. Create what is needed: a human environment.”²⁷ From today’s perspective, many signs of residents “appropriating” the estate – flowerbeds by entrances, bird feeders or a piece of garden furniture tied to a tree – indicate how more intimate spaces by the buildings have come to feel semi-private, even though they remain part of a continuous green environment.

Visual Identity and the Role of Art

The construction of Juliánov was accompanied by the creation of both individual sculptures and a rare, coherent ensemble of functional sculptures. The initiative to integrate artistic elements into the estate stemmed directly from Krchňák, who approached selected artists to complete key spatial nodes and articulate the less-defined open areas between the building blocks.²⁸ His concept understood the estate as an “organism” whose identity and atmosphere arise or are strengthened through visual elements²⁹ – an approach aligned with early forms of environmental thinking, in which art is perceived not as isolated decoration but as part of a wider spatial system.

Krchňák invited renowned Brno artists – Jiří Marek, František Šenk, Zdeněk Macháček, Tamara Divišková, and the creative duo Ervín Sauerstein and Karel Řezníček – to participate in the project. Their works were linked through a shared iconographic and spatial programme drawing on the specific location of Juliánov on the boundary between two landscape types, as already noted in the landscape conception. This duality was translated into both the landscape design and the formal and thematic conception of the sculptures.³⁰

Jiří Marek – Spring [Vysočina I]

The dominant feature of the central space of the housing estate, with its square and paddling pool, is the figural sculpture *Spring [Vysočina I, 1967]*, created by the Brno sculptor Jiří Marek.³¹ The sculpture, a limestone shell, is positioned in one of the shallow basins. Conceived as an allegory of the Bohemian–Moravian Highlands “hovering above the small ponds of its region”,³² the horizontally spreading abstracted female figure evokes the organic continuity of the landscape and complements the water surface symbolising the lowlands of southern Moravia.

Marek belonged to a generation of sculptors who combined monumentality with a lyrical relationship to the landscape. His 1960s work is marked by reduction, stylisation and an emphasis on the spiritual experience of the landscape. In Juliánov, he developed the motif of the female body as a landscape principle: the fluid and concave forms echo the local morphology and articulate the tension between the massive northern hills and the more open southern landscape. The sculpture anticipates the recurring landscape iconography in his later works³³ and represents his first distinctly “landscape-based” gesture in a residential environment.

Contemporary criticism described *Spring* as “the most compelling representation of the unity of man and nature in the socialist living environment.”³⁴ Its symbolism of regeneration – frequent in public art after 1960 – acquired in Juliánov a specific contextual role: the sculpture emphasised the urban axis, mirrored the landscape forms, and unified the architecture with the surrounding greenery.³⁵ Positioned between the paddling pool and the civic-amenity building, it functions as both a compositional landmark and a social focal point.

František Šenk – Family

Installed near the Primary School on Krásného Street, Šenk’s *Family* formed the second major sculptural accent of the estate.³⁶ The abstract vertical composition of hammered copper – metaphorically referring to growth as well as the dynamics of relationships within a family – connected the idea of construction with the humanist notion of the family as the fundamental unit of society. Its formal vocabulary resonated with Šenk’s broader transition from stylised figuration to a neoconstructivist expression after EXPO 58.³⁷ From an architectural perspective, the sculpture, as a vertical accent, counterbalances the horizontal stratification of the terrain and functions, in a certain sense, as a counterpart to the nearby rows of trees.

Functional Sculptures – Zdeněk Macháček, Tamara Divišková, Ervín Sauerstein, and Karel Řezníček

Thanks to the 1965 government resolution, works of art appeared relatively frequently in Czechoslovak housing-estate construction. In the Juliánov estate, however, this policy enabled the creation of a coherent ensemble of so-called functional sculptures and play elements – an ensemble whose extent, quality, and state of preservation are without parallel in the domestic context.³⁸

Zdeněk Macháček, climbing structures, 1965
Source: estate of Zdeněk Macháček



Zdeněk Macháček working on one of his climbing structures, 1965
Source: estate of Zdeněk Macháček



Jiří Marek, *Spring*, 1967
Photo: Martina Mrázová, 2014



František Šenk, *Family*, 1965–1966, photo: Vilém Reichmann
Source: BUDÍK, Miloš, HRUBÝ, Karel Otto and REICHMANN, Vilém. 1968. *Brno*. Brno: Blok, p. 172

Zdeněk Macháček, climbing structures, 1965
Source: estate of Zdeněk Macháček



Zdeněk Macháček, climbing structures, 1965
Source: estate of Zdeněk Macháček

The concept of functional sculptures drew on Scandinavian models as well as a series of debates about children's leisure discussed in Czechoslovak periodicals from the mid-1950s onward.³⁹ A key reference was the Danish-Swedish sculptor Egon Møller Nielsen, whose abstract play sculpture *Tufsen* (1949)⁴⁰ demonstrated how sculptural forms could respond to children's desire "to climb on large rocks, hide in a cave, or slide down a cliff".⁴¹ Despite the strong professional interest⁴² in these ideas attracted in the 1960s, they were realised in Czechoslovakia only sporadically. The first attempts appeared at the experimental Invalidovna estate in Prague;⁴³ later examples – such as the decorative playground walls at Lesná in Brno⁴⁴ – remained isolated and never developed into a coherent ensemble of play sculptures created by a single author. The design-oriented approach did not endure: in the subsequent decades, standardised playground equipment increasingly replaced original functional sculptures, while artistic "decoration" in housing estates shifted toward solitary works and various decorative elements.

Krchňák's intention to create playground elements in the form of artistic objects stemmed from his familiarity with discussions about children's leisure and the formative role of the urban environment.⁴⁵ His unrealised plan for a so-called *Robinson* playground illustrates his ambition to integrate play, creativity and spatial experience within the estate's open areas.⁴⁶

The first realised work was a ceramic play sculpture by Tamara Divišková (1965),⁴⁷ reflecting her established practice of creating abstract zoomorphic forms for pre-school gardens.⁴⁸ Although the Juliánov piece is no longer preserved, its presence marks the beginning of the estate's distinctive focus on artistic play elements.

The main part of the ensemble, however, was produced by Zdeněk Macháček along with the creative duo of sculptor Ervín Sauerstein and architect Karel Řezníček. In 1965, the Regional Art Commission approved ten of Macháček's proposals and several geometric elements by Sauerstein and Řezníček.⁴⁹ Installed between residential blocks and within the playground, these reinforced-concrete sculptures combined the role of an aesthetic, socialising, and urban-forming element: they structured open areas, acted as visual landmarks, and supported children's physical and imaginative play.

Macháček's⁵⁰ organic forms were rooted in his *Worlds of Silence* series (1962–1963), characterised by a pronounced tendency toward dematerialisation and stylisation that emerged in his work in the early 1960s.⁵¹ He drew inspiration from marine flora and fauna – a world close to him as an avid diver and enthusiast of zoology and anthropology. The perforated spiral structures, resembling the abandoned shells of extinct sea creatures, proved ideally suited to climbing and hiding⁵² while simultaneously enriching the spatial rhythm of the estate. Although the commission recommended reducing the size of the sculptures placed between housing blocks (they are

approx. 1–3 metres high) to avoid dominance in intimate spaces,⁵³ the ones installed in the playground remained fully usable for play.

In contrast, the works produced by the duo Řezníček-Sauerstein⁵⁴ – simple elements made from prefabricated concrete and metal components used in building construction – can hardly be described as "sculptures." Despite criticism of their craftsmanship,⁵⁵ they contributed to the articulation of semi-public spaces and reflected the period's search for new forms of children's equipment beyond standardised playground sets.

Taken together, the functional sculptures at Juliánov demonstrate an unusually integrated approach in which artistic, spatial and social considerations formed a coherent whole. The abstract forms adopted by the authors could, in line with Egon Møller Nielsen's ideas, stimulate children's imagination and encourage interaction. The sculptures were not intended for passive contemplation but for active use – they enter into a direct relationship with the estate's inhabitants, shape their experience, support social interaction, and contribute to the identity of the place.

Transformation and Present State

After 1989, the Juliánov housing estate underwent a series of transformations that altered several aspects of its original spatial and visual character. The regeneration of apartment buildings carried out in 1992 – including rooftop extensions and new loggias – changed the silhouette of the ensemble and introduced visual disorder. In turn, the prefabricated playground equipment added to some of the interblock spaces reflected the technical possibilities and aesthetic preferences of the early post-revolution era.

The reconstruction of the paddling-pool area between 2005 and 2008 resulted in the enclosure of what had originally been freely accessible water; today it functions as a paid swimming facility and introduces a new physical and visual barrier into the open space of Juliánov Square. Another transformation occurred in 2019, when a new grid of small-crowned trees and residential-style street furniture was installed adjacent to the preserved cemetery trees, and the sculpture "Spring" was set inside newly designed circular forms. Several ceramic elements and play sculptures disappeared over timethrough the reconstruction of school grounds or the degradation of materials.

The vegetation has now reached full maturity and, in some areas, even obscured the former visual connections. Nevertheless, the main spatial relationships remain discernible, particularly due to the preservation of the original urban axes and the fundamental structure of the vegetation. These surviving layers continue to mediate the scale and character of the estate and form an essential basis for interpreting its present condition.

Conclusion:

Juliánov as a Synthetic Work/ Gesamtkunstwerk

Juliánov represents an exceptionally coherent postwar housing ensemble in the Czechoslovak context, where

architecture, landscape architecture, and visual art together create an interconnected whole. The urban structure, terrain modelling, vegetation, and artworks were designed in parallel, enabling the creation of an environment with a strong identity capable of structuring public space across multiple scales. While many of its features are representative of early 1960s housing estates, such as the open building scheme and typified construction, Juliánov is exceptional in the consistency with which architecture, landscape and art were conceived and realised as a single authorial composition.

A significant role in this process was played by the coordinated approach of the chief architect Krchňák and the landscape architect Otruba, whose collaboration established a shared spatial language linking the individual disciplines.

This synthesis is most clearly expressed in the central space of the estate, where vegetation, terrain modelling, the water surface, and the sculptures merge into a unified composition with both aesthetic and social functions. A comparable interconnection of disciplines is evident throughout the housing estate, where the landscape detail and small architectural elements share formal principles and contribute to the legibility of the wider environment. Within the context of the 1960s, Juliánov stands out as a project

that maintained an individual authorial approach, despite the rise of typification and increasing economic pressures.

The present form of the estate reflects a series of later transformations that have influenced its visual and functional relationships; nevertheless, the fundamental compositional layers – the urban axes, the treatment of the terrain, the character of the vegetation, and the key artistic elements – remain readable. These surviving components now serve as crucial criteria for assessing new interventions and highlight a certain fragility of the general environment. This fragility raises questions essential for the future development of Juliánov: how to balance the value of sightlines with that of mature vegetation, how to ensure the long-term preservation of artworks in public space, and how the estate can respond to future social and environmental changes.

In this sense, Juliánov can be understood as a genuine *Gesamtkunstwerk* – a work whose quality lies not in individual disciplinary outputs but in their interconnection and their ability to jointly produce a space with lasting spatial and cultural integrity. This synthesis, still perceptible despite later transformations, makes the estate a significant reference point for contemporary interpretations of postwar urbanism and for reflections on the future care of residential ensembles from this period.

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- 1 According to some sources, the cemetery was established in 1891 and abolished in the 1950s (see ŠVĚDA, Jiří. 2001. *Městská část Brno-Židenice: z dějin a současnosti Židenic, Zábrdovic a Juliánova*. Brno: Nakladatelství Šimon Ryšavý, 176 p.). According to cadastral sketches, the cemetery may have been founded between 1894 and 1907 (see cadastral sketches Židenice, 1894 and 1907).
- 2 The following are listed: L. Hřebačka, J. Pipa, B. Štěpánek, and, as authors of the earthwork and planting design of the tender project, I. Otruba, M. Šíkl, and J. Kuchtiček. See KRCHŇÁK, Pavel. 1968. Sidliště Juliánov. *Architektura ČSR*, 5(6), p. 357. Unlike the architects, Ivar Otruba was employed at the Želešice State Farm, in the design department Garden Architecture.
- 3 See, e.g., PRESS, František. 1962. *Zásady pro navrhování obytných souborů*. Brno: Výzkumný ústav výstavby a architektury, pp. 30–36.
- 4 This was a collective of researchers from the Research Institute in Průhonice, which also engaged in design work in pilot projects. As part of the research focused on experimental methods of modernising and renewing inner-block greenery, a design division was established in Brno, which was responsible for the implementation in Juliánov. See ŠUBR, Jaroslav. 1984. *Návrh experimentální metody řešení vnitroblokové zeleně*. Závěrečná zpráva. Průhonice: VŠÚOZ.
- 5 See, e.g., Press, F., 1962, p. 32.
- 6 Krchňák, P., 1968, p. 357.
- 7 Krchňák, P., 1968, p. 357.
- 8 The position of the housing estate on the boundary between two landscapes, as described by P. Krchňák in 1968, is still apparent despite the visual barriers formed by mature vegetation and multi-storey buildings. Moreover, it is supported by a biogeographical view of the landscape (see CULEK, Martin (ed.). 1996. *Biogeografické členění České republiky. I. díl*. Prague: Enigma); Juliánov lies less than one kilometre south of the boundary between two European biogeographical regions, the Continental and the Pannonian. At the same time, this is the boundary between lower-level units, the Pannonian and Hercynian sub-provinces.
- 9 According to Ivar Otruba, standard site surveys routinely analysed hydric, soil, and geological conditions, but potential natural vegetation was not mapped. The selection of woody species was much more strongly influenced by the availability of species in nurseries and by gradually accumulated experience with their resilience. See OTRUBA, Ivar. 2011. Interviewed by Anna Magni on housing estates. Unpublished.
- 10 MAGNI, Anna. 2013. Obytné soubory 1945–1989: prostor pro nové postupy a technologie v zahradněarchitektonické praxi. *Acta pruhoniciana*, 104, pp. 59–69.
- 11 Krchňák, P., 1968, p. 357.
- 12 CHATRŇÝ, Jindřich. 2024. Sidliště Bohunice. *Brněnský architektonický manuál* [online]. Available at: <https://www.bam.brno.cz/objekt/d220-sidliste-bohunice>. (Accessed: 25 November 2024).
- 13 OTRUBA, Ivar. 1990. Ivar Otruba's habilitation thesis. Estate of Ivar Otruba, p. 10.
- 14 Otruba, I., 1990, p. 11.
- 15 Magni, A., 2013, p. 64.
- 16 This is a set of unsigned drawings with perspective views of the housing estate's spaces. Based on the comparison with other drawings by Krchňák (view of the housing estate) and Otruba (drawings of other projects), their authorship can be ruled out. It is therefore likely that they present the ideas of a building architect rather than those of a landscape architect.
- 17 Between 1970 and 1989, Ivar Otruba formulated in this location an outstanding collection and educational garden with high artistic value, now regarded as his masterpiece.
- 18 NOVOTNÁ, Eva. 2017. Jak vyřešit bytový problém? Nařízením! In: Skřivánková, L., Švácha, R., Koukalová, M. and Novotná, E. (eds.). *Paneláci 2. Historie sídlišť v českých zemích 1945–1989*. Prague: The Museum of Decorative Arts in Prague, p. 113.
- 19 E.g. STARÝ, Oldřich. 1959. Úloha architektury v kulturní revoluci. *Architektura ČSR*, 18(7), pp. 373–374.
- 20 The solution to the postwar housing crisis was addressed by a government resolution of 1959, under which 1,200,000 flats were to be built in Czechoslovakia by 1970. See Novotná, E., 2017, pp. 166–181.
- 21 E.g. MUSIL, Jiří and POLÁČKOVÁ, Hana (eds.). 1962. *První celostátní diskuse o bydlení*. Prague: Ústav normování ve stavebnictví.
- 22 ŠETLÍK, Jiří. 1958. EXPO 58. *Architektura ČSR*, 17(9–10), pp. 654–662.
- 23 The Czechoslovak Government Resolution No. 355 of 28 July 1965, addressing issues of the application of visual art in investment construction, established the obligation to finance the artistic decoration of architecture by a certain percentage of the total construction budget. The resolution set out a total of 14 principles for cooperation between investors, designers, and artists in the application of visual art in investment construction. The ideological and artistic level of works was evaluated by art committees at the relevant professional unions. Decision-making authority was left to the author of the architectural concept. The resolution is held in the National Archives in Prague, fund Úřad předsednictva vlády (unprocessed). A partial transcription of the resolution was provided by Kateřina Pažoutová in her dissertation. See PAŽOU-TOVÁ, Kateřina. 2004. *České výtvarné umění a architektura 60. let 20. století*. PhD thesis. Faculty of Architecture, Brno University of Technology, pp. 16–17.
- 24 Criticism of the construction that was supposed to provide a solution to the housing crisis as quickly as possible came not only from experts but also from party officials, including president Antonín Novotný. See *Architektura ČSR*. 1964. Projev prezidenta republiky Antonína Novotného. II. sjezd Svazu architektů ČSSR. *Architektura ČSR*, 23(6), pp. 375–379.
- 25 Krchňák, P., 1968, p. 359.
- 26 PALLA, Vladimír. 1968. K sídlišti Brno-Juliánov. *Architektura ČSR*, 5(6), p. 360.
- 27 The motto was formulated in 1990, when he was politically rehabilitated and returned to Mendel University (then the University of Agriculture). See Otruba, I., 1990, p. 5; translation from POPELINSKÝ, Tomáš (ed.). 2025. *Ivar Otruba, krajinářský architekt / Ivar Otruba, Landscape Architect*. Prague: KANT, p. 63.
- 28 Zdeněk Macháček, interview with M. Mrázová, 2015, Křížovice.

- 29 Krchňák, P. 1968, pp. 357–359.
- 30 The way in which the architects of some housing estates coordinated the choice of authors and the thematic programme of the “artistic decoration” is sometimes compared to a curatorial approach (in addition to the Juliánov housing estate, this also applies, e.g., to the Brno housing estates Lesná, Kohoutovice, etc.). See KORŇKOVÁ, Jana. 2017. *Výtvarné umění v prostoru brněnských sídlišť (1945–1999)*. PhD thesis. Faculty of Fine Arts, Brno University of Technology.
- 31 Jiří Marek (1914–1993) graduated from the studio of Bohumil Kafka at the Academy of Fine Arts in Prague (1938).
- 32 Krchňák, P., 1968, p. 359.
- 33 E.g. Vysočina, 1981, Žďár nad Sázavou; Vysočina, 1984, Brno–Bystrc; Vysočina, 1987, Brno–Řečkovice. See ČUBRDA, Zdeněk. 1987. *Jiří Marek*. Brno: Svaz českých výtvarných umělců a Muzeum dělnického hnutí Svitavy.
- 34 *Architektura ČSR*, 28(4), 1969, pp. 23–25.
- 35 In the first designs, the plan was to install a trio of functional sculptures by the paddling pool. Regional Art Committee for Cooperation Between Artists and Architects, Book 19, entry 15/65, fund G 606 (unprocessed). Moravian Provincial Archive in Brno.
- 36 Created in 1965–1966. The sculpture is actually missing.
- 37 František Šenk (1914–1978) graduated from the studio of Bohumil Kafka at the Academy of Fine Arts in Prague (1938).
- 38 KŘÍŽANOVÁ, Daniela. 2020. *Funkční plastiky dětských hřišť v kontextu šedesátých let*. Master's thesis. Department of Art History, Faculty of Arts, Masaryk University, Brno.
- 39 E.g. SCHRÁNILOVÁ, Kamila. 1956. *Dětská hřiště*. Prague: Studijní a typizační ústav; KUČA, Otakar. 1960. Příroda v soudobé architektuře. *Architektura ČSR*, 19(5), pp. 312–324; KVASNIČKOVÁ, Rajisa and KVASNIČKA, Ilja. 1960. Děti ve městě. *Domov*, 1(4), pp. 50–57.
- 40 The sculpture, named after the nickname of the sculptor's daughter *Tufsen*, was installed on a children's playground in Stockholm. See, e.g., STOCKHOLM KONST. 2026. Tufsen. Stockholm konst [online]. Available at: <https://www.stockholmkonst.se/konst/tufsen> (Accessed: 22 June 2024).
- 41 ARCHITEKTUR FÜR KINDER. 2023. Egon Møller Nielsen. *Architektur für Kinder* [online]. Available at: <https://architekturfuerkinder.ch/egon-moller-nielsen/> (Accessed: 22 June 2024).
- 42 KORYČÁNEK, Rostislav. 2015. Zabydlet sídliště – postavit hřiště. In: Koryčánek, R., Kořínková, J., Koželouhová, A., Kubínová, Š. and Písaříková, J. (eds.). *Postavit domek nestačí: vizuální kultura a veřejný prostor města Brna v období po druhé světové válce*. Brno: Brno University of Technology, Faculty of Fine Arts, pp. 8–37.
- 43 ZIKMUND-LENDER, Ladislav and CZUMALO, Vladimír. 2014. *Experimentální sídliště Invalidovna*. Hradec Králové: Zikmund.
- 44 The Lesná housing estate was built almost simultaneously with Juliánov, between 1962 and 1970. An ensemble of so-called decorative walls for playgrounds was produced there; however, these were closer to sculpturally conceived small architectural structures than to three-dimensional sculptures.
- 45 E.g. ACH, Jiří, MUSIL, Josef and BLÁHA, Václav. 1968. *Necháme děti na ulici?: výchovné ovlivňování volného času dětí a vytváření prostředí pro jejich spontánní hry a zábavy v okolí domova*. Prague: Státní pedagogické nakladatelství.
- 46 A Robinson playground, similarly to an adventure playground, built on the concept of the so-called *junk playground*, first introduced by Danish landscape architect Carl Theodor Sørensen. It was a playground equipped with discarded or waste materials from which children could build their own world using simple tools. See Krchňák, P., 1968, p. 359.
- 47 The existence of Tamara Divišková's sculpture is known only from archival records. The execution of a functional ceramic sculpture by this artist for a children's playground in the Juliánov housing estate was approved by the committee as early as 1963; by 1965 the sculpture was ready for installation. Regional Art Committee for Cooperation Between Artists and Architects, Book 21, 1962–1964, entry No. 11/63, fund G 606 (unprocessed). Moravian Provincial Archive in Brno.
- 48 Tamara Divišková (1934) has focused on work in ceramics since her student years (she studied at the School of Arts and Crafts in Brno, at the Secondary School of Applied Arts in Uher-ské Hradiště, and subsequently at the Faculty of Architecture of the Brno University of Technology under Vincenc Makovský).
- 49 Regional Art Committee for Cooperation Between Artists and Architects, Book 19, 4 January 1965 – 6 June 1966, entry No. 15/65, fund G 606 (unprocessed). Moravian Provincial Archive in Brno. Out of a total of 15 proposals by Macháček – evaluated very positively by the commission – 10 works were selected for realisation. From the Sauerstein-Řezníček duo, who were recommended by the commission to draw inspiration from the sculpture of František Šenk, 4 designs were selected, 2 of which were to be executed twice.
- 50 Zdeněk Macháček (1925–2020) briefly studied zoology and anthropology at the Faculty of Science of the then Jan Evangelista Purkyně University in Brno (1945–1947) and graduated from the School of Arts and Crafts in Brno.
- 51 Eight of the original ten sculptures have survived to the present. The sculptures were restored in 2011.
- 52 Structurally, they consist of steel mesh on pins, gradually covered and modelled with concrete.
- 53 Regional Art Committee for Cooperation Between Artists and Architects, Book 19, 4 January 1965 – 6 June 1966, entry No. 17/65, fund G 606 (unprocessed). Moravian Provincial Archive in Brno.
- 54 The authors also created a glass wall with a decorative grille in the restaurant of the civic-amenity building. Regional Art Committee for Cooperation Between Artists and Architects, Book 19, 4 January 1965 – 6 June 1966, entry No. 23/65, fund G 606 (unprocessed). Moravian Provincial Archive in Brno.
- 55 The approving committee concluded that “the final execution did not reach the expected level” and reduced the authors' fee. Regional Art Committee for Cooperation Between Artists and Architects, Book 20, 20 June 1966 – 5 September 1967, entry No. 15/66, fund G 606 (unprocessed). Moravian Provincial Archive in Brno.