Keywords: Malacky, building development, mass residential housing, socialism, housing estate

Abstract. The paper presents the view of the situation in a small town that started to develop dynamically in the second half of the 20th century. Until then, the town Malacky made a reservoir of labor for the near capital - Bratislava city. Social changes after the Second World War and the development of production technology had a deep impact on the city. This impact is visible up to these days. New times brought the development of industry and concentration of production, that led to new job opportunities. It attracted people of the surrounding area. This situation led to the housing crises. The way out of this situation was the construction of new urban structures and extensive housing estates of residential buildings, which inexorably replaced the original buildings. Part of the historic organism of the city was demolished and new buildings were formed directly in the city center. Rationalization and pragmatic solutions were dominating, they better met the demands and requirements of the society and material and technical production possibilities at that time. After several years there have been consequences of the situation which prioritize only selected aspects of housing. These residential complexes are the document of the way of society life in the second half of the 20th century, as well as the evidence of abilities of architects and urban planners who were created in the conditions of centrally planned construction.

Introduction

The city Malacky is located about 37 km north from the capital of Slovakia - Bratislava, on the major transport route Bratislava - Prague. Until the half of 20th century, it maintained the character of rural settlement with a predominant agricultural production. It was in the position of label reservoir of Bratislava. Malacky had 6,200 inhabitants in 1931. [1] Its industrial base at that time was formed by a production oriented priority to the processing of agricultural products from the surrounding area - distillery (Slovak Distillery Industry), artificial stone factory, factory of rattan goods, factory of sausage goods, factory for the production of technical fats (Olio), two brick factories, three mills, four saws and power station. [1]

Malacky Development and Consolidation of Its Position after World War II

After World War II, Malacky was becoming an important city, the population increased rapidly. New industry was established, there were created schools, hospital, social and cultural facilities, as well as devices for physical training and recreation. The foundation stone of pavilion hospital was put down in 1965, in 60’s there was established enterprise called Chemical Cleaning and Dyeing, and there were also established the largest enterprises in Malacky - Agrostroj (production of agricultural machinery), and the Bratislava branch of the company Kablo (production of electrical materials, power cables and wires). Consequently incurred further enterprises - machine factory, Slovlik (Slovak liqueurs) and the production company Kožatex (production and processing of leather and textiles). The construction of Western-Slovakia Furniture Factory began in the second half of the 70’s. People from Malacky have no longer to travel for a work, because they found it at home. At the same time Malacky began to provide jobs to people from far and wide. It was a reason for new influx of people to the city resulting in sharply increased demand for apartments.

The city did not provide the sufficient amount of housing units for newcomers workforce. This situation initially led to the housing crisis. The political leadership of the state was aware of the
importance of housing issue. Therefore, the provision of housing has become a priority social and political task.

Table 1. It was envisaged the increase to 15,000 inhabitants up to 1980. [2]

<table>
<thead>
<tr>
<th>Year</th>
<th>1945</th>
<th>1960</th>
<th>1975</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
<td>8320</td>
<td>9650</td>
<td>13918</td>
</tr>
<tr>
<td>Apartments</td>
<td>1873</td>
<td>2454</td>
<td>4043</td>
</tr>
<tr>
<td>Residents per 1 apartment</td>
<td>4.44</td>
<td>3.93</td>
<td>3.44</td>
</tr>
</tbody>
</table>

**Mass Housing Construction and Its Application in Malacky**

Social changes after World War II, the dynamic development of industry and manufacturing technologies encouraged the expansion of the construction industry. It created also new possibilities for residential construction. Unification of residential buildings and prefabrication of construction elements allowed their implementation in less time. As a consequence, there were the transition from handmade constructions to structures under prefabricated technology construction from large panels. Building area was subjected to this aspect - ideal area was without major obstacles, areas of the city outskirts removed from the original rural structures. [3]

State housing policy followed up the experience of the interwar period with construction of rental apartment buildings all over Slovakia. Mainly small-sized apartments arose at that time, that already satisfied the requirements of sanitary facilities available for disadvantaged populations. Houses complied new hygiene requirements for illumination of apartments, ventilation and they were equipped with central heating, electricity and hot water. The bulk of the population did not have such living conditions until that time. Later, when the material base of construction was stabilized, it was passed to the system of prefabricated panel construction. Large-scale production of building components rose to the uniformed, at first glance identical residential houses. Although prices of prefabricated houses were higher in compare with brick houses, decisive advantage was the speed of construction - dwellings arose rapidly, thus filled the state strategy to ensure housing for all residents. Prefabricated construction technology of houses allow to increase the number of floors, which brought a new phenomenon to the image of the seat in the country.

Mass estate housing brought efficiency and pragmatic solutions to urban structure. The primary indicator will become high-speed construction and reduce the costs of housing unit.

Territorial development of Malacky was guide by the new urban plans for the development of urban structures and projects of new residential estates. State planning organization called Stavoprojekt drew up a program of centered housing construction in September 1971. Concept was to build a multi-storey apartment buildings that would fulfilled the needs of a growing population. There were developed detailed urban plans for the housing estate Malacky - Houses (636 housing units), Malacky - South (452 housing units), Malacky - Center and completing housing estate on the Street May 1st (520 housing units). Finally 1328 dwelling units were provided to use in the 70’s (458 cooperative apartments, 394 corporate apartments, 286 communal apartments and 190 units in family houses. Designed social amenities had to complement the residential function of these estates.

Urban layout of the residential buildings moved from the street character (housing estate on the Street May 1st) to open yet unusual system of houses that had lack of compactness, previously typical for urban organism. Efforts to realize the ideals of healthy living in the vegetation with the segregation of residential and production function, resulted in urban structures with free line buildings of isolated dwelling houses. Among them there was created home environment - areas with recreational vegetation.

Malacky experienced its most intensive development in the first half of the 70’s. The effort was to improve housing conditions in the city. Demands on public space has increased. There were built dust-free roads and pavements on one side of streets on main roads, street lighting, playgrounds, they planted the vegetation that complemented public spaces. New bus stops, parking areas, asphalt
pedestrian moves and upgraded roads served to people. There were built kilometers of tap, sewer and road network, gasification of the city was completed. Motorway feeder road was brought directly to the city center.

Multi-storey buildings of housing estates became the new dominant of the city and they considerably changed its appearance. The replacement of the original ground floor houses by large housing estates has become inevitable consequence of residential intensification. New construction emerged not only at the edges of the settlement, but entered directly into the city center and it influenced his identity. Old structure of the city disappeared due to reconstruction of the original, unsatisfactory buildings and new complex form was formed in the city center in accordance with current views on urban organism and environmental hygiene.

Malacky was up to 90’s part of the district Bratislava - Countryside, in 1996 it became the administrative seat of the Malacky district.

**Housing Estates in Malacky**

Advent of Socialist Realism, the official artistic doctrine that determine character of architecture in Slovakia in the first half of the 50’s of the 20th century, stifled the application of the principles of the Athens Charter. Ground plan layout of the residential complexes of that time approached rather to historic building complexes. Although their functional subdivision, structure of services and the high proportion of green areas still corresponded with the current international views of residential areas. [3]

**Housing estate on the Street May 1st** was the only housing estate in Malacky established in the tendencies of Socialist Realism. It was completed in 1956. Low, three storey, even brick residential buildings with hipped roofs are surrounded by vegetation and offer amount of semi-public spaces. They are located close to the city center. Street May 1st was formed in the fields that belonged to the houses on the Žáhorácka Street. Residential buildings are arranged axially symmetrical around this street. The architectural design draws from expressive means of the previous periods. They have applied a certain effort of decoration, although in significantly reduced form. Risalits with
shield and cornices divide long facades of buildings, windows have chambranies and jambs of entry doors are framed and beveled.

Following residential construction was related to strengthen position the city Malacky as the important seat of the district, it means as the city with the perspective of population growth. Next housing estates in Malacky was formed from standardized panel-prefabricated houses.

Fig. 2 (left), Housing estate on the Street May 1st, around 1960.
Fig. 3 (right), Housing estate on the Street May 1st, in 2013.

Housing estate called Malacky - Houses. First phase of construction was completed in 1974. During the second half of the 70’s the construction was finished, and also its attributable public amenities - kindergarten, nursery, shop and also surrounding landscaping and garden arrangements. Hviezdoslavova Street delimits housing estate called Malacky - Houses from the north, Ján Hollý Street from the west and Mierové Square and General Štefánik Street from the east. During the construction of housing estate Malacky - Houses it was envisaged with the sanitation of 100 existing family houses, and 66 dwelling units has to be maintained as cooperative apartments. Housing estate originated from the four-storey sectional panel-prefabricated houses. Free line grouped buildings create a number of semi-public spaces with main road routes around the perimeter of the housing estate and vegetation inside the structure.

Housing estate called Malacky - South is located between Štúrova Street and Stupavská Street, at considerable distance from the city center. During the period from 1976 to 1983 there were completed 472 apartments, kindergarten, nursery and shop. Eight-storey sectional panel-prefabricated houses with larger distances from each other create a free urban structure. Pressure on finishing flats was more intensive since the 70’s, there were efforts to greater reduction of construction costs, therefore there were not realized original plans and projects comprehensively. Implementation was restricted only to apartment buildings and road routes, others has to be completing later, which was not. This housing estate has a lack of emphasis on the environment, vegetation, recreation areas, playgrounds, public and semi-public spaces.

Fig. 4 (left), Nursery school and housing estate Malacky - South in the 70’s.
Fig. 5 (right), Nursery school and housing estate Malacky - South in 2008.
Housing estate called Malacky - Center was established along Záhorácka Street in the city center. They began with its construction subsequently after completion of housing estates Malacky-Houses and Malacky - South. Malacky - Center should solve still non-decreasing demand for apartments. In urban structure it should connect and Malacky - Houses. It should create a significant dominant location corresponding to the central part of the city. Housing estate on the Street May 1st defined it from the north, Břeclavská Road and Youth Road from the west and Hviezdoslavova Street from the south. It was necessary to respect the existing individual building plots there, with retention of plots according to the current rules from 600 to 800 square meters. [4] In the east the area was defined by the Red Army Square (now Monastic Square). Existing commercial facilities were in substandard buildings, therefore it was proposed to demolished and reconstruction of the total area made the new structure with adequate amenities.

The new housing estate was built in accordance with the master urban plan. Only a single object from the original buildings had to be maintained and protected - a cultural monument Roman Catholic church. The master urban plan specified requirements according that the western part of the residential structure should respect the church with its number of storeys and urban layout. However, new construction did not deal with the urban relationship to this object, which acts in the final solution as a solitaire isolated in vegetation.

In concerned territory there was originally 89 houses, in which 139 families lived, about 550 people in total. Existing building stock in this area was specified as seedy. 63 houses were identified to be demolished, 21 houses to endowment and only 5 houses as being in good condition. The vast majority of houses (94.6 %) was seedy according to documents. For their inhabitants there were defined replacement dwellings in the estate Malacky - Houses, which have already been finalized at that time. During the construction of the housing estate Malacky - Center there were finally demolished 133 residential buildings and 25 buildings of state organization. [4] The new structure of the city did not respect the natural historical development of settlements, disappeared continuous row of family houses, structure that have been built up over the centuries.

Buildings with a maximum of six storeys and a height of 30 meters above ground level were initially designed in this territory. However, the required minimum density of 300 inhabitants per 1 ha of area forced to change the original construction program and build on this territory eight-storey section buildings in combination with twelve-storey tower buildings. 800 new housing units were created in this housing estate. [4] Following this settlement there was planned new center of citywide amenities towards to east. It responded to the central part of the seat of district importance and complied the increasing demands of society of that time. It was considered with the construction of a department store, office building, public toilets, food shop, hotel, state bank building and state savings-bank building, cultural house, cinema and commercial stores. This concept was finally not realized to the full extent.

High vegetation was planted along Záhorácka Street. It had to satisfy the insulating function and to serve the citizens for local recreation. Its composition had to complete a new residential estates and it contributed to a healthier environment. Sports facilities and playgrounds were inside the new structure. Planted low and high vegetation had even there mostly insulating character, there were also created areas of decorative flowers.

Stream Malina flowed through the territory of housing estate Malacky - Center. As part of estate construction, the stream profile was covered up to the Brnenská Road, under which a new outlet was created. Malacky originated during the Middle Ages as a stream village with a watercourse as a central compositional axis. Stream Malina divided the open space on two parallel paths forming a relatively wide semitrailer. Along these paths there were vertically sorted farmhouses, situated on narrow plots, defining individual farmyards. [5] Construction of profile that covers stream Malina also largely contributed to a change in city identity.
Fig. 6 (left), Construction of housing estate Malacky - Houses.
Fig. 7 (right), Housing estate Malacky - Center.

Fig. 8 (left), Housing estate on the Street May 1st.
Fig. 9 (right), Housing estate Malacky - Center.

Fig. 10 (left), Housing estate Malacky - Houses.
Fig. 11 (right), Housing estate Malacky - South.

**Housing estate called Malacky - Center II.** Urban area project Center II was created in 1979 and should provide 733 new residential units. In urban structure it was designed in response to the
housing estate Malacky - Center as its second phase. Designed houses were located to the north from the Roman Catholic Church, between the Záhorácka Street and Brnenská Street. Also in this area were existing houses proposed for demolition, only mill and mill race had to be maintained. Housing estates Center and Center II should create a single residential complex. There were designed sections houses with the orientation of the longitudinal axes to north - south. Millrace of the stream Malina should have on pedestrian path a part of the open watercourse. High-rise gradation has been applied in the project concept. It led from the tower of the church gradually to eight-storey to and twelve-storey residential houses. But the realization of the estate Malacky - Center II never happened and finally original family houses remained on this territory.

The Current view of Socialist Residential Construction

The end of mass residential housing in Slovakia is usually dated to 1989, when it was dismantled the socialist social system and the death of those entities that oversaw the construction of mass housing. [3]

Problems of housing estates, as we perceive them today, are mainly associated with the properties and durability of the used materials and with poor implementation work that was due to the speed of construction. With increasing time from their construction it leads to the degradation of their technical status. Revitalizing interventions in terms of reducing the energy consumption of buildings can provide them further satisfying life.

Another downside is the traffic situation, which nowadays with the huge increase of vehicles per dwelling unit, brought the lack of parking spaces and poor transport connections. Monotony of residential buildings and the lack of architectural means of expression also collects criticism. There was not created sufficient space for regional specificities, so cities became more uniform and they have gradually lost its distinctive character, that they kept for many centuries. One of the biggest impacts on the urban city identity is destruction of compact urban structure and the end of traditional street, cityscape suffered considerably.

Despite all mentioned negatives, housing estates form the basis of the city residential stock. Panel houses create the background of a large group of population and fulfill their economic demands. Today the reconstruction of prefabricated houses is gradually realized and it is revitalizing their surroundings. Residential complexes creating indispensable component of the environment in which we live, and they are an important evidence of way life of the second half of the 20th century, as well as evidence of creative skills of architects and urban planners in terms of centrally planned construction.

References


