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- ² The first draft contains four volumes: Land use, Networks, Regimes of management, Spatial planning units. The cartographic material contains 16 thematic maps. Each map contains one main map (scale 1:12500) and three sub-maps (scale 1:30000), supplementing the main map. The first draft thus contains 64 maps, that enable comprehensive overview.

List of main maps (sub-maps are in brackets):

1. Regional town (functions of regional importance, networks);
2. Land use (new residential areas, new areas for central activities, institutions, education and health care, new areas for production activities);
3. Central areas (distribution of commercial and non-commercial activities, new central areas and mixed use areas, distribution of public open spaces and hierarchy of central activities and semi-public spaces);
4. Areas for production activities (Suitability (flexibility) of production areas, areas of restructuring, vision of development of production areas);
5. Residential areas (new residential areas, clean and mixed residential areas, settlement density);
6. The green system (design elements of the green system, parks and sports surfaces, generators of the green system);
7. Traffic network (traffic network (intercity and local) functioning as access routes between Maribor and its suburbs, parking and areas of traffic calming, cycling paths);
8. Water supply - development of the waterworks system (protection belts, areas of high and low pressure in the network, Drava, rivers and flood planes);
9. Sewage and processing refuse water (proposed collectors, primary collectors, protection belts);
- 10.1 Energy - development of the natural gas and hot water network (situation of the long distance heating system TOM, situation of the natural gas network with buildings using natural gas for heating, situation of buildings heated from boilers according to heating fuel);
- 10.2 Energy - proposal for energy supply in the town - long distance and individual heating (development of the TOM network, development of the natural gas network, areas of extension of long distance heating);
11. Electrical energy network (The electricity network, areas fed by particular transformer stations, including the electrical system of Maribor into the national electricity supply system);
12. Communication network (tc-network and tc-corridors, post offices, radius of acceptable accessibility and limits of postal areas, radio and TV network);
13. Town form (structural model, design elements of the natural system, dimensions);
14. Regimes of management and phases (concept of global distribution of spatial planning units, prevailing land use in spatial planning units, areas of complex development and renewal);

15. Building sites (size and relations for different types of land, land use on undeveloped building sites and land for public economic infrastructure);
16. Spatial planning units (Rotovž, Melje, Košaki, Drava, Tabor, Studenci, Radvanje, Tezno, Pobrežje, Brezje).

Illustrations:

Figure 1: Abstract image of the four towns

Figure 2: Four town parts - quality of urban space drops counter clockwise

Figure 3: The town as a fractal - work and trading in the East, Government and residences in the West - transfer from the left to the right bank

Figure 4: The traffic network - the inadequate network of existing primary town roads (black), will be complemented by new ones (grey), so that they connect all four town parts in both directions. The railway terminal, highway and aero- port (intermodal node) are in the South, the highway in the East, river traffic will be established on the river Drava.

Figure 5: Central activities will develop along the main access roads and near the town entrances. Transfer of central activities to the right bank, centralises the contact zone on the right bank connecting all four town parts into one.

Figure 6: New residential zones will be established on cleared and renewal areas, thus restructuring central areas, presently occupied by production and warehousing activities and by complementing existing residential areas, thus forming a major part of the built edges in all the town parts

Figure 7: Production activities are moving from the town centre, only a small part of the Melje industrial zone will be maintained, to the South and West edges. Each of the four town parts will gain a manufacturing zone, along the highway services and warehousing activities are proposed

Figure 8: Green areas - the four town parts in the green vessel, its edge defined by the green ring, green wedges (fingers) connect the town centre with the green belt and hinterland

Figure 9: Division of the East part of Maribor

Jasna KRALJ PAVLOVEC

Edo Mihevc - Urban planner, architect and designer

Evaluation of postwar urbanism of the Slovenian coast

„The decisions guiding the professional path of Mihevc were always complexly balanced and directed into a long-term perspective. He was guided by understanding the needs of social development. The search for technological innovations and humanistic ethics was reflected in his implementations of all kinds through a convincing personal artistic note. As a result of the author's consistency and his irreproach

able principles, his enthusiastic activity echoed throughout the former Yugoslavia, contributing to raised values within the entire territory of the country" (Brezar, V., 1985).

1. Introduction

Edo Mihevc (1911-1985) was one of the protagonists of Slovene modern architecture after World War II. The time distance of more than a decade after his death and almost a generation after the most productive period of his activity enables an unbiased view on one hand and raises a series of questions, dilemmas and assumptions on the other.

One such question would undoubtedly be why Mihevc wrote so little or almost nothing about his work and about his perspectives of the architecture, although he was relatively talkative when lecturing to students and even more in an intense and suggestive professional discourse within the narrow circle of his colleagues and students. Since he always used to carry a pencil and emphasized each word with a line, a sketch or a drawing on the legendary sketch paper, one of the possible explanations would simply be that drawing was his language and that this is heritage he brought from the Plečnik school. He disliked the public media and avoided them. Reporters and colleagues wrote about him - polemically and otherwise - however, he „never gave a statement". Why? Maybe he underestimated the importance of the public media, maybe he thought his work spoke itself. In principle, a creative process in architecture (and otherwise) is an intimate matter of intuition and gesture; when you talk about it you have already desecrated and interpreted it. An interpretation, however, is never more than an approximation to the original truth. If something like this eventually happens, it is a rare exception and reading it leaves an uncomfortable feeling that the revealed truth is banal, regardless of the author's efforts to mystify it with a hermetic vocabulary.

Another interpretation is also possible: his partisan political episode was a huge burden for him: - every statement he would have given in the 1950's and 1960's would bear an additional weight and connotation in a sense that he spoke from the position of power (although informal).

Mihevc belongs among those Plečnik's students that separated from his manner and believed in the new world of Modernism which was at that time already overwhelming Europe and the World. After-the-war euphoria of »reconstruction and industrialisation of the homeland" was an ideal opportunity and an alibi for modern ideas to be implemented in a reality.

The teacher's influence was of course too strong: some of his former students have »killed the father" only on the declarative level, some of them only formally, some got lost, while only a few have developed into independent personalities. If the discourse at this point is narrowed down to the two most frequently mentioned: Mihevc and Ravnikar, it has to be stressed that I avoid their direct comparison in spite of the tempting fact that the easiest way of enlightening things is with the use of contrasts or antipodes. Considering various interpretations - known to the professional public - of the role and the importance of Ravnikar as a continuator of Plečnik's tradition, the only appropriate assumption (without unnecessary ambitions) would be that Mihevc remained

faithful to Plečnik's tradition in terms of detail, implementation, professional attitude towards all matters and people. This, however, does not diminish his devotion to Modernism in any aspect (i.e. in terms of formal language, functionalism, the use of reinforced concrete frame, innovative construction solutions in industry, etc).

At the same time, his Modernism in all areas is subject to the genesis into something else: internationalism in urban design and planning was replaced with the search for a regional identity; new, more humane forms (multi-apartment villa, tower apartment buildings, terraced housing, town houses, etc) were searched in housing construction instead of modern types; in the area of the reshaping of urban structures he detached himself from the residential district doctrine and used traditional methods of urban design (squares, piazzettes, streets, vertical elements - campaniles, displacements); in tourist architecture, although intended for mass tourism, he tried to emphasize an individual character and new forms; public building interiors (halls, restaurants) were given virtually a sacral character.

Apart from being a child of his time (according to the old good milieu theory), Mihevc also influenced it - of course, I refer to the first three decades of the Slovene post-war architecture. Born in Trieste and educated in Ljubljana, he lived his life between the two cities. In his architecture he remained faithful to the Mediterranean feeling for the ambient environment on the level of the exterior and to the Central European civic tradition of the ambient culture in designing the interior architecture.

2. The areas of Edo Mihevc's activity

His architecture has always been a reflection of demanding tasks the profession was assigned by the society, and at the same time an echo of modern European and Worldwide search in the area of architecture.

In industrial buildings - i.e. the complex of the Litostroji factory - he was faced with problems that have been unknown to Slovene architecture until that time: large spans, extraordinary technological requirements and quick construction. The use of reinforced concrete was an entirely constructive task he managed to translate to the level of architectural design of large prefabricated elements in a way that they - apart from their supporting function - also contribute to the expressiveness of the entirety, i.e. they speak in the language of Modernism with geometry, concrete and functional simplicity. This language was unknown to the Plečnik's school, however his students managed to learn it by themselves.

For Mihevc, the functionalism that together with the views of the Modernist avantgarde of that time (i.e. Le Corbusier, Gropius, Mies van der Rohe and others) represented also the basis of the new post-war Ljubljana school of architecture, was primarily the opportunity to give sense to the new and the different, therefore to reduce the distance in relation to the old and the traditional.

Tourist architecture is a special area in which some of his most mature creations were perhaps reached. Apart from a series of hotels designed in Ohrid, Ljubljana and along the Slovene coast between Ankarana and Portorož, unconven-

tional forms of tourist architecture (tower apartment buildings, multi-apartment vilas, bungalows, etc) and tourist infrastructure buildings gave him the opportunity to express his attitude towards the sensitive coastal region, its message and its climate imperatives and, at the same time, to introduce the most modern principles of tourism industry into this area.

Tourist settlements, i.e. apartment houses in Ankaran and Lucija, were a kind of innovation called „settel“ - a settlement + hotel in greenery. This was a form of tourist building/settlement representing a cluster of buildings instead of a hotel block, designed in a manner of a compact village in the best sense of the Istrian tradition, offering a guest also an adequate human-friendly ambient, a high degree of intimacy and the connection with nature.

The Slovene coast is also dotted with another type of buildings: restaurant complexes on all important tourist and transport crossroads (Žusterna, Belvedere, Lucija, etc). Restaurants have a special place in Mihevc's work because he unleashed all of his creative energy while designing them: he designed unusual constructions, searched for new volume shapes, used new materials and the old ones in new ways. In a noble synthesis of concrete, stone and Mediterranean tiles, the architecture of these restaurants is given an almost sacral place. A pillar has a special role in it, be it only a simple support of a pergola or a central bearing wall of the building. Wall decoration is not only an application but an actual structure of the materials used in a unique way. And above all - the Istrian white stone, connecting elements into an entirety as a hypotenuse, is always used in an architectural way and is always the closest to a person that touches it.

Public buildings, such as business buildings, theatres and cultural centres, are placed in larger city centers. Business buildings, built in the Ljubljana city center, are today a typical counterpart of the city center outlook. From the Impex corner building which remains classical in total subordination to the street area and the use of stone for wall sheeting, to the Metalka and the Avtotehna buildings which give Ljubljana a new City character with a new scale and design, the path was marked along which the country's construction engineering capabilities and capacities were developed. In spite of being seemingly simple, the frame of the Metalka building nevertheless required an extremely high quality of concrete for that time, while the pre-fabricated aluminium suspended facade was a challenge for the domestic aluminium industry rather than striving for an innovation at all costs, since the structure of the front facade successfully incorporates into the environment of the post-earthquake and Secessionism Ljubljana despite its modern technology.

The most important public buildings include both Slovene cultural centres in Italy. The exterior of the first one, built in Trieste in 1964, is characterized by modern geometry and classic proportions, while its interior is a real feast of the Slovene spirit, a bounty of the variety of spaces and their characters, functional in the best sense of rational functionalism, furnished in a cooperation of numerous subcontractors from Slovenia and decorated with artistic works of the entire cultural circle of Slovenes living abroad. The Cultural Centre in Gorica was built in 1976 on an extremely unfavourable location and with limited funds, however its language is much richer than the materials used in construction.

Apart from tourist buildings, residential buildings are the most quantitative area where the first applications of certain housing types in Slovenia are recorded:

- An urban residential district - Belvedere in Koper represents the first town district in Slovenia with a gradation of housing types from a multi-apartment house to a high rise apartment building with a skillfully designed exterior and the inclusion of Istrian identity in designing urban attributes;
- A city housing block - the Kozolec in Ljubljana is one of the most characteristic multi-apartment buildings. The model of the Corbusier's Unite d'Habitation block that has been copied worldwide is here nevertheless used in a disciplined way, taking into consideration the existing urban fabric as well as the construction line and orientation, avoiding the principle of „a box in greenery“¹¹. In its scale, programme and materials, this is a genuine urban element with a main-street function in a ground floor and the housing part in higher floors, protected with belts of balcony horizontals; the frame construction, remaining an exception in housing construction in Slovenia until today, enables free layout design and the adaptation of the building in accordance with changing demands.
- A multi-apartment villa (Lucija) and a town house (Piran) are a combination of a multi-apartment building and a villa or a detached house in terms of the content and the design.

In principle, Mihevc was not involved in mass housing construction manifested in large residential districts. An exception is his early period when modern Koper was in the phase of construction and the idea of the residential district was still a novelty. Such an example is the Smedela residential district in Koper, offering much better living conditions than other residential districts in Slovenia of that period. The planned size of the Smedela residential district later got out of control - it expanded considerably and reached the boundary of the Izola municipality.

Among numerous detached houses, the Metuljček (Butterfly) house in Ježica, Ljubljana should be mentioned. It was built according to modern principles which was more an exception than a rule at that time. An extremely thoughtful design of the ground plan organism and a functional system, the connection of individual spaces separately with the equally designed exterior, the inclusion of greenery into the comprehensively designed environment - all this reflects the humane housing culture to which the functionalism doctrine and an unconventional design of the building mass represent means rather than a goal.

The difference between the architecture in larger urban centres and the architecture of the coastal region lies in its expressiveness. On one hand, the architecture is monumental, urban, without author's intentions to leave a personal mark, yet it is designed in accordance with human needs and takes into account the urban fabric in line with urban design guidelines of Modernism; on the other hand, the architecture of the coastal region managed to preserve and reintroduce a typical littoral character, which was achieved by following the principles of the modern architecture development. Numerous forms also reflecting the environmental variety and scale differences include modest atrium terraced housing in Šalara near Koper, a type of detached houses which served as a model for the further massive housing construction in this environment; and furthermore, terraced housing, housing blocks, high rise apartment buildings and above all

tower apartment buildings and multi-apartment villas. The latter housing type was developed as the most rational form of housing development adapted to small coastal towns and the local way of life. Mihevc dedicated special attention to details (the design of fences, lamp-posts, chimneys, pillars, stone fences, etc) which he as well as his teacher Plečnik considered distinctive expressive power and a relationship in the understanding of classical architecture. With a strong personal note, the details reflect the colourfulness and the character of the Slovene landscape and its people.

As a **designer**, Mihevc was active in three different areas. In a series of permanent and temporary exhibition pavilions throughout the world (Vienna, Paris, Bari, Trieste, London, Milan, New York, Copenhagen, etc) he primarily expressed his perspectives on the artistic problems related to this area that was usually under a severe pressure caused by the lack of time, prices and technical and innovation demands. The second area is a complete antipode to the first one: designing of memorials where the cooperation of an architect, a sculptor, a painter and a poet is presented in a framework of free expression in the first, as well as the second area. In his spatial concept, an architect detached himself entirely from the detailed artistic idea; he conditions the size and place of the sculpture. Besides, monuments were designed in the period of socialist realism where realism and monumental sculpture were intertwined with a new concept, however Mihevc's monuments are an antipode of this period - they are abstract and traditional in terms of design and materials; they are also commonly designed in line with regional identity. His installation of a statue of a member of an underground movement in Ljubljana seems so natural that it serves as an example never surpassed in Ljubljana. The heroes' tumb is also exactly what it should be: a quiet, sacral place, a peaceful island in the middle of vibrant life in the city center. He achieved this with modest, however monumental means: a stone shaped as a sarcophagus, an axis, trees, ...

The third area is a series of interior architecture, characterized by original, intensive approaches, introducing a series of new materials and processes (photo wall papers, intarsias, woodcuts, mosaic, etc) where he designs everything from chairs and lamps to the last screw and inscription. Especially worth mentioning are the interior of the Palace hotel in Ohrid, night clubs in Ljubljana (Sion Bar) and along the Slovene coast (Tri papige), the Cultural Centre in Trieste and the interior equipment of his tourist facilities.

As a **town planner** Mihevc was active in the Slovene coastal region and Istria. One of his first design plans for individual settlements, designed as part of a wider framework of concrete projects, is the Regional Development Plan of the Slovene coast and Istria, the first of this kind in Slovenia. Apart from the plan's role, Mihevc's long-lasting urban planning discipline is also very important since he managed to interpret it to social factors as their own goal. Indeed, the landscape appearance of the Slovene coast is a result of this simple discipline which includes certain principles of the structuring of building masses, the use of local materials, the uniform use of Mediterranean tiles for roof covering, the consistent use of shutters for sun protection and the intensive introduction of greenery in exterior design. His development predictions according to which Koper would become the only Slovene port and the Slovene coast would develop as an integral tourism region proved to be correct.

His plans for the predominantly tourist use of the coast turned out to be realistic. However, instead of treating the coastal area as a longitudinal phenomenon along the coastline, he treated it transversally towards the inland with a hierarchical distribution of functions and spaces, with international transport directed through the hinterland area and green areas between the centres.

The educational work of Mihevc was typical of a creator who grows from his rich intuition and is able to take each task as a unique, new challenge. Educated by his master Plečnik, he always pointed out that the language of an architect is primarily his drawing, followed by words only later, let them be spoken or written. He also tried to implant his attitude towards materials and masters that work them into his students' minds. A model or a maquette was always an essential counterpart of his creative process, therefore he always organised cooperation between students and a model workshop during his seminars as a permanent part of activities.

However, the most valuable contribution was his consistent connection of the educational work with a concrete creative practice which took place in a series of summer schools when the most active core of his seminar moved to the field, to the construction site itself, during summer vacation.

Among his students - more than four hundred altogether - there are now ten university professors, six doctors of science and three masters of science.

His social activity was tightly connected with his work. Apart from numerous functions he performed within the Faculty of Architecture and the University of Ljubljana, he was also engaged as a consultant for various areas of architecture and town planning in Slovenia as well as abroad (Greece, Ethiopia). His work related to both Slovene cultural centres in Italy also had a special political role since working on such a joint building project, engaging numerous people and groups from abroad as well as from Slovenia, represented a distinctive integration phenomenon.

3. Town planning

Due to the intensive construction of residential districts, industrial areas and megalomaniac traffic connections within and between the settlements, the contours of town centers started to disappear in the course of Modernism. At the same time, the integration of a town center gradually took place - the decomposition of a traditional town perimeter as a (until that time) controllable town boundary that could be viewed from the highest point in the town. This period was marked by a rapid growth of towns which were turning into large cities, metropolis and even conurbations. Ideal regional concepts appeared that were not based so much on the design - instead, they stressed social component of residence, work, rest and recreation (Košir, F., 1993). It is known that avantgardistic architects and town planners in distinctively anti-communist countries were also socialists by their view of life. Far from designing only garden cities for rich classes, they were mostly enthusiastic about designing settlements and districts for the working class.

Urban functionalism with new theoretical orientations on one hand and traditionalism with historically proven spatial solutions on the other prevailed until the end of World War II.

Mihevc established a dialogue between both theoretical orientations in such a way that he established:

- New values and qualities in areas with tourist settlements;
- Protection of green areas;
- New industrial and residential areas;
- Harmonization of traditional spatial values with new development perspectives.

All urban plans designed by Mihevc, from regional plans to micro urban plans, are derived from natural conditions in the treated area and a thorough knowledge of this area. A complete knowledge was based on extensive analyses (Investbiro Koper, 1966) covering: the situation, topography and natural conditions, protected areas, agricultural land and forests, terrestrial and marine communication infrastructure, production and industry, population structure and density, limiting and development factors related to town functioning and suggestions regarding the possibilities of town growth and the development of new/planned activities by sectors. Therefore, an area with all its characteristics was taken into consideration, its absolute and relative identity (Kalčič, I., 1992), as well as living habits of the local population. And, as Geddes (Geddes, P., 1915) said and Mihevc put into the reality, the process of town or landscape planning was possible exclusively on the basis of extensive analyses which were a base of knowledge about an area. When characteristics of an area and its identity were recognized and taken into consideration, the planning and designing of this area changed into a constructive link between the past and the future.

As aforementioned, Mihevc was - as a town planner - active mainly in the Slovene coastal region and in Istria in Croatia. Apart from the coastal region he also planned Ljubljana town quarters (Figovec, Metalka - the Metalka mall, Na trgu - Kozolec, sindikati - Holiday Inn), the Dolenjska region, especially Šmarješke toplice and Dolenjske toplice thermal resorts, Novo mesto and the surroundings of the Krka factory complex; and Črni vrh nad Idrijo skiing center.

After World War II the Slovene coast was politically divided into two zones which started to develop economically and politically within corresponding states only in 1954 when Trieste was incorporated in Italy and Koper in the former Yugoslavia. A strong influx of workers and educated people from all over Slovenia, especially the Štajerska region, and other parts of the former Yugoslavia accelerated the process of urbanization in all coastal towns with tourism as a long-term development orientation. Due to its position and the vicinity of the state border, Koper was planned to take a central role in the Coastal region, connecting the coast with the hinterland - through the development of a new modern port connected to road and railway networks. A fishing-industrial and tourism functions were designated to Izola, while Piran was planned as a tourism-oriented pearl of mediaeval architecture.

The need for planned development of the Slovene coast required the elaboration of a common regional plan for the entire region. Until 1958 only several sequence solutions have been proposed, such as the **Ankaran coast design plan** by Viljam Strmecki and the **Piran peninsula regional plan** by Edo Ravnikar and Savin Sever (Arhitekt, 1965). The first one is an attempt to establish a relationship between agriculture and tourism. The second one reflects the need for establishing an equal relationship between tourism and natural environment.

In 1959 Mihevc was offered to elaborate the draft regional plan of the Slovene coast between Debeli Rtič and Sečovlje by Primorski biro and later by Investbiro Koper, searching for a town planner that would be prepared to take over the design outlay of the entire coastal area.

4. Examples of urban plans of the Slovene coast by Edo Mihevc

Five urban plans are presented in this paper, from the Slovene Coast Regional Plan to individual urban plans of towns and tourist centers in the Slovene coastal region.

Each plan is presented in four points:

- Graphical presentation - plan;
- Planned (studies, suggestions, outline schemes and plans by Mihevc);
- Implemented (what has been actually or partially implemented);
- Changes (false presumptions, development changes).

The examples of urban plans of the Slovene coast presented in a chronological order present genesis of the Slovene post-war urban planning in the coastal region. With their regional identity, humanistic philosophy of design, visionary planning and spatial art, these plans confirm the quality of planning in terms of time and space as well as the identity of the landscape and the country as a whole. The selected plans include:

- The Slovene coast regional plan (1959-1963) and a vision of the traffic solution for the Slovene coast;
- The Koper urban plan (1961);
- The Simonov zaliv (St Simon's Bay) urban plan (1968);
- The Izola urban plan (1971);
- The Piran-Bernardin-Portorož urban plan (1973);
- The urban plan of the water complex of the Portorož marina in Lucija (1960-1985)

4.1 The Slovene coast regional plan (1959-1963)

With the help of students Mihevc elaborated the first draft regional plan that was confirmed the same year. Based on this, study plans were made for Ankaran and Strunjan in 1960, a regional plan of the Piran municipality and Lucija in 1961 and an urban plan of Koper and Izola in 1963. Findings and solutions of these plans were incorporated into the updated Slovene coast regional plan in 1963.

Rapid development of the economy, especially the tourism sector, required the combination of several working stages, therefore the regional plan assumed the character of a development plan. The regional plan from 1963 treats the entire coastal area as an uninterrupted, integrally designed belt where the catering-tourism function of the coastal area was designed in detail. Primarily, the Slovene coast regional plan defines the new traffic solution, land use and an outline of land organization.

Based on the Slovene coast regional plan, variant urban plans for Koper, Izola, Piran, Ankaran, Žusterna, Simonov zaliv (the Roman Haliaetum), Belvedere, Strunjan, Fiesa, Portorož, Bernardin and Lucija were elaborated under the leadership of Edo Mihevc in the period 1960-1973. These urban plans served as the basis for design plans of individual

areas: the Tacco square in Koper, the tourist complex in Ankaran, the Semedela residential district, the vacation resort of disabled war veterans in Strunjan, a garden settlement in Portorož, Belveder in Koper, a tourist garden settlement in Lucija, the residential settlement Fižine, terraced houses in Piran, the residential and tourist settlement Žuster- na, small houses Šalara in Koper, the Olmo residential district in Koper, the marina in Portorož, hotels in Portorož, etc.

The regional plan also envisaged the establishment and development of towns that would develop into tourist centers, i.e. Ankaran, Simonov zaliv, Strunjan, Lucija, Portorož and Fiesa. Apart from the existing and planned towns and tourist settlements with concentrated development and green areas in the forefront, the plan envisaged agricultural and winegrowing areas and landscape parks between the two roads (Haliaetum near Izola, Seča, Sečovlje salt pans, etc).

4.2 The vision of the traffic solution on the Slovene coast

The vision of the global road network on the Slovene coast defined a system and categorisation of roads with connections to the existing road system in Italy and to the planned road system in Istria. The Slovene coast regional plan from 1963 and the regional plan of the Slovene coast and the northwestern Istria from 1965 define a coastal road or a panoramic major road and a parallel - designed for the first time at that time - the Škofije - Dragonja **motorway** and its connection to the Adriatic major road.

It was correctly estimated that the road network in the area of Koper, Izola and Piran would be overburdened, therefore a reconstruction and modernization of the road Črni Kal - Koper - Izola - Piran - the bridge across the Dragonja river with branches towards Škofije, Ankaran, Lazaret, Portorož and Lucija-Piran was planned. The coastal road was planned to be reconstructed as a four-lane road on the existing course with an exception near Izola where it would be moved to the outer margin of the natural amphitheatre under the hill. Intersections in the shape of a „semi-cloverleaf“ with connections to town access roads (Koper with two access roads and Izola, Strunjan, Portorož and Sečovlje with one access road each) were also planned.

The course of the new motorway was planned to be moved inland from the coastal belt, to provide the fastest connection of the Slovene littoral area with the western part of Istria and the Adriatic major road. The traffic solution (the urgency of which is still being largely discussed 35 years after the idea was published for the first time) was supposed to take the burden off the existing coastal panoramic road. The connection of the motorway with border crossings to Italy, Croatia and further to Pula and the redesigned coastal road are important features of the regional plan of the Slovene coast and the northwestern Istria (1965).

Apart from the road network, the construction of complementary facilities was planned, i.e. new bus stations in Koper and Izola, as well as a series of service stations and workshops.

To make life in the urbanized environment well organised, Mihevc planned municipal facilities (energy and water distribution systems, sewage system) that are a necessary com-

ponent of modern towns. It should be stressed here that prior to 1960 coastal towns Koper, Izola and Piran had primitive sewage systems with surface runoff and a direct discharge into the sea. Therefore all the three towns had to undertake a gradual reconstruction of the entire sewage system and waste water treatment plants.

4.3 The Koper urban plan (1961)

According to the regional plan and economic predictions and on the basis of the long-term political strategy, Koper was planned to become the Slovene coastal metropolis - an alternative competing with Trieste - with possibilities for the development of industry, port activities and railway transport.

Mihevc and his colleagues were faced with an important issue of urban and architectural renewal of the old Koper which preserved a visual structure of historical urban design and fabric with numerous cultural monuments, squares and streets. Draining the wetland area and solving the problem of sewage system and water and energy distribution networks were not an easy task as well.

Regarding the planned development of Koper, the coastal region and the state, urban planners had three alternatives which - from the viewpoint of today's knowledge and a scientific methodological approach to the evaluation - could be called simple. Two extreme solutions were offered and an intermediate vaguely defined alternative:

- The old Koper remains unchanged and is entirely preserved (fundamentalist conservatorship), new Koper is detached from the old city core with a clear gap;
- The old Koper is destroyed and a new town of Koper is built on the same location;
- The third option of the renewal ment primarily the evaluation of the building fund of the old Koper with the definition of evaluation criteria set at the level of static judgement. Typical well preserved urban features would be preserved as well as architectural monuments. The new Koper would be incorporated into the existing filigrane urban structure in terms of content and shape (partial renewal).

In accordance with new political and economic conditions that determined the function of the future town of Koper, the last alternative was adopted.

Only exceptionally important architectural and urban monuments, squares, streets and artistical-aesthetic ambients and urban structures (especially the still visible cardo and decumanus) were to be preserved. All this was planned to serve as a basis for new buildings in the old Koper which should keep the function of the town center without motorized traffic, intended for pedestrians.

The new Koper was, apart from Semedela, an »empty sheet of paper“, limited by two streets - the outer redesigned four- lane road and the inner alley - a „neckless“ surrounding the old Koper - was planned as an airy, spatious organism with a lot of greenery connecting the railway station and the coast. This area would be divided by town access roads into individual quarters as follows:

- **The coastal part of the town** would become a wide coastal promenade, intended for sports activities and cov-

- ered with green areas. At the intersection of the circular road and the busiest access road, a city transport bus station was planned which is presently located in the inter-city bus station on the outskirts of the town. This area would be elevated to 2.20 m and would represent a protection belt for the new Koper lying in a depression.
- **The school and sports park** would be connected with a widened Badaševica riverbed and further with the sea. Water sports would become a counterpart of school activities not only at sea but as far inland as possible.
- **Four larger residential districts** were planned in a „cross-shaped layout“ with a gradation of various types of housing (high rise apartment buildings, housing blocks, tower apartment buildings, multi-apartment villas, town houses, detached houses, etc).

The commercial port with an aquatorium, wavebreakers with storage facilities, refrigerating facilities, etc was planned at the intersection of marine and terrestrial traffic routes. According to the plan, the connections of the port with the road and railway networks would be separated from residential areas. The industrial port, together with an industrial basin and a fresh water well, was planned in the northeastern part of the coast. Since then, industry has developed in the area where the Tomos factory is located. This area could not be connected with the railway because it would prevent the expansion of the new Koper. The new industrial area therefore extends along the new Koper paralelly with the road leading to the railway station and is in this way connected with the railway. The town would be separated from the industry by a wide green belt. The question of the railway and its course was one of the essential urban conditions for the appropriate development of commercial and industrial ports as well as the industrial basin. The planned route of the railway track was completely separated from the town so that it would not represent an obstacle for its expansion. The railway would touch the town at the railway station square where an area for customs offices, port management and the bus station was planned. A consequence, the passenger railway station was planned as a front-end station. This part of the town center is logically connected with the railway and road traffic networks. The connection of road and railway traffic is solved in such a way that there are no unnecessary intersections between roads and the railway.

All areas intended for housing development, the industry and the port were boldly dimensioned with a possibility of expansion which is evident also today. Road and railway networks were laid out logically and without compromises, however only partially implemented. Plans were made for large parking areas, green areas and areas for unplanned activities.

As a symbiosis of the old, the newer and the recent, Koper needs urban re-evaluation of all plans in accordance with contemporary views and principles. This is exactly what can be achieved through urban planning workshops which offer a professional, unbiased view of the problems related to coastal towns.

4.4 Simonov zaliv (St Simon's bay) - Haliaetum (1968)

In Izola, Mihevc planned the most important tourist area in Simonov zaliv (in the Roman Haliaetum). The place should

connect its historical and archaeological past with modern tourist services, helping Izola to develop a new identity with its uniqueness.

„Near Izola there is - a meter under the sea - an old Roman bay. On the coast, today covered with vineyards, ancient remnants of a Roman town can be found, remnants of a mosaic and other archaeological findings. This extraordinary finding needs to be preserved „in situ“. An old bay, satisfying all nautical requirements, is planned to be raised to the present water level. Each visitor to the park should enjoy in the beauty of the mosaic and other findings. In this way, an attractive core of a new tourist center, developed on and unsettled hill, would be created.“ (Mihevc, E., 1964/29)

All that has been implemented of Mihevc's urban design vision of Simonov zaliv as a future identity of Izola and a Haliaetum tourist-archaeological park, is a partly constructed access road leading from Prešernova street to the sea without the addition of a double tree-lined avenue. Of the planned buildings, the Haliaetum hotel with Korala, Perla, Mirta and Sirena outbuildings, a restaurant and a complex of tourist apartment houses in greenery were built. Due to the lack of financial sources, unprofessional excavation and since several individuals, the municipality and the state showed no interest in the finalization and maintenance of the Haliaetum park according to the urban plan, the already discovered archaeological sites were buried back after Mihevc's thorough consideration.

4.5 The Izola town plan (1971)

The Slovene coast regional plan defined Izola as a fishing and tourist town with developed specific industry. The expansion of residential areas and an industrial zone was anticipated. The following facilities were planned for 15,000 inhabitants and 5600 tourists: three elementary schools, an Italian school, a kindergarten, a nursery, a high school, a musical school, a technical school, a school of economics, a hospital and a health center, car services, a supermarket, a commercial center, a marina for yachts and liners, a municipality building, a post office, a police station, industrial and craft centers, a bus station, a gallery, a museum, a stadium and a sports center.

Several variants of Izola urban plan were made in line with the guidelines of the Slovene coast regional plan. The urban plan from 1971 suggests a traffic solution, land use, landscape protection and the design of Izola coast.

Mihevc foresaw the design of three main terrestrial entrances into the town:

- The southern pronounced entrance - an amphitheatre axes is shifted so that it seemingly leads to the center of the island. The southern access road is connected to the motorway, to the reconstructed four-lane coastal road and to the widened Prešernova street. The Cankarjeva avenue and the new southern access road encircle the „town on the island“;
- The eastern entrance from the Koper direction;
- The western entrance - Simonov zaliv;
- A program and spatial design of the coast - town program connection was planned:
- The old town core - the 1st May tree alley - E. Vatovec - IX Korpus, Livade;

- The old core - Bazoviška - Kajuhova;
- The old town core - Bazoviška - Oktobrska revolucija - Simonov zaliv - Jagodje.

A coastal promenade was planned from Belvedere above Izola to Koper with the interruption of a walkway near the Delamaris industrial complex and with the passage through the old town core further towards Ruda. The course Belveder

- Simonov zaliv - archaeological park Korbat (Haliaetum) - marina - restaurant/sports center - Sončno nabrežje - man- drač (port) - Kopališka street - Punta - northern coast - Delamaris and shipyard complex - the Viližan Bay coast - Ruda - the coast towards Koper remains very interesting also today, however it has not been implemented.

Mihevc achieves spatial transparency through clearly defined boundaries of individual areas (the town on the island, town districts on mainland, ...). At the same time, he connects (separates) them with lush vegetation, i.e. with green systems; he emphasises view axes, road lines, town quarters with alleys (cypresses along the Bazoviška street), he preserves an archaeological site Haliaetum and changes it into a park of a higher importance and includes it into urban touristic structure. The Izola town plan by Mihevc emphasises the importance and preservation of existing natural system, landscape urbanization, architectural, archaeological and technical heritage.

4.6 The Piran - Bernardin - Portorož; Fiesa - Pacug - Strunjan urban plan (1973)

For Piran as a still living monument of mediaeval architecture, preservation and reconstruction of the old town was planned with „tourist islands“ at Punta (the headland point) and near the Tartini theatre. Mihevc proposed the design of the Tartini square, the northern coast with a promenade and a walkway connection with Pacug and Fiesa, as well as a new town access road which would descend from the Piran wall past the elementary school down to the coast. The access road was planned to join the four-lane coastal road from the Portorož direction. Along this access road, the construction of hotel facilities was planned, representing the termination of natural flysch cliffs and the beginning of urban entrance into Piran from the direction of Portorož. In the prolongation of the new town access road and the beginning of the old part of town, a parking platform was planned to be constructed in the sea. The platform would solve parking problems in Piran and reduce traffic congestions in the old town. Parking lots in greenery, a bus station, a sailing club with a smaller marina, service facilities, smaller beach facilities and two swimming pools were planned on the platform.

5. Town planning on the Slovene coast

The following presumptions, assertions and hypotheses have been set for the evaluation of plans and implementations related to Mihevc's urban design of the Slovene coast:

1. Urban plans and implementations by Mihevc have a regional character – a regional identity. It has to be stressed that regionalism was present in Mihevc's philosophy of creation at least a decade before European theoretical mind started to consider re-

gionalism as a possible architectural and town planning stream.

Elements of regional identity include:

- Structuring and submerging of building masses into the greenery, the Mediterranean park;
- A coastal belt is designed with marine elements and intended for public use;
- Preservation of terraced slopes and uninterrupted green areas.

2. Urban functionalism developed into humane, permanent architectural and town planning solutions of high quality - a **humanistic design philosophy**.

Humanistic design philosophy is expressed as:

- Small scale of building masses in accordance with human needs;
- A dispersed urban outlay and the diversity of urban patterns;
- An expansion of land into the sea and seabed reconstruction;
- Humanely designed urban motives: alley, avenue, entrance sheds

3. With far-sightedness and simple worldly wisdom, the consideration of regional and urban development reached far beyond official Slovene **doctrines-visionary planning**.

Visionary planning has been implemented through political, economical and social development in the following elements:

- Koper as the capital of the coastal region and the Port of Koper;
- Slovene coastal region was planned as an integrated tourism-oriented region;
- Global traffic solution and the hierarchy of the road network;
- Dispersed town planning;
- Large-scale design of the coastal belt.

4. In its genesis, the Architecture, spelled with a capital A, is a **spatial art** or the art of space.

Spatial art is expressed through the introduction of urban motives and closed spatial complexes:

- The necless - the Koper town avenue;
- Lungo mare - Lucija - Bernardin - Piran, Izola - Simonov zaliv - Belveder, Žusterna - Koper;
- Closed spatial complexes:
- A street - buildings in Portorož and planned hotel buildings in Piran;
- An alley - the Cankarjeva street and the Bazoviška street in Izola;
- An avenue - Portorož coastal road;
- A square with arcades - the new Palace hotel;
- Piazzetta - Belveder in Koper;
- A dominant/vertical emphasis - Belveder in Koper;
- A semi-circular nodal outlay - the planned Bernardin hotel complex, the Semedela residential district;
- An amphitheatre - a planned hotel in Simonov zaliv;
- A platform - between the Palace hotel and the cafe in Portorož.

The Slovene coast is the only region in Slovenia built in accordance with uniform Mihevc's town planning vision and stands out distinctly from the mediocrity of town planning and architectural design in other Slovene regions. Besides,

in the Casabella magazine (Casabella, 1963/280) an example of Mihevc's macro and micro urban design of the Slovene coast is described and given as an example to Italian planners.

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A short biography of Edo Mihevc (1911-1985)

- July 8, 1911 born in Trieste
- 1931 graduated from the Ljubljana grammar school
- 1931/32 Architecture department at the Technical Faculty of the Ljubljana University
- August 1, 1936, graduated under the mentorship of Prof. Jože Plečnik
- 1937-1940 - employed at project and construction companies in Ljubljana
- 1940 - passed a professional examination as an authorized engineer
- 1941-1943 commander of the Gubec brigade, commander of a military school of the intelligence officers, head of the headquarters of operational units and member of the supreme staff of the National Liberation Army and POS
- 1943 economy commissioner of the FPRY (Federative People's Republic of Yugoslavia) in Trieste and the Friuli-Venezia Giulia region in Italy
- 1945 (June 16) head of the cabinet at the Ministry of Industry and Mining of the PRS (People's Republic of Slovenia)
- 1946 (November 11) associate professor for residential and industrial buildings at the department of Architecture of the Technical Faculty of the Ljubljana University
- 1949 the first award of the FPRY government, the Ministry of Education and Culture, for the implementation of the Litostroj industrial buildings (co-author Miroslav Gregorčič)
- 1950 the award of the Ministry of Construction of the PRS for the Belinka chemical factory development plan
- 1958-1981 professor, lecturing on residential buildings, industrial buildings, interior equipment; he also led the composition seminar
- 1965 the award of the City of Ljubljana for outstanding achievements in architecture
- 1969 the Prešeren award for Architectural urban solution of the Lucija complex
- 1981 retired, moved to Portorož
- 1985 awarded the title of Deserving professor for educational work by the Faculty of Architecture, Construction Science and Geodesy of the Ljubljana University
- 1985 (June 4) died in Portorož

Archive material

- Edo Mihevc archive at the Faculty of Architecture, Zoisova 12, Trubarjeva 14, Ljubljana
- Nuša Mihevc archive, Med vrtovi 3, Portorož
- Marko Mihevc archive, Groharjeva 18, Ljubljana
- The Architecture Museum archive, Ljubljana

Illustrations

Figure 1: The Slovenian coast regional plan, 1963, 1:10000 (source: E. M. archive)

Figure 2: The Slovenian coast and Northwestern Istria regional plan, 1965, 1:25000, (source: E. M. archive)

Figure 3: The Koper urban plan, 1961, 1:2000, (source: E.M. archive)

Figure 4: The Simonov zaliv town plan, 1968, 1 : 500 (source: E. M. archive)

Figure 5: The Izola town plan, 1971, 1 :2000 (source: E. M. archive)

Figure 6: The Piran - Bernardin - Portorož town plan, 1973, 1 : 1000 (source: E. M. archive)

Figure 7: The Piran - Bernardin - Portorož town plan; a sequence section of Piran, 1973, 1 : 1000 (source: E. M. archive)

Figure 8: The Bernardin town plan, 1968, 1 : 500 (source: E. M. archive)

Figure 9: The Portorož town plan, 1965, 1 : 1000 (source: E. M. archive)

Figure 10: The town plan of the Portorož marina water complex in Lucija, 1970, 1 : 1000 (source: E. M. archive)

Jože KOS

Cycling across borders¹

1. Introduction

The role of cycling in most European countries as a mode of transportation has been increasing in the last years, especially in urban areas. Usually it is divided into utilitarian (to and from work) and leisure (recreational) cycling. The first is described mainly as cycling to work, schools, shops, sports grounds etc., over short distances, lasting for several minutes or even an hour. The time used for recreational cycling, done as physical or mental leisure, is much more flexible and can last even for a few weeks on cycling trips (holidays).

As is the case with other modes of transportation, cycling also has its fans and opponents. The central international organisation promoting cycling, as an everyday transportation mode, is the ECF - European Cyclists' Federation. One of the constants in its operation is the organisation of *Velocity* conferences. These conferences are the most important cycling meeting for planning and development, that has since 1989 almost every two years regularly attracted a globally representative assembly of all individuals interested in any possible theme involving bicycles as a transportation vehicle. They are a diverse group of interested cycling activists, traffic and urban planners, spatial planners, engineers, politicians, academics, economic enterprises involved with cycling, individuals promoting a healthy way of life etc. The main purpose of the *Velo-city* conferences is to speak out about newest achievements in various areas connected to cycling. The organiser of a particular conference is a town selected by the ECF, an honour not simply granted, but won in competition with other candidate towns.

The eighth *Velo-city* conference was held in 1995 in Basel, Switzerland, the ninth, in 1996 in Freemantle, Australia and the tenth in 1997 in Barcelona. It was attended by a record 512 delegates from 42 countries and five continents. The eleventh *Velo-City* conference was held in two towns, for the first time in its history, in Austrian Graz and Slovenian