

The proposal magnifies ideas about placing housing programmes in the area. Living in the immediate neighbourhood of singing railway tracks themselves is not an advantage, living in the city centre, however, definitely is. With skilful architectural design and the creation of pleasant living micro-places (orientation, noise alleviation etc.) the idea of »living on railway tracks« is surely interesting.

#### 4. Between the lines

Whether the recently completed competition met all the Slovenian capital city's expectations and granted the awaited push needed to redefine the transport node and other connected projects doesn't depend (only) on the final choice of an urban design and architectural solution. The decisive step will predominantly have an urban management nature. With global transfers of knowledge one could state that today there is more hope for its success, although the domestic practise cannot boast about available trained individuals, who could push the project forward.

The chosen competition proposals will be exhibited indefinitely in the hallway of Slovenske železnice, the national train operator. The recently closed exhibition in the unheated courtyard of the City hall was more than sorry, it would have been better to exhibit the proposals on one of the central city squares – visitors would still be out in the cold, but there would surely have been more of them and the squares would be filled, not only with the temporary seasonal December shopping stalls, but also with some content with long-term significance. In short, go there, take a look and report your judgement. The lack of public debate on such matters is becoming stifling.

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*I am extremely grateful to all the participants of the competition, who had the time to speak to me about their ideas.*

#### Notes:

- [1] Proposal by the author group coded 06931- »Podhod«, authors: Klanjšček, R., Pavlin, K., Vrhovec, A., with partners and consultants.
- [2] Proposal by the author group coded 56142 – »Diagonale«, authors: Prelovšek, A. M., Gašparič, D., Stegnar, L. M., with partners.
- [3] Proposal by the author group coded 77474 – »Skulptura«, authors: Volk, A., Huber, A., Castella, K., Günther, M., Schneider, M., with partners.

#### Illustrations:

**Picture 1:** »Podhod« (subterranean passage) – layout, winning entry

**Picture 2:** »Podhod« – rendering of proposed future developments

**Picture 3:** »Diagonale« (diagonals) – layout

**Picture 4:** »Diagonale« – perspective drawing of proposed future developments

**Picture 5:** »Skulptura« (sculpture) – layout

**Picture 6:** »Skulptura« – axonometric showing programmes and volumes of proposed development

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## A City on a Landscape park's edge

### Reassessing relations to the marshlands in the municipality as the starting point for rehabilitation of Ljubljana's Southern part

#### 1. The Southern entrance to Ljubljana

The marshlands of Ljubljana (in continuation: *Barje*) are one of the natural and cultural entities strongly defining the city's identity. With its image and character, *Barje* is tied to the city's development, above all as a place of exceptional natural resources, unattractive for building and other urban functions. In fact, the city's development stops on the marshlands edge.

*Barje* is an area seen by the citizens of Ljubljana as a place of less valuable land uses, such as garbage disposal or illegal housing. The place South of the ring road is more or less formally tied to the city, while it functionally remains outside the daily rhythm of urban life. The preparation of the new spatial strategy of urban development (*orig.* Prostorska zasnova mestne občine Ljubljana, 2002) justly called for a debate about the connecting edge between the city and *Barje*. The conditions in Ljubljana's Southern gateway demand planned interventions and a decisive development policy. Questions about content and »incomplete« design are given additional ponder by the need for defining the municipality's cooperation in the management of the landscape park *Barje* (Krajinski park Barje, 1999).

We suggested to the municipality to comprehensively re-evaluate relations to the marshy part of the municipality's territories, which would be based on findings from various expertise and research. All acts concerning management, control, new programmes, cooperation with neighbouring municipalities and individual investors, should be driven by the idea that the area along the ring road should re-establish its dignity. The city has to assume an active role in relation to planning the rehabilitation and development of the area. The latter should limit itself only to an extent, which would enable functional completion of existing and new programmes. All ideas concerning development should be subordinate to the preservation of *Barje's* natural and cultural values. Ljubljana should participate in the landscape park's management with the notion that development in the park is limited with a protective rationale, which is also necessary for the park's functioning.

The proposal by the Ljubljana municipality for the accommodation of a new programme node, i.e. sports and recreation-park in the extension of Barjanska Street, is tied to the functional rehabilitation of the city's entire Southern edge. The concept of a new urban park on the meeting edge is a major development challenge. The present condition and

uses demand a concept for all interventions in the sense of finding the best and newest ecological-engineering knowledge. On *Barje's* edge the practise of less-acclaimed developments and programmes have to be stopped and the development of a business, education and research area stimulated. Today dealing with garbage disposal is a topic of scientific research and serious business programmes. There is no reason preventing Ljubljana from reassessing the value of its garbage dump or offering science and business systems a place for development. Such a decision could make the garbage dump's neighbouring areas less intimidating and also present them as places worth serious urban arrangements.

## 2. The Marsh (*Barje*)

The landscape image of *Barje* presents an expansive plane from which rise hillocks, which is surrounded by a sloping edge as the natural frame. Geo-morphological features, as well as water, vegetation and animal life (*Barje* is even in the international scale an ornithological speciality) determine its characteristics. The image of *Barje* is further defined by drainage ditches, which determine its geometrical structure, small plots and clusters of hedges and trees. The state of the cultural landscape is tightly connected to primary uses, since maintenance of the drainage ditches, determined periodic hay harvesting and adapting the intensity of use to specific conditions are all necessary conditions for preserving *Barje* in its present image. The area is predominantly used for semi-intensive agricultural production, seen as moderate productivity and prevailing pastures or grasslands. Abandonment of fields is the ongoing trend with increased production of monocultures, pointing out the shift to animal husbandry (Cunder: Second conference on *Barje*, 2002).

Water conditions fully define *Barje*. Outflow of water from *Barje* is limited. Under extreme rainfall, half of *Barje* is flooded. Floods cover 15 % of all surfaces annually. Today the area can still be identified as a wetland [1] in the widest sense of the term. In the gravel layers of *Barje's* clay, there are flows of subterranean waters. It is used as a source of potable water. The upper layer of the water table is heavily affected by pollution from agriculture, industry and communal services, but provides 30 % of potable water to Ljubljana and its Southern suburbs (Hacin, Čop. In: Second conference on *Barje*, 2002).

*Barje* is a place of dispersed settlements, which are positioned outside the flood plane on the slopes of the hillocks and edges and in narrow strips along the roads crisscrossing the area. The area is not losing inhabitants anymore and is becoming an interesting place for settlement, as well as leisure uses (Common development programme, 2001). The extent and attraction of the natural environment invite cyclists, travellers, ballooners, equestrians and various other daily users. Their quantity is however causing problems (unorganised parking, driving on field paths, garbage dumping, catering etc.). The area is a meeting place of conflicting interests of nature protection, managing the water regime, settlement and leisure activities. In day-to-day practice the quantity of small, informal and other actions is growing, with undesirable influences, which are serious problems in *Barje's* vulnerable environment.

*Barje* is a natural asset [2] and as such proposed for protection as a landscape park [3], a wider natural area according to the Law on preservation of nature. Development in the landscape park will connect six municipalities: Borovnica, Vrhnika, Brezovica, Ig, Škofljica and the city municipality of Ljubljana, which contains one fifth of the park. Whatever the share of the park in any municipality, its future largely depends on successful negotiation about the distribution of particular development programmes. Concerning *Barje*, the municipalities will be joined in the development debate about the distribution of new programmes along its edge and control of land use. Development in the area will be fully saturated with preservation of natural values, which is often seen or understood as an obstacle in development.

Interested municipalities in the region South of Ljubljana are preparing a joint development programme in conjunction with the development of *Barje* (Common development programme, 2002). All the municipalities are joined in the Regional development agency of the Ljubljana urban region, which has already prepared its regional development programme, but hasn't as yet began the preparation of its spatial regional concept.

Differences between the communities joined in the region are vast and the question is, which programmes can overcome them. In the Ljubljana development region, dominance of the capital city is obvious, which has, besides joining into the common region, already affected the independent joining of Northern and Southern neighbouring municipalities. Is it at all possible to overcome the position in which small municipalities see themselves as the functional hinterland of the largest municipality and are of course dissatisfied? The route to structural complementarities can only lead across regional projects, in which, at least in the early stages, the centre will have to exercise restraint. Such a project is undoubtedly the Landscape Park *Barje*. In the execution of the spatial concept of the project Ljubljana will be included as an equal partner, but not as project leader. This role has to be taken by the Development agency or any other institution, which can, through its activity, provide optimal conditions for cooperation and balancing the inherent power of the capital city. The landscape concept, seen as the region's spatial project can be the advance party of the regional spatial concept. The latter will become operational when it meets development intentions, common to all the municipalities (Simoneti, 2002). One of the main problems afflicting all Slovenian regions is truly the definition of common denominators between joined municipalities. Harmonising problems within the framework of the Landscape Park *Barje* can become an opportunity and incentive for inter-municipal cooperation in the Ljubljana urban region, if the capital city exercises restraint.

During the preparation of expert guidelines for the completion of programmes along the city's edge with *Barje* (Design proposal for the sports and recreation park *Barje*, 2002) we discovered that for the future of the landscape park, the cooperation of all six involved municipalities sharing *Barje* is essential. Only in this way can *Barje* be protected from undesirable development acts and the programmes on its Southern edge balanced. Because of such understanding, the Municipality of Ljubljana is consciously limiting its development to the edge of the southern ring road and the space, which has to be cleared because of previous development actions.

### 3. The edge where the city meets Barje

The Southern ring road cut through the natural passage between the city and its hinterland. A hard division replaced the soft transition. The expansive belt of exchange between the built and the natural was cut, while development on both sides of the road was significantly marked. The city side became very interesting for development, while the other side was left with less valued uses (garbage dump, used car lots, illegal housing, allotment gardens, illegal dumping grounds) and connected problems of controlling land use. Typically, amongst these are planned, but also informal activities. Both in a certain manner reflect a low level of recognition of the area's values for development. Even the fact that the idea about the »Southern centre« (VR 6/1 and VO 6/1 in the long-term plan of Ljubljana, 1986–2000) never neared implementation also point out limited expectations from the place. Last, but not least, even the passages from the city to *Barje* remained on the sidelines of interest of planning or user friendliness.

Because of the uniqueness of *Barje* we proposed that in planning initiatives the entire contact area between Ljubljana and the marshy landscape be subordinate to high environmental protection standards and generally rational design solutions. The attitude, which the city should assume, is to intervene in the area with future development, only in a magnitude functionally needed to complete its programmes, whereby expected economic and environmental development effects have to be balanced with the offer of programmes and sensible distribution of new programmes.

In the discussion about the relationship between the city and *Barje* various development possibilities were dealt with. In principal three scenarios already enable assessment of effects and consciously taken development decisions. The gradual scenario builds from development decision making from case to case, the limiting scenario subjects all decisions to preservation of nature and the environment, while the long-term scenario solves development issues by using protective planning.

Development scenarios	<i>good</i>	<i>bad</i>
<b>gradual</b> (aligned to needs)	adaptability	conflicting
<b>limiting</b> (protective)	preservation	rigid development
<b>long-term</b> (development)	Adaptability/ preservation by development	–

Comparison between scenarios speaks for long-term directing of spatial development. If gradual development is chosen, then particular development decisions are hard to coordinate, meaning they can, in such a vulnerable area cause ecological problems. Emphasised preservation or general opposition to all interventions ca, in the long run, seriously hinder development and lead to dangerous »emptiness« of the area, similar to the present state. The most sensible decision on the general level is apparently to pursue development with inbuilt protective and control principles.

The chosen development model formed the backbone of our proposal to re-evaluate relations to the marshlands in

the municipality. All proposals are subordinate to the idea of active transformation. Contrary to the expected reserve, tied to the emerging landscape park, the municipality opted for development. Distinct and user-friendly designed passages to the *Barje* hinterland will be tied to restructuring of contents and programmes.

The proposal relies on programmes placed along the Southern ring road and limited expansion towards the South, towards the Ljubljana River. It enforces a raised standard of spatial management, including programmes, particular buildings and street design. This functionally and otherwise improved space should become hospitable to visitors and users. The Southern gateway to the city offers development opportunities, with which the city could stimulate investors.

Decisions concerning the meeting place of the city with *Barje* are designed according comparisons between possible development structure models. These models are logical superstructures of long-term scenarios and rely on the finding that the space along the Southern ring road is composed of four larger areas: Dolgi most, the garbage dump, South centre and agricultural lands East of the river. Construction and buildings already connect the first three areas, while the entire Eastern area is even in the long run, reserved for primary uses. Comparison of models shows that the protective model mainly enables clearing interventions, which are limited to existing uses and has very limited development potentials. Thus, for further elaboration, the two-pole model was chosen, which proposes development in areas formerly set for development in planning documents. The model contains modernised and complemented development from two aspects (the city and the landscape park) and maintains ties with the landscape between the two poles – functional cores. Within the chosen model's framework a new urban park was conceptualised, a programme node connecting the city and the landscape park.

### 4. New urban park

The sports and recreation park *Barje* is planned as a modern leisure area, whose character conditions various programmes ranging from urban uses to natural ones, passive to active and public to commercial. In view of all previously stated findings, the site of the new Urban park was well chosen and ecologically acceptable for the planned programmes. The idea about developing a new urban park on the city's Southern edge is aligned to findings about the people's needs. Leisure activities, in conjunction with increasing quantities of spare time, have become an important aspect of daily life (Černigoj, 1991). Modern urban parks are no longer places for viewing. Uses in parks have been adapted to needs of various user groups, thus enabling active use of spare time. The boundary between day-to-day offer of public programmes and tourist offer in such a park is fuzzy, similar to the distinctions of its character between active and passive, recreational, sports or educational. Such a mixture of offer strives for conditions, which integrate as many users as possible, children, youngsters, families, elderly, residents and occasional visitors.

Providing passages and paths connecting the city with *Barje* is the key issue in any rehabilitation and development of the area South of the ring road. These can generally be provided with renewed existing ones. The planned changes

## Building the city

of use in the area can be ensured by pleasant and safe pedestrian passages with additional new paths connecting the city to the *Barje* hinterland. The idea doesn't contain attractions for massive invasions into the area's core, but on contemplated opening of the landscape park to visitors. The proposal doesn't contain any new roads to the hinterland for motorised traffic. Most of it will stop in the Centre itself, functionally connected to the access ramp of the ring road.

The proposed new urban park has six components: The Centre, Urban park, Nature park, golf course and allotment gardens. Separate management and design of the particular parts is possible, as well as their gradual development from the primary layout to the mature state. The design builds from intertwined functions and programmes.

Elements of the new Urban park are spatially positioned with respect to the area's physical characteristics. Programmes are developed at a distance from the city. The edge with the city is adjacent to the Urban park, while the edge with *Barje* itself is the nature park at the confluence of Ljubljanica River with Ižica River. The first is intentionally granted to new experiential challenges and adrenaline adventures, while the second is tied to sailing, rowing, picnics and other more classical types of spending leisure time in nature. Functionally all the areas are tied to the Centre with paths and resting places and form the park's singular body. In between them is the golf course, designed in a manner permitting other users passage. The concept includes an area with allotment gardens, one of the favourite pastimes of many people.

The proposal was drawn on the level of programme guidelines and relevant regulation, which are essential for further elaboration. The golf course, one of the known possible programmes in the leisure park, was spatially positioned with environmental assessment, including design guidelines.

The Centre is positioned at the exit from the city's Southern access road. It coincides with the end of the planned tramway line, bus stop, pedestrian and cycling paths and proposed path to the pier on Ljubljanica River. The building itself merges functions of traffic node and new programmes. Its layout is additionally coupled with an embryonic intelligent business environment, which can facilitate specific cultural practises, massive gatherings and covered recreation programmes. It is functionally connected to other programme areas of the park and caters to some of their needs. For example it contains the club area of the golf course, of course with suitable standards of separating users and respecting dis-functionality of certain programmes. Its design follows the idea about a programme node with a transport pier for parking and a P+R system. It can be designed in direct contact with the access road, with traffic running above the ground, thus tying to the observation tower at the park's entrance, as well as pedestrian and cycling paths.

The Urban park lies South of the ring road and Centre, enveloping it from the East to the West. Its dynamic programme and character are largely tied to the city. The proposal is a summary of new challenges and tests of endurance, power and searching for limits, provided by the adrenalin park. Particular features are in certain cases tied to the park, some are independent and can be used by various types of users.

The Nature park at the confluence of the Ljubljanica River with Ižica River represents a clearing action and significant enrichment of the area's programme. It lies along the left ri-

verbank on a strategic passage of the Ljubljanica River to the city. It is coupled with two new bridges across the Ižica and Prošca rivers. The park connects to POT (a circumferential path around the city) and thus to Špica, the city centre and indirectly Golovec Hill. Programmes of less intensive character follow each other along the rivers. The idea is to build piers on both riverbanks of the Ljubljanica River for varying uses. The pier on the left bank allows access to the new Urban park and Centre or experiencing nature from places prepared for picnics. The pier on the right bank, which is connected to the new circular path, also contains a footbridge from the park to Črna vas, a nearby suburban village.

The allotment gardens West of the Urban park and Centre are one of the programme units of the new park. Maintaining one's own garden is one of the citizen's favourite pastimes. For a lengthy time the municipality has been coming up with a decision to provide a model for modernised practise in arranging such spaces. *Barje* is one of the areas where it could be tested. The proposed area was after much deliberation placed on a site where there are none at present. Thus the old practice is being stopped and a model of sustainable allotment gardens is being introduced. The proposal is comprehensive, with functional surfaces and ties to public programmes.

The golf course lies south and west of the Centre, covering an area of almost 70 hectares. The proposal follows previously established criteria for planning in the vulnerable area of *Barje*. It uses those parts of the area where there are few drainage canals, which extend over a surface that can be designed with belts of biotops between particular holes. From the aspect of nature preservation, two sites are suitable for golf courses. The first is west and southwest of the garbage dump. After the dump is filled in (in approximately ten years) the golf course could be extended even into the re-cultivated garbage dump area. The second is a site that reflects consequences of non-uses (informal land uses). From the environmental protection aspect building a golf course anywhere else would be unacceptable. All issues tied to building a golf course on *Barje* are presented in the proposal separately.

## 5. Conclusion

During the preparation of the new strategic planning document (Spatial concept of Ljubljana, 2002) we established that development of the marshlands, South of the ring road, for various reasons, has to be conceptualised. There the city is simultaneously excessively present and absent, which is an unacceptable condition. Although even the idea of complete withdrawal from the space South of the ring road, in view of its present condition, is very tempting, probably better solutions can be found. Land use, functionally and in content, demands development actions. Issues concerning management of the garbage dump, entrances to the Landscape Park *Barje*, prevention of illegal housing, wild garbage dumping and planning infrastructure corridors and new road connections between Ig and Ljubljana, demand serious contemplation and answers.

The decision to change the area along the Southern ring road into a potential development zone is a good one, which was proven sensible also with expert research. Apparently it isn't in conflict with the future Landscape Park

*Barje*, quite the contrary, they coincide. Only by planned development and rehabilitation of the entire area will the city be able to create conditions for coexistence with the Landscape park. The concept of the new park will thus help in the establishment of a new functional centre, serving both the city and landscape park.

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### Explanation

*The article is based on the proposed layout of the Barje sports and recreation park drawn in 2002 and commissioned by the Municipal Department for urbanism. The proposal was drawn by the authors of the article, in cooperation with Urška Kranjc and Luka Vidic, students of landscape architecture, Martin Žerdin, M.Sc. and Andrej Sovinc, M.Sc., partners on the environment and protection of nature, and Mateja Doležal, representative of the Municipality.*

### Notes

- [1] The term wetlands annotates lands on the transition from continental to water environments. Wetlands are important for the metabolism and storage of nutrients and sediments in the primary production and containment of high waters and for the containment of effects of flood waves. Wetlands are important habitats of numerous animal and plant life. They are natural water reservoirs and a source of potable water. They are important in cleaning polluted waters, because they also function as natural biological clean. They are important as recreation surfaces and also provide certain raw materials.
- [2] Natural values, as stipulated in the Law on preservation of nature, include all natural heritage on Slovenian territory. Natural value are besides being rare, precious or known natural phenomena, also other valuable phenomena, components or parts of living or other nature, nature areas or parts of nature areas, eco-systems, landscapes or built nature.
- [3] The landscape park is a wider area of nature, protected according to the Law on preservation of nature.

### Illustrations

- Picture 1:** Municipalities joined by the landscape park Barje  
**Picture 2:** Development concept and development models (protection model, longitudinal model, model with two poles) and the chosen model  
**Picture 3:** Centre  
**Picture 4:** Urban park  
**Picture 5:** Nature park  
**Picture 6:** Allotment gardens  
**Picture 7:** Golf course

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Mojca ŠAŠEK DIVJAK

## Building the city with emphasis on urban mobility – examples from USA

### 1. Introduction

Cities and other settlements are at the core of all development since they represent the place of overlapping economic and social ties. Simultaneously they are major users of space, natural resources and polluters. Concentration of people enable urbanised lifestyles with positive and negative effects on the quality of life, health and well being of people. The city offers opportunities for employment, socialising, cultural life, better use of all infrastructure, but also causes environmental and social-psychological problems. In a well-organised city larger concentrations ensure vitality and development, but also with negative effects: traffic jams and chaos, pollution, noise, alienation, loss of place, insecurity etc. These are the reasons why increasing numbers of people are deciding to live in the immediate outskirts of larger cities or the countryside, which offer better ties to the natural environment, coupled with social and economic reasons (lower land and construction prices). Contemporary cities cannot be easily discerned from the countryside, urban agglomerations stretch out for kilometres outside the city proper and form metropolitan regions. All developed countries are afflicted by issues of suburbanisation and dispersed settlement, thus the sustainable model of regional city emerged. It includes development of central compact parts of cities and decentralised concentration in suburban areas.

The need for separate urban functions, which were enforced in »modernist« times has changed significantly in the last decades. The main reason is modernised technology: industrial production is cleaner, production is transforming into service activities. New electronic communications allow faster and more accurate conveying of information, enabling working from home or nearby. The quantity of employment opportunities in services is increasing and these can be easily tied to residential areas.

### 2. Developments in Europe and USA

Urban planning concepts from the nineteenth and first half of the twentieth century, which significantly marked modern cities, tried to solve urban problems of the times (sanitation, industrial pollution, slums). These concepts were the »garden city« (E. Howard: Garden Cities of Tomorrow, 1902), the antipode »industrial city« (T. Garnier's plans for the Cité Industrielle, 1901) and the most often copied »functionalist city« (La Charte d'Athènes, 1933, especially the influence of Le Corbusier), which influenced the transformation of cities into distinct areas for residence, leisure, production and transport. The »zoning« concept of the functionalist city actually tried to solve some issues of urban development, but also caused many new ones. Monotonous housing units, distant industrial areas, noisy highways, concentrations of work places and central functions etc., all led to new social