

slow and under tremendous influence by users of former social property from the recent past, now changing into private property. Changing the Constitution and declaring market economy as the mode of conduct are not enough. The necessary legal framework has to be set up as well. Besides, the introduction of new, albeit indirect instruments of land policy (compulsory replotting of building plots), demand a specific approach. The legal definition of instruments of land policy is needed, but not the only condition. Mentality has to change. Only then will instruments of land policy, already known and respected worldwide, become operational even in Slovenia.

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Notes:

- 1 Priority is given to public interest although the role of private interest cannot be denied.
- 2 The owner has to be »convinced« that his land will be used for the proposed intent.
- 3 They are: the landowner, the government and/or local authority and investor.
- 4 In the opposite situation, untimely execution of the pre-emption right would imply a larger intervention into private property.
- 5 Further reading on the success of (compulsory) replotting, readjustment, as an instrument of land policies in obtaining land for building in Germany, can be found in Weiß (2000).
- 6 Planning gain in general represents the increase in property value, that has not been caused by the landowner or inflation, but by the decisions of government or local authority concerning physical planning. Planning loss correspondingly represents loss in property value caused by the decisions of government or local authority concerning physical planning.
- 7 In this case the issue is tax on planning gain. If the issue are other types of taxation, we have to be very careful, after all principles such as the »principle of tax and countertax«, can be rather binding (Fuchs, 1991).

For literature and sources turn to page 51

Andreja JAN

Plečnik's concept of planning the rehabilitation of Ljubljana

1. Introduction

The most common explanation of Plečnik's creative rationale in the Ljubljana city centre is the one stating that his concept follows the masters daily walks from home through the city. They conditioned the emergence of particular axes, binding the city into a whole.

This interpretation of Plečnik's concept was first noted by Grabrijan in the book Plečnik and his school. Plečnik's urban planning was understood as the transformation of urban arteries, which were given special attention by Plečnik, and where often repeated even in later interpretation of Plečnik's work in the city centre. This interpretation stresses Plečnik's experience of the city »in natura«, and is the key source of his architectural creativity. Since Plečnik didn't leave any theoretical explanation of his work, the basis for interpretation can only be analysis of his work and in-depth understanding of the circumstances of their creation. Proof for the emergence of the phenomenon »Plečnik's Ljubljana« can therefore be found only in his legacy.

2. Planning circumstances

Most of Plečnik's Ljubljana was created between 1926 and 1941, including the times of the general economic crisis. During the period Plečnik accomplished a series of projects in the urban tissue, by redesigning squares, roads and the banks of the Ljubljanica River.

An interesting point is that at the time out of the 128 km of roads in Ljubljana only 7km of roads (and squares) were paved. Another point is that most of the projects were financed from public works and mainly from funds provided for paving streets and roads². Limited financial resources did in fact have a significant impact on the execution of proposals. Plečnik often achieved his goals with minimal resources (by planting, using historic fragments), thus lowering building costs. The projects were achieved by adjusting the architects proposals to the needs and financial possibilities of the municipality, but also as Plečnik's monumental answer to functionally conditioned demands by the municipality, which were also used for achieving his own vision of the city as the national capital.

Municipal commissions related to spaces surrounding the medieval city core of Ljubljana. Although these spaces were of key significance for the spatial structure of the city and important transition areas between the old and new city, they were either completely dilapidated or with poor architectural image.

3. Planning urban rehabilitation

Most of Plečnik's achievements lie in the inner city, mainly in the transition zone between the medieval core and new

city, where he redesigned the key urban spaces. Plečnik gave these connecting places a renaissance ambience. He also stressed the Mediterranean note in the urban structure of Ljubljana as a counterpoint to the influences from the North. There was no renaissance urban space in Ljubljana so Plečnik's concept in fact provides this passage between the old and the new. Gradually Plečnik created a composition of spaces surrounding the medieval core that became the important connecting element between the old city and emerging modern city.

He believed that Ljubljana as the capital of the Slovenian nation needed monumental axes, thus he proposed development along several of them and marked them with nodes (points) ³.

In the core of Plečnik's approach to planning of the city centre were recognition and redesign of those urban spaces, which were, although architecturally inarticulate or poorly emphasised, important (key) places in the city's layout. The approach should enable a continuous process of urban development while maintaining identity. Plečnik's redesign of Ljubljana was therefore based on emphasising and presenting and connecting key urban spaces.

When designing urban places in Ljubljana, Plečnik chose motifs that were typical for the city's identity and hid or even proposed the demolition of buildings, that didn't fit in with his vision of the Slovenian capital city – mainly buildings designed by architects from the former Austro-Hungarian monarchy. The chosen architectural language was rooted in Mediterranean space, thus he proclaimed his opposition to northern architectural expression, and after all it was, in his opinion, foreign to the city's identity.

The Italian architectural tradition, the spirit of which was sought for in the planning of Ljubljana, was also the source of Mediterranean motifs used by Plečnik as the basis for his own architectural expression.

Plečnik's letters sent from his study tour to Italy reflect the first parallels between the urban spaces of Ljubljana and the conceptual framework of his architecture. His observations, instead of leading to general conclusions, were a comparison between particular historical spaces and spaces in Ljubljana. Thus in a preserved sketch and description for the design of the square in front of the cathedral in Ljubljana and access to the castle, he compared it to the church Santo Spirito. Imaginary planning of urban spaces was therefore the basis for future proposals in Ljubljana.

Understanding of Plečnik's urban planning is possible only by analysis of numerous plans drawn through a lengthy period and not any singular, all-encompassing proposal for any particular urban space. This specific approach of gradual building of urban space with architectural elements ⁴ that latter assume the role of connective and constructive urban elements is a continuation of traditional mutual adaptations of architecture and urban space.

4. Rehabilitation of Ljubljana

Plečnik's endeavours in the city centre were undertaken at two levels: the plan and redesign proposals for particular (key) urban spaces. The processes ran simultaneously with

mutual effects. Architectural actions also have the inherent role of connecting urban space. Particular freestanding elements (e.g. a pillar as a monument) thus often also signify the intersection of particular connecting spatial axes.

Plečnik's work can be divided into two parts. The first includes seminary work done by students and diploma theses; the second are projects commissioned by the city, institutions or individual contractors. The work done as students' projects were often the consequence of Plečnik's initiative and the first attempts at architectural redesign of the city. This work was therefore more than pedagogical; it was also an experiment of placing particular ideas in the real environment and a basis for further adjustments. The particular tasks were selected from spaces with poor or no architectural image, which were seen as important for urban development. Projects intended to redefine the city centre i.e. the key points in the spatial development concept were schematically transferred to the plans and thus although only experiments at possible solutions in fact influenced further planning.

The basis for Plečnik's regulation plan (1928–29), in which the whole city was presented as the design objective, was the studio work of F. Tomažič. It was also published in the Schools magazine »Lučine« in 1928.⁵ It started off from two proposals using Koch's plan from 1910 as the framework.

In the first plan, named Emona, the position of the Roman town Emona was marked, proving the integration and continuation of certain elements of the ancient city in the contemporary one. In the second plan the medieval town was added to Koch's layout, as well as schematic additions of completed and proposed projects drawn by Plečnik's students. Both plans present continuous development of Ljubljana in time, the first showing past transformation of the city and the second showing planning for the future. Interpretation of Emona as the primeval city presents the starting point for all transformation in the city, but also expresses a Mediterranean note, the desired image of Plečnik's Ljubljana.

Plečnik's regulation plan from 1929 thus presents the execution of particular architectural ideas on various levels of development: completed construction, planned development and proposed sites schematically drawn in the plan, but without architectural articulation. The latter emphasise Plečnik's scheme, suggesting future planning (e.g. Roman wall, Ljubljana riverbanks...). The plan is therefore only a step in a long-term planning process and reflects the master's approach to urban planning. The process develops from initial transformations of key urban spaces developed as separate projects, continuing to the regulation plan that joins them into urban prospects that tie the city together. Areas of the city that haven't been transformed, nodes are emphasised as important future urban spaces, the foci of future development. This was the rationale by which the plan was presented and adopted as the basis for future planning, but not as the definite regulation plan.⁶

In Plečnik's work it is clear that he achieves his **imaginary city** methodically, i.e. gradually with **architectural landmarks**, based on **ties** between particular **key urban places**. The principle applies to redesign, as well as planning new urban areas. In the city he identifies key urban places, connects them with spatial axes and integrates them into the existing built urban tissue. Open spaces (streets and squares) are also designed as architectural spaces, tied to the surrounding buildings.

In the area of the city centre a structure emerged, coined Plečnik's Ljubljana. It grows from architectural history and simultaneously shows the rationale and key points in Ljubljana, e.g. the market place, as the Stoa and symbolic city boundary; the library as an analogy of a renaissance palace; the bridges as an analogy of the Venetian ambience. The article continues with a detailed presentation of Plečnik's redesign of the Ljubljana riverbanks.

4.1 Ljubljana river (from the Shoemakers bridge to the market place)

In his proposals for the redesign of the Ljubljana riverbanks, already started by Keller, Plečnik identified ties to the city as the main constituent element of urban space. Planned bridges, terraces and accesses to the river should achieve these. Fabiani suggested similar proposals in his regulation plan from 1896.⁷

Grabrijan mentions a different idea drawn by Plečnik, one that would culvert the whole length of the river and use the created space as a boulevard⁸, similar to the regulation of the Wien River in Vienna carried out between 1894–1900. The space of the river was designed similarly as in Rome or Venice, with numerous bridges.

Plečnik wanted to achieve excellent connections between the riverbanks, thus trying to achieve the ambience of Venice or the Tevere River in Rome. Redesign and planning of bridges is therefore the continuation of urban spaces across the river. On the riverbanks he proposed the building of new squares and the redesign of existing ones (Dvorni trg, Novi trg, Marijin trg), visually connected to the castle.

Thus the new Shoemakers bridge (Čevljarški most) is a prolongation of the Jurčič square across the river, also joining the two parts of the medieval city. Visually the whole space connects with the castle tower looming above. The concept of the bridge was derived from its medieval functioning, i.e. bridge-market place.

The former enclosed space, created by traders huts along the sides of the bridge, was revived by Plečnik with pillar arcades replacing them. The antique, architrave, style of construction is replaced by a reinforced concrete platform with a single central support. In an abstract sense Plečnik relives the space of the first market place in Ljubljana as an element of urban identity and ties it to classical principles in concept and design, derived from antique architecture. A similar idea was proposed for Novi trg between 1930–1951, where he proposed a bridge (Victory Bridge) that would connect the square with the castle.

The next »key« point in the city, redesigned by Plečnik, is again a connecting point between the old and new city. When the Franciscan bridge (1842) couldn't handle the new traffic demands and its position in the city structure, Plečnik preserved it by adding two more pedestrian bridges on either side of the old one. The concept, together with the proposed landscaping, was supposed to monumentally strengthen the entrance to the old city.

The building of Manes's bridge in Prague, also supposed to replace an older bridge influenced the concept. For some time it was possible to cross the river along a parallel bridge, the sight of which strongly affected Plečnik. In a letter that he wrote to S. Suchardi he stated his attitude about the

proposed demolition of the old bridge and even added a sketch of his proposal. Design of the »Tromostovje« (triple bridge) again offered an opportunity of repeating the mentioned motif, in this case designed according to Venetian patterns (slanting ramps, function, volume etc.).

Use of the old parapet from the bridge, now placed on the terrace of the Gerber stairs⁹, is an example of preservation of historical fragments, often seen in Plečnik's work as a presentation of renewed ancient elements in a new composition and new context.

4.2 The market place (1941–42)

Fabiani already proposed the market place along the Ljubljana River in his regulation plan, and drew an elliptical space on the site.¹⁰ Between 1939–40 Plečnik drew the last plan for the redesign of Vodnik Square, but its completion was prevented by the outbreak of the Second World War. Only the arcade along the river was built.

The composition includes a pavilion at the end, a bridge in the central part, while the design of the »Bellevue« follows that of a façade of a Greek temple. Therefore Plečnik proposed a bridge even in the concept for the market place, making it accessible from the opposite bank. The concept of the bridge intended for commerce is similar to the Ponte Vecchio in Florence or Rialto in Venice, both with similar functions, but also continuing the tradition of bridges on the Ljubljana being used for commerce.

In his first proposal Plečnik planned accesses to the river with stairs and terraces, following ancient motifs. In his second proposal he presented a building that would re-establish the medieval place and city wall, perforated in places to allow views on the city landmarks, such as the castle or cathedral. The completed part of the concept is the colonnade, built on the position of the demolished medieval city wall.

Plečnik again revitalises the motif of the city wall as an important component of historical city image and establishes necessary parallels to viewers from the opposite riverbank. He allows views only to the most important buildings, thus strengthening the landmarks or specific urban nodes (castle, cathedral...). He introduces an abstract motif to the urban regulation concept, i.e. perforated city wall, allowing observation.

While the market place introduces views from the opposite bank that reconstruct a medieval atmosphere, the concept and design of the interior of the market space are from the ancient stoa, manipulated by Plečnik to follow the river course.

The colonnade follows the line of the riverbank and simultaneously relates to Bernini's colonnade in front of St. Peter's in Rome. It begins with a pavilion, resembling the architecture of an ancient temple, also influenced by Palladio's ideas used on the façade of the church Il Redentore, i.e. a temple within a temple. A similar concept, entering or introducing the composition, is the temple to goddess Nike on the Acropolis in Athens – the introductory element into the sanctified complex. On the opposite river bank, Plečnik proposed the construction of a similarly designed café, that should replace a kiosk built in 1932.

5. Conclusion

Plečnik wasn't an urban planner, especially not in the sense of 20th century urbanism, where cities were divided into zones and architecture separated from planning. In his regulation plan for Ljubljana drawn between 1928–29, Plečnik used Fabiani's regulation plan from 1895 as the framework for his architectural proposals.

His plan is based on accomplished proposals and planned ones, the latter presented in the plan dated 1928 as sketches. The sketches include diplomas by: D. Grabrijan, 1927 – Tivoli; D. Fatur, 1928 – Maria square; F. Tomažič, 1928 – Vodnik and Krek square; B. Kobe, 1924 – Roman wall.

Other proposals presented for the first time in the regulation study were later developed in detail as independent proposals (the citadel redeveloped as a museum, accesses to the castle, Hrvatski square, Museum square...). In the following years Plečnik continued to design particular ensembles presented in the regulation plan. These endeavours however weren't aligned to contemporary international architecture and urbanism that were in the thirties already gaining favour even in domestic practice.

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Notes

- 1 Grabrijan, 1968, pp.13.
- 2 Historical archives of Ljubljana, Cod VIII, 3, report from the meeting of the construction committee, 1928
- 3 Krečič, 1982.
- 4 Jan, A., 1998, pp. 41.
- 5 Lučine, 1928.
- 6 Valenčič, 1945, pp. 11.
- 7 Fabiani, 1896, pp. 7.
- 8 Grabrijan, 1968, pp. 21.
- 9 Prelovšek, D.: Jože Plečnik 1872/1957, 1992, pp. 297.
- 10 Fabiani, 1895, pp. 10.

Pictures

Picture 1: Plečnik's planning of Ljubljana (source: Jan, 1995)

Picture 2: Tomažič, F.: Emona, studio work, 1928

Picture 3: Tomažič, F.: Ljubljana, studio work, 1928

Picture 4: Plečnik, 1928–29, A study for the regulation of Ljubljana and its surroundings. In: *Dom in Svet*, 1929, supplement 4

Picture 5: Axonometrics of Ljubljana – from Shoemakers bridge to the Triple bridge (source: Jan, 1995)

Picture 6: Axonometrics of Plečnik's proposal for the market place (source: Jan, 1995)

For sources and literature turn to page 58

Aleksander JANKOVIČ

The legacy of architectural and technical infrastructure

1. Introduction

The article came to life as a consequence of a recent lecture about Australian museum trains and attitudes of Australians to technical heritage. Although the article is focused on the legacy of architectural and technical infrastructure, I will however begin by defining dealings with legacy in the wider context.

Architecture and the whole complex of natural and cultural heritage can be envisaged as a combination of natural assets, the level of development of production means and connected economic relations, and the pertaining culture of living. We should also add symbolic meanings of particular contained elements, seen both as status symbols of an individual (a villa, palace, garden etc.) or an identification symbol of collective identification or consciousness, (town hall, church, stock exchange or other public buildings). In this way we can arrive at the most general and often used model for dealing with heritage. Before embarking with the model towards real examples, I will take a stand towards heritage and relations towards it as conceptual matter, defined in the crossings of the axes »natural-artificial«, »old-new« and »beautiful-ugly«.

1.1 Natural-artificial

If the word »artificial« denotes everything created by the work of man or the technologies created by man to perform the same task, and we limit our discussion to place, conceptually reduced to the pair »rural-urban«, then a retrospect in history would ascertain the formerly strong divide between the two. It was even physically manifested in the shape of the city wall. Inside was organised a built, »artificial« world of human society, exclusively cut and adequate to human use. Outside this space, of course depending on geographic features and understanding, was either a »romantic« landscape or a threatening wilderness, from which one was protected by a locked gateway and/or armed guards. The city wall was the materialised boundary between the urban and the rural, both physical and mental, marking out two apparently autonomous units, that lived through centuries in un-conflicting harmony, until the advent of changes in production methods and processes – the industrial revolution. It allowed the expansion of the urban into the rural by speeding up the rhythm of life, a still ongoing process.

When cities were fairly small and the wall just a few steps away, there was no desire in cities for renewing ties with the natural. Almost simultaneously with the growth of urban settlements which prevented such direct ties, under the slogan »Back to nature!« artificially recreated segments of the natural reappeared in cities. Most had the form of public gardens or parks. A diametrical opposite to these reserved areas within urban environments and as a consequence of urban expansion, a different form for maintaining the last remnants of primeval nature was established, i.e. the national park.