

- expand central pedestrian areas and enforce quality in design of public open spaces: squares, streets, courtyards;
- pay respect to the pedestrian scale of the city (not cars), diversity, vitality and openness;
- extend different infrastructure: transport, heating, natural gas pipelines, sewage, water treatment plants etc.;
- preserve, renew and expand green surfaces (parks, river banks, recreation areas ...).

4. Conclusion

Directing urbanisation processes is tightly knit with social and economic development policies. It demands joint approaches of environmental dimensions with economic and other policies in decision making on all levels of activity. The sustainable approach in urban development is especially important, after all, all activities involved in settlement processes cause the greatest spatial changes and environmental burdening.

Although the political and economic ransformation of Slovenia has been going on for several years, a comprehensive development strategy corrresponding to the new circumstances, with respect to goals of sustainable development, still hasn't been prepared. Local development strategies will have to coincide with global strategies on the national level, that are being prepared (strategy of economic development, national spatial policy and the new spatial plan).

Urban planning is tied to the environment, infrastructure, housing, real-estate and other policies. The condition for coordinated operation of the planning system and spatial management is connecting particular sectorial policies and mutual solution of emerging conflicts.

As was emphasised in the presented plan of Copenhagen, the urban plan cannot solve all planning problems in a city. It does however represent a proposed order, that often simultaneously crumbles because of unexpected spatial acts. Problems are often solved only after they appear. Therefore an urban plan, has to be suitably adaptable and flexible, thus enabling necessary ammendments. Nevertheless, it still has o provide a municipality with strong guidelines and allow its citizens to achieve opportunities offered by the time they live in, to enjoy new living qualities. Possibilities for preserving old parts of the city can increase if necessary space for renewal or urban growth are provided. We have two planning chances: we can give priority to protection, conservation and maintanance of conditions and structures from the past with minimal renewal or we can allow radical transformation with new structures, that can also lead to the destruction of the qualitative urban substance. The best result is achieved, if we can find a sysnthesis or balance between the two extremes.

Urban planning should direct rather than restrict and proscribe changes in urban development, it should apply development concepts, programmes, structural plans. Changes shoudn't be planned in narrowminded teams of various experts (planners, urbanists, architects, landscape architects, surveyors, geographers etc.), but with public participation. The procedure should be transparent and planning goals clearly stated, thus allowing public participation even

in early decision making phases. Cooperation and mediation between different users, the public and private sector, local authority amd potential investors, as well as other actors, such as professional groups, nongovernmental organisations, economic and development companies, is a must.

Dr. Mojca Šašek Divjak, architect, Urban planning institute

Illustrations

Figure 1: The basic scheme of the 1989 Regional plan of the Copenhagen metropolitan regiion (Finger plan) contains urban areas (grey), the traffic structure and structure of centres (central old town core and centres on transport nodes). Source: Copenhagen M. (1993)

Figure 2: Scheme of central activity surfaces with the new supplemental area Orestad. Source: Copenhagen M. (1993)

Figure 3: Structure of central activities in the town plan. Vir: Copenhagen M. (1993)

Figure 4: Network of cycling routes. Source: Copenhagen M. (1993)

Figure 5: Town subcentres – the town core: urban pattern. Source: Copenhagen M. (1993)

Figure 6: Town subcentres – the town core: qualities and problems. Source: Copenhagen M. (1993)

Figure 7: Town subcentres – the town core: long-term development potential. Source: Copenhagen M. (1993)

Figure 8: Town subcentres – the town core: areas of planned renewal in the planning period. Source: Copenhagen M. (1993)

Figure 9: Land use plan and activities in the central town area. Source: Copenhagen M. (1993)

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Vladimir DROZG

Certain Dilemmas in the Preparation of a Master Plan – The Maribor Experience

1. Introduction

Although the contents of the master plan are proscribed in a by-law ¹, a series of dilemmas and questions arise on the method of approaching and executing such a complex and elaborate task. The Law doesn't answer numerous questions so the experience of those who managed to trudge their way through such a labyrinth could be useful. In this article we wish to enlighten some dilemmas that emerge in such a project and strengthen ideas on principles with the experience of the master plan for Maribor.



2. The Purpose and Scope of the Master Plan

Needless to say we will begin by explaining the purpose and scope of the master plan, because they relate to numerous questions on content. The Law proscribes, that the master plan is a planning document defining land use, organisation of activities and design principles for further planning. The purpose of the master plan is similar to other urbanistic and spatial planning documents, namely:

- creating conditions for economic and social development, that can be achieved by providing adequate space for particular activities, rational use ² and spatial design with a rational network of technical infrastructure;
- creating conditions for functional and aesthetic living space and clear (mentally controllable) spatial arrangements;
- defining rules, conditions and measures that enable execution of urbanistic and real estate policies.

At least two sets of contents can be distinguished in a master plan: the first is conceptual, where the goals are optimal distribution of activities, functional land use and good city form, the other is operational, where conceptual solutions have to be translated into "urbanistic conditions" (determinants, guidelines), that are the basis for carrying out real planning documents. The master plan is therefore composed of "expert material", from the conceptual phase, and the normative planning part. The results of a master plan have to answer two questions:

- 1. Where is what and
- Which rules (conditions) have to be applied in development of a certain are.³

2.1 The Time Scope of the Master Plan

Amongst "hot" introductory questions is the time scope of a master plan. Are we preparing a plan until 2005 or 2020? I believe, that this question cannot be answered, therefore it doesn't need more than a principal answer.4 We do not begin the design of a new master plan because the old one isn't legally binding any more (we could of course prolong the old one endlessly), but because the gap between the actual and planned has become too wide or because the contents do not give answers to present development problems. From the formal, legal aspect, validity of a master plan adapted to a long-term plan, whose constituent part it is. From the aspect of content, effects come from solving known spatial needs and problems and not a tightly set time horizon, that only implies the time of achieving planned goals.⁵ In mid-term plans the limits of the built-up area adapt to planned development (complex endeavours), that we wish to achieve in the five-year period before us.

This approach also gives relativity to input data on economic and social development of a city. By attempting solutions to basic spatial problems we approach the ideal image of land use or urban spatial system. It is a follow up of a methodologically irreproachable analysis on the spatial suitability for particular activities, meaning the conceptual framework for distributing activities is spatial suitability, and not quantified needs for surfaces for particular activities. (Maybe this is the place to add, that we have got to get rid of the notion about unchangeable spatial plans and connected corrections to proposed solutions).

2.2 The Town Limits

One of the key issues is also the definition of town limits. We have to aware of the fact, that a town has different limits - some limit the built-up area (i.e. compact city), the others limit the suburbs - the area of most intensive daily contacts. while the third area is the wider gravitational area, defined by the garbage dump, communal zone, infrastructure corridors, recreation areas. All of these areas need planning incentives, thus limiting depends on the goal and spatial problems, that we are trying to solve with the plan. The widest area is by definition the subject of a spatial plan, more than the master plan, while the space within the limits of the immediate built-up area, demands a detailed approach, even with design elements. Since many urban functions are moving into the suburbs and the town is gradually unifying with its hinterland, it is sensible to add this area to the limits of the central town in the plan.

The master plan for Maribor was limited along the outer edge of the suburbs, while the town itself was dealt with in detail. Amongst criteria for limiting the suburbs we used: distribution of important urban activities (e.g. recreation areas, airport, industrial and communal zones, graveyards, traffic and energy infrastructure, protected water sheds), closest settlements (settlement in which the growth index is higher than in Maribor, settlements where 80 % of the work force are employed in another part of the municipality (we presumed, mainly in Maribor), compactness and density (if between neighbouring settlements there is less than 1,5 km of un-built land)) and the criteria of visualising the suburbs (elements of visualising closeness to the town are: density, advertisement panels, road width, density of traffic, municipal public transport network).

2.3 Contents and Approach

The next dilemma concerns the contents or approach to understanding the town. Here we can choose between three approaches: according to the territorial principle, the problem approach (thematic) or system approach. The latter has probably been outlived, because it brings too many unconnected knowledge about housing areas, recreation, education, the traffic system, sewage system. The thematic approach is goal oriented, but sets, worth an urbanistic analysis, should be defined beforehand - a difficult task. The defined sets deal with urban problems in the town, thus enabling a comprehensive overview of issues. The territorial principle, a combination of the other two, implies dealing with particular parts of the town. It is useful when more detailed conceptual solutions are necessary on green sites, vacant areas or renewal areas concerning land use and distribution of activities.

In practice often several approaches are chosen and adapted to specific problems or urban issues. In the selection (choice) the level of urban "definition" has to be respected (we are aware, that with the new master plan, we are in fact continuing and upgrading the contents of the former one) and the nature of urban issues (if these are conceptual, the approach is different, than for those dealt with in real scale). This also means, that all parts of the town don't need the same level of definition. Some areas are already developed and need to be complemented, while in other parts of the town fixed relations haven't been set as yet.



In the case of Maribor, we selected the thematic approach. The town was planned already six times, therefore the global and conceptual solutions are already known and will not change. Following a lucky coincidence, during the time of preparation of the master plan, three urban design workshops were held, dealing with three of the least defined urban parts of Maribor (Tezno, Studenci and Pobrežje – territorial principle). The workshop results were used for establishing new land use and formalising the urbanistic concept.

2.4 Contents of Urban Analyses

Among the dilemmas of the master plan concerning content was also the urbanistic analysis. What do we wish to find out from the analysis, what are the raised issues? The answer is easier, if the purpose of the master plan is clearly stated, as was noted earlier. Basically we were interested in the following:

- defining areas that don't provide adequate conditions for the activities they are intended for (areas with deficient infrastructure, poor living conditions, lack of central activities, recreation and green spaces);
- defining areas were land use of neighbouring areas isn't compatible (inventory of spatial conflicts that are a consequence of contradicting types of land use, noise, pollution);
- defining areas that are aesthetically unclear, with poor design;
- defining bottle necks in infrastructure
- defining protected areas;
- defining areas suitable for particular activities (housing, production, recreation, infrastructure, central activities with commercial or public character).

The analyses had to be goal oriented, with clearly defined issues, it is common knowledge that the question modifies the problem. It is useful to present the findings from the analyses graphically with synthetic indicators and tables, that present the structural characteristics of the town. Thus we gain an overview of the town's system and necessary development.

In the analytical phase of the Maribor master plan we defined the following contents:

• Quality of life in residential areas, high quality urban areas and degraded areas, open and extensively used surfaces, main access roads, open public spaces, town form, traffic in the town core, areas with central activities, spatial planning units, the green system, suburbia, demographic development of the town, physical structure of the town, the town edge, parking. Possible further issues are also: the young and elderly, areas of renewal and restructuring, network of public transport, areas with potential increase in value of real estate, problems of the medieval core (town centre), development poles and areas of limited (limiting) land use (after Koželj), all of which create the backbone of the town system.

The most important findings from the analytical stage were tied into several key issues, that were in the later stage formulated as goals of spatial planning. The table showing some of the structural characteristics of the town that also helped in formulating the goals:

Table: Indicators of the urban structure in the various parts of Maribor⁷

Indicator	Studenci	Tabor	Pobrežje	Tezno	Rotovž
No. inhabitants	13.887	35.810	16.263	11.216	28.512
No. of employed in the II. sector	978	4998	697	4903	8856
No. of employed in the III. sector	247	3325	570	755	5535
No. of employed in the IV. sector	295	5108	582	1167	9331
No. of central areas	4	14	6	4	10
No. of buildings of regional importance	1	8	2	1	39
Primary and high schools	2	10	4	3	10
Banks and post offices	1	11	2	2	19
Health care	1	14	4	3	22
Public sports grounds	1	3	2	1	2
Cinemas	0	0	0	0	4
Parks	0	1	0	0	2
Squares	1	4	1	1	13
Well equipped residential areas	1 out of 3	9 out of 12	3 out of 6	1 out of 4	6 out of 8
Maintained Residential areas	0 out of 3	9 out of 12	3 out of 6	2 out of 4	5 out of 8
Degraded areas	5	9	5	4	8
Telephones %	28,7	34,8	31,4	34,3	50,6

Although the question on analytical accuracy and the level of generalisation is more important in the last phase, synthesis, I believe it necessary to be answered earlier. WE are dealing with the dilemma about how accurate should the analytical findings be; should they pertain to separate plots or homogenous areas? Furthermore, how accurate should a land use plan be? The answer can be merely in principal, but has to emerge from the usefulness of the particular part of the master plan. Land use is intended for directing development, determining concordance between investors and spatial needs or possibilities, as well as determining values of available building sites (also urban rent). Thus, land use has to be defined accurately, as well as categories denying possible misinterpretation or misuse of the master plan.

In our master plan we defined functionally homogenous areas, as well as areas of important activities (e.g. education, health care, recreation) that are points in the network and areas of mixed use (whereby we defined what kinds of use, e.g. manufacturing and industry, housing and services).

2.5 Starting Points of the Contents of the Master Plan

Amongst the questions that have to be answered right at the beginning are also the starting points of the contents of the master plan. How, based on what do we define the contents framework, formulate questions for analysis, separate the spatial issues. These starting points are defined from three sources:

 Theories of urban planning and contemporary trends in urban planning and development (e.g. tertiarisation, sub-



urbanisation, social differentiation, ecologisation and environmental protection, poli-functionality of solutions, motorisation, restructuring degraded areas, renewal, vacating of historical cores, social segregation, the emergence of out-of-town shopping centres). We have to be aware of the fact, that social development in Slovenia is lagging behind more developed countries by 10 – 15 years, therefore the transfer of contemporary, often "trendy" ideas is questionable if not completely wrong.

Deficiencies of the present master plan (especially viability and implementation of valid regulation, the gap between planned and real conditions, suitability of solutions from the former times, recognised spatial issues and conflicts). These findings are gained from analysis and later

reformulated as goals.

 From the established urban problems, as perceived by the lay and professional public. Here the opinions of the inhabitants and authorities operating in the field of urban management has to be respected. One of the methods for achieving public participation are surveys concerning urban deficiencies (as we did in Maribor), public tenders and preliminary debates in local communities.

2.6 Checking the Motives - Basic Goals

Maybe it would be useful to mention the goals used as basis for analysis, synthesis and definition of measures for execution. The choice of goals is important because it deals with real circumstances in the town. Simultaneously they are a unique review of spatial issues in the town and point out possible measures for implementation. In the case of Maribor we had the following **basic** and synthesised goals:

- improving the quality of the living environment: managing supply and service activities in residential areas, relieving roads in residential areas, improving accessibility of the town centre, sub-centres and work places, improving accessibility to the public transport network, increasing maintenance of the environment;
- improving traffic connections between particular areas: design of circumferential roads and intermediate connections, reorganisation of pubic transport, design and widening of cycling routes, use of roads according to their carrying capacity, relieving bottlenecks in the traffic network;

dispersion of stationary and dynamic traffic: management of a parking regime in the town centre and residential areas, relieving the centre of traffic, defining adequate parking surfaces and sites for multi-storey garages;

- including the natural environment in the town structure: protection of the natural environment, maintenance of green surfaces (parks) in deficient areas, maintenance of recreation areas, maintenance of the green belt around the town;
- building the town: revitalisation of degraded areas, activating vacant and extensively used surfaces, renewal, prevention and clearing of dispersed settlement in the suburbs, maintenance of open public spaces, establishment of poli-functional sub-centres;
- continuity of urban form: adaptation and improvement to existing built structure, creating aesthetically homogenous areas, respect for the human scale in new development;
- environmental protection: improving the quality of air, diminishing noise in residential areas, building the communal network, introduction of efficient infrastructure networks that use less space and energy;

creating conditions for sustainable spatial development: ensuring spatial conditions for development of industry and manufacturing, social infrastructure, sports and recreation, development of technical infrastructure, development of different housing types and more efficient management of building sites

3. Conclusion - Conditions for Execution

The last question are planning conditions for the implementation of the master plan. Which conditions should be included in the master plan and how. As we mentioned earlier, the latter is an important part of the document. Conditions are defined in view of the whole town, although they apply to separate plots, road or building. Without an overview of the whole town as a system, conditions cannot be defined. Therefore, for urban regulation formulated as conditions, it is necessary to prepare adequate analytical and synthetic material. Sources and literature provide contradictory proposals concerning urban planning conditions. In developed systems of urban planning, the most often used instruments are:

- land use;

 amongst design instruments: FSI (floor space index), building line, height (floors) and building type (e.g. detached, terraces, apartment blocks).

Conditions have to be regulative and directive. The most important criteria for choosing urban planning conditions are the needs and expectations of local authorities, that check the adequacy of the documentation for a proposed development and of the expert consultants who prepare them, whereby the conditions provide the basic legitimacy for their involvement.

Urban planning conditions have to be presented in homogenous areas, such areas where the same planning conditions can be enforced. In the case of Maribor we named them spatial planning units. These are the basic urban cells, in which detailed land use and design principals are proscribed. For each of these 96 units we defined the following: land use (shares of built-up areas, green spaces, roads, production areas etc.), FSI (for areas of new housing development), traffic network (category of road and number of parking spaces), urban planning restrictions (e.g. protected areas), building line, height (number of floors) and type of development (apartment blocks, detached housing, office blocks etc.). 11

We often hear that contemporary urbanism is a chance for small towns, probably resembling Slovenian towns and of a similar size. We shouldn't miss this chance!

Prof. dr. Vladimir Drozg, geographer, Department of Geography, Faculty of Pedagogy, University in Maribor

Notes

- Instructions on the contents and methodology for execution of expert guidelines and spatial components of municipal planning acts, Official bulletin of the Republic of Slovenia, No. 20/1985.
- The term "rational" mustn't be understood only from the economic sense, but in the ecological and social sense as well.



- In practice and in principals concerning the master plan often partial understanding is encountered when conceptualising the purpose of a master plan. Some actors visualise only the visionary aspect of a condition of spatial organisation in the future presented on a conceptual level. Undoubtedly this is an important component of the contents, however it doesn't suffice. The master plan is therefore a development, management, design and legal act. If one of the aspects is missing, then the purpose of the plan was not achieved.
- 4 Urban planning cannot be understood as forecasting, but as understanding the present and thus indirectly directing urban development.
- 5 A city is never completed, the scope of any plan is the horizon of known possibilities and needs, predictions and expectations (Albers, 1990:209).
- Here unintentionally the feeling emerges, that from unreliable forecasting of needs one embarks on equally unreliable estimates of spatial capacity; from speculative economy on to inadequately known ecology. Therefore it is necessary to understand the presented dilemma more as a method of thinking about space and city, rather than a devised working method.
- 7 From available data unequal facilities of different parts of the city are evident, adopted as one of the key urbanistic problems and starting points for improving the urban system.
- In our circumstances where the organisation and regulatory mechanisms of the real estate market are deficient, the importance of these contents are not adequately evaluated. Improvements to the planning system (above all its transparency) and the real estate market will reinstate land use as one of the basic regulatory policies for built-up areas.
- ⁹ Such attitude confronts a strong counter arguments, especially in rapidly changing circumstances and poor knowledge (i.e. needs and possibilities) of future development. If the attitude stands, then the question is, whether urban planning has any meaning at all?
- Here I would like to point out the difference between often utilised uses of zones, that have, after a certain period, lost the driving reason for their former definition. For planning units morphological or physiognomic elements are much more important than functional elements.
- 11 This phase hasn't as yet been completed.

For literature and sources see page 31

Ivan STANIČ

Motives of the master plan for Slovenj Gradec

1. Introduction

The master plan is a long-term articulated document containing visions of spatial development of an urban settlement and indirectly its gravitational hinterland. Although most Slovenian towns are composed of virtually rural settlements, they mostly function as extensions of a central town. Therefore it is necessary when conceptualising the parameters of such a document, to consider and plan the surroundings as well. Following present conditions in the physical environment, which are a consequence of the last decades, and recent developments in the national political and economic system, we understand the master plan as an articulate and spatially positioned strategic framework for future spatial intervention while focusing on public interest 1.

The driving motive behind the ammendments and supplements to the spatial components of the municipal plans of Slovenj Gradec and bringing the existing plans in line with recent expert findings, were innovations to the master plans of the settlements Slovenj Gradec, Pameče, Troblje, Podgorje, Šmartno and Tomaška and Turiška vas, certain development acts and iniatiatives by individuals, as well as companies for new activities.² Some of the valid guidelines and decisions in the spatial acts didn't coincide with the present historic moment, social conditions and expert findings, thus only such ammendments and supplements to the plan were proposed that are essential for further spatial development procedures and future management of the municipalities territory.

These are mainly actions on the central settled areas with rectifications to the road system and communal infrastructure.

In the starting stages a series of expert material was added to the already voluminous research previously carried out with emphasis on the following topics: demographic analysis³, tourism ⁴, development strategy and the master plan ⁵, countryside and dispersed settlement ⁶, The spatial plan of Slovenj Gradec – forests ⁷, urban design and planning guidelines for selecting the railway route through the municipality of Slovenj Gradec ⁸.

Following this fairly elaborate research stage, we prepared the proposal for spatial components of the planning acts with standard elements. The proposal was put on exhibition (2nd October-2nd November 1998) and during this period public hearings were carried out in the local communities. During the exhibition we organised an urban design workshop under the topic Spatial possibilities for the development of entrepreneurship and production activities in the settlements Slovenj Gradec, Pameče in Troblje. The plan was adopted by the Municipal Council in October 1999.

2. Development of activities - motive 1

Development of activities in Slovenj Gradec is based on the following facts:

Construction of the interrmediate route on the 10th European corridor, the connecting railway line that will com-