

MANAGEMENT OF INNOVATION INNOVATION POLICY IN THE URBAN DEVELOPMENT

Maria BOSTENARU DAN

CS Dr., „Ion Mincu” University of Architecture and Urbanism, Urban and Landscape Design Department, e-mail: maria.bostenaru@iaim.ro

Abstract. This paper presents the application of the theory on innovation through strategic planning, different from traditional zoning, a way to take participation into account, for a neighbourhood from the begin of the 20th century in the north of Bucharest. For the analysis the innovation relied on the application of the perception of the image of the city according to Lynch's method. The formulated mission is in accordance with the status of protected zone of the area around the Dorobanți place. The theory, critically seen through the systemic theory of Sandu (1988), comes from the „Final report on the ecological city“ from the OECD Habitat II conference.

Key words: Lynch, strategic planning, protected zone

1. Introduction

Urban planning is almost as old as the history of mankind and yet there is still room for innovative ideas to make it new. Almost every major style period has a priority program architecture, but also new approaches to urban planning are brought with it. Previously, it was the military, for "strategic" reasons. Since the mid-19th Century, it became secondary basis. The cities developed, some fast becoming the major cities in the second half of the 20th century. Of the previous criteria remained one: it is continued to develop a strategy, but this time a planning strategy. This paper tries to illustrate what is the innovation, if the boundary of the city can still be set instead of by physically-present wall by the omniscient planner planning policies.

This paper is divided into two main parts. In the first part the principles of an

OECD Report on "Final Report on the Ecological City - Innovative Policies for Sustainable Urban Development" summarized and commented. The second part is a case study. The principles outlined are implemented within a fictitious project, but on a real site, rich in urban heritage.

2. The theory: the O.E.C.D. Report

In 1996 the OECD published the "Final Report on the Ecological City - Innovative Policies for Sustainable Urban Development" (OECD, 1996). The report introduces as in the cover the contemporary conditions of people's needs, which are necessary for additional measures to the economic implications these have and what they need for a policy framework. The report consists of four parts:

- The unsustainable present
- Cities, innovation and inclusive policy

- Economy and urban environment
- Conclusions.

For this work, especially the second part is interesting. This is discussed in more detail to make the innovation an instrument of sustainable city.

2.1. The role of innovation

Creativity is the process in which new ideas are born during the innovation process which is to be introduced through these ideas. The role the national policy has in the frame is introduced, while a transsectorial approach is required. The main purpose is to achieve integration, but also mixing and flexibility. It is worth noting that innovative designs are not more expensive than the conventional one.

According to Beer, every system is organic and therefore inter-related. If it is also horizontal, vertical and sorted, then it is hierarchical. The goal of stability and differentiation determine its variability. The most sophisticated systems are adaptable by their entropy, feedback and self-control.

The balance of an ecosystem is secured by the any change is launching a new feature of the system. The so-called s-functions tend to preserve the current state, while the dis-functions tend to more stable conditions for a change. A flexible system allows, through a variety of stability conditions, the positive action of the s-functions. Its entropy is high.

2.2. National and local barriers to better policy

The first step in transcending the barriers is their explanation, and exceeding the limits is the same with successful performance. O.E.C.D. therefore proposes the next areas for research:

1. the measurement of environmental imprint;

2. the social aspects of sustainability (as the progress toward sustainability is stopped by improper lifestyle);
3. 3 the implications of the market towards sustainability;
4. the characteristics of the terrain and land use planning systems and economic instruments which are adapting to the promotion of sustainability in this sense;
5. to promote the technology and integrate the efforts of policy with other areas. Here are yet to be solved the following tensions: between social, environmental and economic stakeholders, and between long-term and short-term demands, and between centralized and decentralized structures, between closed and open systems; between bottom - up or top - down strategies. The unresolved tensions follow the implementation of better policies. Therefore O.E.C.D. recommends some measures. The first package of measures includes an environmental budget, to determine the impact on the environment and environmental management system. The next package consists of the requirement of cooperation, partnership and public participation. The final package is limited to the economic instruments. The main role in innovation, according to the report, is assigned to the meanings of new information and participation.

2.3. Information

Information is necessary but unfortunately not enough. It is important for the formation of public ideas, and thereby for the effective government.

Public ideas help, if appropriated, the change in the ecological understanding. For the conservation and use of appropriate information, information strategies were constructed, which are based on education and discussion. Catalytic events and organizations create opportunities for meeting people with different views. This exchange of ideas is encouraged.

An example of formation of public ideas stimulated by the city major was in 1990-91 the Green Belt in Frankfurt by Tom Koenigs.

The information is available in a complex relation to values and beliefs but it is also in proportion with the act and with the context. That is why it is so important that new ideas appear through public standards management. By this it is possible to follow new, sustainability-directed paths on the basis of new information programs. To get good information is not enough. It must also be used. It is still difficult to use information. One way to overcome this is the cybernetic approach.

More information can be obtained by new methods. Indicators are no good tools, because there are no useful ones of them. To define a threshold would be very helpful. This was a new urban concept introduced by the report, which was considered in connection with the carrying capacity of the environment. Much more potential but hidden was found in the GIS systems, but which is was at the time unfortunately not been sufficiently exploited. In urban planning curricula they are not sufficiently used even today. A special use is to measure their current performance relative to a reference system. New conceptual tools

for data analysis and policy development are: the systematic approach to ecosystems, ecological time handling (including new jobs, working hours number) and environmental capital calculations. Appropriate instruments are still lacking. The Urban Ecology must develop its own analytical instruments and methods.

The unit of measurement for the relative expansion of a city there is the ecological footprint. It is described in connection with the case study in this work.

Future directions include: scenarios, vision exercises, simulation. Simulations to make advantage of virtual spaces, but they need to be refined by reference to sustainability. All three directions have to be cleared out by bringing their visual expression. The data in these new forms of expression must be installed to be edited in the early stage of development varied according to the integration goal.

Joseph Huber: "Naturally, there are practical limits of sustainability, however, it is because of the networking and dynamics of ecosystems that is not possible to limit the time of attainment to predict reliably."

The last action is so different from the essence of the system, the system explodes.

2.4. Involvement

Participation plays a critical role for sustainability. It provides feedback, which is the function so important for of a system. In this way, the sustainability problems are reduced to the scale of the resident. The consultation and participation determine first the problems of sustainability, which are allied with the

habitat, because they are visible at the level of the value of life. The consultation is a promotion mean for the heavy decisions possible without political interference.

Effective participation is not possible without appropriate policy and this must always be performed with caution, because participation can sometimes lead to inequality.

Mu0 MF0

MU1 mf1

Mun Mfn

urban concept

(Sandu, 1988)

Nevertheless, the participation must be refined as the key policies in a relationship with local needs. The innovations strengthen this area. Participation is the way whereby the sustainability demands are met.

2.5. Innovations in strategies, plans and designs

Strategic planning demonstrated by the large number of their idea that there is induced innovation. Summarizing the strategic planning in general, one or more views for a long-term planning of urban regions includes strategic, practical implementation of these views directed to submit proposals. These views need to be flexible in order to respond to the constant change in global conditions. A long-term view is not a final plan with specific livelihood. Strategic planning can direct the policy, without converting them into a settlement. This creates a strategic planning system.

At various levels action plans will be managed to ensure a good addition regional development. The regional

sustainable development focused on the balance of the surges and the region. The bioregional views represent the functional relationship between urban form and food production. The landscape is transformed in the course of the productive use and that is a transhabilitation project. In the context of a general framework, there are also model designs. Such are the demonstrations, and pilot-designs. There are many successful examples, such as pilot designs for transportation and land use for demonstrations or settlements and conversion. Both categories are interesting by planning their integration capacity. These opportunities will also bring on these routes for greening programmes to the ecological landscape in the city.

On the economic side of these innovations, there are new techniques. They are most important for urban change and to put emphasis on are voluntary agreements. Such examples are: the partnership, the charter contract and the contract. An extension to the networks. Participative projects such as the mentioned Green Belt in Frankfurt with its Charter, or the IBA Emscher Park exhibition, are examples of voluntary agreements presented in Bostenaru (2007). Technical colleges are also of considerable interest. The transsectorial strategic planning allows separations to limit adverse side effects.

The innovation is in general characterized by that it supports decentralization, participation and intensification of the activities. It strengthens the connections between sustainability incentives. Most innovations are transsectorial and inclusive.

The city is characterized by complex integration and moving space - synthetic: fluid. In the context of a multi-functional integrated structure it ensures environment fluidity the overall unity of the processes, while allowing a variety of activities (Sandu, 1988).

2.6. Innovations in the regulation and financial undertaking

The scheme is a traditional response to the innovation. But the rules must not only form the basis for a long-term design. At best they should be handled as a broad unstatutory framework, showing the direction in the short term and long-term flexibility. Thus, the control of the dynamic nature of the system is subjected to the innovation accordingly. A good example is the "ecological footprint".

Innovation is important in all stages of a project, in the evaluation and in the diffusion of information and new insights. The term "sustainability planning" sterilizes the experiment, the environmental capacity can be achieved within the framework of sustainability to explain.

Innovation in the legislation must be connected with the integration of sectorial approach to the statutory framework. It must also be adaptable to be able to synchronize to the dynamic process of urbanization. As a case study to propose two ways to solve problems of exclusive and mono-functional zonification be "the environmentally healthy technology" and the industrial symbiosis.

The scheme can not be seen separately from the financial instruments. The environmental tax is more effective in achieving environmental goals than traditional control systems control. Of

particular interest in the context of financial instruments for environment-related investment is the combination of environmental areas with environmental jobs. The increase in the control and supervision in the areas of transport and environment-related jobs have not yet succeeded. The high capital investment that is asked of sustainable forms of urban infrastructure demands a new approach to their funding. Taxes and debt have beneficial effects on the environment due to the change in behavior of producers and consumers.

An original idea that encourages innovation, was developed by the design of ecological city. These are the SPA, "Sustainability Performance Areas' (= sustainability performance areas). To build such an area requires three steps: the local community, the regional authority and the declaration of the zone. Finally, decentralization and the integration can be achieved in Variety. After 3-5 years, the SPA will be assessed. Thanks to their achievements in the field of openness, integration and adaptability of the SPA have the strength and vitality of the bottom-up strategies. Thanks to the elimination of bureaucratic obstacles, SPA for a faster implementation of ecological principles are very helpful, but they are not a replacement of the strategy but are temporary measures that are integrated into the overall planning framework.

The systemic understanding of things is a result of ecological understanding in the territory (Sandu, 1988) (Petrisor, 2010). Since the concept of sustainability is being approached systemically, an optimal system must be found for each criterion to compare different positions. These must be

analyzed according to the global stability, versatility and adaptability of dynamic systems. The cybernetic analysis-synthesis approach, is the formation of a system ahead from his description. The deal for control is inevitable, because in this education a certain functionality and certain properties are considered. The cybernetic approach requires modeling. There are various models for their validity type. A development model category, where the answer always changes in the environment is the dynamic model (model behavior). This is a mathematical model.

2.7. Assessment, diffusion and education

The final step in the implementation of the innovation is the evaluation. It is important to examine the usefulness of the approach over time or compared with alternatives. It also helps the necessity for immediate action with the need for analysis to compensate if the development must be redefined. The data collection methods and analysis methods must therefore be conceptually developed. An interesting example of an appraisal of an information system with power, in the Netherlands, is the city dome concept - an entire city or district is considered an environmentally-coherent space if continuous interventions have different environmental effects. We tried to apply city domes in the planning of a museum in the Green Belt in Frankfurt (Fig. 1).

Most areas have greatly valued innovation potential: the environmental review, the ecological footprint, the environmental report. In this sense, a refinement of the evaluation of sustainability indicators: EIA - the definition of environmental

exposure and EIS - to determine the environmental impact. Both demonstrate the need for more informative expression of arguments.

The dissemination of knowledge has to come out of the preservation of the results in the implementation of ideas.

The high communication potential of the Internet is under pressure twice: not all innovative materials are suitable for distribution via the Internet and access was expensive at the time of the report. The result is that traditional forms of communication such as mass-media still play an important role in the dissemination of information.

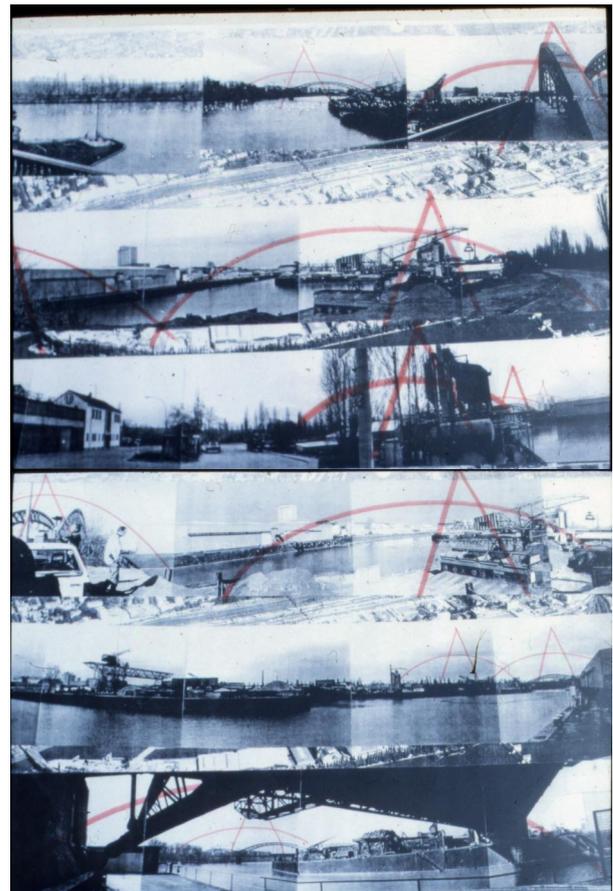


Fig. 1. City-dome project for a Museum of Water in Frankfurt on the Main

Environmental education emphasizes the personal involvement and motivation of action, the criticism

intensifies the capacity to identify problems and formulate the understanding setting forth dynamic properties. These are: the trigger blow, the independence and responsibility. Environmental education has primarily the role of converting the ego-citizens into eco-citizens. Citizens are aware of the fact that the city and the environment are no separate areas forming an ecosystem, and that citizens are also to answer to their problems they blame.

3. Conclusions from the report chosen to be implemented in the case study

The first aspects highlighted in the report in which innovation is present are those related to information and involvement, or participation. Information is the first step towards participation, through the rights of the citizens. In planning and design this democratisation of planning can be transposed through strategic planning.

In our approach to the case study we applied strategic planning: for directing the development we developed a vision, for which there are action plans at different levels of planning from the urban level to that of the building element over the level of building, instead of just different urban planning levels. But the key element in our approach to strategic planning are not the social aspects of voluntary agreements in the democratisation of planning which is participatism but the approach to the problem, with its many facets. For this the SWOT analysis has been approached in an innovative way not defined by the report, following the way Kevin Lynch read the „image of the city“.

This project in itself can be a demonstration or pilot project. The next level on which we see innovation is the one in regulation and financial undertaking. The regulation we propose is drawn on the basis of the innovative analysis. And one of the actions to achieve the objectives of the strategy is the establishment of an environmental budget. The final step to achieve innovation is the education, which has been designed as a feedback mechanism.

4. The Case Study: Innovative Operations in Urban Areas Example "Piata Dorobanți", Bucharest, Romania

Piata Dorobanti is a place in the middle of the northern residential area of Bucharest, the capital of Romania.

The area to the West of Piata Dorobanti is a maze of so-called protected zones.

4.1. History

The site is located in the residential area in the north of Bucharest, bringing together historical plots of protected areas, and thus exemplifying the principles about cultural value (Crișan, 2004). In the west the whole place are Protected Construction Areas 48, 49 and 53 which have recently been the subject of a workshop on conservation of modernist neighborhoods (EAAE-ENHSA, 2011) (the presentations at the link include a plan of the area marking all protected zones).

According to Lascu (1997) the first plot of the area was the parceling Blanc (~ 1895) too remote from the Dorobanti square to influence our plans. The second plot (Lascu, 1997) was the parceling Filipescu (1912), which includes the park and that tangential to

radial artery rings around the park with high standard housing. The third plot was park Bonaparte (1913) (Lascu, 1997), south of Paris street that divides into two the area, but not reaching Dorobanti Way south of the Dorobanti square. It includes some of the Dorobanti Square. Plots Filipescu and Bonaparte are the largest ones with over 500 m². There was a parcelling by the "cheap housing" Society (1916) to fill the gap until the blocks on the socialist Avenue Dorobanți, the parcelling of Edilitatea society (1922) south of it, the parcelings Mornand I and Eng Teodorescu (1922) west of the Television tower and a small plot Zamfirescu (1925) near the Government House (Lascu, 1997). The plot Mornand II (Hubert, 1928) surrounding the tower of the Romanian Television (Lascu, 1997). In the interwar boom decade there were made plottings for the society "Mill" (1935), "Mechanical weaving" I (1935) and II (1940) in south-east, adjacent to the park Bonaparte (Lascu, 1997). Between the two Filipescu parcelings there is the parcelling Mornand and Gherghel (~1922) (Lascu, 1997).

The Filipescu plots (Mortu, 2012) built form protected area 48. The plottings Bonaparte-Mora (Gherghel) build the protected 49. The plottings Mornand I and Part II of Mornand remaining, which excludes Television Tower, built protected area 53. Marcel Iancu, Henrietta Delavrancea-Gibory and Tiberiu Niga are some of the leading architects whose urban routes cross this area, stylistically mixed with up to 4-5 storey housing, individual or collective. The area is rich in precious architectural buildings individually, not only in whole (Fig. 2).

We elaborated a concept for an intervention in that urban area, following the ideas suggested by the report. The objective was the process of urban development through the managerial point of view, to know and understand the role of the architects in that process.



Fig. 2. Styles existing in the analysed neighbourhood: Neoromânesc/ New-Romanian (Virginia Andreescu Haret, Casa Stănescu, Str. Paris 43, 1923); Modernist (Henrietta Delavrancea-Gibory, Casa Vâlcovici, str. Londra nr. 44, 1934). Photos: M. Bostenaru 2010 and 2011

4.2. Objectives

Urban development is a process. In the structuring and development stages various actors are involved, which operate under different dynamic conditions and within different reference systems. The architect and urban planner are only two of these actors. The motivations and expectations of these actors are

different, sometimes contradictory, and have their own dynamics. In urban development, the individual interest and the collective interest are often contradictory, opposite are also the private interest and the public interest while local interest is confronted with the global interest.

Through his activity the architect is in the middle of this interaction fields. Fingerhuth and Koch gave a model of how these fields are (Fingerhuth and Koch, 1996). The urban society formed in each case a legal and an institutional framework to control and manage these relationships to the development process they can be. This creates a non-static model, whose dynamics in the last decades have even accelerated, the number of players has grown and their style has become increasingly diverse.

4.3. Procedure

A different kind of urban intervention than the conventionally was processed than that "prescribed" by the authorities.

In the traditional model, God-father-one, the current planning and future image of the city, and the way there were present already in the design phase, the plans were "manufactured". The study area was uniformly handled at different scales, problem areas identified and interventions designed to transform this.

Only a zoom level from the general plan to the more detailed ones has made consideration of the possible neighborhoods. In Fig. 3 there is a collection of such urban analysis.

Within the strategic planning (Fig. 4), however, is the master plan is a

development of a pictorial vision based guidance for the interaction between all levels of planning and all stakeholders. It's about the organization of urban opportunities. The emphasis is not on the structural appearance when problems are identified, but the problem itself, in its many forms.

Problem - related orientation, differentiation and activation of the actors and identification of target groups in this case lead to the issue raised in the report, education, personal implication and motivation action highlights.

A more detailed description of the zone emerges from the results of this first phase.

To schedule the tasks, a strategic intervention in the area around the square, was processed in two stages. The first stage was the identification of problems and potentials in the field, enabling to make a diagnosis and a mission has been formulated.

Innovative was mainly the approach to the analysis. No uniform coverage of the area, but one that can highlight relevant scale independent urban design elements. It was developed following the Kevin Lynch method outlined in "The Image of the City" (1960). According to his theory a city can be read on the basis of several elements: features, paths, zones, nodes, and borders. For the analyzed area we accurately identified these elements. Fig. 5 contains the 2 sheets where they were drawn according to the conventions of representation contained in the book. The written report after the first phase (and

potential problems, diagnosis and Mission) was added as Appendix 2 to this work. In this not only the participative approach, which is subject of other detailed studies (Bostenaru, 2004, and Bostenaru 2007), but also the economic measures towards the ecological city were included.



restructurable zone by compaction remediation
 Boundary between the zones / junction of land for road
 Mainly pedestrian / the appropriate public facilities are established in accordance with respect to the pavement, urban furniture and separate bicycle paths
 Main roads / streets two-way / speed limit 40 km / h
 Service roads / one way / driving speed of 30 km / h / Public Transportation
 possible volume accents
 maximum height of the cornice for a road
 minimum height of the cornice for a road
 Access routes for the tunnel under
 public transport stops
 Distance between the baying of the property to the street and the baying of the building
 Parking
 Care access for motorized vehicles to service facilities

Examples from the legend:
 Mixing zone with mainly residential use
 percentage of use of land 60%
 1.0 to 1.5 total floor area over land area
 max. 9m height
 normal admission / it is recommended to use the old built substance and built on the old parcelling

Fig. 3. Realisation of a classical urbanism study for the zone.

After formulating the mission we choose one of the sub-goals and designed a strategic plan for its implementation: the sub-goal "maintaining the character of the district in future interventions", which is

in accordance with the protected zone state.

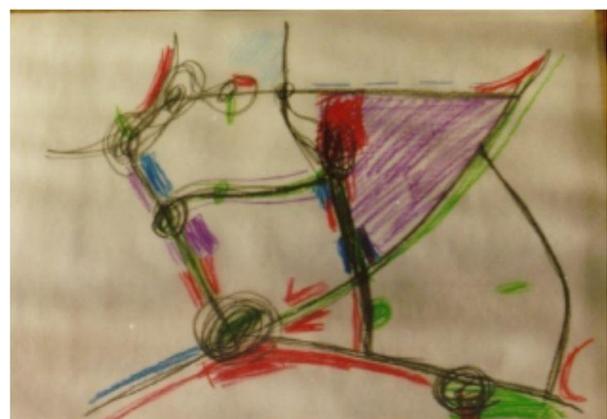
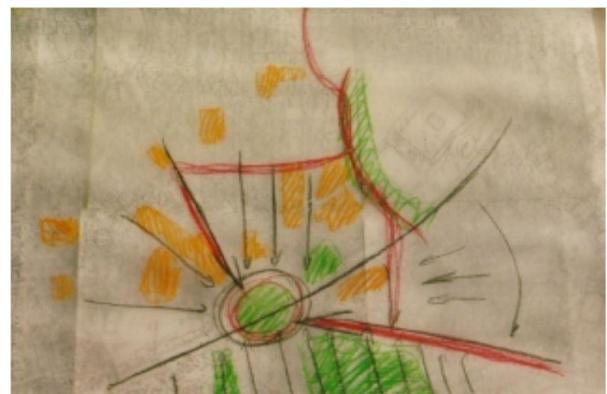


Fig. 4. Emphasize on the potentials through the filter of urban zonation (a); integration of the vision after the analysis of the urban site.

APPENDIX 1: Study of the problems and potentials of the zone (SWOT analysis)

RELATING TO THE CITY ZONE:

Place

– Potentials

1. Located in the zone of the main development direction of the city

2. Located in the zone of large lakes (specific micro-climate)
 3. Located in a zone where the population lives with a certain standard of living
 4. (Age)
- *Problems*
1. The convenient location attracts real estate speculators

Use

- *Potentials*
1. Mainly residential, quiet neighborhood, intimate character, respect for the home
- *Problems*
1. Inadequate and poorly located equipment (gas station)
 2. Southern Zone: the development of a secondary center of the capital to affect the relationships between activities in question
 3. The risk that by changing the percentage of soil occupation - it is that of a "sleeping quarter"
 4. Parking opportunity?

SPECIFIC STRUCTURING AND ORGANISATION CHARACTERISTICA:

1. It is a place on the course of a street, no one at an intersection
 2. It is a place which brings together, through the convergence of ways
 3. It separates - the differences in the network (zones)
- *Potentials*
1. Meeting place, public valences (the lack of public spaces in the neighborhood)
 2. Potential of a commercial fords
 3. Traffic problems do not have the highest priority
 4. A possible wish sign - it reflects a different scale for a specific zone element: the square

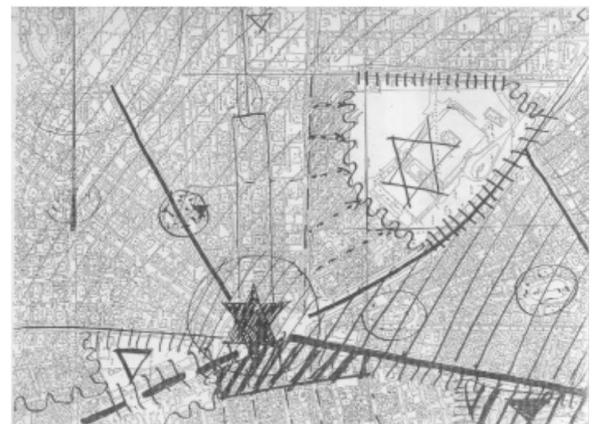
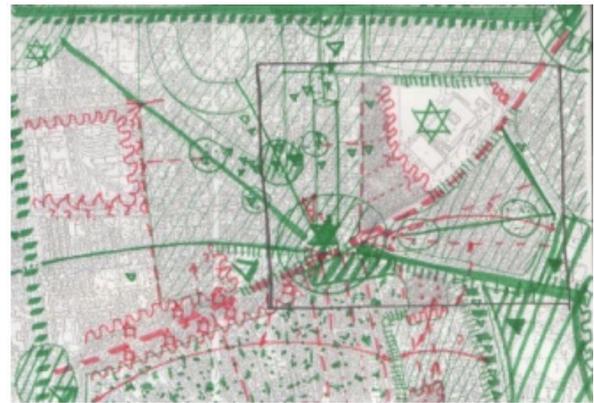


Fig. 5. Assignment of problems and potentials for the urban zone, with red problems, with green opportunities (a); Concentration of the potentials in the more narrow zone, from the point of view of perception (symbols like in Lynch, 1960).

- *Problems*
1. The place is not even a feature in the way for the people, while the collector streets in the zone have this statute. The character of the place must be redefined.
 2. The green area is badly put in value, surrounded by roads
 3. The course of the road Dorobanti is "broken" at Dorobanti place, the zone shows connection problems at an urban scale.

NEIGHBORHOODS:

Roads

- *Potentials*
1. Two types of screening:
 - Parallel and orthogonal-concentric jet

- Variety and unity in the treatment of land
- Doubling of the green range: squares, roadside trees
- 3 types of green space: spot, point, line
- The district has character
- Flowing traffic surges
- Characteristics, positive evaluation of people

- *Problems*

1. Communist time brutal interventions have interrupted the streets
2. The Dorobanti street has no character and the intersections with side streets on the east side are too often
3. The reference to public transport needs to be redefined, with the public and private interests to be weighted
4. There are still empty corners

THE VOLUMETRIC CONSTRUCTIVE STRUCTURE:

- *Potentials*

1. The variety of styles allows for the successful integration of existing and planned buildings
2. Percentages of soil occupation provide an additional quality that it is private green area
3. The nodes are treated in their overwhelming mass

- *Problems*

1. In the North East there are different types of buildings, insertions, free on the site. Not always reference was made to the road block. Newer procedures, which run the risk of exploiting the built percentage at soil and destroy the volumetric-spatial constructive

structure. Low density is a quality but also a financial problem, except for some social categories and classes, segregation - can lead to anti-social acts

2. If floor area occupation and floor space index increase, the value decreases
3. Among the skyscrapers and high rise buildings there is little control

HOUSING TYPE:

- *Potentials*

1. Mixed Residential ways but primarily in single-family homes. There is a certain representativity
2. The diplomatic missions are mostly residences, not consular services

- *Problems*

1. The pointed out discrepancy both architecturally and in terms of location between the input and multi-family houses
2. The equipment facilities are not accompanied by a corresponding pedestrian trail
3. The proximity of the parcels with housing to those with institutions (building of the National Television, the high school) are not solved

DIAGNOSIS:

Potentials, which reinforce each other

- location - people with a certain social status. The ability to locate equipment facilities in the zone of the place
- almost exclusive residential use. Problems that are mutually reinforcing
- real estate speculation - change in density

- not appropriate treatment of public space - the bad perception of this space
- quality difference between the single-family and multi family homes - social segregation

MISSION:

- maintaining the character of the neighborhood as part of future interventions
- reduce the segregation between adjacent zones
- the place Dorobanti, a traffic zone, converted into a meeting place
- integration of character of the Television building in the urban fabric
- mediation between the public and private interest

*APPENDIX 2: the approach to intervention
in the zone*

STRATEGY:

OBJECTIVES:

- reduction of the functional separation
- optimization of the relationship density / transport needs
- decentralization of diversity in land use
- reduce transport demand by increasing the accessibility
- achieve urban integration and flexibility by mixed use
- solution of the tensions that could lead to damage to the urban environment
- education of the people to appreciate the potential of the ecological city
- support the changes that may occur in the built environment through flexibility and adaptability in the political environment and economic structural change

ACTION:

1

- establishing an environmental budget / a credit limit by the local administration for the sustainable development of the district
- determine the impact of new developments on the environment
- develop a control system of new developments

2

- attract as many of the participants as possible for their cooperation
- an increased partnership system
- to ensure the support of open participation to the success of the new development

3

- determining the financial instruments

4

- implementation, with time-wise evaluation of the results and redefinition of the first items if necessary

DETAILED DESCRIPTION OF THE MEASURES - IMPLEMENTATION INSTRUMENTS:

1*a) definition of an environmental budget*

- *The first possible measures are:*

- Elimination of tariff barriers which prevent such a development-
 - possible a change in the tax system might encourage such a change
 - the approximate definition of a capital subsidy, which is necessary for this development

b) determine the impact of new development on the environment

Lacking other instruments of measure the traditional regulatory instruments can be taken: the indicators.

Is called, there is also a different measure, the "ecological footprint". The track measures an environmental impact based on a surface, as biophysical unit. Each category requires the consumer or productive capacity absorptive of a limited area. These requirements provide for an agregat area, called the ecological footprint. This area represents the carrying capacity of the economy and the escalation of the power consumption of goods throughout the ecosphere.

The future development may be to gather such data digitally illustrated by scenarios, visions and simulations.

c) develop a control system of the new development

The strategic plan contains the views for a long-term planning of the urban region / maintaining the character of the zone, the reduction of segregation between sub-zones, the redefinition of the character as a meeting place, integration of the architectural object of the television building. It is oriented urban policy, but the strategy is not to control. It contains strategic rules for the implementation of these views / economic mix, redefinition of public space, development of a new control system.

As part of the strategic planning the means to achieve the intended goals are assigned.

The next step is the preparation of operational plans. The operation plan does not only refer to the zone, the object of study, but also to the fluxes, combining this with the other zones. The operational plan may be in this case a model project. It can be a demonstration of Siedlung restructuring in terms of transportation and land use.

2

a) win as many of the participants as possible for their cooperation.

An important role have the voluntary agreements. The first step in this direction is the making available of information. Another is the encouragement of the private sector regarding its role in the development of the zone.

The information is important for the formation of public ideas. It leads to the formation of public ideas. These in turn lead to the appearance of new guiding norms and therefore pave the way for the implementation of the strategy.

b) expanding the partnership system

Examples include the partnership agreements, which are recorded in charters and contracts. They can also develop into networks.

c) ensure support for open participation for the success of the new development

Participation is a feedback element in the urban operation. In this way opened by the new development problems are reduced to the scale of the citizen.

The consultation and participation are the first set within the habitat-related problems - at the level of quality of life.

3

Definition of economic instruments

Sectoral integration in the approach defining the law

Connection of the scheme with financial instruments

Environmental tax - tax on cars / air pollution, traffic speed

Guarantees and tax that promote non-motorized traffic

Financing of the concern in infrastructure: tax and debt sustainability depends on the potential / possible reuse of the new elements of urban form

Link between environmental and ecological work spaces

The goal is to reduce the need for transportation by increasing accessibility. The land use schemes will be dependent on the degree of accessibility. The mixed use extensions to extend as far as to permit to live and work in one place.

The public and commercial interests are treated according to the life cycle duration.

Policy support for a new environment on a new human behavior. People prefer lower prices of some utilities. The strategy must include proposals for public participation and responsibility.

Supporting the private sector, that has a vital role in job creation and marketing of products and services.

Political and economic flexibility and adaptability: decentralization, integration.

Determining the costs and risks of a disaster as the limit of capacity of the environment.

Creating an entrepreneurial spirit: support for local initiatives.

4

a) implementing

- Changes can be small and able to undo.
- Real estate and franchise
- Land exchange to a more sustainable parcelling
- Support for some plans to pursue a mixed use of land
- Establishment of the associated public spaces, increasing the safety of pedestrians

- Introduction of environmental tax with respect to motorized traffic
- Further promotion of participation through education and ecological adaptation of the functions to the user requirements
- Change of use, if necessary, of some public areas or built elements

b) Review

- This is necessary every 3-5 years. The interventions should also take place continuously, leading to variety of environments.

REFERENCES

- Bostenaru Dan M. (2004), *Review of Review of retrofit strategies decision system in historic perspective*, Natural Hazards and Earth System Sciences, **4(3)**: 449-462
- Bostenaru Dan M. (2007), *Von den Partizipationsmodellen der 70er Jahre zu Kommunikationsformen Ende des XXten Jahrhunderts in Architektur und Städtebau*, Cuvillier, Göttingen.
- Crișan R. (2004), *Analiza integrativă a valorii culturale și de utilizare a clădirilor existente*, Editura universitară „Ion Mincu”, Bucharest.
- EAAE-ENHSA (2011), *Modernist Neighborhoods: Conservation / regeneration*, III EAAE Workshop on Conservation, <http://eaae2011.uauim.ro/>
- Fingerhuth K., Koch M. (1996), *Gestaltung zwischen Entwurf und Vereinbarung. Zur Verständigung über Funktion und Ästhetik bei der Planung und Realisierung von Neubauten*, in: Selle K (editor): *Planung und Kommunikation*, Bauverlag, Wiesbaden/Berlin, pag. 23-40.
- Lascu N. (1997), *Legislație și dezvoltare urbană. București 1831-1950*. PhD thesis, Institutul de Arhitectură „Ion Mincu”, Bucharest.
- Lynch K (1960), *The image of the city*, MIT Press, Cambridge MA.

Mortu P (2012), *Parcelarea Filipescu*, *Arhitectura* 2 (4): 138-147, 160-161.

Organisation for Economic Cooperation and Development (1996), *Final Report on the Ecological City*, Second conference on sustainable cities, Berlin, October 1996

Petrisor A.-I. (2010), *Mediul urban. O abordare ecologică*, *Urbanistique*, <http://www.urbanistique.ro/mediul-urban-o-abordare-ecologica-dr-alexandru-ionut-petrisor/#more-127>

Sandu A. (1988), *Teoria structurilor urbane*, Editura IAIM, Bucharest.

Received: August 15, 2012 • **Accepted in final format:** September 24, 2012