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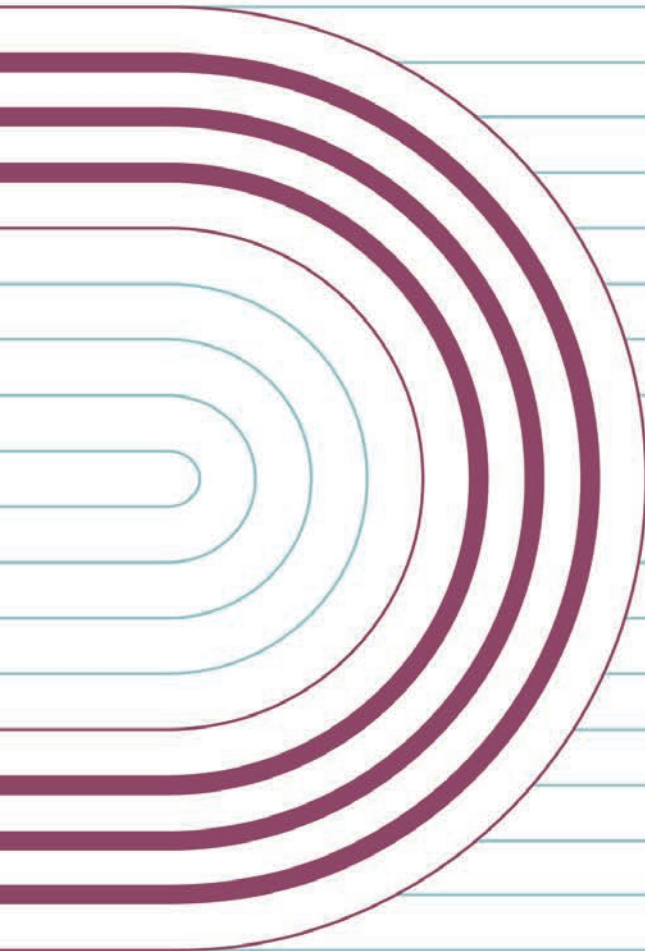
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Andrei MITREA

Dana MILEA



**The urban
planning
basis of
projects**

What is the purpose of the urban planning component of a project?

Regardless of the type of architectural project we work on, it is useful to understand the functioning of the urban fabric of the studied site and its surroundings, focusing mainly on how communities interact with the built environment they use. Thus, we can systematically examine the following two themes, both fundamental to urban planning practice:

1. The relationships between plots, buildings and exterior spaces, both public and private, which together constitute the urban fabric.
2. The relationships between the functioning of the urban fabric and the quality of life of the residents.

The project thus launches the urban planning thinking process, which is essentially based on the following four stages:

1. Analyses of the existing situation.
2. Synthesis of the analyses.
3. Minimal diagnosis.
4. Intervention proposals.

The four stages are closely interrelated, regardless of project type and complexity.

By the end of the diploma project, the students should demonstrate the following abilities:

_UA1: Effective and productive documentation, using specialised literature written in all the languages they know and master.

_UA2: Performance of a series of precise analyses which provide a framework for the observations made on the site and its surroundings. The analyses must be sufficiently clear so as to be understood by the jury as well as by tutors and colleagues.

_UA3: Drafting a clear and effective synthesis, based on the above-mentioned series of analyses. The synthesis should clearly show how the urban fabric is used by the residing communities, depending on the parameters set by the student. In addition, the synthesis must provide a logical foundation for a minimal diagnosis of the area.

_UA4: Building of a minimal diagnosis of the area, i.e., a series of explanations, called “causal mechanisms”, which clarify the functioning logic of the synthesis.

_UA5: Understanding of the role and logic of urban planning documentation: general urban plan (PUG), zonal urban plan (PUZ) and detailed urban plan (PUD) as well as the related local urban planning regulations (RLU). The information included in these documents must also be understood.

_UA6: Accurate and eloquent identification, measurement and representation of a series of urban indicators, characteristic for the studied area.

_UA7: Creating alternative proposals to address the identified issues in the studied area.

_UA8: Designing a coherent master plan that addresses a pre-established set of intervention priorities.

_UA9: The proper subdivision of plots, with both regular and irregular shapes, occupied by individual or collective dwellings, as well as other facilities, whether complementary to housing or not.

_UA10: Building study models, which are constantly used in the design process, as well as presentation models that showcase the proposed solution.

_UA11: Producing high-quality graphic materials.

_UA12: Delivery of a coherent, consistent and concise presentation.

_UA13: Effective negotiation and the ability to arrive at clearly and expressively formulated resolutions.

_UA14: Creating intuitive work instruments, capable of capitalizing fundamental urban planning knowledge.

_UA15: Creating a design brief, which clearly formulates the problem to be solved and the minimal conditions for validating a solution.

All these abilities except UA9 and UA10 must also be demonstrated in solving the pre-diploma project. As a matter of fact, the project introduces and supports a continuous process of documentation, conceived so as to develop the students’ curiosity and abilities of solving urban planning problems elegantly and efficiently.

How do we structure the project?

Starting from the urban planning thinking process described above, we propose to structure the solving of the project into a series of complementary stages:

_the first is a critical analysis of the existing situation on the site and in its surroundings;

_the second is a synthesis, derived from the preceding critical analysis;

_the third is a diagnosis which exploits the synthesis. We understand “diagnosis” to mean a set of sentences of the cause—effect type, which explain the conclusions of the synthesis. These explanations become working hypotheses in determining the development potential of the area as well as the conditions under which this potential can become reality via the proposals of the architectural project;

_the fourth stage consists in a critical study of the urban planning documentation approved in the study area. The study of the urban planning documentation identifies the regulations of that area, which directly influence its possibilities of development. The three types of relevant documentation are the following: the general urban plan (PUG) and the zonal urban plan (PUZ), together with the related local urban planning regulations (RLU), as well as the detailed urban plan (PUD);

_the fifth stage is a design brief, which clearly formulates the problem to be solved;

_the sixth stage is a set of design principles, which guide the creation and validation of the solution to the problem defined in the design brief;

_the seventh stage is a series of operations used in building the intervention proposals;

_the eighth stage is a study for intervention proposals, with different options. The study will eventually determine the optimal solution for the architectural object by considering the development of the area. The intervention options will be generated with the help of principles and operations. While responding to the design brief, the proposed options will also be related to the diagnosis and to the critical study of the urban planning documentation approved for the area. To complete this stage, at least two different scenarios for solving the problem are needed.

What are the minimal requirements that must be met by the project solution?

Critical analysis responds to the following five requirements:

1. The understanding of the wider context of the study area.
2. The careful study of the residing communities, based on direct observation as well as on the discovery of personal micro-histories, representative of the area and of its history.

3. The understanding of land use in the study area and of the flows generated by the different uses.
4. The analysis of the urban fabric and of the built environment.
5. The analysis of the urban landscape.

In its turn, the synthesis must obey the requirements below:

1. Filter all the analyses conducted in the previous stage.
2. Order the conclusions of the conducted analyses by their importance so as to generate a clear, coherent and logically consistent synthesis.
3. Establish intervention priorities.
4. Describe the links between the functioning of the urban fabric and the quality of life of the communities from that area.

The diagnosis takes into account the following two requirements:

1. The set of sentences of the cause—effect type contains clear statements. Each sentence must explain a conclusion from the synthesis.
2. Each sentence must be transposed into a clear and eloquent graphic scheme.

The critical study of urban planning documentation covers the following:

1. The reading of Law 350/2001 regarding land management and urban planning, in its consolidated form, i.e. encompassing all the changes and updates since its enactment in 2001. Law 350/2001 explains the relationships between different urban planning documents. Therefore, section 3, titled “Urban planning documentation”, from chapter IV, titled “Land management and urban planning documentation” should be carefully read. In addition to the Law, students should read its implementation norms, which appear in the Order of the Minister of Regional Development and Public Administration (OMDRAP) 233/2016, for the approval of the methodological norms in implementing Law 350/2001 regarding land management and planning and in developing and updating urban planning documentation.
2. The identification, correlation and interpretation of approved urban planning documentation which regulates the study area.
3. The critical analysis of the changes or the detailing brought by lower-rank documentation to higher-rank documentation.

The design brief must meet the following two requirements:

1. Name the problem that must be solved.
2. Establish the set of minimal conditions which a proposed solution must fulfil to be considered valid.

The design principles and the operations must fulfil four requirements:

1. Be clearly formulated.
2. Be appropriate to the solving of the defined problem.
3. Apply cumulatively. In other words, they must not be in contradiction.
4. Each principle and each operation must be transposed in a clear and eloquent graphic scheme.

The scenarios for determining the optimal solution for the architectural object must consider three requirements:

1. Be adapted to the possibilities of development of the study area.
2. Offer coherent and creative intervention solutions.
3. Fulfil all the conditions of the design brief, using the defined principles and operations. In other words, the scenarios will address the theme, integrating the five levels of analysis of the previous stage, the synthesis, the diagnosis and the critical study of the urban planning documentation, approved or at the stage of being presented to the public for information and consultation.

Finally, the master plan must obey the following six requirements:

1. Optimally respond to all the requirements set in the design brief.
2. Illustrate the intervention proposals.
3. Address in a coherent fashion the problems and priorities identified in the synthesis.
4. Demonstrate the application of all the formulated design principles.
5. Be the result of applying only the design operations derived from specialised literature.
6. Explain and illustrate how it improves the functioning of the urban fabric and the quality of life of the communities in the area.

How do we approach the project?

Based on our experience from previous years, we designed a working method aimed at removing the difficulties encountered in project argumentation. Thus, the entire project can be conceived as a series of exercises (Table 1). The exercises proposed below are orientative and must be adapted, depending on the type of project and on individual experience.

Table 1: Guiding exercises for solving the project

Exercises	Guiding research questions and minimal expected results	Ability
1. Preparing the site visit	<ol style="list-style-type: none"> 1. How do we prepare the site visit? 2. What do we know about the area where the site is located? <ul style="list-style-type: none"> Anticipated results: <ol style="list-style-type: none"> 1. A work plan for the site visit. 1. A first draft of the profile of the area. 	UA2
2. Beneficiaries and communities	<ol style="list-style-type: none"> 1. Who are the beneficiaries of the architectural project? 2. What are their defining characteristics? <ul style="list-style-type: none"> Anticipated result: <ol style="list-style-type: none"> 1. A brief analysis of the beneficiaries and communities in the studied area, based on quantitative information (estimated population, density, etc.) as well as on qualitative information (needs). 	UA1 and UA2
3. The context	<ol style="list-style-type: none"> 1. How do the location of the site and of the study area influence the beneficiaries/communities and their activities? The location of the site within the district and within the city will both be taken into account. <ul style="list-style-type: none"> Anticipated result: <ol style="list-style-type: none"> 1. A contextual analysis, which presents the advantages and disadvantages from the perspective of circulations, economic activities, public amenities as well as of green spaces. 	UA1 and UA2

Exercises	Guiding research questions and minimal expected results	Ability
4. Activities and circulations	<p>1. What is the land use in the area?</p> <p>2. How are the activities sized and distributed?</p> <p>3. How do the existing activities respond to the needs of the beneficiaries and of the communities?</p> <p>4. What is the relationship between current traffic flows and street capacity?</p> <p>5. What are the coverage and the quality of public transport?</p> <p>6. What are the parking facilities like?</p> <p>7. How do the characteristics of the activities and circulations in the area impact on project beneficiaries?</p> <p>Anticipated results:</p> <p>1. A series of schematic analyses illustrating how the distribution of activities and the main identified dysfunctions (absence or unequal distribution of activities, functional incompatibilities) affect the beneficiaries.</p> <p>2. A series of schematic analyses, which identify existing dysfunctions in the circulation system (connected to accessibility, infrastructure dimensions as well as to the occupying of public space by vehicles) and their impact on the architectural project.</p>	<p>UA1 and UA2</p>
5. Morphology	<p>1. How do densities influence the shape and the quality of the spaces in the area?</p> <p>2. How do the beneficiaries and communities use the built environment and the public spaces?</p> <p>3. How does density affect the quality of the activities in the area? What other factors influence it?</p> <p>Anticipated result:</p> <p>1. A series of schematic analyses which show the characteristics and deficiencies of the morphological structure of the urban fabric and its effects on the architectural project.</p>	<p>UA1 and UA2</p>
6. Urban landscape	<p>1. Which are the factors that affect the quality of public spaces in the study area, from the point of view of the perceived urban image?</p> <p>2. How do the built environment and the activities contribute to the quality of the perceived urban image?</p> <p>Anticipated results:</p> <p>1. A series of schematic analyses that describe the quality of the public space and its impact on the architectural project.</p> <p>2. A series of schematic analyses that describe how the characteristics of the architectural project contribute to improving the quality of the public space.</p>	<p>UA1 and UA2</p>

Exercises	Guiding research questions and minimal expected results	Ability
7. Synthesis	<ol style="list-style-type: none"> 1. How does the study area function? 2. What about the site of the architectural project? Anticipated result: <ol style="list-style-type: none"> 1. A synthesis, which compresses the conclusions of the analyses, ranked by their significance. NB The synthesis is not a mere enumeration of the conclusions of the analyses! 	UA3
8. Diagnosis	<ol style="list-style-type: none"> 1. Why does the studied area function in this manner? 2. What about the site of the architectural project? Anticipated results: <ol style="list-style-type: none"> 1. A minimal diagnosis, consisting of a set of five to ten explanations derived from the conclusions of the synthesis, formulated as sentences of the cause-effect type. 2. A set of five to ten graphic schemes, meant to illustrate the ten explanations proposed above. 	UA4
9. Urban planning documentation	<ol style="list-style-type: none"> 1. What relevant information for the architectural project is provided by the urban planning documentation? Anticipated results: <ol style="list-style-type: none"> 1. A series of schematic analyses that present the rules derived from the urban planning documentation, which the architectural project must obey. 2. A scheme with the superposition of the rules identified in the point above with the already completed synthesis and diagnosis and the critical interpretation of the obtained result. 	UA1, UA5 and UA6
10. Design brief	<ol style="list-style-type: none"> 1. What is the problem that I must solve? 2. What conditions must the proposal meet to qualify as a valid solution? 3. Which are the intervention priorities? Anticipated result: <ol style="list-style-type: none"> 1. A design brief that explicitly names the problem to be solved and establishes the minimal conditions for validating a proposed solution. 	UA15
11. Design principles	<ol style="list-style-type: none"> 1. What is the minimal number of design principles that we require to address the problem and the formulated list of priorities? 2. How do we filter the documentary materials to build a solid set of design principles? Anticipated result: <ol style="list-style-type: none"> 1. A set of design principles, based on the studied documentation. Each design principle must be formulated as a simple sentence and accompanied by a sketch. 	UA1 and UA14

Exercises	Guiding research questions and minimal expected results	Ability
12. Operations	<ol style="list-style-type: none"> 1. What is the minimal set of operations we require to design efficiently? 2. How do we select the operations using the predefined priorities and set of principles? Anticipated result: <ol style="list-style-type: none"> 1. A set of operations, derived from specialist literature, which will be used in the design process. Each operation must be formulated as a simple sentence and accompanied by a sketch. 	UA1 and UA14
13. The proposal with options	<ol style="list-style-type: none"> 1. How do I solve the problem? What possibilities are available? Anticipated result: <ol style="list-style-type: none"> 1. At least two proposal options, which meet the requirements imposed by the design brief. 	UA7, UA8 and UA9
14. Comparative analysis of the options	<ol style="list-style-type: none"> 1. Which of the proposed options solves the problem in an optimal manner? Anticipated result: <ol style="list-style-type: none"> 1. A comparative analysis of the proposed options. 	UA13 and UA14
15. The Master Plan [1]	<ol style="list-style-type: none"> 1. Which are the components of the Master Plan? Anticipated result: <ol style="list-style-type: none"> 1. A preliminary representation of the Master Plan that explicitly deals with the following topics: <ul style="list-style-type: none"> • Motorised and non-motorised circulations • Parking • The built environment • Functions and activities • The interior–exterior relationship and orientation in relation to the cardinal points • Exterior design and planting design 	UA8, UA9 and UA10

Exercises	Guiding research questions and minimal expected results	Ability
16. The Master Plan [2]	<p>1. Can a Master Plan be drawn using the density concept?</p> <p style="padding-left: 20px;">Anticipated result:</p> <p>1. A representation of the Master Plan which uses the following densities:</p> <ul style="list-style-type: none"> • Densities related to the proposed facilities • Densities related to the proposed buildings • Densities related to the proposed interventions, including those related to the planting design 	UA8 and UA14
17. Specific urban indicators	<p>1. What are the characteristic urban indicators of the proposed Master Plan?</p> <p style="padding-left: 20px;">Anticipated result:</p> <p>1. Calculation of the urban indicators required in the design brief.</p>	UA6 and UA14
18. Final modelling	<p>1. What are the essential things I need to communicate to show what I have done and the results I have obtained?</p> <p>2. How do I organise them to make the message accessible?</p> <p style="padding-left: 20px;">Anticipated result:</p> <p>1. At least one modelling proposal for the items required in response to the design brief.</p>	UA11
19. Defense and final delivery	<p>1. How can I present the problem I needed to solve and the solution I built in a concise and accessible manner?</p> <p style="padding-left: 20px;">Anticipated results:</p> <p>1. All the items required via the design brief.</p> <p>2. A coherent and solid presentation to the jury and peers.</p>	UA12

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