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scholar architect

Ediţie română-engleză/
Romanian-English edition

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TRADUCERE ÎN ENGLEZĂ DE/
ENGLISH TRANSLATION BY
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Editura Universitară „Ion Mincu"
Bucureşti, 2023

Universitatea de Arhitectură și Urbanism „Ion Mincu”

Materialele publicate în paginile acestui volum (ediție bilingvă) reprezintă rezultatele cercetării desfășurate în cadrul proiectului **SCHOLAR ARCHITECT – Perfecționarea și creșterea calității științifice în învățământul de arhitectură (2020).**

The materials published in this volume (bilingual edition) represent the results of the research developed within the framework of the project **SCHOLAR ARCHITECT – Improving the quality of research and teaching in architectural education (2020).**

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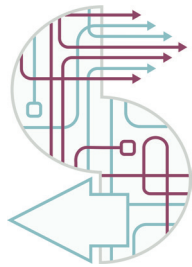
https://doi.org/10.54508/9786066382991

Descrierea CIP a Bibliotecii Naţionale a României
Start - Scholar architect / coord.: Anda-Ioana Sfinteş ; trad. în engleză de Florina Tufescu. - Ed. română-engleză = Romanian-English edition. - Bucureşti : Editura Universitară “Ion Mincu”, 2023
ISBN 978-606-638-299-1

I. Sfinteş, Anda-Ioana (coord.)
II. Tufescu, Florina (trad.)

72



Materialul în limba română a fost dezvoltat în cadrul proiectului

SCHOLAR ARCHITECT
Perfecționarea și creșterea calității științifice în învățământul de arhitectură
Proiect finanțat prin CNFIS-FDI-2020-0655

Traducerea materialului din limba română în limba engleză
a fost realizată în cadrul proiectului

SCHOLAR ARCHITECT 2023
Promovarea raportării la tendințe, tehnologii și problematici de actualitate în învățământul de arhitectură și urbanism
Proiect finanțat prin CNFIS-FDI-2023-F-0436

Fondul de Dezvoltare Instituțională, Domeniul 5:
Îmbunătățirea calității activității didactice, inclusiv a respectării deontologiei și eticii academice.

The Romanian edition was developed within the framework of the project

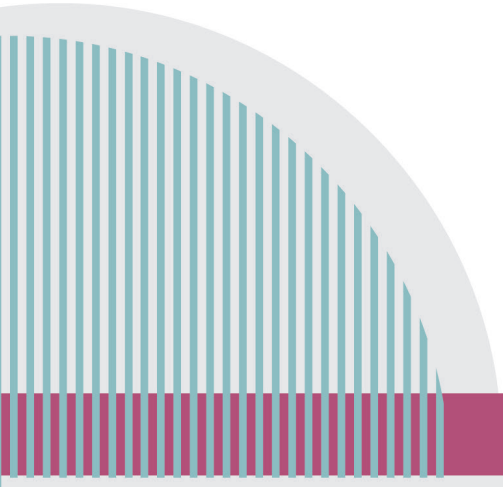
SCHOLAR ARCHITECT
Improving the quality of research and teaching in architectural education
Project financed by CNFIS-FDI-2020-0655

The English edition was translated from Romanian within the framework of the project

SCHOLAR ARCHITECT 2023
Promoting linkage to topical trends, technologies and issues in architectural and urban planning education
Project financed by CNFIS-FDI-2023-F-0436

The Institutional Development Fund, Domain 5:
Improving the quality of teaching, including the observance of professional and academic ethics.

https://doi.org/10.54508/9786066382991.07



the logical construction of a design process

Adrian MITREA
Dana MILEA

THE DESIGN BRIEF

In architecture and urban planning, a programme represents:

> The totality of requirements that must be fulfilled for buildings to meet their purpose. (Bălan & Mihăilescu, 1988, p. 180)

A project is a particular case of programme illustration. A good project is the result of a good design brief, while a good design brief obeys a fundamental condition:

It clearly formulates the problem to be solved.

A problem is clearly formulated only when we are able to describe it unequivocally and when we can build the test that a proposal must pass to be considered a solution (McCarthy, 1956, as cited in Newell & Simon, 1972). Thus, the above-mentioned condition entails two consequences:

_Naming the problem;

_Establishing the minimal conditions that validate the solution.

In practice, these conditions interpret the general data of the programme, describe in detail the specific functional processes and all their participants, refer to all the spaces, specifying their dimensions, finishings and technical equipment, in relation to landscape characteristics and to the shape, to the orientation and to the infrastructure of the site (Bălan & Mihăilescu, 1988, p. 180).

Establishing the content of the design brief, i.e. the brief data, is a key moment, since it sets our expectations in relation to the project. If we change the brief data after we start working on the proposed solution, we will most probably come to modify the proposal, either partially or completely (Cardaș, 1983).

In determining the conditions of the design brief, in addition to the set of arguments extracted from the analyses, synthesis and diagnosis, we work

with two other instruments, which we briefly discuss in the following sections:

_Design principles;

_Design manuals.

DESIGN PRINCIPLES

A principle is an idea, considered true and valuable, which underpins the decisions we make in building and validating the solution. The role of principles is a simple one: they facilitate the design process by providing additional support for decision-making. Furthermore, in the presentation of the project, just as we will observe later in the case of concepts, the articulation of these principles will enable colleagues, the tutoring team or the jury to better understand the idea of the project and the argumentation behind it.

Principles can be of a general character or they can refer to particular aspects, helping us manage not only the content of the solution, but also the path to it. Thus, we can formulate principles of different types, as detailed below.

_Principles that mainly guide the content of the solution:

> improve the environment whenever you do anything to change it. (Garrett Eckbo, as cited in Simonds & Starke, 2006, p. 101).

_Principles that rather guide the working method:

> to realize a project on a site effectively, we must fully understand the program and we must be fully aware of the physical properties of the site and of the total environs (Simonds & Starke, 2006, p. 106).

_Principles that guide both the content of the solution and the working method:

> each element or area of the structure [must] be conceived in harmony with related site areas (Simonds & Starke, 2006, p. 134).

When choosing design principles, the problem of the optimal arises, similar to the one encountered in the selection of the suitable analyses. Thus, it is necessary to find the minimal number of principles that has maximum impact on the project. Since the series of principles is cumulative, they must not be in contradiction. In other words, no decision must infringe upon any of the principles. For this reason, they must be carefully chosen and clearly formulated.

DESIGN MANUALS

Design manuals offer detailed and specific information on how the projects that are representative of a programme actually function. In compiling the data for the brief, the information extracted from the design manuals is complemented by the design principles.

The value of manuals consists both in the qualitative and quantitative information provided, often structured into sets of rules that a project must follow, as well as in the presentation of the logical process underlying its functioning and the justification of the need to impose a series of rules upon

it. The latter aspect will subsequently become essential, when we pass from the design brief to its solution.

Since the problems we solve through projects generally require interventions in several fields while the manuals most often deal with specific topics, we will only consult the manuals required to cover the range of situations we are confronted with. This step is part of the critical analysis of the bibliography and answers the following research questions:

_How closely does the project situation resemble the one in the textbook?

_Are there data in the design brief for which we have found no correspondence in the design manuals? How significant are they to the project as a whole?

FROM DESIGN BRIEF TO SOLUTION

The more precise and complete the design brief, the easier it will be to move towards solving it and building a proposal.

> The process of site-structure plan development is a search for logical progressions and best relationships. (Simonds & Starke, 2006, p. 135)

Under these circumstances:

> The balance of the planning process is a matter of comparative analysis and refinement of detail—a process of creative synthesis. A good plan, reduced to essentials, is no more than a record of logical thought. (Simonds & Starke, 2006, p. 113)

In the first projects, building the proposal will be a laborious process, possibly even more laborious than selecting the analyses. Yet, with sufficient practice, we will significantly improve our ability of calibrating the design process.

Take a look at the following four schemes. They show an example of incomplete succession of leaps, from the elements of analysis to the proposal. The images do not present the entire process of the project, nor do they follow in detail all the steps described in this chapter. Yet, even under these circumstances, we can deduct a coherent passage from elements of analysis to elements of synthesis, diagnosis, design brief and, finally, to the proposal. What is more, we can easily infer part of the argumentation thread of the project, regarding the relationships established between the formulated proposal, land characteristics and site infrastructure. In the case of faculty projects, the process of generating the proposal must be more substantially presented, as a whole and without leaps of logic.

Once complete, the proposal must be submitted to the test of the conditions presented in the design brief. If it fully meets them and passes the test, it means that we have solved the problem. If not, we have to take a few steps back and make the necessary changes to fulfil the validation requirements.

Two useful verification questions are available at this point:

_Does the solution obey all the conditions of the design brief?

_Can we reach an elegant solution more easily?

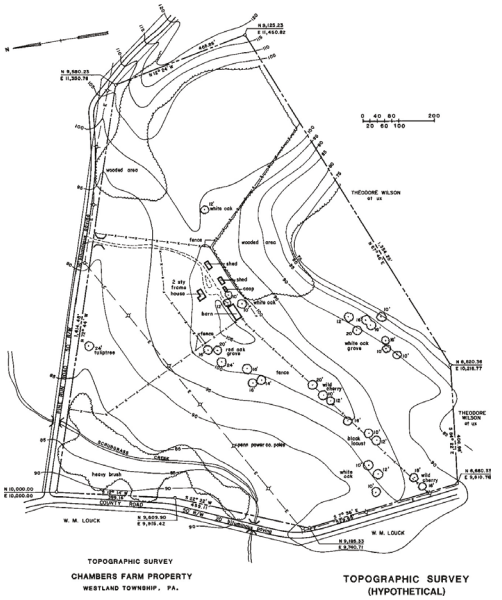


Fig. 1. A first reading of the site topography
Source: Simonds & Starke (2006, p. 108)

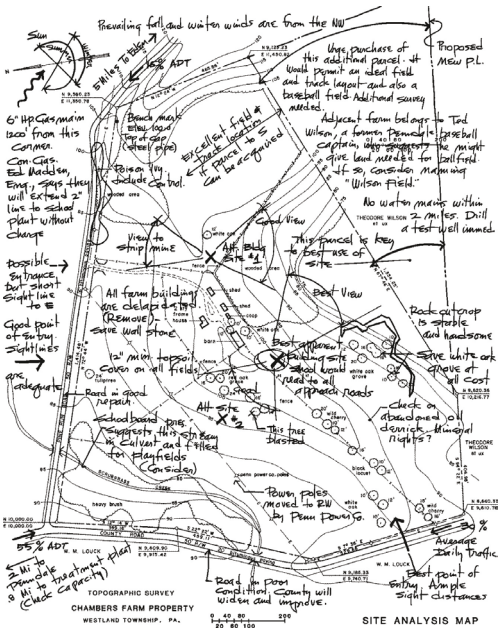


Fig. 2. Site scheme
Source: Simonds & Starke (2006, p. 108)

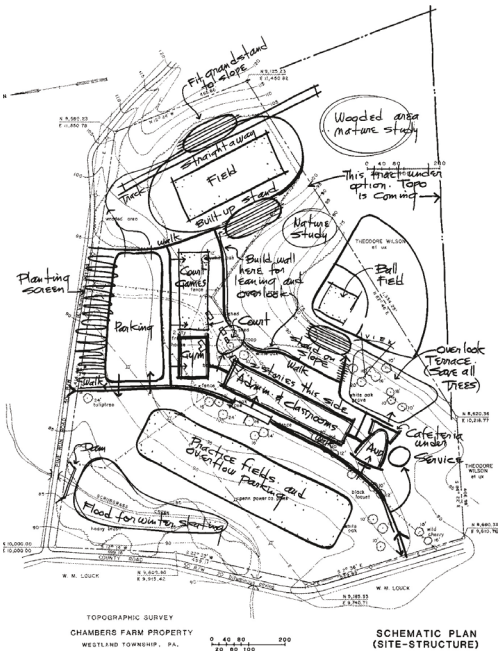


Fig. 3. Scheme of the building-site relationship, option 1. Source: Simonds & Starke (2006, p. 113)

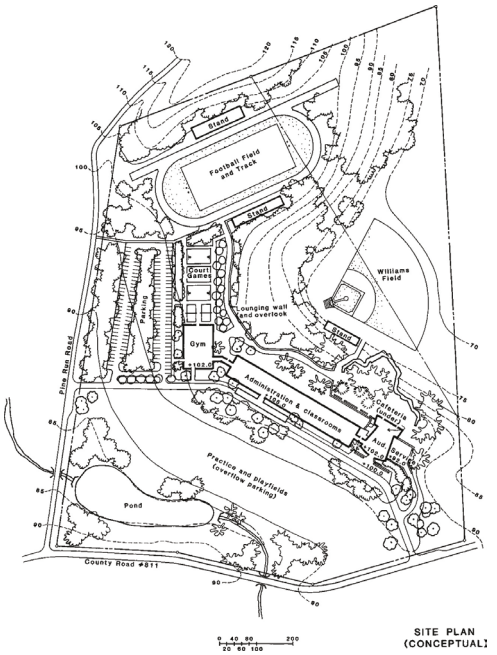


Fig.4. Scheme of the building-site relationship, option 1, reworked and refined.
Source: Simonds & Starke (2006, p. 114)

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