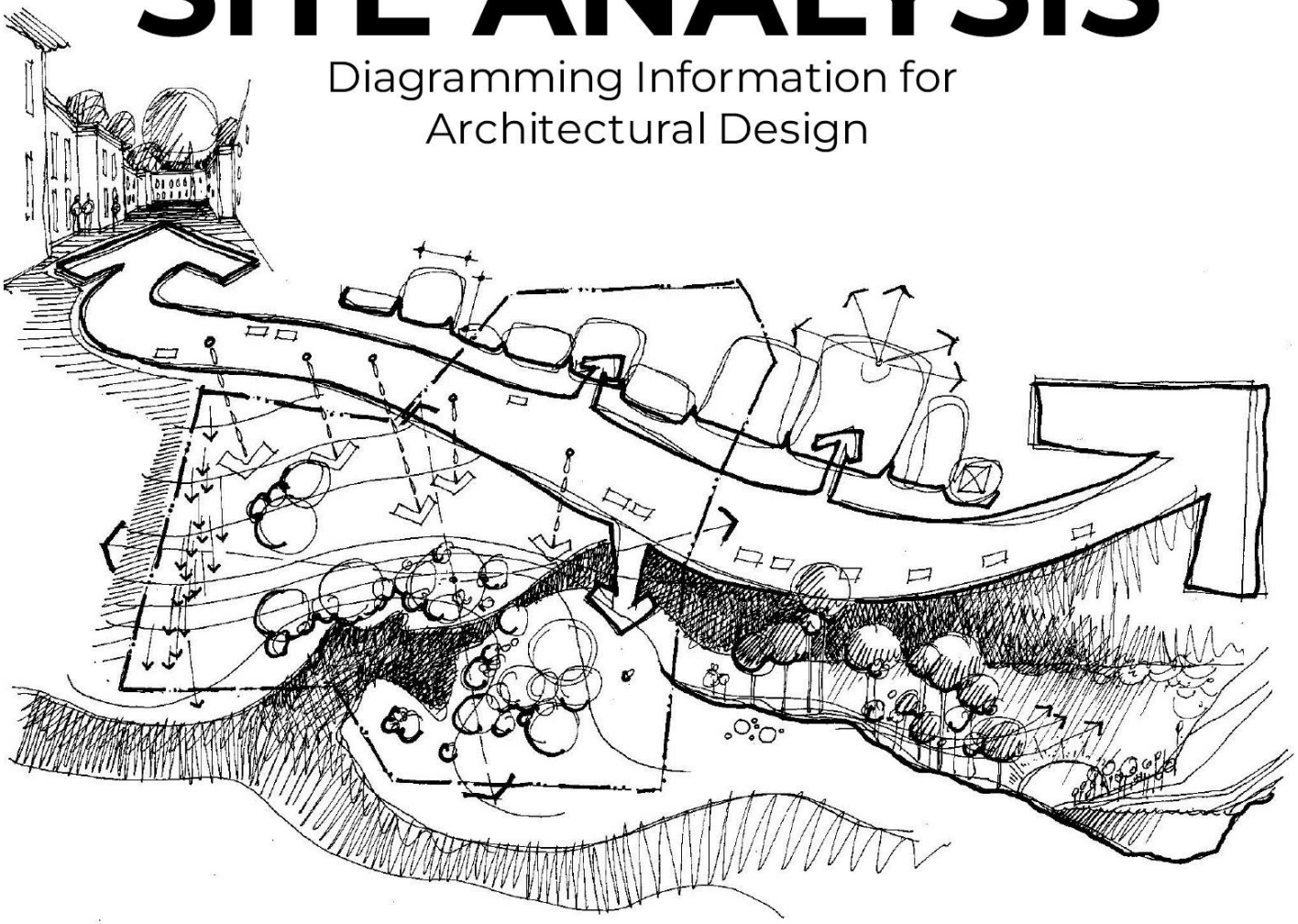
SITE ANALYSIS

Diagramming Information for
Architectural Design



EDWARD T. WHITE

SITE ANALYSIS

DIAGRAMMING INFORMATION FOR ARCHITECTURAL DESIGN

EDWARD T. WHITE

ArchiBasics Press

The Edward T. White Library, available from ArchiBasics Press, includes these publications:

- Building Meaning Analysis: Diagramming Information for Architectural Design
- Concept Sourcebook: A Vocabulary of Architectural Forms
- Design Analytics: Notes on Facility Programming and Building Evaluation
- Design Briefing in England: Interviews with Architects
- Facility Programming in the United States: Interviews with Architects
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- Path • Portal • Place: Appreciating Public Space in Urban Environments
- Presentation Strategies in Architecture
- Site Analysis: Diagramming Information for Architectural Design
- Space Adjacency Analysis: Diagramming Information for Architectural Design
- Travel Drawing: Engaging the Spirit of Place

Site Analysis: Diagramming Information for Architectural Design

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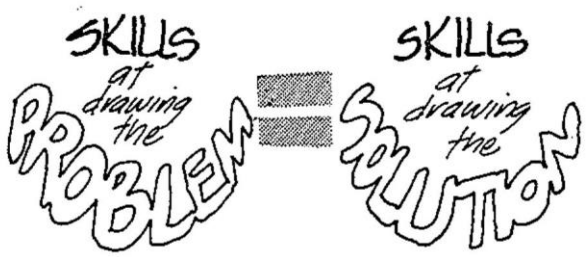
INTRODUCTION



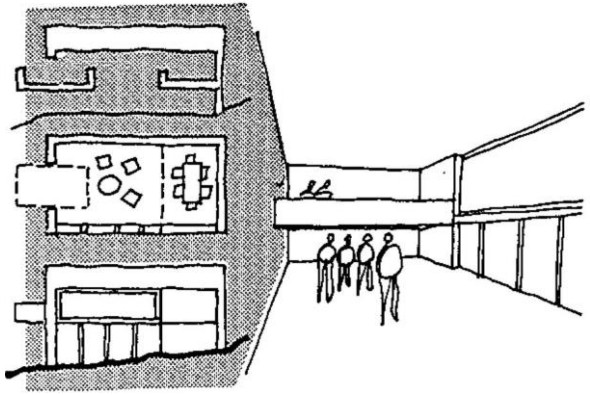
We designers are often more comfortable and skilled at drawing plans, elevations, sections, and perspectives than at diagramming project needs, issues and requirements.

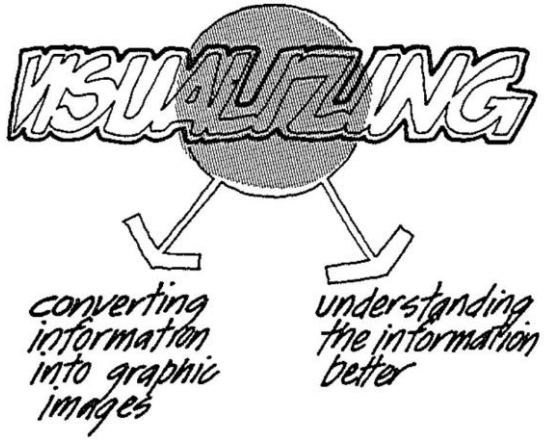
We sometimes seem overly anxious to draw the architectural answers to ill-defined project questions and reluctant to invest in graphic techniques that help us better understand the project needs and that stimulate responsive and creative design concepts.

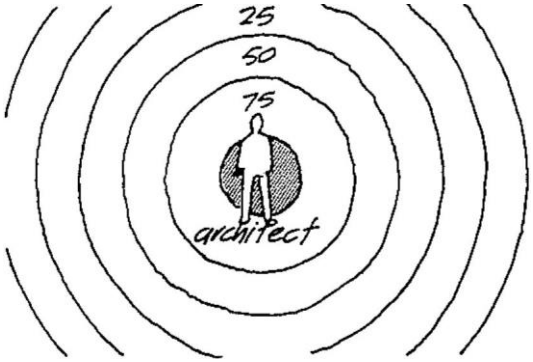
We need to balance our skills at drawing design solutions with our skills at drawing and visualizing the problems and requirements.

This book is the first of a planned series about diagramming in architectural design. The theme of the series is visualizing information for design in the dual sense of converting the information into graphic images and seeing or understanding the information better. The central thesis is that our ability to draw needs, requirements and early design concepts is just as important as our ability to draw final building design solutions and that, in fact, our diagramming skills profoundly influence the quality of our building designs.

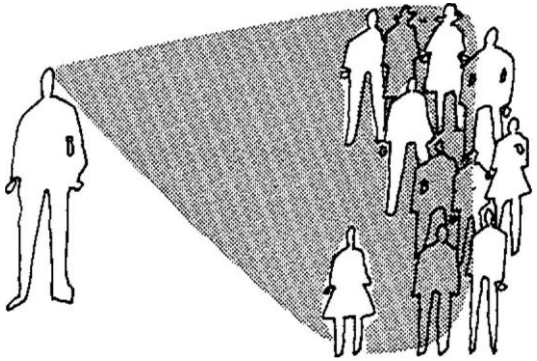
There are several reasons why it is helpful for us to visualize design information when planning buildings:



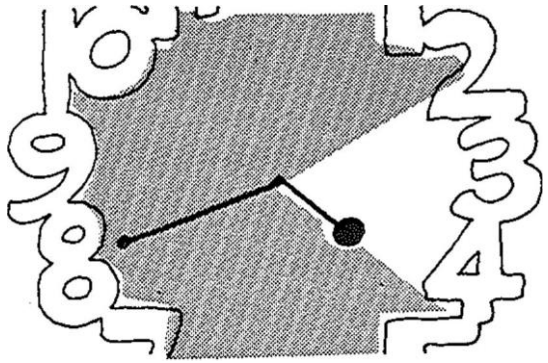




Accountability. As designers, we are being held responsible for the success of more and more aspects of the building delivery process and of the performance of the buildings we design. At the same time, the criteria for successful buildings are becoming more defined and the building evaluation processes more systematic and rigorous. New facts are being produced by the building research community each year which multiply our professional, legal and moral obligations and responsibilities in projects. Diagramming is a tool which can assist us in coping with information overload and in more thoroughly addressing the project requirements in design.



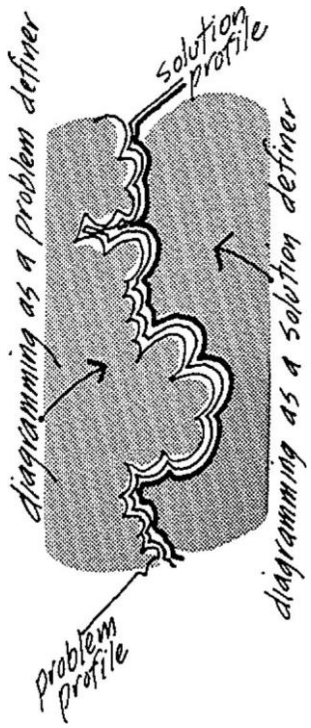
Communications. Clients of architectural projects are becoming increasingly multi-personal (boards, committees, community involvement) and more demanding in terms of their participation in design decisions. Complex clients often mean complex interpersonal relationships, conflicts, and difficulties in obtaining consensus and timely decisions. These situations require strong project organization, clear procedures and effective communication techniques to facilitate thoughtful, well-informed decisions. We must have solid defendable reasons for our design recommendations that are rooted in the needs of our clients. We must render the decision processes in design more transparent so that our clients can understand where we are, where we've been and where we're going. We must be better documented in both the analysis of the problems and in our generation of the solutions. It is important for us to leave decision tracks that can be retraced and to be able to explain how we arrived at particular design proposals. Diagramming is an effective means of increasing the quality of communication in our building planning processes.



Efficiency. We are constantly faced with severe time pressures to expedite the completion of projects to meet client deadlines and to finish work within internal (design office), budget and time constraints. Very few design offices can afford to plan projects in a leisurely, passive manner-that is, to wait until good design ideas "happen along." We must be able to make ideas happen, to design assertively and to control idea-getting processes rather than allowing these processes to control us. We should have tools which can help us to cause design solutions to occur in a relatively short time. This need for techniques extends beyond problem analysis and conceptualization into the synthesis, testing and refinement of design solutions. Diagramming is an excellent tool for getting started in our design thinking, for taking control of the planning process and for getting unstuck when we hit snags.

Diagramming is an important aspect of our design language with which we produce our design solutions. Mastery of that language is fundamental to attaining competence in the design profession. Much of the attention in the area of design graphics has been focused on techniques for drawing our final building designs. We need to begin to codify those predesign and early design graphic techniques that help us to surround the problem, define it, crack it, enter it, and explore alternative architectural responses to it.

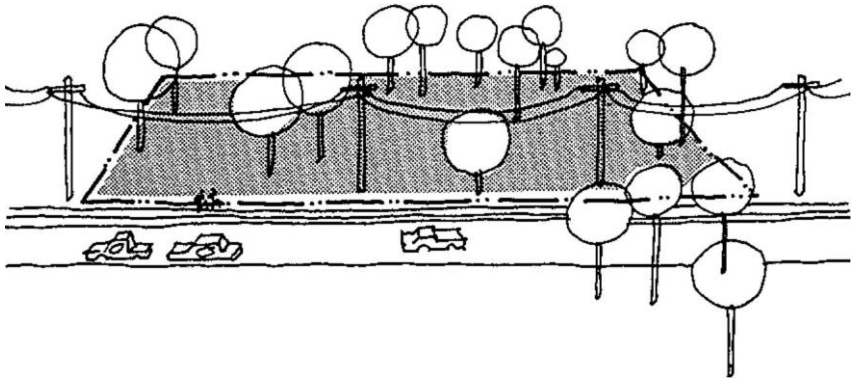
Diagramming is a way to get close to the problem, to engage it, to absorb it, to restate it in our own terms and to render it second nature so that we can attend to the selection and integration of potential solutions.



Ideally, the profile of the design solution should mirror the profile of the programmatic requirements and conditions. Diagramming is useful in constructing the problem profile so that it may serve as a beacon toward which to manage the design solution.

Investing in diagramming often leads us to the discovery of design ideas that otherwise wouldn't have occurred to us. It helps us to build our vocabulary of design solutions for use in future projects by expressing solution types in storable and retrievable (memorable) form. Diagramming assists us in bridging between the problem as expressed in verbal terms and the solution as expressed in physical/architectural terms. Through diagramming we decrease the likelihood of losing something in the translation from problem to solution. Diagramming can facilitate the discovery of key problem issues and can clarify, summarize, amplify, and test verbiage. It is a way of simplifying and collapsing project issues into a manageable number and of transforming those issues into more meaningful and evocative form for design. Diagrams can serve as efficient reminders (programmatic shorthand) about complex issues during design that would require pages to explain in writing. The entertainment value of diagrams helps to make programmatic information less tedious and intimidating and more approachable.

This book deals with one aspect of diagramming information for the design of buildings: the analysis of sites where new buildings will be built.



Contextual analysis, that is, the study of project property, is a vital prelude to making sound decisions about optimum site utilization, best on site arrangements of clients' interior and exterior activities and spaces, and most effective ways to respect and capitalize upon site assets.

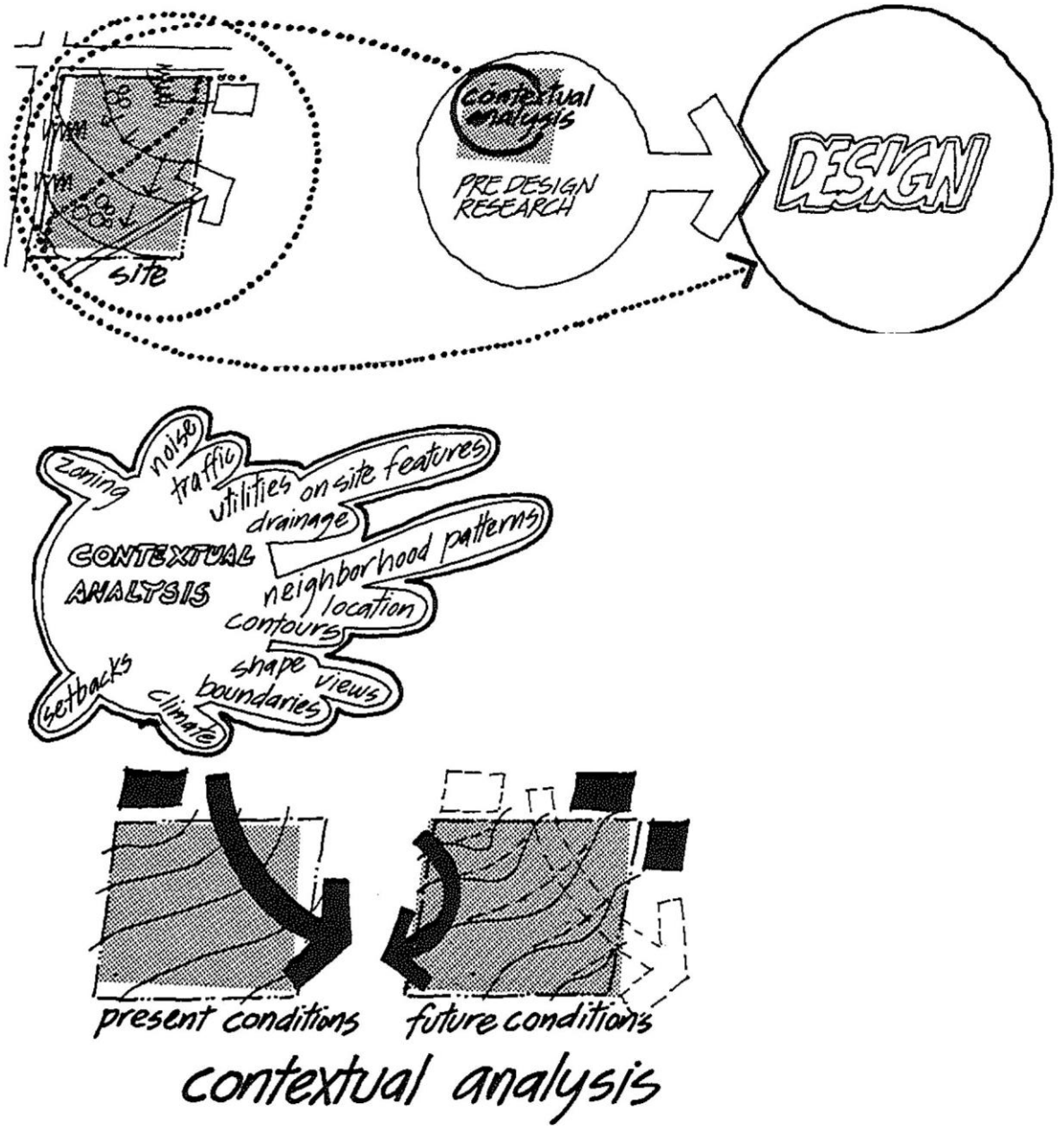
DEFINITIONS, ISSUES, AND DESIGN IMPLICATIONS

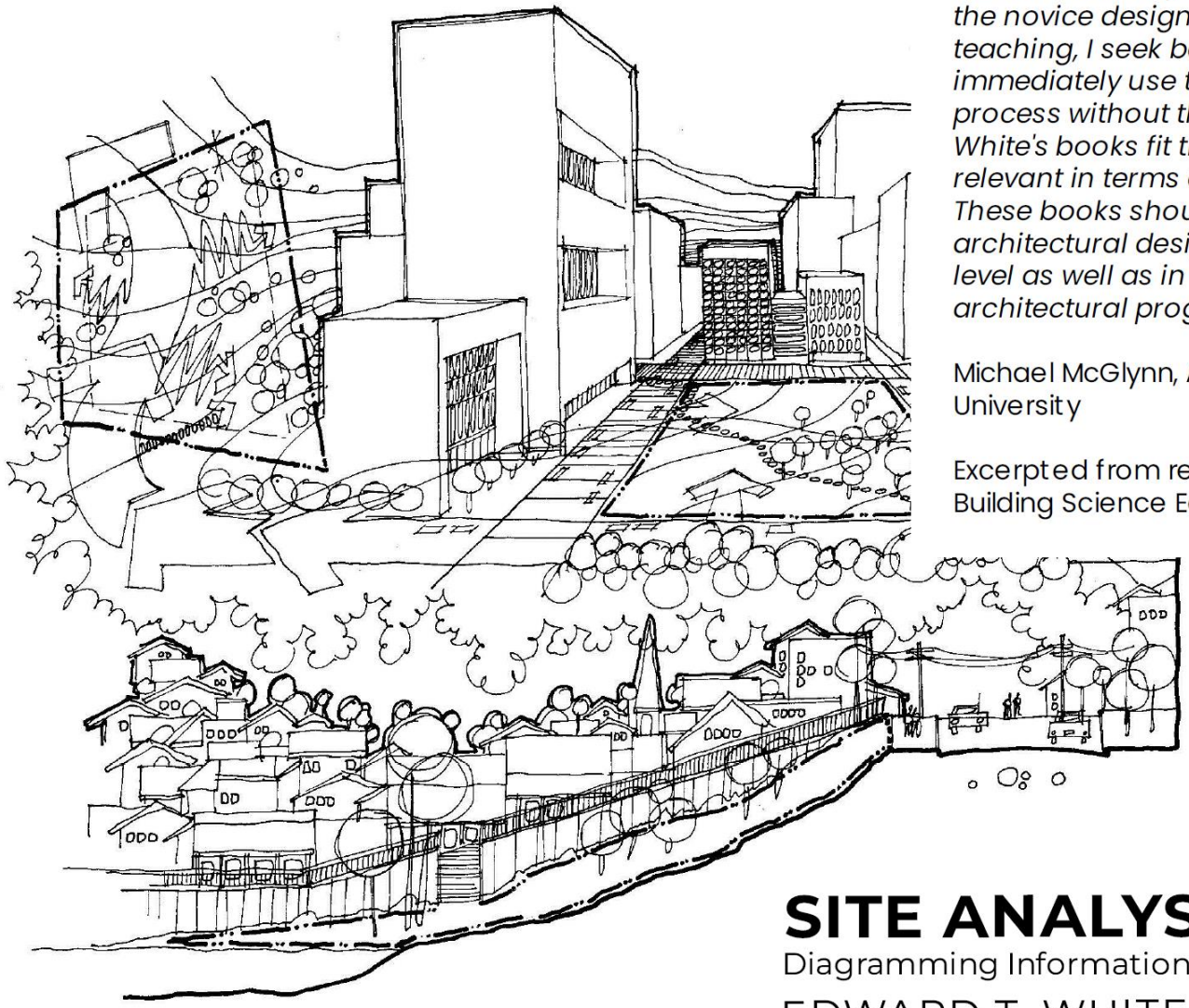
OVERVIEW

Site analysis is a predesign research activity which focuses on the existing, imminent and potential conditions on and around a project site. It is, in a sense, an inventory of all the pressures, forces and situations and their interactions at the property where our project will be built. As such, it might also be thought of as context analysis.

The major role of site analysis in design is to inform us about our site before beginning our design concepts so that our early thinking can incorporate meaningful responses to external conditions.

Typical site issues addressed in an analysis are site location, size, shape, contours, drainage patterns, zoning and setbacks, utilities, significant on site features (buildings, trees, etc.), surrounding traffic, neighborhood patterns, views to and from the site and climate. As designers, we need to know something about these issues in order to design a successful building that not only meets its internal responsibilities (functions) but that also relates well to its external environment. Since our building will exist for several years, our contextual analysis should attempt to deal with potential future conditions as well as the ones we can observe on the site today. Some of the typical issues in this regard are changing zoning patterns around our site, shifts in the designation of major and minor streets, changing cultural patterns in the surrounding neighborhood and the construction of significant projects nearby that impact on our





As an architecture student... I found these two books invaluable. As a design studio instructor 28 years later, I find no other books that cover this particular subject matter as clearly and comprehensively for the novice design student. For design studio teaching, I seek books... that students can immediately use to support their design process without the need for translation. White's books fit this bill. They are still relevant in terms of content and method. These books should again find a home in architectural design studios at any year-level as well as in site design and architectural programming courses.

Michael McGlynn, AIA, LEED AP Kansas State University

Excerpted from review in SBSE (Society of Building Science Educators) News

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