

# Concept Sourcebook

A Vocabulary of Architectural Forms

**Edward T. White**

**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
- Images of Italy
- Ordering Systems: An Introduction to Architectural Design
- The Piazzas of Florence: Place-Making Lessons for Urban Environments
- 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

### **Concept Sourcebook: A Vocabulary of Architectural Forms**

Copyright © 1975 by Edward T. White. All rights reserved.

Reformatted and updated edition published by ArchiBasics Press 2024. <https://ArchiBasics.com>

No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means electronic, mechanical, photocopying, recording, scanning, or otherwise, except as permitted by the United States Copyright Act, without the prior written permission of the publisher. Since 2013, ArchiBasics Press has been the only authorized source for the work of Edward T. White and Architectural Media, Ltd.

This publication is designed to provide accurate and authoritative information regarding the subject matter covered. Neither the author nor the publisher makes any representations or warranties regarding the information provided and specifically disclaim any implied warranties of merchantability or fitness for a particular purpose. No warranty may be created or extended by sales representatives or written sales materials. Readers should seek professional advice before taking any actions related to information in this book.

<b>Preface</b>	<b>iv</b>	Activities	61	Building Images in Plan	103	<b>Building Envelope</b>	<b>163</b>
		Frequency of Activity Occurrence	63	Building Images in Elevation	107	Footings and Foundations	164
		Duration of Activities	64	<b>Response to Context</b>	<b>119</b>	Columns	164
		Anticipated Growth and Change	65	Property Boundaries	120	Walls	166
<b>Concepts</b>	<b>3</b>			Land Contours	121	Additional Column and Wall Roles	167
<b>Introduction</b>	<b>4</b>	<b>Architectural Space</b>	<b>68</b>	Surface Drainage	124	Beams	169
Need	5	Forming Space	69	Soil Condition	125	Additional Beam Roles	170
Goals	7	Spatial Qualities	70	Rocks and Boulders	126	Roof Forms	171
Organization	8	Scale Types	71	Trees	127	Wall Concepts	172
Potential Problems	9	Scalar Sequence	71	Water	129	Floor and Ceiling Concepts	172
		Scalar Flexibility	72	Existing Buildings	131	Balconies	173
<b>Theory</b>	<b>10</b>	Tailored Space	73	Expansion of Existing Building	133	Canales and Water Bins	175
Definition	11	Anonymous Space	74	Easements	135	Fireplaces	176
Relation to Design Process	13	Space-to-Space Relationships	75	Noise	135	Steps	176
Concept Scales	15	Inside-Outside Space	76	Views from the Site	136	Stairs	177
Contexts for Concept Formation	16	Division of Space	77	Off-Site Vehicular Traffic	137	Stair Placement in Relation to Building	183
Concept Formation	19	Door Placement, Circulation and Use Zones	80	Existing On-Site Vehicular Traffic	138	Additional Stair Roles	184
Concept Hierarchies	21	Circulation as a Space	81	Existing On-Site Pedestrian Traffic	139	Shafts	184
Concept Reinforcement	25	Multiuse of space	82	Utilities	140	Skylights	185
Creativity	26	Dealing with Residual Space	83	Building-Parking-Service Relationships	141	Skylight Roles	186
Problems in Concept Formation	28	Natural Lighting	84	Vehicular-Pedestrian Traffic Systems	142	Doors	188
		Artificial Lighting	85	Parking Systems	143	Window Forms	189
		Roles of Lighting	87	Car Storage	145	Windows in Plan and Section	199
<b>Vocabulary</b>	<b>35</b>			Approach to Building	147	Additional Window Roles	200
<b>Functional Grouping and Zoning</b>	<b>36</b>	<b>Circulation and Building Form</b>	<b>89</b>	Arrival Modes	148		
Need for Adjacency	37	Line-Generated Circulation	90	Entry to Building	148		
Similarity in General Role	38	Point-Generated Circulation	92	Total Site Zoning	151		
Relatedness to Departments, Goals, and Systems	39	Circulation within Circulation	93	Total Site Systems	152		
Sequence in Time	42	Basic Forms	93	Landforms	153		
Required Environments	44	Grouping of Forms by their Qualities	94	Seating Forms	154		
Types of Effects Produced	49	Specific Form-to-Form Relationships	94	Landscaping with Plants	155		
Relative Proximity to Building	52	Space-Circulation Relationships	95	Landscaping with Water	157		
Relatedness to Core Activities	56	Space-Circulation Sections	98	Contribution to Neighborhood	158		
Characteristics of People Involved	57	Placing Unique Space Shapes in Plan	99	Sunlight	158		
Volume of People Involved	59	Entry Points for Circulation Concepts	99	Temperature and Humidity	161		
Extent of Human or Machine Involvement	60	Placing Vertical Circulation at Unique Points in Plan	100	Rainfall	161		
Degree of Emergency or Critical Situations	61	Movement Systems	101	Wind	162		
Relative Speed of Respective		Routing Systems Through Buildings	101				
		Achieving Visual Interest	102				

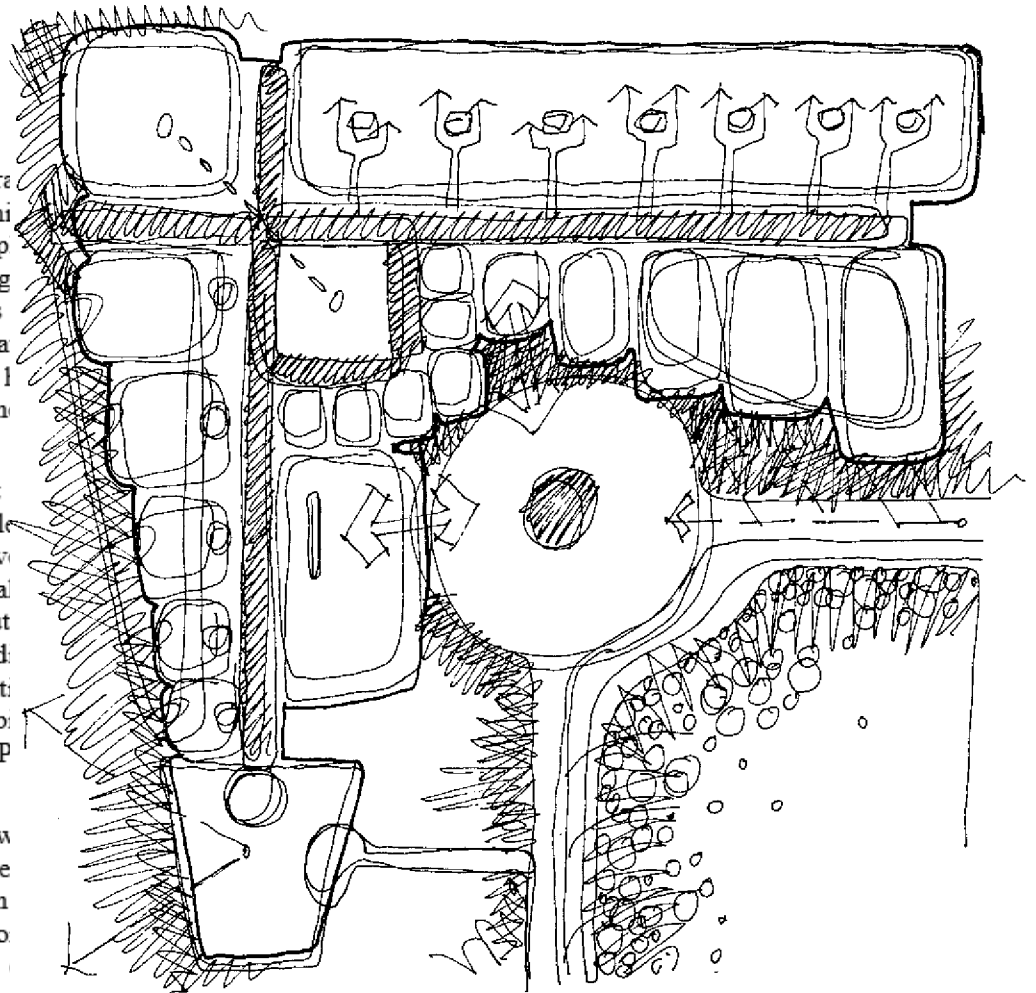
## Publisher's Preface

### *The Edward T. White Library*

**What?** Prof. White is arguably the most methodical, eloquent, and graphically inventive explainer of design in general, of effective design technique and of designing for behavioral-contextual functionality. His books explain what makes a particular design meaningful, how the best designs manage to achieve both order and innovation, how the subconscious can process and then retrieve knowledge through such manual techniques as observation and sketching, how project goals can be established before designing, how built designs can be evaluated once occupied, and how that's all done in practice.

**Why?** There's an old joke that engineers learn more and more about less and less until they know everything about nothing and that architects learn less and less about more and more until they know nothing about everything. Design is an art but also a science. The best designers are specialists who gather information on all the issues that inform a good project but also generalists who can step back and connect the dots. This is exceedingly difficult to do well. Effective designs are said to be durable, beautiful, and functional. Information is readily available on designing for durability and beauty but there's very little on how to achieve functionality. Prof. White's books help fill that void.

**Why Now?** As these books were first written years ago, readers may wonder if they are still relevant. The truth is that there's still nothing better even close. Fact-based decisions are increasingly necessary – even in design professions, which skew so heavily toward art. Of course, sometimes without grounding decisions in investigation, exploration, and experimentation, projects can still succeed. But the contemporary world of margins and extreme consequences is far better suited to projects based on the rigor Prof. White advances. The original texts have been minimally edited to eliminate obsolete references. Any remaining won't reduce the power of the message.



# Introduction

# Need

At the end of our career as an architecture student, we seem to graduate with a relatively small vocabulary of architectural forms for responding to project needs. This is not because the forms are unavailable, but because present methods for acquiring them are very inefficient. As a result, in the role of professional designers, we tend to handle very different projects with very similar building forms that have become comfortable and familiar.

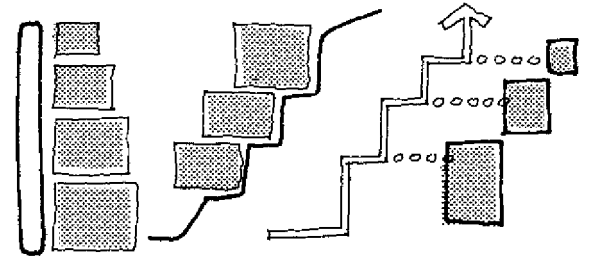
In both architectural practice and education, concept formation is demanded but seldom taught. More often than not, it is learned peripherally, in a piecemeal manner as the residue of design case study experiences in the studio. There are several reasons for the neglect of this central aspect of design activity:

1. The study of concept formation has traditionally been mind-oriented and as such has encountered problems due to the scarcity of information about the actual workings of the mind.
2. The value placed on purity and innocence of design authorship as a requirement for creativity has tended to promote a hands off attitude toward both training in concept formation and systematic exposure to existing concept vocabularies.
3. The preoccupation with preserving our individuality as student designers has resulted in waiting until we make our concepts before beginning serious discussions about synthesis in studio classes.
4. The growing body of facts from other fields to which we must respond in design has become an object of attention in itself and has drawn off much of the theoretical thinking done by those interested in front end processes in design.
5. The perception of architecture as ultimately product oriented has channeled much of the mental effort in design theory to analysis of completed building designs.

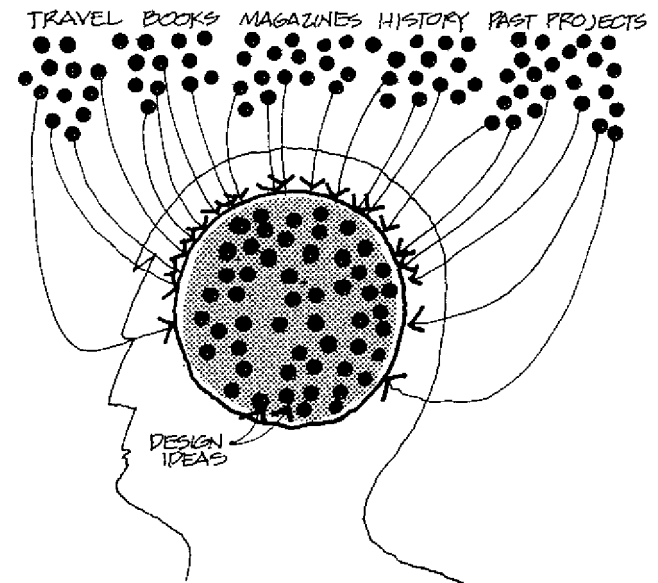
All of these factors taken together have left us without any developed body of theory about concepts or concept formation. The subject is seldom addressed directly in architectural education even though required of us as students in the studio.

Below are offered some observations about the conditions that have prevented the maturity of concept theory and concept training in design.

1. The view of concept formation as an intricate, infinitely complex system of largely subconscious thought processes, hopelessly buried in grey matter and defying analysis is probably correct. We can circumvent this problem however and effectively teach concept formation by simply teaching concepts. The situation is no different than teaching sentence formation in English composition. We do not describe how the mind works when creating a sentence but rather we show students examples of well-formed sentences and some ways of making them.
2. Somehow we acquire the misconception that to reuse and apply those concepts that we have already learned is uncreative, a form of self-plagiarism and an admission that we have no ability to generate ideas on our own. An attitude is developed that design strategies learned through travel, distilled from architectural history, seen in periodicals and tried in last year's studio have been "used up" and cannot be drawn upon for present or future work. As true designers we must somehow deny ourselves access to outside sources when seeking concepts for our projects. This is nonsense. Creativity results from knowing more, not less. We must absorb as much as we can from as many sources as possible to equip ourselves to produce our best projects. There are numerous valid and proven alternatives for dealing with project needs in building form. It is senseless to persist in attempting to design while wearing blinders, reinventing fundamental and well-known strategies and refusing to use available concept



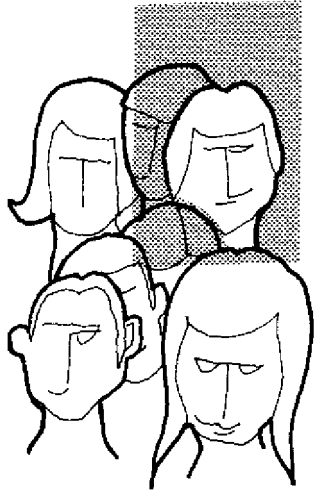
AN EFFECTIVE WAY TO TEACH CONCEPT FORMATION IS TO SIMPLY TEACH CONCEPTS.



DEVELOPMENT OF AN EXTENSIVE DESIGN VOCABULARY IS ESSENTIAL TO CREATIVITY.

vocabularies. Originality in design comes from making these strategies second nature so that they can be creatively chosen, combined, varied and manipulated to produce totally new ones.

Design teachers should assume a hands on posture toward students in teaching concepts. They should encourage students to more actively seek exposure to and use of concept sources and catalysts.



THE TEACHING OF CONCEPTS CAN NEVER ERASE THE INDIVIDUALITY OF EACH DESIGNER.

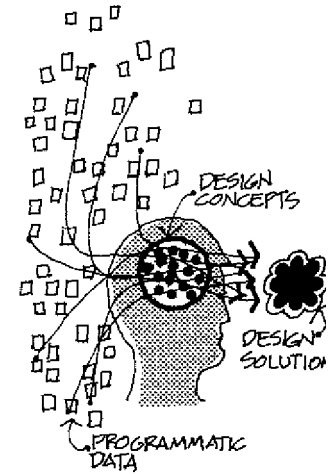
3. There is no doubt that encouraging different building solutions to the same set of project requirements is a great source of stimulation and meaningful learning in the design studio. The essence of the validity of this teaching and learning tool is sometimes seen as the promotion of the individuality of the design student, the avoidance of tampering with the ways the student generates concepts and the religious reluctance to predispose the student toward certain solutions by teaching concepts directly. As will be discussed further on, no two designers will approach a project in exactly the same way because of their unique and different experiences, life views and values, design philosophies and perceptions of the problem. Discussions in the studio about forming concepts and expanding vocabularies of available concepts in architecture cannot possibly erase the inherent individuality of designers and should in no way reduce their capacity to generate different building solutions. Similarities between building designs in the studio are more likely a result of a tightly structured project program, a building type with extremely strict performance standards or a teacher with a strong opinion about which building forms are appropriate for the project.
4. Behavioral relations between people and building, ecological interactions between building and nature and the role of building in people's perceptions of and orientation to the cityscape are some contemporary considerations that we must address in planning buildings. The components of these concerns and others that are becoming available

to architecture from related fields such as sociology and psychology are mounting in number and complexity. Add to this the increasing complication of the traditional architectural concerns and the greater demands placed on building performance and it becomes evident that we are faced with a dilemma. We are caught between a huge and still growing body of information which must be translated into building form on one hand and more stringent criteria for judging the success of buildings on the other. There are two problems that result from this condition:

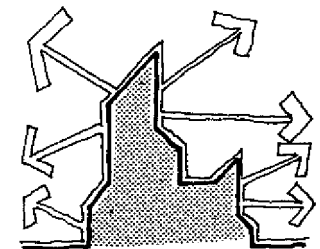
- a. The information overload puts too much pressure on us, often resulting in mental gridlock during conceptualization.
- b. The characterization of the new design data as totally different from any data dealt with before implies that we must generate totally new concepts in response.

Both of these difficulties have to do with concept formation and concept vocabularies. The first makes it even more important that we address concept formation directly as subject matter in the studio. It is the point where the programmatic information is initially translated into an idea for physically dealing with it in building form. The second need, to create new concepts, renders the teaching of concept vocabularies not only legitimate but necessary. We must have access to the language before we can create new words and sentences, and in time, new grammar and syntax.

5. It is difficult to argue against the belief that the effects of and on a building when in use are crucial and perhaps even the most important concern in building design. All of the techniques, methods, processes and theory having to do with design activity are largely aimed at producing buildings that cause desirable consequences. The validity of the study of design is founded principally in the construction and use of successful buildings.

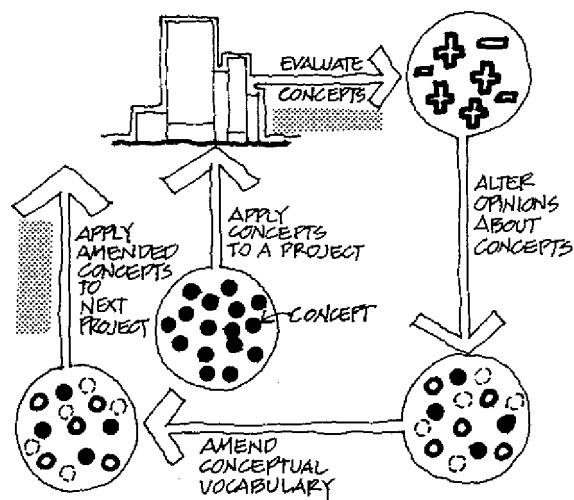


THE LEARNING OF CONCEPTS CAN HELP TO REDUCE THE PROBLEMS OF INFORMATION OVERLOAD AND UNFAMILIAR PROGRAMMATIC DATA.



THE EFFECTS OF OUR BUILDINGS ARE VITAL CONCERNS IN THE DESIGN PROCESS.

There is sometimes a feeling by those who share this attitude that there is too much self-indulgent manipulation of method theory for its own sake in architectural education. This may be the case, but it is important not to hastily react by discouraging efforts at theory development. The experienced designer can surely see the relation between concept formation and the positive and negative qualities of the eventual physical building. Greater emphasis on developing and teaching concept theory is one of the most effective ways of controlling building consequences more completely and of ensuring that they are as desired and predicted. It is mandatory, of course, to develop sensitive feedback mechanisms together with thorough building evaluation techniques to continually check the validity and relevancy of the concepts that are being taught and to monitor the relationship of design concepts to the realities of constructed and inhabited buildings.

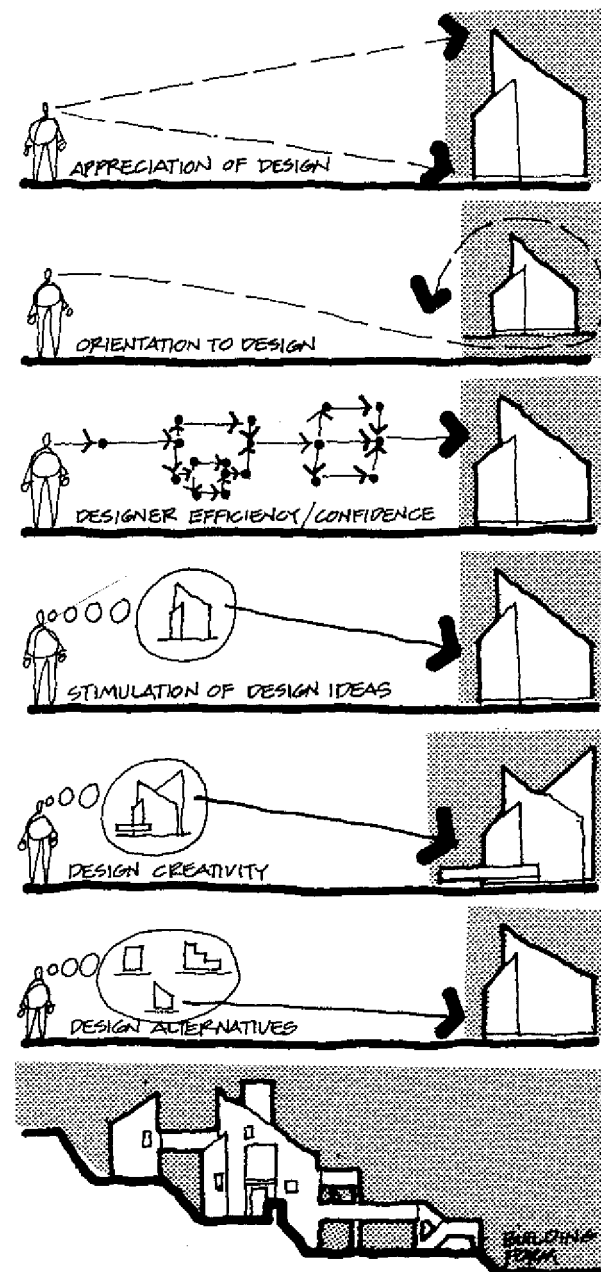


WE SHOULD ESTABLISH **FEEDBACK LOOPS** TO EVALUATE THE EFFECTIVENESS OF THE **CONCEPTS** THAT WE EMPLOY IN DESIGN.

## Goals

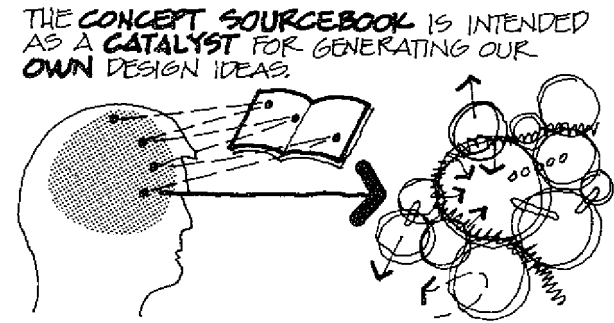
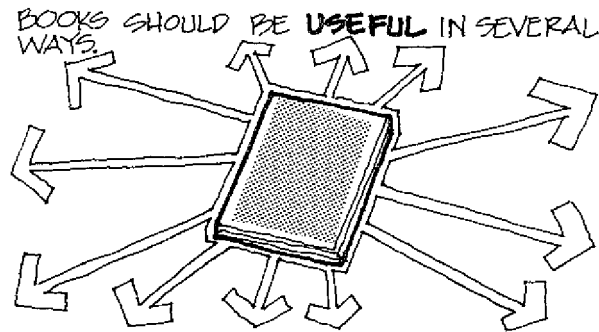
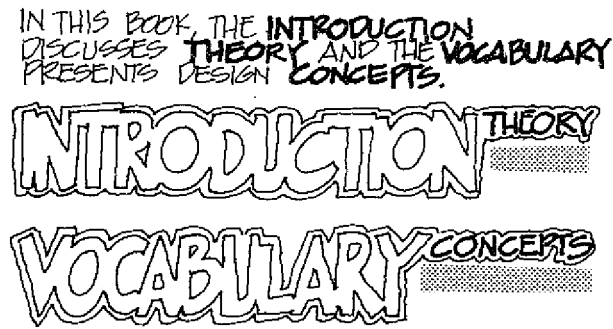
The goals of this book are derived from the issues discussed earlier:

1. To provide the layman with some appreciation of the considerations that architects deal with in building design.
2. To introduce the beginning architecture student to some of the concerns of building design.
3. To promote beginning designer confidence in his or her ability to completely respond to project needs with building form.
4. To offer an efficient way for the design student to accumulate a vocabulary of architectural forms and concepts.
5. To serve as a stimulant and catalyst for generating concepts.
6. To promote creative design by helping to make traditional design strategies second nature.
7. To help the designer become more efficient in design work and more able to deal with complexity in projects.
8. To provide a spectrum of alternatives for dealing with a single design requirement or situation.
9. To allow the designer to become facile in concept formation sooner so that more time may be spent in developing, refining and manipulating building form.
10. To encourage the design student to explore project requirements thoroughly for form giving issues.
11. To help foster an understanding about the relationship between project facts and building form.
12. To help the designer overcome the tendency to spend too much time in plan.
13. To help the designer transcend any timidity in exploring new building forms.



THE **GOALS** OF THIS BOOK CONCENTRATE UPON THE **SEVEN TOPIC AREAS** LISTED ABOVE.





## Organization

The book is divided into two major sections, the Introduction and the Vocabulary.

There is an important distinction between the theory presented in the Introduction and the concepts presented in the Vocabulary. There are obvious personal values and biases of the author included in the Preface and Theory of the Introduction. The Vocabulary section, on the other hand, makes no proposals or recommendations but simply presents alternative design strategies. It serves much as a dictionary in that the user must choose the appropriate strategies for particular design situations. This is not a book of "answers" but rather a collection of concepts from which the designer may choose, derive, assemble, refine and manipulate his or her own answers.

The Introduction is verbally presented with diagrams and is relatively short. The Introduction has no direct content relationship to the Vocabulary section.

The Vocabulary section is graphically presented and embodies the principal purpose of the book. The concepts presented are organized under the following headings:

1. Functional Grouping and Zoning
2. Architectural Space
3. Circulation and Building Form
4. Response to Context
5. Building Envelope

This author believes very strongly in the multifunctional roles of books. The value of this source book may be direct, as when the designer chooses to use some of the ideas presented here. Just as valuable, however, are the indirect roles such as:

1. Providing concepts that may be altered to suit special needs.
2. Stimulating the designer to generate his or her own concepts.
3. Calling to mind antithetical concepts from those presented here.
4. Fostering the creative combination of concepts.
5. Helping to develop diagramming ability.

The concepts are sometimes presented at a given scale but may be applicable to many scales. They are sometimes applied to a particular architectural situation but are applicable to many situations. The concepts are offered in plan or section but are valid for both. Many of the diagrams are examples of the concepts being applied to a specific building type. The user of this book should strive to understand the generic form of the concepts presented in order to benefit from their broadest applicability. The book is intended as a broadening tool, not as a limiting one. Hopefully the contents will help stimulate the growth of a concept vocabulary that will extend well beyond the covers of the book.

The book is meant as a catalyst in concept formation for each project undertaken. It belongs at the drawing board. The different meanings that it has from project to project and from designer to designer will hopefully prompt many rich and beneficial discussions.

## Potential Problems

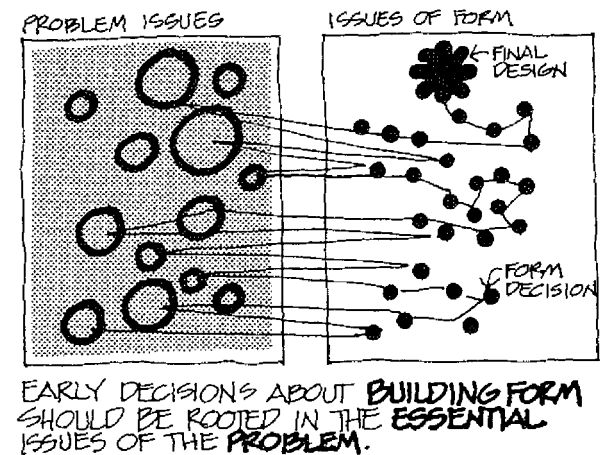
There are some problems that should be pointed out which may result from possible misconceptions about the book:

1. The book does not propose a design process or method. Sometimes this is interpreted from the presentation sequence of the material. The beginning student is particularly prone to be procedure-oriented and to search for rules which, if followed, will ensure design success. The order in which the concept vocabulary is presented does not propose a sequence for addressing design concerns in a project. This must be determined by the designer after careful problem analysis and establishment of project emphases.
2. The book focuses mainly on physical design issues. Relationships between the concepts presented and the intentions and goals of the designer must be made by the designer. For example, alternative ways of handling spaces are presented but not reasons or intentions for handling them that way. The designer must choose from among the alternatives presented and have reasons for the choices. This is true for all the concept sections. The concepts are presented neutrally. Value, emphasis, rationale and choice are the responsibility of the designer.
3. Access to a concept vocabulary demands designer discipline and restraint lest the building design become a muddy and uncoordinated assembly of unrelated ideas. There may be a tendency to try to incorporate too many concepts, some having no connection to project needs and issues. This almost always leads to unnecessary complication and to compromise of the most important concepts. It is vital that the concepts chosen be relevant, appropriate and related to each other in a unified solution. >

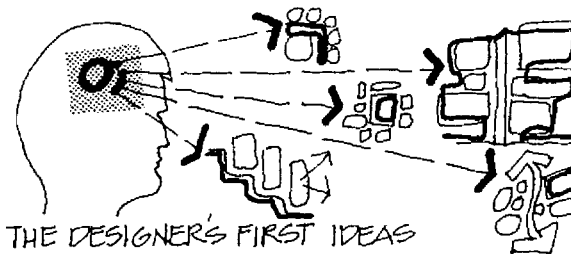
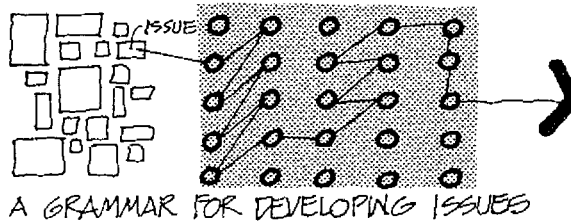
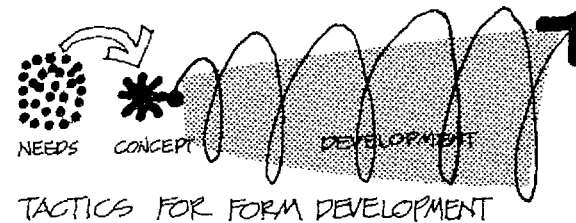
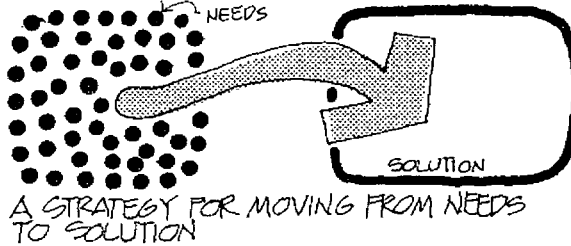
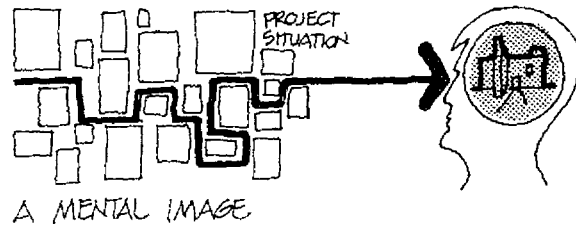
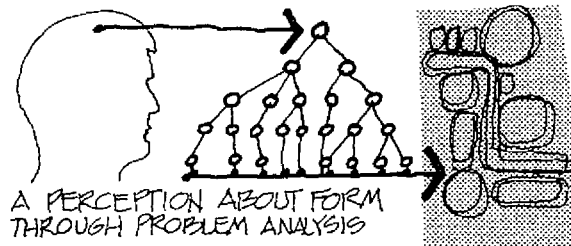
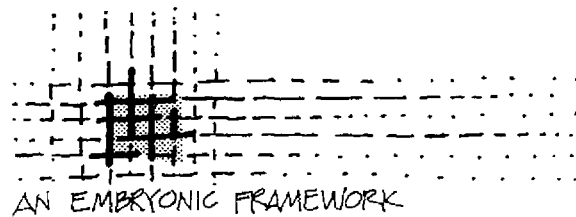
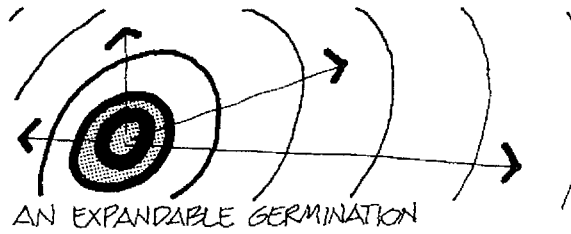
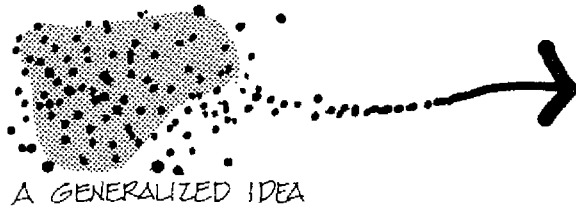
4. The designer may have the attitude that a concept vocabulary somehow lessens the effort needed for development and refinement of the solution. The opposite is the case. There is much more demanded of the designer in terms of making relationships, resolving conflicts and mediating the competition between alternative design strategies for making building form. By enriching the building form, the project becomes more complex for us, not more simple. For any set of concepts chosen, there is important adaptation and refinement to be done before the concepts truly respect the project requirements and each other.
5. The book is not intended to be stifling to the designer or to be more of an influence on our building solutions than the project requirements. The danger here is that the book will be the only source used to generate design ideas. This would be detrimental to our personal development. There are more notions about design that are not contained in this book than are in it. Each of us must accumulate our concept vocabulary from as many diverse sources as possible. Notes and diagrams made while traveling, magazine cutouts, edited history notes, handouts from design studio classes and a diary of ideas as they occur while reading are some of the ways that we can build our own concept book. This of course does not diminish the absolute necessity for detailed analysis of the project needs. This analysis generates criteria for choosing from among available concepts in our vocabulary. Because the ideas presented in the vocabulary section of this book are physical concepts, there may be a temptation for us to prematurely choose and manipulate them before completing the project analysis. Sometimes, as beginning students, we are inclined to believe that "making buildings" is the business of architecture and that the sooner we get physical or architectural in design the better. If we can insert another word and say the making of successful buildings is our chief concern, then we can more

easily see the importance of writing thorough programs, analyzing the project and responding to the needs faithfully, completely and creatively. Our understanding of the project situation must always precede a search for the physical concepts that lead to building form. The more we know about the project needs before choosing concepts, the more meaningful, effective and intelligent will be our choices.

Achieving this kind of mental discipline is very difficult, particularly when the project needs are overly complex, seem too simple or for some reason are uninteresting. In these instances, our mind often wanders to thoughts of how to handle the column transition to ground or to some other escape from the task at hand. Although this may be an effective escape from the tedious, we must guard against allowing these design ideas to pass as valid until they are tested against the findings of project analysis. While it is true that many decisions about form are made as a response to or in continuation with previous form decisions, still the early form decisions should be founded in project analysis conclusions. These form decisions, in turn, provide the context for the form decisions that will follow.



A **CONCEPT** MAY BE DEFINED AS:



## Definition

The architect, the architectural student and the design teacher are all involved with the making of building forms. There are many valid techniques, models, paradigms, idioms and processes for designing, learning design and teaching design, all with the same essential goal of providing successful architecture in every sense. They all serve as vehicles or catalysts for improving our effectiveness as designers, for broadening and deepening our understanding of design activity and organizing and presenting information about designing. One of these, the notion of concepts will be used here to present some thoughts about architectural design.

There are several statements about concepts which, taken together, can convey a sense of what they are. A concept is:

1. An initial generalized idea.
2. A germination which is to be expanded and developed later in more detail.
3. An embryonic framework which is to accommodate a richer complexity.
4. A perception about form resulting from an analysis of the problem.
5. A mental image deriving from the project situation.
6. A strategy for moving from project needs to building solution.
7. A rudimentary set of tactics for proceeding with design.
8. A preliminary grammar for developing the **principal** project issues.
9. The designer's first ideas about building morphology.

From these notions we can distill several facts about most concepts:

1. They are derived from problem analysis or at least initially stimulated by it.
2. They are general and rudimentary in character.
3. They both require and must embrace further development.

Traditionally, architectural concepts have been our ways of responding to design situations presented in programs. They have been the means for translating the nonphysical problem statement into the physical building product. Every product has within it what might be described as prime organizers, central themes, critical issues or problem essences. These all exist within the project situation or within our perception of the problem situation. We must establish what they are, and then out of them, or in response to them, create concepts for dealing with them architecturally. Our concepts are sometimes called big ideas or basic frameworks or primary organizers.

As we will see further on, concepts may be process or product oriented, take place at any stage in the design process, occur at any scale, be generated from several sources, have a hierarchical nature, possess intrinsic problems and be plural in number and concern within any single building.

As designers, we are presented with project situations. They come to us from programmers or clients and they require a building or buildings to satisfy the stated needs. Often, we think of a building design as consisting of one concept or overall idea. Evidence of this exists both in school and in the profession. Competitions ask for a statement of the concept. Student projects are explained in juries by beginning: "my concept for this project is" ... Although it is true that the design of the project may begin with a single overall direction of how to respond to the problem ("this is a functional problem" or "this is a contextual problem") any building design is in fact composed of many concepts. Even small scale

projects contain a great deal of complexity and it is virtually impossible to deal with all the aspects of the building simultaneously with a single concept. We must divide the project situation into a manageable number of parts, deal with them individually and then synthesize them into one whole simultaneous building.

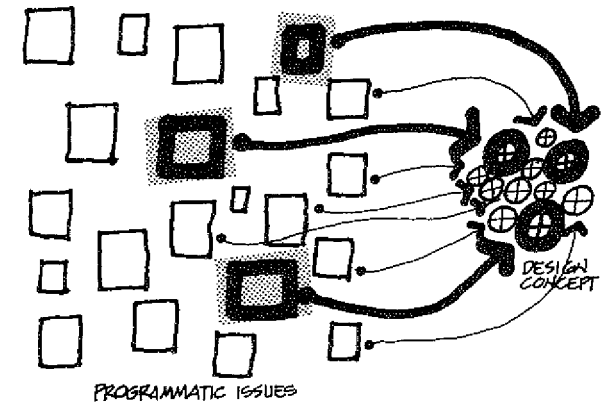
Some general categories under which the concerns and issues of a building may be listed and addressed in design are:

1. Functional zoning
2. Architectural space
3. Circulation and building form
4. Response to context
5. Building envelope

Economy applies to all of these. The issues of most building types fit conveniently under these five categories and taken together, the categories seem to describe many of the important concerns about building design.

There are undoubtedly many other ways to decompose building design into issue topics that are equally useful. The ones listed here have proven useful to this author in his own design work and so he has addressed himself in this book to the development and presentation of some of the concepts possible under each of the five headings. Alternative taxonomies for describing building design activity are not explored in this book.

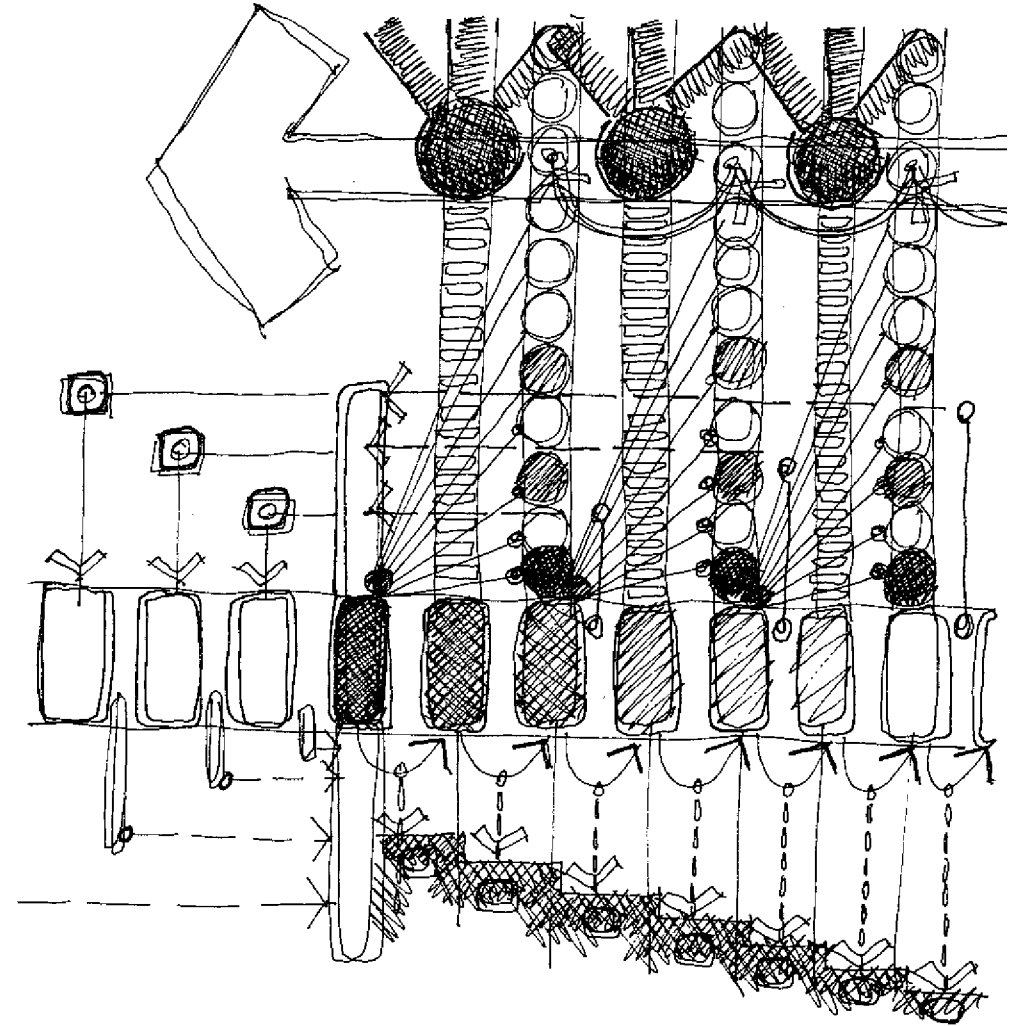
"Functional zoning" and "response to context" involve existing conditions. The client's operation and the context where the building will be located are givens. Space, circulation and form and building envelope are our means for responding to the givens and transforming the project situation into a building. We act upon and develop concepts about all five: function, space, circulation and form, context and envelope. Within any of these categories we may produce several concepts. When developed and combined, the functional, spatial, formal, contextual and envelopmental concepts produce a building design.



THE **PROGRAMMATIC** ISSUES SOLVED FIRST WITH BUILDING FORM ARE OFTEN SOLVED BEST BECAUSE THEY BECOME THE **CONTEXT** WITHIN WHICH THE REMAINING ISSUES ARE SOLVED.

The quality of that design and the resulting success of the eventual constructed building will depend upon our ability to produce valid, complete, efficient and creative concepts and to put them together into a harmonious whole. The goal is to design a building that is totally successful in all respects. This book is intended as a checklist to bring some of those concerns to our attention during design.

Depending upon our personality and individual design method we may address conceptual issues in a rigid sequence or skip among them in some order or at random until the mosaic of the building solution is finally complete. This sequence of our attention to the respective problem issues and the assignment of emphasis to them will have a profound effect upon the nature of the solution. Those issues addressed first in design are often the most important in our mind and tend to be solved most successfully. Also, because they are solved first, they tend to be formalized early and so become the context for solving the other remaining issues. The remaining issues must adapt themselves to the ones solved first. This seems to be true even with design recycling and with the tentativeness that characterizes most early design decisions.



## Functional Grouping and Zoning

# Need for Adjacency

RELATIVE NEED FOR BUILDINGS, DEPARTMENTS, SPACES OR ACTIVITIES TO BE ADJACENT

ADJACENCY NEED RANGE

CRITICAL

NECESSARY

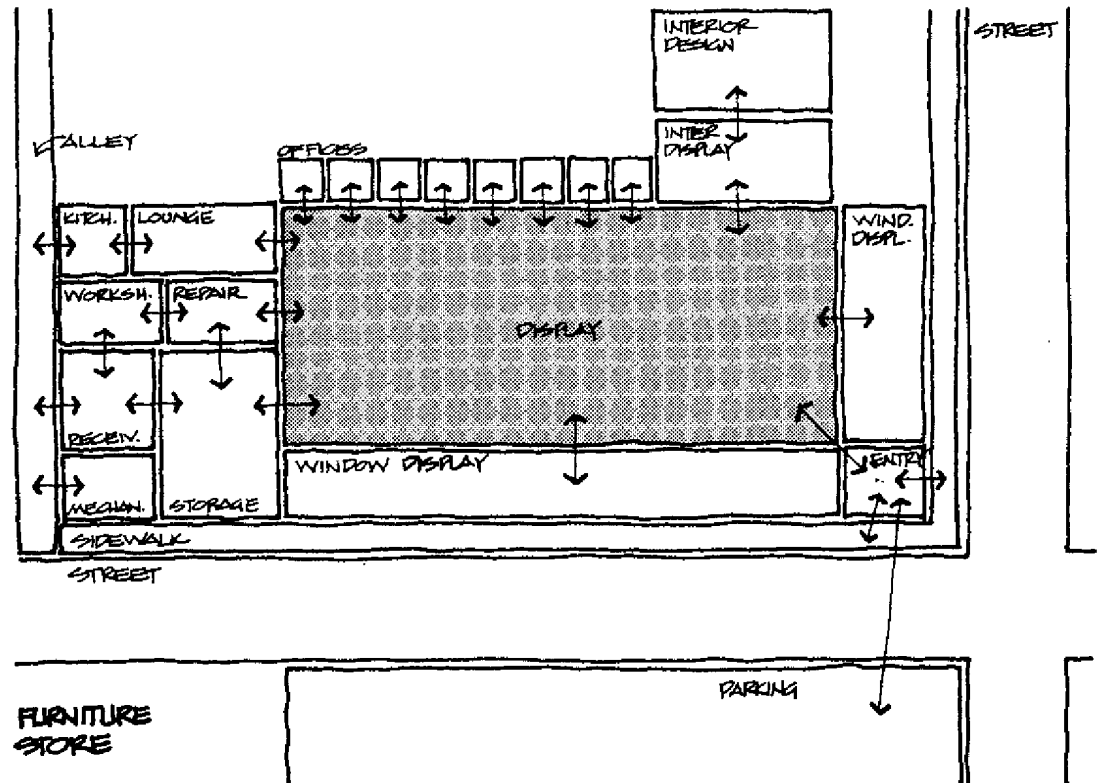
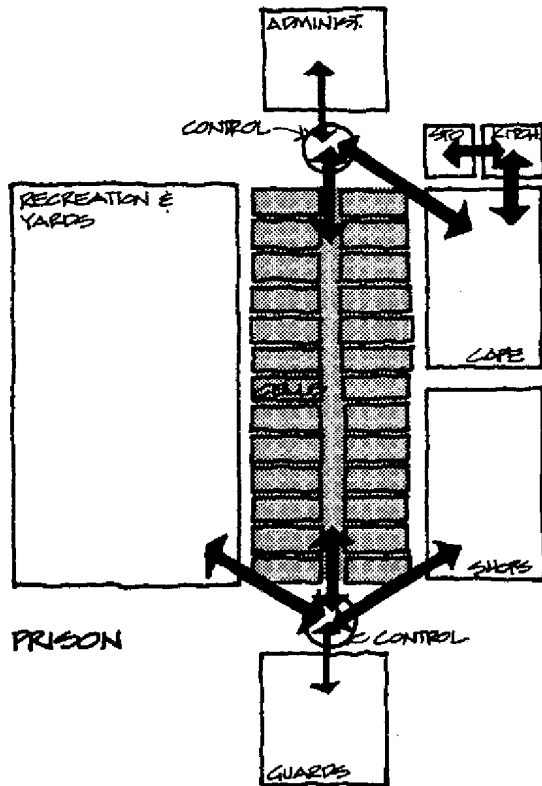
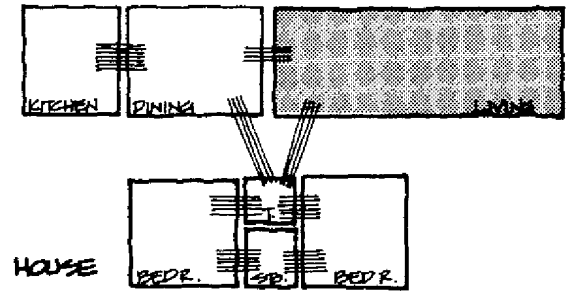
DESIRABLE

NEUTRAL

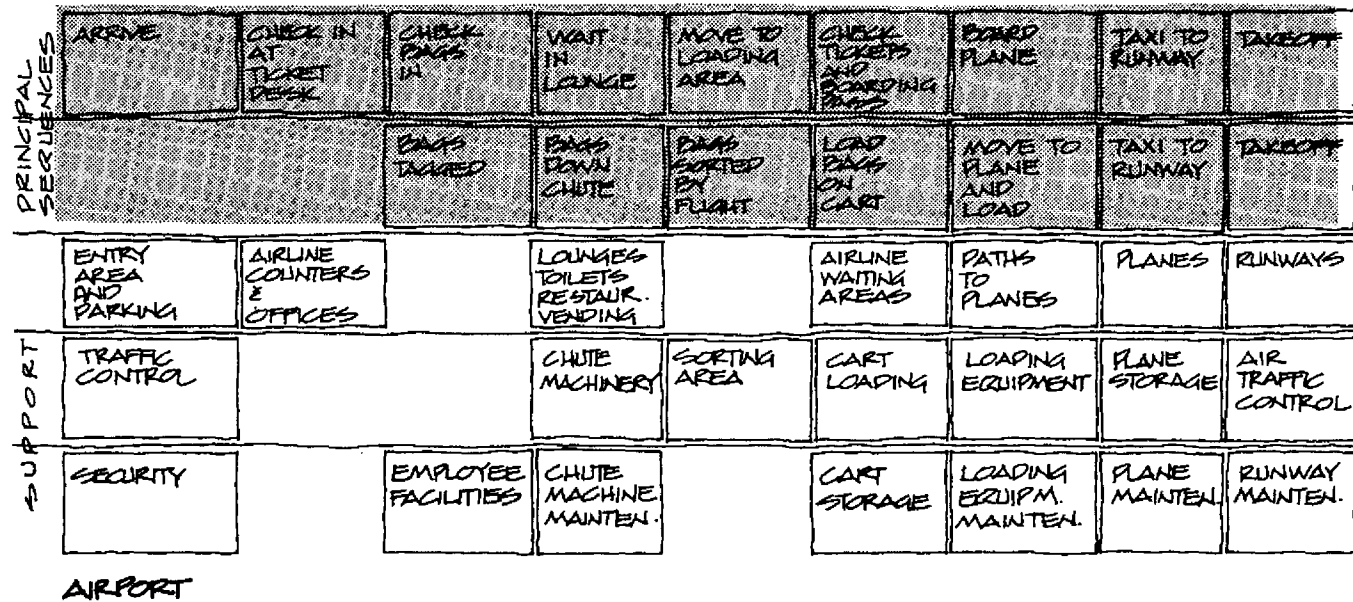
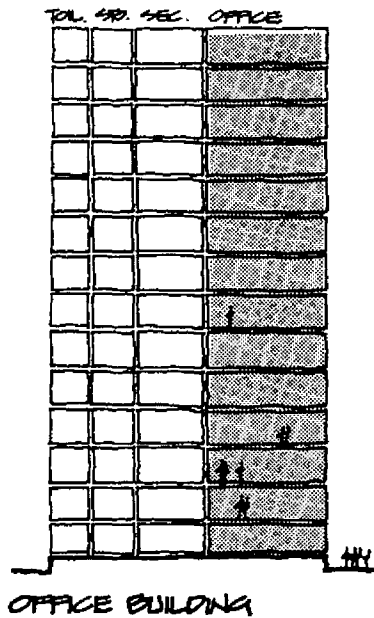
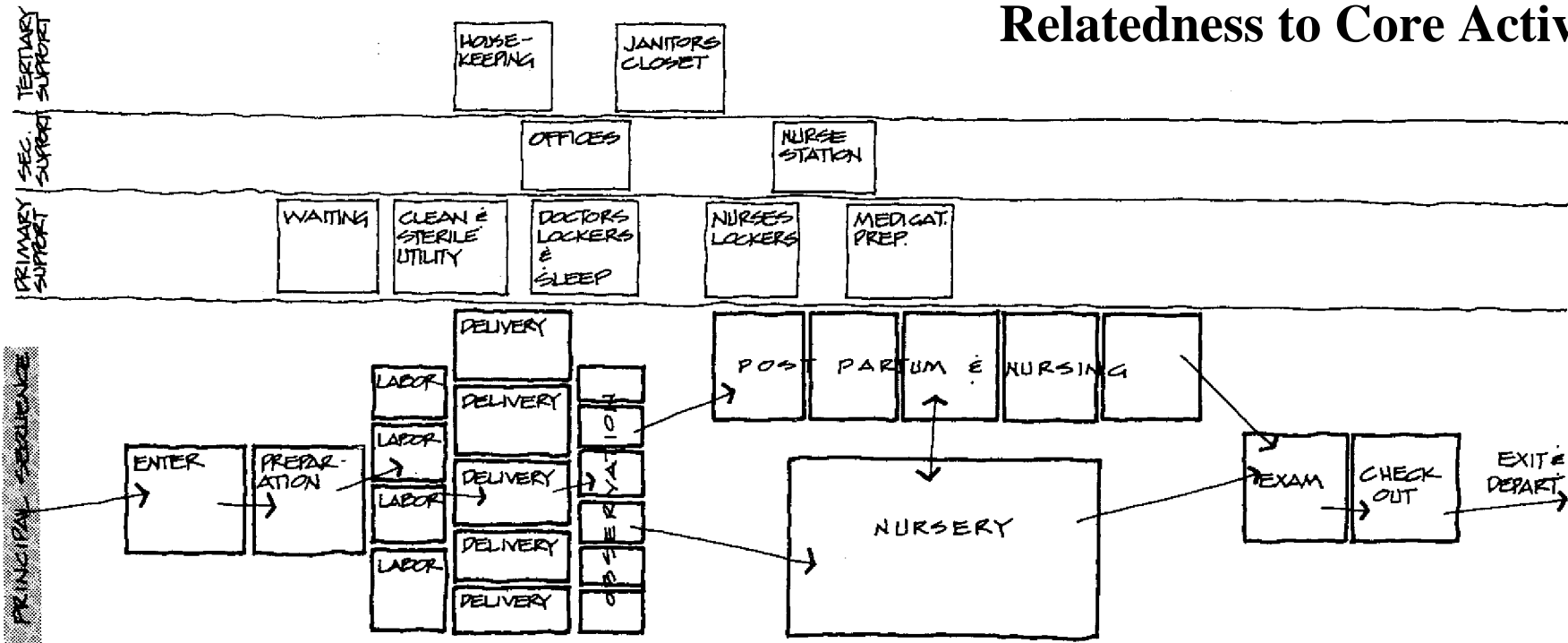
UNDESIRABLE

NECESSARY SEPARATION

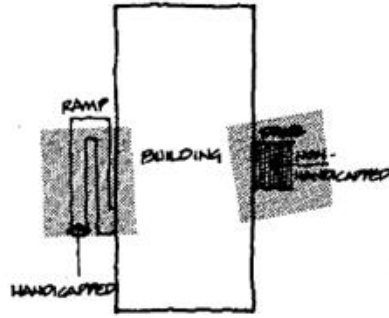
CRITICAL SEPARATION



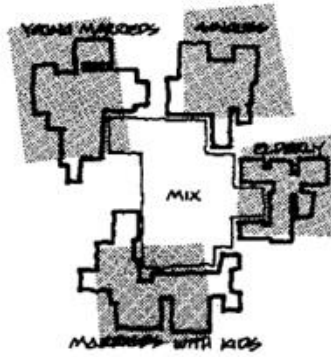
# Relatedness to Core Activities



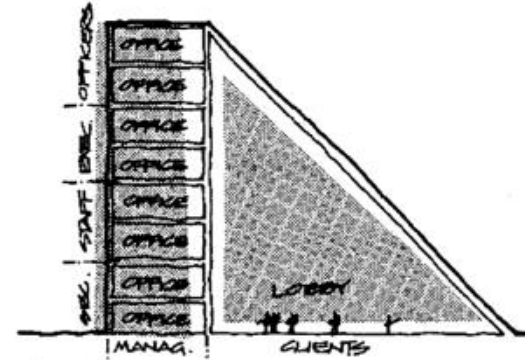
# Characteristics of People Involved



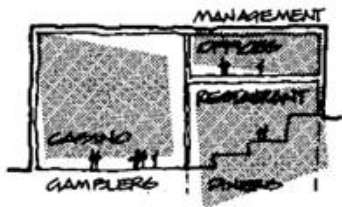
OFFICE BUILDING



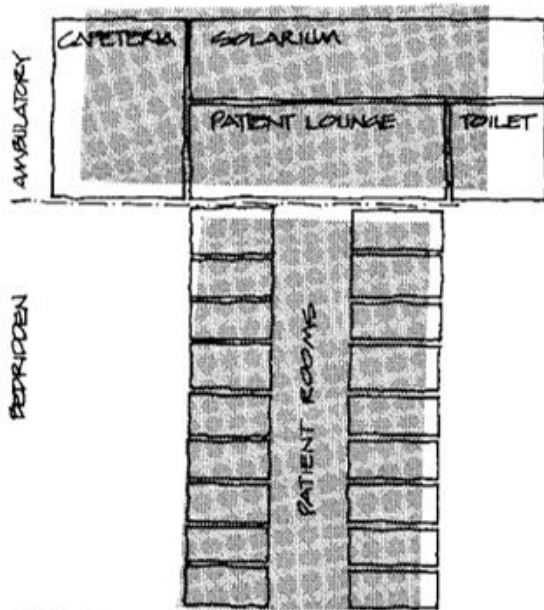
HOUSING



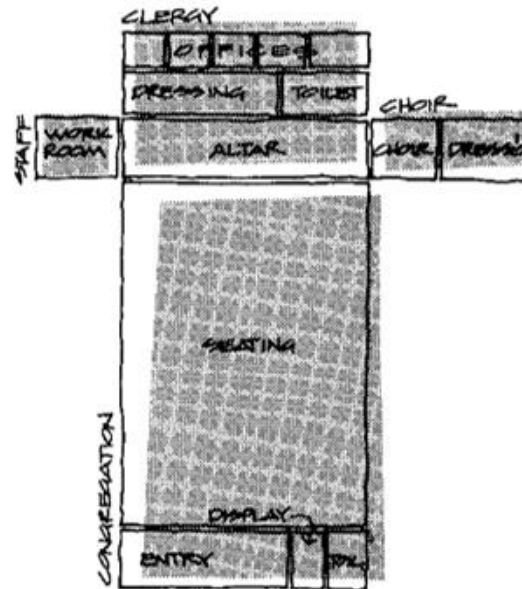
BANK



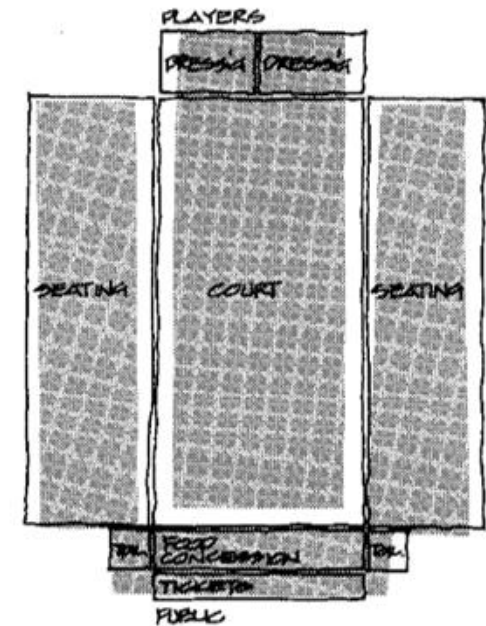
CASINO



NURSING HOME



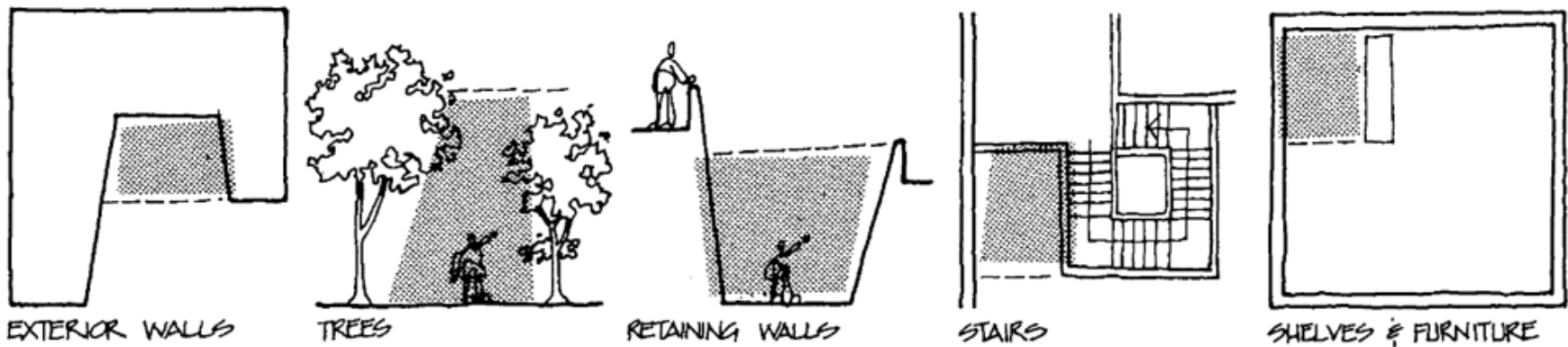
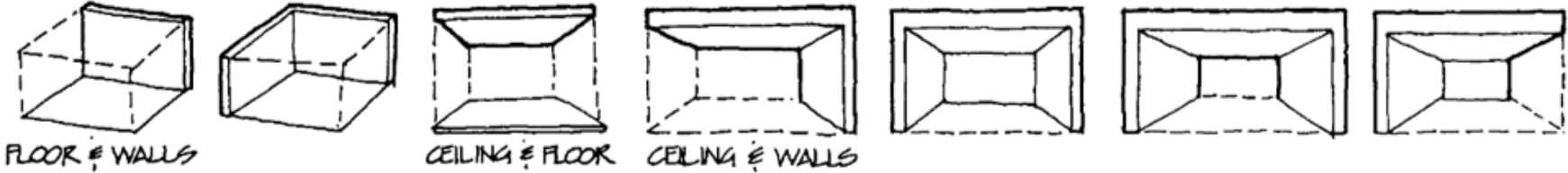
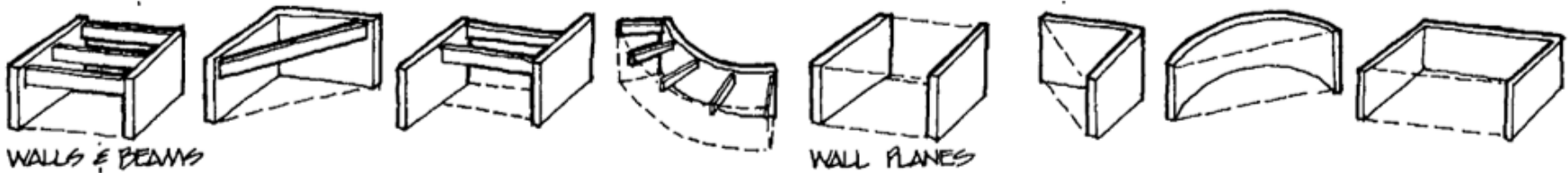
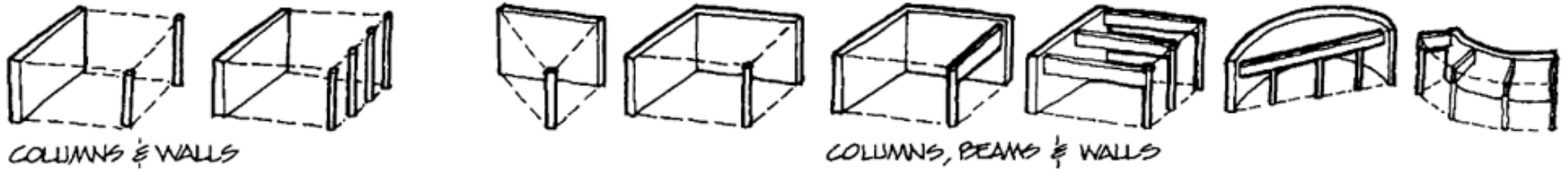
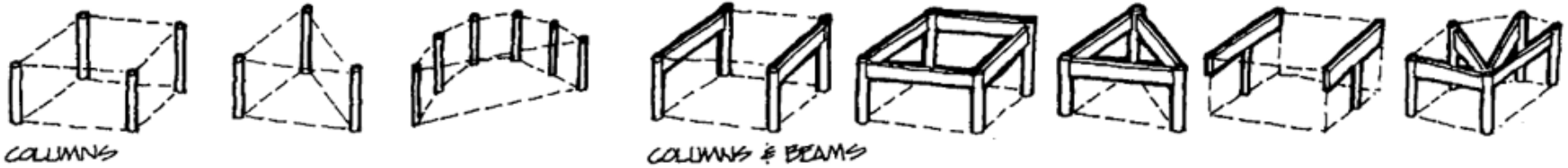
CHURCH



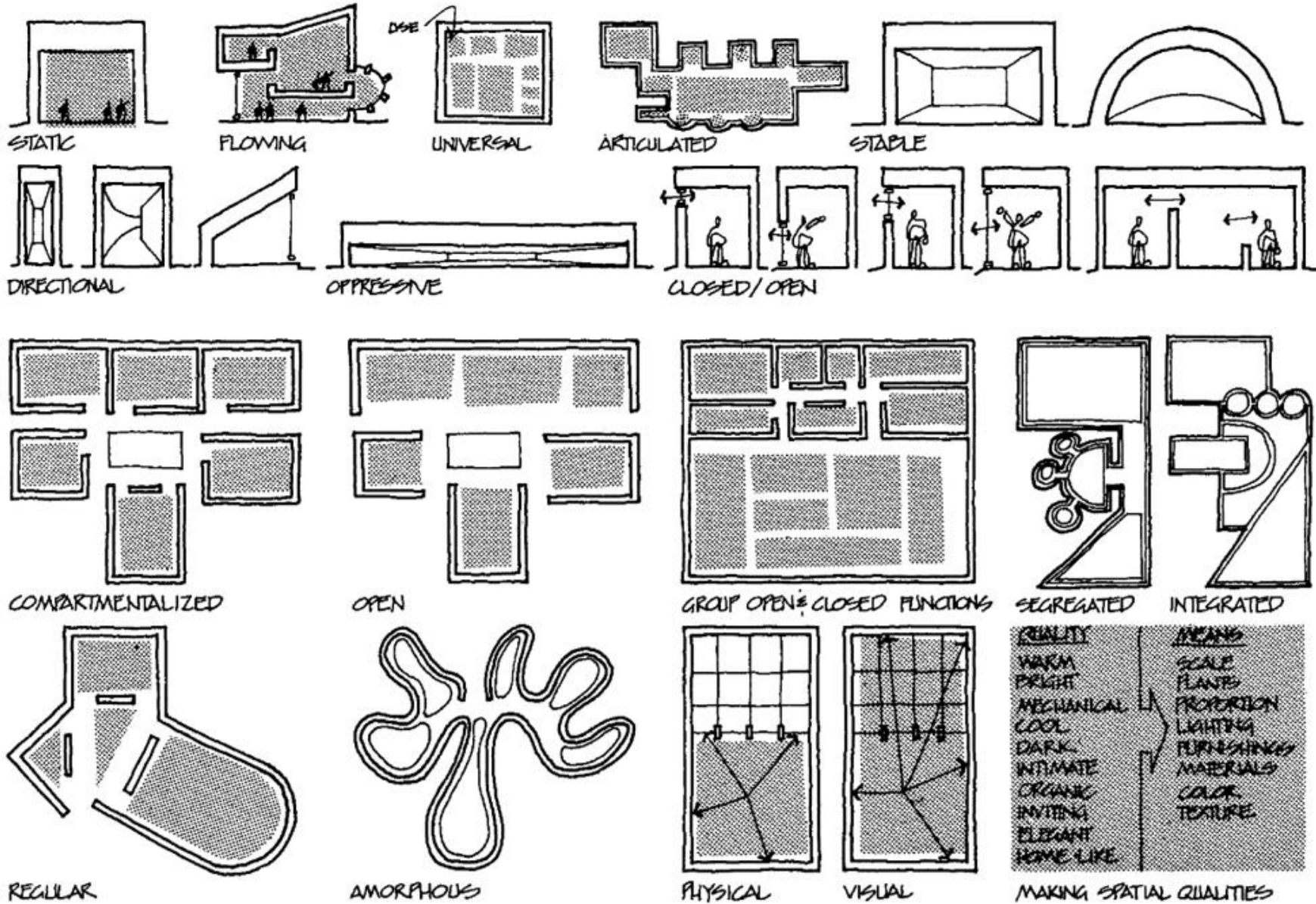
FIELDHOUSE



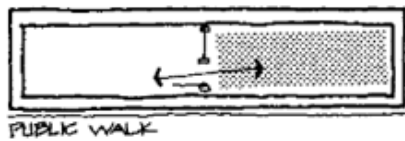
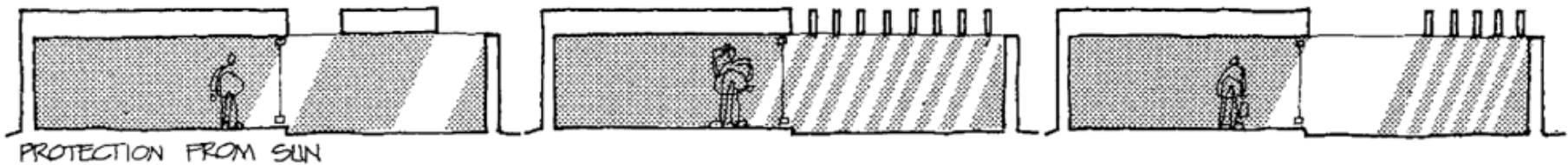
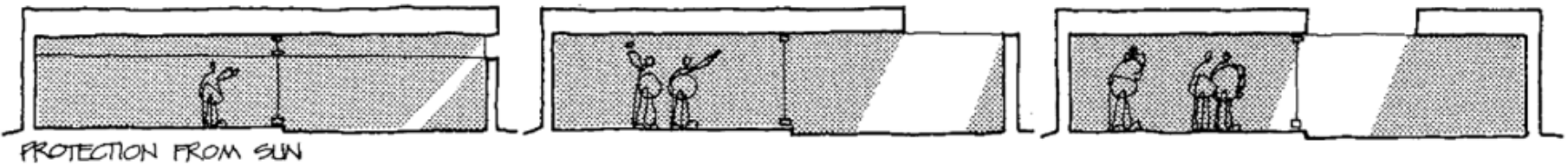
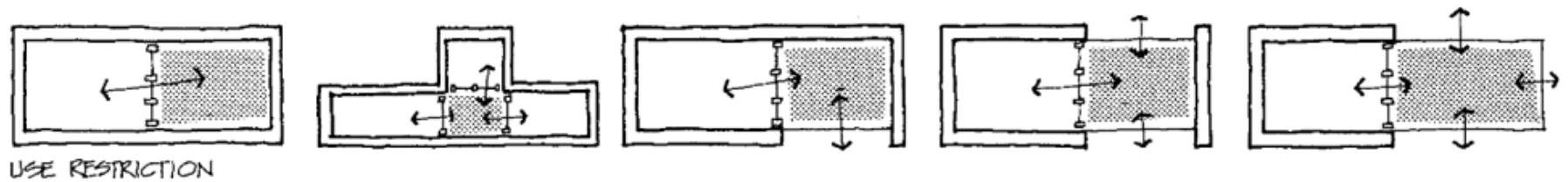
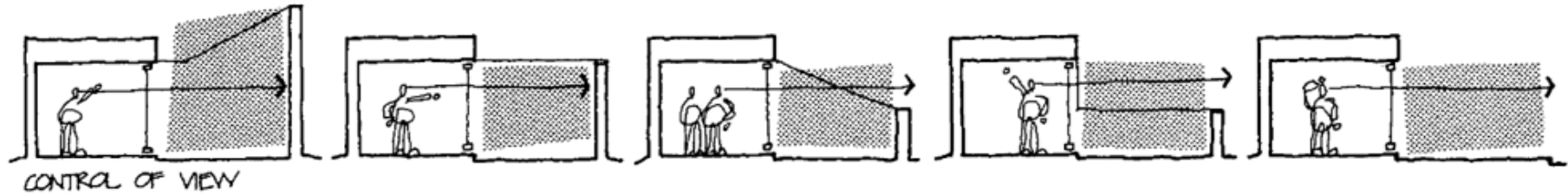
# Forming Space



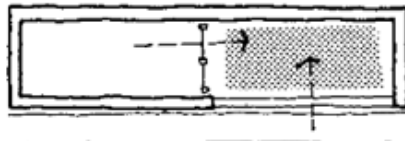
# Spatial Qualities



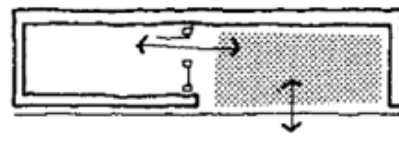
# Inside-Outside Space



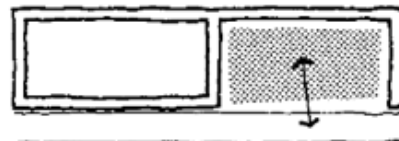
EXCLUSIVE SPACE USE



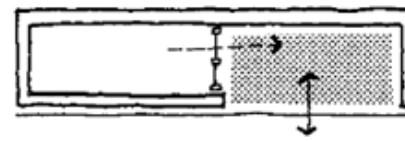
VIEW FROM SPACE ≠ PUBLIC



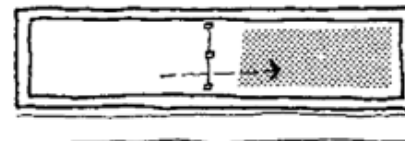
USE BY SPACE ≠ PUBLIC



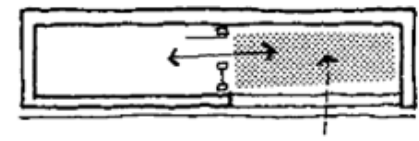
EXCLUSIVE PUBLIC USE



PUBLIC USE • VIEW FROM SPACE



VIEW FROM SPACE

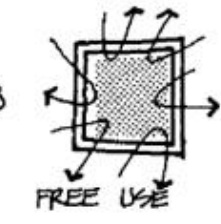
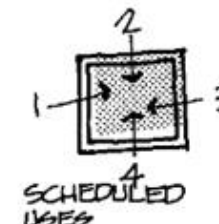
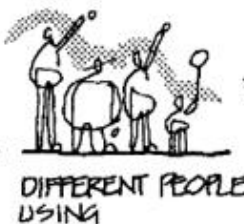
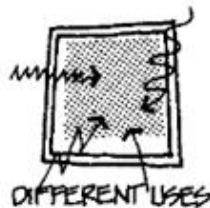
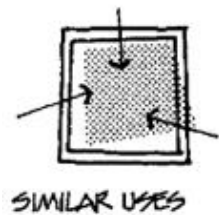
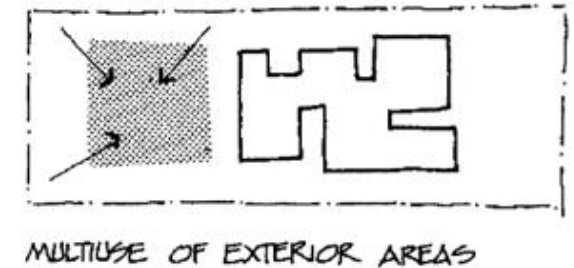
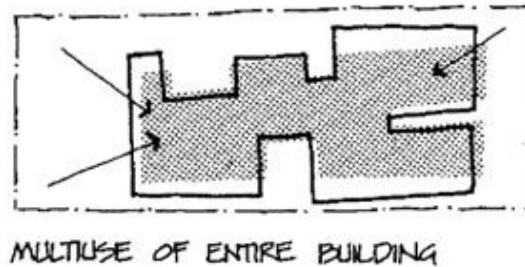
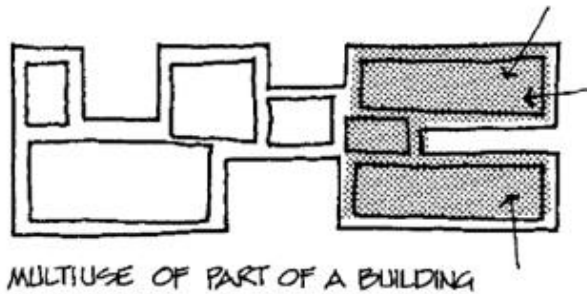
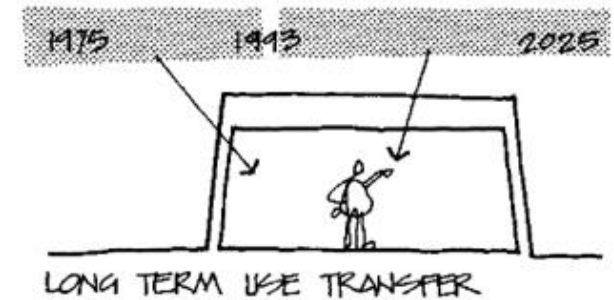
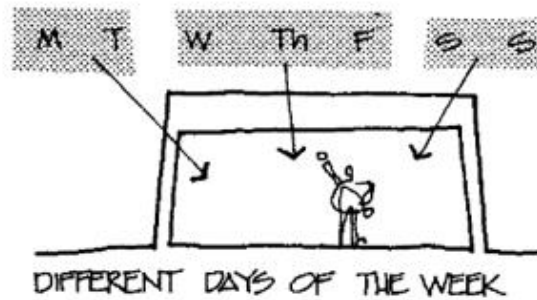
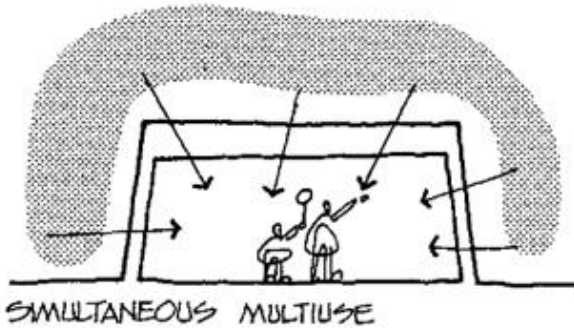
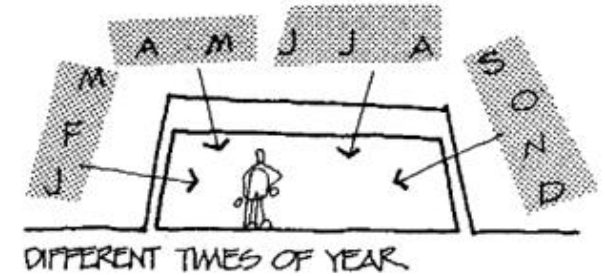
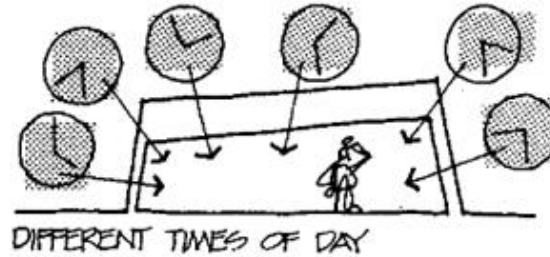
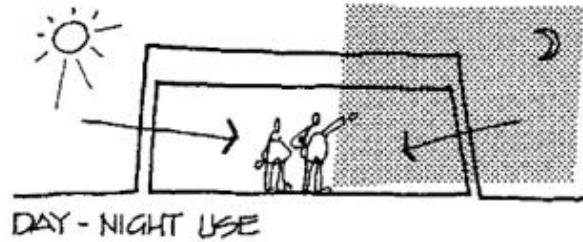


USE BY SPACE • PUBLIC VIEW

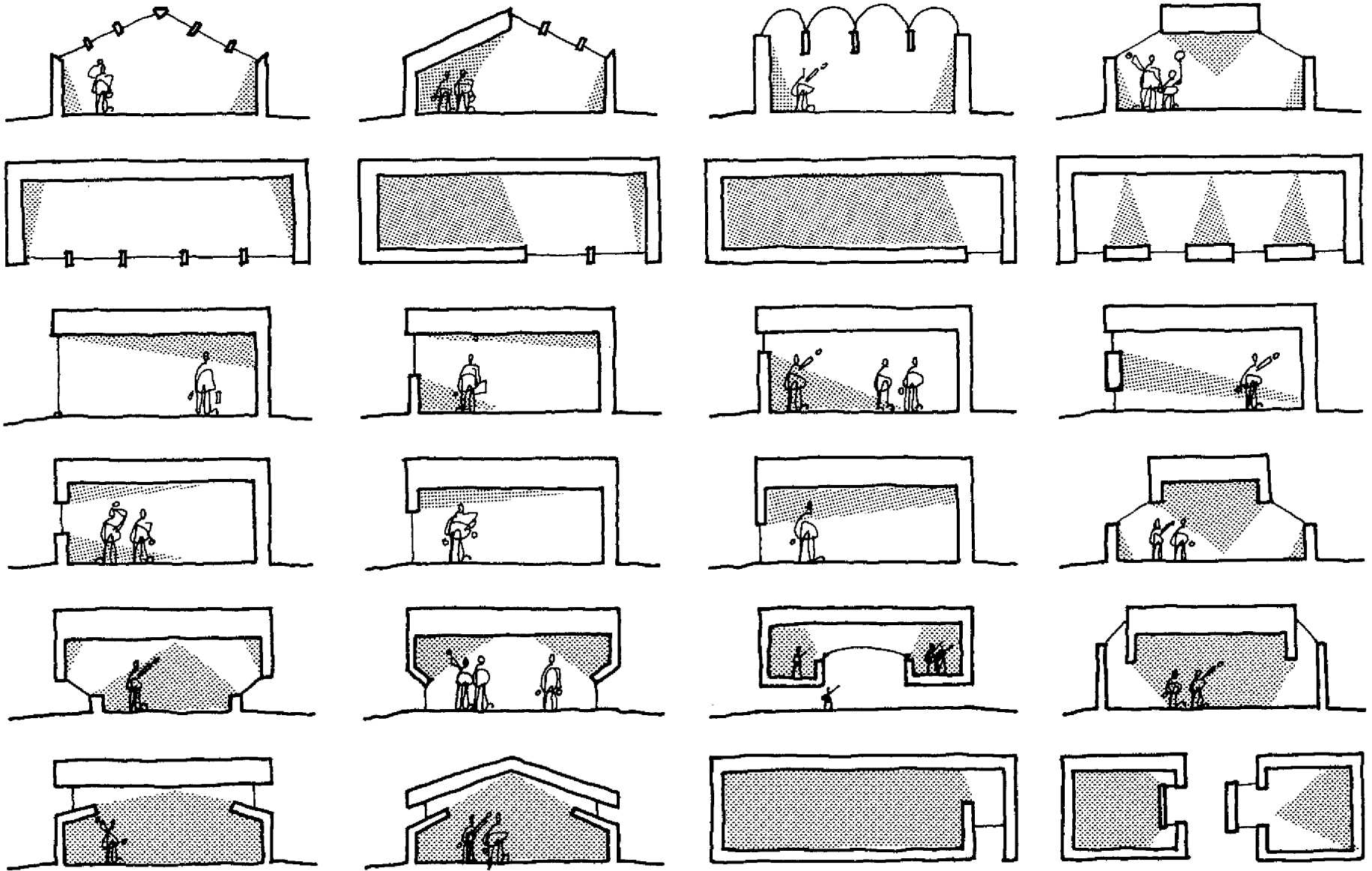


VIEW FROM PUBLIC

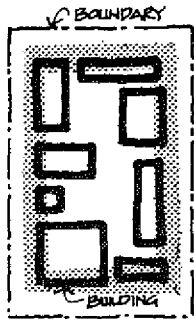
# Multiuse of Space



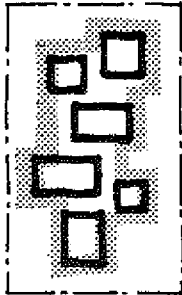
# Natural Lighting



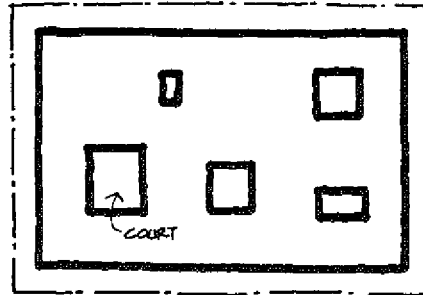
# Property Boundaries



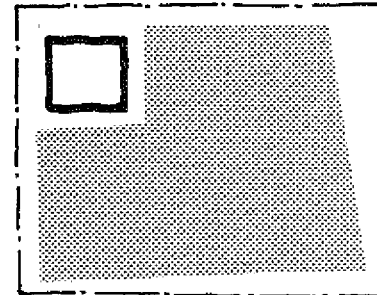
HARD EDGE AROUND SITE



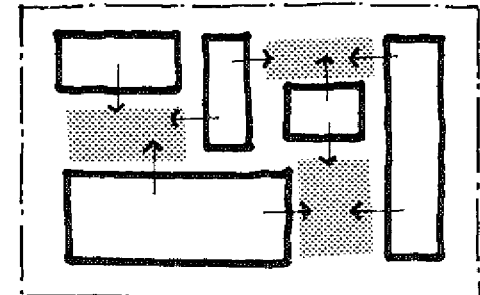
SOFT EDGE AROUND SITE



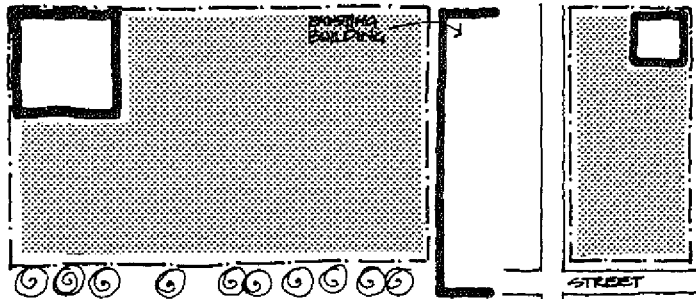
FILL SITE WITH BUILDING • CREATE CONTROLLED COURTS WITHIN



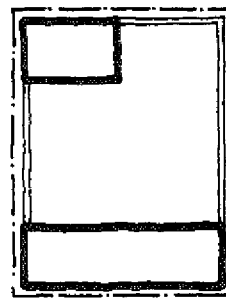
CORNER BUILDING LOCATION FOR FLEXIBLE USE OF REST OF SITE



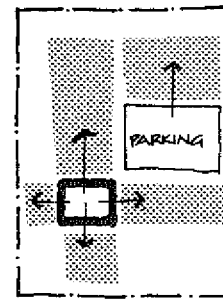
BUILDING PLACEMENT TO CREATE EXTERIOR USE AREAS



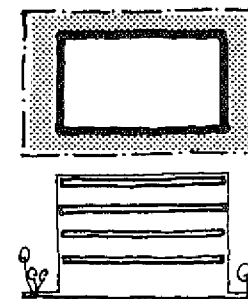
PLACE BUILDING TO DEFINE BOUNDARIES TOGETHER WITH EXISTING SITE FEATURES



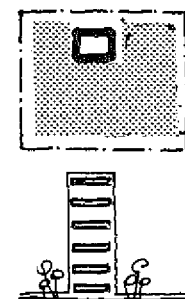
WALL WHOLE SITE INTO FORTRESS



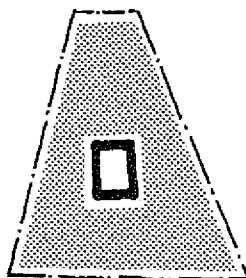
BUILDING PLACED FOR GROWTH



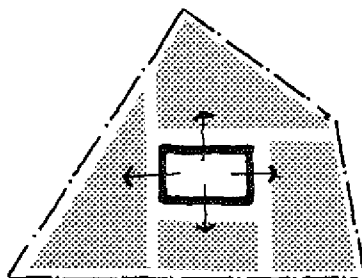
STACK SPACES TO FIT BUILDING ON SITE



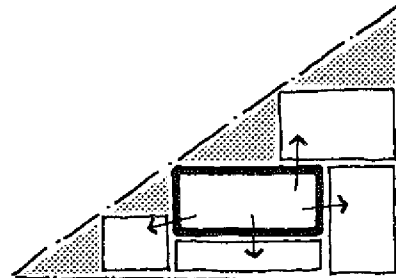
STACK FOR OPEN SITE



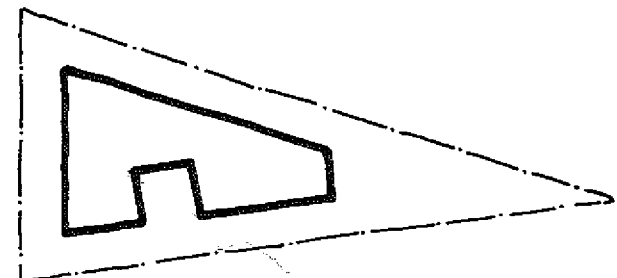
SPACE AS BUFFER BETWEEN BUILDING AND SITE GEOMETRY



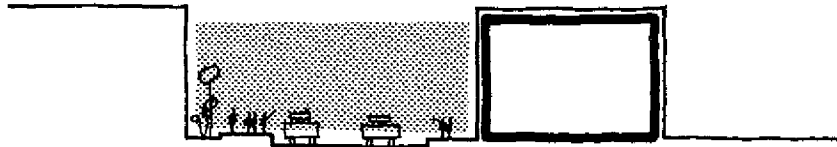
EXTERIOR USE AREA GEOMETRY AS TRANSITION BETWEEN BUILDING AND BOUNDARIES



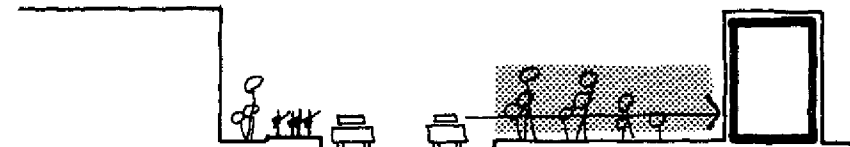
LANDSCAPING AS TRANSITION BETWEEN EXTERIOR USE AREAS AND BOUNDARIES



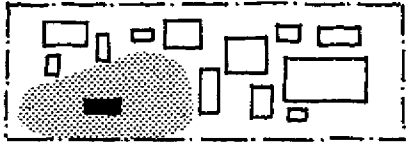
BOUNDARY GEOMETRY AS A GENERATOR OF BUILDING FORM



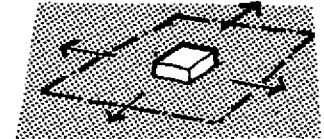
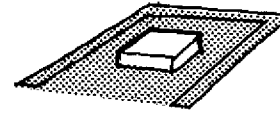
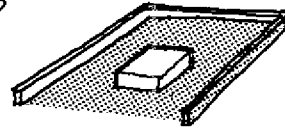
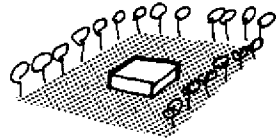
BUILDING AT BOUNDARY TO CONTRIBUTE TO STREET SCALE



BUILDING SET BACK TO CREATE VISTA FROM STREET



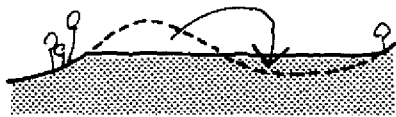
BUILDING IMPORTANCE SHOWN BY AMOUNT OF LAND AROUND IT



EMPHASIZE BOUNDARIES WITH TREES, WALLS, WALKS

SITE CONTINUITY WITH ADJACENT LAND

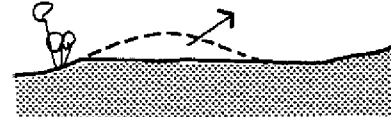
## Land Contours



LEVEL SITE WITH CUT AND FILL



LEVEL WITH IMPORTED FILL



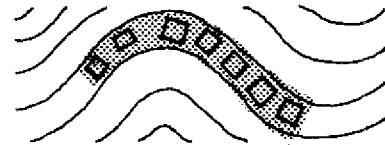
LEVEL WITH CUT AND REMOVE



CUT AND MAKE LAND FORMS



CUT = FILL FOR BUILDING PLATFORM



CONFORM BUILDING TO CONTOURS



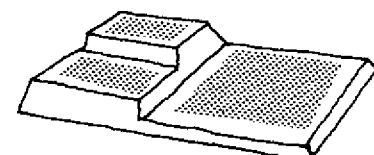
DIAGONAL RELATIONSHIP



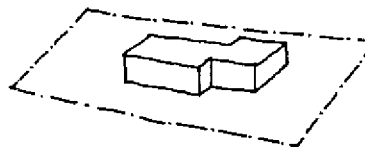
PERPENDICULAR RELATIONSHIP



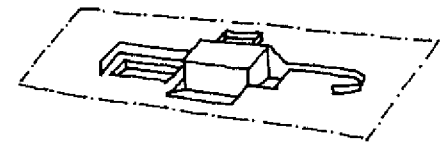
NOTCH FOR BUILDING PLATFORM



SCULPT LAND INTO USE ZONES



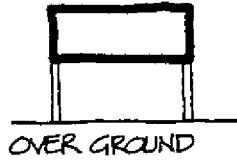
BUILDING AS OBJECT ON SITE



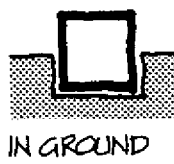
BUILDING AS INTEGRAL WITH SITE



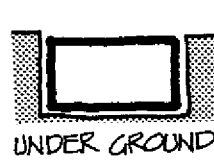
BUILDING ON GROUND



OVER GROUND



IN GROUND



UNDER GROUND



ON SLOPE



OVER SLOPE



IN SLOPE



UNDER SLOPE



ON HILL



OVER HILL



IN HILL



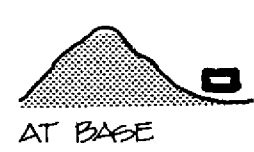
UNDER HILL



ALONG RIDGE



HALF WAY DOWN



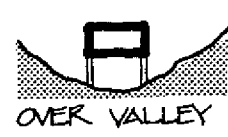
AT BASE



IN VALLEY



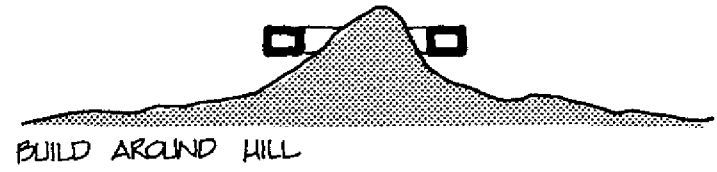
BRIDGING VALLEY



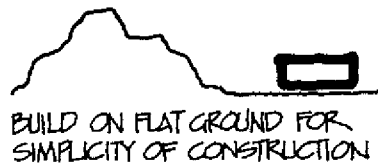
OVER VALLEY



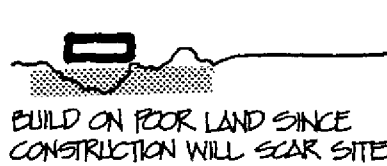
ABOVE VALLEY



BUILD AROUND HILL



BUILD ON FLAT GROUND FOR SIMPLICITY OF CONSTRUCTION



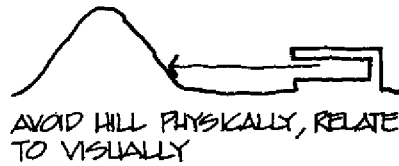
BUILD ON POOR LAND SINCE CONSTRUCTION WILL SCAR SITE



LEAVE FLAT AREAS FOR PARKING AND PLAYGROUND



BUILDING ADJACENT TO HILL TO FORM EXTERIOR USE AREA



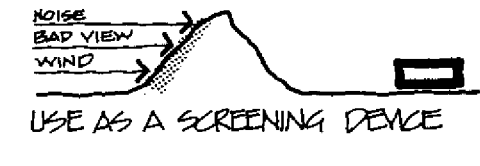
AVOID HILL PHYSICALLY, RELATE TO VISUALLY



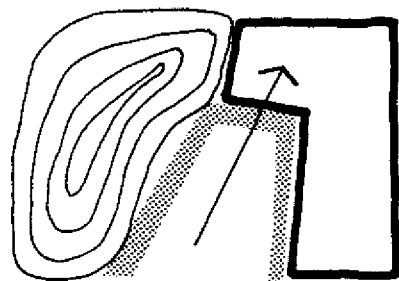
AVOID PHYSICALLY & VISUALLY



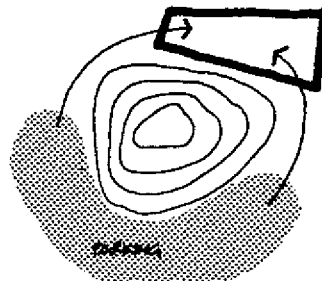
ENCLOSE HILL AND MAKE A FEATURE



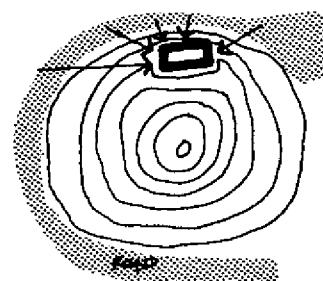
USE AS A SCREENING DEVICE



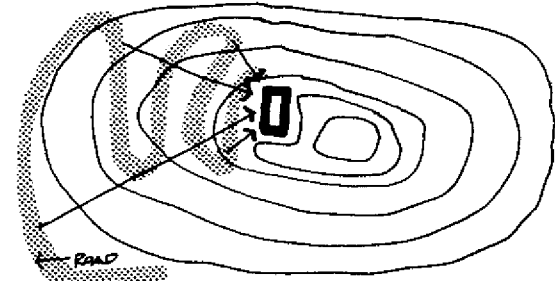
USE HILL WITH BUILDING TO FORM ENTRY SPACE



WALK AROUND HILL TO BUILDING FROM PARKING



DRIVE AROUND HILL TO VIEW OF BUILDING



USE SWITCHBACKS TO PRESENT DIFFERENT VIEWS OF THE BUILDING





PARK AT TOP • WALK DOWN



NOTCH HILL FOR ENTRY



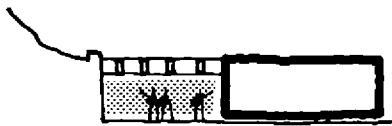
PARK AND ENTER TUNNEL



DEVELOP FOR EXTERIOR USE



PARK AT BASE • WALK UP



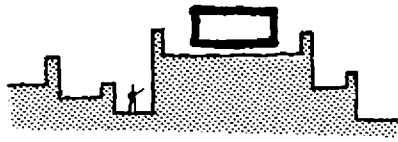
BUILD INTO HILL FOR COURT



USE HILLS TO ZONE SITE USE



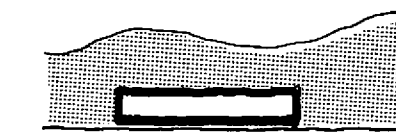
ARTICULATE HILL AS USE ZONE



FORCE LAND TO FIT PROJECT



LEAVE LAND AS IS



HILL AS BUILDING BACKDROP



BUILDING AS HILL COUNTERPOINT



REINFORCE HORIZONTAL HILL PROFILE



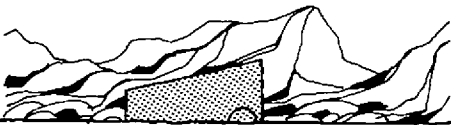
BUILDING PROFILE = HILL PROFILE



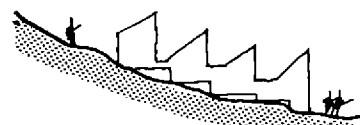
CONTRAST HILL PROFILE



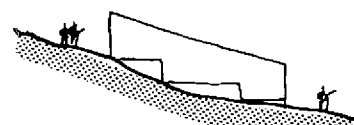
BUILDING SOLID/VOID = HILL SOLID/VOID



BUILDING SOLID/VOID AS CONTRAST



CONTRAST SLOPE WITH PROFILE



MIMIC SLOPE WITH PROFILE



RELATE BUILDING PROFILE TO LAND



CONTRAST PROFILE WITH LAND



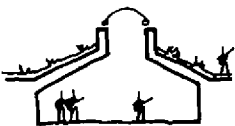
INTERFACE NATURAL CONTOURS WITH BUILDING



SCULPT CONTOUR INTERFACE



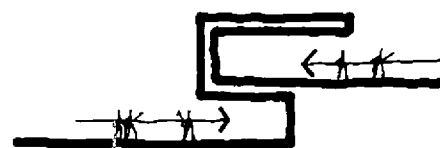
PEDESTAL AS INTERFACE TRANSITION



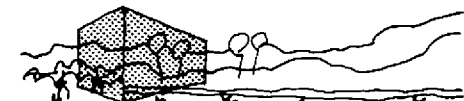
EARTH AS A ROOF



LIGHT ACCESS FOR SUNKEN BUILDINGS



STAGGER FLOORS FOR GRADE ACCESS



BUILDING AS A MIRROR

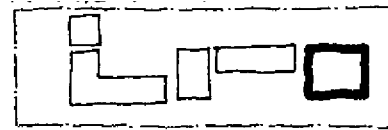
# Existing Buildings



INTEGRATE SPACE & CIRCULATION BETWEEN OLD & NEW



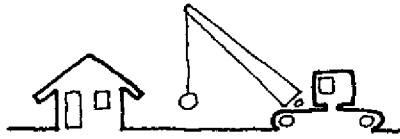
FILL RESIDUAL OF OLD WITH NEW



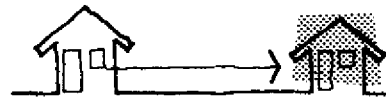
RELATE TO ON-SITE COMPOSITION



PUNCTUATE LONG EXISTING BUILDING WITH NEW



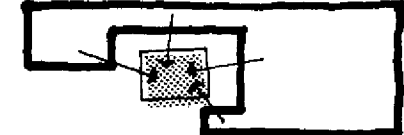
DEMOLISH ON-SITE BUILDING



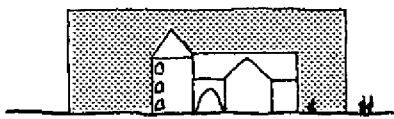
RELOCATE TO A DIFFERENT PART OF SITE



DEMOLISH AND REUSE MATERIALS



SURROUND AND FEATURE



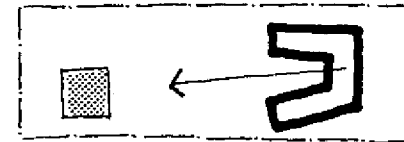
NEW BUILDING AS BACKDROP FOR EXISTING ONE



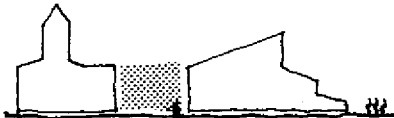
EXISTING BUILDING AS FOIL FOR NEW ONE



AVOID PHYSICALLY & VISUALLY



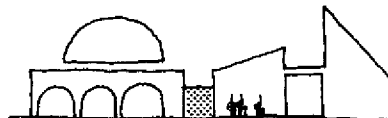
AVOID PHYSICALLY • RELATE TO VISUALLY



FORM SPACE BETWEEN OLD AND NEW



MAKE ENTRY SPACE BETWEEN NEW AND OLD



ABUT WITH TRANSITION JOINT TO PRESERVE INTEGRITY OF FORMS



USE AS A BASIS FOR SITE ZONING



USE NEW AS UNIFYING ELEMENT BETWEEN EXISTING BUILDINGS



WEAVE NEW IN AMONG EXISTING



BREAK UP NEW TO INTEGRATE WITH EXISTING



USE EXISTING AS ENTRY EXPERIENCE TO NEW



SPAN OVER EXISTING WITH NEW



BUILD OVER BY SINKING COLUMNS INTO EXISTING



DEVELOP AROUND EXISTING AS A SITE FOCUS



PROTECT OLD WITH NEW

# Canales and Water Bins

