

Places

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Representations and Realities

Photographs, drawings, writing and other representations can modify what we see and how we understand it. This is especially apparent with respect to places at the architectural and urban scale. Most are themselves not easy to grasp, to categorize, or to visualize. They comprise many, often contrasting, artifacts and spaces, and they are constantly being changed over time. Each person brings his or her own memory, fantasy, and prior experience which influence how and what they see. And because many people satisfy and have satisfied a wide variety of purposes over time, places can validly be seen through thousands of eyes, probably through no pair in the same way. Lawrence Durrell's magical essay about Montevideo, for example, transports us into a world of materials, light, and sensuous experience. With a Piranesi drawing in hand, one can catch a glimpse of the Boston City Hall as a fantasy of municipal power and intrigue. And because of Cézanne's paintings of Mt. Sainte-Victoire, in its presence one can experience the drama that shaped modern conceptions of space and form.

Just as representations mediate perceptions and understandings of reality so they also mediate designs and their imagined reality. It is through representations, and only through them, that the design and its imagined reality can be considered. Therefore the comparison between the experience of a representation and the experience of a real place is a luxury that design does not permit.

Representations are all that can be experienced of the future! They are its only reality.

In this issue we present articles that address these and related questions. Stilgoe describes the richness of hidden human definitions of landscapes but shows how such definitions are distorted by the "prism" of prior experience or by the "pipe dreams" of our and others' own imaginings. Plummer's photos and rich verbal descriptions build on what specifically is there, whereas Myer, through juxtaposition of images, selectively directs our attention and our thought to what may not be, at least at the outset. Darden, through his poetry and extraordinary drawings, helps us to enter worlds we shall never experience directly, but that will influence how we experience the ordinary world.

Chastain and Chow open our eyes through drawings that opened their eyes to an unfamiliar way of life. Domeyko, by focusing on certain issues and principles that he finds in Córdoba, heightens our understanding of how drawings of existing places can form a bridge to design. Habraken describes principles of design extracted from such observations in order to guarantee that the design controls reflect the richness and pluralism of real places through time. Bosselmann describes a physical modeling technique with extraordinary capacity to engage the public in discussion of future possible realities.

Just as representations modify, influence and even change the experience of places real and imagined, so also places mediate the experience of life.



William L. Porter

The Control of Complexity

N. John Habraken

How can we design large projects without necessarily imposing uniformity and rigidity where variety and adaptability over time are desirable? How can the big project nevertheless do justice to the small scale?

There are good reasons to believe that variety and adaptability yield a better match between the built environment and the life it shelters. Moreover, the state of the art in building technology suggests that there is not necessarily a conflict between efficient production and variety of form. In fact, variety might be the logical outcome of efficient production.¹

If neither the use nor the technical means dictate uniformity and rigidity of built forms, design skills may become the weakest link in the chain. The design of complex, varied forms that are adaptable over time and nevertheless easy to control and to build demands new methods and skills.

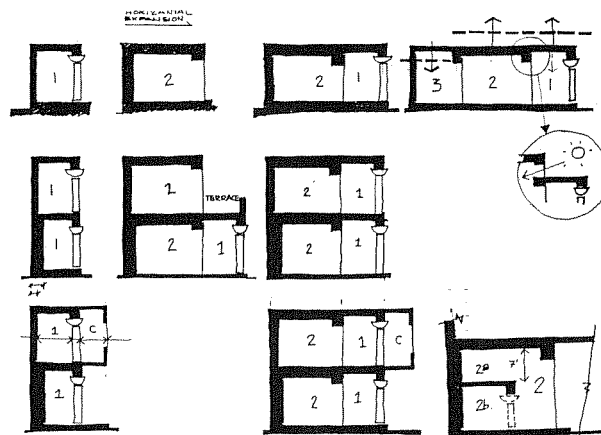
In turn, such new methods and skills must come from a good understanding of the structure of complex artifacts. And much can be learned from the study of environments with a high degree of spatial complexity to find out what their structure is and what processes could make them come about. In this context, the studies done by Fernando Domeyko are most valuable. His meticulous documenta-

tion of vernacular environments of high density in cities like Santiago (Chile), Madrid, Cambridgeport, Córdoba, and others gives us a wealth of information to be interpreted and studied. An interest in these environments has nothing to do with a romantic yearning for past conditions. We are not looking at them to copy but to learn how today structures of similar sophistication and resilience may come about in accordance with the means we have today. In a similar way, Maurice Smith of MIT has studied the Portuguese hill towns and found consistencies in dimension and spatial organization that are useful for present day designing. What we look for and what we are interested in here are systemic properties from which complex environmental organizations can be built.

In what follows, I will discuss a number of issues that have to do with understanding complex environmental forms and their design manipulation. These are, if you like, areas of knowledge and skill of interest in a search for new methods. They have been the subject of discussion and experimentation in my course on design methods and theory in the post-professional degree program (M.S. Architecture Studies) at MIT.

Transformation

First, and possibly most importantly, it should be

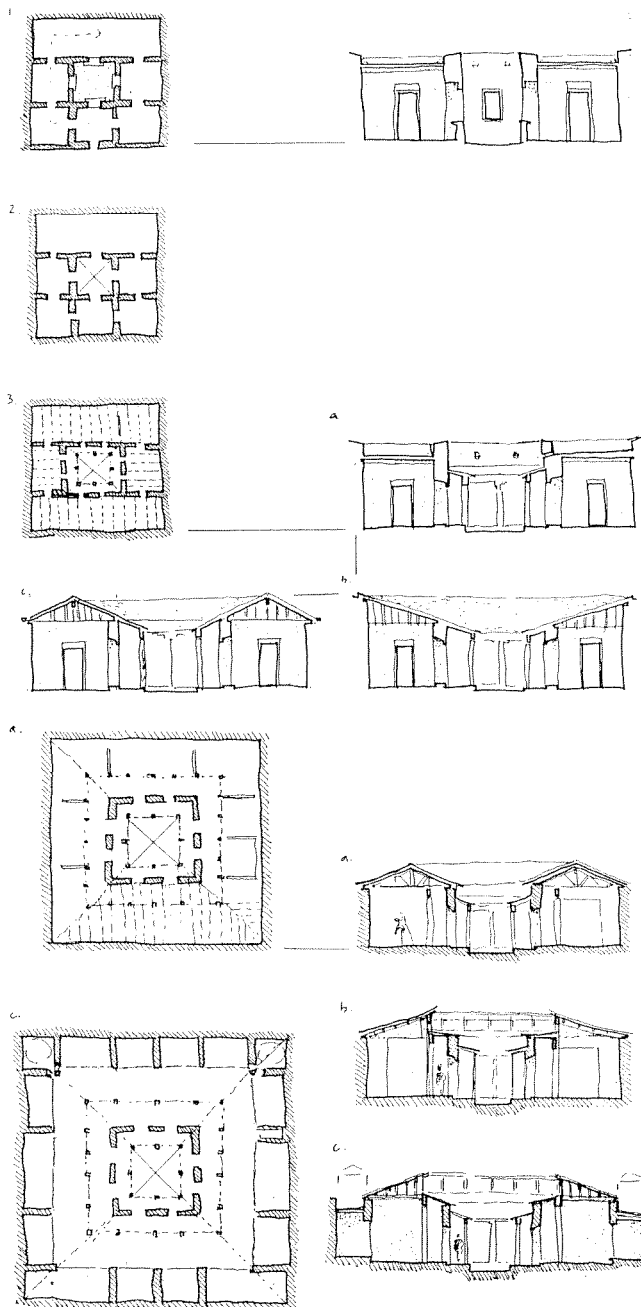


I Thematic development of a section following a growth pattern in which new kinds of spaces are developed.

Starting from the upper left-hand corner, horizontal expansion is from left to right and vertical expansion from top to bottom. From a class assignment by Solomon Benjamin, M.S. Arch. St. program, Massachusetts Institute of Technology.

Courtyard House

a. non-directional Basic Moves Theme: circulation layering in courtyard houses



noted that architectural form may result from a process of transformation. Suppose we set up, by way of demonstration, two columns and a lintel spanning them. This primitive configuration, when studied, leads to a number of alternative next moves. We may expand with another column and beam. This may be done in alignment with the first beam or at an angle to it. Or we may repeat the portal at a distance parallel to the first, which would allow us to put planks from beam to beam and make a floor or roof. The choice of any of these steps leads to new alternatives.

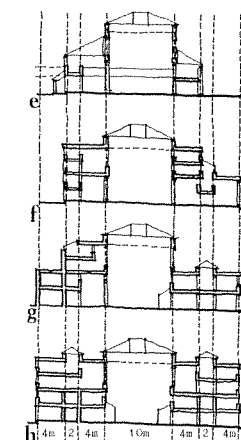
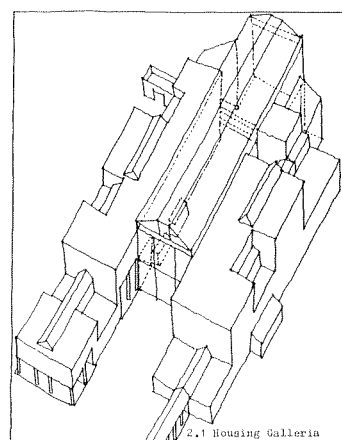
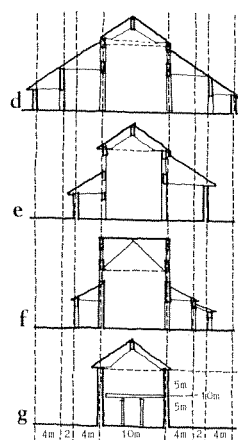
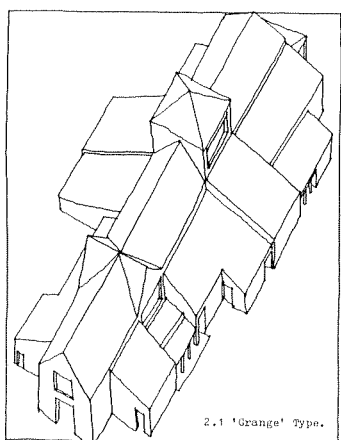
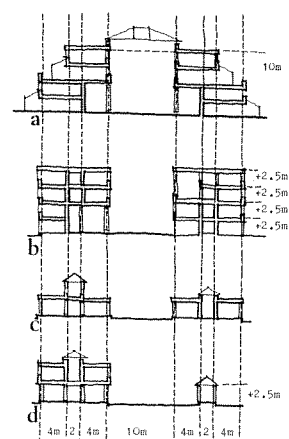
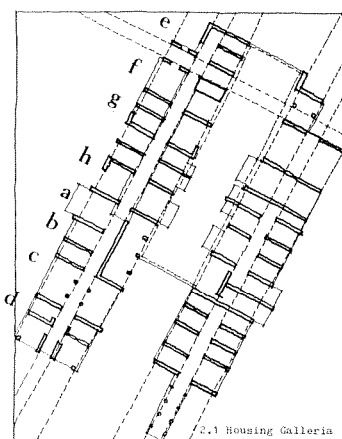
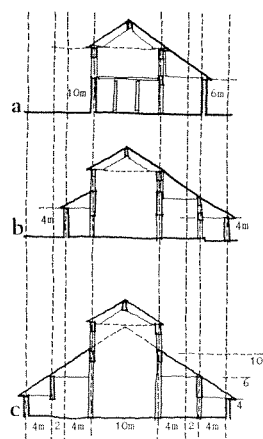
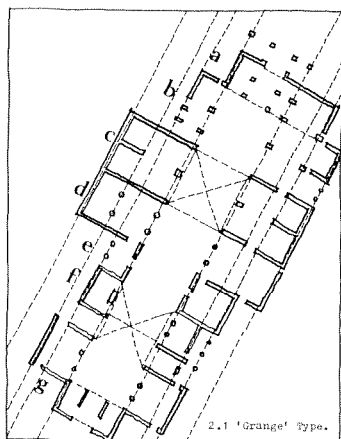
This basic exercise gives us the ingredients of a design attitude. We see in the form at hand the moves available to us. We enter in a dialogue with the form. Our freedom is in choosing the next move; our skill is in choosing what leads us in the general direction we must take to satisfy a demand or a strategy; our knowledge and experience lie in being able to find many alternative moves.

The result of such a humble beginning, if the process is continued, can be very complex and very rich. But nothing in it needs to be done by happenstance, and all steps are accounted for technically as well as architecturally.

This very beginning is initially found difficult by

many designers for a number of reasons: First, it can only be done from a knowledge of and interest in the way the building is actually built. Columns have certain properties, and these suggest next moves. There is a difference between a concrete portal or a steel one or free-standing columns with a lintel on top. All three alternatives are interesting to work with, but the moves we can choose from them are different. When the design is too abstract, anything goes. There can be no dialogue with the form. In short, one can only work this way if one believes a building can only be designed when one knows how it is built. I should point out here that the same knowledge about building allows us to generalize. For instance, we may decide later whether to use concrete or steel portals while we reject early on the free-standing column. The requirement that we design from a knowledge of the building system does not mean that we must decide everything now or cannot change our mind as we go.

A second difficulty students have with this exercise is that there is no program. They are asked not to think of any guiding functional demands. For those trained in a culture in which one justifies one's architecture functionally, this is difficult. Even designers who embrace the idea of an autonomy of the form find out how heavily their design



3

2 Thematic exploration of a contained form. The study focuses on the transition from the outside space of the courtyard toward the inside spaces around it, resulting in a number of different concentric screens. From a class assignment by Sergio Palleroni, M.S. Arch. St. program, Massachusetts Institute of Technology.

3 Thematic transformations of a section. Inspired by the "grange type" of the Benedictine monasteries in France during the Middle Ages, the various sections join into a directional building organization. From there, the same zones serve a different section principle called "housing

galleria". The two section principles also share the dominant central space relating to smaller spaces on the periphery. From a class assignment by John R. Dale, M.S. Arch. St. program, Massachusetts Institute of Technology.

reasoning depends on programmatic premises. In the approach suggested here, function becomes a variable within a stable form. This relationship will be discussed separately later on.

It becomes evident when working without a program that we lack an appropriate vocabulary to talk form. Most of our language when discussing architectural form is related to use. A broader vocabulary is needed to discuss moves, directions of moves, developments of patterns, juxtapositions of spaces, relations of elements, and other aspects of form making.

The third barrier for the beginner is a feeling of directionlessness. “How can I design if I do not know what the end result will be like?” is a frequent complaint. “Why would you need to design if you already knew?” is my response. The need for a prior image is most keenly felt when we do not trust the form as something to work with. There is nothing wrong with having such an image, but it is not a prerequisite and may be a hindrance. When we speak with other people, we need not know what the result of the conversation will be either. We may come out of the conversation with a better sense of the issue; in fact, we may have changed our mind. When we are concerned about “doing our own thing” and feel we must be on top of the form all the time, we cannot relax

and trust the process. Once students find out how one’s dialogue with the form will always bear the imprint of one’s personality—whether one likes it or not—the complaint is no longer heard.

Theme

Designing in dialogue with the form is like improvising on a theme. There can be variations and transformations of the initial pattern. We can elaborate, we can add subthemes, we can shift the theme by changing some of the relationships among components or by introducing new components.

The concept of theme leads us to two important issues. First, the theme allows us to connect to others. Someone else, recognizing the theme, will know what we are trying to do. This link enables us to work together once the theme emerges in the process. The nice thing about the theme is that it makes us communicate through the form. Indeed, under ideal circumstances, thematic communication can be without words. One could simply supply a series of transformations, and someone else could continue the thematic development. Experimenting with thematic developments this way makes us appreciate the power of implicit conventions in designing. Much of what we do is based on unspoken understandings. We already share many common values and principles before a dialogue starts. Making form transformations in a thematic

way establishes such implicit understandings and conventions. Once the mechanism is recognized, it can be used deliberately to foster teamwork and cooperation in the design process.

Second, the communicative power of a theme is also found in systems. A system gives us a choice of elements and their allowed relations in space. It emerges when we seek to establish rules. By approaching systems this way, we can see their thematic potential. A system always allows variations of form within the rules it imposes; it can support the thematic development of a configuration. Thus, systems thinking can be a means for generating variety by following rules.

Theme and system both set constraints on what we do. In the system, constraints are spelled out; in the theme, they are implicit. The system is rules, the theme is convention. A system usually allows for many themes, but a theme always implies something systemic. Both hold people together in that they imply a group of those who follow their constraints. Indeed, both are, in their own way, the product of people agreeing on a set of constraints. The explicitness of the system makes it more generally transferable. The implicitness of the theme is bound more to a social body.

By comparing themes and systems, we find how their

rules and conventions give design a social context. They make people work together. Working only by ourselves, we may find implicit or explicit rules that can be used to master complexity. But if we want to work with others, rules become indispensable. Without systemic or thematic principles, delegation of work to others is very difficult and will soon lead to confusion. Moreover, if we want to divide responsibility among peers in a team, we must agree on such principles as well. By their use thematic designing becomes a shared adventure.

Thus, by starting from the concept of theme, which led us to the concept of systems, we begin to see designing as something happening among people. No one designs alone in architecture anyway. We will be less defensive if we can explain the thematic aspects of our work to others because it allows them to think along with us and it makes us free to change the elaboration of the theme or choose a different theme without loss of control.

The Nonthematic

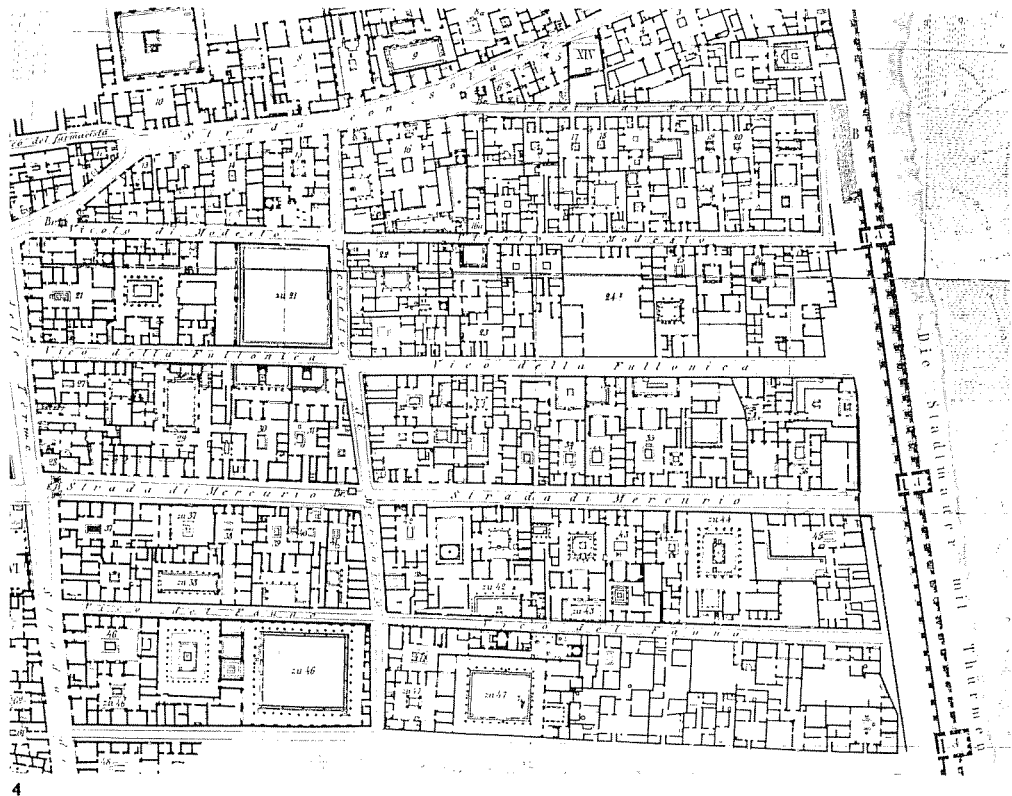
Once the thematic is understood as a means to guide our actions and connect to others, we realize we are also free to divert from the conventions we follow. At any point elements can be introduced and moves can be made that go outside the theme. The thematic and the

nonthematic define each other because the special cannot exist without the conventional, and it is the tension between the two that brings out qualities of form. It is therefore important to understand that both the thematic and the nonthematic are part of the design effort and that both can be subject to agreements and rules. Since each one makes the other possible, we cannot argue which is more interesting. The way we orchestrate the thematic and the nonthematic is what designing is about.

Type

Once the thematic is understood as something we can share, the concept of type can be brought into focus. When we study house types from different places and cultures, we find how they represent very complex combinations of systems. The type can be described in many ways, as a spatial system, as a combination of technical systems, as a system of facades and decorations. All descriptions can be valid and yet they do not exhaust the type. There is always another way to describe a type emerging in real life.

Types are shared properties within a culture. Everyone, builder, designer, user, is familiar with them. Yet types, such as the Venetian Gothic palace, the Amsterdam renaissance townhouse, the Georgian terraced house, or the Pompeian courtyard

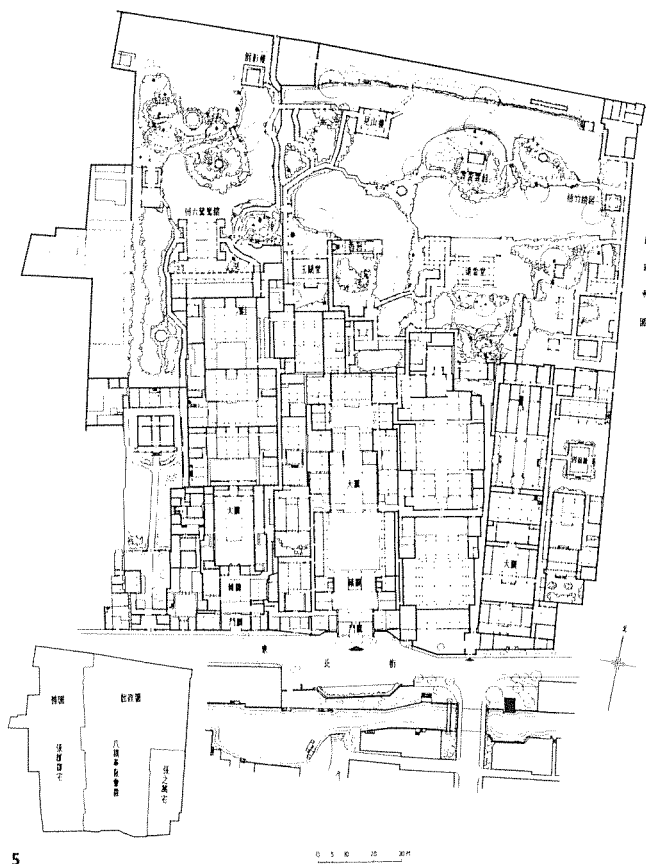


4 Pompeii as an example of a continuous architectural field. The urban tissue shows variations of a house type. The house units are formed by the combination of atrium, peristyle, and garden, with cell-like rooms around them. Note how large houses have a larger atrium and peristyle, but that the size of the rooms is not much different with the size of the house; there are only more rooms. While all houses have an atrium, only the larger houses have a peristyle. Although their

number may vary, the relations between the spaces that make the house is always the same, for instance the peistyle is always behind the atrium and both are surrounded by cell-type rooms.

This field can be read in both ways as discussed in the text. First, as a deployment of walls and columns, following certain continuous patterns across the whole field. See for instance the cells lining the streets. Second, as a combination of territorial

units. Closer scrutiny shows that the latter are not the same as the house units by which we recognize the type. Openings in party walls, for instance, suggest the combination of two or more "houses" into one territory. Irregularities in party walls also betray exchanges of spaces from one house to another in the course of time. Detail of the map in Overbeck, Pompeii, Leipzig, 1866.



5

5 Zhuo Zheng Yuan estate and garden, Zu Chou, China, example of a continuous architectural field. From: Liu Dun-Zhen, *Zu Chou: Classic Chinese Gardens, China Architectural Industrial Press, Beijing, 1979.*

house, were never formally described by those who made and used them. Types only exist in a social body. Once we realize this we find how futile it is to discuss typology in terms of form only. The power of the type is that it is never explicated but allows a social body to produce very complex artifacts with a minimum of formal designing and a maximum of efficiency.

As shared know-how within a social body, the type is known through acts, not through description. Indeed I found that students have no difficulty making a reasonable instance of a type after studying a number of examples for a day. However, being asked to describe the type produces much labor, long disputes, and little conclusive results. Each observer stresses another aspect. Each description is inevitably a reduction and therefore destroys the holistic power of the type. The type exists as long as we follow the conventions it implies. The living type need not be explained because it is already shared knowledge; hence its efficiency and coordinating power.

Field Deployment

Once the thematic development of forms is understood, we need not think of self-contained forms that grow and transform, but we can use the same approach for the creation of

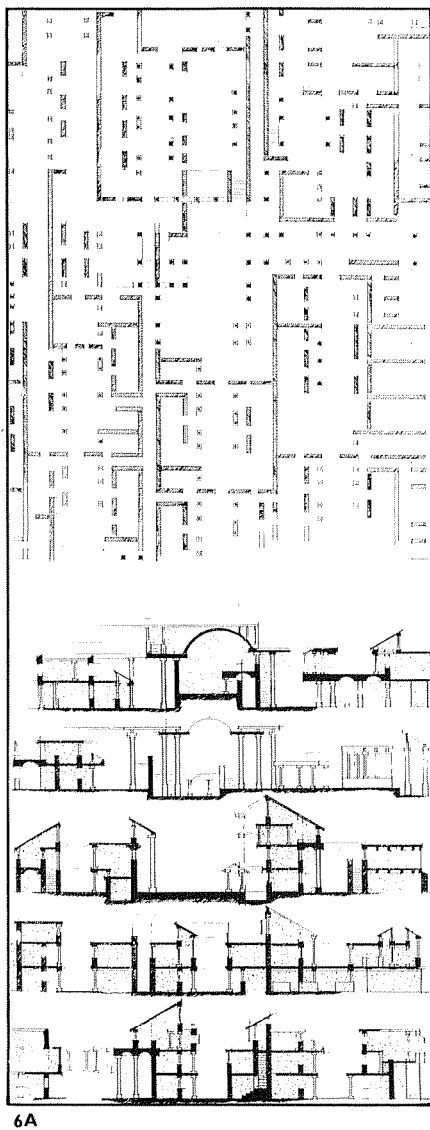
large continuous fields. The theme can work its way across the field, making instances and reiterations without ever repeating exactly the same form. In environmental design, urban tissues are examples of continuous thematic fields.

To control the deployment of such fields, a number of issues must be studied. One has primarily to do with tools: we need a formal geometry to help us organize such fields. The other has to do with a better understanding of complex forms: we need to know about their hierarchical structure.

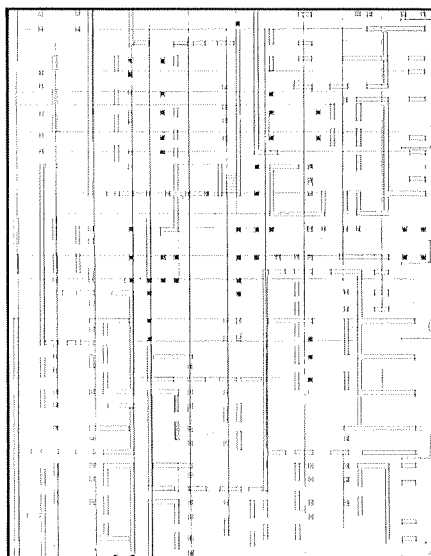
Geometry

Geometry in design has to do with the placement of parts. It organizes where things go. To make the position of each part in our field unambiguous but manipulable, we need placement rules. These rules should facilitate the thematic development itself, making a link between theme and field. The formulation of such placement rules is accomplished by means of a grid.

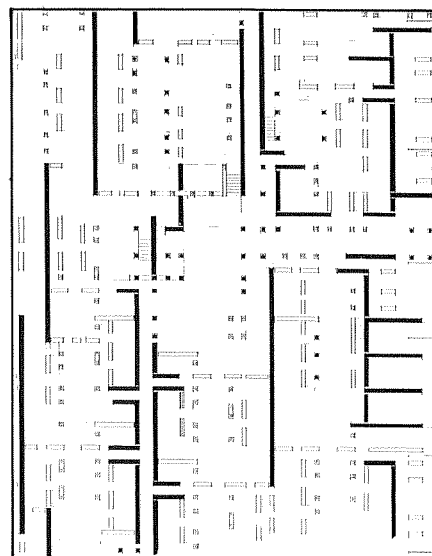
A grid, by nature, is predominantly homogeneous and continuous. However, we may not want the field to be fully homogeneous. The introduction of zones to which we designate particular properties allows us to articulate distinctions in the whole. The zone, similar to the way it is used in urban



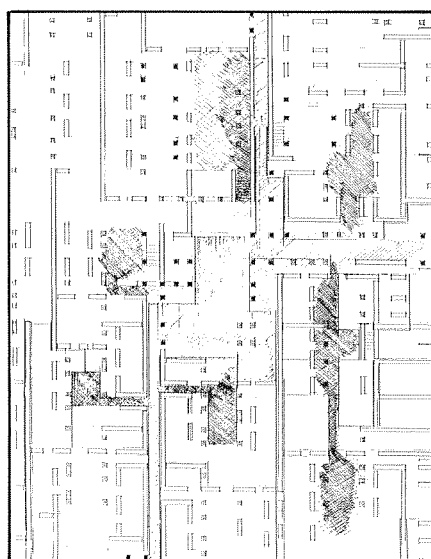
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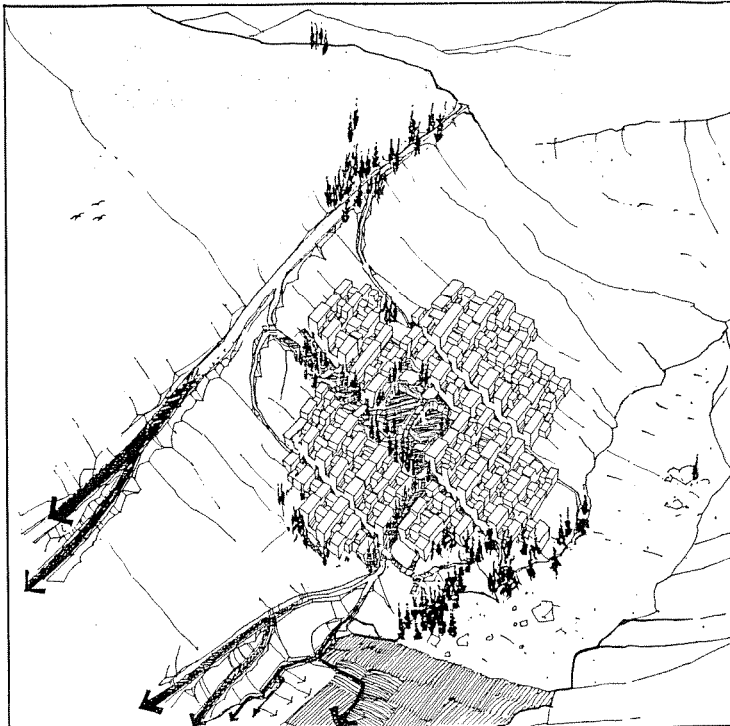


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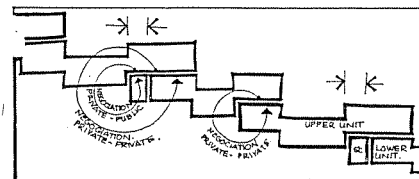


6C

6 Study in continuous field deployment. A. Plan and sections. B. The grid superimposed on the plan. Note that the two axes of the grid have different modules, producing a direction to the field. C. A territorial interpretation of the field. D. Distinguishing the different layers of the deployment. Long walls, combined with shorter perpendicular ones, as given in black, make a first layer. Subsequent layers are made by strings of short walls or piers in two directions and two kinds of columns. From a class assignment by Margaret Lew, M.S. Arch. St. program, Massachusetts Institute of Technology.



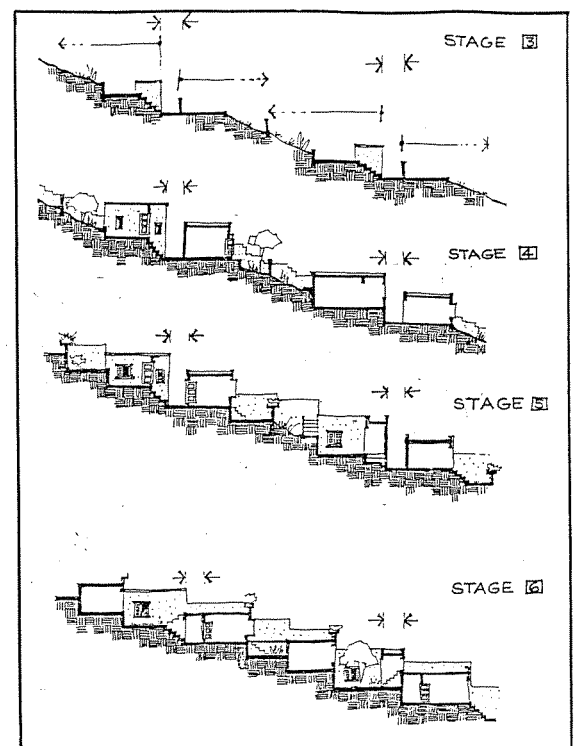
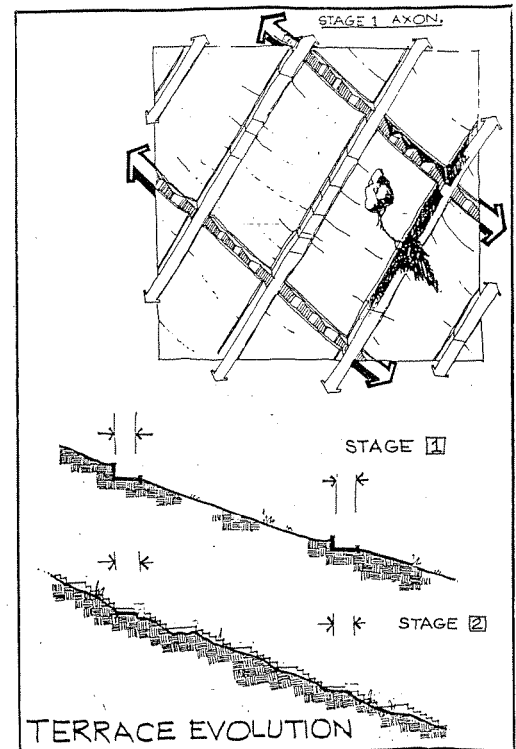
7A



PROCESS OF NEGOTIATION
PUBLIC - PRIVATE, PRIVATE - PRIVATE.

7B

7 Study for a field deployment inspired by the settlement type found in Ladakh, northern India. A. Overview. B. Diagrammatic section of the housetype and possible space negotiation between territories. C. Sections of the subsequent layers used in the development. Project by Solomon Benjamin, M.S. Arch. St. program, Massachusetts Institute of Technology.



7C

legalization, is an abstraction of site conditions; it allows us to state what is, and what is not, allowed in a particular area. When our exercise is formal and not bound to a particular site, the zones themselves help us to establish “site conditions.” By attaching various deployment constraints to zones, the field is no longer neutral and must be responded to. Of course, in real site cases, the zones and the rules attached to them are expressions of conditions we note in the site.

Zones and grids are tools developed for the specific needs of thematic development of larger fields. As such, their discussion is inevitably technical in nature and only of interest to those who engage in such deployments. Grids have a bad name in architectural circles mainly because they are confused with dull and repetitious gridlike forms. But we must not confuse the tool with the form. As a tool, used with appropriate position rules, the grid allows for the generation of extremely complex and varied arrangements. It is the arrangement we ultimately see, not the grid.

In a broader context, zones and grids are of interest because they constitute a new geometry in design. Geometry has always been the hallmark of architectural skill. Where ruler and compass allowed the

Renaissance architects to produce formal organizations of a predominantly self-contained kind, we seek a geometry of fields, and one that is by itself continuous—albeit varying from place to place—allowing us to make formal arrangements of a different nature.

Hierarchy

We are all familiar with the notion that rooms make the house and houses the neighborhood and neighborhoods the town. Large things are made out of small things, and complex forms are inevitably hierarchical in structure. But to make the idea of hierarchy useful in design, we need to be more precise about this concept. In the analysis of complex forms, two kinds of hierarchies must be distinguished. When we say that the small makes the larger we refer to a part-whole hierarchy, a hierarchy of assembly. In building we may say that the bricks make the wall and the walls make the house. Here the wall is a part out of which a house may be built, and the bricks are the parts of which the walls are made. But when we say that the furniture makes the room or the houses make the neighborhood, we speak metaphorically. We cannot assemble a room out of furniture or a neighborhood from houses. We can, however, place and arrange furniture in a room, and we can build and demolish houses in a neighborhood.

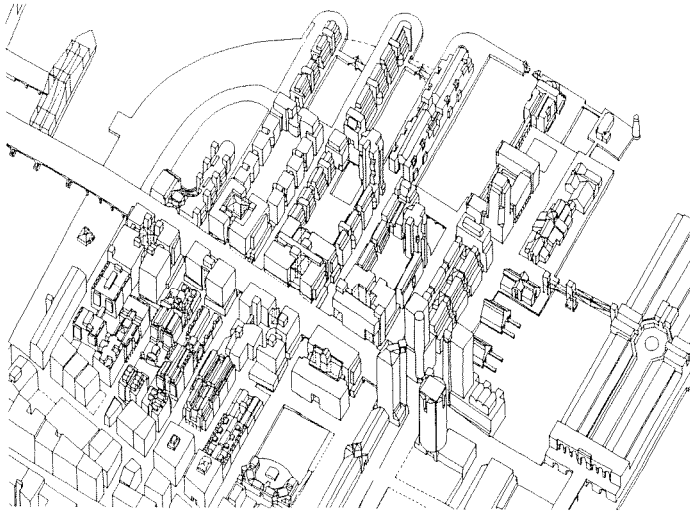
Apparently we have, in the latter example, terms for entities that contain one another rather than make up each other’s constituent parts. Such an alternative hierarchical concept distinguishes realms of intervention. I can design a room, and you can design the arrangement of furniture in it. You can design a neighborhood and determine the context by the layout of streets and public places, and I design a house in it. When complex forms are studied this way, we find that there is a hierarchy of discrete physical parts on different levels that constitute realms of control. Each design intervention takes place on at least one such level. Relative to the level on which we are designing we always find a higher level which is part of the physical context offered us. Similarly, a lower level will be accommodated by the design we make. This kind of hierarchy we may call a “control hierarchy,” or “dependency hierarchy.”

In control hierarchies we find two important aspects of designing combined. First, we see the complex form composed of systemic physical realms, or “levels,” which are individually manipulable over time. The vertical relationship of such levels in control hierarchies is one of loose fit (in contrast with the part-whole hierarchy). The lower level can change without disturbing

the higher level. In this way the highways make a network in which secondary roads can be deployed, and office buildings make structures in which partitioning systems constitute floor plans. It is this innate flexibility that enables complex artifacts such as cities to change and adapt over time and allows us to inhabit buildings in different ways.

Second, because the levels are realms of intervention, we find these hierarchies defined in terms of control. A level exists because there is a party out there that operates on it. In complex artifacts, we discover the levels of intervention by trying to change things. In fact, our general distinction between interior designers, architects, urban designers, and city planners reflects the reality of control hierarchies.

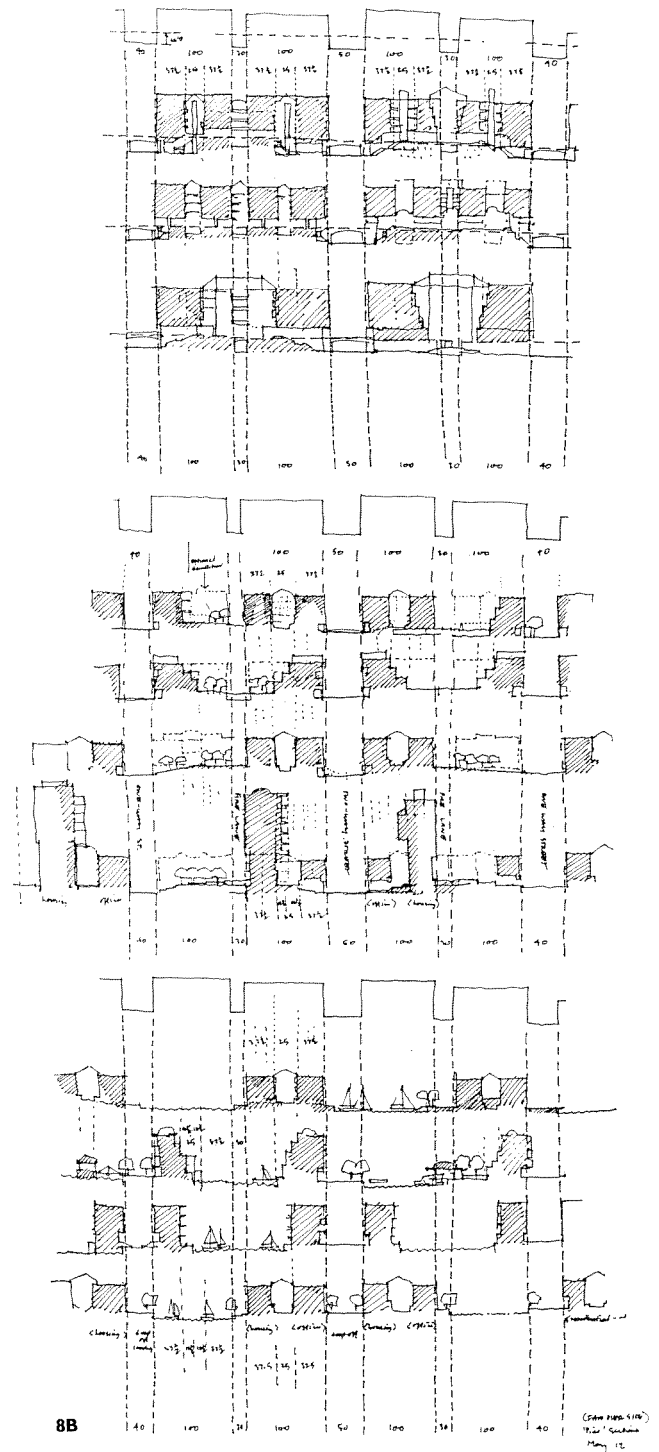
Knowledge of control hierarchies can be utilized in continuous architectural fields one level at a time. In urban design, we first make the road network and next arrange the buildings in the blocks. In building, we first deploy, for instance, the larger structure of columns and floors and next distribute facades and infill walls. Each deployment on one level allows alternative deployment on lower levels. Once this principle is recognized, we can use it more fully. The large field need not be a juxtaposi-



8A

8A Study for Fort Point Channel, Boston, based on thematic field deployment of predetermined building types. Overview.

8B Sketches for building sections arranged in the zoning of fig. 8A. From the thesis project by John R. Dale, M.S. Arch. St. program, Massachusetts Institute of Technology.



8B

tion of already vertically integrated entities, such as houses put next to one another, but can be the deployment of walls and columns over the whole field, followed by facades over the whole field, to be followed by infill walls over the whole field, followed by kitchens and sanitary equipment over the whole field. Thus we begin to see the field as horizontally organized: layer after layer of distinct deployments. In each layer, we need not repeat a same combination ever but can stay with thematic variations. When all layers are in place, the result can be extremely complex and varied. Yet each instance is fully under control, and local changes are possible on each level, and each time we can test its impact on lower levels.

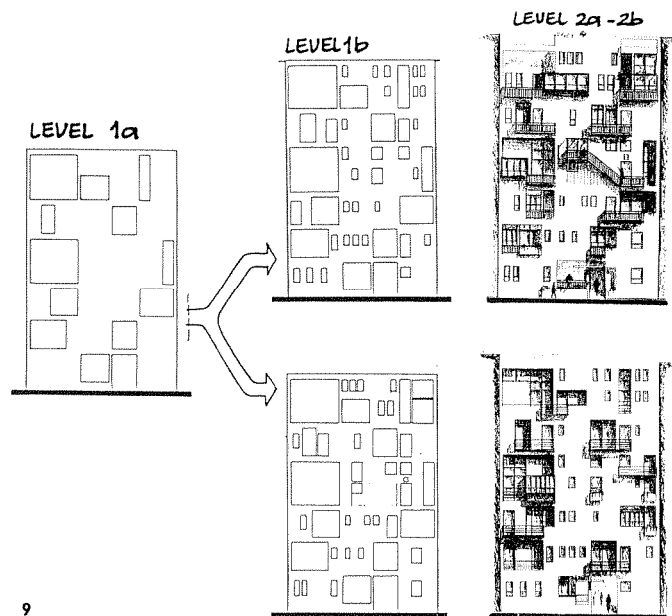
Capacity

We recognize a room's function by the arrangement of furniture and equipment in it. Given the location and dimensions of a space, we may decide, for instance, that it can be used as a bedroom or as a study. We can test this by arranging the furniture in the same space in two different ways. This is how what we call the "function" of a configuration (in this case the configuration of walls making a room) can be expressed by another configuration of a lower level. The concept of "function" as it is used in architectural design is linked to the relationship between two

levels of intervention. We can explore the "capacity" of what we produce on one level to hold configurations on a lower level. In a similar way, the urban designer may demonstrate how buildings can be built by other parties in the context of the streets and public spaces he has laid out.

Seen this way, the concept of function becomes part of the transformational development of the complex form and we learn about function by the study of the relation between levels of intervention. When we decide that a certain space must have a certain function, we mean that this space, when it is designed, must be able to hold an arrangement of objects that stands for the use we have in mind. This arrangement must conform to norms we deem representative for this use. We may, for instance, call a space a "one person bedroom" if it can hold a bed, a closet, a chair and a table, all arranged in appropriate relations.

Although we cannot make a lower level arrangement before the higher level context is in place, the expectations we have for lower level use can guide higher level design. The function does not dictate the space, but we can demand that the capacity of the space hold a certain function and test it by inserting an appropriate lower level arrangement. Coming from



9 Layered field deployment applied to a facade design. Each stage serves as a constant "higher level" context for the next. From a study for an apartment building by Christina Gryboyanni, M.S. Arch. St. program, Massachusetts Institute of Technology.

the higher level, we may produce a spatial context first and ask ourselves what uses it may have: we explore its capacity by projecting in it a variety of alternative lower level arrangements representing different uses.

Thus, what we usually call “function” when discussing the uses of spaces is part of a more general concept called “capacity,” which applies to all levels of the complex form. We can study the capacity of a facade to hold windows and doors, the capacity of an office floor to hold arrangements of partitioning walls, or the capacity of a lot to hold a building.

The concept of capacity can be applied to the layered field deployment discussed earlier. Each pass across the field with a lower level system is a comment on the capacity of what was already in place. When, for instance, we first lay out a field of bays using different bay widths in various combinations, we may next study the capacity of bay combinations in the field for holding subdivisions by infill walls and other elements and make such lower level decisions while we go across the field once more. Capacity studies, therefore, can be conducted locally for each part of the field.

It is easy to see, then, how we can work from the bottom up as well as from the top down. We might, for

instance, start from lower level considerations and first determine the capacity of different bay widths before we choose two or three for deployment in the field. In most design processes, we combine the upward and downward approaches.

Territory

So far we have only discussed the control of physical systems. Of course we deploy them with architectural space in mind and transform them through the manipulation of material elements.

To distribute elements in space, we first must have access to the space in which they go. Territory is space controlled by one party, which must have the ability to keep things (and people) out. This is the basis of all use of space. We cannot dwell someplace unless we have certainty of some territorial control.

Territory, defined this way, is not the same as architectural space. The house, as an architecturally defined volume, for instance, may not define the territory of its inhabitants simply because it stands in a garden and the territorial boundary is at the curb where the lawn begins. A fence, to give another example, may be a territorial boundary but it can also be just a barrier to keep animals from wandering away.

Territory as a token of inhabitation is always an interpretation of a given

physical organization. When a culture is familiar to us, we are very adept at reading territorial clues. We read easily signs of inhabitation such as plants placed on a doorstep, the room’s door ajar, the towels and umbrellas arranged on the beach and avoid the embarrassment of trespassing. We know instinctively the difference between a ceremonial gate and one that defines a territorial boundary.

From a methodological point of view, territory is an independent variable relative to the physical arrangement it inhabits. Given such an arrangement we always can project a number of plausible territorial interpretations. This is true on all scales of the environmental form because territories have their own hierarchy, distinct from the dependency hierarchies we discussed earlier. In each territory we find included territories. In the condominium, for example, individual households are included territories. The common space is public space of the larger territory. Indeed, in all cases, a territory contains two kinds of spaces: those occupied by the included territories, which we call “private” spaces, and the space left free to be shared by the inhabitants, which we call the territory’s “public” space.

Thus, we can have public space on all levels of the territorial hierarchy. For

instance, the public space in the condominium is, in turn, private when we step out into the street. The concept of public space is therefore a relative one, and it is this relativity that accounts for the confusion of terms we often encounter such as “public,” “semi-public,” “private,” and “semi-private.”

This is not the place to elaborate on the theory of territoriality in environmental design, but enough has been said to make a few points. The territorial organization as a separate variable is methodologically useful. Once a territorial organization is determined in a given field, we can, within each territory, deploy lower level arrangements to serve this territory. Thus, territorial organization divides a field into self-contained areas guiding further deployment. Not all lower level development, given a first deployment as context, needs to be divided into territories, but each such division frames lower level arrangements.

Territorial structure reflects patterns of inhabitation. Seen this way, the territory is the most general expression of use and function, and it interprets indeed the given context in a manner similar to the way a lower level arrangement interprets it functionally. We could say that an arrangement of the furniture in a room is a

functional interpretation, but it also reflects a territorial interpretation in the larger context of the house. Conversely, as we have seen, a territorial interpretation of the floor plan will “frame” the arrangement of furniture in the rooms.

In the design process, we should consider not only the territorial structure of inhabitation but territorial divisions among designers. The field can be given a territorial interpretation to guide the division of design responsibility within a larger team. Each designer will have a “territory” in which to make design decisions within the “public” space that is the joint responsibility of the team. Such divisions of design responsibility in a large project are most successful when the design territories correlate closely with the expected territories of use. This division of work is preferred to an arbitrary segmentation of a field where there is no “public” space to relate individual design efforts and interface conditions lack clarity. It is also an alternative to dividing the work in layers such that each design party is responsible not to a part of the field but to a level across the field. In the design of most complex environmental forms, a judicious combination of such “horizontal” and “vertical” divisions of the form for the purpose of delegation of design responsibility is best.

Final Remarks

This quick survey of methodological opportunities in the design of complex environmental forms can, of course, be no more than a sketch. What has been said may seem familiar to the extent that it gives more formal expression to concepts we deal with regularly: control hierarchies, territorial organization and division between public and private space, capacity analysis, type, and theme. Methodology should indeed always confirm what we already do in the sense that it can only be successful if it facilitates common practice and gives us power to deal with problems we are already confronted with.

At the same time, these familiar elements can be brought into a new perspective by applying two interrelated concepts not normally equated with design: change and control. By looking at the architectural form as an instance of a continuous process of change, we become interested in the mechanisms of transformation. That we can learn from change is not new. In all observations, scientific and otherwise, change and movement reveal the structure of what is observed. In our case, change is brought about by people designing, making, and inhabiting the environment. We have to deal with human constructs, and hence the complexities we observe

are of our own making. Therefore, the structure we find is a reflection of patterns of control. We begin to see the complex form as a social artifact, and its hierarchical and territorial structure is, ultimately, a product of convention.

Such conventions we find reflected in the concepts of theme, system, and type. All three make us see form as shared, reflecting values we hold in common. A theme is what we design when we want others not only to understand what we do but participate in the development of the form. A system is the product of formal rules accepted by all who use it. A type, as we have seen, is a complex form principle, containing many themes on various levels, which lives outside formal description in the social body that applies it.

Thus the concepts on which rest the methodological tools discussed here run somewhat against the grain of traditional design attitudes. We tend to stress the constancy and immutability of the architectural form and do not readily take change into consideration when designing. We have not been taught how to share our designing with others. The myth of the master deciding everything confuses authority—based on skill and experience—with centralized control of decision-making. We need new attitudes that allow the

qualities of daily life in the environment—variation in spatial development, thematic richness, and adaptability over time—to support our architecture in an efficient way. Without such qualities, environmental forms will maintain the poverty and rigidity we all deplore.

NOTE

- 1 Evidence of how efficiency can produce variety instead of uniformity can be found in recent developments in housing technology in the Netherlands. Builders, architects, and developers, now cooperate for the introduction of infill systems. These systems comprise interior partitioning, kitchen and bathroom equipment and the plumbing and wiring that makes equipment work. Industrialized infill systems, if designed correctly, yield considerable savings in on-site labour and overall construction time. The dwelling's shell (called “support”) and its infill are treated as separate, complementary, systems. The shell offers independent dwelling territories which can have their own infill configurations. The result is that no two dwelling plans need be the same for reasons of efficiency. See also N. J. Habraken, “Reconciling Variety and Efficiency in Large-scale Projects” in: *Large Housing Projects; Design, Technology, and Logistics*, ed. Margaret B. Sevcenko, pp. 46–53. Designing in Islamic Cultures, 5. Cambridge, MA: Aga Khan Program for Islamic Architecture.

Three Letters to an Architect Dissolving

Douglas Darden



Rowhouses

You will be deceived by the
buildings in this neighborhood.

In the empty light that
fills the day, whole blocks nod
in conformity. Brick facades
agree on what to say.

Dusk is another story.

As the sun gives up
naming the hour, houses begin
to contest each other—
a revolt against proximity.

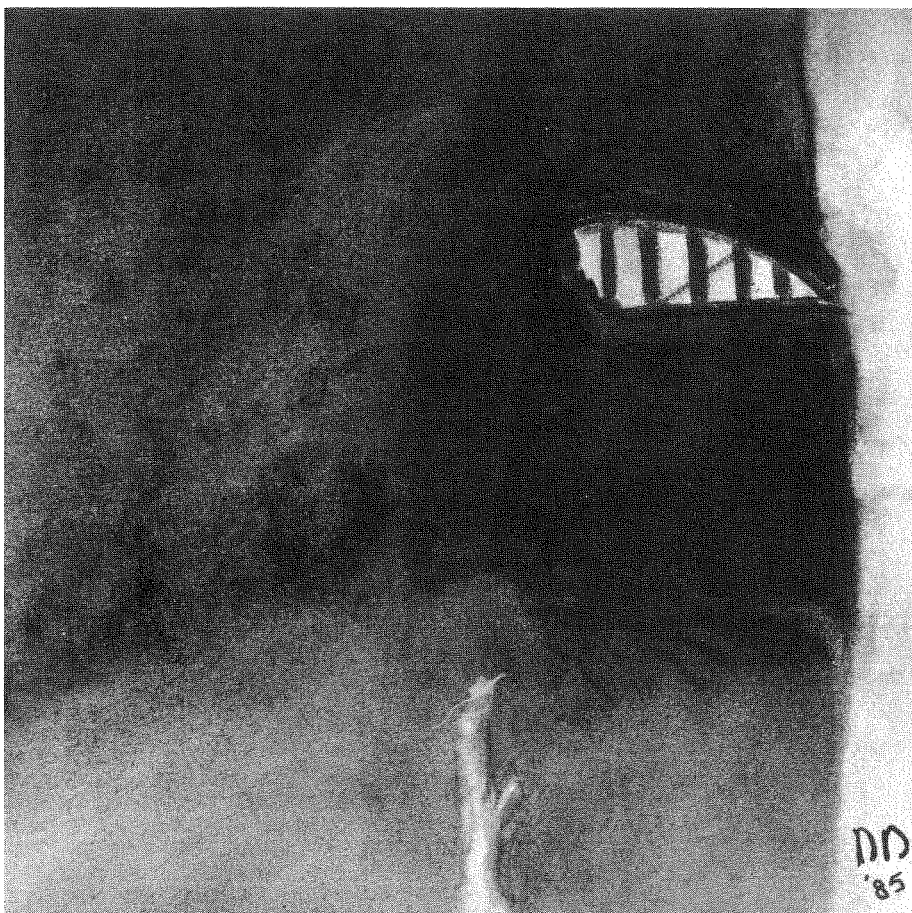
Profiles call to crow and cat;
on cool roofs tin gadgets
poke accusations of decay.

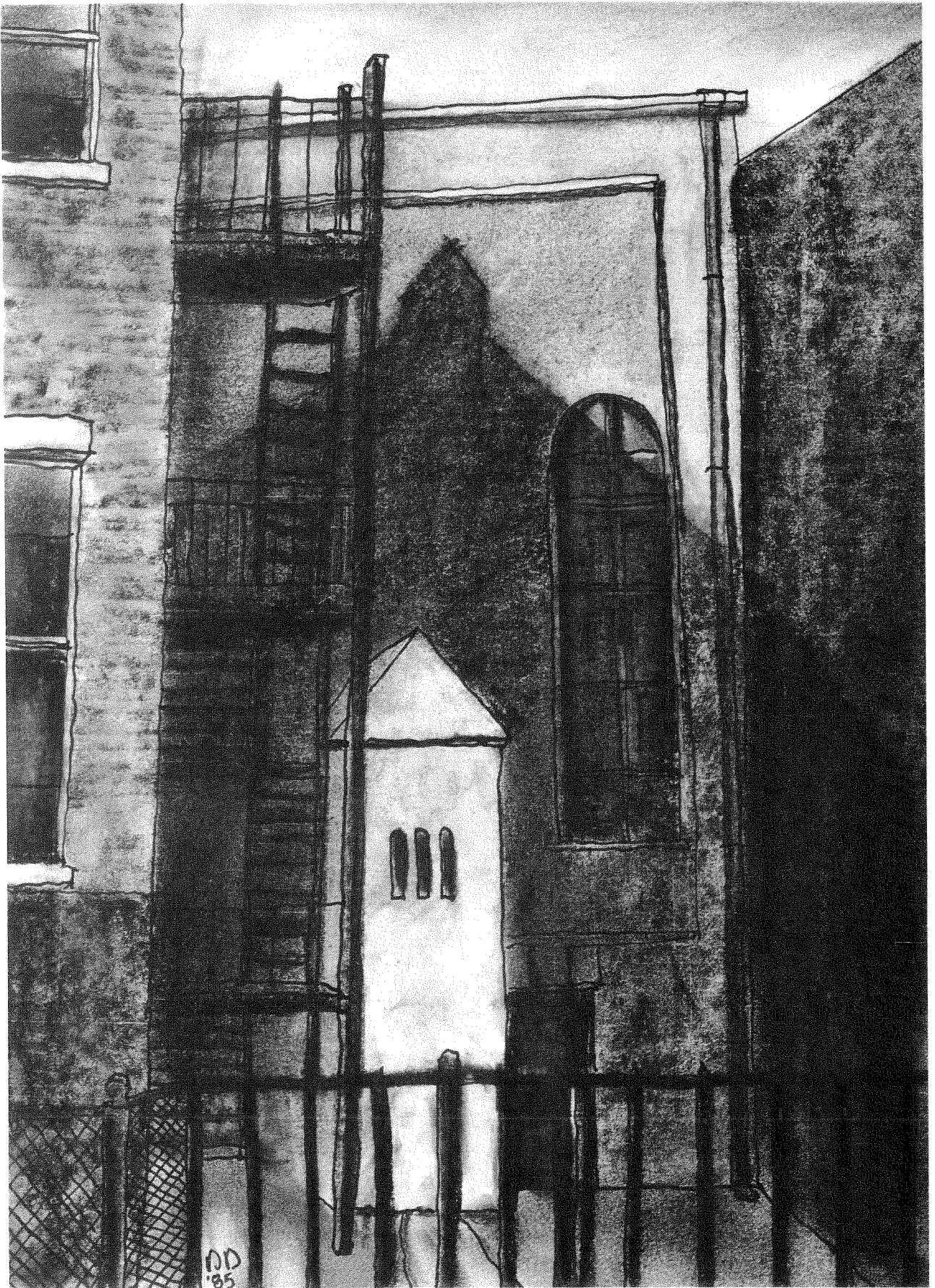
Electric lights strike at furnished
rooms. Tight quirky stairs lead to
lurid chandeliers and hallway doors,
ajar. Rows of windows unveil
a curvature of tales.

Now in a reverberating dark,
the rowhouses recede
from view: brick texts of habit
and fact; autonomous, shut.

Voyeur, en face!
Forclose on these rows.
Don't deceive yourself. To be
an architect is to lay down your arms.

Drawings by Douglas Darden





Open Lots

There is a confinement
among these disconnected lots:
spaces are designated,
but the place is void.

The slightest debris entangles
everything. All forms resist
official history.

(In the wake of
expended urban effort,
nothing stirs. Every
lot is a detour
for the next.)

Witness the child walking past
the lots on her way to school.
At every crossing, an abnormal
hesitation, unease: the insufficiency
of her inevitable solitude.

A famous Japanese sculptor claims
that the greatest artist of this
century is the earthmover.

Dry forms replace the heavy earth.

Give up, architect: no man,
and less the rock,
revolt against these masses.

Canyons

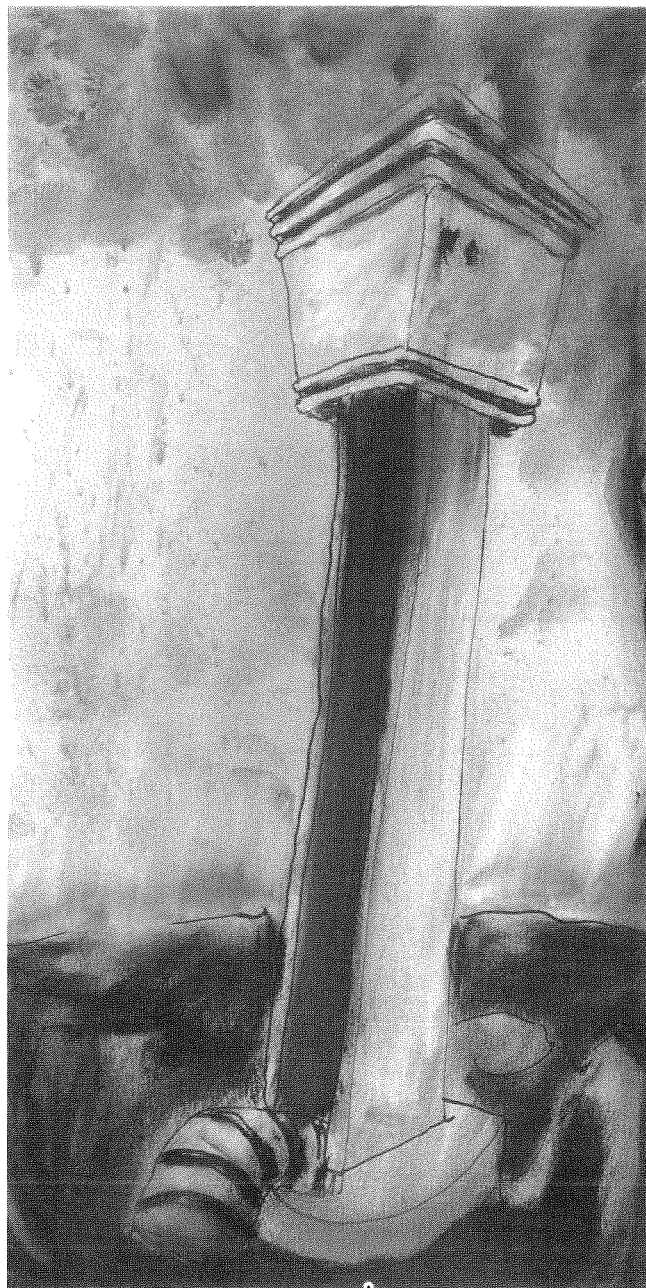
The architect carves
a territorial niche
for the present
to commerce
with the past.

What humble frame
inscribes the action?

Frank Lloyd Wright said
that if he had to build
a monument, he would go
study the Grand Canyon.

Is this what we call humility?

Architect, you slide
on the immense concave
mirror of time,
while our age conspires
how it will end.





Observations of Turfan

Thomas Chastain and
Renee Chow

The oasis of Turfan appears as an improbable stretch of green in a desert known as the Taklamakan Depression. The Depression, located some 150 feet below sea level in western China, is a landscape of endless red rock and dust, where the summer temperature can be in excess of 110° F and the roads are far more suitable for camels than wheeled vehicles. It is not a place that could be accused of being picturesque.

It is a region known for its grapes, melons, colorful clothing, and almond-eyed people, where dinner consists of kebabs, lamb pies, and flat bread called *nang*. Historically, Turfan was at the crossroads of two cultures, laying on the ancient silk route that the traders of the west passed over on their way to Xian, then the capital of imperial China.

Turfan's image is hard to "see." Like most of China, it is defined by walls, walls that enclose the courtyards and contain the streets. Modestly constructed of clay bricks and sparingly used wood from the poplar trees grown around the village, the walls are continuous with very little articulation and give the space of the village a closed feeling.

It was to this place that the two of us and Paul Hajian, all from MIT, traveled to study the built environment of the Uygur people, one of the Islamic minorities in China.

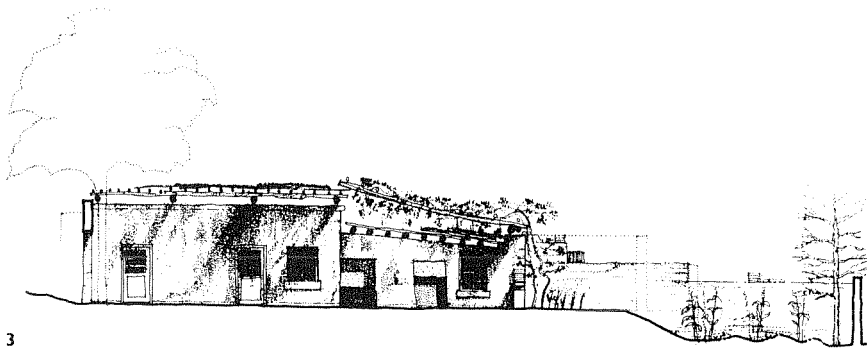
We shared the belief that understanding begins with



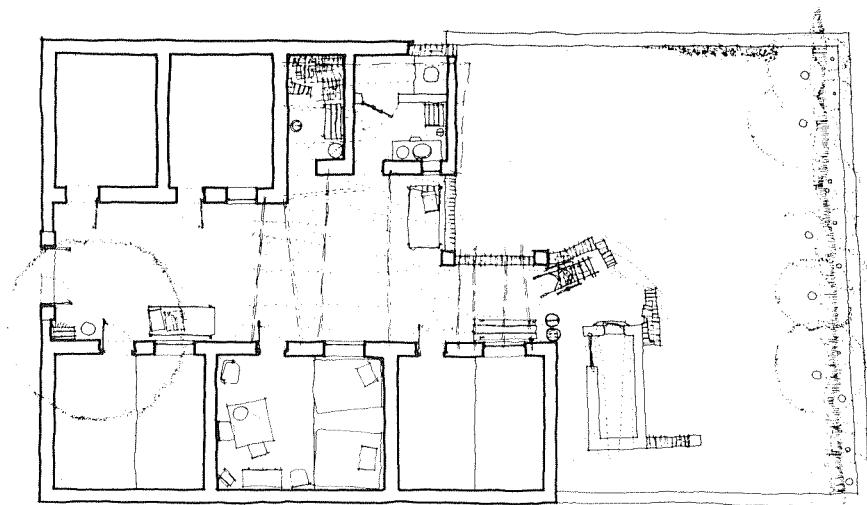
1 The road to Turfan

2 Uyigur children

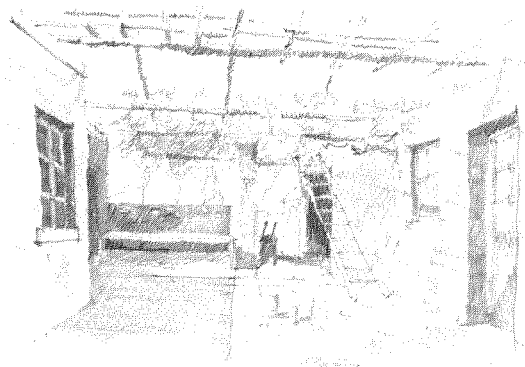
Drawings and photographs by Thomas Chastain,
Renee Chow, and Paul Hajian



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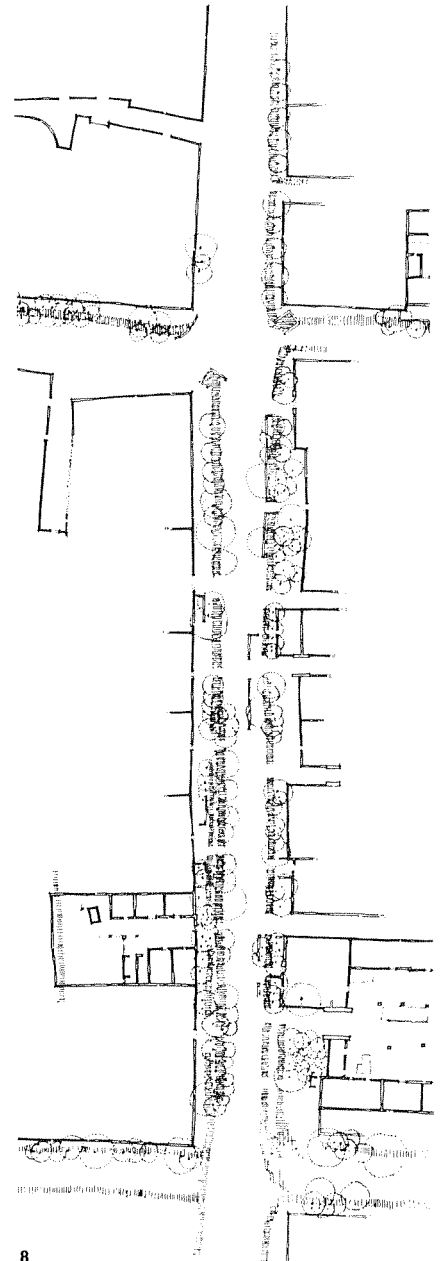
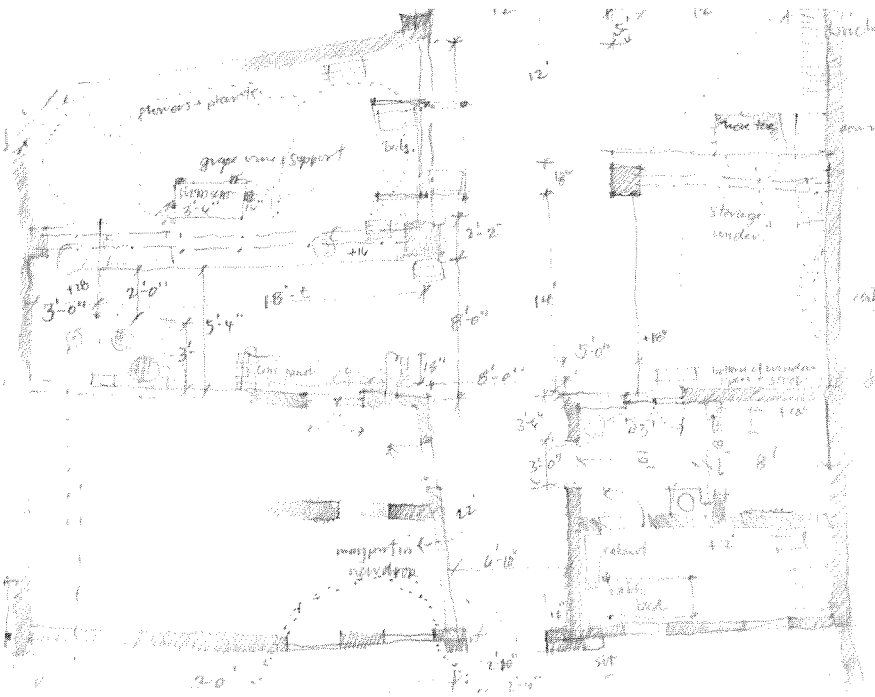
- 3, 4 Turfan courtyard, plan and section, a place made by walls and trellises
- 5 View inside the collective space of the courtyard
- 6 Typical documentation drawing for understanding Turfan
- 7 Water runs in channels through the town on the way to the fields
- 8 Turfan street, a place defined by water, trees, and walls

observing and sought to describe this place in ways that would help to reveal its nature. As architects, this of course meant drawing, but the question was *what* to draw. On the surface, the architectural form of the environment seemed limited and plain. We turned, instead, to look at inhabitation, and Turfan is an intensely inhabited place.

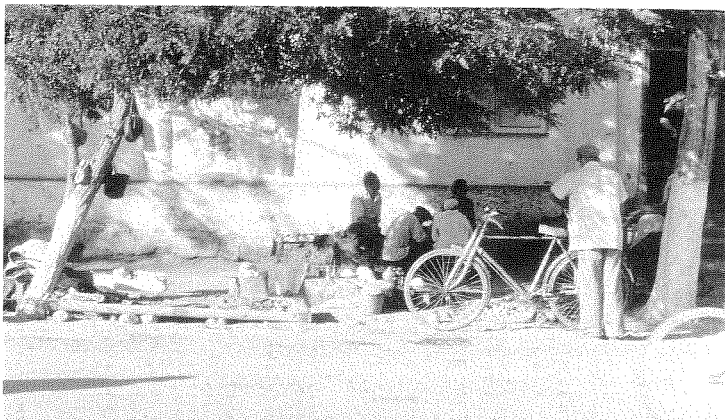
The desolate landscape beyond concentrates life inside the oasis. Colors, vegetation, water, even animals, are made more vibrant by the proximity of the barren openness beyond. In looking at this life, we were also searching for the forms that promoted such inhabitation. This meant documenting the environment by drawing every “thing” in it; our process was in the space, not outside of it.

This observation resulted in an appreciation of a complex built environment made of water, screens, and walls, which created a system of places by transforming light. Of these elements, it is the water that provides the primary definition for inhabitation. Water is gathered in wells that reach miles into the desert. Every morning the water is pumped from the wells into a system of irrigation channels. These channels flow down from the center of the town and market, weaving through the residential areas on their way to the fields.

Throughout the village, the channels line the streets, sitting out some six feet from the walls, creating a strong physical continuity in the public space. For example,



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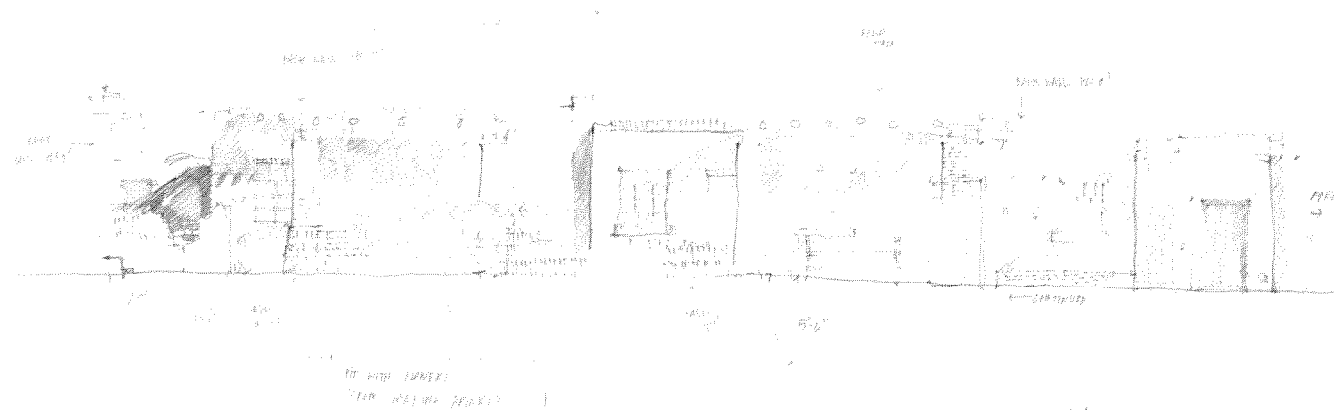
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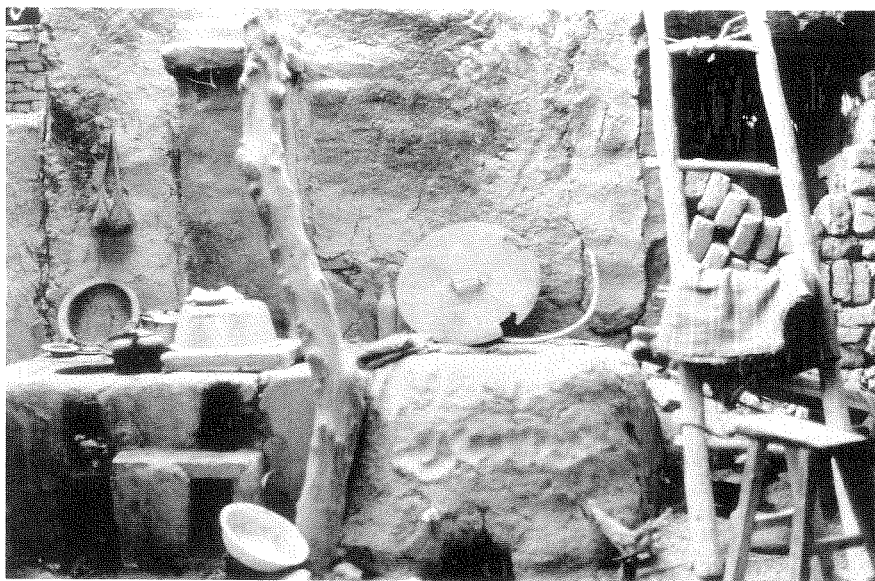
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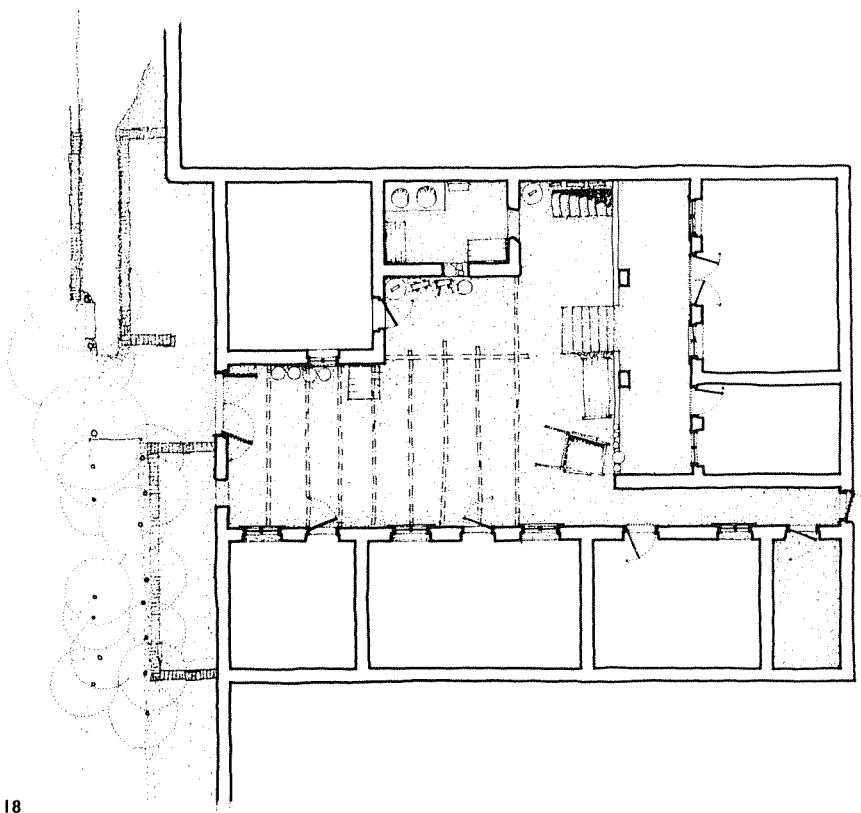
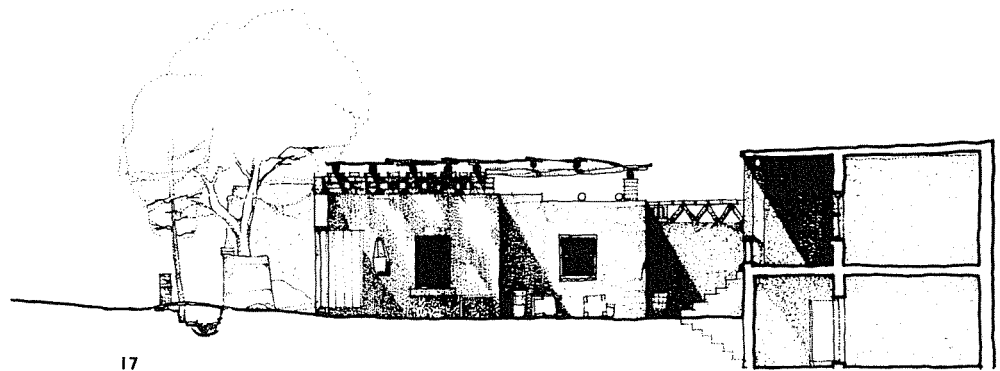
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14, 15 Courtyard plan and section shows all the materials, objects, animals, and activities that inhabit the space

16 Courtyard walls are molded and thickened



is again the transformation of light that defines the area for inhabitation. Here, though, the screens are horizontal trellises on which grow grapes. Under these screens in the shade of the filtered light is the collective space of the courtyard where families cook, work, play cards, and even sleep on hot nights.

Dark, cellular rooms along the perimeter of the courtyard open onto this collective area and thicken the walls with barrel vaulted spaces. In this way a layering of insideness and transition is created not only by the enclosing walls but by the transformed light quality, from the bright openness of the desert to the dark enclosing shade of the rooms.

At times water channels penetrate courtyard walls, transforming enclosures with the sound of rushing water and cooling air.

The wall itself has a different meaning on the interior of the courtyards than on the streets. More than just containing space,

17, 18 Plan and section of courtyard with two-story house



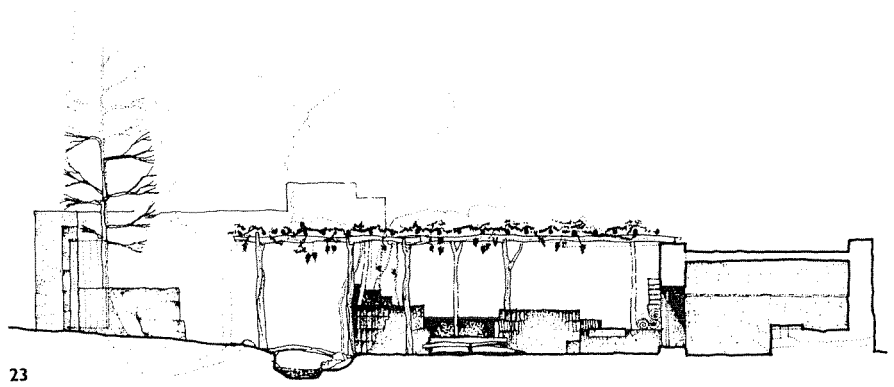
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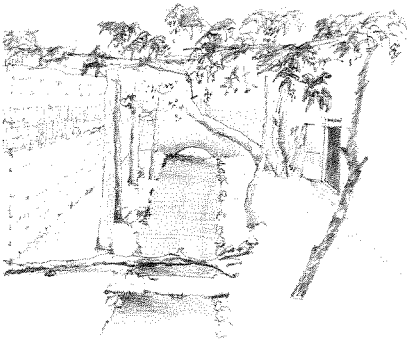
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19, 20 Molded courtyard walls

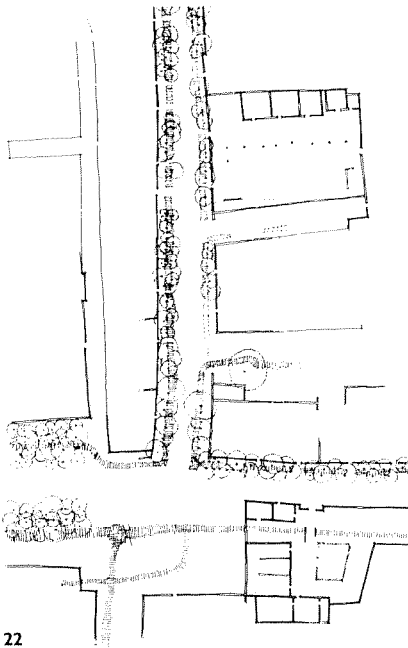
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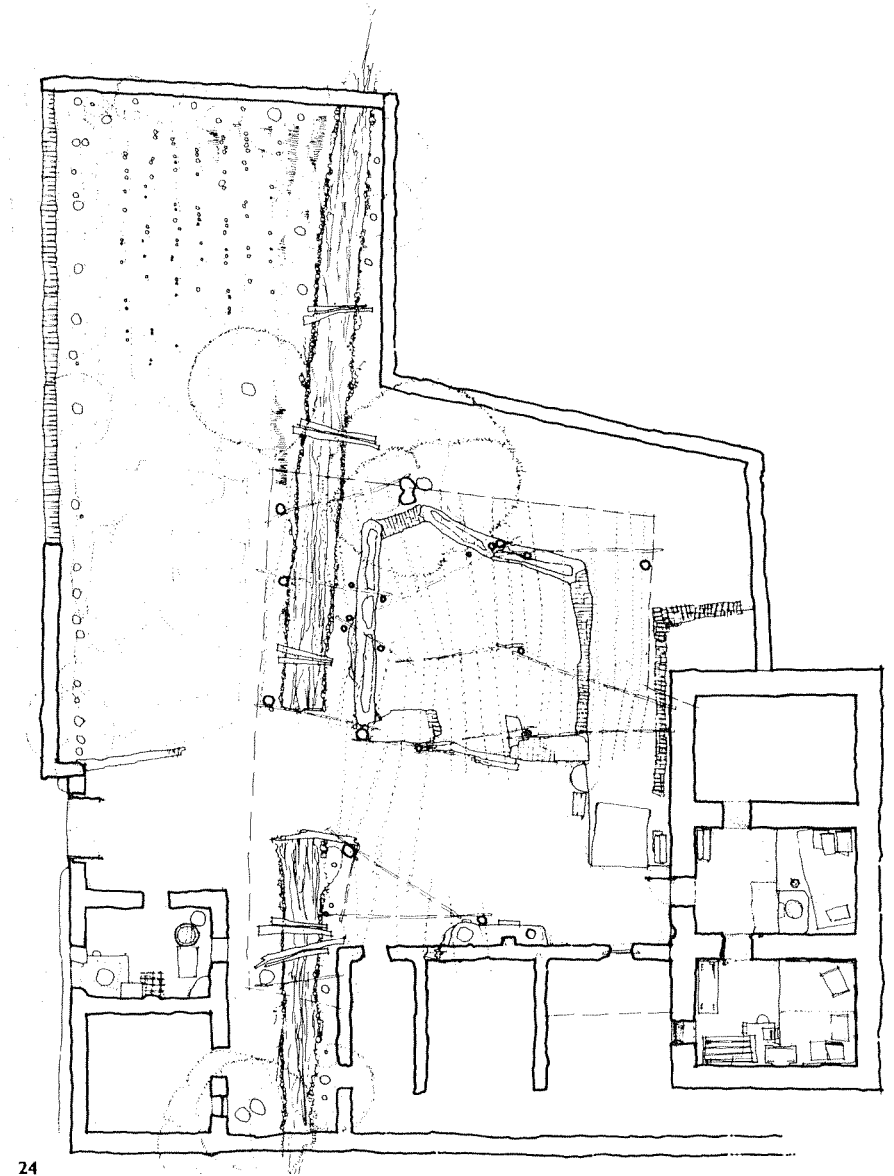
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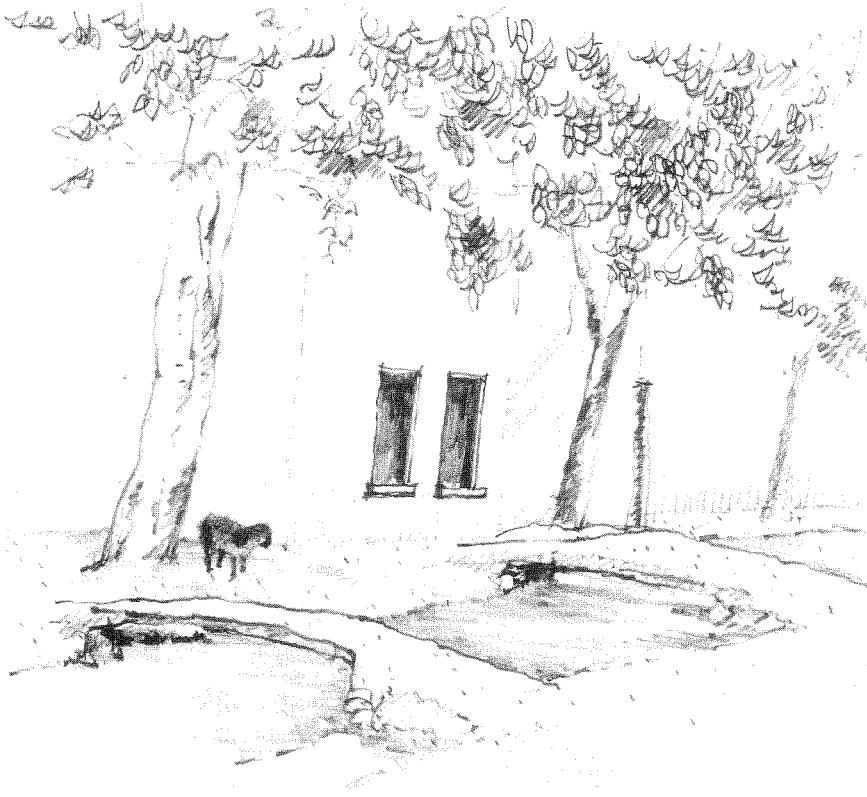
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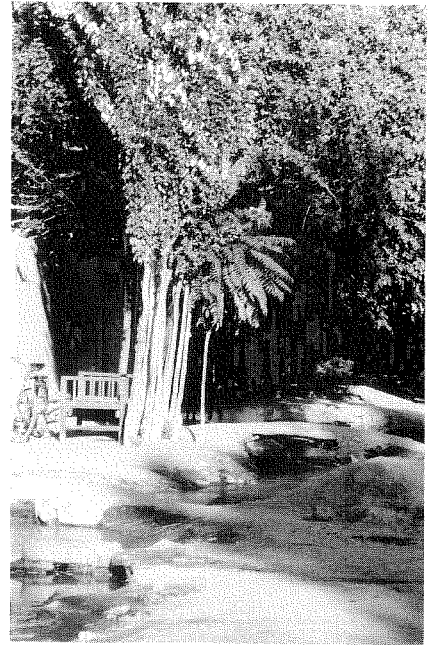
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21, 23, 24 Plan, section, and view showing water flowing in channel through a private courtyard

22 Street plan for house in 21



25



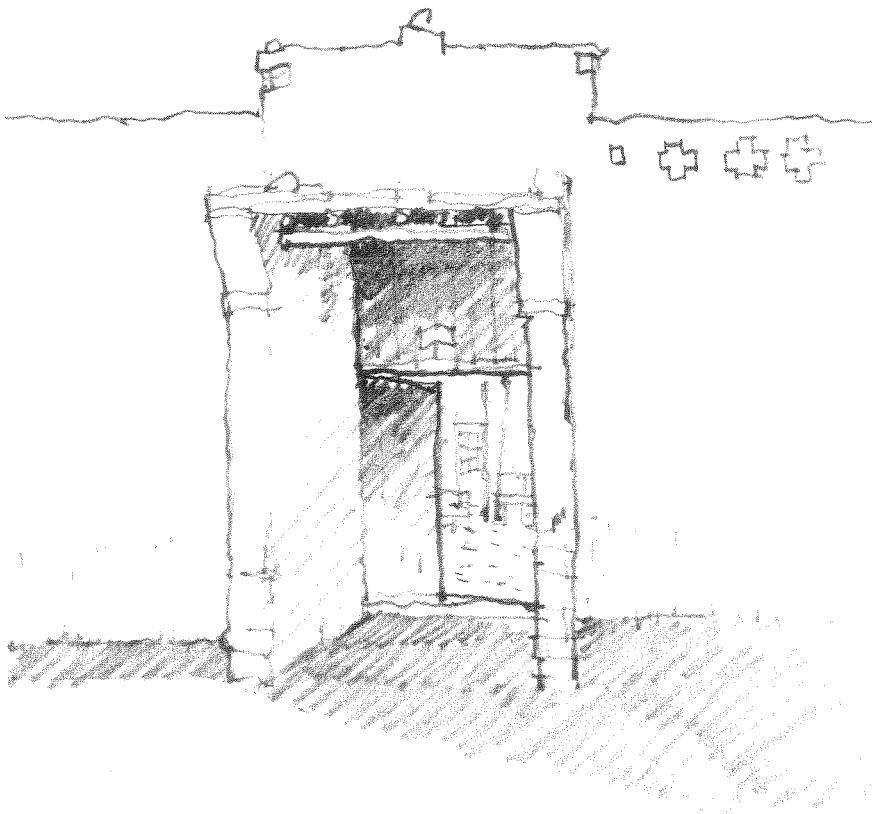
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25, 26 Bridges crossing a channel

27 View from inside the collective space of the courtyard to the entrance gateway



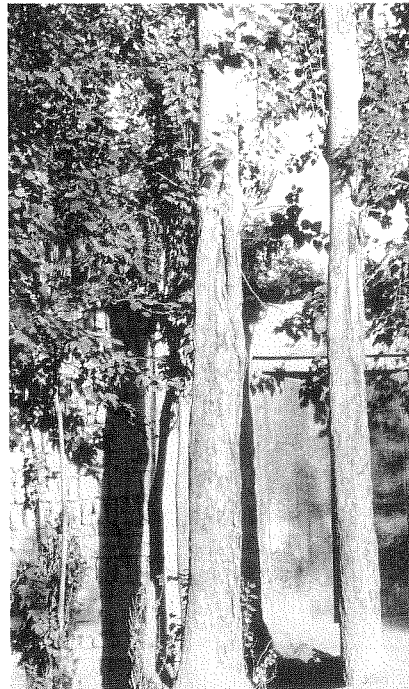
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the wall becomes a surface molded into benches, cooking surfaces, shelves, and niches which promote inhabitation by people, pots, dried vegetables, and an occasional chicken.

Turfan seems hidden behind walls. The transition from the street to the enclosed courtyard is composed of a small bridge over the water channel and a gate in the wall. The gate, which is the only element along the street that identifies the private territory behind the wall, is built to indicate status and personal choice.



29



30

It is not, though, the object quality of the gates but their position relative to the collective space in the courtyard that holds the key to understanding the nature of this environment. While the walls separate the public and private worlds, the gate's location in the wall, when opened, offers a direct view into the trellised area of the courtyard. Thus, while our initial perception was of an environment that felt closed, the experience of the space proved it to be very open. The gateway was more than a transition; it was a view into the daily life of the people.

Patterns of Association: Juxtaposition and Analogues

John Myer

Some years ago, Gary Hack, Bob Slattery, and I undertook teaching an introductory studio in environmental design. At the time it was a new endeavor for us. Early in the preparatory work we struggled with how we and students alike might model our thought. What bridged both our physical architectural models and the verbal/numerical/diagrammatic models of planning? We had set out to approach the design of environment where physical/spatial order was addressed simultaneously with institutional order. What model would work continuously to map our growing understanding of the design in both fields?

In time the idea surfaced that analogues would work equally powerfully across both orders and in many others as well. In

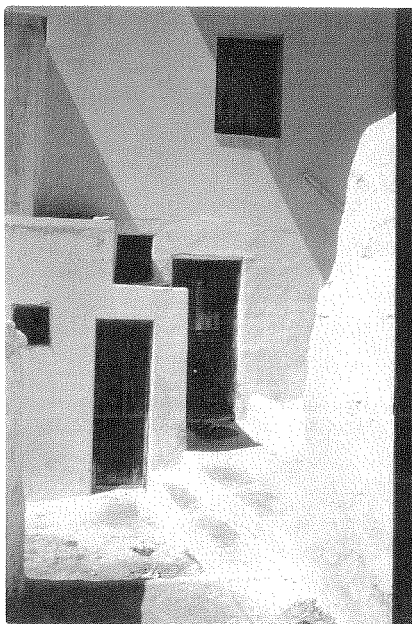
nondesigned and designed areas analogues answered the question “What is it?” by transforming the question into “What is it like?” It also occurred to us that not only were analogues a powerful tool for design—one we had long used naturally in our work—but also one that we used regularly in our daily lives. Was this then not a powerful way to undertake exchange with our beginning students? Could they not (as they had already in their lives) project an understanding of a place through analogues?

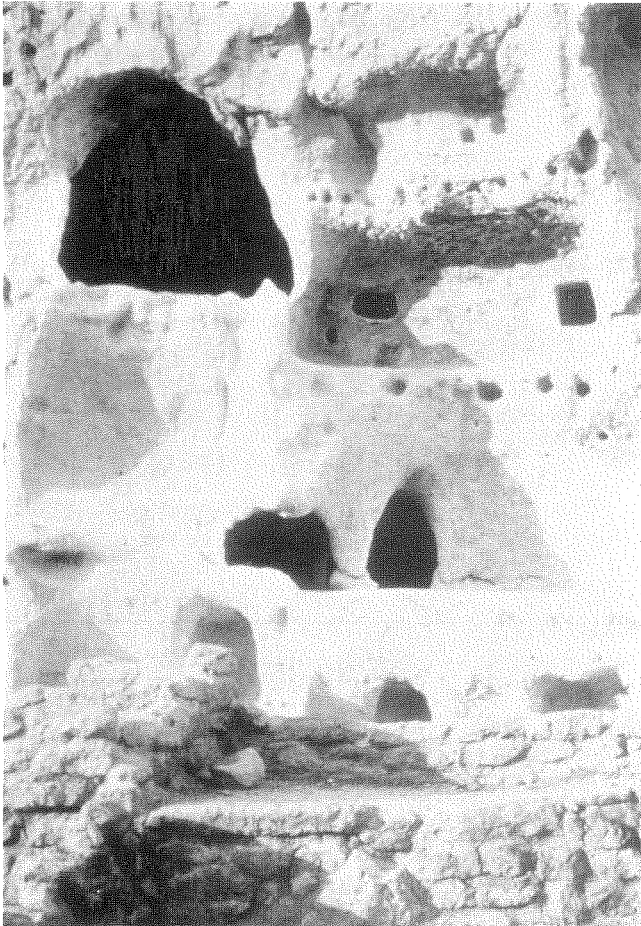
We then proceeded to prepare a slide sequence in which we put forward a range of visual analogues. The first year we ordered them randomly. Over a period of time, as we began to discern differences between types of analogues, we undertook to diagram and discuss

the different types. In the process, we discovered that it was necessary to deal with a broader condition, that of juxtaposition of elements, since only some of the pairs of images were similar and others were different or opposite.

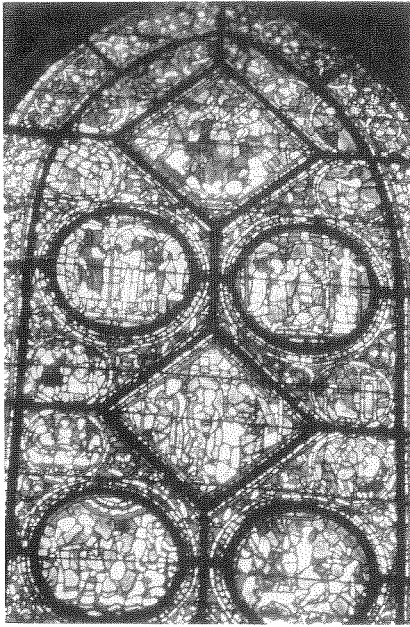
These first three pairs of images are simply examples of analogues used to clarify or heighten understanding in design work, the sort that we as designers would use among ourselves or in exchange with clients.

The ledge on the right picks up in the Mykonos image the spatial envelope, direction of light, and slope of the ground and allows us to see those attributes in a heightened way.





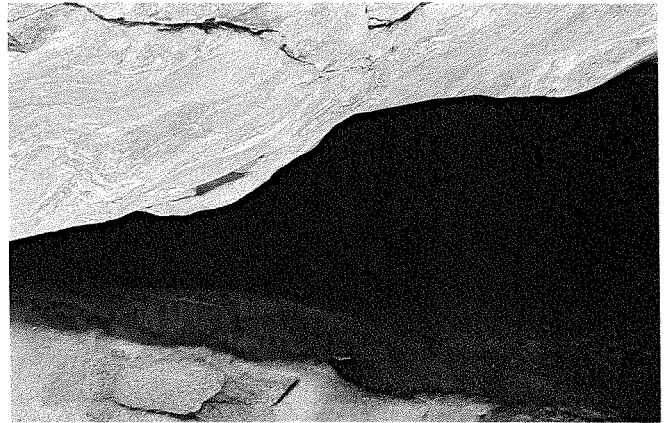
For me and others, the image on the right heightens a sense of the bony rims of the openings in the image on the left.



Did the architectural screen on the left come from the natural screen on the right? May not such found natural references be associative beginnings for new architectural screens?

In time we felt the need to differentiate kinds of analogues and other juxtapositions that were beginning to occur in our minds. This led to the need for a construct to share with each other and the students. In our model an element is understood in a context that is shared with the observer. This understanding is stable enough when that context remains unchanged, but when a new element is brought in juxtaposition with the first, the understanding of both the first element and its context will go through a partial shift. They will seem to have a somewhat altered identity.

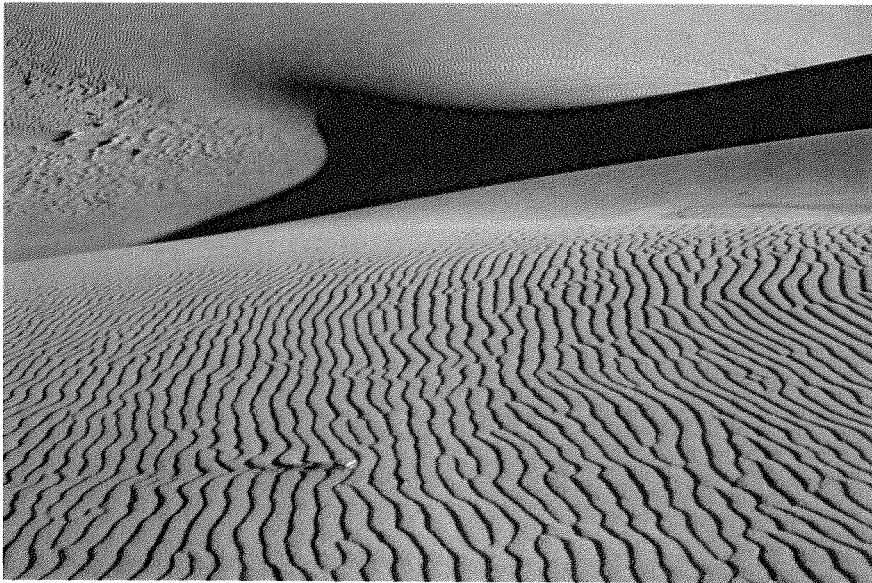
Bringing together different elements is basic in our work as designers. Their selection and aggregation is a crucial step in place-making. Not only do we experience a shifting sense of an element's identity as it is brought next to another, we also understand it as similar to or different from the other. Since elements are normally composed of multiple attributes, it often happens that two elements will have some like attributes and some different ones. If the relationship is largely one of likeness, then the elements seem to come closer together. If it is largely one of difference, they seem to be driven apart.



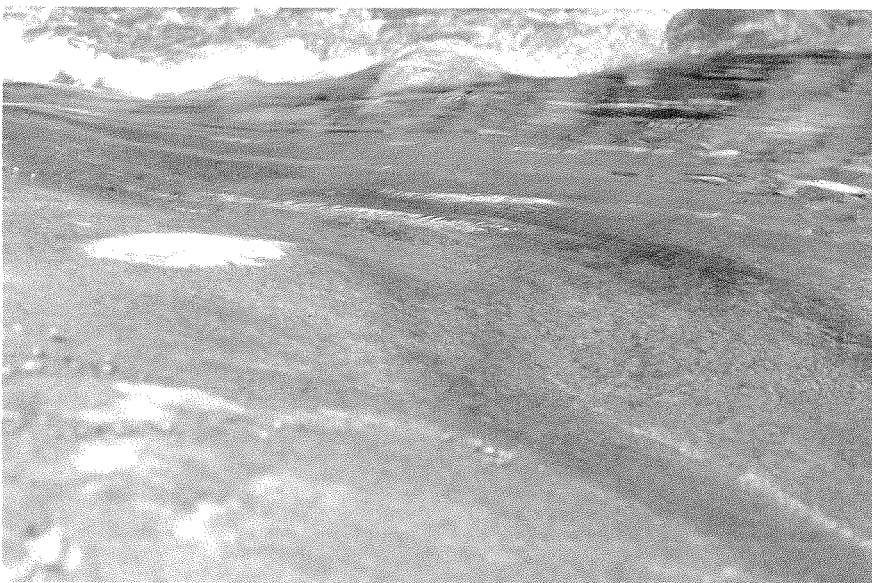
For example, the size of these two caves is very different—one a few hundred feet long, the other a few feet—yet they are almost the same to us as secure habitable concavities. Projected as slides on the wall side by side, one can merge them and they seem almost one continuous image.

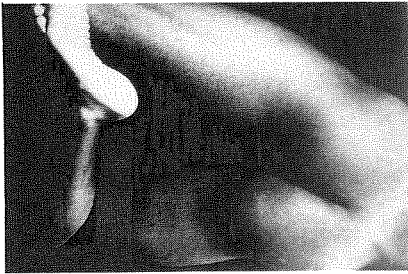


These two images seem uneasy next to each other. The one on the left suggests habitable space not only in one's imagination but in reality, with lichen, beetles, falling leaves. The one on the right has seemingly similar horizontal strata, but where on the left we found habitable void, here we find it filled with sand. There is in its juxtaposition with the left image a sense of filled voids, of being smothered. The two in this way seem at root opposite.

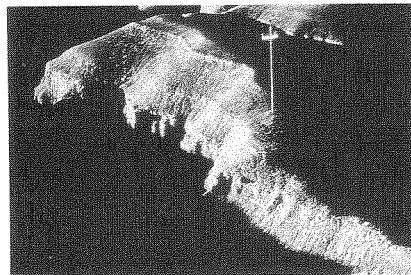
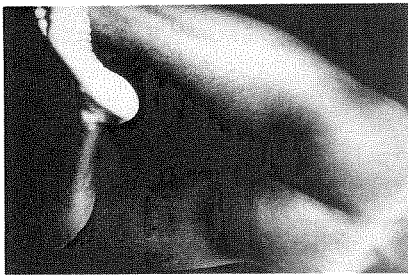


Many of the attributes in these two images are opposites: hot/cool, dry/wet, granular/continuous. Yet the dynamic, fluid process that put the two materials in place is essential in the nature of each. The opposites pull the images apart; the similarities draw them together. Thus, the mind is forced to consider likeness and difference alternatively. The two understandings do not want to become one, do not integrate into one common meaning. Instead there is a kind of uneasy partnership in the mind: now together, alike; now apart, opposite.

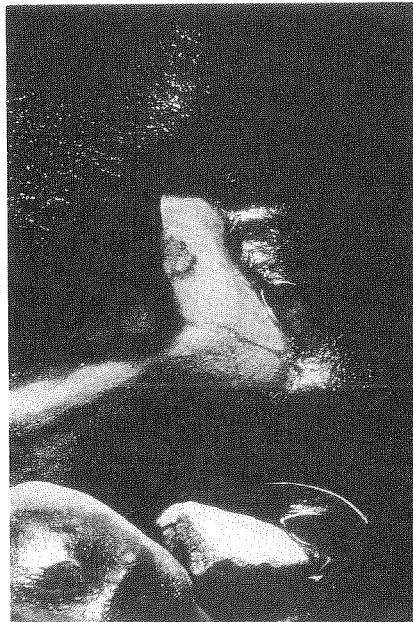




We have said that in the process of juxtaposition our perception of a form changes as it is placed next to another form. Next to the nude form on the left we will place three different images and discuss how our focus shifts to a different understanding each time.



Many people doubt the suggestion that we read landscape forms in our own bodies and feel them as some part of ourselves. But when we juxtapose these two forms and ask whether the hypodermic needle is in the right place, most people concur. Clearly the association here between ridges and body is with the left thigh and buttock.



After scrutinizing this juxtaposition for a moment, people make a couple of different associations. The first is between the L-shaped form of the rock in the right image and the bent right leg in the left. A second and more important association is the lit rounded tops of the rocks with the rounded buttocks and the mid-portion of the nude's body. This is a dramatic shift from focus on the left thigh and buttock in the first juxtaposition.



The connections in this juxtaposition are more elusive than in the previous two. Some associate the sandy areas between the rocks with the tissue between the pelvic bones; others associate the smooth surface of the rocks with that of the nude's surface. A smaller number of others think that possibly the body is leaking or bleeding and associate that with the drainage occurring in the right image. Even if the associations are diverse, no one so far seems to feel that the connection between the images is slight.

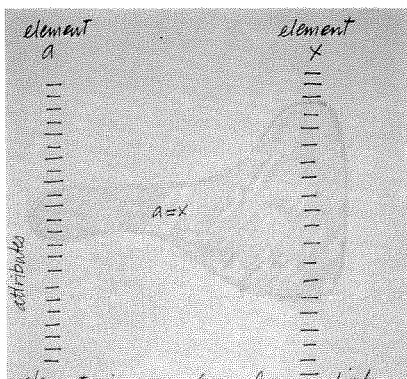
Although we see several different and nonexclusive associations in each pair of these three juxtapositions, our focus on territory in the nude form is quite different in each: long muscular vitality in the first; rounded, middle-ness in the second; and

the fluids, viscera, and pelvic bones in the third.

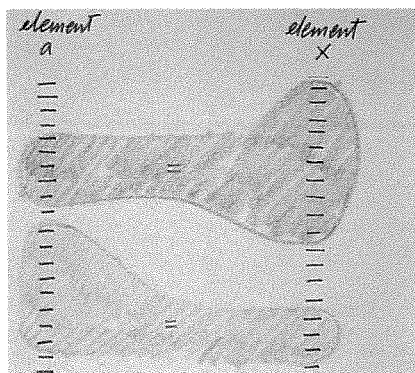
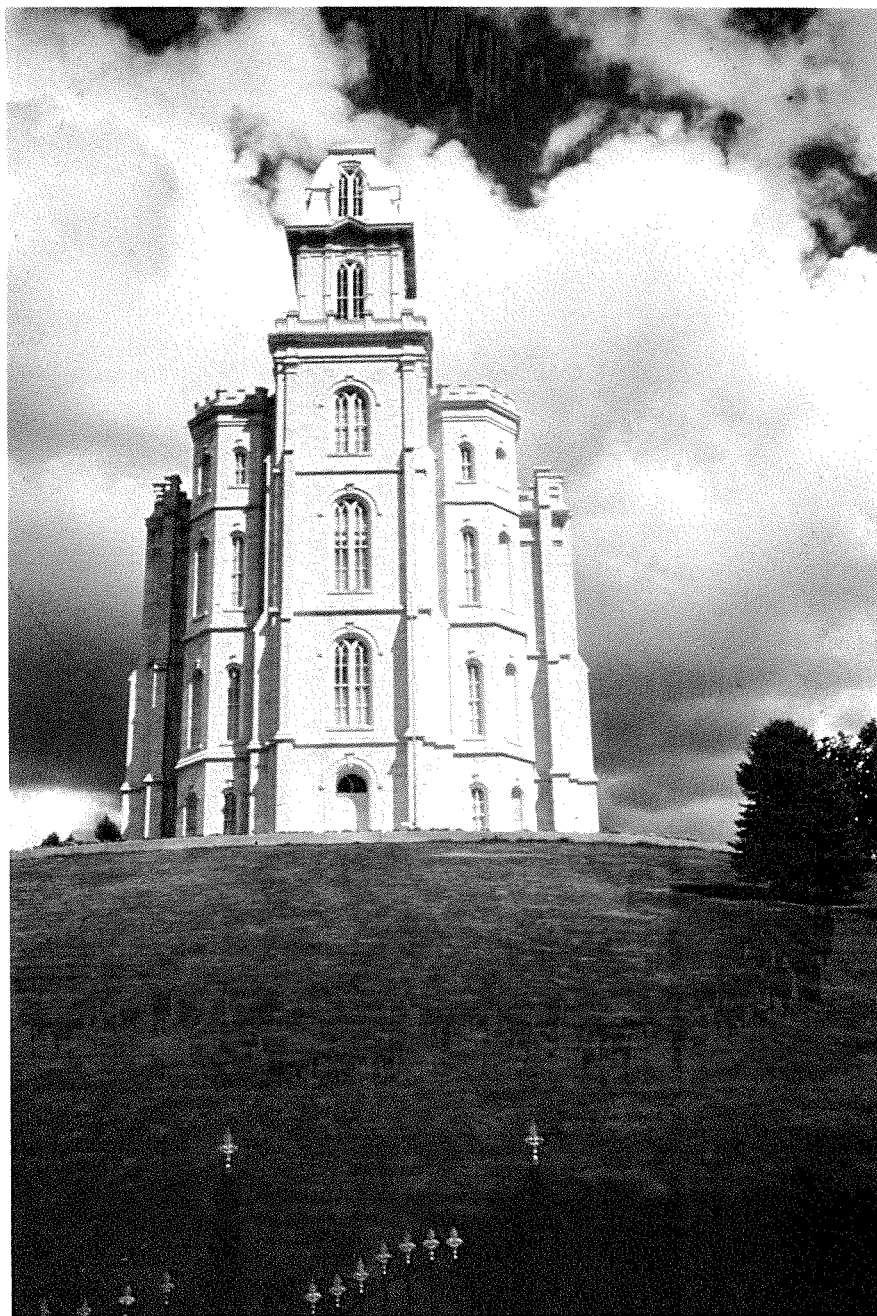
When we bring the foregoing construct of shifts in understanding that occur by multiple juxtapositions to place-making, we become more aware of the complexity of design and the exploring through juxtaposition that we must do if we are to be clear about meaning and place.

In the juxtaposition of analogy, we use the similarity of one element to another to illustrate our understanding of the first. It is through likeness that I am able to tell another designer or client or student that an element being considered in a work at hand is like something that already exists. We also use analogy when we attempt to bring to the surface our own half-understood sense of something.

We ask ourselves, "What is it like?" The answer is often an aggregation of attributes: "It is close to *x* but has a bit of *y* and some of *z* in it." While both uses of analogy are common in the work of the designers of places, the second one is central to designing itself. It is how we surface and deal with thoughts that at first are principally intuitive, thoughts not readily described by words or numbers.



Usually the first analogues we come upon as we begin a search are partial analogues. When element x , which has a plurality of pink attributes, is brought next to element a , our attention focuses on the pinkness in a .



The most frequently occurring partial analogue might be described as a reciprocal partial analogue. Here x makes us more aware of a 's pinkness while at the same time a makes us more aware of x 's yellowness. We can become confused as to which is doing what to what. But this needs to be overcome so that if we mean to focus on the pink in a , we do not at the same time and in equal focus consider its yellowness

or the yellowness of x . To do this we must locate another x , say x_1 , which does not pick up on a 's yellow at all. Or we may also be able to screen out the yellow association by selective screening of the image itself or by accompanying words that guide the mind toward pink and away from yellow.



This pair of images is another example of reciprocal partial analogy. Without words we see the archetypal massing of the crowning smaller mass set upon a greater one in both the natural mass and the architectural one. It is a strong and direct analogue.

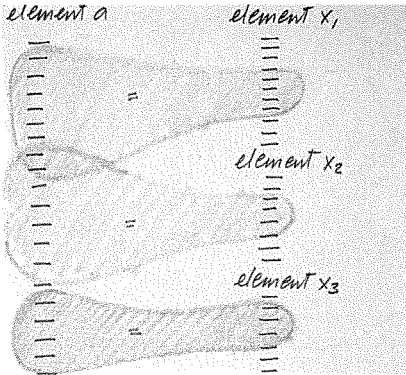
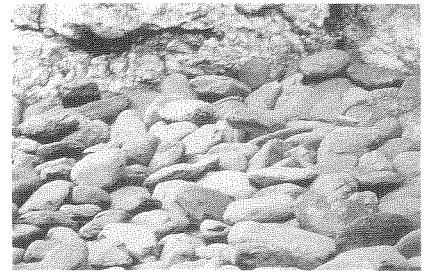
As we consider the two images further, a second and reciprocal analogy arises having to do with apparent accessibility for habitation. At first one would think that the architecture would be more habitable than the mountaintop. But as our eyes move over the forms, we closely see that there is no path leading to the building from the spiked gate. The lawn seems bleak and untraveled, even uncomfortable to inhabit. The height and verticality of the building added to the rising ground of the hill yield an aristocratic image; perhaps whoever is within would open the door only at their

own wish, not to the uninvited knock of any visitor. There is a good chance that the door would not open for us. We feel to a degree put off, excluded.

Crossing the talus to the rocky tower would probably be difficult, but there is no sense of intended exclusion. In fact, as people discuss the tower, they become enthusiastic about the possibility of occupying this nook, climbing that chimney, or sitting in a high seat to survey the world. In short, the mountaintop seems to offer comfortable habitability more readily than the building, and only rarely does someone decide the reverse.

Thus, while the mountaintop brings our mind to bear on the mass of the building we also deal with how we might happily inhabit the mountaintop. Confusion arises about which image was brought next to which for what purpose.

If we wish to focus on mass, then we need to find ways to keep habitability from confronting us in a reciprocal manner. We need to find another massing analogue that does not introduce another strong message.

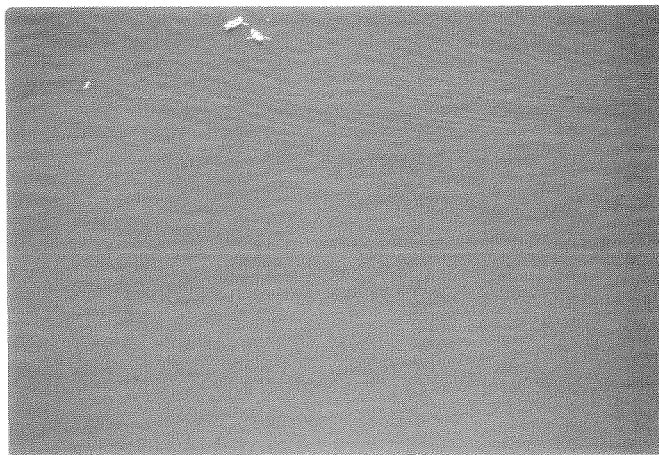


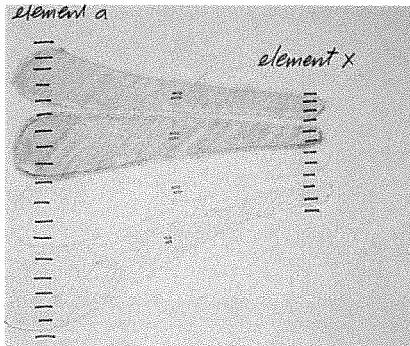
With a series of partial analogues $x_1, x_2, \dots, x_n$ used additively, we may describe a as an aggregation of attributes. For example, I will describe a beach in Positano, Italy, using a set of its key aspects. The beach is stony and hard to walk on in bare feet. That is why boards are laid down and the chairs and umbrellas are so close to the water.



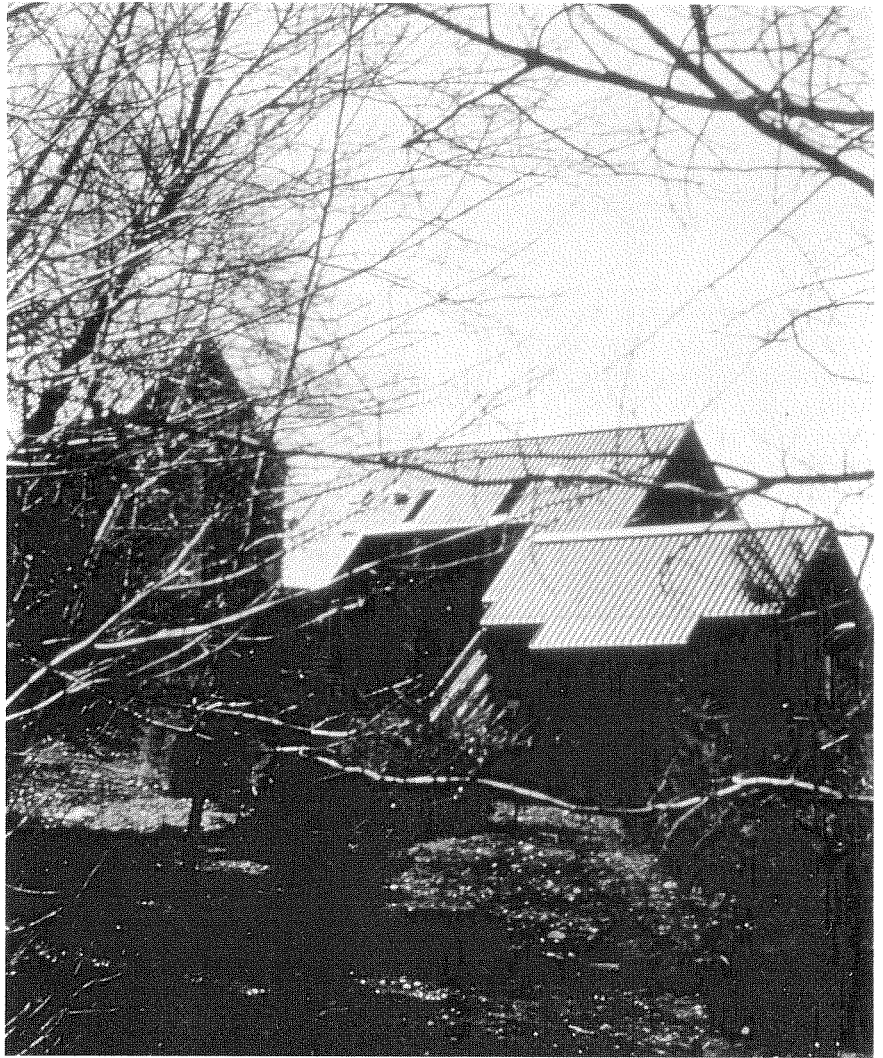


The beach confronts a sparkling sea with mountainous edges. Unlike American beaches, where one instinctively seeks a position as far away from other picnic gear and people as possible, here habitation is deliberately contiguous. This is a place of maximum social contact, a place to meet. It might even be thought of as a courting beach. And if one seeks a more solitary beach picnic, one can hire a boat or two and captain and sail up the coast. While there is some of the beach I have not described, in a short time, thought a set of partial analogues, I have been able to sketch a picture. It is interesting that three of the four analogues were drawn from other places but were sufficiently close to the mark to serve the description. In the same way, we as designers can project an intended place that still is in our minds.





Another kind of analogue is the epitome, which gathers together the key attributes or a key theme pervading the whole. This pair of images presents an epitomizing analogue Bob Slattery and I used for designing the Worcester/Hampshire College student residences in Amherst, Massachusetts, the first project of this size we had undertaken. The program called for too many student rooms, and the budget was too low. We feared residences would be like a low-cost housing project—stillborn, not alive.



And then a countervailing thematic reference occurred to both of us at the same time: a hut in the Pemigewasset Wilderness, which spoke of elemental shelter, Bachelard's hut in the storm. If the sense of the essential shelter of the hut and its form consequences could cut through the limits of

the budget or the belittling sense of being one among too many, we felt it would be all right in an architectural way. In the end, the design results from using this analogue were much better than our earlier tries on the drawing board.



In conclusion, it is worth noting that the associations discussed here can be found in varied relationships in the places that we inhabit and love. Not only will we find similarities between things, but there will be degrees of difference, even true oppositeness. Like people, elements of place have complex relationships with things around them. Despite great differences, which may even be repelling, they may share some deep quality of being, and they may be brightened, lifted up, by some important presence in another. At times associations will be additive; at other times a theme will run through a place, as the sense of the hut in the storm is meant to pervade the Worcester/Hampshire student housing. A formula for good place-making might be the following: for places to be rich and alive, they should include the juxtaposed forms of associative relationships discussed here. In this way we can relate them to our own lives—our bodies, emotions, minds.

Cinque Terre

Henry Plummer

. . . a house with cosmic roots
. . . will appear to us as a stone
plant growing out of the rock up
to the blue sky of a tower . . . a
natural being whose fate is bound
to that of mountains and of the
waters that plough the land. . .

Gaston Bachelard
The Poetics of Space

Within a brief stretch of the rugged and furrowed Ligurian Coast, clings an astonishing series of cliffside villages poised between earth and sea. The Cinque Terre (Five Lands), until recently linked to the outer world only by mule track, rail, and water, are medieval fishing villages as well as centers of grape harvest for surrounding hillside vineyards. This dual relationship has given rise to settlements that are virtually amphibious, each leading a double life that is half on land and half in water.

The villages gather the sea as they wrap intimately around small coves, drawing the harbored waters deeply into their stony fabric. Adding to this concave embrace is an overlapping union, the lower village inundated with salty spray and

pounding waves, while tidal rhythms actually carry the swollen sea up into village streets. Peninsulas encrusted with houses enwrap themselves with the sea, in turn, by projecting the village beyond shore and out into the tremulous waters. Settlements tend to crowd around a single main artery, a wide central street winding down to the sea in a sinuous torrent of space, its channel “folded” out of stone, spilling into the bay and disappearing below surface, a kind of elongated threshold along which people flow and boats are launched. This passageway, leading from rock to water, is the primary communication link between mountain and sea, and in this sense it is almost a cosmic axis, a meeting ground that is now terrestrial and now aquatic, now solid and now liquid, now spine and now vein.

Topography is also incorporated directly and metaphorically into the village structure. Basins, crests, promontories, and valleys are accentuated by settlement morphology, and the steeply terraced mountainsides reverberate in tiered dwellings and cascading

footpaths, while bedrock is chiseled into walls and floors. Set against the chipped and faceted terrain are colorful patchworks of weathered houses, their manifold faces as fragmented as rock crystal. The subterranean quality of the narrowest passages, cleftlike and close to the earth, are at the same time ravinelike, as if etched through by watercourses over time, alternately angular and undulant, rocky and watery, landward and seaward.

These coastal villages bring daily life closer to earth and sea, meshing their houses into the great cycles and forces of our planet. But such places also breathe in and out reconciling our own dual needs for settlement and wandering, security and adventure. Here we are rooted and stable, emplaced deeply in a warm and fertile earth, even as we are released into the sea’s vaporous horizons, turbid depths and quivering surface. Within the fluctuating border of these two primeval worlds, dwelling is intensely grounded yet protean, as all life should be for terrestrial beings.





The Synthetic and the Real: Notes on Córdoba

Fernando Domeyko

The notes and observations presented in this work attempt to establish and clarify the physical configuration of space, form, and light. The work starts with a careful dismantling or de-constructing of a place that can reveal plural and even contradictory points of view. New issues, forms and, gradually, holistic understandings emerge. By focusing on certain issues the drawings make possible not only these inferences but also transformations that go well beyond them. However, the drawings remain faithful to their origins in the physical realities of the place: to its forms, its qualities, and its tectonic properties.

The drawings derive from direct experience with particular buildings in particular places. For each drawing there is an issue, and its purpose is to deal with that issue, not just to make a drawing! For one, the issue is light and the counterpoint between light and shadow as part of a sequence of movement. For another it is the superposition of different patios in the same directional field, as happens here in Córdoba. By showing changes in time and position it allows the reading of spaces-in-between and the clarification of central open spaces. It turns out that the central spaces are common and general, and it is the edges that are special, particular and local. One drawing was to make the

three-dimensionality of the space understandable through depicting movement through the building. In that drawing it was necessary to add a stair in order to realize the continuity of movement. Later, when I went back to the place I found that the stair was there, in the right position!

These explorations start with sketches from the real place, and they imply each observer's experience of that place with all of the perceived meanings and associations. The sketches, therefore, represent a confrontation with the physical facts of architecture. You have to bring up that experience through drawings and notes. The architectural experience of a building is at once both visual and tactile. Architecture is to be *in*. If the visual aspect becomes too strong or loses touch with the tactile, then the building becomes merely an object, and the sketch becomes only a representation of its sculptural or pictorial values.

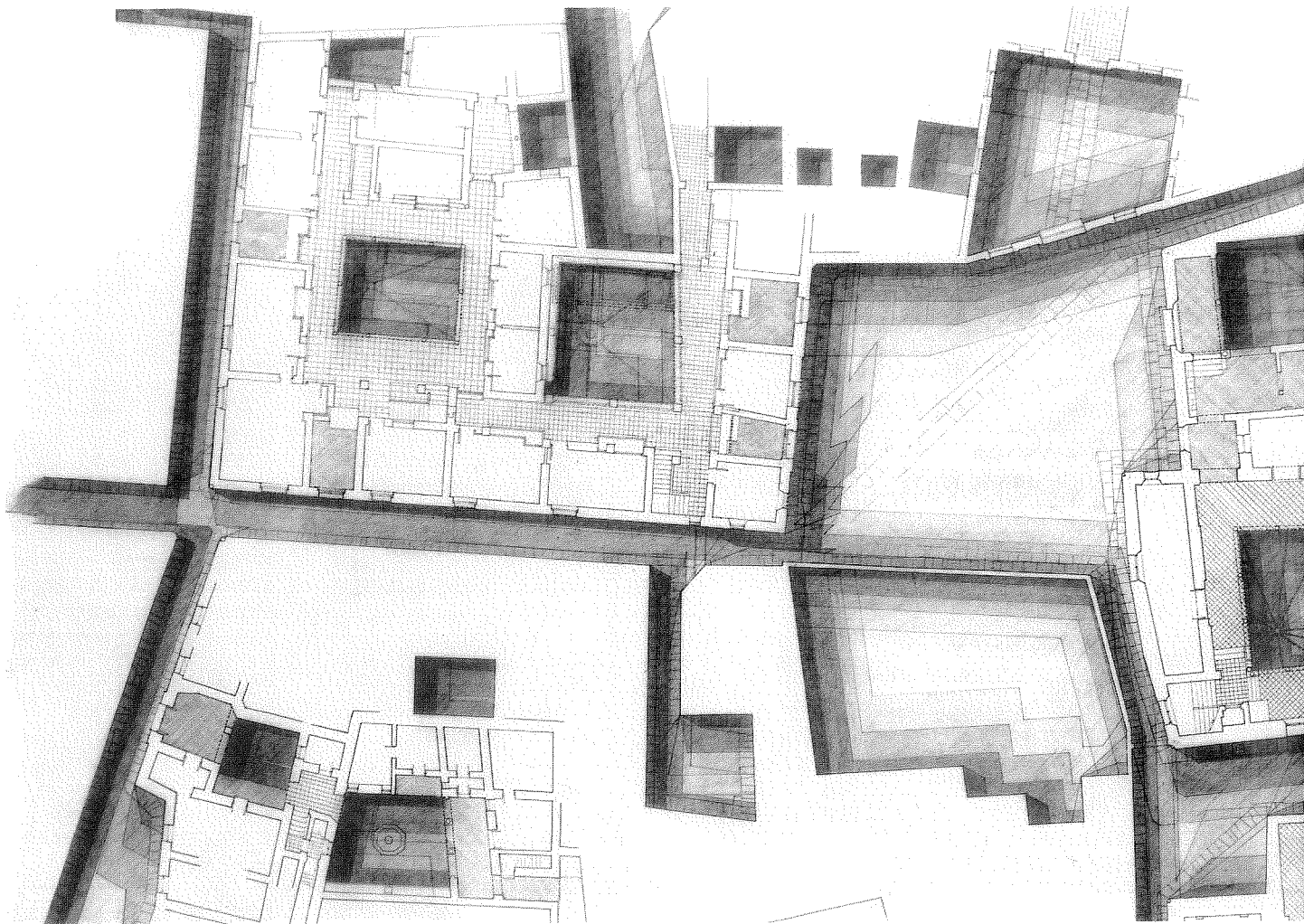
There are different lines to enter the material. One is the organization of light; one is the organization of forms in terms of solid and volume implying reciprocity and reversibility; another is the organization and position of elements and all the movements that are in the space that have specific connotations. I enter as well through dimensions and

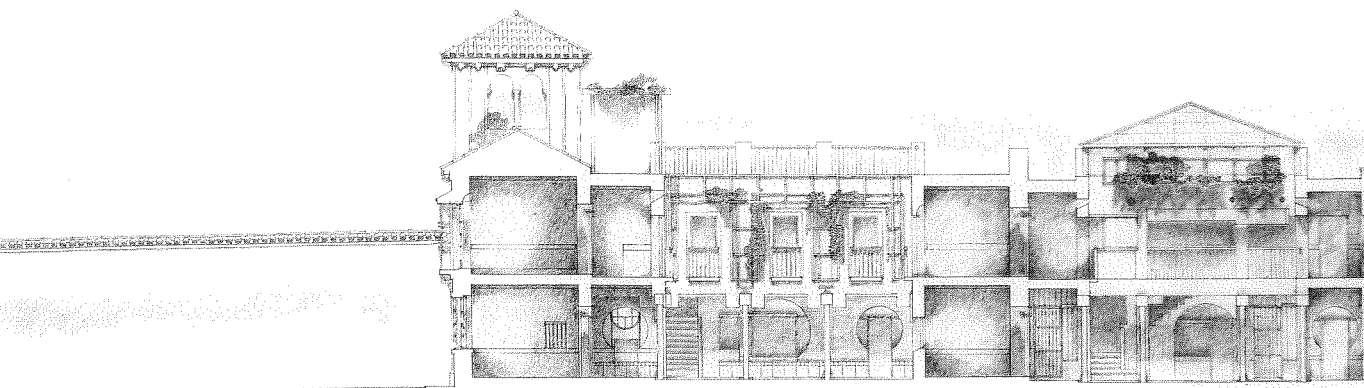
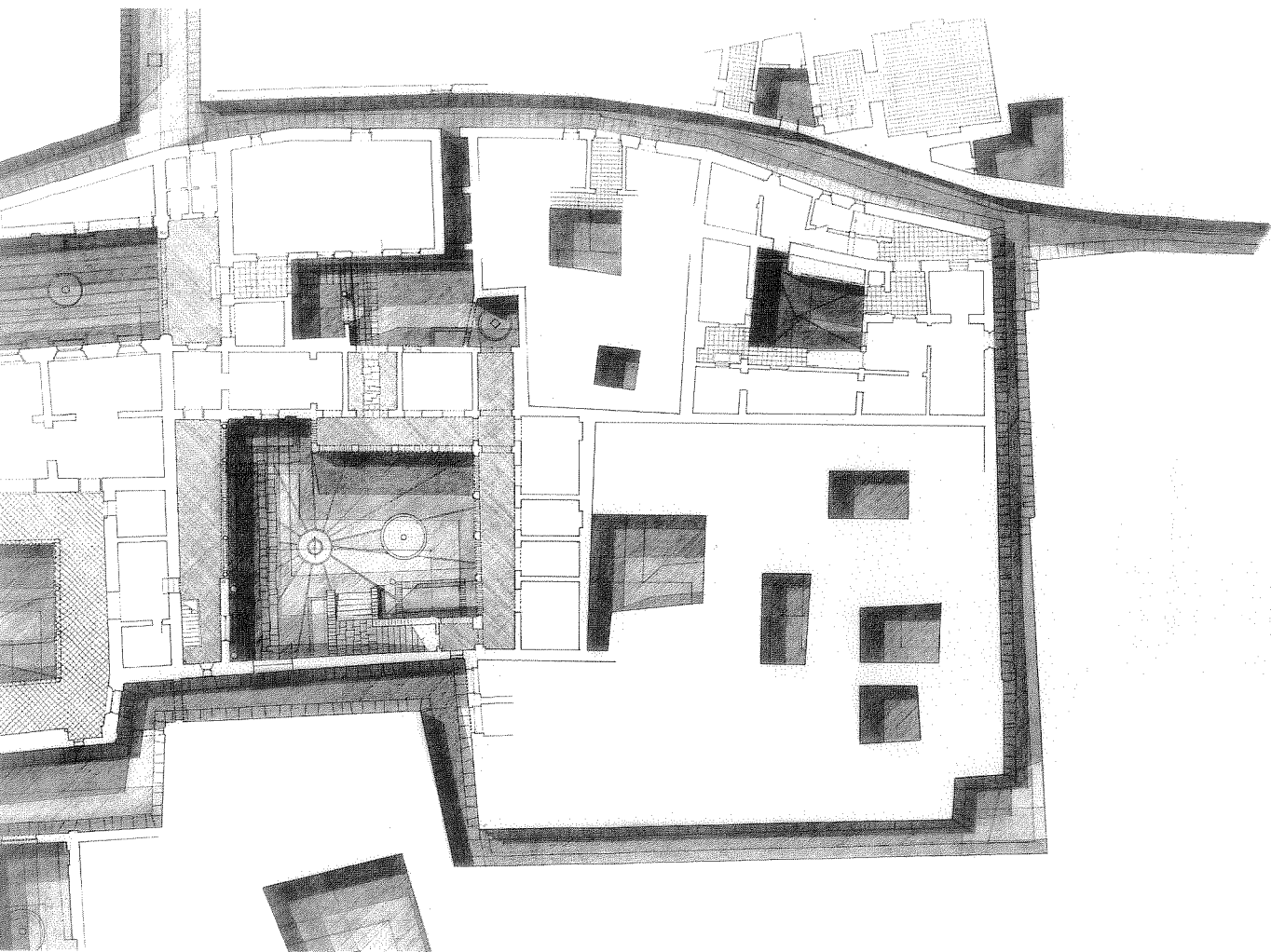
relations between dimensions: specific dimensions that are simply true, some that are related to cultural experience and construction techniques, and others that are independent of associations for now. The relations between dimensions and dimensional patterns create the possibility of making places.

When you start to make a drawing to explore an issue, you don't know exactly what the result will be. But you have a rough sense because you have the experience of a place and because you have done pictorial as well as diagnostic sketches. The pictorial sketches help a lot to understand the essences of the issues because they are more intuitive. At the same time the diagnostic plans and sections help to achieve a three-dimensional understanding. They are not direct transcriptions. Each drawing becomes an "instrument of detection." The memory of the recorded experience helps to establish the issues and the ways to represent them. To clarify and to establish the values of the issues it is necessary to accept the description of the drawing as an instrument in the framework of the approach outlined here. The drawings of light and shadow, for example, reveal spatial continuity and order as well as the relevance of the shadow in that particular place. In Córdoba the order of form and spaces is gen-

erated from the order of shadow. In other locations, as in Boston, it is the light which generates that order. Another drawing was done that showed bands of movement through the buildings displaying the direction and rate of slope of the hill. This system of movement is defined to permit walking permanently in shadow. It is divided into very consistent dimensions relating to how the different plateaus are defined. These are not universal dimensions; every hill has its own subdivisions. It is from this association with its context that the movement system takes on added meaning.

Furthermore, you can start to see some notions of the organization of place in relation to the system of movement. Every time that there is a lateral extension of the horizontal plane coupled with an increase in size, the diagonal of that plane appears and makes possible the notion of place. The ground plane, by defining magnitudes and dimensions, is what establishes the primary orientational and spatial reference. Without it there is no possibility of place. If these lateral movements are accentuated by a vertical displacement up or down, the perception of place becomes spatial. The changes in natural light reinforce its definition. You realize all this in the plazas and in the patios where you can cross on the diagonal.





These imply a more public realm, and that is true in any culture.

There is always the light in these places of arrival through entrances that are in shadow. It is sequence of light and dark which establishes the reading of the movement through the city or through the buildings. The definition of the pavement defines movement in a tactile as well as a visual way because both sides of the sidewalk differ from the texture of the center even when it is very narrow, and presents the alternative of through movement or of repose. Both sides are also differentiated by the positions of entrances. You can be blind, and you don't make mistakes!

Places are defined by the topography of the site, and the organization of forms in this architecture is directly related to their positions in that site. In this sense building can be thought of as the story of the topography. Buildings in Córdoba are made in a way that, as you go through them, you come to know the site as a place. Architecture does not exist outside place. It is not a flying object, and it is not an item in a catalogue of diagrams. It must be in a specific place and extend the experience of that place. Every good building is *in* a specific site.

The first architectural definitions here had to do

with agriculture, and the ways to bring the water throughout. These definitions remain and give different values to the different directions in the plateau. There is not equal value to direction in any real physical pattern. Every place inside of the houses is related to that basic movement. Private open spaces have the same formal definition as public open spaces, and can shift from public to private or *vice versa* depending on how they are accessed by the system of movement. The public realm here is not as strongly defined as in other cultures.

There is a continuum of walls (or zones between walls) that establishes a physical continuity of material and the relation and definition of spaces. They define zones that can become corridors, patios, or rooms. At times these walls become colonnades that form edges of places that alternatively are off to one side and then the other of the main line, of the material. It happens that the main line of the material falls on the central axis of the organization of building, as is the case, among others, in the Gothic cathedral placed inside the Mosque at Córdoba. The resulting order of volumes and spaces, in strong counterpoint with the rhythm of the land, can be read as an autonomous organization, with options open as to how it is used in both plan and section.

Dimensions are similar between walls in rooms and corridors opening up the possibility of spaces being defined in either way. These dimensions become repetitive and consistent having their own specificity and meaning in the built and the unbuilt—rooms, paths, patios, entrances, plazas—establishing a strong order. Building materials, roofs, and light and shadow do the same.

This drawing represents an assumption of the summer solstice and the two equinoxes at the same time of day. It does not represent the reality, and it doesn't reflect the light in its totality. In one part of the section the light is introduced directly from the sky, and in another a screen was added at the roof in order to liberate the walls from direct light. The resulting transformations are completely different. In both, the attitudes toward the light are still the same. The understanding and use of the light is one of the strongest continuities across cultures, and, with understanding, it can endure changes in times and technologies. The earth under the sun won't change, at least for a while!

This drawing has in mind a sense of ruins, of overlapping ruins. A place is defined in the time therefore we are in that process of time. Tomorrow will be defined in a new way. We will add

a new reading over that reading, but it will remain a place and become even more a place. Chartres, Paestum, the Acropolis, or Machu Picchu are so strong and powerful because they have that quality. It is not that you define a place forever and it stays static and unchangeable.

The choice you make to build a drawing is connected both to the experience of the site and building and to assumptions made about that reality. The drawing is a poetical definition of something that is not exactly there, but becomes true of what is there. It is synthetic and not descriptive. It conveys aspects of the reality of the place better than the direct experience of the place itself.

These drawings are similar in some respects to those that resulted from the French Academy of the 19th century. Labrousse's of Paestum are layered, showing first just what they saw as a record of the reality, and overlaid with what they excavated. Other drawings show imaginary reconstructions in which they transformed what they found into new organizations of form. In this highly disciplined process there does appear a kind of ontological drawing that proceeds from building the ruin in the drawing and, through that, discovering and defining the essence of the place. The drawings in this article are more



selective. They are monographs of a specific site, trying to understand the forms, qualities, and the principles of organization rather than just the external characteristics.

They reflect qualities of vernacular architecture in which the principles that underlie it are evident in its organization and in its particularization in buildings. Identity in building is achieved through the confrontation of the principles with the realities of the site rather than through making buildings that are exceptions to rules—exceptional buildings. The mosque, the cathedral and other palaces are defined and transformed by the same issues that we have discovered elsewhere in the town. In the mosque, the

attitude toward light is the same, but it is obtained with different dimensions, and the resulting quality of light is dissimilar but related. Through consistent attention to the same issues but with carefully considered changes, important public buildings establish a continuity with the rest of the urban fabric, but also establish their own distinctive identity. Thus, there is a permanent dialectical relation between the monumental and the vernacular.

The drawings included in this article attempt to make these principles clear without commitment to specific transformations. Notions of design are, however, implied. The drawing becomes a project with its issues and values.

The position of a stair in the plan, or the transformations in section only come to mind after these experiences. Knowing the order of the place, you become able to transform it into a new reality by means of different technologies and in response to different social and physical conditions.

ACKNOWLEDGMENTS

With deepest gratitude to Professor William L. Porter for helpful discussion and valuable editorial contribution. I would like to thank the many students involved in the process leading to these drawings and to make special note of the contributions of Patty Seitz, Don Klema and David Nelson.

Times Square

Peter Bosselmann

“The internationally celebrated crossroads,” was what Adolf Ochs called the bowtie intersection of Broadway and Seventh Avenue in 1904. Ochs had recently purchased the *New York Times* and sought a new business address. At great expense he soon acquired the triangular block on 42nd Street, Broadway, and Seventh Avenue just two blocks from Oscar Hammerstein, Sr.’s “Olympia” amid a growing cluster of theaters and fancy hotels. The new Times Tower, then the tallest building in New York City, became Broadway’s most famous landmark. The name of the paper has been associated with the place ever since. In its basement, the new IRT subway station subsequently became the transfer point for the rapidly expanding population from Queens and the Bronx who commuted to work during the day and sought entertainment in the evening.

On December 31, 1908, the great electric ball of light, in a ceremony repeated to this day, first descended from the Times Tower to mark the beginning of the new year.¹ Twenty years later, in 1928, the *Times* added the famous “News Zipper,” which spelled out wire service news on a band of electric light bulbs. Imitating Times Square’s rapid pace and night life, newspapers in capitol cities throughout the world soon installed similar news bands. On Broadway, light



1 “Times Square at its Best.”

© New York Public Library,
photography collection

2 Drawings prepared in California before the construction of the model understate the impact of Midtown bulk on Times Square. Drawings by Peter Bosselman

became the trademark of the "Great White Way."² "The brilliance of the light and color," wrote journalist/novelist Theodore Dreiser in the summer of 1908, "urged onlookers to chew gum, drink beer, attend a play or movie, and lit the clouds above Manhattan with a glow like that of a dry timber fire." The spectacle, free and neverending, still enralls. People have come to Times Square to shed their cares, to wonder, to dream, and to feel the pulse of a vibrant city.

Times, however, have changed. Many New Yorkers have stopped going there. Live theater and shows now compete with private forms of entertainment. For many, the area is only a pale reflection of what it once was. For many, too, it is a bleak reminder of the myriad social problems afflicting the city.

There are many streets in the Times Square area that New Yorkers, especially women, avoid. City University of New York staff members, in a 1978 study of the pedestrian composition at the sidewalks of Times Square—42nd Street IRT station sidewalk area, discovered that the mean ratio of males to females was 7 to 1 in the afternoon hours and, at the equally busy Public Library, it was 2.7 to 1.³ The study, however, undermined the suburban New Yorker's preconception of Times Square as a

"playground for minorities." At most hours of the day and night, whites outnumber other racial groups. A follow-up mail-in survey, at any rate, indicated that the theaters around Times Square ranked first among entertainment spots in the city as places where people would "enjoy going" and actually did patronize. Only 13 percent of the respondents said they had never attended a Broadway theater. Nevertheless, 20 percent said they had never patronized the restaurants there.

The theaters, thirty-three active ones which are clustered along the side streets, offer the district's main appeal. Some have retained their fascination for more than eighty years. Elegant old structures, they greet visitors as special people. Their architecture extends the atmosphere of the drama from the stage to the auditorium, to the lobby and out into the street, surrounding the audience and the passerby as well in a single, playful, magic experience.

All together, they are a national treasure. The number, size, and acoustical features of these theaters enable the staging of virtually any kind of production. The theater business is still a cyclical one. Some theaters, for instance, are dark for many weeks. But collectively, they attract between eight and ten million people yearly. The

first-run movie houses in the district sell more tickets than the rest of New York's movie houses combined. The outlook for live entertainment is far from dim. New York's convention center, located less than a mile from Times Square, attracts twelve major conventions each year. Already, conventioners spend approximately one billion dollars yearly, or one-third of all the money spent by visitors overall. Times Square is an obvious choice for the ten thousand hotel rooms that are needed to accommodate the added flow of conventioners.

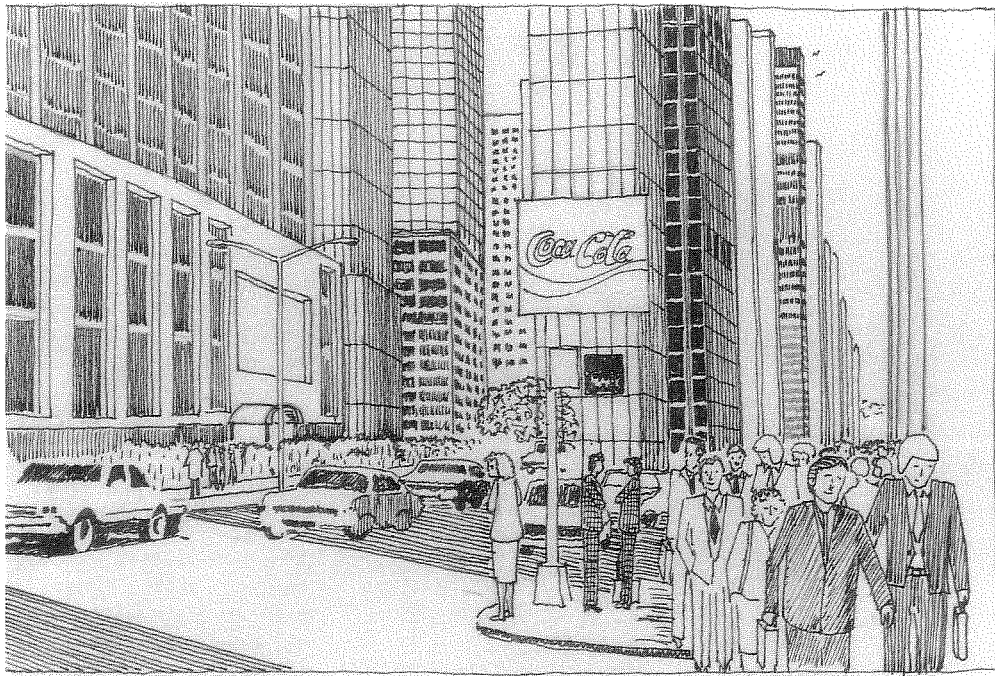
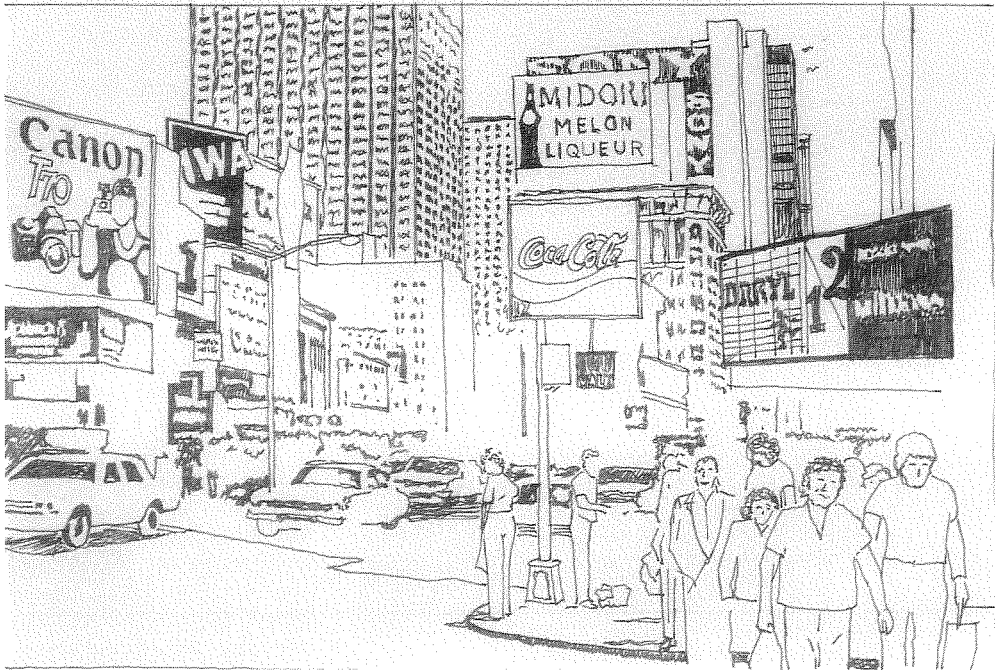
The long-term viability of the theaters is an important goal.⁴ How to reach it, however, is a matter of heated contention. Debate arose in 1982 when the "midtown" planning controls proposed expansion of the highrise office district to the west of Sixth Avenue.⁵ This area includes the Times Square entertainment district. Properties on those blocks between Sixth and Eighth Avenues soon became prize real estate. Under the new controls, more than twenty highrise structures above fifty floors could be built along Broadway and Seventh Avenue between 42nd and 53rd Streets. Many of the new buildings could be constructed on or near theater properties.

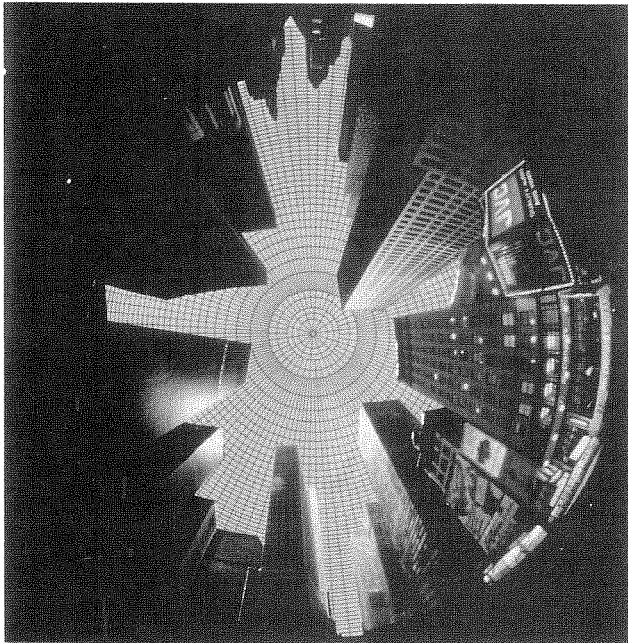
The zoning law allows for additional floor space, should the new buildings incorporate the theater

into the new structures. Additional floor space is permitted if air rights are transferred from a theater in the vicinity. Altogether, the allowances could permit new buildings towering as high as 70 stories. Proponents of these new controls have argued that the theater rehabilitation bonus and the transfer of rights within the district will provide economic incentive for the preservation of theaters. Believing that white-collar workers would revitalize the district, they have also argued for the construction of new office buildings. Opponents, predictably, have greeted both points with skepticism.

Theater preservation, through zoning and transfer bonuses, has been questioned since 1982. That year saw five of Times Square's most beautiful and well-known theaters, the Helen Hayes, the Morosco, the Astor, the Bijou, and the Gaiety, demolished to make room for Portman's new Marriott Marquis Hotel at 45th Street and Broadway. Initially proposed in 1973, plans for the hotel were praised as a crucial step in the city's program to rehabilitate Times Square.

Recently completed, the architecture of the new building does not truly link hotel activities and those of the Marquis Theater to the Broadway sidewalk. The theater, the interior of which resembles a barn when





3

compared to the five theaters it replaced, is accessible only from an interior lobby mall on the hotel's third floor.

Rehabilitation is also the theme of New York State's redevelopment project on 42nd Street. Here, at the southern edge of Times Square, the presence of five new office towers currently planned will endanger the existence of eight theaters. These include some of the city's oldest, such as the Lyric (1903), the Victory (1899), and the most splendid of all, the New Amsterdam. The State's project also would endanger the existence of the Times Tower. In earlier rehabilitation projects, it should be recalled, the huge 1515 Broadway office tower replaced the old Astor Hotel. Next, the 1500 Broadway Tower, with its ominous facade, replaced the Claridge Hotel. The 1653 Broadway Tower followed. Every one of these projects was meant to remove the "undesirable" and "breathe new life" into the district. Yet the new skyscrapers have not solved any social problems. "The presence of advertising executives and lawyers at noon," writes Paul Goldberger, "does not make this the enticing and safe environment it once was at night."⁶

Instead of bonuses for new buildings, many people in the theater industry, including writers and actors, have urged theater

preservation. After Portman's development demolished the five theaters mentioned, "Save the Theaters Incorporated" demanded that every Broadway theater receive landmark designation. Only five, as a matter of fact, had been so honored.⁷ At their prompting, the Board of Estimates subsequently requested a comprehensive district plan and charged the previously appointed Theater Advisory Council to study the issue. When the Council advocated city or federal landmark status for forty-five theaters, tempers immediately flared. The three major theater owners, the Schubert Organization, Nederlander, and Juyamayan, all staunchly opposed the "landmarking of an industry."⁸ Gerald Schoenfeld, Chairman of the Schubert Organization, argued in favor of bonuses and of transfer for allowances "granted as of right" and not upon discretionary review by the city. When asked at a hearing regarding midtown controls for the theater district whether he could imagine Times Square surrounded by 70-story office buildings, Schoenfeld replied he had no qualms about such a future vision "if it preserves the theaters." Actors and producers, joined by preservationists and neighborhood groups, have questioned the integrating of old theater structures and new office towers. They are also skeptical of the theater owners' commitment to keep all the theaters, including the smaller ones, "alive."

For better focus on the matter, further research was needed. Just before the fall 1985 hearings on midtown planning controls for the entertainment district, the Municipal Art Society commissioned a model of the Times Square area. Using techniques developed at the Environmental Simulation Laboratory at Berkeley, a model measuring 16 feet in length was built. The model comprised, in miniature, every building along Seventh Avenue and Broadway between 42nd and 53rd Streets, including signs, billboards, cars, people, statues, and trees around the ticket booths on Duffy Square. To test alternative development controls for the district, the buildings in the model were made interchangeable. A committee formed by members of the Municipal Art Society and various outside professionals guided the project team.⁹

Work commenced with the careful photographing of every building. To assure accuracy, a perspective-correcting lens was used. The picture, taken with the camera held parallel to the facades, provided the desired frontal views. Printed to the scale of the model, in which 16 feet equals one inch, the prints were then mounted on stiff cardboard and assembled as exact replicas of the existing structures. Large billboards and signs were similarly photographed and assembled.¹⁰



4

3 Sky exposure. Preferred alternative

4 Midtown controls

Of the twenty developable sites in the Times Square area, twelve large parcels were chosen for new construction under the midtown planning controls. They were also chosen under alternative controls designed to be compatible with the character of the entertainment district. For development under the midtown controls, recent high-rise buildings were photographed in the same manner as the existing buildings were photographed. For each of the chosen development sites around Times Square, large model structures were erected.

To illustrate the development opportunities over time, as well as cumulatively, the new buildings could be placed into the model incrementally. After placing three of the new buildings into the model, Broadway resembled Sixth Avenue one block further east. When all twelve new development buildings were placed into the model, the result was stunning. The architecture critic of the *New York Times*, after viewing the model, headlined his story, "Will Times Square Become a Grand Canyon?" "The current zoning law," he wrote, "could change the identity of the place."¹¹ Indeed, an office district would replace the entire entertainment district. Approximately 15 million square feet of office space could be built around Times Square.¹²

Anyone stepping up to the model could bend down slightly and, looking down Broadway or any side street, perceive instantly, from a pedestrian's perspective, the startling difference in scale between the new office towers and the theater structures, tucked in between as curiosities of a bygone era. New signs, even if mandated by zoning law, would have to be placed on the facades of large buildings; they could no longer be seen, cleverly angled to surround the viewer, as silhouettes against the sky. Indeed, "canyon" walls would replace a bowl of light.

The large model effectively displayed the impact of midtown zoning controls. The dramatic change in scale dazzled the eyes of designers, planners, and nonprofessionals alike. "Before" and "after" sketches, prepared in California before the model was constructed, showed the same building volumes, yet understated by far the impact of new buildings as seen from a pedestrian's perspective in the model. Indeed, using a conventional 35mm camera with a close-focus lens, the scale of the model was sufficiently large to photograph at eye level. The model, built in 12-inch sections, thus permitted the camera to "walk" along Broadway, pivoting right and left. The model and views recorded in this fashion became a powerful design

tool to develop and test alternative controls, based on qualities already in place and on enhancing the experience of the visitor. The brilliance of the lights at night reflected against the sky is a Times Square tradition and needs to be preserved. The signs need to be seen from a distance, and there has to be ample room to angle them against the background of the city and the sky. The many stacked signs form the sloping walls of a well-proportioned outdoor room like a circus tent roofed by the sky. The design of this bowl, even now that it is interrupted by skyscrapers, is critical for Times Square as a place where tens of thousands of people can crowd together without feeling crowded. To preserve this openness to light and sky is the guiding aim to planning controls for the entertainment district.

The facades along Broadway and Seventh Avenue need to be low, with signs above as silhouettes against the sky. Taller buildings would step back above the street facade and step back again as buildings ascend. The sky can be retained because setbacks above the street facade let light and air into the street. Designing Times Square from the pedestrian's perspective was made possible by the use of the model. Lines of sight were studied and appropriate setback dimensions calculated. The placing of new signs and maximum

building heights were all tested in the realistic context of the Times Square model.¹³

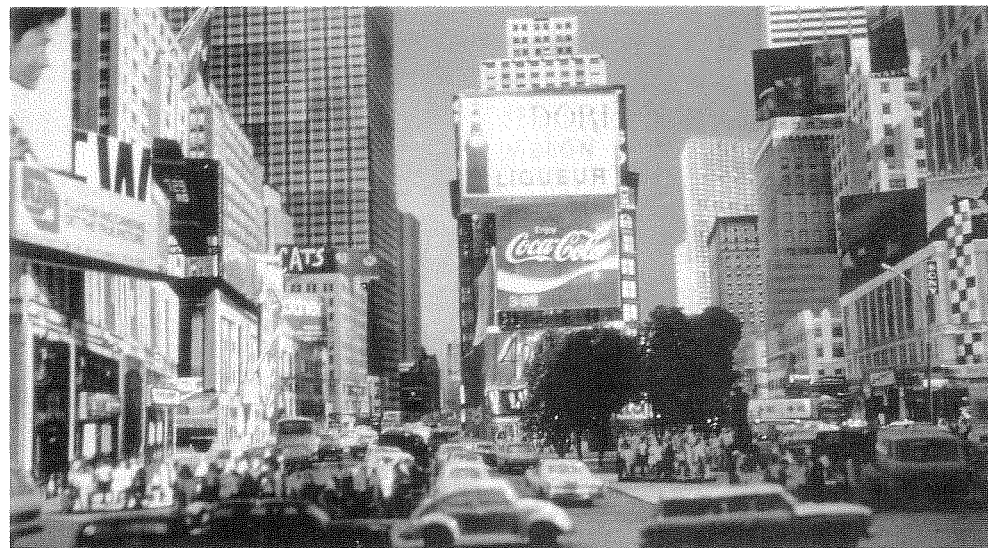
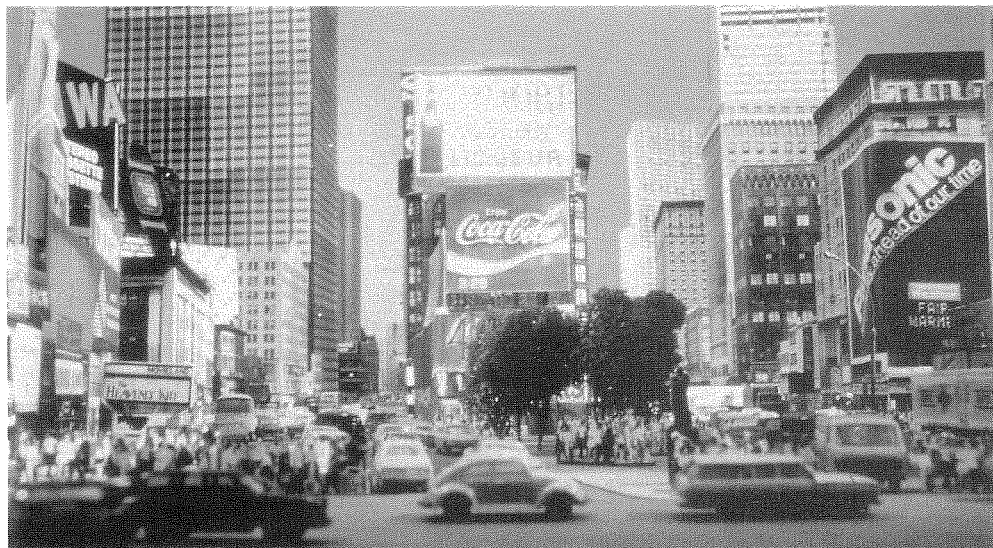
It was concluded that hotels, not office towers, are the most important use in an entertainment district. Residential buildings might not be ruled out along the side streets towards Eighth Avenue and the Clinton neighborhood.¹⁴ Finally, in terms of land use, it was concluded that bars, restaurants, and nightclubs should all be open to the street and designed in a continuous row along the side streets between theaters and movie houses.

The model was first shown publicly at the Planning Commission hearing in September 1985. Prior to the meeting, the Art Society had set up the model in the front part of the room. Upon entering the room, the commissioners had to find their way around the large display. The model separated them from the first row. Here the three chairmen of the theater organization sat, with their aides. Upon the theater owners' urging, staff had to remove the model during their part of the testimony; but it returned during the many testimonies by the actors, stage writers, and citizens' groups who all spoke in support of theater preservation and entertainment district zoning controls. A short film, narrated by Jason Robards,¹⁵ showed eye-level views of the Times Square model

animated to show growth over time under the mid-town controls and under a preferred ordinance. This film and the display of the model for four months at the Urban Center on Madison Avenue has opened a new perspective on the future of Times Square.

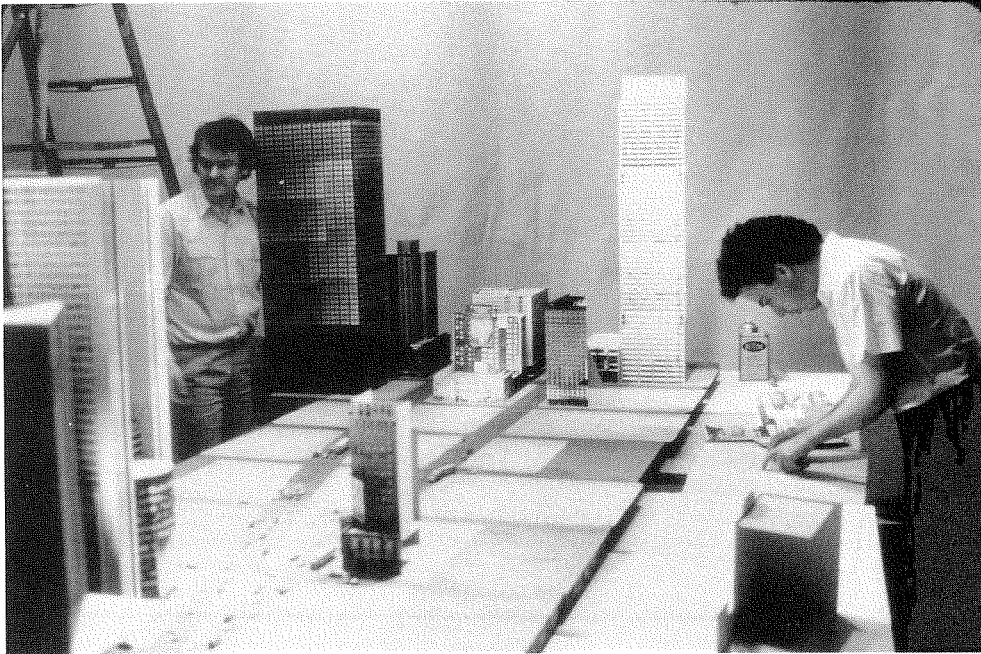
Many people arriving at lunchtime, when staff occasionally animated the model to show alternative futures for Times Square, were given a view of Times Square unlike any they could imagine. These previews gave many the opportunity to react, articulate their own views, and participate in a public discussion.

This discussion is ongoing. In the summer of 1986 the *New York Times* reported on a change in planning controls for Times Square.¹⁶ All buildings fronting Times Square have to be kept low, at 50 to 60 feet, with a 50-foot setback above this height to accommodate large illuminated signs. The size of the signs on top of these low buildings shall be directly proportional to the frontage length of each new development—50 square feet of signage for every foot of Times Square frontage. Beyond the 50-foot setback, buildings can go up higher. The City Planning Department's proposal follows directly the recommendations made in the film. But the amount of future development around Times Square is still



5 Existing

6 Preferred alternative



7

disputed. The city's urban designers are reluctant to further limit the bulk of future high-rise development. In their view, building bulk is a political issue.

The current midtown controls allow towers with a total floor area of eighteen times the square footage of the lot. Additional floor area is permitted through transfer rights and bonuses. Also, a complicated daylight evaluation system is used to preserve adequate light conditions at street level. This daylight scoring system defines the tower shapes, but does not limit the volume or height of future buildings. These daylighting scores, designed for streets and avenues, cannot be applied to an open area like Times Square. They will not produce a "bowl of light," so essential to the vitality of this large public place. To preserve the openness of Times Square to light and sky, building bulk has to be limited by sky exposure planes. This continues to be the position of groups who support special planning controls for Times Square.

The model has been continuously used to study the city's proposals as well as counterproposals. The outcome of this debate is uncertain. However, community groups concerned about places like Times Square have learned to use tools that help them visualize and imagine what these places would be like in the

future. Floor area ratios, setbacks, and sky exposure planes are no longer abstract terms and numbers.

The Times Square project has spurred community groups in Manhattan to use these modeling and filming techniques in waking others to the effects of city planning policies on their neighborhoods. A group on the Upper East Side has used this technique to show what the avenues would look like if more and more towers were built along Third, Second, First, and East River Avenues. The group insists on lower building heights and on stricter design review criteria from the city.¹⁷ Across the Park, on the Upper West Side, community groups have gone further, calling for a moratorium on new high-rise development in their neighborhoods.

In New York, community groups are no longer on the defensive. They are taking an active role in shaping their future.

NOTES

- 1 A history of Times Square by Stanley Buder, Professor of History, Baruch College, appeared in "The Bright Light Zone," by William Kornblum, Associate Professor of Sociology, City University of New York, Graduate School and University Center, 1978.
- 2 Another good history with many illustrations of Times Square, the actors, and show business is Jill Stone's *Times Square, A Pictorial History*,

1982, published by MacMillan Publishing Co., Inc.

A third valuable history is Lou Stoumen's *Times Square—45 Years of Photography*. The author has taken photographs of Times Square from 1939 to the present. New York: Aperture, 1985.

- 3 "The Bright Light Zone," West 42nd Street Study, by the Graduate School and University Center of the City University of New York, 1978, commissioned by the Ford Foundation. The study team conducted pedestrian counts, questionnaire surveys, and market studies of the 42nd Street corridor entertainment industries. The study concentrates on West 42nd Street, with some emphasis on the Times Square area.
- 4 In an open letter dated August 7, 1985, the president of the Planning Commission identified issues for public discussion: a special demolition permit for all theaters, height controls for Broadway and Seventh Avenue properties (a novelty in Manhattan's midtown), transfer development rights, and urban design controls on signage and lights.
- 5 City of New York, Midtown Planning, 1982.
- 6 Paul Goldberger, *New York Times*, October 6, 1985.
- 7 Broadway Theater District, A Preservation Development and Management Plan, advocated: Designate as landmarks the interior and exterior of the remaining thirty-three legitimate Broadway theaters under Chapter 2004 of the City Charter. The study, sponsored by Save the
- Theaters, Inc., also recommended a Federal Historic District bounded by 41st Street to 53rd Street, midblock between Sixth and Seventh Avenues to Eighth Avenue. The study was prepared by Lee Harris Pomeroy Associates, Jack Goldstein, Fred Kent, and the Harvard Business School Task Force, December 1983.
- 8 *Daily News*, Manhattan, August 28, 1985.
- 9 The committee was chaired by Nicholas Quenelle and Hugh Hardy; members were Kent Barwick, Paul Byard, Phillip Howard, and Carol Rifkind. Advisers were Lee Pomeroy and Anthony Hiss. Darlene McCloud, Director of Issues at the Municipal Art Society, did the research on development potential in the area and organized the project. Virginia DeJani successfully convinced Jason Robards to narrate the film. Sue Radmer organized the exhibit at the Municipal Art Society.
- 10 The photographs were taken by Duke Crawford and Doug Webb. The models were built by Gilles Depardon, Michael St. Pierre, Kathryn Ogawa, Timothy Abbel, Mary Jukary, Lea Cloud, and Nancie Newman.
- 11 *New York Times*, October 6, 1985.
- 12 This figure is based on 80 percent build-out of twelve development sites around the bowtie intersection of Seventh Avenue and Broadway, north of 42nd to 53rd Streets. It does not include the approximately 4 million square feet of development proposed for the 42nd Street redevelopment project—The City at 42nd Street. Fifteen million

square feet of office space would bring forty to sixty thousand people to the sidewalks of Times Square during the morning and afternoon.

- 13 Under the proposal by the Municipal Art Society, a street wall height of 50 to 70 feet would be mandatory, with a 50-foot setback above the street wall for the placing of signs. Above that height, building volume would follow a cut-off plane of 1:2. If avenue properties would be limited to 200 feet in depth, the resulting floor area ratio would amount to 1:14. The development potential on the twelve sites in the study would total 6.1 million square feet instead of the 11.7 million square feet permitted under Midtown controls.
- 14 Clinton, or "Hell's Kitchen," a neighborhood first truncated by redevelopment in the 1930s—first by the Lincoln Tunnel project, then by the Port Authority Bus Terminal—is a physically isolated neighborhood west of Eighth Avenue.
- 15 Jason Robards volunteered his time to narrate the 12-minute film presentation with model simulations. The model was photographed by Doug Webb. The author designed the model scenarios and directed the model and film project.
- 16 *New York Times*, August 6, 1986.
- 17 "No More Tall Stories," a film produced by CIVITAS, written by Edmond Levy and Peter Bosselmann, narrated by Paul Newman, directed by Peter Bosselmann and the Project for Public Spaces.

Treasured Wastes: Spaces and Memory

John R. Stilgoe

The Bog, The Pit, Mrs. Norris's Woods, The Swamp, Fuller's Dam, The Landing, all linger as landmarks in a landscape of childhood. Adults in the 1950s and 1960s knew the places treasured by boys growing up in a small New England coastal town but used other designations, if they applied designations at all, to a collection of semi-used or long abandoned spaces. Only one bog deserved "the" in its name; perhaps fifteen acres in extent, it produced few cranberries but innumerable wild ducks, frogs, herons, and the big snakes eventually identified from junior high school nature guides as the common northern water snake, *Natrix sipedon sipedon*. Beaver now and then dammed the brooks flowing through the worn dike built in the early part of the century; if the beaver stayed "up bog," boys rolled fieldstone into the breaches, insuring a tiny pond all summer and, with luck, a larger skating pond by Christmas. Three miles away, south by southeast, endured The Landing, a ragged gash in salt marsh opening into the estuary. From the 1650s to the 1920s, boatbuilders, fishermen, and farmers used it, making it common land; its steep slope and slick mud defeated cars and trucks, however, and as the age of the horse passed, bayberry and sumac crowded the lane. Officially if occasionally visited by the Highway Surveyor, used by fishermen seeking striped bass, and rare summertime canoeists, it remained the possession of boys bored with the well-kept gravel and asphalt of the densely populated town landing

slightly seaward. Hidden by second-growth forest, defended by twisting, muddy paths and rotted bridges, The Bog, The Landing, and the other constituent elements of the intricate landscape of childhood thrived within an equally complex landscape of adults.

Now and then intersection of interest shattered peaceful coexistence. Forest fire signaled the arrival of the volunteer firemen, adult onlookers, and the boys, breathless on bicycles. Always the fire chief barked the same question: "Boys, what's the best way in?" Then followed the frantic flinging down of Indian pumps—four-gallon, Army surplus handpumps worn on the back—to the boys, filling the pump tanks by a fireman nearly knocked down by boys with pumps and too-small boys screaming for the honor of a pump, then dragging the hose along the trail known only to boys thrilled to be guiding the townsmen and squirting tiny streams on smoldering white pines or smoldering canvas hoses. Day after day, however, after school, in the frigid winter vacations, the landscape of boys remained almost untrodden by adults. Separate, protected, and regularly modified by its stewards, it passed eventually to younger boys when the wonders of driving family automobiles in distinctly adult space deflected sixteen year olds from marshes, swamps, and the forgotten plantation of balsam fir designated Christmas Tree Land.

Of course, men return now and

then, even a landscape historian weary of typewriting and determined to improve the last of a November afternoon by following the old route to The Bog. Windfalls and poison ivy have deflected the path a bit, but the long vista across the now overgrown sandpit remains. And in the gray light, at the crest of the drumlin, the historian describes a man walking as he walked a quarter-century earlier. In the hollow, now thick with choke cherry, the old friends meet, the historian asking the lawyer dressed for court what brings him onto the path to The Bog. "She just told me. She wants a divorce. Somehow I just wound up out here."

Discreteness distinguishes a landscape from landscape. A landscape typically acquires discreteness from natural or artificial boundaries or as it evolves peculiar spatial and distinguishing characteristics. The landscape of Nantucket Island or Sombrero Key extends to the low tide mark and is easily bounded by any observer on foot or equipped with a map or chart. Even the landscape of Missouri or Montana can be delineated by political boundaries. But more often geographers and other dedicated students of the built environment identify a landscape not only by tracing its edges but by defining its distinguishing characteristics. Bank barns, double-pen cabins, adobe wall construction, and a thousand other characteristics serve to define landscapes. In the past two decades, landscape identification and definition have grown sophisticated. Edges and details, cherished by

discoverers, dovetail with frameworks evolved by philosophers, economists, and mathematicians.

Landscape is not *a* landscape. As I define it in *Common Landscape of America, 1580 to 1845*, landscape is not cityscape but essentially rural, essentially the product of tradition.¹ To discern and define *a* landscape means knowing what landscape is in general, then devising a system for noting the important edges and other features of the place under study, be it a suburb, a valley devoted to cattle ranching, a Great Lakes resort island. Scholars have lately devised such systems; many prove immediately useful, others suggest modifications or adaptations to specific landscapes.² Implicit in most are prisms, however, prisms that subtly distort the usefulness of the system in the work of others.

Consider scale. What is a long vista across an overgrown sandpit? To a native of Moab, Utah, perhaps two or even three miles; bright sunlight, clear air, and unobstructed views combine in Utah to produce attitudes toward distance alien to West Virginians. In Norwell, Massachusetts, it means about two hundred yards, a figure not surprising for a heavily wooded town. But what, then, is the impact of a town's coastal location? What influence has the sea, stretching away flatter than any Wyoming wheat field? Such are the issues that perplex the reader of undergraduate and graduate term papers. What local values, unrecognized by their

bearers, distort visions of landscape?

The question lies at the heart of landscape analysis. "In certain of its fundamental features, our rural landscape," asserts the French historian Marc Bloch in *The Historian's Craft*, "dates from a very remote epoch." But in order to examine the rural landscape of the past, "in order to ask the right questions, even in order to know what we were talking about, it was necessary to fulfill a primary condition: that of observing and analyzing our present landscape." Bloch says little about the actual observation and analysis; he does, however, liken the task of the historian to that of someone examining a roll of photographic film. "In the film which he is examining, only the last picture remains quite clear. In order to reconstruct the faded features of the others, it behooves him first to unwind the spool in the opposite direction from that in which the pictures were taken."³ The state of the last negative, therefore, determines the whole study of the prior ones. And as any surveyor or navigator knows, the slightest error at the start of a long course produces increasingly serious errors as the course is run.

J. R. R. Tolkien, the British folklorist who produced *The Hobbit* and *The Lord of the Rings* for fun and in so doing created one of the richest of fantasy landscapes, wondered about the start of landscape perception, about the very frame that worried Bloch least.

"If a story says, 'he climbed a hill and saw a river in the valley below,' the illustrator may catch, or nearly catch, his own vision of such a scene," Tolkien argues in *Tree and Leaf*, "but every hearer of the words will have his own picture, and it will be made out of all the hills and rivers and dales he has ever seen, but specially out of The Hill, The River, The Valley which were for him the first embodiment of the word."⁴ If Tolkien is correct, the landscape of childhood has immense meaning for the student of landscapes, for that first landscape remains—despite training, system, and years of fieldwork—a prism through which actual landscapes are viewed and through which long vanished landscapes are reconstructed using the written documents favored by Bloch and other historians. And as all prisms do, the prism distorts, perhaps dangerously.

Innocence suffuses the landscape—or cityscape—of childhood. To the child not yet aware of thermonuclear fire, landscape is permanent. It is no accident that landscape history is largely a postwar phenomenon; the work of Maurice Beresford and W. G. Hoskins in Britain and J. B. Jackson in the United States evolved out of wartime experience and technique.⁵ The devastated landscapes of continental Europe advertised the fragility of built form, spurring interest among people ever less certain of permanence.⁶ "The city has never been so uncomfortable, so crowded, so tense," wrote E. B. White of New York in 1949. "The

subtlest change in New York is something people don't speak much about but that is in everyone's mind. The city, for the first time in its long history, is destructible. A single flight of planes no bigger than a wedge of geese can quickly end this island fantasy, burn the towers, crumble the bridges, turn the underground passages into lethal chambers, cremate the millions."⁷ World War II destruction and the subsequent threat of atomic warfare did not create the field of landscape history and the profession of historic preservation, but they urged them onward. If Tolkien is correct, if the last frame of Bloch's film is seen through the prism of childhood, it may be simply because the landscape of childhood is the last safe place, the refuge to which adults can never return.

A landscape, therefore, can certainly be what geographers or landscape historians so frequently say it is: a discrete area. It may also be something else, something defying photography. It may be a prism, or a pipe dream.

Prism

In autobiography lies the shadow of the prism, if not the prism itself. Often writers of autobiography stare backward at some well-remembered space, the details of which remain crisply clear. "In the foreground lay a marvelous confusion of steel rails, and in the midst of them, on a vast cinder-covered plain, the great brick

roundhouse with its doors agape, revealing the snouts of locomotives undergoing surgery within," writes Russell Baker in *Growing Up*. "Between the mountains that cradled the yard there seemed to be thousands of freight cars stretching back so far toward Harpers Ferry that you could never see the end of them." Baker recalls the long approach to Brunswick, "as distant and romantic a place as I ever expected to see," the toll bridge with its loose boards, the "incredible spectacle" of an express passenger train "highballing toward glory," a department store, movie house, and drugstore. For the boy from the farm, Brunswick is a "great smoking conurbation," a "metropolis,"⁸ But for the town-bred boy, the country is equally exciting.

"I realized at once that we had been transported into a different world, far from the dust and heat we had left behind," muses Gerald Warner Brace in *Days that Were*. "It is always in my memory a pure summer morning with white sunlight glinting across the eastward bay, the waters all calm except for the long heave of the groundswell that reared and creamed along the rocky shores of the islands on our port hand, and the air is faintly redolent with the fragrance of fir and spruce." For Brace, entering Rockland Harbor aboard the *Bangor* or some other coastal steamer proves as memorable as arriving in Brunswick by flivver proves for Baker. Brace recalls every vacation "rediscovering" the town's "perfect

harmony of function, where everything seemed to fit into a natural design," but clearly Baker savors the memory of the industrial order of the railroad town so unlike his own."

Memories of Brunswick and Rockland Harbor endure so strongly simply because they originate in what the novelist-philosopher Walker Percy calls a "rotation," a successful escape from daily routine, something different. For students of landscape, however, it is the concept of repetition, not rotation, that proves of more lasting value in defining a landscape. "A repetition," argues Percy in *The Moviegoer*, "is the re-enactment of past experience toward the end of isolating the time segment which has lapsed in order that it, the lapsed time, can be savored of itself and without the usual adulteration of events that clog time like peanuts in brittle." The narrator of the novel provides an example: in glancing at a newspaper, he sees an advertisement identical to one he saw twenty years ago in a magazine on his father's desk. For a moment, "the events of the intervening twenty years were neutralized," and "there remained only time itself, like a yard of smooth peanut brittle."¹⁰ The concept of repetition explicates the prismatic function of remembered childhood landscape.

Baker recalls his boyhood in the agricultural town of Morrisonville, "a poor place to prepare for a struggle with the twentieth century, but a delightful place to spend a

childhood.” He describes it almost in shorthand. “It was summer days drenched with sunlight, fields yellow with buttercups, and barn lofts sweet with hay. Clusters of purple grapes dangled from backyard arbors, lavender wisteria blossoms perfumed the air from the great vine enclosing the end of my grandmother’s porch, and wild roses covered the fences.”¹¹ Such memory remains strong because it is grounded in sensory experience, a range of sensory experience extending well beyond sight. Baker recalls sounds, smells, and textures, the heat of the sun on his skin. As Edith Cobb and other researchers have noted, children experience space through all senses, achieving, for a few years at least, a powerful intimacy.¹² Smell acquires an importance in childhood that it quickly loses, perhaps with the discovery of reading and the consequent emphasis on vision. Just as Brace recalls the fragrance of Maine coast conifers, Baker savors the lingering aroma of newly stacked hay and the perfume of wisteria. As sensitive adults know, smells trigger repetition more quickly, more directly than visual stimuli. The traveler alights from an airliner, smells the odor of the floor wax used in his kindergarten room, and is momentarily transported across time with awesome immediacy. Children—or some children, at least—know a landscape as they know the back of their hands, not only through sight but through the other senses as well.

Certainly rural and small-town

children have the “back-of-the-hand” knowledge; so much autobiography springs from such roots. About urban children, the young inhabitants of cityscape, not landscape, the evidence is much less clear. City life may be qualitatively different for children; researchers have only begun to examine it.¹³ In deciphering the mysteries of landscape, however, the role of childhood space in rural and small-town America acquires importance in proportion to the degree of repetition it engenders. The landscape of childhood can function exactly as Tolkien suggests, by becoming a prism; it can also evoke repetition.

Many scholars—and artists—agree on the importance of memory in the intellectual life of creative adults. Indeed Cobb suggests that powerful memories of childhood may be the roots of genius. Powerful memories, vibrant enough to frequently stimulate repetition, often involve landscape or interior space. “Memories are motionless, and the more securely they are fixed in space, the sounder they are,” muses Gaston Bachelard in *The Poetics of Space*. “Each one of us, then, should speak of his roads, his crossroads, his roadside benches.” After describing how powerfully his memories of a childhood attic inform his thinking, he continues, “each one of us should make a surveyor’s map of his lost fields and meadows.” Bachelard argues that such remembered space, whether attic or “familiar hill paths,” is somehow “creative,” that to visit it

in dreams or daydreams is to partake again of its energy.¹⁴

Artists rarely deal explicitly with this issue. Even Wordsworth’s “The Prelude; Or, Growth of a Poet’s Mind” or Whitman’s “There Was a Child Went Forth” are many-layered constructions, not simple autobiographical statements.¹⁵ From time to time, of course, artists do write explicitly about the significance of memory of childhood landscape, and their work bears scrutiny, for some artists understand the prism.

Eudora Welty perhaps understands the prism better than most other writers of fiction. In *Place in Fiction*, Welty suggests that place can focus the eye of genius and so concentrate its energy. “Place absorbs our earliest notice and attention, it bestows on us our original awareness; and our critical powers spring up from the study of it and the growth of experience inside it,” she asserts after insisting that place is the fundamental component of successful fiction. “Imagine *Swann’s Way* laid in London, or *The Magic Mountain* in Spain, or *Green Mansions* in the Black Forest.”¹⁶ Throughout the slim book, she insists on the absolute importance of place in ordering all else in fiction, character, plot, period.

In *One Writer’s Beginnings*, published twenty-seven years after *Place in Fiction*, Welty sharpens her argument, focusing on her own childhood. The first sentence of the

book introduces the striking of clocks; the first paragraphs introduce the “elegant rush and click” of her brothers’ electric train, the rocking chair that “ticked in rhythm” to the stories read aloud by her mother, the appearance of illustrations in her first storybooks. Early in *One Writer’s Beginnings*, Welty suggests that “childhood’s learning is made up of moments” and offers a catalogue of hers, beginning with sitting in a kindergarten circle of chairs and drawing three daffodils just picked in the schoolyard. The middle third of the book, “Learning to See,” lovingly describes a series of discrete landscapes, the landscapes that eventually appear, sometimes in altered shape, in her fiction.

By “a landscape,” therefore, the artist may designate a concatenation of images remembered in the creative moment, indeed somehow merging with the creative moment, perhaps in a near-magical repetition. “But it was not until I began to write, as I seriously did only when I reached my twenties, that I found the world out there revealing,” writes Welty near the close of her book, because “*memory* had become attached to seeing, love had added itself to discovery.”¹⁷ Welty italicizes the word *memory* because memory sparks the creative process; love receives no such emphasis.

Baker and Brace, Cobb, Bachelard, and Welty assert or imply the importance of remembered childhood landscapes in the creative process. For them,

landscape can be a prism through which they look at present experience and space. But landscape may also be pipe dream, not prism, and the distinction is subtle.

Pipe dream

Urbanization in the years following the Civil War prompted many Americans to savor the memory of rural childhood, of childhood in landscape abandoned for cityscape, or at least for the built environments of towns and villages. The last decades of the nineteenth century consequently witnessed the appearance—and acceptance—of nostalgic works concerning rural childhood. *Being a Boy*, an 1878 volume by Charles Dudley Warner, not only represents the genre, but hints at the genre that replaced it.

Being a Boy describes a farm boyhood to readers intimately familiar with such experience. Haying, weeding, woodchuck baiting, firewood toting, all the experiences of farm boys, Warner sites in an environment focused on house and barn and encompassing fields, dirt roads, and woodlots. And Warner is aware of repetition, of the immediacy with which an urbanite may be momentarily transported to another time and place. “But that which lives most vividly in his memory and most strongly draws him back to the New England hills is the aromatic sweet-fern; he likes to eat its spicy seeds, and to crush in his hands its fragrant leaves; their odor is the unique essence of New England.”¹⁸

No description of overgrown, half-wildered pasture or shaggy roadside prefaces the sweet fern sentence; Warner assumed an audience familiar with the habitat of the shrub.

Twenty years later no writer could so easily assume a once rural audience; indeed the turn-of-the-century era witnessed a new scorning of farmers, a scorning evident in words like *hayseed* or *clodhopper*.¹⁹ No longer did farm boys grow up to prosper in professions other than farming; the new generation of male urbanites recalled a boyhood spent on the fringes of farming, in villages or small towns. Between 1880 and 1930, American authors turned out a staggering literature focused on small-town life; for many writers, the small town represented the best of all possible worlds, a place free of the new evils of corporate industrialism and massive urbanization, but for others it exemplified a sterile, conformist, dull existence useful only as a starting point for urban splendor.²⁰ Social and literary historians continue to examine the wonderfully rich, markedly divided literature ordered about small-town life, and they reach only rare accords.²¹

One window on late nineteenth-century small-town life remains oddly unstudied. The small-town weekly newspaper, for all its biases and inaccuracies, endures as the voice of the moment. Consider, for example, the May 8, 1880, issue of the *Saturday Evening Journal* of

Crawfordsville, Indiana. In 1880, the *Journal* had published for thirty-three years, apparently always weekly. The left-hand column of its front page consists entirely of advertisements for pianos, groceries (including nine varieties of coffee), ornamental poultry, and patent medicines. Five additional columns of fine type report stories involving the circus stranded by debt, changes of railroad schedules, the organizational meetings of an equal suffrage society and a baseball club, the twenty-five-dollar fine levied on a man convicted of attempted murder, an Illinois rapist reported to have given Crawfordsville as his address, a drunk rescued from a railroad track. Beyond the front page lies more news, similar in content and tone. Only a few back-pages advertisements for McCormick reapers and other field machinery aim at farmers. Clearly the *Saturday Evening Journal* is a town paper.

More than a century after its appearance, the May 8 issue fuels two interpretations of small-town life. On the one hand, it is evidence of a closely knit, friendly community; most articles emphasize names—everyone organizing the baseball club, for example—and demonstrate the essential quietude of Crawfordsville. Trouble comes from outside, and internal difficulty is immediately confronted, if not by bystanders, then by the town judge. On the other hand, the articles make easy the argument that the town is stuffy, nosy, and

determined to maintain close scrutiny of all activity. For the landscape historian concerned with landscape perception and the role of childhood landscape perception in particular, however, the newspaper proves at first glance less than useful.

The *Saturday Evening Journal* reports almost nothing of landscape, indeed of space. To name a person or business is sufficient; scarcely one address intrudes in news stories or advertisements. Just as Warner assumes an audience familiar with the habitat of sweet fern, so the newspaper editor assumes a readership familiar with the town landscape. And with the exception of a brief story concerning school enrollment and another describing the abandonment of a baby by a city woman who arrived in Crawfordsville for that purpose, stories involving children are lacking too. Landscape and children deserve no notice by the editor because they are simply part of the scene.

What the *Saturday Evening Journal* provides so exquisitely is the official, adult view of things in Crawfordsville on May 8, 1880. To discover the other view, one need only examine the memories recorded decades later by boys who recalled the landscape and the escapades it hosted.

More than many writers, the cartoonist Clare Briggs scrutinized the childhood small-town landscape left behind by city residents.

Throughout the first decades of the twentieth century, Briggs's sketches delighted readers of the *New York Tribune*.²² Briggs recalled all the spatial details so lacking in small-town newspapers, and he knew exactly the thousand and one familiar places so vitally important in the lives of children. His sketches depict boys playing on railroad tracks, playing follow the leader through an orchard, playing in lumber yards, old barns, half-finished houses, on rooftops, and in a hundred other places. Now and then the boys tolerate the company of girls, but in the many sketches focused on swimming holes, girls—and women—are conspicuously absent. Briggs's drawings of boys running past haunted houses, dreaming of hopping freight trains, and taking a thousand shortcuts now and then include urban backdrops, but chiefly they memorialize the small-town landscape out of which so many New York City men had come, a landscape of boyhood, a landscape of innocence. They memorialize the landscape of Reedsburg, Wisconsin, the late nineteenth-century boyhood home of Briggs himself.²³

Autobiography savors the landscape of small-town boyhood. The most cursory survey of American autobiographical writing uncovers hundreds of twentieth-century books extolling the intricate world unreported by the *Saturday Evening Bulletin*. Now and then, as in Edmund G. Love's *The Situation in Flushing* and Loren Reid's *Hurry Home Wednesday*:

Growing Up in a Small Missouri Town, 1905 to 1921, most or all of the book focuses on the boyhood environment, but more often, only the first chapter records the timeless details of intimately known small-town space.²⁴

“The golden age of childhood can be quite accurately fixed in time and place,” begins a typical autobiography, Dean Acheson’s 1965 *Morning and Noon*. “It reached its apex in the last decade of the nineteenth century and the first few years of the twentieth, before the plunge into a motor age and city life swept away the freedom of children and dogs, put them both on leashes and made them the organized prisoners of an adult world.” Morning for Acheson is life in Middletown, Connecticut, in the 1890s, a place where “nothing presented a visible hazard to children,” where “no one was run over,” where only his mother fleetingly worried when she saw him hooking a ride on the ice wagon. As do so many other male authors, Acheson catalogues structures and spaces, some certainly noticed by local newspaper reporters, but many part of the invisible landscape of boys. “An open field of perhaps three acres” where the boys refought the Boer and Spanish-American wars, the dentist’s “large, round bed of luxuriant canna plants” in which baseballs vanished, “the maze of backyards and alleys.” Acheson recalls the importance of naming spots like the pond “too muddy and choked for bathing and appropriately called by ‘Polliwog Pool’” and shaping and reshaping

places like the three-acre field and the caves in the wooded hills just west of town. Acheson concludes that “life in the golden age was the very distillation of that place and time,” a distillation whose essence, at least, lingered with him through the decades.²⁵ Safety, spatial freedom, the power of naming, the power of shaping and reshaping space, such are the attributes so frequently catalogued in male autobiography of the mid-twentieth century.

Only rarely does an intrepid observer long departed from his boyhood small-town landscape return and scrutinize contemporary space. Eric Severeid’s long, incredibly detailed 1956 *Collier’s* account of his own return to a small North Dakota town illustrates so forcibly the shock of confrontation and the meaning of memories strong enough to provoke repetition.

Severeid catalogues smells, sounds, and a wealth of boyhood spaces remembered clearly enough and describes the strain of finding some smells and sounds absent, and many once familiar, once cherished spaces changed beyond recognition by the building of a small office building or the demolition of the town water tank. At first profoundly disappointed—*disenchanted* perhaps designates better his melancholy shock—he gradually discovers some boyhood elements, a faded lumberyard fence, for example, still unchanged and recognizes in the movements of boys the existence of an equally rich space. Eventually, Severeid uses a

photographic metaphor to explain his new perception: “I could run through the film exposed this day of 1955 and see it all, the hills, the rapids, the bridge and the house and the streets, all of it as it *is*, in black and white, exact, life-size, no more, no less. Then I could run off the old, eternal negative, larger than life, in its full color and glory—the same scenes and trees and faces—and there was no fading or blur of double exposure.” He emphasizes the photographic nature of memory: “I had both reels now, sealed in separate cans, and I knew I could keep them both, as long as I lived.” What then of Marc Bloch’s notion, of the historian unwinding the film backward in order to study the rural landscape of time past? Severeid answers the question, albeit obliquely.

“In stark clarity I remember running away from home at the age of four, crossing the Soo Line tracks, trudging up South Hill and then, suddenly confronting the sky and the plains; I was lost, alone in the eternity of nothingness.” In the era of his boyhood, towns had definite edges, edges of genuine significance to the people who lived “in town” and to those farmers or ranchers who lived “outside.” In walking back from “outside,” the adult Severeid recalls the one terrifying incident of brutality of his childhood, the senseless, deliberate shooting by a farmhand of his friend’s dog. As he recounts burying the dog in a weed patch, “across from our island,” Severeid enters the town, and his essay immediately changes subject and tone. With the prairie at his back, the adult

Sevareid “felt for a moment, faintly, the joy this passage had brought me at each re-entry into the oasis with its familiar shapes and smells and sounds, its thousand secret delights, cool water and shade, and home and safety.” And suddenly, he pierces the veil of mystery that shrouds so many autobiography first chapters. “I understood then why I had loved it so and loved its memory always; it was, simply, *home*—and *all* of it home, not just the house, but all the town. That is why childhood in the small towns is different from childhood in the city. Everything is home.” Walking the old path across the edge of town, turning his back on the place where he had witnessed evil, he perceives the childhood reality of town as oasis, as refuge, as home.

“We are all alike, we graying American men who were boys in the small towns of our country,” he muses. “We have a kind of inverted snobbery of recollection and we are sometimes bores about it, but that’s the way it is.”²⁶ Of course, for Sevareid, for Acheson, for Baker, the way was not permanent residence; the way led to the corners of the earth, to success not only in great cities but in national and international arenas. For such men, the landscape of small-town boyhood is in Robert Frost’s terminology, a fixing point, a place in which later life is moored, however long the mooring line.²⁷

For others, for many according to the most recent federal census, the landscape of small-town boyhood is a contemporary, accessible place. In *Return to Main Street: A Journey to*

Another America, Nancy Eberle chronicles and analyzes her family’s move from a Chicago suburb to a rural small town. Before its appearance in 1982, portions of the text appeared as a long article in *McCall’s* magazine in which Eberle argues that small-town life redirected her two sons toward richer, simpler living. *McCall’s* and many other so-called “women’s magazines” focused on middle-class audiences have lately emphasized child-rearing issues. Eberle, in her article and subsequent book, argues explicitly that small-town physical and social environments strengthen both individual and family character. “It’s never wondering if storekeepers think you’re a shoplifter and never being asked to produce your driver’s license,” she asserts in her final chapter. “It’s a swimming hole, a haunted house, a Halloween Parade, and a nickname.”²⁸ *Return to Main Street* emphasizes not only the physical and social setting so casually presented in the May 8, 1880, *Saturday Evening Journal* but that of the cartoons of Clare Briggs. Eberle delicately balances the adult view of small-town life—and space—with that of her sons, the stewards of shortcuts and swimming holes.

In her first chapter, entitled “Main Street,” Eberle begins her balancing with a command: “Picture a primitive.” She then describes the buildings and spaces along Main Street, the residential streets adjacent to them, the farms at the edge of town. For Eberle, it *is* primitive, and as her argument evolves, one learns that it is

Edenic. Galena, Illinois, in 1982 is prelapsarian America, the Republic before the fall, the United States of America before urbanization, industrialization, Viet Nam, drug abuse, divorce, even before the nuclear bomb. In her last chapter, the balance kept poised, Eberle asserts that “quality of life” is increasingly important to thoughtful men and women, often more important than social status, salary, professional advancement. And Eberle grounds her argument, her balancing of adult and child view, in space, in the landscape of small-town America.

Eberle is no lonesome soothsayer. As she correctly points out, periodicals like *Mother Earth News* now boast circulations over the one million mark, suggesting that even many urban and suburban families feel a tug toward rural living and small-town residence. The tug is more than emotional. Harley E. Johansen and Glenn V. Fuguitt demonstrate in their 1984 study, *The Changing Rural Village in America: Demographic and Economic Trends Since 1950*, that the growth rate of small towns in the countryside has surpassed that of suburbs and metropolitan regions.²⁹ As the 1960 census hinted, as the 1980 census proves, something important, something massive, now looms in the American psychological horizon. A geographic shift of staggering implications is under way. As Sevareid suggested in the middle 1950s, the small town remains the American home, the cultural cradle. And if the statistics indicate



The Steam Shovel
Photograph by John R. Stilgoe

anything, they indicate that many Americans are going home.

Perhaps they go for the reasons Eberle, Johansen, and Fuguitt catalogue: fear of urban crime, distrust of new forms of community, disgust with unhealthful air, water, and food. Perhaps they go for such reasons and for many more. But perhaps they also go for a more elemental reason. Perhaps they search for the landscape of childhood.

If they go to rediscover the full-color photograph Severeid describes, to experience not only fleeting repetition but permanent repetition, to restore themselves with the energy of place about which Welty orders her fiction and autobiography, to experience a place known in the years before they recognized that the atomic bomb destroys all, then indeed they are in search of the landscape described not in the *Saturday Evening Journal* but in the nostalgias of the heart. One popular prime-time television series, *The Waltons*, drew energy from this concatenation of thought and feeling, each show concluding with an epigraph extolling not only childhood security but the importance of childhood space enduring into adulthood: "Forty years have passed, but that house still stands, and the solace and love that we knew there as children still sustain us." Solace and love, important as they are, gather strength from the *still existing house*, the physical manifestation of family life.

What underlies the power of boyhood landscape, what attracts so many men—and women—to the small town today, is not only the memory so strong it engenders repetition. It is the recapturing of the right, the freedom to shape space. The small-town boyhood landscape is not simply enjoyed by boys. It is maintained and changed by boys. As Clare Briggs depicted in so many of his sketches, as so many graying men remember in their autobiographies, the small-town landscape permitted and rewarded shaping. Boys felled trees to make rafts, cut saplings to lace together as huts or duck blinds, begged slabs from the sawmill to make tree houses so high in the white pines that even the lighthouse could be seen through field glasses borrowed from fathers' dresser drawers. No one, not even the Highway Surveyor, consider the fieldstones rolled into the bog dam spillway an act of vandalism; no one, not even the Coast Guard crew chugging seaward, looked askance at the boys laboriously pounding a newly cut cedar tree into the salt marsh to make a mooring bollard at The Landing. Men who had long ago shaped the boyhood places expected new generations of boys to shape them, and so long as real estate developers stayed clear of the abandoned, half-forgotten acreage, the boys did shape space and do so still.

And as long as bits and pieces of the boyhood landscape endure, grown men can visit them, sometimes in the panting rush of the volunteer fire department, grunting under the weight of hoses, "Used to come here

when I was a kid, huge tangle of barbed wire under those wild grapevines, stay left"; sometimes they come alone, seeking the solace of innocence. For that landscape is, as Severeid so accurately saw, home, all of it is home, for it flows into back yards and barnyards, to back steps and screen doors. And home, as Frost discerned in 1914 in a poem entitled "The Death of the Hired Man," is indeed special: "'Home is the place where, when you have to go there,'" one of the poem's narrators says; "'They have to take you in.'"³⁰ The landscape of boyhood, if it endures in an age of suburbanization, condominium development, and shopping malls, is perceived by many grown men as Severeid perceived it, as being somehow obligated to give solace, rest, repetition. And even when modernization has obliterated it, it can survive as a prism or even as a pipe dream, changing the perceptions of grown men or luring others, with their families, back to small towns.

Understanding landscape must, I think, involve coming to terms with the power of boyhood landscape. Tolkien is correct: words like *river*, *hill*, *wooded valley*, *salt marsh* mean in part the visual image adults first associated with them. Consider the words *steam shovel*. Now used by nearly everyone to designate diesel-powered equipment, they carry special meaning in my little coastal town. For decades, boys old enough to explore the abandoned sandpits bordering the cranberry bogs—not The Bog—have found The Steam Shovel, a derelict diesel-engined

vestige of long vanished activity, a derelict still standing watch over sandpits growing up in chokecherry and now green with sweet fern. For many Norwell men in their late thirties, now graying and wondering about their own children, *steam shovel* evokes memories of The Steam Shovel, of races ending at it, of precarious balancing on its outstretched boom, of shaping the abandoned sandpits and bogs around it, of living in an innocent summer afternoon free of The Bomb, of living at home.

NOTES

- 1 New Haven: Yale University Press, 1982, pp. 3–7, 339–346, and *passim*.
- 2 See, for example, Yi-Fu Tuan, *Topophilia: A Study of Environmental Perception, Attitudes and Values* (Englewood Cliffs, NJ: Prentice-Hall, 1974); D. W. Meinig, ed., *The Interpretation of Ordinary Landscapes: Geographical Essays* (New York: Oxford University Press, 1979), especially Peirce F. Lewis, “Axioms for Reading the Landscape: Some Guides to the American Scene,” pp. 11–32; Annette Kolodny, *The Land Before Her: Fantasy and Experience of the American Frontiers, 1630–1860* (Chapel Hill: University of North Carolina Press, 1984); and Tadahiko Higuchi, *The Visual and Spatial Structure of Landscapes*, translated by Charles S. Terry (Cambridge, MA: MIT Press, 1983).
- 3 Translated by Peter Putnam (New York: Random House, 1953; reprinted 1964), pp. 46–47.
- 4 Boston: Houghton Mifflin, 1965, p. 80.
- 5 Jackson is especially eloquent about the role of war; see “Landscape as Seen by the Military,” *Discovering the Vernacular Landscape* (New Haven: Yale University Press, 1984), pp. 133–137.
- 6 World War I had, perhaps, a similar effect, at least on Edith Wharton; see her *A Backward Glance* (New York: Appleton-Century, 1934), pp. 362–363.
- 7 “Here is New York,” *Perspectives USA* (Summer 1953), p. 44.
- 8 New York: Congdon & Weed, 1982, pp. 50–53.
- 9 New York: Norton, 1976, pp. 66–67.
- 10 New York: Avon, 1960; reprinted 1980, p. 68.
- 11 *Ibid.*, p. 42.
- 12 *The Ecology of Imagination in Childhood* (New York: Columbia University Press, 1977).
- 13 See, for example, Kevin Lynch, *Growing Up in Cities* (Cambridge, MA: MIT Press, 1977); Irwin Altman and Joachim F. Wohlwill, *Children and the Environment* (New York: Plenum, 1978); George Butterworth, *The Child’s Representation of the World* (New York: Plenum, 1977); and Charles Zerner, “The Street Hearth of Play: Children in the City,” *Landscape* (Autumn 1977), pp. 19–30.
- 14 Translated by Maria Jolas (Boston: Beacon, 1958; reprinted 1962), pp. 10–12.
- 15 William Wordsworth, *Complete Poetical Works* (Boston: Houghton Mifflin, 1904), pp. 124–222; Walt Whitman, *Leaves of Grass* (New York: Random House, 1950), p. 287. One critic has discerned the role of childhood space in the poetry of Hart Crane; see Sherman Paul, *Hart’s Bridge* (Urbana: University of Illinois Press, 1972).
- 16 New York: House of Books, 1957, n.p.
- 17 Cambridge, MA: Harvard University Press, 1984, pp. 3–7, 10, 76, and *passim*.
- 18 Boston: Osgood, 1878, p. 177.
- 19 Eric F. Goldman, *Rendezvous with Destiny: A History of Modern American Reform* (New York: Vintage, 1956), pp. 30–31; see also Warner Berthoff, *The Ferment of Realism: American Literature, 1884–1919* (New York: Free Press, 1965). The place of farm boyhood in the American spatial and cultural imagination deserves separate, detailed study.
- 20 For an introduction to the arguments still swirling about small-town life, see Carl Van Doren, *The American Novel* (New York: Macmillan, 1920), pp. 294–302 and *Contemporary American Novelists, 1900–1920* (New York: Macmillan, 1922), pp. 146–171; Richard Lingeman, *Small Town America: A Narrative History, 1620 to the Present* (Boston: Houghton Mifflin, 1980); Anthony Channell Hilfer, *The Revolt from the Village, 1915 to 1930* (Chapel Hill: University of North Carolina Press, 1969); and John R. Stilgoe, *Metropolitan Corridor: Railroads and the American Scene* (New Haven: Yale University Press, 1983), pp. 191–220. One of the most thought-provoking studies is John A. Jakle, *The American Small Town: Twentieth-Century Place Images* (Hamden, CT: Shoe String, 1981).
- 21 Since very few farm children grew up to be writers, there is a consequent dearth of written evidence explicating the farm child’s view of the town, however, something frequently overlooked by literary historians.
- 22 After his death, a multivolume memorial edition of his drawings was published: *When A Feller Needs a Friend* (New York: Wise, 1930); *That Guiltiest Feeling* (New York: Wise, 1930); *The Days of Real Sport* (New York: Wise, 1930); et al.
- 23 *National Cyclopaedia of American Biography*, XXIII, p. 317.
- 24 Respectively, New York: Harper, 1965; and Columbia: University of Missouri Press, 1978. To the best of my knowledge, there is no parallel development of autobiographies by women who grew up in small towns.
- 25 Boston: Houghton Mifflin, 1965, pp. 1–24.
- 26 May 11, 1956, pp. 38–68.
- 27 “Take Something Like a Star,” *Poetry* (New York: Holt, Rinehart & Winston, 1969), p. 403.
- 28 New York: Norton, 1982, pp. 19–23, 214–224, and *passim*; portions of the book appeared as “A Good Place to Live,” *McCall’s* (October 1981), pp. 127–131. When Eberle finished the book, her daughter was only three years old and not roaming the small-town landscape (pp. 206–207).
- 29 Cambridge, MA: Ballinger, 1984.
- 30 *Poetry*, p. 38.