

3 Clues

"The development consisted of imitation Tudor houses clustered along little concrete-and-grass pedestrian lanes. The place was doubtless designed for families with young children: traffic and parking lanes were safely isolated and almost every house seemed to have a tricycle or some form of hobby horse overturned on the lawn."¹

What things that we see tell us what we want to know about urban areas: what are the clues? A clue or indicator is something that can be seen that tells the observer something he or she desires to know. Clues help the observer understand the nature of the urban environment being examined. They help answer some of the questions about the past, the evolution, and the present state of an urban area.

The meanings of some clues are obvious. A building with a 1920 date on it and four doorbells, four mailboxes, four light meters, and four telephone wires leading to it is obviously a four-dwelling-unit structure of known age. If the building was obviously designed as a single-family house and is surrounded by similar single-family houses, then it has obviously been converted: change has occurred. If construction workers up the street say they are converting other buildings, more change is on the way. Some obvious clues can be important: roofs with holes but with people living underneath, a wall that is seriously out of plumb, a sign announcing that a freeway is planned for the area. Such clues provide a basis for pursuing the more subtle clues, many of which are not obvious.

In thinking about clues there is no way to avoid categories and classification. The categories used here are ordered according to importance—that is, visibility

and frequency—and according to sequence, the order in which one is likely to see them in the field. This kind of categorization has difficulties, because the eye and mind respond to what is there, not to preconceived categories or sequences. With that crucial qualification, we can proceed to consider the various kinds of clues: the things we see that tell us.

Buildings

Buildings are clues to so many of the things that people concerned with urban environments want to know. They are basic indicators of when development took place, its pace, and the nature and pace of activities in the area. They can also tell us who the area was originally intended for, as well as who lives in or uses it now, what changes have taken place over time, and how vulnerable the area is to change in the future. However, buildings is too broad a category to deal with; we need to consider specific characteristics. And sometimes groups of characteristics and groups of buildings, rather than individual elements are most significant.

Architectural Style

A building's architectural style is a major clue to when it—and perhaps the area—was built. This is true regardless of the building's function. Of course, the observer has to know when a particular architectural style was used—for example, that concrete apartment buildings with very little detail were not built until after World War II or that Victorian was before the turn of the century. Often, however, people with little or no formal knowledge of style can estimate, based on design, the age of buildings. A street with buildings all in the same style was probably developed at one time; a variety of styles usually means development over time by more than one builder.

But architectural style is not always revealing. Some styles were built over long periods; for example, the Georgian colonial style was built over a span of 180 years, up to the late 1700s. And style periods may overlap. A house in the bungalow style, which started in the late 1800s and persisted until World War II



might have been built before a Victorian, whose style period ended at the turn of the century.

Then, too, builders are not bound by academic determinations of period; Georgian colonial houses are built in the 1980s. Usually there are clues one can use along with style, such as window details on a new Georgian colonial that are not the same as one would find on a 1750 Georgian, or contemporary joinery, or the absence of weathering, which make it easier to see the distinction between old-old and new-old. It is more difficult, however, to tell with certainty whether the buildings one sees are the original development in the area. Knowing architectural styles, particularly in an area where disparate periods are represented, helps the observer figure out what existed before the present development. It is not always certain that the newest buildings have replaced the earliest ones, or even that the oldest existing buildings were the first to be built. Fortunately, architectural style is not the only clue to when urban development took place.

Purpose

Houses, stores, factories, churches, offices, and schools usually have distinct physical characteristics that indicate their intended use. However, the more specifically one tries to categorize purpose as shown by building design, the more likelihood there is of error. In some periods and some countries, distinctions between house, school, and office are not emphasized. In Brazil it is difficult, at first glance, to tell the difference between office buildings and certain apartment blocks. The exterior distinction between a contemporary office



and an industrial building is minimal in many cases. In the Baroque period the building facade was more important as a unifying design element than as an expression of intended use. But usually the design of the buildings in an area tell us their intended use and, by extension, the nature of activities in the area and who it was built for. If we compare the intended use of a building, according to its design, with the building's present use, we can begin to think about changes that have taken place.

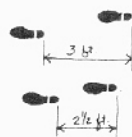
Size

The sizes of buildings and of the units within them can be strong indicators of who an area was built for and who its present occupants are. In combination with other clues, building and unit size can help tell the history of an area's development, including life style values of the community, its economic structure over time, and something about local regulations.

Building size is important because of the direct correlation between size of building or unit and wealth of the occupant as well as the number and size of occupants. Because this is a broad assumption, it is important to take it cautiously, with qualifiers always at hand. Generally, smaller units are built for and occupied by lower-income people or activities and smaller families or businesses than are larger units. Put another way, people build or rent as much space as they need and can pay for. A large family lives in a small space only if they can't afford anything larger. When we see large houses or units, we assume they were built for people with more money. Other clues may support, modify, or question the premise, but that is the starting point.

The observer in the field can estimate the area of a building simply by pacing off the front. Then, if one can see the side of the building and estimate its length in relation to the front, one can figure out the floor area. If the side is not visible, a nearby building often permits comparison.

In any country, for most types of construction floor-to-floor heights are remarkably uniform. It is easy to





make adjustments for nonstandard story heights once you know the norm.

The sizes of units within buildings can be more difficult to estimate. One way to begin is to divide the total area by the number of units, as indicated by the number of doorbells and mailboxes. This method does not account for different unit sizes, of course. A closer examination of the building may suggest where the interior partitions are, where one unit stops and another begins, thus permitting finer estimates of unit sizes.

But what do we mean by big and small? Measuring the size is fairly easy, but deciding on whether something is big or small or medium-sized is another matter. Like the standards of building condition, size is particularly laden with personal values. What is considered large or small often depends on cultural tradition, sometimes standardized by community regulation.

Nations, communities, and institutions have developed space standards as benchmarks for minimum acceptable housing quality. All countries that have publicly built and supported housing set standards for the number of rooms per dwelling unit, sizes of rooms, or space per person or family. Anything below the adopted figures is considered low, small, crowded, or substandard. During the 1960s India's Prime Minister Jawaharlal Nehru said that two rooms was to be the minimum size for housing in that country. The new standard sent planners, who had been working on a gross space standard, back to the drawing boards and reduced the size of individual rooms in new housing. In the United States, more than one person per room has been an indicator of crowding for many years. In America the Federal Housing Administration has used minimum room size standards as a basis for insuring loans since the 1930s. If one knows what the standards were when a building was constructed, one has some basis for saying that the building or unit is small or large.

But there are more satisfactory ways of coming to conclusions about size. If one knows what the common building practices were in the community at the time of construction, it is not difficult to say that the units are large or small. This approach, too, takes some prior

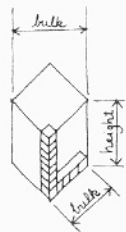
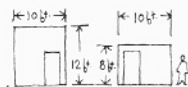
knowledge, but it may be more useful to work from a norm rather than from arbitrary minimum standards. Knowing how buildings in the community are usually laid out gives an idea of how many bedrooms there are in a unit. From that, one can guess the number of people and the family type it was intended for. There are always exceptions — units with many bedrooms and no children, units with few bedrooms and many children. But we want only to determine the intended use of the building and the kinds of people who used to live in and now live in the neighborhood.

Failing all else, particularly if the observer is not familiar with community standards and common practice, there is another way to determine relative size: using one's own experience as the benchmark. We all know our own and our family's income level, living arrangement, rent, and space, and we remember what these variables were at other stages of life. That knowledge, used with caution, becomes the basis of comparisons with what is being observed and allows one to draw tentative conclusions about size.

Building size is one of those clues that, combined with others, can help one understand the history and present conditions of an urban area and even of the city as a whole. Consider size in combination with the quality of construction materials. If a small house or other building is of relatively simple, standard construction, we conclude that the original owner was less affluent than the owner of a similar building constructed of more specialized and higher-quality materials.

If house size is an indication of the income level and family size for which the area was originally built, then observations about the present residents can suggest how the area has changed. If small units are still occupied by low-income people, this suggests a certain stability. But if those units are now occupied by more affluent people, then the area may be more desirable than it was, or there may be a housing shortage in the city. Consider the Victorian houses on the southern slopes of Pacific Heights in San Francisco. The modest size of the houses suggests that the original residents were middle-income families. In 1983 that area was





very expensive, and higher-income people, most without children, lived there, often in subdivided units. Conversely, if large houses have been subdivided and are now occupied by lower-income people, we guess that the neighborhood has become less desirable. Or the market for housing throughout the city may have changed, as happened for a period in Naglee Park. Now that neighborhood seems to be changing back to single-family housing. By understanding what was and comparing it with what is, we begin to understand change.

A situation that may be less obvious is that of large, old houses on spacious lots near the center of a city, once associated with great wealth but presently occupied by less affluent people. Such houses are often vulnerable to declining maintenance, to subdivision, and to replacement. Many visible clues—location in the city, age, quality of design and original materials, number of occupants, and maintenance—may lead one to suspect vulnerability, but *size* is the variable that triggers questions and further observation.

Size can be an indication of vulnerability in other ways. Both ceiling height and room area have a direct relationship to maintenance costs. It takes almost 40 percent more paint, to say nothing of labor costs, to cover a room ten feet by ten feet with twelve-foot ceilings than to cover such a room with eight-foot ceilings. A resident with limited income will paint and otherwise maintain a large unit less well and less often than a small one. A large unit occupied by low-income people is more vulnerable to poor maintenance. Size, then, can be a clue to vulnerability to change.

The relative sizes of nonresidential buildings can be a telling indicator of the economic makeup of a community. Size here refers to both height and bulk of a building as well as to the sizes of rented or owned units within it. These are indicators of the scale of entrepreneurship at the time of building, of changes that have occurred, and of anticipated markets for space. Consider Chestnut Street in San Francisco, where the commercial buildings are mostly one- and two-story structures. We will call that height low. Building widths



vary from twenty-five to seventy-five feet. In San Francisco a typical residential lot is 25 feet wide, except corner lots, which may be up to 100 feet wide. These commercial buildings are not much wider than residences. There are some taller buildings with apartment units on the upper floors, but none higher than four stories. Some of the individual store units within each building are very small; a newsstand or a cigar store may be as narrow as 10 feet. The market served by the Chestnut Street businesses is largely local, although people from other parts of the city do frequent the specialty shops, restaurants, and entertainment establishments. Stores go out of business often, though many have been there for years. Changes in use are relatively easy because of the number of spaces available, but a large space user, say a supermarket, would find it difficult to find a building of adequate size. In short, the sizes of buildings and units in the Chestnut Street shopping area reflect an economy of many small owners, small entrepreneurs, serving a largely local market.

It is possible that the many buildings were built by only a few owners, and it is possible that they are now owned by a few people and simply rented to many tenants. Various economic structures could exist in this physical setting, but the one described is the most likely.

Much of downtown San Francisco was at one time not all that different from Chestnut Street. The buildings, some of which still stand, were only slightly larger in height and width. Although the downtown area was much larger than the Chestnut Street area, suggesting a larger market area being served, one might come to similar conclusions regarding many small owners, entrepreneurs and developers. There were always some larger downtown buildings, and as time passed, some buildings were significantly taller and wider and had larger tenants than those of the original development. A view of the downtown at any given moment would show this shift in scale, suggesting a shift in ownership patterns and the nature of economic activity in the city, a shift from small to large.

The size of buildings today in downtown San Fran-





cisco reflects the presence of corporate headquarters, large-scale owners and developers, fewer individual entrepreneurs. Large developments suggest an anticipated market for the space. The developer-owners may satisfy a perceived need for diversity, particularly for retail and service functions, by including small shops at ground level, usually under tight design controls that are obvious to the observer. San Francisco's downtown, then, started small, physically and economically, but it has changed in scale, and the changes are visible.²

The messages of industrial buildings are similar to those of commercial buildings. Smaller units indicate smaller-scale operations with fewer employees. At the extreme, one large industrial building in a city suggests that the occupying industry dominates the economic life of the community.

Building size can also indicate certain standards or regulations that a community has adopted, telling us about some issues that have been and are important to its members. Height is a good example, usually in the form of maximum height allowed. The results of such regulations are often visible: no private buildings over a certain height in central Rome, as in many other European cities; large areas of one- and two-story buildings, except for taller ones at intersections, in some American cities; abrupt changes in height from one area to another. Buildings of the same height over an extensive



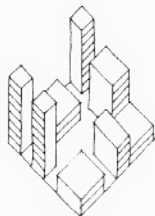
area are not usually the result of coincidence. A change in height regulations can be seen when all of the buildings built before a certain date are of one height while those built later are higher or lower. One building that is much taller than the others around it, even newer ones, may raise the question, why? And why not others? The Fontana Apartments at San Francisco's waterfront are an example. The answer may be that one person changed an unwritten norm—low height at the water's edge—and that afterward building height became an issue, resulting in a regulation on permissible height. Older, lower buildings amid newer, higher ones might reflect a concern for saving older buildings that was later expressed in a regulation to keep them. Most height regulations are associated with the cultural or design values of a community. Others have to do with building materials and standards for their use; for example, wood structures are permitted to rise forty feet above a concrete base in San Francisco, with other maximum heights for steel or reinforced concrete.

The overall size of a building may be controlled by a regulation on the amount of floor space that can be built in the area, presumably because of traffic and demands on public services and utilities. Such regulations are more difficult to see in the field because of variations in height, bulk, and area coverage. But the resulting mass or cubage of the building can often be read by a practiced eye. There are any number of other public controls on building size.³ One recognizes them when one sees many buildings of the same general size though of different designs and ages or when one observes abrupt changes in size from area to area. Then, as always, one asks why.

Building size, then, is an important clue in understanding history, change, community issues or values, and vulnerability. It is also a strong indicator of the bargaining power of the people who built and of those who occupy the building.

Materials and Workmanship

It is easy to see what a building is made of on the outside, and we can often guess at what the interior

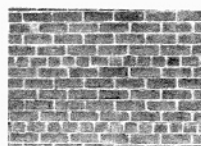
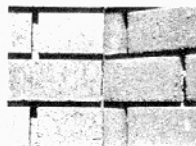
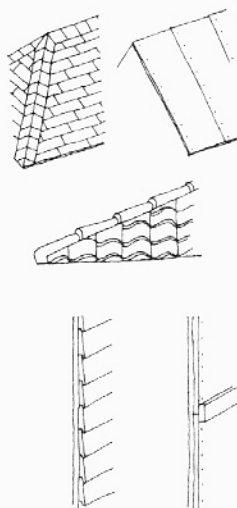


materials are. The materials we can see, plus some knowledge of their quality, can help tell us who the building was built for, what materials were in style at the time of construction, whether the building will last, with or without major maintenance, and how susceptible it is to change. Again, the starting premise is economic: high-quality materials are generally expensive, so people with wealth are more likely to build and occupy buildings in which such materials are used.

It is important to understand what influence local characteristics—say a very cold or a wet climate—have on the materials used. I will not try to list all of the possible situations or to catalogue materials and their relative qualities, let alone construction methods. But the observer should be aware of the types of situational variables. These include geographic location (brick is not a high-quality material in an earthquake-prone area such as Tangshan, China); availability of materials (wood is no longer available in Tangshan, and reinforced concrete can be used only if reinforcing steel is available); availability of skills (people who can lay brick and engineers who can show how to build low, safe, brick buildings). Familiarity with the properties of various materials helps one understand why a particular material has been used. And the materials used can help one understand the situation. The use of scarce materials may be a sign of wealth or prestige or importance.

But what is the meaning of quality in materials? Solid one-inch plank siding is a higher-quality material than plywood or shingles, but the definition depends on the circumstance. A tarpaper roof might be just as adequate as tile for a temporary building or a storage shed in a moderate climate where it seldom rains. An imprecise but useful working definition of adequate material quality is durability and suitability for the intended job without undue maintenance or replacement. A tarpaper roof is not a high-quality material in cold, windy Chicago; seeing such a roof in that city tells us that the people living under it are probably poor.

Interestingly, observers without much formal knowledge of building materials can often tell the difference



between high and low grades. Thin stucco somehow looks different from thick stucco, even when you cannot see the thickness: a high-grade exterior plywood looks different from a lower grade. Generally it is not difficult to make the connection between materials and the economic status of the people for whom they were intended. Gauging workmanship is a bit more difficult, requiring some knowledge of how buildings should be constructed. A good starting point is to ask whether elements that ought to be straight really are and whether pieces join tightly. Again it is not difficult to identify the extremes of low-quality and high-quality work.

For city planners, the major concern in quality of materials and workmanship is not so much who the building was intended for or who uses it now, but its durability. Triple-layered slate shingles, usually considered a high-quality roofing material, are costly to maintain when they get old. The quality of materials in relation to the occupiers' ability to maintain them, can indicate vulnerability to rapid change. If people of moderate incomes fall on hard times, they find it difficult to maintain a lower-quality, high maintenance building. Building or neighborhood decline and decreased property values could then take place.

Many professionals with middle-class values tend to look down on materials of lesser quality than we are accustomed to, to assume that they are not likely to last. That is part of a mental process that has resulted, I think, in many of the decisions to tear down areas of cities. The buildings may be sound when the decision is made, but it is assumed that they soon will be slums.⁴ So one should be very cautious about concluding that materials are of less than adequate quality.

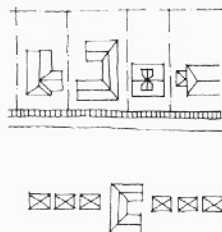
Design Quality

It can be argued that everything made by man is designed. But in urban environments a "designed" building or complex usually means one that stands apart; concentrated effort went into its design. It may be unique in appearance, or complex in details and arrangements, or different from "standard," or created by a "designer." I am not referring to good or bad design or just to buildings designed by architects.

It is usually not difficult to distinguish an urban structure that has been "designed" from those that are standard or for which no special design effort was made. This also applies to a large complex of buildings or distinctive tract of housing, even though each building within the complex is similar.

What might the presence of carefully designed structures in an urban area imply? Usually greater economic resources have been spent on a designed building, so the builder must have had those resources. Of course part of a building's specialness may be that it is smaller than "usual" and therefore less costly, implying that the owner-renter has less money than his neighbors. In any case, though, the initiators of the design probably had a sense of values, aesthetic or otherwise, that were different from their neighbors', or they may simply want to attract attention.

To see what specially designed buildings can tell us, it is worth turning to some specific situations. On some city streets every building is different, and each one seems to have been individually designed. It is reasonable to conclude that they were all built for people with higher incomes than those who occupy more standard buildings. If they are all well maintained, then one can conclude that the present occupants are also well to do. One or two new individually designed houses in an area of older designed homes suggests that the area is stable and confidence that it will be maintained. On the other hand, the presence of standard, smaller houses or apartments in an area of older, individually designed buildings suggests there has been a shift in the income level of residents and in the



market for housing. Obviously, any number of combinations is possible.

What of large-scale tract housing such as the Levittowns in the east and the Eichler developments in California? Considerable design effort has gone into these developments. We can assume that the purpose was to save construction costs and lower sales prices, so that a large number of people could afford to buy.⁵ The houses were often smaller than standard but were designed to make a better, more efficient use of the space. The developers were apparently concerned with economies of scale that can be achieved through special design and with more efficient design that would appeal to a mass market.

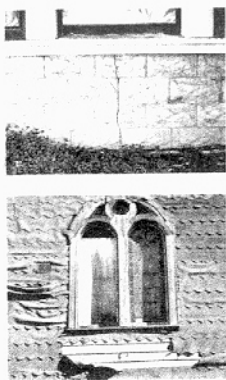
Housing has been the model for most of this discussion of design, but the same points apply to nonresidential buildings as well. Specialness involves greater cost, except when the specialness, often on a large scale, expresses the "design" of lowering costs.

Maintenance and Condition

More than the other clues we have considered, building maintenance is a clue to change and vulnerability to change. It can therefore tell us of the presence of—or need for—neighborhood policies and action programs. Maintenance and condition are clues to the residents' income levels and the value people put on their homes and neighborhoods. At the same time, maybe more than any other single characteristic, building maintenance and condition can be misread and used to justify inappropriate public actions.

When we look at a building, we see surfaces, materials, openings, connections, and details such as railings, gutters, or steps. Their condition shows how well the building has been maintained. Paint may have a healthy sheen, or it may look chalky or have bubbles or be flaking off. Walls that should be vertical may lean, and floors and roofs may no longer be horizontal. Roof shingles, instead of lying flat and even, may be cupped, and some may be missing. Check to see if replacement parts are thicker or thinner than the originals and of better or poorer quality. Window frames





should join tightly with wall surfaces; if they do not, there may be signs of leaks. Downspouts should connect with and slope toward continuous gutters, but some areas may have rusted away or loosened, permitting water to pour down the walls or along the foundation. Look for cracks or settling in the foundation. New siding materials, such as shingles or aluminum siding, should be butted tightly at corners and openings. Overall, one looks for precise workmanship, with tight joints and straight lines, or a more careless approach.

Building maintenance consists of many aspects, some very important, many not. Obviously, it helps to know something about building materials and to have a standard of adequate maintenance before inferring very much from looking at buildings. A large, bare-looking wall of wood siding, even with a few boards missing, may not be difficult or expensive to repair. In looking at building condition and maintenance one should always remember that very few buildings in a community fall down in any given year for *any* reason, let alone from lack of paint. Sagging floors and leaning walls do not usually mean the building will collapse tomorrow. It is important to know the difference between present and potential dangerous conditions. After repeated failures to find the source of a leak and fix it, more than one property owner has taken the advice of the genius who said, "Make friends with your leak." I do not wish to make light of building condition or its importance as a clue. But it should be kept in perspective.

One benchmark of condition and maintenance is whether the building has been kept at its original quality, taking into account normal aging and weathering of materials. That measure allows for the reality that buildings and whole neighborhoods start out at different quality levels. One should know not only what the original conditions were, but also something of building technology and maintenance and effect of the local climate on materials. Clearly, too, the general condition of buildings in an area is as important as that of individual structures.

Building owners, especially if they live on their

property, usually try to maintain them as well as they can afford. People usually buy and occupy houses they can afford, or that are only a bit beyond their economic means at the time of purchase. Usually, a well-maintained single-family house is assumed to be owner-occupied. If the maintenance is shoddy or poor, we wonder about the economic status of the owner and whether the occupants are renters rather than owners. Renters are less likely to be responsible for exterior maintenance of property, even if it is a single-family home, and the owners may not be able to keep up with repairs for any number of reasons. An excellently maintained modest-sized (two to ten units) apartment building may also suggest owner occupancy, particularly if one sees signs of personal touches in painting or repairs.

We assume too that renters desire to live in well-maintained housing and do so consistent with their means. Poor maintenance of multiple-unit buildings suggests that the income from tenant rents is not adequate to maintain the property or that the owner is permitting it to deteriorate in favor of higher profits—or both. In general, we assume a direct relationship between maintenance and income: as one goes up so does the other, and vice versa.

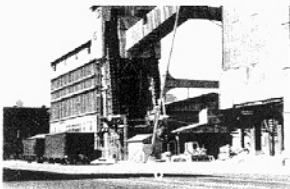
There are exceptions, of course. Among some cultures, exterior house maintenance is not so important; the insides of houses provide the clues. The people behind those unpainted, chipped, cracked walls may not be poor. And remember that building maintenance is not the only clue to the occupants; I have spoken of building size and will discuss other clues. Lack of maintenance may be a clue that public image is not important to the occupants or that their emphasis is on private life. It is important to distinguish between basic and superficial maintenance. Unpainted walls or cracked and chipped stucco may not be very important. Signs of seriously sagging floors or missing or rotting structural members are more telling. We need to take a closer look. Some other clues may suggest the incomes of the inhabitants: a nameplate, a bell, or a distinctive, polished brass doorknocker in striking contrast to the



gray, chipped walls; new or recently varnished window frames; or, conversely, rusty downspouts and crumbling walls. It may take some looking, but the clues are often there.

Judging the maintenance of nonresidential buildings is more complicated. The visual manifestations of good maintenance in a steel mill or factory are different from those in a house. Still, many of the signs of maintenance are similar for all buildings and uses. Since the 1960s light industrial buildings have been made increasingly to look like residences or small-scale office buildings. And employees and the community have come to expect neat, well-maintained buildings, particularly in so-called industrial parks. There is status in owning or working in an industrial building whose function is masked by its appearance. If an industry has a negative image in the community, design controls may try to overcome the unpleasant associations. Such buildings are often maintained as if they were homes. Signs of inadequate maintenance makes the observer question the economic well-being of the business or the developer. One has only to look at a development like the Ravenswood Industrial Park in East Palo Alto to know that it is not thriving.

Signs of good or poor maintenance may be harder to see in older industrial and warehouse buildings, particularly in older cities. There may be little reason to clean old brick walls covered with years of grime or to paint metal window casements or even to wash the windows. Such clues may have no relation to the economic soundness of the industry or the level of employment. Good structural conditions, where they can be seen—vertical walls and columns, floors without sag, tight roofs—may be much more important in gauging the industry's ability to withstand change. To judge, one needs some knowledge of the history of industrial development in urban areas, together with clues such as whether buildings are occupied and whether broken windows, for example, have been replaced. One can also try to ascertain whether the design and construction of the buildings are adaptable to changing societal requirements.



In a heavy industrial complex (a steel mill, a foundry) the most important maintenance clues may be found in the area that houses management. Administrative offices are more likely to resemble office or even residential construction, and the maintenance clues are similar.

In all of these cases the quality of maintenance indicates the financial capabilities of the owner or occupant, modified by personal or cultural values.

Changes from one area to another also may suggest some of the issues that may be present in the community. Imagine a turn-of-the-century neighborhood where the houses were constructed of the best possible materials and with the highest-quality workmanship. If the houses have always been maintained "just like new," this suggests a certain stability in the incomes of the occupants. If the relative costs of maintaining that quality have risen, we can infer that the present occupants are even wealthier than the original owners.⁶ Buildings whose original construction and materials were of low quality and have remained in their original condition also indicate stability. Better maintenance than in the past and higher-quality replacement materials suggest upgrading, either by owners with higher incomes or through a government program. An area of lower-quality homes next to a better residential area is a good place to look for upgrading. If the people in the lower-quality area cannot pay for improvements, they may be displaced by economic pressures or even by government programs that mandate improvements. This process of gentrification is very difficult to chart statistically, but it can often be predicted for an area by astute observation.⁷

Change can go in many directions, depending on a number of variables. Good maintenance in an area, together with recent construction and few vacancies, suggests a strong market for housing. Widespread maintenance efforts in one particular time period could indicate that the community sponsored or required improvements. A uniform look could mean that a good salesman of a new product, such as permastone, came through the neighborhood at just the right time. A

strong indication of public funding is major rehabilitation, such as new roofs, stairs, siding, windows, and painting, in an area whose residents do not appear able to afford the work. Recent changes, which are usually easy to spot, should be weighed in relation to other variables to get a sense of the dynamics of an area. It is worth noting that an account of these kinds of changes is seldom available from other sources.

Land and Landscape

Like building maintenance, the treatment of yards and land can be an indicator of economic status, ethnic values, and other matters as well.⁸ The observer can see how extensively outdoor residential space is used and by whom. Worn areas mean heavy use, perhaps by children or pets. Outdoor cooking arrangements suggest a particular life style, and slides and play equipment suggest children. A paved front yard suggests that easy maintenance is a prime consideration. Some people who do not place a high value on the land around their house may pave their yard or ignore it. But paving is a landscape decision, too. Four automatic sprinklers in a 100-square-foot grass plot suggest that the owners like the lawn but do not want to spend a lot of time hand watering it.

Generally, unusual trees and plants and professional landscaping are associated with higher incomes. But gardening is an activity that people of all incomes enjoy. The yard of a lower-income person can be as well landscaped and meticulously cared for as that of a wealthy person. Over many parcels, however, one expects income characteristics to prevail.

Many developers and managers of rental and condominium properties believe that intensive landscaping is a selling point, that well-cared-for grounds can justify higher rents. It sometimes pays to see whether the landscaping quality is equal to that of the buildings. If, in a new development, the landscaping is considerably better than the building quality, it would not be surprising if the landscaping deteriorated after the initial sales pitch was over.

Maintenance of land around public housing can be

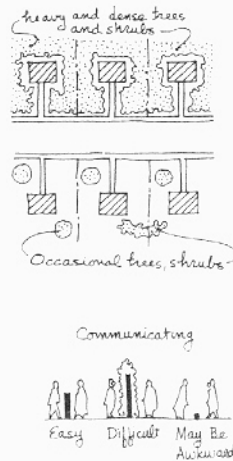


an indicator of its relative importance to the management, the financial state of the agency that runs it, and the attitudes of tenants to their homes. Landscape funds are usually one of the first things to be cut in a budget crisis, but there are examples to the contrary. In Cleveland, under the administration of Ernest Bohn, the design and maintenance of grounds of public housing projects were far better than for most private developments. Bohn believed that good landscaping was a relatively inexpensive way to enhance modest building design. During the 1950s it was common to see flowers and even vegetables, planted by tenants, around doorways in those housing developments. This suggests that the tenants had a positive relationship with management and each other and a good feeling about the development as a place to live. It is easy to list examples of disregard by management or tenants in public and private housing, and this too indicates people's feelings about where they live.

The kinds of landscape arrangements one sees in an area permit some hypotheses about communication and perhaps even about the likelihood of neighborhood action. Hedges, trees, and flower beds can be arranged so that communication between neighbors is either easy or difficult. Planting can facilitate communication or make it more awkward. From the nature and design of the landscape, we can guess whether people are likely to talk to each other regularly. *Likely* is the key word.

Use of Buildings and Land

We observe and take messages from the uses made of land and buildings so automatically that we may not be aware we are doing it or how important it is. Stores show us what we can purchase; hotels tell the traveler that lodging and food are available; the areas next to railroad yards are avoided by middle-income people in search of housing. We know these things without identifying the clues as land uses. Often a land use is not seen directly, but certain clues permit us to conclude that people work, buy and sell, or reside there. Or we can tell what the land use is directly: people buying



and selling in a store or an outdoor market, children playing, signs that say what is happening on a site.

Land uses tell something of the *nature of activity* in an area. The size of the area indicates how many or few people do those things. The size, of a shopping center can suggest how large an area people come from to find what they want—that is, whether the center is locally or regionally oriented. If people come from a wide area, then one asks how they get there, and one thinks about traffic volume. Diversity of uses in an area, along with size, tells more.

A lack of some uses, too, is telling. If there are no stores in an area, or none of a particular kind, one wonders where people shop. Do they drive, or is there public transportation to shopping areas? If they take public transit, they cannot buy very much at one time. An absence of parks may mean that parks are not very important to the people in the area, or it may mean that there is a need for parks, but no available space, or that the government is not responding to need.

Land uses may be homogeneous over a large area—all housing, for example, even all single-family houses, or all commercial buildings, or a mixture.

The economic diversity or homogeneity of a metropolitan area or of one section of a city is usually visible. That visibility, combined with the observer's knowledge of economic development and location patterns, can permit some conclusions about an area's relative stability or vulnerability. An area of three-bedroom, one-family detached houses or of six-story apartment buildings with one- and two-bedroom units can accommodate many different kinds of people: such is the adaptability of space. But it is a good bet that such a homogeneous area was built with a particular population in mind, a limited range of possible occupants. If the present occupants are clearly different from the intended population, then we ask why. A single-use office area suggests a need for transportation for those who work there. We also can guess that there is little or no activity there during evenings or weekends. Some segment of the community is likely to express the

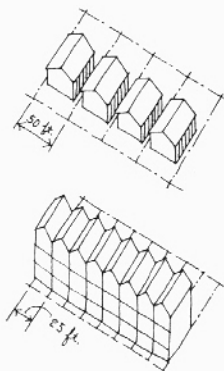
desire for more activities so that the area is "alive" throughout the week.

Obviously, there are endless possible combinations and arrangements of land uses and their implications in a given situation. What is important to understand is that the uses can be seen and that they constitute meaningful clues.

The relative *intensity* of a use, that is, the amount of activity on the piece of land, is usually visible. Population density is related to intensity. A low-density urban residential area, say with one dwelling unit on each 50-by-100-foot lot,⁹ is visibly different from an area of buildings with three units on every 25-by-100-foot lot. Just seeing that much tells us that the first area will generate a smaller market for shops than the second, that transportation modes will be different, that public transit will be more economically feasible in the second, and more. Family sizes in the two examples might be the same, but the life styles of residents probably are not. The lower-density area has more land available to meet residents' needs and may require more care. Occupancy by owners is more likely with lower density. Residents of a higher-density area might have to, or want to, satisfy more recreation needs away from their homes than residents of a lower-density area. Life styles, then, will be different, either marginally or significantly.

Similarly, the visible intensities of nonresidential development suggest what needs exist for access, transportation, and services. Some needs will be apparent, for example, transit, parking, solutions to congestion, police, street cleaning.

Types of nonresidential uses are usually observable and can tell us something about the economic base of the community, about the area's relative stability. Pittsburgh's earlier emphasis on heavy industry—mills, factories, smoke—was always visible. Its present offices, banks, research institutions, and light industry suggest some diversification, but with a large dependence on the older, still visible, factories. The Oakland area of Pittsburgh is education, medical, and cultural





institutions. The businesses of the Fisherman's Wharf area of San Francisco depend on tourists, not fishing. The observable nonresidential uses in the Palo Alto area are related to electronics. Modesto, with its irrigation systems and farms has a visible agricultural base. Orvieto, Italy, is wine and ceramics.

The nature of nonresidential uses is a clue to the kinds of people who are likely to live nearby, in the city or immediate area. The electronic and computer firms of the San Francisco peninsula hire different people from those hired by the Ford Company in Detroit and from the people who work for the government in Washington, D.C. If we assume that people prefer to live near their work place if they can, we would expect local employment sources to indicate who lives nearby. Of course, some industries are less desirable as neighbors, and the less environmentally desirable an activity is, the more likely it is that people with enough money to do so will live farther away.

Changes in land use are also revealing. In Chapter 5 I deal more extensively with change as a phenomenon, but consider the following examples. Multifamily units in what used to be single-family houses indicate changes in the market for housing, in the nature of people who occupy the space, and in life styles; offices or stores in what were houses represent a significant shift; dwelling units in former industrial loft space indicates that the demand for housing is stronger than that for industry or storage; care homes in single-family houses suggest that the original owners wanted to leave the area, that they found it hard to sell to other people for the same use, and that there was no legal or community prohibition on the change of status.

Changes in land use and new uses can indicate existing or future problems. A new shopping center with the same kinds of stores as the existing stores in the adjacent area makes one question whether the market is expanding and whether both centers can survive. The construction of a major new commercial center has long been a visual indicator that the older downtown shopping district was or would soon be vulnerable to economic decline. In looking at new

developments, one asks about the market for them and the likely effects on nearby similar land uses. This gives some idea of possible community issues.

I have just touched the surface of a large subject: what the visible uses of land and buildings can tell of the dynamics of an area. My intent is not to be all inclusive; the purpose is to look at land use as a major indicator of what has been, is now, and is likely to be happening in an urban area.

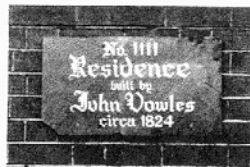
Special-Purpose Buildings

A residential, commercial, or industrial area is very rarely purely that. Somewhere in any of those areas one can find a church, a firehouse, a school, even a stadium. Most of these uses are public or semipublic, and often they stand out visually.

Such buildings often have dates on them, which can be a clue to the age of the surrounding development. Older public buildings help tell who the earlier development was for and who lives there presently: schools mean families with children; Catholic churches mean Catholic residents; Slovenian halls mean a Yugoslav community; fraternity houses are a signal of a university nearby. Stability or change may be apparent: a school may be as old as the houses and may still be in use, or it may be vacant or converted to another use, or it may be new; a church may have a new name or information in a different language; the firehouse may be closed. Such changes may be clues to a neighborhood's influence and its vulnerability to change, past and present: most people are happy to have a neighborhood library branch, but no one wants a stadium or sewage treatment plant. Town and gown issues come up anytime a university plans to expand; a small police station is expensive and may be uneconomical, but in a high crime area the residents may have pressed for a stronger police presence.

Artifacts

The details on buildings, which I will call artifacts, can be as telling as larger elements. Artifacts, usually utilitarian and often added to a structure by its occupants,



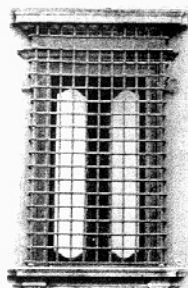
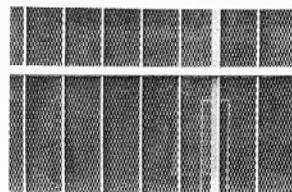
can help to verify or refute an observer's hypotheses. The number and types of artifacts as clues are almost limitless. I will list and discuss briefly those I have found to be the most helpful indicators in the field.

Address identifications and house numbers can tell where the area is in relation to some starting point or to the city center. Usually street numbers get higher as one goes away from the center. The numbers can also indicate unanticipated changes that have occurred over time: a sequence is broken by half numbers or missing numbers; a sequence such as 456 followed by 456A means that a housing unit was added after the street was numbered.

The graphic style of house numbers may indicate the owner's personal style or a prevailing fashion. How clearly visible they are may show how much the residents want to aid people who are looking for the house. Or the style, location, visibility, and age of numbers may be the result of a local ruling. In a Cincinnati neighborhood where the houses varied in style and age, new helvetica-style numbers of uniform color and size were a clue to a recent community decision.

Mailboxes and doorbells often reveal the number of units in a building and permit the observer to estimate unit size by dividing the total square footage by the number of units. New mailboxes and bells indicate that units have been added. The accessibility of the mailbox and whether it is locked tells whether security is a concern.

Nameplates of occupants can indicate the ethnic composition of an area and where the territory of an ethnic group begins and ends. Students in San Francisco used this as one indicator of the boundaries of Chinatown. Nameplates are also a clue to some living arrangements, as when two or more surnames are given. Nameplates can identify the types of professions and businesses ("Hong Kong Import Export Co." or "John Lewis, Attorney at Law") in a building or an area, including businesses in what appear to be residential buildings. A nameplate such as "The Andersons" suggests that the occupants are proud of their home and neighborhood. People who put their own



name on their home are decidedly not afraid to be identified. Vacation homes often seem to have names, such as "Sea Breezes."

Grates, grilles, alarm boxes, and home alert signs are age-old indicators of safety and crime issues as perceived by area residents. People go to the expense of placing those devices over windows and doors only if they perceive that crime is a problem. An observer should look for clusters and patterns of those devices—one street has them, another does not, a third has them at one corner and not another—and signs of how recent they are. These factors allow one to speculate about the location and urgency of the problem. In some areas window stickers indicate that the neighborhood has organized to confront the crime issue. "Beware of Dog" signs and fences are also indicators, as are television surveillance systems and floodlights.

But these clues can be misleading. Once a protection device is attached to a building, it probably will not be removed, even if the problem no longer exists. And the absence of such clues does not mean there is no crime problem. The residents may not be able to afford such devices or may find them repugnant, or there may be less visible crime deterrents at work, such as concentrated police patrols or private surveillance.

Lawn, balcony, and porch artifacts—toys, basketball hoops, bicycles, lawn furniture, cooking grills, lawn decorations, and clotheslines—tell a great deal about the people who live in an area. The age, quality, condition, and degree of permanence of such artifacts are all part of the picture. Toys, of course, indicate children, and the types of toys allow one to guess the ages. In America, bicycles on apartment balconies suggest teenagers or young adults and inadequate storage space. In upper-income neighborhoods in the United States, clotheslines are rarely seen. The clothes hanging on lines may bespeak the residents' type of work or life style. Given that most incidental artifacts are easily stolen if left unsecured, their presence is a clue that the residents are not greatly concerned about petty theft and vandalism.

In some geographic areas there seems to be a strong

relationship among social class, religion, and decorative artifacts.¹⁰ Eagles, colonial lamp posts, rustic signs, and unique mailboxes are more often displayed by people whose social and economic status have recently risen than by "old money" families.

Automobiles can be misleading. Although it is easy to tell their size, age, make, relative value, condition, and maintenance, there are too many variables to allow one to relate those factors directly to types of owners. You don't have to be wealthy to drive a Cadillac, and some wealthy people drive small cars. One sees more standard-sized American cars in the Midwest than in San Francisco, where smaller imports are more common, but that does not tell us much about the Walnut Hills area of Cincinnati. But one can observe the number of cars in a residential area in relation to the number of housing units. Trucks and campers give some notion of life styles, and motorcycles are usually associated with young people. It is possible to see repair work being done on cars in yards and garages.

A building's windows may be clean, dirty, or somewhere in between. There may be good reason to read something into window condition, particularly in association with other indicators. But whether windows are regularly washed may be culturally determined or a matter of local habit more than anything else. In India windows are normally not very clean or seem to have been washed with dirty water. In Cork, Ireland, they shine, even in small, poor houses, but that is not the case in Dublin. In the United States clean, shiny windows seem to be the norm for middle- and upper-income areas but not usually for the very lowest-income areas, especially where the population is transient. We are less surprised by dirty windows when the buildings are in poor condition, when the units are very small, when a commercial use is economically marginal, when the street has heavy traffic, when an apartment building has many vacancies, or when the blinds or curtains behind them are makeshift. Men, except gay men, may be less likely to wash windows than women.

Window curtains and blinds are another story. A



middle-class mother is not likely to haphazardly hang an Indian madras bedspread over a window unless it is her first night in the house. Makeshift materials and methods of hanging are often indicative of lower-income people who do not feel settled in the neighborhood. Lower-income people cannot afford to hang delicate, thin-slatted venetian blinds. Young professionals are likely to use fashionable, designer fabric, maybe with the designer's name and label visible, on their windows. Materials, styles, and ways of hanging curtains and blinds, if they are hung at all, can tell something about an area's residents. Also, window coverings, once bought and hung, are not usually changed for a long time.

We hypothesize that stylish fabric, up-to-date blinds, and wood shutters are used by people concerned with fashion, people who may have moved into the units recently. Less fashionable fabrics and designs usually indicate older people of traditional values, and more modest means. Such clues can be tricky. In the past everyone "knew" that lace curtains, the kind that had to be dried on curtain stretchers with all those nails, were used by middle-class and lower-middle-class families. Synthetic fabrics and the cycles of fashion have made lace curtains fashionable again in the 1980s, so one can't always tell about the income level of the residents.

If window coverings are similar throughout an area, that might help confirm a hypothesis about social homogeneity. Distinct differences in style or quality of window coverings suggests a mixed population or perhaps new people moving in.

In a building with multiple units, checking the number of windows with identical curtains can help determine or confirm unit or room sizes. Sometimes, however, the occupant does not control what the observer sees from outside; the management may provide the drapes or dictate their color and other characteristics.

One can sometimes see furniture and other interior artifacts, which give the same messages by and large, as curtains. With a little knowledge of furniture, books,



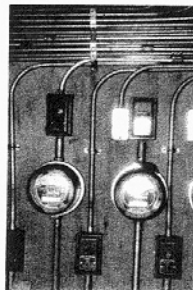
artworks, and their arrangement, the observer can confirm ideas about the occupants' incomes, ages, and lifestyles.

Electric meters and water meters must be located where the meter reader has access to them, so sometimes they can be seen from the street. This is an easy way to tell how many units are in a building or to surmise who is paying for what. Some residential buildings in San Francisco's Chinatown have no visible bells or nameplates to indicate the number of occupants. But if one sees forty electric meters just inside a back door, then one knows the number of units and can guess at the number of people. It is also clear that light and heat are not included in the rent.

Telephone and electric wires leading to buildings are another clue to the number of units. If a number of telephone wires lead to a house that looks like a single-family, it is likely that the house has been subdivided into individual rooms for boarders or into business offices. In older areas the absence of overhead wires means that some group made an effort to have them placed underground, perhaps through a community or neighborhood campaign.

Bright street lights on a quiet residential street may indicate that the neighborhood has had a security problem—residents often demand better lighting in those situations—or that there has been a public works program to replace old lights. Well-maintained old lights or newly designed fixtures indicate that the community has put some special effort into street lighting.

Signs are among the most important clues in understanding an environment; their purpose is to inform, and little interpretation is necessary. Sometimes, though, the messages go beyond the words, numbers, or pictures. "For Rent" and "For Sale" signs are good examples. Not only do they tell what properties are on the market, they may make it clear that there is a high turnover of houses in the area. The condition of the sign—the word "Sold" slapped on a new sign, or an old, dirty "For Sale" sign—shows how fast the property is moving. If one knows how many units there are



on a street and how often the residents tend to move, one can get a reasonable impression of whether five or six "For Sale" signs constitute a trend or an insignificant number.

Signs for drivers, such as child safety or parking-hour signs, can tell something about the neighborhood and its issues. Stop signs at every intersection may mean there have been traffic problems. Or, if there is very little traffic, they may just mean that a very effective neighborhood association has been concerned about cars speeding through. Tow-away signs, one-way signs, detour signs—they all tell about the nature of the traffic and how the community is dealing with it.

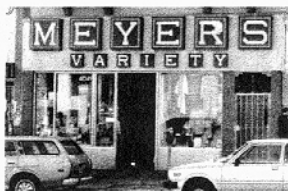
Public information signs and notices advise of many things beyond their literal messages: how active a community is, who is looking for what, who the residents are, and whether the area is oriented to local residents or to a larger community.

Graffiti usually signify the presence of teenagers. They may literally express some issues that concern those who did the writing, who often do not feel that they are part of the mainstream of the community.

Business signs also tell more than the immediate, direct message. A tattered banner sign is likely to indicate a poorly kept, cheap eating place rather than a well-kept, expensive one. Signs tell something about the age of the store, the clientele served, the economic status and values of the owner, whether ownership is local or not, and the presence or lack of community restrictions on size or type of signs. Signs indicate who the shopping area is for—men, women, a class of people.¹¹ The characteristics to look for are design style, condition and maintenance, materials, age, size, and, of course, the words or symbols used.

People

Psychologists and others advise us to be cautious in reaching conclusions about people just by looking at them. "The poor are persons who live in a certain section of town and not necessarily the people who wear the most tattered clothes . . . A prostitute is a woman standing alone in the Tenderloin and not



necessarily a woman in a revealing costume."¹² Fair enough, but how does one identify the Tenderloin? Maybe, in part, by seeing a number of women standing alone, dressed in eye-catching, if not revealing, costumes. Observing people is useful in making hypotheses, some with certainty and some to speculate about with caution.

People's age, race, and sex are obvious indicators of who lives in or frequents an area. But it is possible to tell more. Clothing styles give one a notion of their interests, life styles, and economic status. Fashions change, but it is not difficult to distinguish expensive from inexpensive, or high fashion from conservative or office dress from blue-collar work clothes. Uniforms, whether formal like a policeman's or informal like a stockbroker's, tell what people do. At Diamond and 24th in San Francisco, women, middle-aged and older, were wearing simple wool coats with hats and black, comfortable, low-heeled shoes; their ages and styles suggest that the area residents have a middle-income, family-oriented life style. Along with other clues, the clothing and the grooming of the men at Castro and Market streets identify them as gay. Within that culture, knowing observers see other distinctions.

The needy, in one way or another, often show it. The presence of one mentally or physically handicapped person in an area may mean very little, but seeing many such people in one area suggests that they live or work nearby. Group homes or workshops may be needed and may be an issue in the neighborhood.

Commercial Areas

Both in their component parts and as distinct land-use concentrations, commercial areas are extremely important as sources of information. Such concentrations of clues and activities more fully represent an area than a residential street or an industrial district because changes are easily seen, and people gather there.

In examining commercial areas, I will start at the level of individual stores and establishments, then move up in scale to the street, though occasionally

going back to the smaller units. Finally, I will discuss types of commercial areas.

Individual Units

There is no problem finding things to look at in a store or other commercial establishment; that is exactly what one is supposed to do. Some helpful indicators are: the *type* of establishment (what it sells or the service it provides); the quality of what is offered; physical size, layout, and method of display (including fixtures); the age of the place; the inventory and its completeness; the level of maintenance; the types and numbers of workers and clients; and details such as signs and *safety devices*. All are important; all exist in relation to one another, and together they can tell us something about the area in which they exist.

The possible combinations of clues and meanings are endless, but the messages are fairly straightforward. Consider some examples. People generally like to buy groceries at a store convenient to their home, so grocery stores usually mean a residential area nearby. A large grocery store needs a larger population to support it. If a good-sized grocery store has no nearby parking space for cars, it must be serving a high-density residential or working neighborhood; otherwise the store won't stay in business for long.

A store's goods or services tell something about the people served, no matter whether they live nearby or come from a larger area. High-priced goods indicate a high-income clientele. An ethnic bookstore suggests either a large, dispersed ethnic population or a nearby area where that ethnic group is or was dominant. Laundromats serve people in the neighborhood.

The presence of a number of older, apparently successful stores suggests stability. A store's age can be determined by the types of fixtures, specific signs ("Established 1960"), and inventories. The display and interior design can suggest how long the business has been there and whether it strives to stay up to date. New shops indicate change and a feeling of confidence, at least in the proprietors. A thin but varied inventory






may suggest a new business starting on a shoestring or a proprietor who is unsure of the market. A shopkeeper sitting alone in a store with an old and limited inventory may be paying very little rent or may own the building. One guesses that there is not a high demand for space in the area. One can tell whether a store is busy or not. A sign may be handmade or professionally made. It may tell that the store is one of a chain. A name can convey stability (Bank of America) or the origin of the building (Meat Market Coffee House). Even the lack of a sign is a clue. Guards at the door or grilles over the doors and windows at night signal a concern for security. Goods displayed on the street suggest the opposite. In each case the implication is fairly clear.

One type of commercial establishment that is particularly telling is a real estate office. The pictures in the windows tell what houses and stores are for sale, with prices. They sometimes display historic maps and photographs of the area. Then, too, one can ponder the meanings of the business itself—whether it has been around for a while (they like to say so, suggesting stability), or seems new or is about to go out of business.

The sizes of stores, the nature of goods or services sold, and the prices, combined with other characteristics of the surrounding area, suggest whether the shoppers are local or not. Usually, the larger the store, the more people are needed to support it, and therefore the less likely it is to serve the neighborhood primarily. The more specialized the goods or service (a Rolls Royce showroom, for example) and the higher the prices, then the wider the area served. A single store selling expensive, high-fashion dresses may serve a local market if it is one of a kind in a small commercial area. In all of these cases, the larger context is more useful in gaining an understanding of the dynamics of the area.

Commercial Streets

Stores and services are not usually alone in an area. In older communities stores are usually clustered on one or more commercial streets. At the street scale one looks for variety in types of stores or services, local or

broader orientation, size of store, and the orientation of entrances; the condition and maintenance of the street, the number of people, availability of parking, access, and the nature of public improvements. It is at the street scale that change is most easily seen.

The variety of stores simply indicates the kinds of the people and activities being served and to some extent whether it is a local or nonlocal market. Local, of course, can mean whatever the observer decides: the immediately surrounding neighborhood as opposed to the city, or the city as opposed to the metropolitan area, and so on. By local, I mean the immediately surrounding area. The local or nonlocal orientation of a shopping area is not always clear. Some shops may serve people from both near and far. Nonetheless, the mix of stores and the dominance of one type is usually observable.

If the stores and services of a commercial street serve the local area, their nature can be a clue to the kinds of people living nearby. Stores with ethnic names and signs in different languages obviously suggest the ethnicity of the surrounding population. If all of the stores sell the same quality of merchandise, then the population is probably quite homogeneous in income. Price-level variation among the same types of stores, say inexpensive and high-priced groceries, suggest a mix of residents, particularly if both types have been there for a while.

One usually has a sense of the area's quality of maintenance, though it is sometimes difficult to pinpoint. In Copenhagen the quality and type of goods sold at one end of the Strøget (the main shopping street) is different from that at the other end, and the quality of store and building maintenance is also different. Generally, the physical quality of the stores differs from one shopping street to another. The differences suggest something about the economic status of the areas and, by extension, of the people they serve.

The number of people and the amount of car and bus traffic indicate how busy the shopping area is and perhaps also how well it is doing; the more people, the better business is.

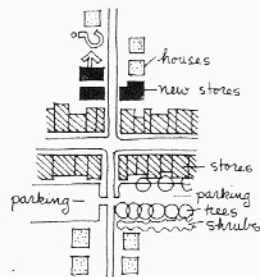


A city-owned, public, off-street parking lot in an older shopping area may have been created to meet changing shopping habits—and perhaps a decrease in transit ridership—and to remain competitive with newer shopping centers. Its presence may also reflect the political strength of a local merchants' association, which was able to convince the city to develop the lot.

Areawide street improvements, such as planters, banners, coordinated sign designs, and ornamental lighting may represent action by a merchants' group or by the city. In any case, they represent special efforts to improve or maintain business, perhaps in response to a perceived decline.

Indications of change, often readily apparent, give information about the surrounding area as well as about the commercial area itself. New stores in a context of older ones might indicate neighborhood pressure to upgrade and possibly a new population group (younger, higher-income) moving in. A few older, marginal stores among many new ones might mean some favorable leases still in effect, but perhaps not for long. The message of recent vacancies is clear: business has left and, depending on how many have left and how recently, the implications for those remaining may be ominous. Changes from one type of tenant to another, upward or downward on the economic scale, tell of the markets for space and for shoppers. Public offices or social institutions occupying former storefronts usually mean the shopping area is declining.

Clues about expansion are often found at the edges of commercial areas. New stores or off-street parking along the side streets of a commercial area and in the adjacent residential area are a sign of expanding commercial use and perhaps also a signal that the housing may be vulnerable to change. On a side street a house immediately adjacent to a shopping street is often a less desirable residence than one farther up the street. The condition of such houses may suggest their relative desirability, and the demand for housing. The architectural attention to the edges of commercial areas and to parking lots can suggest how much the merchants care



about their relationship to abutting property owners, as well as the relative political strengths of the two interests.

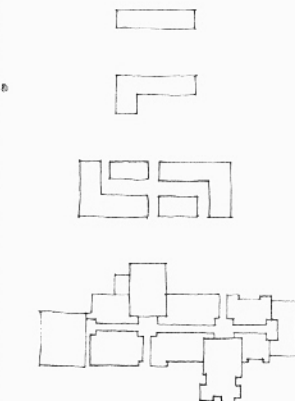
Commercial Centers

Any number of common terms are used to refer to types of commercial centers: neighborhood or regional center, mall, strip, enclosed mall. The different terms usually have more to do with the size of the market served than with anything else. A convenience center is usually small and provides a limited selection of goods and services—a grocery store, laundromat, and bank, say—to the immediate neighborhood. A regional center serves a wider market.

Most commercial centers are conceived and developed as a unit, usually with a parking area that serves all the stores. Design elements—building materials, signs, colors, trim details—are much more uniform than on commercial streets, a uniformity enforced by centralized ownership and management. The control may extend to the hours that stores are open, and the design of individual stores and window displays.¹³ Indeed, if one sees such a center where design and maintenance uniformity are no longer in effect, it may be a clue that the central management has not been able to enforce its standards, a result of less than optimum financial clout. It is afraid of losing tenants.

Highway Strips

A strip—commercial development with off-street parking in front or rear along a wide, fast-moving traffic artery—usually stands alone, a divider between residential areas on either side: it is an edge, not a center. Strips have been characterized as transitional areas, where a business can set up easily, sell goods easily, often to people on the move, and, if necessary, move out quickly.¹⁴ That characterization may be extreme, but the types of stores on a strip, their ages, and quality will reveal as much. If the area is dominantly utilitarian (auto sales, gas stations), if the people on either side of the strip are unlikely to know each other, and if few residents value the businesses, it may



be a sign that it is easy to effect public or private change in the area. A street widening, for example, would be more easily achieved.

A commercial establishment standing alone raises questions. Why is it there? A single furniture store on a street amid buildings of a totally different nature may be there because an entrepreneur believes the location will be good for business. Or it could mean something more. Depending on the age and type of building, such a use can signify an older, now abandoned transportation route (the marginal motel on a bypassed main street). Or the builder may have anticipated that the area would develop rapidly, but it never did. The use that stands alone makes us ask why. The answers, even tentative ones, help us create hypotheses about the history and evolution of the area.

Downtowns

Downtowns are a special category, but the same indicators apply. We expect a central business area to serve a larger than local population, and we look for clues to the nature and economic stability of a wider area.

Some uses that one often finds in downtown areas are corporate offices, large older department stores, hotels, perhaps the best jewelry store in town, and certain government offices, such as the court or city hall.¹⁵ The existence of these uses, the amount of activity associated with them, and the condition of the buildings tell something of the importance and the economy of downtown in the larger area. Other key indicators are the size of the downtown area; the variety of uses; building types, designs, condition, and age; the level of maintenance of public areas; the amount of new construction or renovation of old buildings; the number of people using the downtown, particularly the shopping area; and the nature and use of the transportation system.

Downtown edges can be particularly telling for signs of change: new construction or renovation pushing outward from the area, or vacancies and marginal uses suggesting contraction. The height of existing buildings may also delineate an edge, often one at which there are pressures for change.



Because a downtown is a center by definition, we expect traffic to be concentrated there, particularly public transit. So we look to see whether there is public transit, and if so, what kind. Studies have been done of the kinds of office-commercial concentrations and of the location and density of residential areas that are likely to be able to support public transit.¹⁶ The kinds of transit—buses, subways, both, or neither—and the presence or absence of posted schedules and routes tell us how important downtown is as well something about the outlying residential areas. If there is a subway station for outbound trains, many people must live in the outlying area who come downtown to shop or work. If the only public transit is buses on limited schedules, we can guess that the residential area is low-density and dispersed and that the downtown is not very concentrated.

The type of transit may indicate a community's feelings about what the downtown should be (strong, city-centered) as well as what the outlying areas are like (compact, land-conserving). Many cities, including Calgary, Toronto, San Francisco, and San Diego, have built rapid transit systems, at least in part to achieve those kinds of development patterns. Increasingly, the health of public transit is an indicator of public will rather than of private market forces.

Street widths, amount of auto traffic, and provision of off-street parking go with transit as indicators; more auto-oriented facilities may mean less public transit. Large areas of ground-level off-street parking, particularly with wide or widened streets and older buildings, usually mean a change from an earlier, more intense downtown, now supplanted by outlying shopping centers and office parks. The off-street parking where buildings once stood may be an interim use, waiting to be developed.

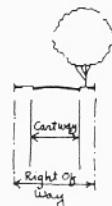
The Public Environment

As much as 30 percent of the developed land in urban areas is used for public streets and walks. That public space is full of indicators of historical development, changes, values, and issues.



Street Names

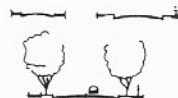
Communities name and number their streets so that people can locate each other with relative ease. Numbered streets indicate the distance from some starting point, usually a center. Numbered streets can tell of unfulfilled expectations too, like a 243rd Street that exists only as a name or that has a wilderness between it and a real 71st Street. Front Street is likely to be along a waterfront or a former waterfront that has been filled; Main Street was intended to be just that; Bay Street once ran along the bay or led to it. (But be cautious about reading too much into Grandview Avenue or Shiplane Mews in the suburbs, or even Riverside Boulevard if the river is not there.) Street names may tell of local events and heroes; in Rome the street signs have captions to explain what the person did to be so honored.



Street Widths

Street rights of way and their cartways (the distance between curbs, where curbs exist), are of different widths. Generally, older streets are narrower than newer ones. Generally, too, the width of the right of way reflects the relative value of the land when it was laid out, as well as reflecting community standards then and the anticipated importance of the street. The street may have been built wide enough to accommodate fire engines, permit a horse and carriage to turn around, or to permit two lanes of traffic with curb parking. When streets are wide and there is little traffic, it is worth asking why. What was the expectation for this street? Was the width a standard, a reflection of history, a sense of values?

Obviously, an unpaved street indicates little wheeled traffic, and generally the higher the quality of the paving, the more likelihood of heavy use. The use of curbs to separate the roadway from the rest of the right of way is usually another sign of the community's desire to accommodate traffic. The designs of the roadway can also indicate a desire for a special character, as shown by wide, planted median strips, or designs



associated with country lanes, with neither curbs nor walks. Street design may also reflect an analysis of and concern for a special problem, such as slowing traffic or keeping through traffic away from local streets.¹⁷

Change in street layouts are usually observable, even after considerable time has passed: one stretch of right of way is wider than the rest, sidewalks are suddenly narrower, trees are new or have been cut down, the paving becomes narrower, a crack in the street indicates where curbs once were, a traffic barrier exists that is not common to other streets. Those changes tell of solutions to problems and the values prevailing at the time the changes were made. One can recognize present or upcoming problems, for example, in heavy traffic on a two-lane residential street or in a temporary traffic diverter that shows signs of abuse.

Sidewalks

In some communities the streets are lined with houses on fifty-foot lots, but there are no sidewalks. That may have been a decision by the designer of the area, the housing developer, or the community to achieve some preconceived image of a desired environment. Or the neighborhood may have wanted sidewalks but did not have enough clout to get them. In some suburban areas sidewalks start and stop abruptly, for no apparent reason and without relation to the age of development. That can be because of area annexation patterns and timing: the streets without walks were developed before those areas were annexed to the city, when there were no sidewalk requirements. Sidewalks are usually built to community standards. A close look at them can sometimes reveal when the area was developed, or when improvements were made, or an earlier public works program, such as those of the 1930s that left dates in the walks. Contractors used nameplates to stamp their name and often the date in their work, but this is done less often now. In the 1970s and 1980s, new sidewalks and paving in an older area, particularly if accompanied by extensive property rehabilitation, is one indication of a publicly sponsored improvement program.

Sidewalk materials can also be telling. Concrete and asphalt are the most common materials in the United States. The use of brick or tile or an unusual design reflects an attempt to gain attention or to denote public pride.

Curbs

Curbs are used to delineate the uses within the public right of way and to channel water for drainage. The absence of curbs may mean that those functions are not required or that the community wants to maintain a less urban character. In American cities the age of curbing is usually apparent in the color and freshness and in signs of aging, such as cracks and settling. Granite used to be the standard curbing material, but these days less expensive materials, such as concrete, sometimes with a metal edge, or asphalt, are used. Granite curbing is used only for high-status projects. New curbs may have been installed because of a public improvement program, perhaps for new utility lines.

Street Trees

The story persists that San Francisco had very few street trees until Russian Premier Khrushchev visited and commented on that fact. Then, the story goes, the city started a tree planting program. In some city areas residents have displayed an active dislike of and resistance to the planting of street trees because they are messy, drop sap on cars, and require care. But a lack of street trees does not necessarily mean that the residents dislike them. Among the many possible explanations, such as disease, is the simple one that nobody thought of them.

If the trees on a street are all of one type and size, they were probably planted when the street was first developed. If they look younger than the houses, they may have been planted as part of a public project at a later time. If the trees are of different ages and species, people may have planted them individually over time. If they are all the same age but different types, then maybe the initial idea was collective but there were differences of opinion about the most appropriate type.



Or, one person could have started planting and the idea then spread. The trees themselves may grow at different rates and may look old or young depending on climate and care variables.

Street trees often fall victim to street widening. That may be obvious if the trees were removed only on one side or not continuously. We can tell how much the residents value trees when a street has been widened and the trees kept, even in the middle of the street, as is often the case in European cities.

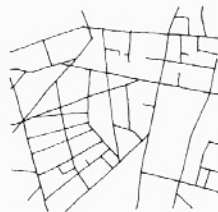
Maintenance

The maintenance of public ways is usually a public job, though residents and merchants are often responsible for keeping sidewalks maintained. In most societies there is some expectation that the public ways should be clean and in good condition. When that expectation is not met, or if it is obviously surpassed, then questions form in the observer's mind. Is the refuse on the street a consequence of the time of day or week? Are all the streets in San Jose this clean, or only the ones in Naglee Park? Is there a direct relationship between the condition of the streets and the size and quality of the homes? If so, what does that say about who has influence? Is there a relationship between the number of potholes and amount of refuse and the city's financial situation?

Pavement cracks can tell another story, particularly if they are continuous and fairly straight. Such cracks tend to return in spite of repairs, because the foundations of the street on one side of the crack are different from those on the other side, representing different periods of construction. Settling takes place unevenly, causing the cracks. Being aware of them, one can tell of earlier changes, particularly street widenings.

Street Patterns and Layouts

If you go to a part of a city where the streets are narrow, close together, and irregular, you are probably in the oldest section. Try an area where the streets curve gently but regularly, and there is a good chance that it was developed after the turn of the century. A less

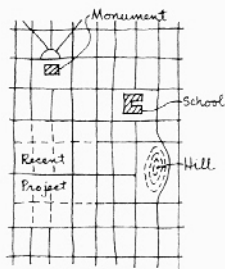
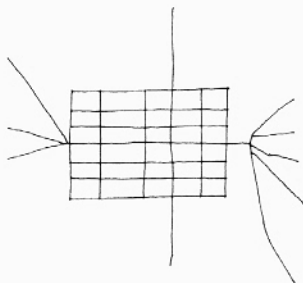


formal street pattern, with intersections farther apart, and more cul de sac streets, is further from the center and was developed more recently. Once set, street patterns tend to persist or to at least leave reminders of their presence. Street patterns and lot layouts provide clues to the area's history, the pace of development, major events, and public projects. Useful distinctions in looking at street patterns are regularity, scale and size of blocks, and breaks, seams, or cuts in a pattern.

Regular and Irregular Patterns

Streets in a regular pattern were laid out deliberately by a developer or the community. It is helpful to know the types of layouts associated with different times and places as well as the subtleties within eras. Most early European cities, for example, had walls, and the major roads usually fanned out from the city gates in radial patterns. In older American towns, radial road patterns are common. Such a road is probably from the nineteenth century or earlier, and the development along it has had an extensive history. Irregular street patterns imply that the area has developed incrementally, without conscious plan, in response to various forces and events.

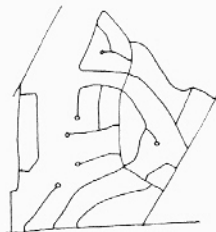
A regular street system overlying or cutting through other patterns is usually the result of a major public project, perhaps an attempt to bring order to a less orderly system, almost always to improve transportation. The Paris boulevards of the 1800s may be the best known of many examples. Deviations within an otherwise regular pattern invite one to look for reasons: an institution or building that was important enough to cause the street to be rerouted; an obstructing topographic feature to be accommodated; a recent development that either closed streets or caused them to be rerouted. Alternatively, areas of irregular road patterns within a larger, more regular pattern may indicate older settlements, perhaps independent communities at one time, that have become part of a growing metropolis. Up until the late 1960s in the United States, irregular street patterns, especially with small blocks and many small buildings, were thought to be inefficient and



Breaks in A Pattern.

associated with slum conditions. Such patterns were considered reason enough for public acquisition and demolition of the area.

The curvilinear street patterns commonly found in suburban developments built after World War II were first used in the late 1800s. To be sure of the period when an area was developed, one must look for other clues, such as the age and style of buildings, location in the region, and street widths. Alternatively, an irregular and curved street pattern may have been topographically determined.



Scale and Size of Blocks

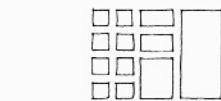
Areas of small blocks are usually older than areas of large blocks, except in large industrial areas or where a special use occupied a large land holding at an early time. Large blocks, now believed to be a more efficient use of land, have been a part of land assembly practices by large public and private developers. They are believed to provide a scale and pace consistent with the automobile, because fewer intersections permit greater speed, and with fewer streets, they are less costly to build and maintain.

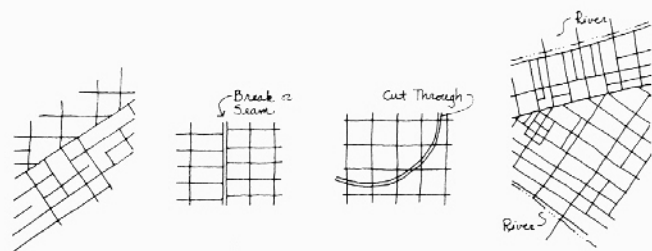
Larger blocks within a smaller block pattern then may suggest recent development in an older framework. A public role in the development is a strong possibility because the city would have had to relinquish older streets to achieve the new pattern. Also the city government may have used its powers of eminent domain to assemble the land.

Breaks, Seams, and Cut-Throughs

Few cities have only a single street pattern; most have at least two main patterns and many variations. The breaks, or seams, where two patterns come together, or where a boulevard or freeway cuts through an otherwise continuous street pattern, are worth studying.

Usually, areas with different patterns were developed at different times. The place where two patterns come together can be where two separate communities or developments merged, but more often the break or seam represents a change in community policy resulting

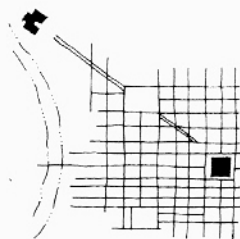




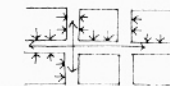
from a change in physical orientation (say from one river to another), a change in design style (rectangular to curvilinear) or a change in standards (small to large blocks). A cut through a pattern may have been there in the first place—a stream, a railroad line—and ignored in the initial street layout.

The places where two or more street patterns come together often are centers of activity, places of exchange, focal points. Times Square in New York comes immediately to mind. One's view is stopped by buildings along such seams, calling attention to the break. Buildings have to be accommodated to odd-shaped parcels, and the resulting differences are likely to be eye-catching. The purpose of a boulevard that cuts through an underlying pattern may have been to focus new development on the boulevard or its end points.

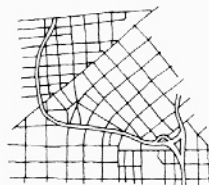
Breaks that separate areas of different activities often feel like no man's lands, areas of transition or division. Market Street in downtown San Francisco has for years been a dividing line between more and less desirable sections, a barrier that is being overcome only by an extraordinarily strong demand for offices, plus major public construction and changes in zoning policies. There is often a transition area between the downtown and areas developed later, as in Pittsburgh between the Golden Triangle and the Hill, in San Francisco between downtown and the Mission District, and in many cities where rail lines create divisions.



Not only is Market Street wider than the others, the block sizes on either side are significantly different. North of Market the small, squarish blocks have a neutral orientation.



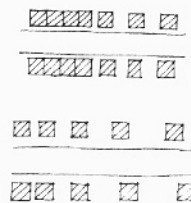
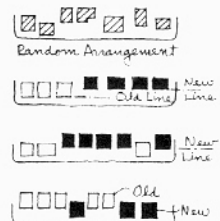
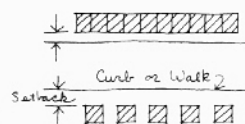
The larger blocks south of Market are more amenable to larger buildings and have a stronger orientation to the main street which do not lead to Market St.



No man's lands, which by definition are the least well known, are vulnerable to change, particularly to major public developments, such as a freeway or other transportation line. If a change of that nature has already taken place, a look under or around it will tell whether the area is still a no man's land. New construction in out-of-the-way areas may reflect strong pressure for development. Where land is plentiful and demand light, no one will invest in the areas along seams. In most cases it takes a major private or public effort to overcome the poor image of a no man's land.

Building Arrangement

This term refers to the physical relationship of buildings to each other and to the street, the approaches and entry paths to buildings, and the ways in which buildings delineate spaces. To a considerable extent these matters concern the transition from public to semipublic and private areas. Building arrangement can be an indicator of community values and concerns as translated first into government regulations and then into physical realities. It can also be one indicator of the likelihood or extent of neighboring and community cohesiveness and organization. In considering building arrangement as an indicator of values or of the extent of communication among people, it is necessary to step gingerly. So many variables affect both values and communication.¹⁸



Buildings usually line up along a street; that is, they are set back a uniform distance from the pavement or sidewalk. Generally, the setback is greater on newer streets, at least in the United States, though there are important exceptions. Setback distance can reflect common practice or can be mandated by city regulation. Communities have been concerned with setbacks from the street at least since medieval times, sometimes for reasons of health (light, air, quiet) but often for purely aesthetic reasons. Health may have been the initial reason for setback regulations in the United States, but in recent years functional concerns, such as the possibility that the street will have to be widened—combined with cultural and design concerns have been the determining factors. In America a deeper setback is usually associated with a higher standard of living. Also, once a minimum setback line has been established, few buildings are placed further back. Because of these conditions, one can expect the following. A random building arrangement reflects a lack of regulation and probably a number of builder-developers; greater uniform setbacks are more recent than lesser setbacks; one or two buildings set closer to the street than the others in a line probably were built earlier; if they are new, however, they reflect either a recently changed regulation (attended by community concern) or the breaking of an unregulated norm (the community may then regulate to keep others from doing the same).

Breaks from the established pattern of back or side yard building setbacks also indicate that this problem has been a community issue. We tend to think of larger yards as "better."

I hypothesize that the farther removed from the street a building is either by distance or other barrier, the less likely that the residents or business are closely associated with the street and with day-to-day public life. In other words, the orientation of a house removed from the street is inward and self-contained. The closer buildings are to each other, the more likelihood there is of eye contact between their occupants. People who see each other often, I think, know more about each other. Clearly, then, the location of entries, windows,

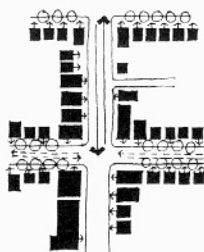
and walkways increases or decreases the possibilities of contact between neighbors. I hypothesize that building arrangement can determine the likelihood of people in them knowing each other (or the ease of getting to know each other).

Further, people living in close contact are more likely to form community associations and to respond to issues that may be of concern to all. Intervening variables, especially people's individual interests and needs, may be so important as to make building arrangement inconsequential. But if one observes several indicators, for example, deep setbacks, heavy traffic on the street, and entryways that do not encourage visual contact, then one could confidently predict that the neighbors know little about each other.

On a stretch of 24th Street in San Francisco, one observes that the houses are not arranged in a way that allows neighbors to see and talk to each other. It is hard to pinpoint why, but it may be because the doorways are isolated and the sidewalks narrower than on other blocks (rear yard arrangements, however, might facilitate meetings). Also the traffic is faster here than on the intersecting streets, and the houses are on the short ends of blocks, so there are fewer per block. The intersecting streets have many more trees, which make them seem narrower than 24th. It seems likely that people living on this stretch of 24th do not know each other and that community participation in local issues is not strong.

Topography

Those who live at higher elevations in a city usually have higher incomes than residents at lower elevations. Field experience in the 1980s suggests that Hans Blumenfeld's 1948 study of this phenomenon remains valid. There has not been any more recent work to confirm this.¹⁹ The usual explanations for the correlation of elevation and income are that high locations are the most strategic and safe, are more costly to develop, and have the best views, most varied topography, and perhaps the best climate. However, the many exceptions to the rule demand explanations. Why might





lower-income people be living on the hills in one city? An undesirable neighbor, such as a factory that gives off smoke or noise may have made the higher elevation undesirable for higher-income people but not for those who work close by. The hill may have been relatively inaccessible in the past, and if the wealthier residents found more easily developed sites, the poorer residents may have been able to afford to build at the higher location. Blind land subdivision, done in a law office without benefit of (or care for) topographic data, with streets that could not be built on the hills, may have kept the land inaccessible and off the general market. In San Francisco the Bernal Heights, Potrero Hill, and Diamond Heights areas and in Pittsburgh the lower and upper Hill districts can be explained this way.

Alternatively, a lower-income development at a higher elevation may have been built through public action, either at a time when the location was considered undesirable, or, as in the case of Diamond Heights, as a conscious effort to build an economically integrated community. Lower-income developments at locations that are otherwise desirable for topographic and other reasons are vulnerable to development pressures. In Rio de Janeiro some of the favelas may be cases in point, because the land is now more desirable, and on Telegraph Hill in San Francisco, higher-income people have moved in and taken over a formerly middle-income area.

Other natural factors that help one understand urban areas include sunlight (generally preferable to shade in temperate climates and avoided in others), noxious odors (to be avoided), and pleasant breezes. Geologic and soil characteristics suggest why some areas have not been built up. A river or other water source may have been the reason for the city's existence in the first place, and its major activities may be on the riverbanks. All these factors can be critical to the understanding we seek.

Location within the Urban Area

Sometimes it is easy to sense where one is in relation to a large urban area: walking along a route that leads from town, just outside of the downtown area or at the

fringe of an urban area. Location is important, for it gives us some idea of what to expect. Generally in the United States population densities decrease as one goes away from the center of the metropolitan area.²⁰ If this is not the case, one should look for explanations, such as a smaller, once independent center that has been surrounded by outward development from the central city or from a nearby employment center. The higher-density area may be simply a small concentration of housing within a larger open area, masking an overall low-density pattern. In American cities poor people are more likely to live near the center, and middle- and upper-income people farther out; in most European and South American countries the pattern is the opposite. Again, knowing and expecting those patterns to prevail helps us understand when they do prevail and alerts us to look for special circumstance when they do not.

Location involves more specific expectations. Many railroad stations and yards, which were built near the centers of American cities, have fallen into disuse since World War II. If the demand for development is strong, the stations and yards are prime sites for alternative uses. Because of the large amount of land, a new development will have a major impact on the surrounding area. Many entrepreneurs will be interested.

Other activities have changed their locations—the wholesale food markets have moved to the outskirts of cities along with other truck distribution centers—and still others can be expected to generate demands in the future, such as tourist and convention centers. Communities whose location and development are dependent upon cheap transportation and energy costs are likely to feel pressures for changes in services and lifestyles if those costs rise sufficiently. Those communities could become less desirable. Location, then, is not only an indicator of what is normal in an urban area; it can also suggest issues that will arise in the future.

Conclusions

One could extend this list of observable physical indicators almost indefinitely. I have tried to discuss the

clues that are most often used to raise the questions we need to answer.

If I were to add a tool at this point, it would be *maps*, which make the connection between "reality" and abstraction, including all the information that comes with nonvisual analytic methods. I always have a map in my mind, but there is nothing quite like the kind you can hold in your hand—whether it's a street map purchased at a gas station or a detailed map showing buildings and topography—to confirm street patterns, breaks, edges, locations, transportation routes, relationships among areas, and much more.

Many of the clues I have mentioned relate to economic status or economic forces. A general conclusion is that people's economic status is likely to be observable in their physical surroundings. Peirce F. Lewis's axiom that nearly all items in the human landscape reflect culture certainly applies to the economic culture.²¹ In urban areas those who are less well off in income or wealth occupy the less "good" physical situations in terms of size, condition, maintenance, and location. It is important, however, to know something of the geographic (cultural-locational) context to make the most meaningful interpretations of the clues.²² The less good the physical surroundings, in terms of the community standard or norm, the poorer the people who live in, work in, and frequent the area. The opposite—better surroundings, greater wealth—seems also true.

If we stopped to listen to our daily conversations, we might be surprised at how often we use words like *nice*, *large*, *small*, *good*, and *bad*. First observations in an urban area often use phrases like: "These are large houses" or "There is a lot of traffic and noise here" or "These buildings are in bad condition." The imprecisions of these words may be a result of observing many things simultaneously; they are short-cut conclusions. Regardless, all of the words reflect a value or bias of the observer.

To the extent that big-small, good-bad adjectives reflect personal standards—and may therefore mean something entirely different to another observer—it is particularly important to ask what the descriptions

mean. What do I mean by "in poor condition" or "small units"? Many of the words have to do with sizes and amounts—widths of buildings or streets, amounts of traffic and people, costs of houses or cars. Other words refer to frequency—how often do we see "For Sale" signs, how often do we see that type of store. Many frequencies are quickly measurable in the field, and by measuring the sizes of buildings or land parcels or the widths of streets, by counting cars and people and doorbells, we define what we mean by "big." We can compare what we find not only with our personal knowledge but with other norms and standards as well. In short, we must try to step outside our personal standards or biases by being aware of the terms we use, by measuring, counting, and specifying, and by comparing observations. To be sure, our values prevent us from seeing some elements, let alone measuring them. There is no getting around that problem, but we can work to be more aware of what we are doing.

What one sees can be compared to a codified community standard. As I have noted, all nations, states, and communities have standards for what is built, usually aimed at upholding the health and welfare of the community. In one sense the standards represent the values, even biases, of the community. They usually take the form of laws or regulations concerning such matters as structural elements, light and air in rooms, room sizes, number of people per room, lane widths of streets. If we know something of those standards, we can compare them to what is seen, we can say consciously that what we are seeing is above, below, or the same as a known standard. In the Chinatown area of San Francisco, we may see an upper-floor living unit that is 10 by 12 feet.²³ We know that units this small would not be allowed today, so we can rightly call them small. It is then reasonable to take the next step and hypothesize that by the standards of the community there is a crowding problem, and that the community may decide to do something about it.

Many building standards, especially those for space, go well beyond demonstrable requirements of health and safety. In some ways, by comparing our vague

adjectives with codified standards we are trading our own biases for those of the community.²⁴ Nonetheless, having started to question what we see and the descriptive terms we use, we should continue that questioning in field observation, particularly if the standards are likely to be the basis for some future action for change. It makes some sense to ask if what we see, regardless of its size or quality, is dangerous or inimicable to life. Usually it is not.

Modifying words such as *likely*, *suggests*, *probably*, and *might* appear over and over in discussing the clues and their meanings. Those words reflect the reality of this kind of analysis. We are not looking for data that can be manipulated and arranged so that all the parts add up to 100. We are looking for understanding.

If there are no studies that interpret what is seen, the clues are the only basis for hypotheses as to the meaning of what is observed. When one observes small houses, one guesses that they were built for modest- or low-income people. In the absence (unlikely) of any other clues to confirm or modify that hypothesis, one would assume that the present occupants are also low-income. Seeing a lot of refuse in a street generates a number of possible hypotheses, among them that the street cleaners have not yet worked there that day or that week; because of a financial crisis the city has curtailed this public service; the neighborhood has little influence in city hall; clean streets are not important to the people of this area or to the people of this city. Other clues, such as signs saying that the street will be cleaned on Friday (and we are seeing them on Thursday), or refuse-strewn streets all over the city, or dirty streets only in low-income areas, would help narrow the range of hypotheses and ultimately the conclusions. The relative cleanness of the street would be used in helping to deal with other subjects. It is easy to see that an indicator may have numerous meanings in combination with all the other clues. The message is clear: to be open to many possible meanings of specific indicators, except in those situations where the meanings are precise.

The lack of accumulated knowledge about cities seems to be one major difference between the kind of observation and diagnosis discussed here and that of other, more "scientific" pursuits. For example, much more is known of body chemistry, human physical structure, and biological systems than is known of urban chemistry, urban structure, and urban systems. I doubt if urban clues ever can be as precise or their meanings so well known as clues in other fields of inquiry.

This exercise of looking at clues and pondering their meanings is not strictly analogous to Hercule Poirot-type detective work, where the objective is to find how a particular antisocial act came to happen and who was responsible, using a much more limited set of clues. But there are important similarities. As in medical diagnosis and criminal detective work, in urban diagnosis the observer looks for patterns, breaks in the patterns, and deviations from the norms. Perceiving new or foreign elements in a field, one asks why and how and what are the meanings? The similarity to detective work may lie in openness to seeing relationships and in a questioning way of thinking. The clues are the critical starting point.