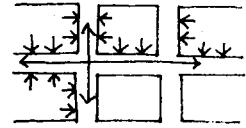
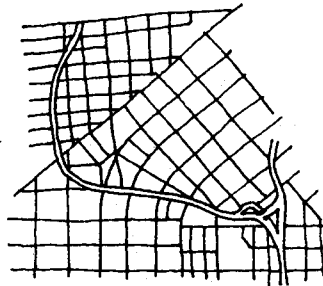
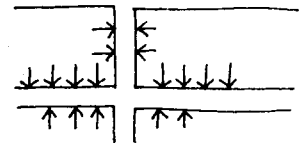


Not only is Market Street wider than the others, the block sizes on either side are significantly different. North of Market the small, squarish blocks have a neutral orientation.



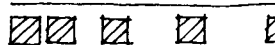
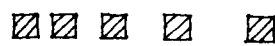
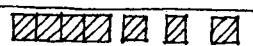
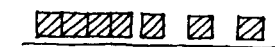
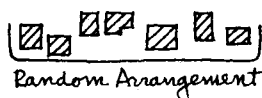
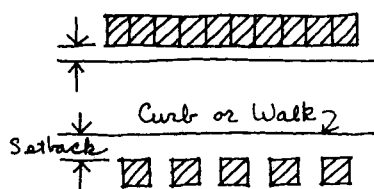
The larger South of Market blocks are more amenable to larger buildings and have a stronger orientation to the main streets which do not lead to Market St.



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).

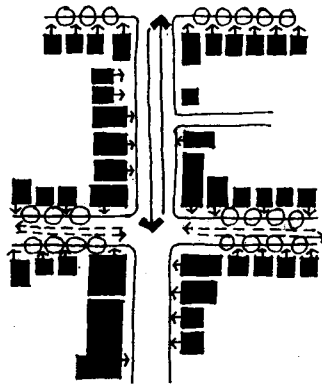
Breaks from the established pattern of back or side yard building setbacks also indicate that this problem has been a community issue. We tend to think of larger yards as "better."

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).

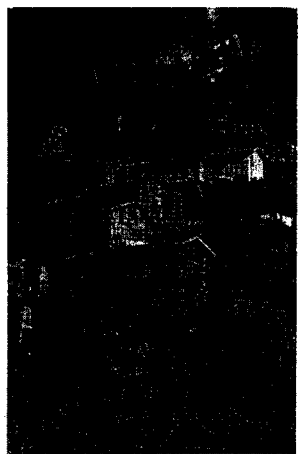
Further, people living in close contact are more likely to form community associations and to respond to issues that may be of concern to all. Intervening variables, especially people's individual interests and needs, may be so important as to make building arrangement inconsequential. But if one observes 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

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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.

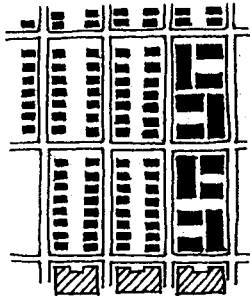
5 Seeing Change

The physical, social, and economic fabric of cities changes continually, in ways that are often interrelated. When something new happens in a city, the residents and their representatives, including city planners, respond. People flock to meetings of the city council or the planning commission to find out how the changes will affect them or to report that they are being affected. Residents may be alarmed about a new housing development on vacant land because they did not anticipate it or because the housing is different from theirs. If a neighborhood has found that traffic has gotten heavier, the residents will want something done about the safety problems. When large old houses, like those in Cincinnati, change to other uses, neighbors became aware of it and want to know what it portends. If a local shopping area or even a whole downtown loses business over time, the merchants become worried, but they may not act in time to save the situation.

To be aware that change is happening, that it will happen, or even that it is unlikely is the first step in responding to it, even if the response is to do nothing. Quite often observation is a faster way to become aware of change than are other research methods.

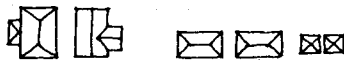
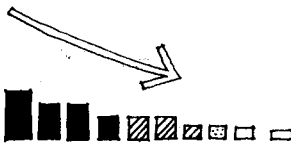
Changes between Areas

As a person walks or drives, he somehow knows when he is passing into a different area. How does he know? What was it that led walkers near a freeway, in the Hayes Valley area of San Francisco, to conclude that they were in an area of contention? Most often there is a perception of change in the people, houses, arrangement of buildings or streets, street details, traffic, or land uses—a change in the pattern of individual clues.



Most patterns are larger-scale versions of individual indicators: land uses that cover a whole area rather than a single site, many buildings of the same age, size, or arrangement, people with similar dress or physical characteristics, a uniform quality of materials and maintenance, or uniformity in public works such as walks, curbs, street widths, lights, and signs. Some characteristic of the area makes an impression, and the observer says, "This seems to be an area of 'wealth,'" or of "poverty," or of "local shops." The observer does not necessarily start out with a specific checklist of patterns to be identified; such a checklist can hamper the process of observation. The identification of a new pattern that is not on any checklist may prove the most telling.

The lack of pattern, because of a mix of uses, sizes, or people, may be significant in comparing one area with another. In American cities, areas that are physically varied are also likely to be economically and socially diverse. The contrast between regularity and irregularity—street setbacks or land uses that are all the same and then become irregular, may be a signal of change from one area to another. Sometimes the clue is a progression from one quality or size or use or even population group to another.



One sees geographic change in part by identifying patterns and being aware of where the patterns change or cease to exist, taking into consideration that patterns overlap. Good maintenance does not coincide with any particular type or size of building, for example.

Having identified a change between two areas, we begin to ask if the changes seem "normal." In a suburban community, for example, one would expect to observe a shopping center between areas of single-family detached homes; one would not expect to see a high-rise apartment building or an office development in the middle of the residential area. If the pattern or progression is not what one would expect—sharp delineations between developed and undeveloped land rather than the more normal urban sprawl into the countryside, say—one asks why and looks for explanations, perhaps a strong public policy against sprawl

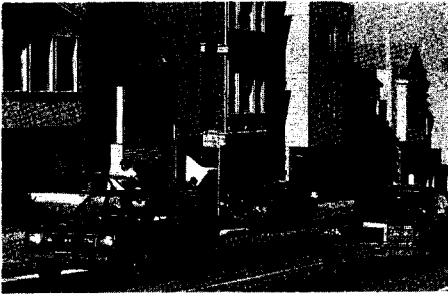
in this case. Another example would be a large tract of undeveloped land close to a city center. Maybe it is being withheld from development because of quirks of ownership or because of construction difficulties (a swamp) and will be built upon long after the outlying land is developed. Or a public program, such as urban redevelopment in the United States, which cleared large areas of many cities in recent decades, may explain the new pattern. The observer may not know enough about local history to be able to explain a pattern, and that recognition, too, is important.

Changes within an Area

Seeing change *within* an area may be different from identifying change between areas. It is more a matter of time than of scale. A change is taking place within a pattern, usually in the form of a "new" or relatively new element that is different, in substance or nature or just in its newness, from its surroundings. The features to look for are the *newness* of the clue within its context, its *nature* (such as size or quality) relative to the pattern, and its *amount*. Even if a new building is the same in design and detail as the older ones nearby, it differs because of its newness—in paint, wood, landscape, absence of weathering, or something else.

A new house that is significantly larger and made of more expensive materials than those around it, though of the same single-family type, suggests that the builder-owner either did not think about the difference in investment or concluded that the investment was safe, that the surroundings were either stable or would increase in value. If one sees a number of such houses, perhaps a new pattern, it may indicate a strong demand for expensive housing in the area. New housing with occupants along a street with heavy, fast traffic and mixed or nonresidential use, such as one finds on Valencia Street in San Francisco, suggests a strong demand for housing in the area and probably in the city as a whole. In such an environment a high vacancy rate or marginal uses would be more usual. One would not expect such investment in an environment that purchasers or renters "normally" would find less than





desirable. Nineteenth Avenue in San Francisco is another of those fast, high-volume, noisy streets where occupancy rates are high and new buildings can be seen.

New office structures may represent either abrupt change or continuation of an established pattern. In San Francisco's downtown one can see, in the relative ages of the various buildings, that office development has been continuous. In Calgary, Alberta, on the other hand, most of the new office buildings were built within the span of a few years. Look where the newest development is taking place and ask if there is a pattern to it, a direction of change. In San Francisco, the direction of new development is clearly into the area south of Market Street. But why is new office development not moving out in all directions from the old, *visible* core of Montgomery and California streets? Immediately to the west is Chinatown, small-scaled and old, and to the north the old, brick Barbary Coast area. Why hasn't the new development moved there? Have there been economic or culturally imposed constraints? It is important to deal not only with where development *is* going and why, but also with where it *is not* going.

On a smaller scale one can look for new stores—or no new stores—in an older shopping area: new signs, newly arranged and painted interiors, new fixtures, new stock. Having identified the newness, we then wonder in what other ways the store may have changed—type of goods? prices? style? Are the expected customers similar to or significantly different from those that use the older stores? Might such a change reflect a shift in the nearby population? If we saw a number of new stores within the older context, we would surely pursue the answers to these questions.

Rehabilitation can be a sign of newness. A concentration of new work on older buildings may be the result of nothing more than an astute and persuasive salesman of shingles or aluminum siding or windows. But the salesman was probably a good "reader" of the environment who understood that the buildings were ripe for rehabilitation and that the residents could be sold on his product. Or extensive new work in a neighborhood may signal some joint action, the result of a

neighborhood campaign or a public program; this is especially likely if there are new sidewalks, curbs, and lighting. Or the new work might mean new owners with larger incomes than those they have displaced.

So the nature of the newness within existing patterns can tell something of the physical and economic direction of changes. If the "newness" is actually ten or fifteen years old within a still older pattern, we might wonder when and why the changes stopped. That, in turn, might lead to asking about the direction of future change.

How Much Change Is a Lot?

Two or three new houses on a street may not represent significant change. So how much change is significant? If one knows how often urban Americans move and approximately how many dwelling units there are in a block and makes allowances for the time of year when people are most likely to move, it is not too difficult to run through the arithmetic of how many "For Rent" or "For Sale" signs constitute "a lot." One can also compare the number and size of new or recent stores and offices on a street with the total of earlier buildings and uses to gain a sense of the proportion of new to older structures. Counting is the first step in answering how much is a lot of change, after which one might move to other research methods for verification.

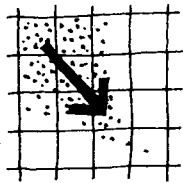
Cycles of Change

Change is to be expected. The new and the different may be explained by the relationship of the area to some cycle. After twenty or thirty years, the owners of single-family residential homes built in the 1950s might be ready to move. Their families have grown up, or the housing requires major maintenance. So population shifts can be expected in the area. Ethnic areas, especially of immigrants, tend to change as their populations age and/or become assimilated. Industrial areas change, and buildings may become obsolete as technologies and products change. Warehouses are more adaptable to changes than buildings that house heavy industry. There appear to be cycles of office develop-

ment and maturation as well. The cycles are not precise, and for older areas with mixed populations, the dynamics are muddy. Just being aware of such cycles can help explain the changes in an area.

Directions of Change

Walking along a street, one may start to observe a number of clues that are different from those that have been the pattern. Perhaps the people are different, or the building types and uses. The shift may not be abrupt. Is there a sense of geographical direction to the change? For example, in an area that is in the process of upgrading—expensive rehabilitation, more expensive stores, higher-income people—the clues that are new in the older pattern have their own pattern, one that suggests a geographical direction of change. It is like looking at a scatter diagram in which the elements form a pattern pointed in a particular direction or directions.

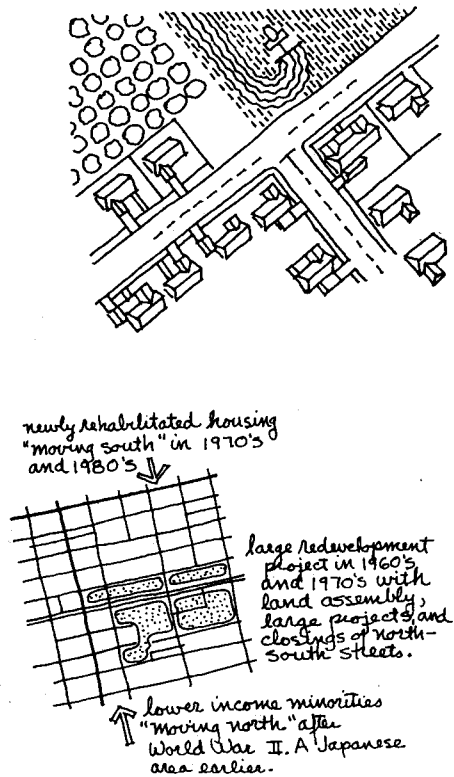


We go another step to ask: what factors can intervene to accelerate or to stop the direction and pace of observed change? A barrier can be physical, such as a wide, dividing street or a steep hill. Barriers within an area may be social, erected by residents or politicians who are determined to stop office expansion into a residential district, for example. External factors can intervene, such as a decrease in large-scale federal initiatives, as occurred with urban redevelopment. Or a change may stop because it is not consistent with economic forces in the area or the city. Triggered by observations, questioning should lead to further research that can help predict what is likely to happen.

Vulnerability

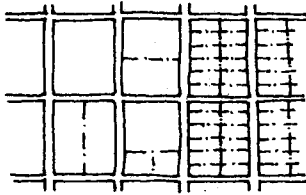
To be vulnerable is to be "capable of or susceptible to being wounded or hurt," "open to attack," or "difficult to defend." Sometimes physical clues can tell more quickly where an area is vulnerable to change than can demographic and economic statistics.

If one stands on the outskirts of an urban area with large-scale new construction on the right and farmland on the left, one reasonably concludes that the farmland



is vulnerable to development. On the southern slopes of Pacific Heights, San Francisco, the most recent rehabilitation work is in the less well maintained, minority-populated area, which is clearly vulnerable to gentrification. Similarly, in the 1940s and 1950s a lower level of maintenance in an area, along with some vacancies, "For Sale" signs, and an increasing number of poorer minority-group residents suggested vulnerability in the opposite direction. We suspect it was clues such as those that led to the massive Western Addition redevelopment projects in San Francisco—land assembly and clearance to stop a downward trend. Even though we may not feel comfortable with the actions taken, we recognize that observable clues led to these actions.

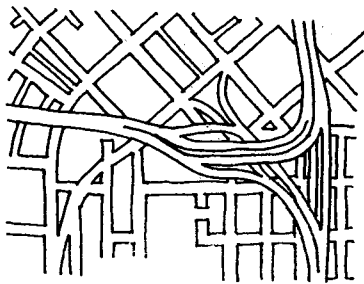
Areas in the path of perceived massive change are vulnerable, and areas that are fragile—physically, economically, or socially—are especially so. A fragile area might be one where the residents are only marginally able to maintain their properties, one where low-income residents will be the first to suffer in difficult economic times and therefore be hard put to maintain the buildings and pay the mortgages. Rapid physical deterioration is more likely if the buildings are old or in need of constant attention. Areas whose maintenance is dependent on outside subsidies such as government programs, which are vulnerable to changing political winds, are doubly vulnerable to change. In the early 1980s, we might be concerned about the future of a lower-income area like East Prescott in Oakland, which the residents have made an energetic effort to improve, but where a recently built postal service headquarters and a proposed publicly sponsored transportation center could displace some residents and make the neighborhood more vulnerable. In East Prescott, however, some clues suggest that people were organized to seek improvements through social and perhaps economic programs— notices posted of meetings, the rapid boarding up of vacant or burned properties, new walks and trees over a widespread area, of the sort that residents would be consulted on. So the area might not be as vulnerable as one would have guessed. Areas



where people are not organized or have little political power are more vulnerable.

Superficial maintenance and rehabilitation, the kind of work associated with real estate speculation, can be signs of vulnerability: cheap new materials used on surfaces without attention to leakage, or foundation problems, and other, more fundamental structural matters. Large land holdings in an area where development is already occurring are more vulnerable to rapid change than are many smaller holdings, because the decisions involve fewer people.

Residential areas with sound, easily convertible buildings, standing in the path or on the fringe of healthy, expanding commercial areas, may be vulnerable to change. Commercial tenants—lawyers, doctors, professional offices, shops—can often pay higher rents than residents. On the other hand, areas where the buildings are not as sound, where the market is thin, and where there is a new or proposed change in the traffic pattern that will increase noise or speed, are vulnerable to deterioration.



Isolated areas and those that Grady Clay calls the "seams of a city," or the no man's lands, are often subject to rapid change. Freeways and other major public works tend to be built in areas where few people live or know about, rather than where many people are active and aware. It is easier to build a major new sewage line in an industrial area than in a middle-class residential area. In San Francisco it was reasonable to expect that an overhead freeway would be built in the industrial-residential area where two distinct grid patterns come together, an area that few people can picture. In areas that people are familiar with, there would be resistance to extending the freeway. There was no resistance to a freeway in the South Bayshore area of San Francisco or to the Candlestick Park Stadium, areas that were unknown to most people.

Vulnerability to change does not mean that change will necessarily happen or, if it does, that it will be rapid. It is just as easy to mistakenly predict rapid change as to underestimate the possibility. We hear of areas that have "changed overnight," but that is not

the usual case. The signs of vulnerability had probably been visible for some time if people had cared to notice. If one makes a point of observing signs of vulnerability, then there is time to check other indicators — property values, investment patterns, demographic data, the nature and speed of surrounding development — to get a sense of the imminence of change.

Questioning Change

Another way of thinking about indicators and directions of change is as a series of questions:

- Are there patterns, and if so, what are they?
- Do the patterns fit with expected patterns and processes of urban development?
- Are there new elements that break the older patterns? What is different?
- How much is new, and does it appear to be significant?
- Does the rate of change seem fast or slow?
- What do the new elements suggest about why change is taking place? Are the changes not what one would expect in that location? Are there changes from original quality or from existing conditions that suggest vulnerability to future changes?
- Is something missing? A park? A school? A place to shop?
- What kinds of additional information would help answer the questions raised by what is seen?

I am purposely suggesting that the observer keep these kinds of questions in the back of his or her consciousness. It is not useful to look too hard for problems and for change, because one may "find" something that really doesn't exist. We want to identify *existing* and *potential* change.

6 Observing the Unknown

Three major factors have attended this consideration of field observation as a tool for people who want to understand urban environments: the degree to which personal values and experience hinder objectivity, the extent to which conclusions come from fresh observations or from previously held knowledge of particular situations, and the extent to which messages taken from an urban environment are culturally bound. Even if one can usefully learn from observation in the United States, can an American read the clues in Italy or China or South America? Here I will deal with the cultural transferability of clues and more important, the transferability of the method of inquiry and diagnosis. With some surprise and more than a little satisfaction I have concluded that it is indeed possible to tell, by looking, a great deal about even a foreign city's past, evolution, present state, and dynamics. You cannot tell as much as you can about an area closer to home, but you can tell a lot.

A brief stay in China in November 1981 was the spur to some serious thinking about whether the same methods of observational inquiry can be used in a foreign culture as in our own. The clues would be different: exterior building maintenance would be less important in India or Italy, say, than in America; dress styles might be harder to decipher; one's knowledge of social and economic history, architectural styles, government, and local issues would be incomplete.

Even in the not-so-foreign environment of Charlottesville, Virginia, I mistakenly concluded that a discontinuous street pattern suggested that the development on either side of West Main Street had occurred at different times. Later I learned that the discontinuous

pattern, common in the South, was meant to discourage black people from walking through white territory. Nonetheless, I started with a belief—a challenge really—that it would be possible to tell a great deal from visual clues.

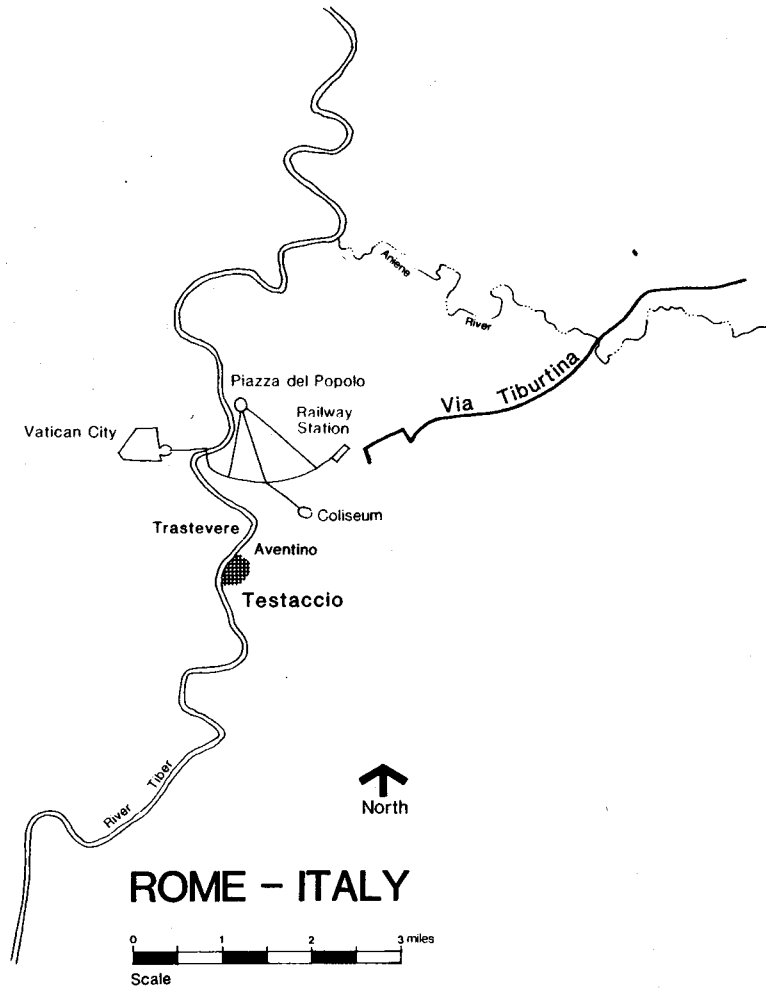
In Calcutta one sees the difference between a poor area and a rich one. People drinking brownish, obviously unfiltered water from street taps or using overflowing latrines next to water sources clearly bespeak poverty and health problems. In China or Russia one can tell old buildings from new ones and estimate the sizes of the rooms inside. The size, quality, and relative newness of different spaces might not indicate the incomes of those who live in them, but they do suggest different standards. One can tell a more expensive restaurant by its appearance in China, India, or Korea, as well as in America.

I had the opportunity to spend some months in Italy in 1982; I decided to see if this method would permit the same kinds of conclusions I reached in studies done in the United States. If nothing else, the distance from my own culture might help me determine if the conclusions I was coming to at home were sound.

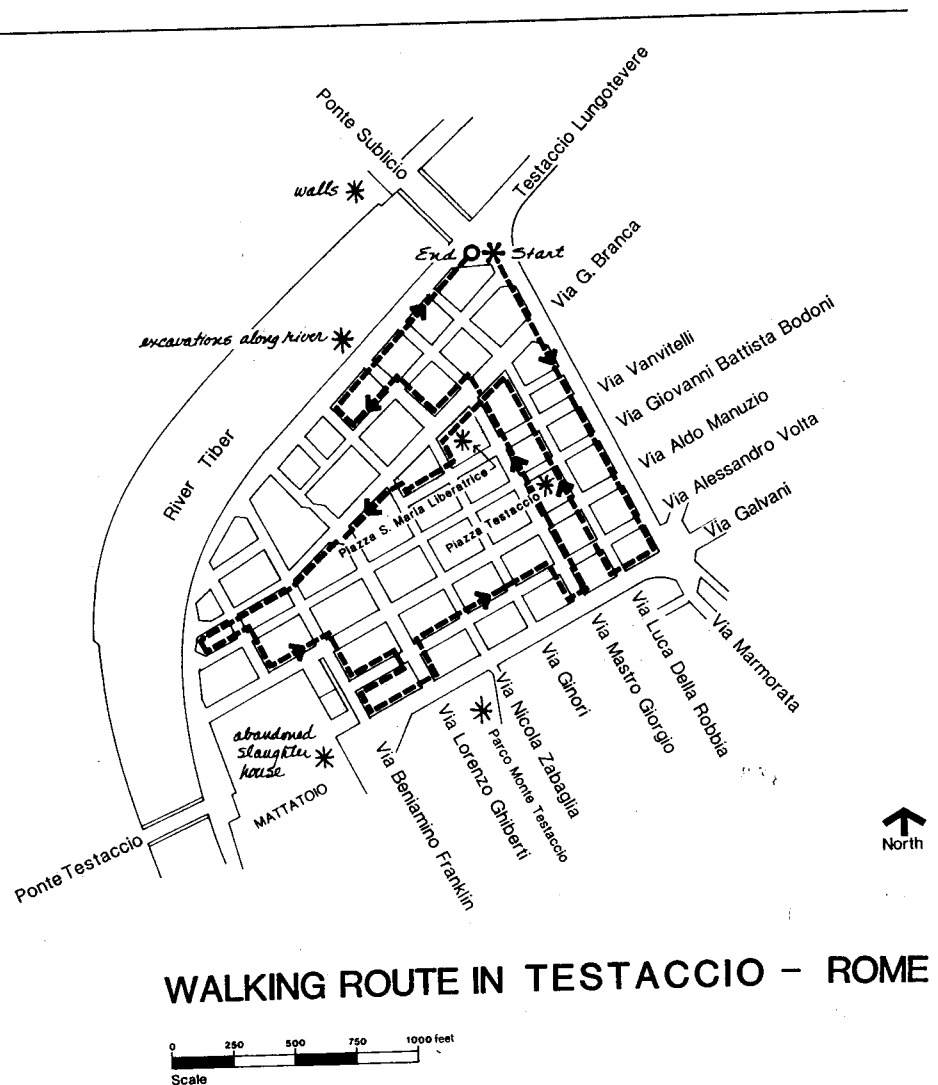
I tested this method in four areas in Italy: two neighborhoods in Rome; one in Bologna, and one in Milan. The areas, which were not familiar to me, were chosen by people who knew them, senior planning officials and a knowledgeable resident. The walks and observations in Rome were done right after I arrived, with very little specific knowledge of the city or of Italian history. By the time I went to Milan and Bologna two months later, I knew more. I spent from four to six hours walking around and observing each area. Then, as soon as possible, usually the same day, I presented my conclusions and interpretations to experts for confirmation. Later I consulted relevant documents to further verify my observations.¹

Knowing about Testaccio, Rome

Testaccio is at a bend of the Tiber River in central Rome next to the Aventino area (one of the seven hills of Rome), a mile or two from the main rail terminal, a

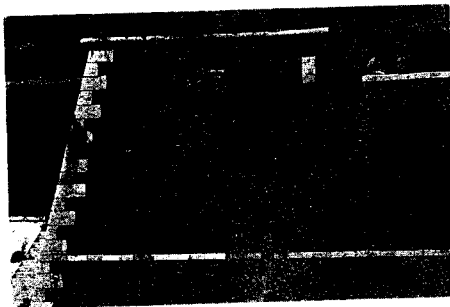


fifteen- or twenty-minute walk from the Coliseum. The area takes its name, meaning "potsherd," from a large hill that borders it to the south, composed of fragments of pots and vases. It is a built-up, central city neighborhood, reasonably well defined by the river, the hill, and a major street. It is not well known because it is somewhat off the beaten track and has no major historic buildings (by Rome's standards) or happenings within its bounds. Four- to six-story apartment buildings dating from the late 1800s line the streets, with shops at street level. There is some post-World War II



WALKING ROUTE IN TESTACCIO - ROME

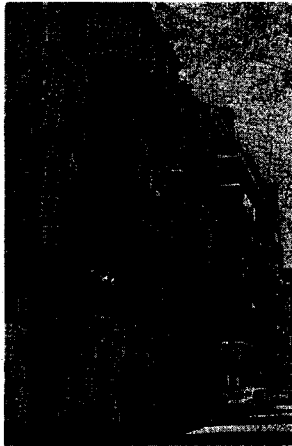
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housing, and there are markets, churches, and an open square. The streets are busy with people and cars.

A few remnants of old walls and other ruins tell of early Roman development, and other ancient walls are visible across the river. Men are working on the old brick vaults along the river, which suggests a historic preservation project. The long, thin bricks date back to the Roman empire, if my memory from school days is correct. What existed in Testaccio in the vast period between Roman times and the late 1800s, when most of the present apartments were built?

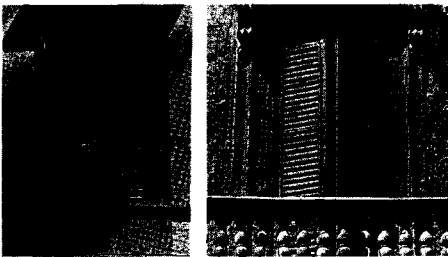
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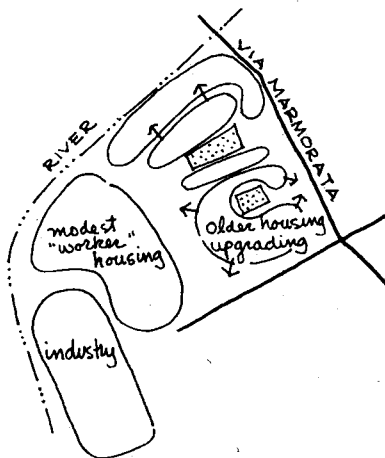
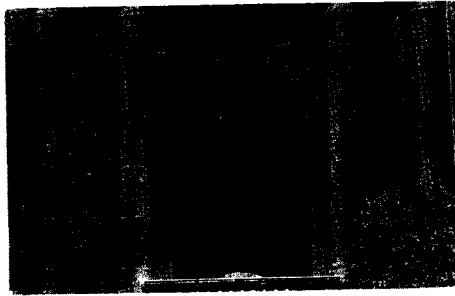
It is not easy to judge the sizes of apartments from the uniformly grand building facades, but the numbers of doorbells and nameplates, and the partitions glimpsed through windows, indicate that the units are generally small. This suggests that the area was built originally for modest-income people. The surrounding industrial uses and the low-lying elevation also suggest the same. Later I learned that the apartments originally did not have individual plumbing facilities; these were added much later. That information helped confirm my conclusion.



The apartment sizes, along with the ages, grooming, manner, and dress of the people, the types and inventories of stores, and the displayed prices are good clues to the present residents of Testaccio. Even more important was the evidence of recent maintenance and rehabilitation—newly painted buildings, new or newly varnished shutters, new finishes. Many of the people are still of modest incomes but it is a mixed area. Signs on buildings indicate that some rental units have been converted to condominiums, suggesting higher-income people. Some sections may be predominantly one income group or another, but probably there are mixes within them as well. Many older people and their families remain.



It is not easy to identify long-term physical changes in the area. To be sure, Piazza Testaccio is no longer a piazza but rather a permanent market, where the ages of food stalls and booths suggest it was established



after World War II, and there is some postwar housing. It is difficult for a foreign observer to identify changes that were part of the Fascist period—there are only two Fascist-style buildings on Via Marmorata—or to guess what the postwar housing replaced, or why.

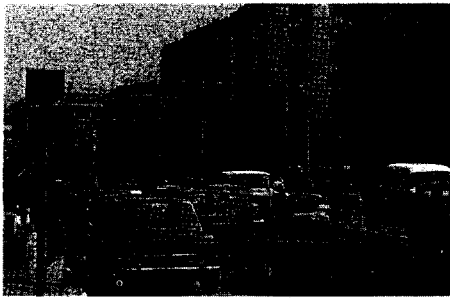
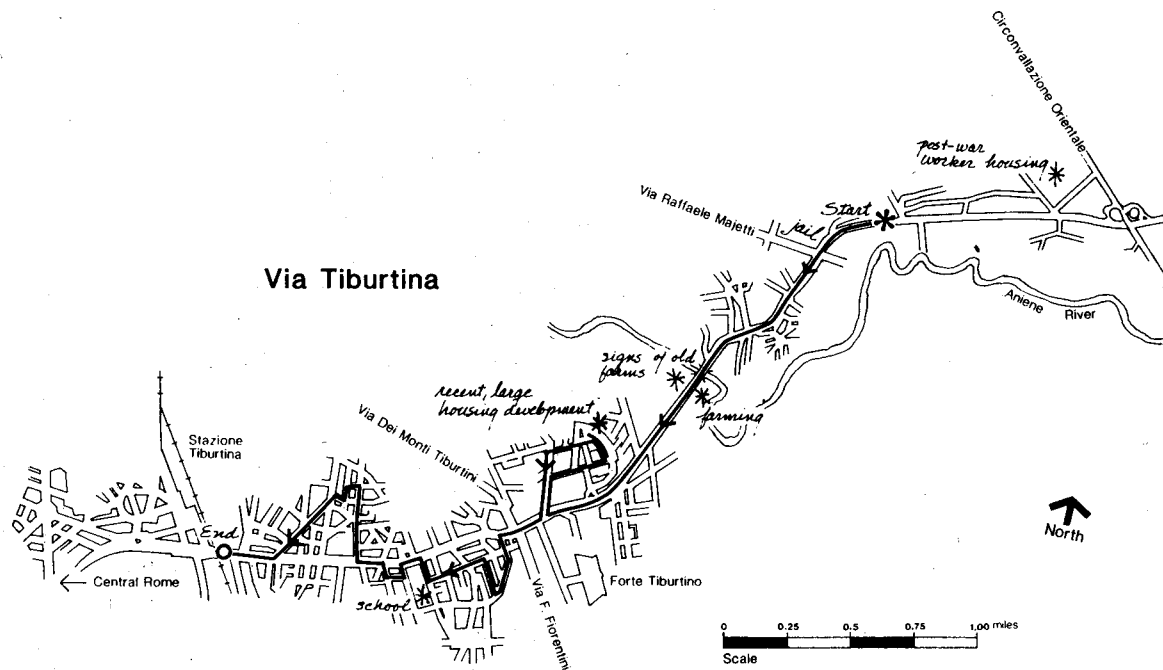
Short-term change and present-day issues, however, are remarkably similar to what one might find in an American city, and with similar clues. There is a lot to consider. Citywide, this is a good residential location now, close to the bustling center of Rome. Earlier the area may have had a negative image because of a slaughterhouse, now abandoned, which was visible but not identified, and with lower-income housing. If there is a large demand for housing in Rome, if nearby industry is not obnoxious, and if many higher-income Europeans still like to live in city centers, then the demand for housing in Testaccio should be strong. The observed rehabilitation of housing suggests that that is the case.

Maybe the story goes something like this: older, modest-income people have lived here in rented or owned apartments, for which there is now a strong market. There may be some kind of rent control in Italy, which owners may try to overcome by selling the units as condominiums. The area is becoming gentrified toward the north, the west, and a bit south from the market and the piazza. The level of demand differs according to location; there is less demand in the older, more modest housing to the southwest. Within buildings the level of demand is determined by the view, unit size, and accessibility.

If all this is so (as was later confirmed by a local planning official, a resident, and available historical data), then old-time moderate-income residents are probably being forced out of their apartments. But an area does not change from one income type to another overnight. Testaccio will remain a good place to live for those who can get or keep a piece of it.

Not Knowing: Tiburtina, Rome

I was much less successful in my conclusions about a second area of Rome, along Via Tiburtina. But the walk



proved more instructive than Testaccio. Tiburtina is not so much an area as a long corridor, with Via Tiburtina as its spine, of urban development leading from central Rome east-northeast for some five to six miles to the city's outer ring road, the Circonvallazione Orientale, and beyond. The corridor can be viewed as a string of numerous distinct residential areas, large and small, each connected to Via Tiburtina. As one moves away from the center, the areas, which consist almost wholly of multifamily apartment houses, become newer. In 1982 considerable new development was taking place in large areas of vacant or agricultural land. The earlier post-World War II development is denser than the later, outlying housing, with a stronger orientation to Via Tiburtina, that is, with more stores and dwelling entrances directly on this street. Via Tiburtina is wider, more heavily used, and more developed as one gets closer to the center of Rome. It could be characterized as a Roman version of American strip development, albeit at considerably higher densities and more oriented to residential than to commercial uses. If one

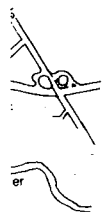
stops to observe five or six enclaves along the way, it can take six hours to walk the strip.

My intention was to take a bus out to the intersection of Via Tiburtina and the Circonvallazione Orientale, then walk back to the center of the city, visiting the areas along the way. But my observation did not go according to plan. Because the area through which the bus was traveling was so underdeveloped, I thought I had passed my starting point, so I got off without quite knowing where I was and started back toward the center. Later I found I had not gone as far as I should have.

I looked at most of the developed enclaves individually, as I had done in Testaccio and the American neighborhoods, though each of the Tiburtina areas was smaller and I spent less time in each one. The messages and the clues I took from observation were similar to those in the other cases. I could tell by and large when the area had been developed (almost all after World War II), who lived there (generally working class, not wealthy), what the residents' life styles were, and even, what some emerging issues were (the need for more interior living space, better services, and solutions to traffic congestion). A great amount of new construction, mostly high-density high-rise buildings, was visible. I could see that some areas had been planned as units and that in some, public improvement programs were taking place. Most of my impressions were of separate, small areas; I learned very little about the larger area or its dynamics. My conclusions, written as notes right after the field observation, are instructive.

Clearly, Via Tiburtina is a major arterial road. I want to call it a "structural" route, one that provides structure for the metropolitan area, a road along which to organize development. What is farther out on this road—industry? jobs?

The first (farthest out) area of major new development consists of dense multifamily apartment buildings, all recent, with stores, schools, and a small central park, suggesting a planned development. The unit sizes seem small.³ What do the residents do when they are not working? Where do they go? I expect that some of



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the significant issues in the area are the lack of adequate services and facilities, such as schools, open spaces, and places for entertainment, issues that come up with so many residents in a small area. Traffic, parking, and public improvements are other likely problems.

The large amounts of vacant land between areas of development suggest that there are problems in getting access to the land for its development, in maintaining it as open space, and in knowing the traffic consequences if it is developed.

Almost all of the people in the Tiburtina areas seem to be working class; few are poor, and there are no areas of great wealth. The less affluent tend to live farther out. Closer to the center, Tiburtina becomes a less pleasant street on which to live. The traffic is heavy, and the noise is intense. But one block away from the main street, traffic is slower and there is much less noise. In these areas there may be problems in controlling growth—when and where does it end? I do not know how important these problems are felt to be.



In that brief observation my images were of many small subareas, not a whole. But there is a “whole” there, and I should have been able to see more of it. I missed the picture of Tiburtina in its historic context and as an area of long-standing social conflict and of shifting public and private development strategies.



Farther out on Via Tiburtina (thirty-one kilometers from central Rome) are Tivoli and Villa Adriana. Knowing that would have provided a clue to the fact that Via Tiburtina is a centuries-old connection between the hinterland and the city.

More immediately, I made no connection between the location and date of the large, low-income housing developments and the earlier policies of so-called slum clearance and people dislocation. If I had started farther out Tiburtina as planned, the pre-World War II low-income housing projects there would certainly have raised questions—why are they located so far out from the center? The age of that development would have placed it in the Fascist era, and I would have connected it with Mussolini’s central city public works,



which involved demolitions of medieval neighborhoods, forcing low-income people out to these suburbs. There is a long history of poor people being forced out of European city centers. The early postwar public housing developments this far out were a continuation of these policies.

I also missed seeing a connection among the large land holdings, the locations of housing for poorer people, public improvements, and market-rate speculative housing closer to the center. Apparently the owners of the large holdings, which I had observed, controlled development in the area. One of them gave the city a large amount of land for public housing. I had seen the name Gerini on some buildings and institutions, but had made no inferences from it. Via Tiburtina had to be improved to get to the new housing, making the closer-in property, owned by the same people, more accessible and valuable. Once again, low-income people were forced from the center of Rome, and Tiburtina, with its access enhanced, became a great speculative area in the 1970s, starting at the railroad.

Another phenomenon I was not aware of is called "abusivismo." In the 1950s residential and industrial buildings were constructed without permits and without attention to local development standards. I saw examples of this unregulated development, but I did not know of its illegality, nor did I realize that the abusivismo practices were continuing. So I failed to recognize clues concerning three major types of development—public housing for poor people distant from the center, speculative development with public help, and abusivismo. To be sure, the walk started at a point where it was not possible to see some of the clues, and that is also significant.

In the 1960s and early 1970s Rome's public planners envisioned a major new employment-commercial center for much of Rome in this general area. The plans involved building new residential areas in the agricultural lands, clearing and redeveloping the ancient areas and the abusivismo, and creating a system of parks along the river to separate housing from industry. Most of this was not done. I did not realize that the mix of

old and new development was part of a more recent, conscious plan to legalize what had been illegal, adding needed public works, parks, streets, and services, and building new public housing. There is a conscious policy to achieve a mix of incomes within areas and to lower the population densities in high-density residential areas so that services can be provided.'

Why did I miss so much? There are many instructive explanations, not the least of which was the shift in geographic scale. A sense of the big picture does not always evolve from putting together small, observable pieces. Window grilles, recent maintenance and rehabilitation, apartments expanding to include balconies as living space, trees, and store prices may tell about the dynamics of a particular area, but to get the larger view one must consider the patterns of an extended area, say the concentration of low-income housing at one location, compared with other types of housing at different locations. It is important to be aware of scale, to look at both the large and the small. In this case I had not realized that the appropriate scale for interpreting had changed.

There is always some element that an observer cannot see. In the case of Tiburtina the early, low-income housing estates that signaled early public policies and action were just beyond the point where my observation started. The physical clues that could help an observer understand will be physically distant, beyond hope of being seen even in twenty field excursions. If public policies—a proposal for a new employment-commercial center or a park or the demolition of abusivismo—have not been carried out, there will be no clues.

From the start I have said that case studies cannot be true reflections of how field observation works in practice. Tiburtina reminds us of the importance of the iterative, back and forth nature of observation over time and in combination with other research methods. Tiburtina underlines the importance of relating what is seen to social-economic and political-historical contexts. An observer who knows the political history of the country would have insights that a less knowledge-

able observer might miss. An outsider may see something new, make some new associations that escape the local observer, but the outsider cannot know the socio-political history as well as someone immersed in that culture.

Observation is not a test; its goal is not just conclusions but questions. In Tiburtina, I did not ask enough questions, at least not consciously, perhaps because I tried to see so much in a relatively short period and to take it all in. Instead of continually questioning what I was seeing and relating the observed environment to my knowledge of other cities, I was in a rush to simply observe. If the Tiburtina case has a failing, it is in not ending up with enough questions.

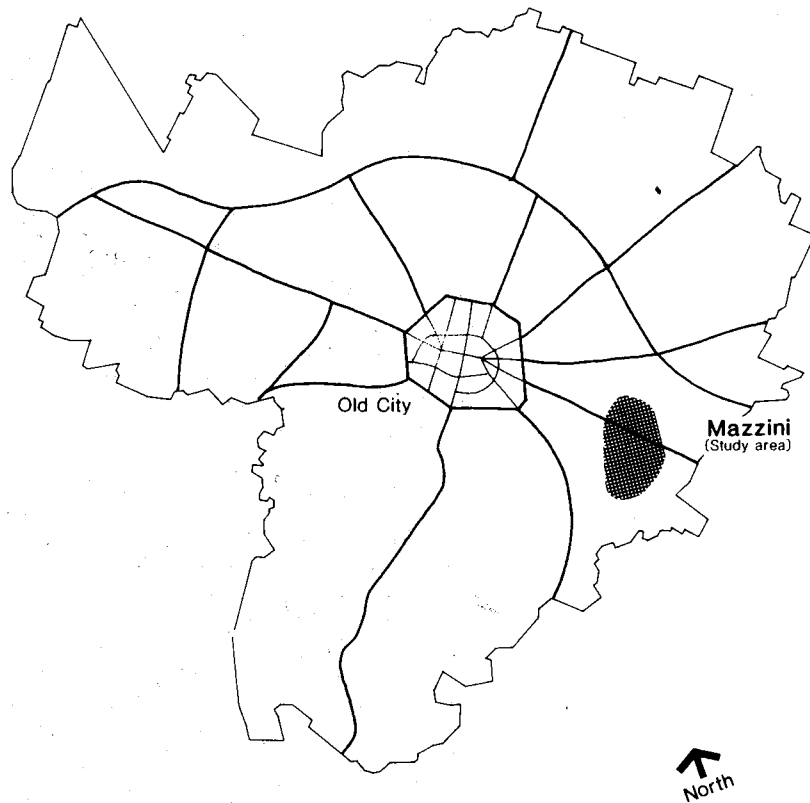
Knowing a Bit More: Bologna

Bologna was as unfamiliar to me as Testaccio and Tiburtina had been, but by the time I observed Bologna I had been in Italy for eight weeks.⁴ Just that amount of time helped me understand what to look for in Italian cities. Then too, I had learned from the two Rome cases.

The area of Bologna I walked in, called Mazzini, is larger than Testaccio and much smaller than the Tiburtina. It is removed from the city center by a bus ride of approximately twenty minutes. Mazzini straddles two main roads leading from the center of the city and could be likened to two or three of the larger individual housing areas on either side of Via Tiburtina. There is both older and recent development, largely residential, with commercial concentrations and some smaller industrial uses mixed in.

Imagine that we have just come to Bologna and are about to spend some time observing an unknown area. Bologna is in the highly industrialized and productive north of Italy, where the people are said to have a high standard of living and the food is supposed to be as fine as can be found in Italy. We know that the people of Bologna have voted for a Communist administration for the last thirty-six years or so, but we do not know how this will affect what we see. We know there is a city policy to limit the population to approximately

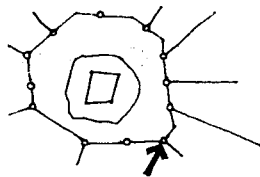




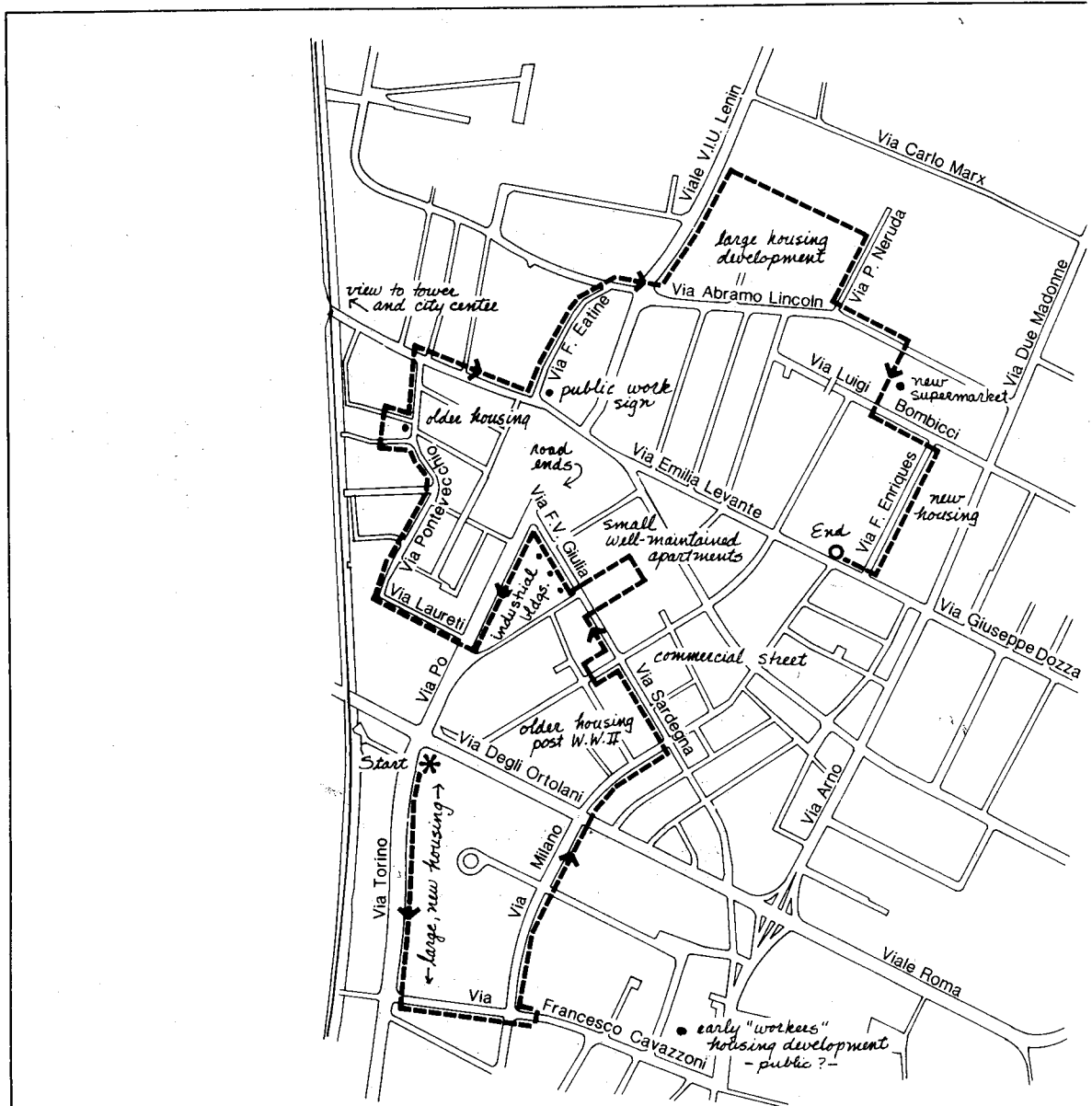
BOLOGNA - ITALY



600,000, presumably to avoid sprawl, and to preserve and restore old buildings without dislocating the residents. The building restoration work in the city center very carefully reflects the original designs and is said to be costly.



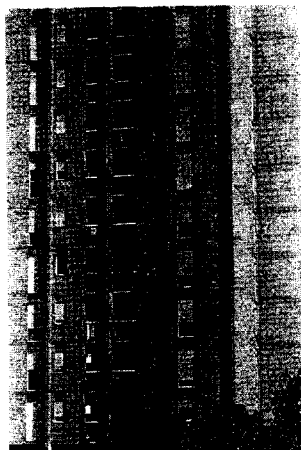
We begin our walk at the corner of Via Degli Ortolani and Via Torino, more than two miles from the central piazza of the city. It is about three o'clock on a warm May afternoon. It has been raining. On the way to our starting point, we saw city walls and a gate, identified on the map as Porta Santo Stefano. We assume these walls are the outermost ring of three; the road pattern suggests that there might have been two other sets of walls. Something else on the map that catches our eye



WALKING ROUTE IN BOLOGNA - ITALY

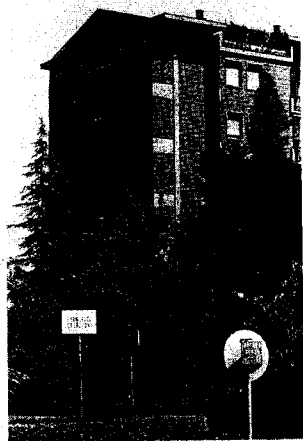
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is the evenly spaced grid pattern of other roads and lines, covering at least the eastern part of the city. Via Emilia, Via Degli Ortolani, Via Po, and Via Arno are pieces of that grid in the area where we will walk. Is this grid part of an earlier city plan? It seems unrelated to anything else we see.

Walking south on Via Torino, we see large housing blocks that appear to have been built within the last ten years. Housing like this in the United States would probably be publicly subsidized. The finishing materials are not of particularly high quality, and the grounds maintenance leaves something to be desired. The buildings are set back from the street, oriented to auto use, with large parking lots. The buildings are widely spaced.

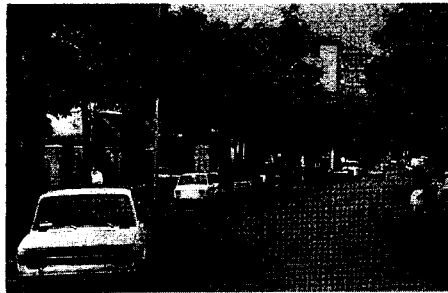


The buildings to the south of Via Francesco Cavazzoni on the extension of Via Torino are a bit older, as are the trees. The buildings are somewhat smaller and closer to the street; the quality of materials and finishes looks better; the building arrangements are tighter and closer together. The street seems more of a piece. The building at the corner has two or three shops.

In a large building on the north side of Via Cavazzoni some units have converted the balconies to interior rooms to enlarge the living space. These conversions may indicate that the units are privately owned condominiums. This housing is more complex in design than the first group. Further along on Via Cavazzoni, it is clear that the landscaping is older than that to the north. There is a shopping strip on the south side. Some teenagers play cards at a table outdoors.

Moving north on Via Milano, we see a number of housing developments with different sizes of buildings on varying amounts of ground. One senses some tension or indecision among the architects as to whether or not to orient buildings to the street. Some three-story houses on the east side of Via Milano are brand new. Across Via Ortolani at Via Calabria are smaller, older free-standing apartment blocks with greater land coverage than we have seen to this point. They date from after World War II.

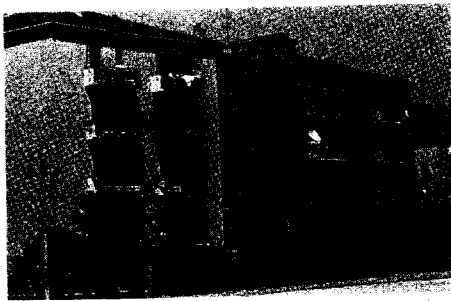
The street system here is a grid that does not parallel



the four defining streets of the grid we saw on the map. Why? Storm windows have been added to some of the units, and some buildings have been repainted. The housing looks as if it had all been built in the 1950s; the different colors and details suggest that the units are privately owned. Maintenance is uniformly adequate. There is less off-street parking than there is south of Via Ortolani. At one point the trees are *in* the street, an indication that the residents valued the trees enough to insist on saving them when the street was widened. The cracks in the street may indicate where the curbs used to be. New trees have been planted to replace older ones that have been cut down. More people are out on the street here than we saw earlier.

Along Via Sardegna the buildings have colonnades, as in older sections of Bologna, although this development seems to be postwar. The stores sell utilitarian goods; there are no stylish displays, nothing high fashion, much like the store inventories in an area of Milan. In America these kinds of stores would be associated with a lower-middle-income area. Most of the stores we see are small. Are they large enough to generate a reasonable income? The people here are of all ages. Older men are playing cards in just about every bar. Around the Piazza Belluno the housing is larger and newer.

Three small industrial buildings, all built after World War II, line one side of Via Friuli-Venezia Giulia. They house a BMW auto shop, a Peugeot auto shop, and one



or two small industries. Why are they here? The last building, at the end of the street, has a section that rises above the rest with apartments in it. This building is not as well maintained as the others. Perhaps the realization of the idea of working and living in the same building did not work out too well.

The apartment buildings on the narrower side streets off Via Friuli-Venezia Giulia, though not new, are well maintained, newly painted, with new windows and doors and some new balconies.

Via Po looks as though it was intended to be a main street, has had recent construction work, but it ends abruptly, blocked by a building. Does the road continue on the other side? Steps lead down from Via Po to Via Laureti, a lovely dead-end street. Some of the housing here is pre-World War II, but it has been rehabilitated. There is a mix of building sizes, scales, types, and ages. Since the street is close to a railroad line, it was probably not considered a choice location even as late as the 1950s. When was the railroad electrified, with less dirt and noise? What effect did that have on nearby properties? The older industrial uses along the rail line may be related to the industries we saw on Via Friuli-Venezia Giulia.

In the Via Pontevecchio area some housing seems to be as old as the turn of the century, but it is all in good condition. The streets are narrower and more irregular; some have recently been repaved. There is considerable new in-fill housing. The new houses are painted in the same few colors—ocher, orange, sienna—we have seen all over the city. What do the many "Strada Privata" signs mean? Some of the older housing is substantial in size, suggesting that the original owners were well to do.

We sense thus far a strong public presence and involvement throughout the area, in the housing on Via Torino, the concentrated rehabilitation of older buildings, the colors. But we do not know how much or what kinds.

The people we see on the streets look like industrial workers, decidedly not people who work in offices. They are wearing "work clothes," not jackets or stylish dresses. It is now 5:20 P.M., so perhaps the office workers have not yet come home.

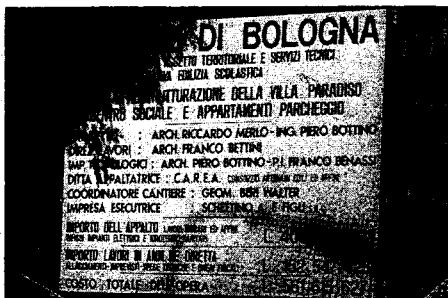
Via Emilia Levante looks like an older main street, and a look at the map confirms that it is a main radial leading out from what must have been another city gate. Where does it go? In Milan we concluded that a similar road was an old radial route leading from Como or Varese to a city wall or gate. Looking toward town, we see a very tall, very old tower.

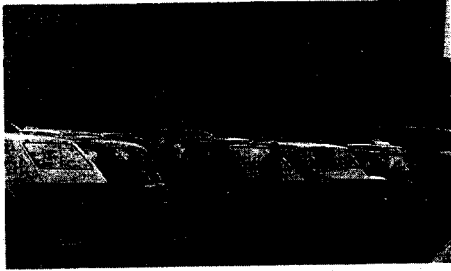
Along Via Emilia the shops tend to be higher style; the clothes are stylish and elegantly displayed, the furniture is contemporary. There is a lot of traffic.

A sign says that the city is renovating an old villa, converting it to a public use. The sign contains considerable financial information about the project. At Via Lincoln and Via Lenin is another area of very large, new housing estates set in open space. Are they public or private or a mix? A private developer probably would not have named a street for Lenin. Other street names: Via Allende, Via Marx.

The people here seem more fashionably dressed. A mother and her young son wear matching colors and styles. The teenagers circulate in groups more than we've seen elsewhere. How easy is it for older people—and teenagers—to meet casually and talk with one another? The big open spaces and the orientation of buildings away from streets raises the question. Maybe that is our selective vision at work. It is a development that one would expect to drive to more easily than walk.

One private housing development (presumed from a sign saying "condominio") has some public uses—a nursery school, a school, and other social institutions. What is the distinction here between public and private? We have not seen any stores in the area. With





this kind of housing, we expect an American-style shopping center with a parking lot, and sure enough, as we turn a corner, we see Supermercato. Walking to the shopping center, we are aware for the first time of being disoriented; we do not know what direction we are walking in in relation to the main streets or to downtown.

In the Supermercato parking area there are cars in most of the stalls. By American standards the enclosed mall is small, and at 6:10 it is not very crowded. The merchandise in the stores appears to be of a bit better quality than on Via Sardegna but is not high style.

As we walk toward Via Emilia, we see new buildings, and the smell of fresh concrete is in the air. Where have the new residents come from? Most of the cars are small, and most of the license plates indicate Bologna.

At Via Emilia it starts to rain again. We get on a bus for the eighteen-minute ride to the center of the city. It is interesting that at this time of the evening the bus gets more crowded as it moves toward the center; that would not be the case in the United States.

To summarize our observations, it seems reasonable to conclude that Via Emilia, running through the center of the area, has been a major route into the city for a long, long time. It focuses on an old city gate; it may have been a route that brought food and goods to the city markets. A main rail line parallels Emilia. We have not learned the meaning of the street grid we identified at the start of the walk, but we cannot help thinking it represents some early planning effort.

The age of the buildings suggests that there was very little development in the area before World War II. The land may have been owned by farmers with large acreages and by a few people with villas. There was also some industrial development near the railroad. After World War II came the housing at Via Sardegna and that closer to the railroad. There seems to have been a long history of public planning and direct action in the area, perhaps associated with "saving" the city center, but we cannot be confident about that connection.

The area bounded by Via Po, Via Emilia, Via Arno, and Via Ortolani was probably one of the first to be



developed with some public involvement after the war. The regularity of the streets in this area, the colonnades at Via Sardegna, and the extensive private and public maintenance suggest a public role in some form — direct public action, regulation, coercion, or what?

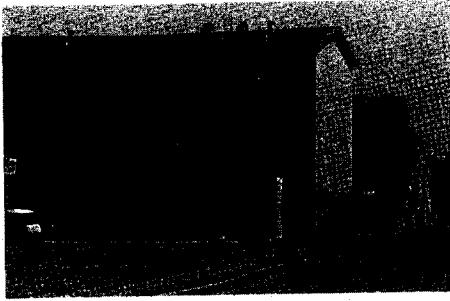
Development to the south and north of this older core (the beginning and end of the walk) is on a much larger scale, and it looks almost as if the city planners decided to make a much larger, faster effort to attain their citywide housing and population objectives. The public role seems similar to redevelopment in the United States, where the government expropriates the land, then sells some of it to private developers to be designed and built according to a plan and develops some of it directly for public purposes, including subsidized housing. We assume, because of the Communist city administration that the government role is more important here than in America.

Checking with Reality

Immediately following the field observation, I met with a Bologna city planner and former government official, Giuseppe Campos Venuti, who had been intimately involved with the city's planning and development for many years, including the efforts in the observed area.

Via Emilia is indeed old, over 2,000 years old, part of a Roman road over the Apennines, a military route linking Roman towns in the region. It existed even before the Roman era.

The street grid we identified also dates back to Roman times. The Romans divided the land into a grid, called *centuriatio*, with roads running parallel and perpendicular to Via Emilia. Roman soldiers who married local women and who agreed to care for the land were given all or part of a square, thereby keeping the new lands under Roman control. Though large parts of the grid have been destroyed over the years, some remain as property divisions, marked by irrigation channels, streets, and storm sewers. Thus the old remains visible. There were only two sets of walls, not three; the original Roman walls were totally destroyed. The railroad, built in the late 1800s, runs parallel to Via



Emilia because it was intended to make the same connections.

Our observations about development after World War II were largely correct. Development was rapid and in some places (near the railroad) haphazard, as we thought. The central area between Via Ortolani and Via Emilia was largely developed by 1960, but there was little or no direct public involvement in the building process. Up until 1960 the planning philosophy was to place public, subsidized housing on the outskirts of town to the east, in a large concentrated development just beyond the area we observed (the same problem that occurred in Tiburtina).⁵ In the old European tradition, low-income housing was put on the fringe of the city. Following World War II the fashion was to tear down and rebuild much of the old city core, not unlike programs then in operation in the United States. In 1960 the left-wing administration changed the policy radically; urban planning and development became a basic focus for the new leaders. One main objective was to achieve a mix of incomes and occupations throughout the city to avoid divisions by class. Working-class people were to live in all areas, not segregated on the outskirts. In the area we observed, since its center was already built, the plan was to reserve the area north of Via Emilia and south of Via Ortolani for the working class. Thus public housing was built in the area between Via Ortolani and Via Cavazzoni, as we observed, and the land south of Via Cavazzoni, developed first, was done privately.⁶ The unlandscaped areas in the public area are not finished, which accounts for their somewhat unkempt condition. The private housing here is at a higher density than the public housing, presumably to encourage private developers. The city bought only the land it used for building the public housing and services.

The policy in Milan was similar. There my misperceptions about Tiburtina helped sharpen the visual inquiry, and I realized that new public services — schools, athletic facilities, some housing — might be part of a planning strategy to facilitate a mix of older and newer residents as well as people with different in-

comes. There, too, street improvements in abusivismo areas were part of the strategy of economic-social integration, as in Tiburtina and Bologna.

In Bologna, the area north of Via Emilia is a mix of public and private development: two "islands" of land within the larger area were left for private development according to public standards and controls. Private and public construction have been simultaneous. Apparently, our concern about the suitability of the area for older people was misplaced; they express happiness with their new environment. At another time of day or on weekends, we might have seen many more people in the new areas. Most of the new residents living in this area come from the Bologna region. The observation about the central area being largely working class was also correct.

In the central area of our walk, city policy has been to equalize some differences among people by bringing the area between Via Ortolani and Via Emilia up to par with the newly developed areas. Housing density has been reduced, services added, and the amount of new development severely limited. Since a recent city law discourages demolition of older buildings, residents now feel they own or live in something of value, so there is much private rehabilitation. Those who live in modest, fifty-year-old housing built for workers on the outskirts of town now are surrounded by more contemporary structures, new housing and services. As a consequence, they may feel that they are more of an integral part of the community.

The local experts told me that the small industrial area and the factory were an experiment in living and working in the same place, as we had guessed. Industry did not use the railroad but was located there because the land was cheap. The owners of houses built during the period of spontaneous growth were later required to pay two-thirds of the costs of streets, walks, and the like, so they put up the "Strada Privata" signs. Private developers had at first rejected the proposal to build the shopping center, so the city urged cooperatives to build it, and they are doing quite well financially.

On the whole, the field observation and analysis



were reasonably correct, guided of course by a new familiarity with the country and the earlier cases. To be sure, there were errors and misperceptions. Clues that might indicate certain problems in the United States — an unfinished road improvement, for example — in Bologna only meant that the government was waiting to purchase a building that was in the way. The Italian urban political history associated with geographical location went largely unnoticed.⁷ Nevertheless, the development history of the outskirts of one major city is not likely to be very different from that of another in the same region. And the political, planning, and development strategies of different cities are likely to be similar in any recent period because the planners are all responding to similar economic, social, and political forces, and they communicate with and learn from one another.

Learning from the Unknown

Clearly, the meanings of some observable physical clues found in urban environments are the same from one culture to another. Some clues seem to be more universal and useful than others. For centuries, bars and grilles over doors and windows have been a response to safety problems. In any culture certain features of buildings reveal relative wealth or stature of the residents. Some characteristics of residents — sex, age, sometimes dress — have similar meanings regardless of where they are. Nameplates, doorbells, signs, dates on buildings, numbers of floors, and sizes of units are always useful clues. Other clues, such as topographic elevation in relation to wealth, diversity of building styles, location of homes in relation to sunlight may be almost universally applicable. Street and building layouts and juxtapositions of land uses can tell the extent of central planning. The Italian studies confirm that the types of goods sold in stores can indicate the income-employment status of the residents.

But it is not my intention to review individual clues for their universality of application. The question is not whether a clue has the same meaning everywhere, but whether it is usable in its context. It is the way one

looks at clues and uses them that transcends cultural differences. We look for relationships between clues. In Testaccio the size of the buildings (small), the location of the area in the city (low-lying, at a bend in the river), and the surrounding industrial uses (former slaughterhouse) taken together suggest a low-income area. People's clothing and the merchandise in local stores helped confirm that impression in Testaccio as well as in parts of the Bologna neighborhood.

In Italy, as in America, *patterns* of clues and their *relative newness* can be more important than the clues themselves: an area of new window shutters or newly painted buildings in Testaccio; a pattern of many small single-family houses of slightly different designs on small lots and narrow but very regular streets, which indicates abusivismo in Milan; areas of massive new public and private construction in Tiburtina and Bologna, signs of public policies.

Finally, the way of looking and the way of questioning are important. The questions are the same as those we would ask in a familiar environment. They have to do with being aware of what we see, identifying patterns in relation to known historic processes of urban development, asking why things are the way they are, gauging the amounts and pace of change, wondering if anything is missing, considering what it is like to live in the area, and asking if what is seen tells anything about the larger urban context.

The major problem, as the Italian studies showed, is that an observer does not usually know the historic context of a foreign culture, either generally or in relation to a particular urban area. These Italian observations point to the importance of seeing the environment in relation to understood economic-political periods.

Also, it is important to understand that space and building norms and standards are likely to vary greatly among cultures and over time. In Tiburtina I assumed that the space standards for publicly assisted housing would be less than in the United States and that families were still quite large. Later I learned that in the early 1980s space standards for publicly assisted units

in Italy are higher than in the United States and that family sizes in the cities have dropped almost as abruptly as in this country. It would not have been difficult to measure unit sizes in Tiburtina to get a better knowledge of sizes.

Notwithstanding the errors of the Italian observations, it was encouraging to find out how fast one learns by observation. The misperceptions and omissions of Tiburtina, once explained, helped me recognize some of the history, development patterns, public planning strategies, and even detailed designs of Bologna, and later Milan. Once I learned about development strategies under the Fascists before World War II and under the postwar governments, I was able to understand some patterns in Bologna and Milan. I recognized abusivismo once the practice had been explained. Knowing about the present-day strategy in Rome of consciously mixing income groups and of concentrating public facilities and services where they can be an integrating force made it possible to recognize these policies elsewhere.

There is an unanticipated dividend to these kinds of experimental case studies. Consider what happens: you, an outsider, spend a few hours walking through part of a city, and then you proceed to tell a local official, who has probably lived in the area for years about its history, people, and possibly some problems. Even if you are correct in the observations and conclusions, you are bound to miss a lot. The expert, the person who *knows*, ends up desiring to tell you not only where you were right or wrong, but also what you missed, including a lot of political history. Your diagnosis can let loose a flood of information, particularly because your hypotheses and conclusions are of interest to the local expert. You tell the expert about his or her city; the expert is amazed at and humored by the attempt and quickly opens up with all kinds of information that would not have been forthcoming otherwise. Thus the context of learning and teaching is one of good humor. Without fail, this was the case in Italy. What a happy, fast way to learn about a city!