No TRUE SECRETS are lurking in the landscape, but only undisclosed evidence, waiting for us. No true chaos is in the urban scene, but only patterns and clues waiting to be organized.

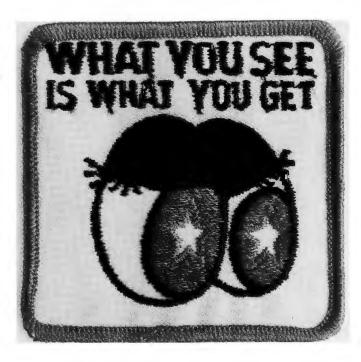
All that we may soon become, our future, is out there shifting about, more or less ready to be found. Strange objects heave themselves into view and give off odd signals; familiar actors change costumes and shift roles; the action moves; the tempo changes. Cities, in short, are forever rewriting their repertoires.

And where are we? Grasping at straws, clutching yesterday's program, swamped by today's expert view, clawing at the newest opinion polls, but neglecting that limitless, timeless, boundless wealth of visible evidence that merely waits in a potentially organizable state for us to take the hard look, to make the next move. Experts may help assemble data, specialists may organize it, professionals may offer theories to explain it. But none of these can substitute for each person's own leap into the dark, jumping in to draw his or her own conclusions (fig. 1).

Full of booby traps is that darkness, but one must leap into one's own scene before uncovering the unity and continuity that lie half hidden in everyday happenings and workaday views. Whole industries of propagandists, many armed with official powers, push and shove to intrude their views ahead of our own. But none of these can match the power of the public's collective eye and its visual consensus.

# Introduction

1. "What you see is what you get" arm patch.



In this book I offer assertions, short cuts, mental games, and other tools; I propose ways to grapple with everyday, visible, accessible evidence of the so-called urban revolutions of our time. My examples are chosen from everyday events and familiar objects, the happenings and places of ordinary life, from the street rather than from the laboratory. All these can and should be tested, criticized, improved upon or modified. I hope this effort will encourage others to look at urban change in more organized ways.

This is the book I needed but could never buy, a kind of Baedeker to the commonplace. It arose out of my experiences as an urban journalist and professional observer. In 1949, I had returned to daily reporting on The Louisville Courier-Journal after a year's Nieman Fellowship at Harvard University, filled with new questions about places and situations I sought to cover. How does one come to grips with a changing landscape where old divisions between city and country are fast disappearing? What are the quick navigational fixes? Why had no one written this book for me?

What a journalist seeks may often turn out to be needed by many others such as newcomers, migrants, travelers, tourists, families finding familiar places undergoing changes; and by students, street people, opportunists of every sort exploring new markets, niches, and realms. Each must get the hang of things, case new situations, dig the scene, get it all together, make sense. Are there universal methods we might use to speed up the process?

Gradually I learned how each person develops his or her own yardsticks, insights, and mental tools for sorting things out, anticipating what comes next, and, finally, for conveying these discoveries to others.

In the process, I found that psychologist George A. Kelly had developed, and published in 1955, his own evidence and theory to show how the ordinary person, untrained in formal science, is his own best organizer against the propaganda, rumors, and clichés being mass-produced about his environment. Kelly argues, in A Theory of Personality: The Psychology of Personal Constructs, that each person builds a mental picture of the world, and then proceeds to continually modify, rebuild, and reconstruct it. We do not merely react and respond to environment; we actively represent it and construe it—and thus build alternative constructions on it.

Kelly proposes that "every man is, in his own particular way, a scientist . . . ever seeking to predict and control the course of events in which he is involved." He does this by trying the world on for size, forever seeking a better fit, not merely to enjoy the moment but also to predict and control his surrroundings better. He is concerned not so much with being well-tailored as with being a survivor.

And so I had begun putting together simple word tools, using what anybody can see to supplement such common journalistic sources as interviews, public hearings, statistics, events, gossip, scholarly studies, etc. I saw this as a device for shifting from "that's-what-the-man-said" reporting to "that's-what-I-saw" journalism.

Increasingly, I found it essential to look for patterns behind the single event, to ask not only the journalistic question "Why did this happen?" but the deeper question "Why do such things as these happen?" The usually reliable sources were not up to the task. Architectural history and criticism, for example, too often turned into a picture story of Great Buildings by Famous Architects. Critical analysis too often turned into a veiled bitchiness that dealt with personality conflicts among designers and critics. But the complex ways in which places worked, the uncovering of how they came to be, an analysis of their happenings, pace, and intensity—seldom did such inquiry fit into the neat chapters in standard texts. Nor were answers easy to come by in the filing-cabinet system of college courses and research specialization.

Neither were the gaps easily filled by the behavioral scientists, although this situation had begun to change by the late 1960's as radicalized graduates in architecture, planning, and the social sciences moved into the vacuum. New work in environmental cognition, cognitive mapping, perceptual analysis, and symbolic and pattern languages is beginning to make itself widely felt as it gets translated and tested. Many new user studies, aimed at finding out more exactly how people employ the en-

vironments they inhabit, have been put on display at conferences of the Environmental Design Research Association in the United States and at sessions of the Architectural Psychology Association in England.

Early in this search, I realized how little most Americans can find out about the evolution of their own, ordinary local surroundings. We bulldoze scenes and buildings of the past when they no longer pay their way in current cash. The typical, downtown big-city American building site, I would estimate, has been re-used at least four times since 1800, but dependable records of such shiftings are hard to come by. Most American cities are so grossly under-studied, most urban scenes so short-lived, that every person's own memory becomes a historic record, especially west of the Mississippi and in mushrooming suburbias.

I came to regard cities and their urbanizing regions as consisting of time as well as materials, and forever changing. This is the real continuity. There is no universal and everlasting right way for cities to present themselves to us. Each reflects the ideas, traditions, and energies available to its citizens in past centuries, as well as at this moment, Each landscape and townscape is an intricately organized expression of causes and effects, of challenges and responses, of continuity and, therefore, of coherence. It all hangs together, makes sense, fits one way or anotherfor good or bad, loosely or tightly. It has sequences, successions, climaxes. It reveals patterns and relationships forming and re-forming.

Some of these energetic scenes can be described in purely visual or stagecraft terms; or through the consensus of human emotional responses, in Gallup polls of what can be verbalized; or in structural or sequential terms. Some scenes we can experience only by moving through them. And some we may sense only in retrospect.

Thus, I have set about describing aspects of a unique phenomenon: the North American city as it may be seen in the 1970's. Deliberately, I have chosen almost all examples from the United States. Its cities share some 150 years of expanding energies, freedom for social experimentation and profitable exploitation of natural resources, staggering and careless growth, and competitive skulduggery mixed with farsighted organization.

With such increasing energies at our command-or out of control-we come headlong into conflict with nature. The story of the city is an account of how mankind has used new wealth and energy to exploit the natural world; the end of the story might describe the end of cities as we have known them.

Differences between places are being wiped out, and these are what we miss. New differences between places arise, and these we find disturbing. It is widely lamented that the difference between city and countryside is being eliminated by look-alike billboards, service stations, and other mass-produced commercial tackle and industrial apparatus.

Yet the remodeling and re-use of places is as predictable as the slow aging of a seemingly more stable familiar landmark. We watch a field being bulldozed, leveled, trenched, sewered, paved, and apartmented-a process as foreseeable on its own terms as is the gradual emergence of a historic civic district or a reconstructed Williamsburg, Virginia. Each scene follows rules of appearance and behavior observable over time; and in each there is change, decay, replacement, adjustment, and new uses for new times.

This suggests how to look at old differences between city and country. Real countryside, whatever that once meant, is supposed to contain real country activities, but surely no factories. Or so one might think-forgetting those thousands of New England and southern mill towns and western mining towns dotting the back country and remote valleys. Real country has always been a place of heavy work, and today's heavy work is increasingly done in prefabs located in suburbs, cornfields, and deserts in response to quite real commuting patterns, freight costs, and land access. There is a vast world-wide sorting-out process under way. Unfamiliar goings on crop up in unexpected places. There is hardly any real country left, especially east of the Mississippi if one defines "country" as territory

2. The majority of urban places represented by circles on this map were visited and photographed by the author. The remainder are represented on maps or are mentioned prominently in the text.



devoid of urban influences; and the so-called edge of the city has become a complex zone of contention extending in some instances for hundreds of miles. The rightful place of nature in this scene is endlessly debated and remarkably subject to disruption by expanding urban energies.

So it is foolish to yearn for a settled stability of scene that never existed. The shifty relationship between people and the landscape is not yet fully understood; their wheelings and dealings do not stand still for such methodological examination as befits the laboratory, nor am I the one to administer such scientific procedure. Consequently, I have tried to link direct observations in a personal way, which may incite others to more rigorous procedures.

In these observations, I have deliberately chosen words, notably in the chapter titles, that are short, memorable, sprinkled with hard consonants (I am a "K" man, myself), and conjure up vivid mental images. This reinforces my conviction that the language of cities need not be architectural or abstract, and it surely must not be deliberately complicated. Urban futures may be difficult, but they need not be rendered indescribable.

Most Americans are captives of an object-ridden language which they must awkwardly manipulate to deal with a changeable, processful thing called city. They speak of "downtown" as a place, but it is many places, scenes of overlapping actions, games, competitions, movements. There are many towns: downtown, uptown, crosstown, in town, out-of-town, old- and newtown, smoketown, honkytown, shantytown (fig. 3). A city is not as we perceive it to be by vision alone, but by insight, memory, movement, emotion, and language. A city is also what we call it and becomes as we describe it (fig. 4).

The approach I recommend for grappling with this changeling is a dedication to firsthand observation of phenomena, together with a loosening of our language. One must use artistic license freely, for "in the arts, the desire to find new things to say and new ways of saying them is the source of all life and interest." Such a language will encourage a continuing watchful encounter with the changing environment. It lets us deal with this thingy process called urbanization, offers insight into energy-exchange systems and into processes as they wax and wane. Putting words to places, and handles to processes is a first step toward getting unlost and well-founded. We must watch for the before and after, the

# Wordgame

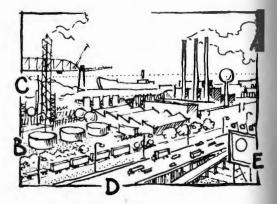


3. "In cities as swiftly growing and composed of as diverse a population as Chicago, the problem of urban interpretation stands out in bold relief." -Anselm Straus in Images of the American City (Free Press of Glencoe, 1961).

4. The way in which anyone looks at this scene is influenced by the class of language he chooses to describe it, and also by the social class attitudes from which that language derives. What goes on within the scene goes on, regardless.

#### CAPTION OPTION I

- A Pollution
- B Ugly scars on the landscape
- Jarring mechanistic shapes
- Dominating railroads & highways
- Billboard blight



### CAPTION OPTION II

- Production a power landmarks
- Symbols of the age
- Dynamic sculpture
- Supporting circulation anteries
- Advertising messages

goings on as well as the objects themselves. After detailed perception studies in American cities, David Lowenthal and Marquita Riel conclude that "only language provides the wealth of detail and nuance that enables us to identify and assess perceived differences among places."2 Rudolf Arnheim has said, "You have to go back to the object-the way it seems, the way it feels, the way it is," and never stop there but keep going beyond the object to its surroundings and actions, asking "What goes on here?" and "What happens next?"

The true language of cities deals with relationships rather than freestanding objects. Maurice Merleau-Ponty, the French philosopher and cofounder of Le Temps Moderne, has observed that language "is understood only through the interaction of signs, each of which, taken separately, is equivocal or banal, and makes sense only by being combined with others."4 Thus with the objects and processes in a city: each makes sense in combination, in relation to, in context, in time. Standing alone, each, considered on its own merits, is bereft, uncomplicated, and uncommunicative.

This was the root of much footless urban criticism of the early 1960's when solving city problems was said to require "total architecture," which seemed to mean replaying an old scene with new buildings. Architects themselves, stuck with old stage settings, had little to do with most of the urban environment, and surely not with where and how most city activities would go on. Annual guidebooks to the convention city of the American Institute of Architects treated each city as a collection of buildings by members of its guild. Seldom before the Houston guide of 1972 did such books recognize major forces that conditioned both buildings and human activity in that city.

I must confess to having sampled a huge cross section of these architectural/urbanist texts, and to having enjoyed the company of many of their authors while looking for insights which linked to my own experience. In the end, I have had to develop my own wordgame for coming to grips with city life—a playful, watchful approach, open-minded both to words and to their referents. One must relax, let the words hang loose and take up their own new and often awkward-appearing positions. And one must keep it up, fitting, comparing, and reshaping-mindful of the history of language but alert to meanings that are evolving and emerging. Neither language nor landscape stands still for us.

This game requires us first to master a discipline, and then to learn its rules; but also to look for ways to stretch and bend the rules so as to maintain our own interest and inventiveness. In this context Michael J. Ellis's definition of play is a good one: "arousal-seeking behavior that leads to an increasing complexity of the players and their play."5

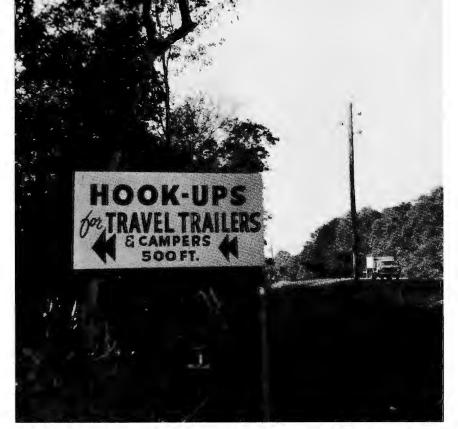
In a fast-changing situation, we must see, smell, feel, and deal; our

language must respond, not resist. A young, television-broadcaster friend describes a new Louisville restaurant occupying a much sought-after site on the banks of the Ohio River: "And there is the Kingfish, sitting right on prime time (fig. 5)." Another friend describes his research office, competing for a Midwest contract, as being "stacked up in a holding pattern over Kansas City." Such analogizing, transference of image from one field to another, is vital in dealing with changing urban situations.

Putting together words in new ways is a means of putting together one's new world, a game at which ordinary people excel. Dwight Bolinger observes how creative the man in the street is at word building, especially when he uses verbs such as to help out, to write up, to die off, to string along, to gad about (fig. 6).<sup>8</sup> Ronald Slusarenko reports that wine-drinking hobos prefer to "jungle-up" on the wooded banks of the Willamette River in Portland, Oregon.<sup>9</sup> These phrasal verbs, as used in everyday speech, are "probably the most prolific source of new nouns in English," says Bolinger, since they so easily convert to "sit-in, wade-in, love-in, dropout, lockout, fallout, cookout, freakout, hangup, spin-off." 10

5. "Sitting on prime time" is a phrase used by television commentator to describe Ohio River restaurant designed like side-wheel steamboat, which occupies a prime downtown site with high-rise hotel and bank tower (in background)—a phrase transferred from time-sales to geographic description.





6. Wordgame as played by sign painter: a phrase like "to hook up a trailer" gets shortened and verbalized as "hook-ups," at Amelia Island, Florida—out-door evidence of language in the act of being changed. It describes the new, instant plug-in communities of trailers, travel trailers, and mobile homes.

Part of the game is in welcoming ill-fitting, odd-sounding, and allusionistic words, which, when applied out of context or in unaccustomed ways, send out sparks and flashes of insight. Wordgamesters learn to hang in there with new meanings, and not get hung up by discordant fits between old words used in new ways. Players train themselves away from literalness, monkey around with metaphors, live experimentally with the odd or unfamiliar, and even temporarily abandon texts and dictionaries in working through new meanings. New words can father new thoughts. As the literary critic George Steiner has observed, "Metaphor ignites a new arc of perceptive energy. It relates hitherto unrelated areas of experience." 11

One must also describe in order not to despair. Paul Klee, the Swiss artist, somewhere has said, "I create . . . in order not to cry." Description, if free enough and accurate enough, suggests actions we should undertake to deal further with what we see.

Prescription—the putting together of proposals, why don't you's, solutions—depends on one's ability first to observe a problem, to describe it, and finally to propose solutions in language that is persuasive, if not eloquent, and firmly anchored to evidence from daily life.

This is no game to be played just for the hell of it, but for survival. Unless we all learn to say what we see, to describe it so others can see it, and to expand our own powers of description in a changing world, there is little reason to think we will do well at prescription, at finding solutions, at coping. Fuzzy language leads to fuzzy thoughts. The so-called "urban dialogue" of our time is not only dull but often hysterical. Its language is an awkward mixture of elitist architectural terms, of radical shitslinging, and of the manipulative lingo of evangelistic bureaucrats. You can read for pages or listen for hours, and have no contact with the hard facts of a living environment. Somehow we need to work out a better fit between language and environment. I think this can only happen if we continually confront the thing itself—the changing city, its people and their processes. Testing, testing, testing. . .

## Fix 1: Perspective

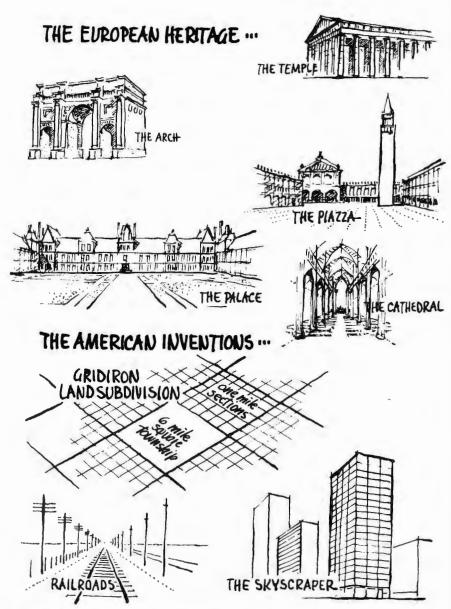
Most of us still look outward from rigidly conditioned points of view. Our visual gyroscopes, set spinning centuries ago, cause us to swerve, pause before familiar scenes, and resist the new and unfamiliar. We are fixed or, in the earliest meaning of that word, fastened or pierced, stuck to an old constraint (fig. 7).

Of all the fixatives still permeating the modern vision, the perspectivist tradition is one of the most rigidifying. Like a mental chemical, it tends to preserve our perception in an earlier state—a kind of tunnel vision.

I recall being part of the voluble and amiable Delos III Symposium, a group of touring discussants brought together in 1965 by the Greek planner-architect Constantinos Doxiadis. On the Aegean island of Thassos we were wending our way up the mile-and-a-half climb to the Temple of Apollo for a memorable lecture by Dr. Arnold Toynbee. Along the way I had stopped to photograph the lovely crescent harbor below with its red-roofed village in the middle distance, greenish-blue mountains in the far distance, and setting sun casting its beams over the Aegean Sea just at the nose of the mountains, all enframed in pine branches (fig. 8).

For a moment I thought I was alone until I discovered the teen-aged son of our host sitting in an ancient crypt behind me. Young Apostolos Doxiadis was sketching the selfsame view that had stopped me in my tracks. Suddenly I realized that we both were captives of a 400-year-old





7. Much depends on the viewer's personal "fix." Those whose world view is fixated in reverence for a golden age of palaces, piazzas, cathedrals, and temples will describe a scene of American inventions as monotonous, tacky, commercialized, etc.

way of looking at the world, as a stage setting, tied to the perspectivist tradition, and magnetized to that particular spot and to no other. As Marshall McLuhan was later to put it, we were still prisoners of the Renaissance way of looking outward, "a piazza for everything and everything in its piazza," visible, predictable, and static.

Later, home from Thassos, I was assembling an array of Kodachrome slides for a lecture on the principles of waterfront development only to discover, as I slouched over the light table, that each scene had been photographed from the same viewpoint as in Thassos: land was on the left, water on the right; the crescent of the water's edge ran from upperright center downward. No matter where I had stationed myself, at home or abroad, my "fix" was showing (fig. 9).

What invisible hand had guided mine to produce those uniform photographs? It was indeed the perspectivists, those innovative artists of the fifteenth and sixteenth centuries who discovered and developed that powerful instrument of vision, the perspective drawing. For over 200 years, artists and mathematicians experimented to produce a sense of three-dimensional space in two-dimensional drawings. By the sixteenth century, the study of architectural perspective "became almost a theatrical extravagance, evidenced in the theater, in paintings and in architectural interiors." (See figs. 10 and 11.)

8. We choose scenes to photograph according to the way we have been taught to see the world. This is the "correct" view westward across the Bay of Thassos in the northern Aegean—a view conditioned by centuries of the perspectivist tradition. It puts American tourists and the scenery in predictable relationship.





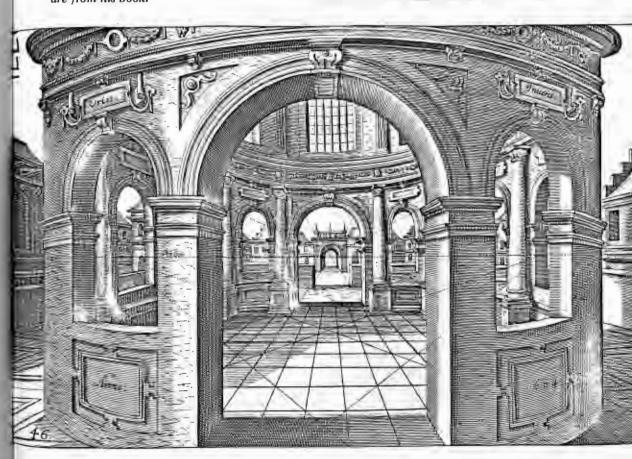
9. Entrapment by custom and tradition: if you are accustomed to looking for landscape that falls into the "right" arrangement, this is what you are likely to get—a series of look-alike snapshots of the world.

## STVDIOSIS OPTICES SPECTATORIBUS.

TPse ego, qui primis Artem veneratus ab annis,

Hoc studui, vt nullum tempus abiret iners.
Grata oculis animóque fuit día Optica nostrus,
Atque animo accessit qui facit esse, labor,
Hanc etenim per lustra octo studiosius artem
Excolui. studio, quod doceo, obtinui.
Dicitur ars certa hac pariat quam regula certa:
Traditur hic certis Optica docta modis.
Ars regit hac oculos, animos recreátque videndo:
Non oculos falsis ludit imaginibus.
Exacté sculptis ars hic proposta siguris,
Vt vestris oculis gratius esset opus.
Forté aliquod nomen mini erit: sed Belgica docta,
Si quod nomen erit, quarat es ipsa sibi.
Hac si grata oculis; occurret maior imago:
Hanc exornatam pagina multa dabit.

10, 11. "This is my visage," wrote Jan Vredeman de Vries, sixteenth-century Dutch architect-painter-engraver. "My eyes and mind took pride in sacred Optics... forty years I plied this art devoutly." His last great work, Perspective: The Most Famous Art of Eyesight (1604-5), demonstrated how to describe scenery according to rules of perspective. These engravings are from his book.



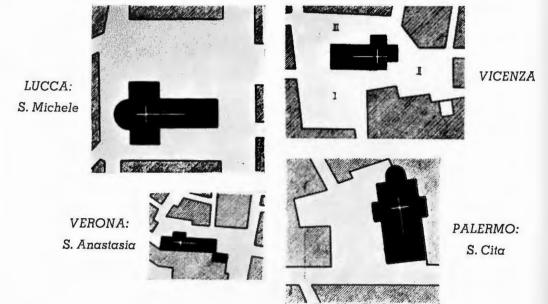
Stereotyped ways of looking became the standard stance of the educated classes in Europe. "Gentlemen of the seventeenth century . . . having learned the clues to scenery from looking at pictures . . . were prepared to look for the picturesque wherever they found it . . . [depending on] the scenery's capability of being formed into pictures."3

Such fixes, organized out of the past, assume powerful influence, as in the work of Camillo Sitte, the Viennese architect whose City Planning According to Artistic Principles was immensely popular when published in 1899, and has become a standard reference.4

Like many a contemporary critic, Sitte made "an alarmed outcry of a cultured and sensitive citizen about the disturbing urban developments of his day."5 He analyzed Greek, medieval, and Renaissance cities "to bring forth something of the old masterpieces," seeking out, "as technician and artist, the elements of composition which formerly produced such harmonious effects."6 (See fig. 12.)

Since proper perspective has everything all lined up in three dimensions with no questions asked, no answers are needed; it is already taken care of in the picture, laid out neat and proper. We need do nothing about it. No demands on us, no intervention required of us, a limited relationship is set up between us. That is the end of a vital visual languagewhen it creates pictures that need no answers. And that also is the death

12. Looking back into the Middle Ages, when energy was in short supply, Camillo Sitte concluded that monumental buildings were best situated "on the sides of public squares of average spaciousness" so as to be looked at from a convenient distance, and because this saved builders the expense of adding fancy façades all around the structure (Sitte, The Art of Building Cities, p. 17).



of a townscape—when it produces pat visual answers that require no questions.

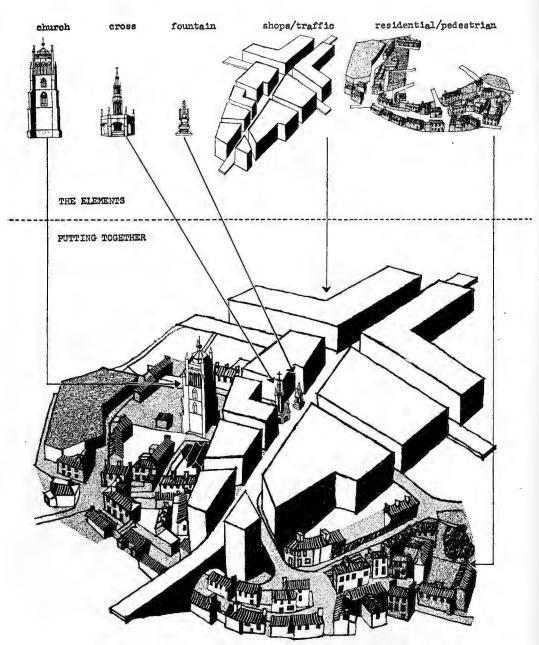
Thus, by the 1950's when the United States was getting into its largest building boom, when housing, redevelopment, and suburban sprawl began to preoccupy American writers on urban affairs, many of us concentrated on the city in terms still visually organized by the perspectivist tradition. Gordon Logie, the British architect-planner, in his book The Urban Scene, dealt with towns and cities "from one particular point of view, their success or failure as pieces of scenery-one could almost say as sets in a theater."7

The most influential practitioners were English, notably Gordon Cullen whose brilliant prose-and-pen style, inventiveness in examining evidence firsthand, and ability to give readers a feel for the "thereness" of places had international impact. His perceptive book, Townscape, available in the United States in 1961, and his earlier writings and sketches in The Architectural Review set up a new vocabulary of serial vision (fig. 13).8 His sketchbooks gave a clear sense of what it is like to move through neighborhoods. Although he dealt with the new sense of mobility, his ideal city seemed to be a medieval clustering of hobbledehoy buildings and winding alleys and streets. He projected so powerful a context in his sketches that it overshadowed much of his inventive, mobile gamesmanship for dealing with cities.

Traditional viewing of cities as stage settings and visual compositions dies hard. In her 1968 book, The Language of Cities, Fran P. Hosken dealt with the city mostly in such old-style terms of European theatrics as: order and unity, scale and space, light and shadow, color and texture.9 Predictably, in such books today's cities fail to measure up. Even the contemporary landscape architect Lawrence Halprin, in his 1963 book, Cities, seemed to be stuck with the old townscape shopping list -nostalgic encounters with street furniture, urban pavement details, fountains.10 However, at the very end of this book he broke loose with an adventurous choreography, "movement notations," later expanded in his 1970 book, RSVP Cycles, into the concept of scoring movements through the environment, a new intellectual confrontation with urban processes. 11

Lurking among us still are feisty rear guards defending the older perspectivist tradition. They mutter that highway drive-ins are messy, signboards low class, suburbs lifeless, and that industrial districts are contemptible unless they copy the moated and turreted castles on the hill of the Middle Ages, surrounded by protective open fields, sentry posts, gates, and other medieval tackle (figs. 14 and 15).

Only when we manage to break loose from the old fixes and look with new vision will the city fully come alive to our presence in it. Only then can we fully recognize functions, goings on, competition, cooperation-



13. Breaking the old English town of Shepton Mallet into its components, Gordon Cullen argues that such exploration permits "a deeper penetration into the truth of the situation," especially by moving through it as a pedestrian (Townscape, p. 214).

the energetic processes of city life too often concealed by the stage settings of the Renaissance and current efforts to copy them.

Furthermore, the burden of the Watts-to-Washington, D.C. riots of the 1960's, fears of mob violence and of official repression, the looming presence of domestic poverty and of increased governmental surveillance, and the growing gap between American claims to moral purity and the immorality of its violence abroad—all this served to traumatize too many of us into a cynical nearsightedness when looking at the world. When it was discovered that Lake Erie was dead—a discovery like Mark Twain's death, somewhat premature—too many otherwise perceptive Americans shut their minds to a continuing analysis of that complex water system and its behavior setting. It was more satisfying to condemn than to investigate, simpler to look, only to look away.

But I do not think steady trauma is a healthy state, nor the dour puri-

14. Opened in 1969, the Cummins Technical Center at Columbus, Indiana, world headquarters of the Cummins diesel engine empire, echoes medieval castle settings—Haw Creek, in foreground, straightened and cleared of brush by company, building upon filled land to stay above floods, all access concentrated at the side and rear.





15. Traditionalists may insist that contemporary American industrial layouts copy the moated and turreted castles of the Middle Ages surrounded by fences, protective open fields, friendly neighbors, etc. Anheuser-Busch brewery north of Columbus, Ohio.

tanical glower a receptive stance. All gatherings are not potential mobs, all gleaming waters are not to be scrutinized exclusively for oil slicks, nor all forests penetrated merely for proof of corporate clear-cutting. There are pleasures as well as crimes to be uncovered, distinctions to be made, and prospects to be explored, described in clear detail, and understood.

## Fix 2: Cross Sections

If only cities, like insects, could hold still like good specimens while we pin them to the laboratory table for study! If only they were like cadavers: cold and rigid from the freezer so that anatomists could debate, following the lead of Andreas Vesalius in the sixteenth century, 12 the proper way to cut a cross section and examine the anatomical patterns inside.

The cross-section examination is an ancient device for studying almost anything from insects to regions, and that great biologist, Sir Patrick Geddes, has left us a superb example in his valley section. It worked well as a pictorial image in his day, and was most clearly put forward in his famed Cities Exhibition at Chelsea, London, in 1911.<sup>13</sup> Geddes had exhibited a large painting of a typical valley cross section as a visual device for understanding the unity and complexity of that geographic unit.

Travel with old Sir Patrick in mind, starting as he did at a remote mountainside, descending through woods, pastures, fields, outer suburbs and then into the town and its seaside docks. It was a predictable set of places, which Geddes perceived in simplistic panoramic terms; the town was a product of its region. From its neighboring hills flowed coal to be shipped, game to be eaten, cattle to be slaughtered, wheat to be milled—everything proceeding downward from hills and fields to grocer, miller, baker, brewer, and shipper. The town was the local magnet, the processor of raw materials that were raised, found, dug, or grown nearby.

Thus Geddes perceived the early twentieth-century town region as a unit. His cross-section diagram enabled him and his exhibition audience to see towns and cities as the expression of their settings. His 1911 panorama showed an orderly, progressive system of transactions from uplands to port, from raw to finished materials. The town or city was still the receiver of raw materials, messages, goods, instructions, and influence from its hinterland.

But how does one translate that old intellectual device today? The contemporary urban complex has become the major power source, the originator of organization, the sender of messages, the manufacturer of influence. Its major exports are energy and control. It ships out regulations, orders, information, propaganda, and directives. It generates transactions to be carried out by the city's agents, salesmen, bureaucrats, managers, and owners. The city is a source region, as polar Canada and Siberia are source regions for North America's weather fronts, spawning and giving identity to cold air masses that flow southeast across the United States.

This 180-degree shift in influence, from Geddes's day to this, has been traumatic. In three generations, "countryside" has been converted from source to recipient, from generator to subject, chattel, or pawn. Countryside is judged chiefly by the presence of, or lack of, urban goods, techniques, and influence. College curricula writers are hard pressed to insist there is still a legitimate subject called "rural sociology," and tend to speak instead of the rural-urban continuum. The prevailing view in America is outward from a city base of operations. Country takes its identity from the city rather than from its own self, and country life is

increasingly hung up with nostalgic and usually denigrating images of itself created in Washington, New York, Boston, San Francisco, and other major image-generation centers.

Thus to view the city with anything resembling Geddes's perspective of the valley section is to misjudge its force, to misperceive its direction, and, above all, to be stuck with a mental tool that hardly equips us to grasp the dominance of city influence over the whole of American life and landscape. Geddes's analysis, like that of the perspectivists, is out of date; and those who hold to it steadfastly are ill-equipped to deal with, or to understand, the forces at work within the contemporary metropolitan scene.

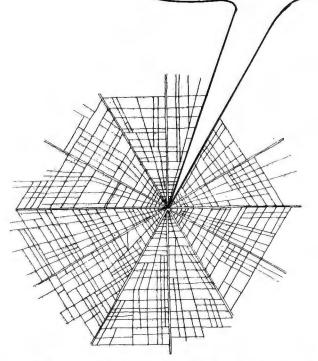
#### Fix 3: Centrality

There was a time when everything that was important in a region happened at its center; when all roads led to the center (before the automobile made possible the discovery that all roads also led *away* from the center); and when the importance of one's home, business, office, showroom, and activities was measured by its proximity to that most central of all points, the old city center, the old downtown (fig. 16).

So powerful was this fixation that it has dominated city growth and attitudes toward cities for thousands of years. During most of those years, mankind had no choice: being physically "close-in" was the only way one could efficiently buy, sell, trade, barter, exchange, charm, seduce, or negotiate. Everything in urban life sooner or later had to flow, either physically or symbolically, through the central market places for goods, services, and ideas. Geddes's valley section reflected this flow.

Today, thanks to cheap or free media, to the new interconnected and intercommunicating, switched-on society, and to increased personal mobility and movement, the old grip of centrality is loosening. No longer can we be certain that, by the grace of God and the laws of geometry, all things of importance are best transacted at the center, all debates concluded at the center, and all great structures located at the center. The first nails in that coffin were supplied by the invention of the telegraph and telephone (which, among other things, put the skids under coffeehouses in New York as the places for swapping business information in the 1870's); by mass transportation to space for sale via street railways in cities, railroads, and automobiles; and now by the new personal media—portable TV, console access to computers, hotlines to libraries and data centers, and quick access to plugged-in information.

Just as the old concept of chastity has been structurally undermined by the Pill, so the old concept of centrality has been undercut by everyman's Hey, buddy. Could you tell me if I'm anywheres near Martha Spindel's Delicatessen?



16. The power of central focus; the old magic of centrality has disintegrated.

access to space by movement (commuting, vacationing, long-range visiting, etc.), and by everyone's access to information that does not require face-to-face encounters for its production and possession.

For hundreds of years, royalty and other powerful groups had sought to tighten the reins on central places, to force the public to traffic through and with the center, to build at high densities and not sprawl at a distance. But these containment efforts have generally failed, except in such



17

18



land-starved and crowded countries as Holland, where sprawl is rigidly prevented in order to save scarce farmland.

Consequently, it is time to recognize that the magic of centrality has waned; and that our fixation with the old concept of a city where "everything goes up in the center"—land values as well as skyscrapers—no longer provides an accurate view of the way cities are acting and changing. And so what happens to old downtowns now epitomizes something far bigger: traumatic changes and shifts in voting and financial power; the takeover of central neighborhood turf by blacks and other minorities; the restructuring of whole cities as they segregate shopping onto suburban strips and clusters, health care into medical centers, jobs into industrial and port districts, and many another single-purpose enclave in a more dispersed pattern (figs. 17 and 18).

To be sure, the rising power of government in many parts of the world, including the United States, continues to express itself in "efficient" and "rational" efforts to promote high-density centers, especially in master plans that try to restrict the growth of suburbs, and concentrate housing developments downtown.

But, just as the marvelous discovery of perspective gradually became perverted into stage setting, just as the cross section and its scientific uses led us to look at the city as a specimen to be frozen for laboratory examination, so the old magic of centrality has misled us into seeing the city only in terms of its ancient and once-immobile geometry. Each of these old-time fixes now tells us to get out and take a new look around.

<sup>17.</sup> Large-scale economic segregation: strung out on huge open tract with new railroad and highway access is General Electric Company's Appliance Park East, the southern economic base of newtown Columbia, Maryland.

<sup>18.</sup> Hospitals in hayfields: the new decentralization of health care, doctors' offices, drugstores. In distance, suburban hospital and doctors' offices; in foreground, new 1972 hospital under construction. St. Matthews, Kentucky, vicinity Browns Lane, Breckinridge Lane, Interstate 64.

In linguistics, an epitome is a brief statement expressing the essence of something, a short presentation of a large topic. A city's epitome districts are crammed with clues that trigger our awareness to the larger scene—things around the corner, processes out of sight, history all but covered up. They stand for other things; they generate metaphors; they are the sort of places that, ideally, help us get it all together.

The thing about epitome districts is that they seldom stand still. The symbolic load is forever shifting. One generation's epitome district may become the next generation's candidate for oblivion. Only a trace may survive—a persistent street pattern, a local accent, a cluster of intermeshed businesses. But do not picture epitome districts as remnants or mere reminders. They offer, I think, the most compelling evidence of present and future change, providing we know where to look, and how.

# Epitome Districts

The term "epitome district" was first coined by a team of bright graduate students at the Medill School of Journalism of Northwestern University in 1966.1 We were looking together for ways to grasp those changes that were convulsing Chicago. The students tracked through the stockyards, then disintegrating like so many other old stockyards-in Denver, Kansas City, Phoenix, and elsewhere-because of the pressure of rising big-city expenses and the increased value of stockyard land for other, better-paying activities. They looked at port-of-entry neighborhoods crammed with newcomers, at a North Shore suburb with streets almost wholly deserted at 10 A.M.; they uncovered an indicator of doubling-up by tenants in old apartments (by counting makeshift mailboxes in the beat-up lobby), a way to measure neighborhood density (by getting out early in the morning after the first snow and counting footprints), a way to check on family overcrowding (by looking for beat-up back stoops and bare yards trampled by too many kids); and they observed the awkward fit between old-timers in village houses amid giant new suburban warehouses in Elk Grove Village and Wheeling, Illinois. And in doing all this they came to see how the traditional fix on downtowns, traditional information sources, and traditional city images are no longer dependable. At first they found it hard to look. All their training had taught them to track down key persons to interview-mayors, city engineers, county political chairmen, et al. They were accustomed to trust a quote, but not a sight. Only after many weeks were they able to use what they saw as skillfully as what they had been told.

Let us look, then, for our own epitome districts; places where one may observe formal and informal rituals, symbolic activities: the organization of folk festivals ranging from parades to inaugurations, from unveilings to auctions to rallies to funerals and swearings-in. Places where such activities begin are key places to all the other activities that feed into and out of those places—especially caravans, parades, motorcades, and a host of proliferating processions that jam up traffic in every city. The beginning point—historically and at the moment—is a special sort of epitome district.

In many cities, one can pick out such ceremonial places easily. In the South there is a modest old Confederate monument as one's guide; in the North a monument is similarly located but two or three times as big (losers generally cannot afford big monuments to lost wars). In older gridiron-type cities, it is likely to be at the City Hall grand staircase. In suburban towns, celebrations begin at a major shopping center. (The 1972 political campaigns offered scores of examples of candidates hustling for suburban votes by helicoptering in and out of shopping-center parking lots.)

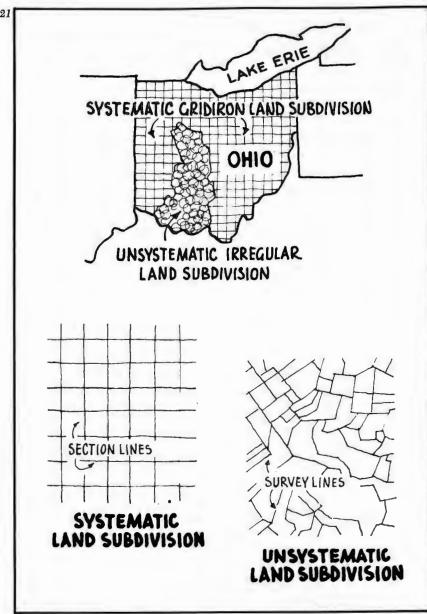
Once we become sensitized to origins, to beginning-places, to places of



MILFORD gridiron roads deflected by lakes -- TOWNSHIPLINES most local roads on + one mile grid ATWOOD highway-WARSAW follows railroad (COUNTY SEAT) - 6 miles -

20

THE TOWNSHIP SYSTEM and one mile squares in northern Indiana



19, 20, 21. Giant-sized breaks in landscape patterns occur where the old national grid took over, generally west of Ohio and Mississippi rivers, with many historical and geographic variations beyond those shown on the United States map here. One of the clearest sets of breaks within one state is the old Virginia Military District within Ohio, subdivided after the Revolution. By far the larger part of the nation, however, falls into a predictable township system.

transition, we are then in a heightened state of awareness, not only to the processes of a city, but to those places especially rich in these directional and functional clues.

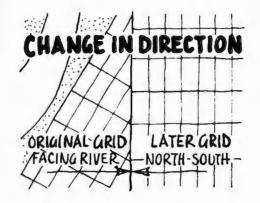
#### Breaks

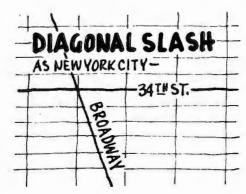
A city's energies falter or shift gears in predictable ways and places. During a century and a half of rapid expansion, American cities have shown the results of change more clearly than have those of Europe, and these breakpoints—or gear-shifting zones—tell us a great deal about the larger scene. As special, geometric epitome districts, they offer quick insights into the larger dimensions of the city.

A "break," as I am using the term, occurs where there is an abrupt, visible switch in the direction and/or the design of streets—especially where the pattern shifts diagonally. It occurs usually where one gridiron of streets laid across flat land encounters a steep hill or a valley; or else where the original gridiron of one settlement, or one early surveyor, clashes with an adjoining street network. From this clash, there usually emerges a series of awkward, irregular, and angular street junctions along the fracture zone where the grids encounter each other (figs. 19, 20, and 21). No matter how long ago the clash took place (thousands of them occurred in the nineteenth century), the results are usually visible and influential today. Thus, to watch for breaks is to find clues to history as well as to current events.

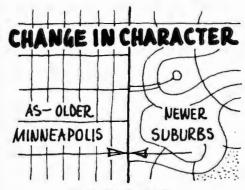
Urban critics, particularly those hung up in the perspectivist tradition, insist that the American city is unvarying and monotonous in its addiction to the grid. But it is not enough to echo this stale lament; for to understand an American city on first contact, one must look beyond the individual grid to its interface or fracture zone with the next, and to variations within the grid (fig. 22). One need not swallow the line that all grids are alike, nor accept whole hog the assertion that one break is as good as another. Some breaks exert a positive effect on the development around them; others bitch things up on all sides. Few breaks exist with no apparent side effects; at least I have never found one in looking at dozens of cities and their street systems.

For example, I have gone back several times since 1963 to observe the modest dog-leg break between the older grid of Austin, Texas, and the slightly shifted and skewed grid to the north, where the University of Texas neighborhood begins at West Nineteenth Street (fig. 23). The north-south streets miss joining at Nineteenth Street by half a block. Consequently, anyone approaching Nineteenth Street looks directly at the backsides and hindquarters of the properties opposite. This particu-



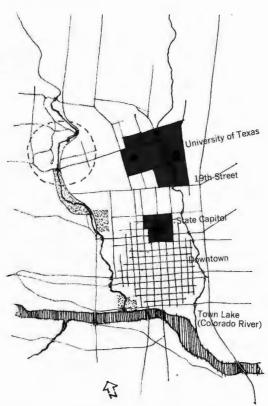


23. Between town and gown at Austin, Texas, Nineteenth Street forms a distinct geographic separation where two street patterns meet at the break, forming a series of irregular dog-leg intersections. These have influenced land uses and set up a zone of transition signals for motorists.



BREAKS

22



larly uninviting break has been very slow to develop commercially, compared with most diagonal breaks which offer better visibility. The reason is not altogether aesthetic. Motorists are so preoccupied with negotiating the dog-leg junctions they pay little attention to the roadsides and what they might offer.

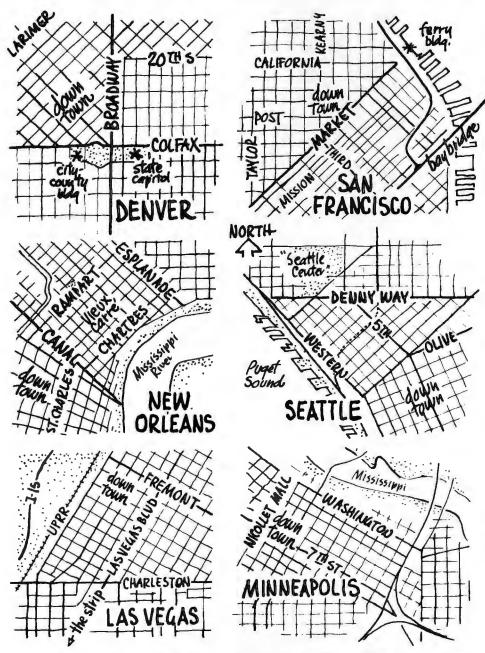
Sharp breaks tend to occur at the edge of central business districts, as though the energies which produced the first city have now exhausted themselves. Time and again, as one travels outward from old downtowns—as in Denver, San Francisco, New Orleans, Seattle, Fresno, Las Vegas, or Minneapolis—one confronts confusion: the grid turns angular and odd-cornered; it slopes off in a new direction (fig. 24). And along this zone of fractured intersections one encounters a new framework with different densities, architectural styles, building setbacks (fig. 25).

The most confusing break I have encountered is the remarkable razzle-dazzle no-man's-land area in downtown Denver where two disparate grids come together at Broadway, Twentieth, and Welton: the original diagonal grid that was based on the South Platte River and early rail-roads parallel to the river, and a subsequent grid that follows the compass directions: north-south, east-west. This lash-up occurs with devastating impact where the blocks are cut up into triangles. So confusing is this melange at first that there is no visible identity left. Most buildings in the vicinity have been razed, the multiple junction is surrounded by parking lots, few pedestrians are to be seen, and one-way traffic speeds through this man-made mini-desert.

Yet this apparent confusion reveals several patterns to a patient observer standing at the break. First, the older flatland grid to the west contains the bulk of old Denver's businesses. Secondly, east of this break you begin walking uphill—an exercise most downtowners have avoided, thus making the break a prime location for parking lots. Thirdly, the University Club and other remnants of the old mansion district along Capitol Hill to the east were obstacles to big-business development until the late 1960's. Now the slope is hot property, being filled with giant office buildings, a transition observable at the breaks of many other cities.

Austin and Denver illustrate the most familiar location for breaks—along the edges of the first settlement or original city plan. Most original plans consisted of rectangular lots formed into blocks, and these, in turn, formed into a rectangular gridiron. Almost inevitably, the first grid followed the alignment of an early bridge or was staked out at right angles to the first town landing or to the water's edge (fig. 26).

Original grids were seldom big enough for growth. Usually by the mid-nineteenth century, another set of speculating settlers laid out a new townsite just upriver or downriver from the original settlement. Seldom



24. Predictably, breaks in the gridiron pattern tell you where the original settlement ended and another, with a competing pattern, grew up next door. Most often the original gridiron was at right angles to a water landing. New Orleans' many grids follow the beds in the Mississippi River. Such breaks are handy navigation zones for getting one's bearings in a strange city.



25. Confusing to strangers is the competition set up between two old settlement patterns, as here along state road 29 (Massachusetts Avenue) northeast of Indianapolis, Indiana. Parking lot lines in foreground follow the north-south dictates of the national grid, while Route 29 was laid out diagonally athwart the grid. Thus property lines, lot lines, and painted lines do a continual flipflop, shifting from grid to diagonal.

did the latecoming grid merge easily with the original. In New Orleans, each new wave of settlers appeared to spawn its own grid, anchored to a different loop or meander of the Mississippi River.

In Milwaukee in the 1840's, Juneautown settlers on the east side of the Milwaukee River settled on one gridiron, while the Kilbourntown folk on the west side had their streets following a different alignment. It took decades of legal skirmishes, bridge-burnings, and fistfights before the geopolitical break was mended.2 Today, four downtown streets-Kilbourn, Wells, St. Paul, and East Buffalo-cross the narrow Milwaukee River on oddly-diagonal bridges as reminders of that historic break.

In the Midwest and Great Plains, the original grid offers an instant fix on the town's origins-usually anchored to the main railroad through town. Go to the point where the main street crosses the main track and that is where it all began. The grid determined early growth, and if the tracks ran northeast-southwest, so did the town. Eventually, as such

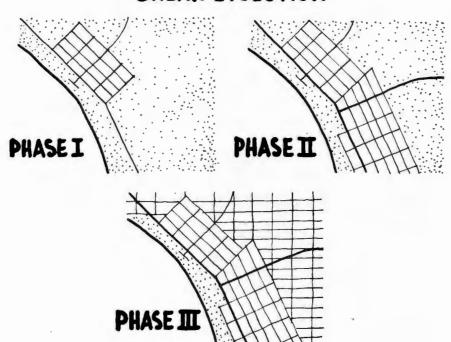
towns expanded, their diagonal grids encountered the one-mile-apart range or section roads, which followed the north-south-east-west compass. At that point, the old railroad grid was abandoned, and beyond the one-mile roads, new streets shifted to follow the national grid, as at Norman, Oklahoma; Hays, Kansas (fig. 27); and Fresno, California.

Not quite so easy to observe is the original grid in Atlanta, which began as a railroad-grid town called Terminus. Today, that original grid and its small, almost-square blocks make up the heart of Atlanta's financial district, north of the old railroad gulch, and surrounded by breaks (fig. 28). "Underground Atlanta's" streets, with their huge granite-block sidewalks, follow the original pattern next to the railroad.

In Macon, Georgia, the breaks around the old downtown area go back to the Civil War. The town was left bankrupt, and its citizens were concerned more with survival than with perpetuating the original rectangular street plan of 1823. Postwar poverty led to the abandonment of the 180-foot right-of-way of the original numbered streets, and today one can

26. Typical evolution of a Midwest or western city with original landing place and first street gridiron at top. Later, land developers set up their own grid until finally, in Phase III, new streets joined the national grid and followed its N-S-E-W directions.

## **BREAK EVOLUTION**



27. Early railroad towns show their beginnings along the tracks with their rectangular patterns tightly anchored to, and determined by, the direction of the tracks. Here at Hays, Kansas, the tracks ran diagonally. As soon as the city's expansion reached the old mile-square section or range line roads, the gridiron "straightened up" into the national gridiron based on points of the compass.

trace that war's influence by the sudden narrowing, bending, or twisting of many streets at the edges of the original grid.3

City dwellers have responded to breaks in remarkably uniform ways: as investors, settlers, and travelers they have resisted crossing the break either in home-seeking or investing. Breaks form psychological, as well as geographic, barriers; they set up relationships that confuse, so that territory on the other side seems strange and unreliable. Land beyond the break has an uneasy look about it; development is spotty and irregular.

28. Atlanta's original gridiron of rectangular blocks was based on the early railroad, here running northwest-southeast across downtown. As city boomed, it set its streets on a new alignment, generally north-south. The old grid marks the heart of financial district.



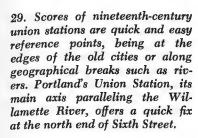
With a speculator's nose for locations, one can learn to look at civic centers, fairgrounds, and other large-scale enterprises for clues to the locations of old breaks. For example, the site of Seattle's "Century 21" World's Fair of 1962 was located just beyond, and north of, a major break in that city's two downtown grids. Land beyond the break, north of Denny Regrade, was still comparatively underdeveloped in the 1950's when the city sought, with a municipal bond issue, the 72-acre site that has now become a major cluster of civic buildings called Seattle Center. Thus, a location that was once beyond the pale, moved into center stage.

## Mobility at the Breaks

High prices have always been paid for highly accessibile sites, and the junction of two diagonal streets has been exploited for its accessibility for thousands of years. Edmund N. Bacon's exposition of the Sixtus V plan for Rome in *Design of Cities* shows a sophisticated effort to create a movement system for that complex city, with a number of easy-access sites created at the nodes of traffic.<sup>4</sup> Bacon's account, in the perspectivist tradition, emphasizes the high visibility of these junctions; but the way traffic moves in Rome is proof, even today, that the key element was access rather than visibility alone. In a sense, Sixtus was an early breakmaker, using the power of the Church to do what later and more mundane planners have done, often by default, with the simple geometry of disjointed grids. Break sites—if they are not altogether awkward, as in Austin, Texas—are valued for their unique accessibility in hundreds of cities.

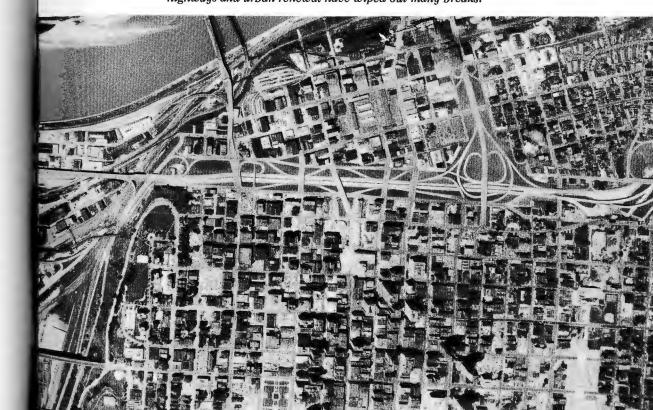
Undiscovered and unexploited breaks, however, are easy targets for contemporary highway and urban-renewal scouts and for tidy-minded city planners anxious to regularize traffic flow. Thus many nineteenth-century breaks are getting buried beneath new expressways, superblocks, civic centers, and other large-scale ventures. Most breaks remain intact, however, and a casual inspection of any city will uncover a consistent pattern of break locations for prominent buildings such as nineteenth-century railroad stations.

Since railroad tracks often followed rivers, valleys, and other topographical breaks, the depot or union station generally occupies a strategic break site, often at the end of a major city street, as in Macon, Georgia; Portland, Oregon (fig. 29); and Kansas City, Missouri. Before they all disappear in the reorganization of passenger service brought on by Amtrak in the 1970's, they should be treasured as clues to the onetime "most accessible place in town." Their presence or disappearance is a clue to what is happening beyond their walls and tracks.





30. Spotting a break in street patterns at Kansas City, between old Missouri River-oriented grid and later gridiron to the south, highway planners chose this confusion zone as a location for Interstate 70-U.S. 24/40 east-west. Thus, highways and urban renewal have wiped out many breaks.





31. While expressways and urban renewal wipe out breaks in one part of the city, architects and institutions go to extreme lengths to overcome the monotony of the breakless gridiron pattern, as here at Columbus, Ohio, where the Grant Hospital School of Nursing on East Town Street has been set askew, on the diagonal. It thereby acquires some of the high visibility that normally accrues to buildings located on breaks.

Since breaks offer such incomparable building sites and planning opportunities, one would expect them all to become preserve-and-dramatize zones on city plans. Yet far too many planners and downtown business groups simply try to wipe out the break, shove it under an expressway (fig. 30), or destroy it with a renewal project. Thus, many a city's future can be previewed in what is happening today, in either the destruction or enhancement of these old breaks (fig. 31).

### The Political Venturi

Quite by accident, mixed into a long search, I stumbled upon one of the more important epitome districts to be found in any city that is still linked together by an establishment, power elite, or power structure. This is the distinct pathway or network of paths along streets, sidewalks, and corridors followed by central-city movers and shakers, influentials, wheelers and dealers, and hangers-on.

Despite the rise of electronic communications, much important person-to-person business is still transacted out in the open, between office and lunch, courtroom and conference, bench and bar, desk and drinks.

The process of my own discovery is worth looking into, for it tells something about the ways in which downtown epitome districts work. and suggests clues to their futures. In writing about my own city, Louisville, I found it essential to move about on foot, to pay personal calls on as many political, financial, and other key figures as possible, to see them in their own haunts and lairs, to probe their attitudes and experience, and, as a journalist, to move in public places, observing who was with whom for clues to future alliances, deals, and consortia.

After repeated exposure, I discovered that one particular stretch of sidewalks, doors, and corridors in the financial-civic district was extraordinarily productive in contacts, tips, suggestions, reactions, observations, and gossip.

My discovery, it happened, took place on a Monday. My Mondays were highly pressured and competitive; days on which it was vital to catch up on potential news after a weekend. I found that by stationing myself at noon on the crowded public sidewalk outside the largest bank and office building, keeping in view the doors of the County Court House and the second-largest bank, plus the route from nearby City Hall, I was likely to meet at least two dozen news sources, men in public life or business, headed for lunch at restaurant or club, willing and sometimes eager to exchange rumor, gossip, and hard information. (One never approaches these encounters empty-handed or vacant-minded.) It became clear that here was an unavoidable "Indian path" between the offices of the downtown elite and their noonday drinking/lunching/negotiating places. This walkway carried a high information load, a mixture of rumor, gossip, facts, and near-truths having varying capacity to shock, inform, placate, and cause repercussions. It was, for my purposes, a highly volatile and explosive mixture to be handled carefully, professionally, and with due regard for the libel laws.

By analogy, I then compared it with the Venturi tube<sup>5</sup> of an automobile carburetor, that narrow aperture or nozzle through which a stream of gasoline was forced under pressure. Once through the nozzle, it expands quickly, mixing with air and vaporizing into an explosive mix to be compressed by the cylinder head, ready for the spark plug to force it to life. Thus the "venturi" is a gatherer, an accumulator, and accelerator of traffic, movement, and information.

The typical venturi of this sort seldom stretches longer than a fifteenminute walk, although it is clear that executives will walk several times as far to lunch—especially in pairs or threesomes—as they will walk from their cars to their offices. The "throat" of the venturi may be only a few

yards long and a sidewalk wide; it may split, disappear, and suddenly reappear. It has its popular corners, its Peacock Alleys, and its cargo of information which varies with the seasons and with demolition or new construction along its route. The formation of new men's clubs, the merger of new and old, and pressure to open all-white, male clubs to women and minorities indicate a situation that is far from static. Many a club withers on the downtown vine, while new ones sprout in the prospectuses of proposed new downtown skyscrapers. Atlanta's penthouse Commerce Club is so successful it has opened a branch some blocks away.

Although financial and court districts are the most immovable and traditional parts of the nineteenth-century American downtown, few of them are static. Competition is keen and transforming. Thus venturis and their appurtenances-the clubs, courts, banks, offices, bars, and restaurants-are epitomes of the larger city; they offer indicators of its power structure, strengths, and challenges. They are carriers of information, conveyors to be used, planned, controlled, and manipulated.

There is nothing more calculated to inspire the cupidity of speculators (and of more prudent investors) than a chance to create, and then monopolize, a local venturi-whether it is a single street that seems to be "the only way through town," or a town or city occupying a large-scale venturi location or geographic bottleneck of the sort described here.

This opportunity fascinated the banker on whose doorstep I had first discovered the process-so much so that in the new Citizens' Fidelity Bank tower in Louisville the ground-floor arcade has been consciously designed as a small-scale venturi to attract low-level customers, and the Jefferson Club added on the top floor to magnetize high-level decisionmakers. Bank president Maurice D. S. Johnson plans, during the 1970's, to extend his bank's venturi diagonally southeastward into the heart of the city's shopping district—barely in the nick of time, for his competitor, the First National Bank, has attempted to create its own venturi two blocks north, with a forty-story office tower and a handsome plaza facing south toward the traditional venturi. No doubt the bankers' grapevine has been at work, for one may observe similar maneuvers elsewhere: the design of the new First National Bank in Chicago's Loop was carefully manipulated to pull customers through its giant arcade and off its own plaza on the sunny south side, and influentials to its Mid-Day Club on the fifty-sixth floor.

No venturi is immutable; some disappear as the information capacity of a downtown district shrivels. The "yield" of a political venturi changes with the seasons in varying degrees depending on latitude: few people hang around Chicago's sidewalks in midwinter, and I will be surprised if the grandiose South Mall at Albany, New York-built at a cost now

approaching \$1 billion-will be anything but a vast windswept wilderness. It is a truism among journalists that the level of interchange and gossip drops drastically around state capitols when the state legislatures adjourn; and similar changes occur when any population shift drains a local pathway system (figs. 32, 33, 34, and 35).

In order to grasp the dynamic forces at work, let us look into several venturi districts, beginning with Jacksonville, Florida: In ten years the old lunchtime venturi has been fragmented by the openings of the River Club (1955) and the University Club (1965), each one atop a new office tower a mile from old downtown on the opposite bank of the St. Johns River. By 1972, all but one major central hotel had closed, few top-flight restaurants remained, and an early venturi northward from the financial district to the old Seminole Club had thinned out. Whether a new insurance headquarters and proposed "skywalk" system might reverse the trend remains to be seen.

Columbus, Ohio: The junction of Third and East Broad streets provides the action scene, much of it still revolving around the State Capitol in mid-city. The University Club is just behind the Capitol on South Third, the Athletic Club at 130 East Broad, and the august Columbus Club a short walk east on Broad, where, in the early 1970's, it faced a major building boom across Broad where the new State Office Building, and Borden Company headquarters were high-rising. Close by an alley called Lynn Street blossomed out with the Pewter Mug and other dimly lit restaurants to reinforce the old Ringside restaurant.

In Hartford, Connecticut, the traditional venturi is anchored to the marble entry of the Hartford Club, an imposing red brick building with its rear quarters extensively rebuilt and a handy parking lot on the south side. Across Prospect Street is the huge Travelers' Tower Plaza (1960) and the Wadsworth Atheneum, the nation's first free art museum. The more modest University Club, tucked away on narrow old Lewis Street a few minutes' walk to the west, is less big-business oriented. Members of the State Legislature and other politicians are magnetized, by good food and a staff that memorizes their names, to Carbone's, a bleak-looking but popular drive-in restaurant on Franklin Avenue a mile south of the business district and considered too far away to walk (fig. 36).

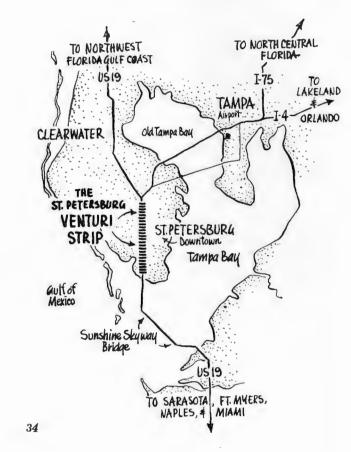
Cincinnati, Ohio: The south side of Fourth, between Walnut and Main, is considered "on the way" from important downtown offices to both the Queen City Club and the University Club. Major banks provide generators along the route, and a number of garages have helped to anchor offices in the area.

Providence, Rhode Island: The corner of Westminster Mall and Dorrance Street, where Westminster Street becomes a retail-oriented pedes-



32, 33, 34, 35. Upon closer examination, it turns out that the venturi principle offers a way of looking, not only at small traffic flows, but at regional and metropolitan concentrations of traffic. The tremendous flow of air traffic through Atlanta, of vehicular traffic through downtown El Paso, St. Petersburg, and Chicago, is partly an accident of geography, but reinforced by bridge and highway locations.









36. Open since 1938 at this location, Carbone's Restaurant pulls drive-in trade from the Connecticut State Capitol, seats 85 with a 150 per cent turnover at midday, and is typical of many clubs and restaurants which pull downtown men away from old downtown sidewalk venturis.

trian mall, is an important venturi. Local men's clubs occupy top positions in nearby office buildings, although the prestigious University Club is several blocks away up College Hill on Benefit Street.

Savannah, Georgia: The vicinity of Johnson, Wright, and Chippewa squares provides this city's greatest mixture of hotels and clubs along Bull Street, the main north-south street, which connects the central core of old Savannah squares. The southern anchor of the Bull Street venturi is the Oglethorpe Club ("Members Only" sign), Union Army occupation headquarters after the Civil War.

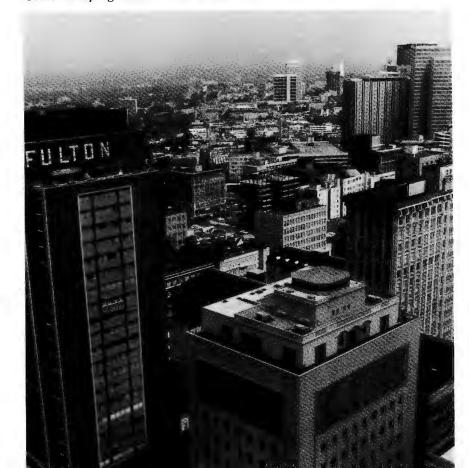
Portland, Oregon, has an identifiable venturi around its central park blocks, partly because of the downtown location of the University. Arlington, and Multanomah clubs and the splendiferous Benson Hotel, all within easy walk of the Sixth and Broadway "heart." Downtown itself remains at relative high density.

Albany, New York: For nearly a decade, this capital city's downtown pathways have been disrupted by the removal of more than 3,000 dwellings to make way for the supercolossal South Mall, by the enforced suburbanization of state employees until the Mall is finished in the middle 1970's, and by giant renewal and highway projects. But the Fort Orange Club stands fast at 110 Washington Street, a block from the Capitol. As New York banks move onto State Street, as 16,000 displaced state employees move back downtown, and as new hotels arise on the Chapel Street-Maiden Lane axis, some of the old foot traffic will resume. It appears likely that State and Eagle, at the lower crest of Capitol Hill, will continue to be the major crossing for shoppers after political, financial, and other goods.

The cargo value or informational load carried by each of these pathways is affected by the magnets, generators, and feeders<sup>6</sup> that contribute to it; by the presence or absence of large office buildings and activity centers (fig. 37); by the variety of public and private goings on in the neighborhood; and by easy access and pleasures along the way-and especially by competition from new media. There is no guarantee that future cities will support traditional venturis as actively as in the past, since the flow of electronic information via computers, private television nets, conference calls, Confravision (the British television version of the telephone conference call) is expanding by geometric leaps.

Today, many venturis carry lighter message-loads; those who walk

37. Atlanta's prestigious Commerce Club, with its tiny promenade around the top of the Commerce Building (foreground) near downtown Five Points is an important watering place along the financial district's venturi. Peachtree Center at top right. This view is northwest.



these pathways are no longer seen as the real heavyweights (especially if you listen to old-timers "tell it like it used to be"). Country club living and spending habits have taken over, and many old-style downtown clubmen can no longer afford both. And new magnets arise in the suburbs. Clayton, Missouri, a bustling suburban county seat, with its restaurants and clubs, has become a noontime mecca for hundreds of St. Louis influentials who live around Clayton and pay high rents for office space. In the 1960's, they were paying higher rents for new offices in Clayton than they were for comparable space downtown. And they seldom hit their old haunts in downtown St. Louis. Power structures wax and wane, and thus it goes with their venturis.

No doubt there are many unmapped but well-known venturis in every city, awaiting discovery by outsiders. I would hope it will someday be as easy to get these maps as those at filling stations. Sidewalk action-like most beats—is visible, mappable, repeatable, and open to study by us all.

How does a stranger spot a venturi when he sees one? Not easily, for some indicators, such as clubs, are tucked out of sight; and the influential lawyer's office building may look like any other. One clue lies within the venturi itself-in the highly visible nature of conversations taking place along the sidewalk. Venturi operators group at doorways and corners, using the sidewalks as their stomping grounds. Old pols-the perennial knowledgeable, cynical, and affable politicians-tend to stand up against the nearest building, one leg thrust forward so they may pivot to right or left, depending on who is approaching, their heads and eyes sweeping the crowd. In flowing threesomes, and eddies of quartets, papers and briefcases at the ready, lawyers, executives, and such upperlevel activists furnish the sidewalk action, contribute to its flow, and thus reveal its location to others.

Wherever men and women make important transactions, they require face-to-face gathering places where body English speaks and leads to consequences words alone can never generate. The venturi is the place where grouping, paper passing, arm twisting, lapel tugging, elbow grabbing, and physical threats or enticements-open or veiled-take place. And they work. Not even the clearest of electronic images, not even the fabulous holographic presences foreseen by Professor Dennis Gabor<sup>7</sup> and projected electronically around a conference table, can match the live and active physical presence that speaks so strongly in essential transactions.

Although some people insist they can learn to trust or distrust another person on television, I would argue that quite another, and more dependable, level of trust or avoidance is generated through repeated physical, visual, and verbal contacts of the sort that occur in the corridors, on the corners, across the new plazas, and through a city's Indian paths and informal meeting grounds. Table hopping at a luncheon club is no substitute for the more democratic mixing that occurs on the sidewalks. In one physical form or another, large and small versions of these essential venturis are likely to survive.

## Made by Victor Gruen

To manufacture an image larger than life-a successful man-made epitome district-is a rare achievement, and we can learn much from the Fort Worth plan proposed in 1956 by the architect Victor Gruen.8

So successful was Gruen in selecting, simplifying, and then exaggerating the symptoms and solutions for a "dying downtown" that his plan captured the imaginations of central-city saviors across the land. His posture was defensive. The old city needed to be defended against its newest enemy, the automobile. Later, in his book, The Heart of Our Cities, he grew more explicit; it was necessary to set up "an inner defense line" plus "two further fortifications systems-to repel the invasion of mechanical hordes onto those areas where they create havoc."9

In the book, as in his public speeches, Gruen exhibited plans of medieval cities, including his native Vienna, bristling with walled forts, bounded by moats and fields of fire for defense. This was eloquent and powerful stuff to which downtowners responded in droves. Commissions for redoing downtowns poured in to the Gruen firm from all over: Fresno, Stamford, Paterson, Cincinnati, Manhattan, Rochester, Norfolk, Santa Monica, Vancouver, et al.

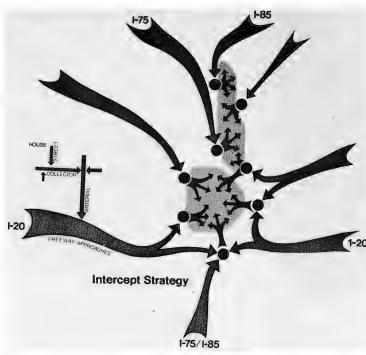
What Gruen had proposed at Fort Worth was a pedestrian-free core with beautiful malls, and around them an enclave of huge building blocks, reinforced by great parking garages at the corners, and the whole surrounded by a giant freeway system giving easy access to and from the heart (figs. 38 and 39). It was dramatic, grandiose, efficient-and expensive. Gruen's originality and verve, his ironic eloquence, put him into the national spotlight. His proposals were widely published; they became official doctrine in hundreds of city plans of the 1960's (fig. 40), and were built into the townscapes of the 1970's. If anything had become a major new epitome district of the American city by 1972, it was Gruen's.

Gruen thus came to stand for twentieth-century rational solutions to large-scale urban problems. His solutions were made up of large units, managed by large organizations, executed by big-scale finance and construction tactics-epitomizing the way twentieth-century American cities were heading. In contrast, the breaks we examined earlier represented the nineteenth-century mode of city expansion by means of a simplistic, repetitive gridiron pattern into which small operators, single-lot buyers, individual homeowners, and builders could fit. In a comparatively short time, from grid to Gruen, a major shift in scale had taken place.



38, 39. How many versions of the 1956 Victor Gruen plan for downtown Fort Worth have been applied to American and other cities is unknown, but the dramatic simplicity of its elements has been widely copied: ring expressway, ramp garages to absorb incoming cars, and a pedestrian-free core.





40. Using defensive language from Gruen, who was using medieval images from Vienna, Atlanta planners set up an "intercept strategy" to soak up automobiles in parking facilities (dots) before they inundated the city core.

### The Identity-Makers

It became apparent to mayors, chambers of commerce, and local development promoters during the 1960's that local identity is capable of being converted into a money-maker in the new age of universal mobility.

As a result, epitome districts of a special sort have become a cliché, a gimmick whereby old identities may be refurbished and new ones fabricated as a device to promote the migration of industry and select population groups, especially tourists. Scores of cities now engage in fabulation—the art of fable-making—by assembling new versions of their former selves, spending fortunes on advertising to proclaim a new identity, and building structures and events to make that identity believable.

Seizing on old and well-known epitome districts, they balloon these into greater-than-life size and advertise them in national magazines. Atlanta proclaims itself to be "A New Kind of City," and capitalizes on its own blend of "Gone with the Wind" history and swinging in "Underground Atlanta." Indianapolis shortens its name on billboards to "Indy" to fit the racing image and newspaper headlines. There are dozens of self-styled "Cities on the Move" advertising their wares in business magazines and other media. Lacking other virtues to attract new growth, smaller cities brag about "Plenty of Room."

In this new age of myth-making, toponymy—the study of place names and their origins—has become a widespread obsession. Historical commissions get more power as cities seek to whip up their own historical districts. The Vieux Carre Commission of New Orleans, one of the oldest, uses its legal powers to coerce property owners into conforming to the proper architectural image. These powers have been firmly anchored to the Constitution by proving that the tourist-getting French Quarter image is important to the financial health and general welfare of the city.

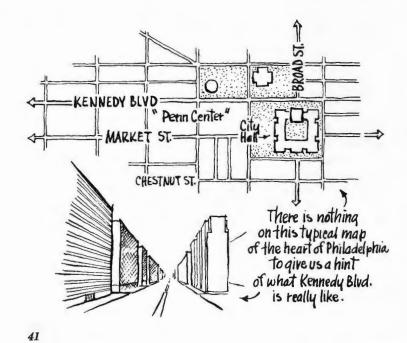
No city considers itself sufficiently armed to entice foot-loose tourists or industrialists without a new sort of epitome district called Six Flags Over Ourtown, or Vacation Village, Frontierland, Pioneerland, Butchertown, German Village, Old(e) Town(e), or local imitations of Vieux Carre, Williamsburg, Sturbridge Village, Bavarian Alpine Village, and Old Salem.

These new epitome districts usually have most if not all the following indicators: a name; well-defined boundaries or a boundary zone; local history made evident in maps, pamphlets, etc.; a mythology; a central zone of action; gatekeepers or at least symbolic entrances; and a variety of signs and symbols. A significant indicator is an increase in neighborhood celebrations. New York City in three years increased the number of street-closing permits from some 700 to over 5,000 in 1972—mostly for neighborhood festivals. There is no limit to size: Disney World's 56,000 acres combined with its promoters' political power to collect highway interchanges and dominate the source of much of Florida's underground waters forecast a whole new scale of epitome districts which, under single managements, may become world meccas for tourism.

Travelers may discover themselves in a yet-to-be-defined epitome district through the presence of old place names, ethnic foods, religious carnival preparations; and become amateur historians by that simple device of trying to follow the old shore line in a waterfront city. ("There is Dock Street, we must be getting close.")

Surrounded by this mixture of newly emerging identity and old-style puffery, we need constant vigilance so as to match what we see happening against what is being artificially manufactured for us. Windbaggery—an airy form of packaging dear to chambers of commerce and tourism promoters—can easily blind us to the true nature of what is going on around us.

The "success" of any of these environments depends on a very special sort of exchange between it and us. The environment I call an epitome district must be information rich, and packed with visible evidence of complexities beyond itself. Each environment can be explained for and to us by signs, symbols, architectural manipulation, lighting, and other devices—explored with great ingenuity by Richard Wurman in *Making the* 



City Observable<sup>10</sup> and his other publications. But our survival depends on us, on our ability to see into any environment whether it is signed, lighted, mapped, explained or not (fig. 41). It is the unmapped, the unadmitted that we must cope with on our own. In all these shifty scenes, our survival depends on our ability to sense, and then to grasp, the environment's carrying capacity for existential meanings—meanings that only we can penetrate by participation in that scene, by our physical presence in, and movement through, it. Such scenes convey much; they imply even more. They have a high absorption capacity for receiving information, for projecting existential meanings, and for generating myths.<sup>11</sup>

Which means that we must bring something into these dealings with environments. It is we who can assign meanings to environments by using them and taking part in them, as Sister Annette Buttimer of the Clark University Graduate School of Geography has suggested.<sup>12</sup>

Thus epitome districts have the capacity to stir up responses in us. Such meanings get built up over time, and seldom flow to us all at once; it is the repeated coming back to a scene or place, perhaps over a lifetime, which adds to the layers of experience that we share with an environment. Thus when we find an epitome district we should treasure it, return whenever possible, and deliberately use it as a special indicator, not only of changes in the scene, but of changes in ourselves.

No such thing as the City or the Country remains. The former has penetrated the latter almost wholly, often invisibly but pervasively. Every United States Census counts the rise of population in that in-between land which is sometimes labeled "rural non-agricultural," and lies altogether within the network of a city's influence and its surpluses (fig. 42).

A city is a device for distributing surplus energy. While it performs many other functions, it carries out this one through a variety of channels including message systems, services, business connections, roads, pipelines, and wires. These networks undermine the political powers of country to resist city. They once transmitted powerful messages from country to city, but now carry streams of messages and energy unremittingly the other way. Neither city nor country can exist without the other-as New Yorkers occasionally learn to their dismay when a dock or truckers' strike stops the flow of food into that most fragile of cities. Yet cities, the surpluses they generate and the powers they coalesce, continue to dominate country in their search for markets to control and room to expand.

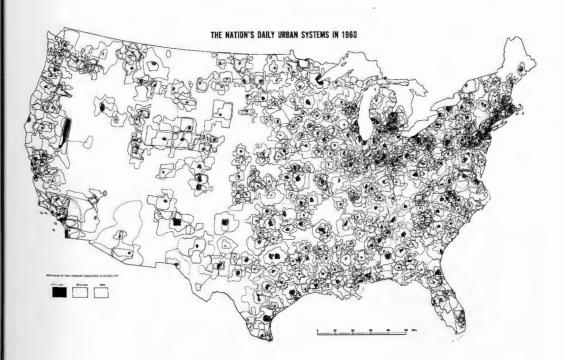
This region, which epitomizes dynamic unrest, I call the urban front, a place where phrases like "the edge of the city" have no contact with reality (fig. 43). A city's edge is where the action was, but is no longer (fig. 44). Often, as a journalist I have inspected what was locally described as "the edge of town" or "the beginning of real farming country." But even the most cursory investigation would reveal land to be held by

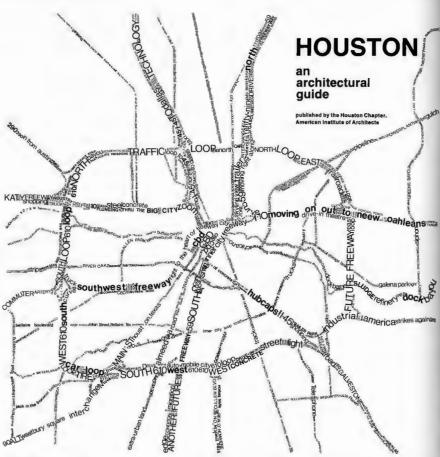
Fronts

speculators, not dirt farmers. The chief crop was capital gains, not cattle -extravagant fences being the first clue. That landscape was already dotted with fireplugs, transformers, public-hearing placards, and other urbanizing tackle; it was crisscrossed by a network of easements, future rights-of-way, utility lines and planned zoning changes, and extensions of the nearest urban energy source (figs. 45, 46, 47, and 48).

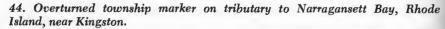
While debates may continue about how to identify and make legible the city and its edges, these will seem trivial in comparison with the larger forces at work and the problems to be solved on these fronts. The ancient image of walled cities with their visible, definable edges is dead (fig. 49). The European dream of a sharp and abrupt city-country division, with apartments on the city side, and open fields on the other, has no meaning here, except for rare instances such as military or Indian reservations (figs. 50 and 51).

42. This is how most Americans grapple with the American landscape-the first map of our "daily urban systems," based on commuting patterns of the 1960 Census. Most of the eastern and central states lie within these urban fields.





43. "Houston is not a city but a region, a form whose connections extend over distances inconceivable in traditional urban situations," observes Peter C. Papademetriou in the tradition-breaking AIA Guide to Houston (1972).







45. The tackle of urbanization: New manmade energies replacing the old agricultural scene at Columbia, Maryland: pipeline welders' acetylene tank (foreground), prefab utility pole (rear), and sagging silo in abandoned farmstead constitute quick visual clues to what is happening as this site is fast converted for a newtown.





46, 47, 48. Trying on Milwaukee for size: More than thirty-two miles apart as the crow flies, the private airport west of Cedarburg, Wisconsin ("No Snowmobiles"), is part of the Milwaukee northern-front activity zone, while the garbage cans along the highway in Franklin Township thirty-three miles southwest indicate the spread of urban services into what looks like farming country. The "Don't talk" warning billboard fifteen miles outside Milwaukee is another sort of indicator, concealing more than it reveals.

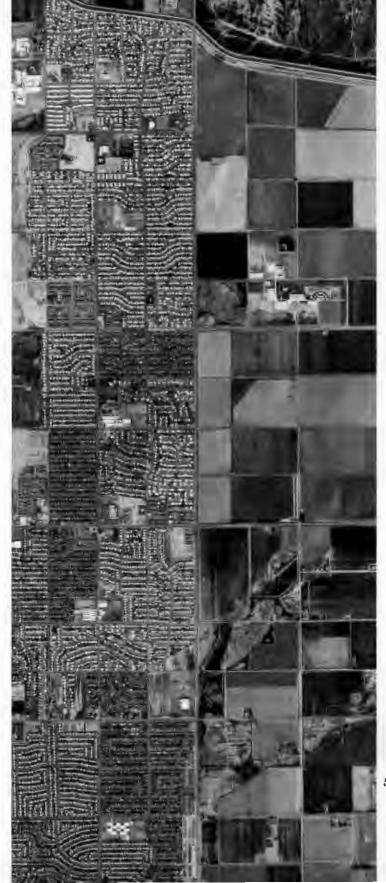




49. Tidy, neat, sharp edges of European cities such as The Hague are used to back up arguments that American cities, too, ought to have clean edges. But this only happens when land is extraordinarily scarce, and where strong governs ment power forces land into prescribed uses. Photo, 1958.

50, 51. Rare example of a stabilized urban front: Pima Road forms the eastern boundary of Scottsdale, Arizona, with the Salt River Pima Indian Reservation on the right. Airview shows total buildup of subdivisions in the 1960's along west side of Pima Road. Photo of Indian youngster with tractor looks east across irrigated flatlands to distant Usery Mountains, in Tonto National Forest area.



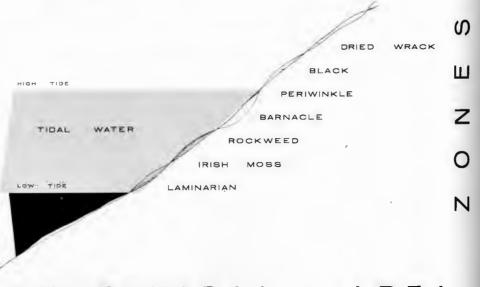


## Dynamics of the Front

I use the term "front" in both its military (battlefront) sense and in its meteorological (weather front) context. Militarily, a front is simply a zone of armed conflict or stalemate. Meteorologists use the term to describe that "boundary which separates masses of air of unlike temperature, but is associated with no discontinuity of the pressure surface across it." Although there are many other words that help one grapple with these matters-edge, ecotone, interface, boundary, fringe, margin, brink, threshold-the word front enables us to consider these place-processes as zones of unpredictable change, uneasy alliances and standoffs, and active citizen negotiation and treaty making (fig. 52).

Fronts are the dispersal zones for many goings on that were once anchored tightly to city land. Consider the sight of the Flea Market Shopping Center along Interstate 10, seven miles west of Jacksonville, Florida, built in 1971. Its very presence shows the owner's expectation that urban front-runners will be dumped at his doorstep via the new highway access. The same rationale underlies those "Condominium for Sale" signs in the semidesert far north of Fresno, California: a continuing redefinition of the size of the urban front.

52. Different forms of marine life find their ecological niches in the intertidal area, or ecotone, of the Maine coast, much as mobile urbanites roam the urban fronts seeking their own proper, personal mixture of access, convenience, privacy, space, and expense. These are zones of interaction where energies are in constant flux.

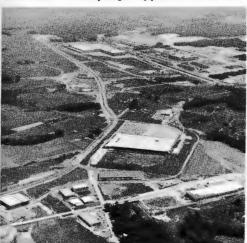


INTERTI AREA COASTI



53. Denver: South Broadway near the Arapahoe/Elbert County line, 12 miles south of downtown Denver.

54. Located in the midst of two urban fronts, newtown Columbia, Maryland, has a major job center on its own industrial fringes-General Electric Company's Appliance Park East.



55. Erlanger, Kentucky: fast-building truck stop off Interstates 71/75 serving a fastgrowth industrict south of Cincinnati. Left foreground: an in-transit prefab house module, Bottom: new dirt dumped for expanding the vast parking area.



Most of the next 100 million people added to our population will inevitably be accommodated on these urban fronts. Given reasonable choices in housing types, they will continue to opt for old and new forms of suburbia. This is also where the jobs are moving (figs. 53, 54, and 55). During the 1960's the suburbs of fifteen major metropolitan areas gained 44 per cent more new jobs, while their central cities lost 7 per cent. In those same areas, the number of people who both live and work in suburbs increased 40 per cent.2

To recognize this great sorting-out process does not mean to turn one's back on the central city and its difficulties, but to put the older central city in its contemporary setting, a stage covering hundreds and often tens of thousands of square miles. It is a long way from the old City Hall.

## Swarming

One could see the future coming most clearly on that summer weekend, in 1969 when some 350,000 young people on their bikes, in campers, cars, trucks, and afoot clogged the highways and inundated the countryside in the Catskills of New York State: the beginning of the so-called Woodstock era when cars were packed bumper-to-bumper for thirty miles trying to get to the "great trip" that Woodstock promised and produced.

Such swarming is the coming together by impulse-determination of mobile communities-Woodstock, 1969, or Bull Island, Illinois, 1972. Swarming redefines community, prompts new consciousness and identity, And it will not go away, for it is created by a self-conscious, youthful society that possesses instant mobility, access to media, and its own, national word-of-mouth communication network.

Never before has United States society generated such a well-distributed capacity for crowd formation. One look at the expanding, commercial convention business will tell you that yesterday's limit is tomorrow's minimum. Never before the Woodstock festival had so many expectants assembled under such mixed primitive/festive conditions, which were peaceably replicated at Bull Island, Illinois. Drugs, both hard and soft, eased the pain of Woodstock's high density and hunger in the mud and rain-first evidence for millions of older outsiders that this form of mass experience and instant community was not to be sneered at or locked out. Clearly, something more pervasive than drugs was at work, then and later.

Swarming in nineteenth-century New England meant sending a colony from an established church out into the wilderness to form a mission. Some called it "hiving." Then and now, it arose from a search for community and empathy apart from old ways. It becomes an escape from establishment, a getaway from monopolies represented by old cities, an effort-strangely like those of typical suburbanites-to find a place to enjoy "before it gets all fucked up," in the various meanings of that term.

Swarming gives previews of new life styles on the urban front. It requires no building-only sites, accessibility, mobility, services, security, information, and a new view of the world.

Swarming puts a premium on swarmers' mobility and self-sufficiency. What established society has overlooked is that swarming is evidence of a new minority group declaring its identity. Since Woodstock, it has acquired its own prophet in Charles Reich (The Greening of America)3 and others whose writings have formed a wave of significant, if erratic, journalism. If there were ever a case of identity formation, this was it.

Not all swarming was groovy, outdoorsy fun and games. Some swarmers got the "Easy Rider" reaction from ill-trained or rancorous deputies and redneck reactionaries. But short of the local perversions of vigilante movements, or of fascism taking over, there is no way swarming can be forced to a halt. The restless human energies are still there; the search for new community through mobility seems to pervade the entire society. And there is no way to disinvent mobility.

#### The Last Frontier Back

Geographic mobility is a special American thing; a mode of learning and getting with it; a means of personal advance, a way of making it. It implies, without guaranteeing, social mobility. Most Americans see their histories as migrational success stories-movement from the old country to new beginnings (fig. 56). History, American style, is seen as a series of confrontations between explorers and raw nature, between white settlers and red Indians, between open-rangers and homesteaders, claim stakers and fence jumpers.

The so-called end of the American frontier era can be pinpointed to the 1890 Census, when its superintendent summarized the results as follows:

Up to and including 1880, the country had a frontier of settlement, but at present the unsettled area has been so broken into by isolated bodies of settlement that there can hardly be said to be a frontier line. In the discussion of its extent, its westward movement, etc., it cannot, therefore, any longer have a place in the census.4

Finis. Kaput. The end.

So stimulated by these findings was the young historian Frederick Jackson Turner that, in 1893, he wrote what has been considered one of



the most important single insights into the American character. He observed that:

Up to our own day, American history has been in a large degree the history of the colonization of the Great West. The existence of an area of free land, its continuous recession, and the advance of American settlement westward, explain American development. . . . This perennial rebirth . . . this fluidity of American life, this expansion westward with its new opportunities, its continuous touch with the simplicity of primitive society, furnish the forces dominating American character.5

That frontier was defined as the margin of settlement which has a density of two or more settlers to the square mile, and also as the edge of free land.

Against this significant backdrop, I think it is useful now to ask what realm of American life is having a similar formative effect upon the American character. What is today's frontier? Does it, or can it, have any territorial or geographical identity?

What we are seeing today is a shift in the old frontier from an East-West polarity to the zones of metropolitan influence of urban fronts. One may watch nineteenth-century Western rituals re-enacted on television, but if it is the real thing you want, go to the urban fronts (fig. 57).

## 'Ranchers' Face 'Homesteaders' in Barrington Zoning Showdown

The ranchers and the home

In this updated version of the assic frontier feud, the range approximately 473 acres in

Could Ruin Water

57. "The ranchers and the homesteaders will be at it again tomorrow in a reenactment of that great American drama, the range war . . . the range is approximately 473 acres in Barrington [Ill.] township."—Chicago Tribune (March 8, 1970).



58. New frontiersmen and women of the 1970's in a zone of contention that has moved from the Old West to the urban fronts around all expanding cities.

Weapons out there are not six-guns and fast cavalry but annexation ordinances, rights of incorporation, municipal housing policies, busing legislation, social and racial exclusionary practices, control over water lines, utility and tax rates, zoning, and police. Territorial rights are exercised not against red Indians but against city expanders and annexers. who are fought off by suburbanite lawsuits, with the help of anti-big-cita state legislatures (fig. 58).

This is a useful way to look at current metropolitan development in the United States. On urban fronts, the language adopted by the contestants is that of the Old West; the images are historic. Land speculators clothe themselves in the language of frontiersmanship: I have heard them claim the right to "establish colonies . . . out where a man can enjoy the freedom of fresh air and a clean start." White suburbanites, resisting big-city public housing, racially mixed apartments, or annexations, assert that they (like the early frontiersmen) moved out here to get away from all those bad influences, and allege a right to exclude latecomers. And so history is perverted and freedom foreclosed on many an urban front, where the last one in wants to be the last to be admitted. Thus, the old frontier zone of guerrilla warfare now occupies a more or less circular front around all dynamic cities. It is to this front, and its evidence, that we now turn our attention.

#### **Nature Fronts**

On every dynamic urban front, there is a zone of action where the pastures run out and bulldozers run in, where field larks are replaced by Thunderbirds and Cougars in new garages, wells by pipes, fields by lawns, and soil by pavement. A landscape formerly dominated by natural forms and processes now gives way to the built environment. (When towns and cities diminish, the process reverses, nature takes over, grass grows in the streets, and woodland sprawl begins.)

To tell which way the battle is going-whether city expansion will continue to destroy country in the usual fashion-requires not only careful scrutiny, but some patience. Are developers still bulldozing down every tree in sight, ditching and straightening creeks, burying marshes, burning woodlands, laying waste to the millions of small niches, nests, burrows, warrens, hollows, dens, and watering places on which each small ecosystem depends? (See fig. 59.)

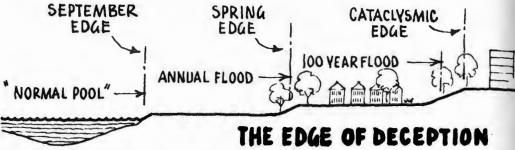
For answers, one may look at a dynamic waterfront such as an ocean resort (fig. 60), or at any restless local river front, the traditional battleground between the river's energies and those of the city people on its banks. Between floods, everything looks serene. But observe carefully the



59. Ecology students at University of Waterloo, Ontario, uncovered a "hawk ring" around Toronto, twelve miles out. Landscape inside the ring is too heavily urbanized for wildlife to survive. Beuond the ring, farmers kill the hawks. The twelve-mile zone has just the wildlife balance to support hawks in this highly specialized front.



60. Highly competitive urban front: Miami Beach where hotel owners seek to grab scarce sand from a restless ocean. Most have given up and covered the old beach with patios, pools, cabanas, hoping that jetties will stabilize an essentially unstable environment.



61. Another way of looking at waterfronts—as zones of centuries-long contention between man and nature where the scene is never the way it looks, but always the way it might become, come hell and high waters.

line where debris was deposited by the last flood. One may see innocuous-looking streaks of yellow silt on the walls of houses, a white plastic Clorox bottle jammed in a tree, brush lodged in a fence, or a line of bottles along a valley's edge a mile back from the river's bank. This is an instant clue to the river's true power to reach beyond its banks (fig. 61).

Walking the big-city waterfront, looking at the water's color, content, and condition, one may see clearly that this front is subject to the conditions of the entire watershed. No one can "save" the local waterfront merely by putting its legal control under a local waterfront commission, since the sources of traffic, floods, pollution, and debris are all upstream. River policy, therefore, derives from land policy, and not the other way around.

#### Guerrilla Suburbia

Within each urban front lie subregions where the forces of city expansion run strongest, where country is in full retreat. Since no American city has the kind of political and monopolistic power that distinguished European cities for hundreds of years, in its aggressive dealings with its neighbors it must fall back on negotiation, persuasion, and various forms of semiconcealed skulduggery to mask its expansive intentions. I call this zone of action "guerrilla suburbia."

More than ever before, it is now possible suddenly to make a long leap, far beyond the city's traditional edge, and set up urban outposts. Often surreptitiously, city officials or private investors (and sometimes the two in cahoots) will secure land options and conclude arrangements whereby some giant new city-benefiting project-a reservoir, airport, hospital complex, shopping center, military base, will become a reality far outside the city limit, beyond the old definition of urban front. To suburbanites or country residents, it appears as the city's Trojan Horse,

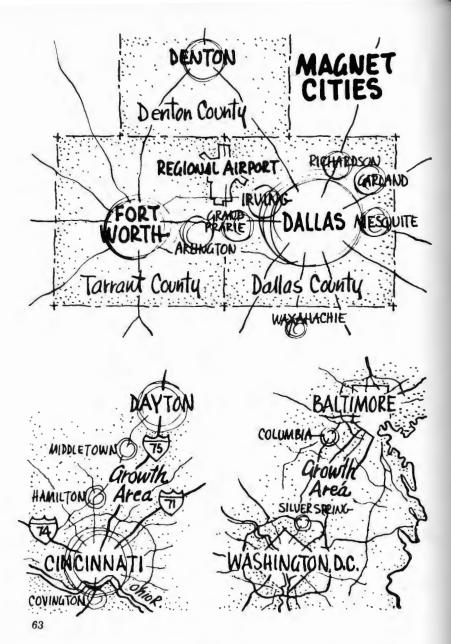
sneaked into their midst by the powerful enemy and quickly bristling with menacing strangers.

Such zones of contention are becoming more common, as many urban fronts extend themselves: along U.S. highways 40 and 25, and interstates 70 and 75 between Columbus-Springfield-Hamilton and Cincinnati, Ohio (fig. 62); the several parallel routes between greater Cleveland-Akron-Canton; along highways 183 and 303, and the newer tollway connecting longtime Texas rivals Dallas and Fort Worth, which buried old rivalries sufficiently to build between them the country's largest intercontinental airport in the early 1970's.

Between two cities close together (up to seventy miles), the attractions are magnetic, as evidenced by vehicle licenses, truck identities, and other signs (fig. 63). Cities along the whole eastern megalopolis, from Boston to Washington, exercise a strong linear pull, growing toward one another.

62. Geopolitics and city competition: in the struggle for southern Ohio markets, a Dayton advertising firm invents the term "megacity" to describe its trade/service region without even showing its much larger neighbor, Cincinnati, which dominates the region. Darkest shading indicates a heavily urbanized region from Columbus at upper right to northern Kentucky at bottom.



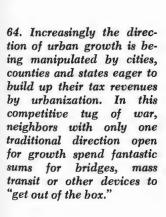


Two such magnet cities set up a zone of attraction and contention between themselves, usually shown most clearly along major highways. Here you will see taxis, buses, and service and delivery trucks from both magnets working the competition zone (fig. 64). Home builders and other contractors from one magnet extend their own radius to work the opposite pole; families from the Baltimore suburbs shop in outer Washington or at newtown Columbia, Maryland, whose residents may drive forty minutes in either direction to work, shop, or visit. In Minnesota,

those onetime arm's-length and suspicious neighbors, Minneapolis and St. Paul, now share a sports stadium between them, and a visitor may observe traffic from both cities mixing and crossing along University Avenue and Interstate 94, which link the Twin Cities.<sup>6</sup> The in-between zone becomes highly competitive as soon as local service and sales firms from both directions obtain equal access to new customers.

The scale of all this is staggering. One land company has assembled more than 100,000 acres for lot sales in the region of El Paso, Texas;<sup>7</sup> major development firms in Florida have amassed hundreds of thousands of acres; the Alfred I. du Pont Estate, through control of the St. Joe Paper Company and the St. Joseph Land and Development Company, controls 100 miles of the Florida Panhandle Gulf coastline.8 A striking phenomenon of the 1970's has been the continued purchase of giant tracts far from major cities especially on the seacoasts, for future development.

Increasingly, the guerrilla front is penetrated by these agents and front-runners so that economists who speak of the "urban-rural continuum" are describing a pressure zone of influence that extends far outward from one city only to meet a distant neighbor's zone at some midpoint. The planner Constantinos Doxiadis, in estimating the future growth of Detroit, has described how his staff, tracing the buying of land in





southern Michigan for purposes associated with the future growth of Detroit, discovered land being bought by speculators from Chicago, 275 miles to the west.9

Standing in such a zone-between two magnet cities-or on the interface between high and low densities, one is tempted to generalize. This is a scene that prompts pompous pronouncements. Anyone, for example, can grab a few census figures, sweep his eyes grandly across a suburban farm outside a city having high immigration and low unemployment. and pronounce eloquently "All these fields will be subdivided in the next ten years." But, of course, he will be wrong, and anyone who puts his money where his mouth is, talking like that, will go broke long before his generalization breaks down.

What separates the sheep from the goats is the capacity to be right a reasonable percentage of the time-correct in local, testable detail and not merely in loose generalization that can only be tested by large-scale mapping or computer techniques.

As it turns out, all fields do not get subdivided at the same rate because, as a matter of record, they are owned by many owners having different life styles and rates of attrition, credit, and patience-and also because some fields are repellent to the current generation of land speculators. They may look "ripe" but conceal subsoils resistant to septic tanks; or they reveal legal confusions dating back to the last Texas syndicate that bitched up the title after a run of dry wells and second mortgages.

Some places attract no traffic and lie vacant for reasons that appear to be no reasons at all. Some are "invisible," carrying social opprobrium, blighted by some historical event or functional quirk, as investors have learned to their regret. Locations just beyond, or just approaching certain traffic lights or other congestion points where a driver's attention is riveted to the road and not to the roadside, are notoriously bad places for certain drive-in businesses. Partly to offset this, many franchise drive-in businesses, in the 1960's, went into an architectural tizzy from which whole buildings emerged as signs so loud, high, bright, and visually persistent as to penetrate each driver's attention. Highway strips create miles of attention getters. Other spots become essential stopping places for tourists with predictably full bladders or empty gas tanks-a fact not apparent at a glance to outsiders.

Such hidden facts infuse all scenes. Intuition alone is never enough to explain what you see. One must learn to trust intuition but also to pursue its leads; to follow hints from peripheral vision but always to dig beyond first impressions; to see through a scene and its many processes, but also to see through it in time, to understand how it came to be, and to guess more skillfully at what it might become.

THE DIRTY OLD MAN of the urban scene is the highway strip. The dirty word in the urban lexicon is "to strip." Strips "pose the most difficult and serious land use problems facing the city," says the Denver comprehensive plan for 1985. A strip is "a miserable place for the shopper to buy and the merchant to sell . . . a drain on the city," says a widely published, 1969 University of Tennessee study.1 It is "one long rip-off," observes a student when we meet at Oklahoma State University;2 "a static linear city," says Christopher Tunnard in The City of Man,3 "a massive elongated bloodclot," says a Rhode Island study.4

In short, the strip is the urban/suburban scapegoat. Demonstrating its iniquity became a major preoccupation in the 1960's among aesthetic arrivistes who looked at it critically and distorted it photographically with telephoto lens, usually for propaganda purposes. If you have seen one of those photos, you have seen them all. The strip became the battleground for class-judgment makers, which explains the high emotional pitch of frenetic suburban zoning, or antizoning, public hearings. But it does not tell us what, besides an object of scorn, we are to make of strips. (See figs. 65 and 66.)

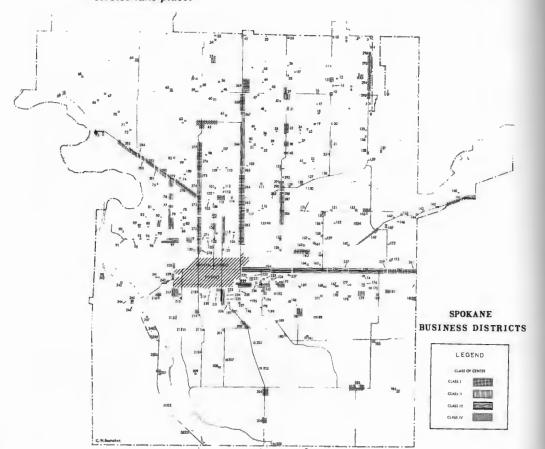
The question remains: "What goes on out there?" Once we ask and begin looking carefully at strips and at the social forces thereby revealed, we are bound to see significant patterns. All strips are by no means alike. Some specialize and thus give us clues to the neighborhoods they serve.

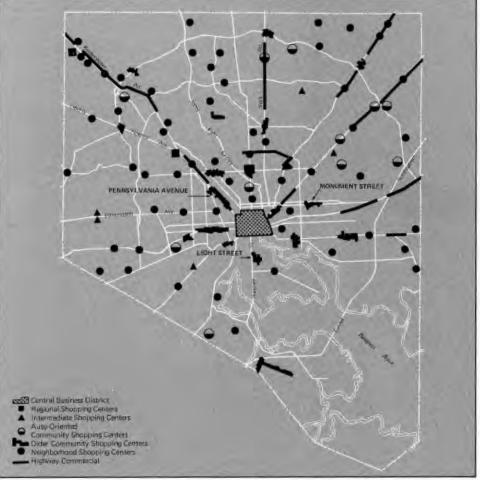
# Strips

New forms are developing, old ones decaying. Here the essence of urban forces is revealed, if we will only look open-eyed and open-minded.

The strip is easy to find, quickly defined, often carries a familiar name such as Sunset Strip, and projects strong images and emotional memories as an identity district. Most people who move about their own communities are able to identify not one but many strips. Teenagers of driving age are vastly knowledgeable about the pecking order of strips—where cops hang out in unmarked cars, where the drag racers gather after midnight, which drive-in zone is frequented by which high-school crowd—i.e., what functions they perform and how well or badly they do so.

65,66. If you get it, you spend it. This rule of life for millions of Americans makes possible thousands of miles of commercial strips, such as these in Spokane and Baltimore (opposite), where major proportions of retail sales and service take place.





66

# The Roadside Surplus Disposal Area

Earlier, I described the city as a device for distributing surplus energies, for it is a commonplace to note that cities throw off surpluses of population, products, services, and wastes. So long as the North American economy continues to grow, well into the twenty-first century, the highway strip is likely to continue serving a vital function as a linear disposal area for surplus urban energies. As surpluses change, strips will react.

On the strip, automobility runs rampant, carrying that valuable cargo called "accessibility" to be dropped off anywhere along the way. The efficient strip is the path of least resistance. On the strip, one can set up shop in a hurry, dispose of a cargo to dozens of buyers, move in or move out quickly, and deal in short haggles. It is a place of easy transactions. If you do not like it, try down the road.

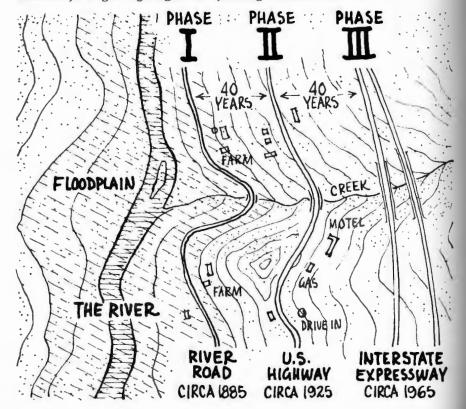
Rules on the strip are less strict than those downtown or in older, denser commercial zones. The newer the strip, the fewer immediate neighbors there are to be affected by noise, light, and other activities. As strips age, they are repaired piecemeal. There is a constant coming and going; population turnover is high. To expect stability of a strip is to misunderstand its very nature.

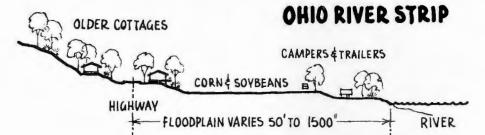
#### Where It All Started: River Strips

The earliest strips to be found are in river valleys, those ruts of civilization, pathways of early settlers the world over. To pinpoint a river strip should be easy for travelers anywhere in North America (fig. 67).

Stop your vehicle if you are anywhere within sight of a river, natural lake, or ocean and look toward the water. Almost inevitably the ground slants toward water, and the earliest strip grew up along an old path or track at the top of the bank. Many such early strips were flooded out and moved to higher ground (fig. 68). Most river roads and coastal highways

67. From coast to coast, this strip pattern has evolved: the old river road, often flooded; the new road built in the 1920's on higher ground; and finally the interstate, disregarding rough terrain, soaring across hill and dale.



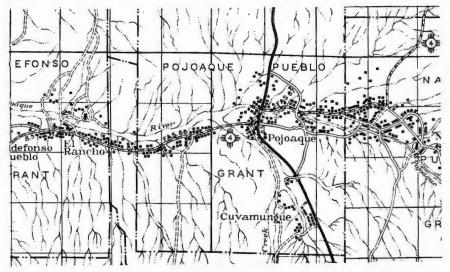


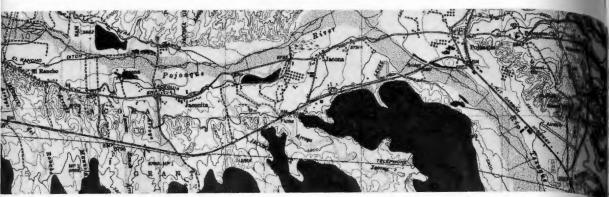
68. Strip-cropping has new meaning along major river systems as the old riverbank, often the site of early trails and roads, is taken over by seasonal residents, and the old highway gets lined with cottages. The next strip, when it arrives, will be uphill to the left.

thus run in pairs with remnants of the older one closer to water. Often enough, the first railroads moved in between; both the railroads and the bigger highways that came later were products of larger energy systems at work—taxes and other subsidies of state and national government.

At every stage for some 150 years, bigger investments poured into new highway strips, generally on higher-ground sites (figs. 69 and 70). As American society grew more high-and-dry minded, it put its big investments out of the reach of floods and hurricanes—either far from the river bank or on huge dikes and fills along the river itself—such as Interstate 91 along the Connecticut River, or Interstate 787 which pre-empts the river front of Albany, New York, or Interstates 71 and 64, respectively, bestowing the same disfavors on Cincinnati and Louisville.

69. Early western strip grew up along banks of irrigation ditch, El Rancho, New Mexico, with later roads following the old settlement pattern along the waterside.





70. A 1953 map of El Rancho area, New Mexico, shows early settlement along irrigation ditches in valley, with older strips following the water, while contemporary highway, a later high-energy-input construction job, has moved in uphill. They form typical downhill-uphill pair.

Thus, many an original, low-lying river road tends today to be a strip of second-rate activities that cannot pay the price of land close to town—junk dealing, cheap storage, shacktowns, and small industries which survive flooding.

To look at river strips in this way enables us to judge all strips as products of their times, reflecting the amount of each generation's surplus energies which were available for investment in trafficways and automobility. At every stage things got bigger. How long this can continue is open to debate, but it is quite certain that strips will continue to be a major exhibition ground for which way the debate is going.

## The Natural History of the Strip

Behind the so-called clutter of the strip lies a set of patterns, which discloses the natural history of the strip (fig. 71). At each stage, the strip puts on a separate act, and before one decides what ought to be done about a strip, it is essential to first discover what stage it is at in the recurring cycle of energy investment and decay. For some strips are ripe for change and others are not; still others may revert to an earlier phase.

In the beginning there was Strip I (fig. 72), and so primitive and persistent is its form that in many parts of North America it is still in use—and new ones are still being carved out of the landscape. Strip I often followed Indian or ancient animal paths and traces, a narrow dirt track winding along a stream, valley edge, or ridge top. Its job was to provide



71. Where the natural history of the strip was discovered: at Eastwood Cut Off, Jefferson County, Kentucky, a second paved road downhill from earlier strip, uphill from the big new cut-and-fill strip.

access to one's place of work in field or forest, protection at a nearby fort, or a neighbor. Thousands of miles of still existing Strip-I routes within city and countryside may be discovered by any traveler.

Strip II (fig. 73) is usually, and simply, a wider version of Strip I, following the same route, but gradually improved for wagons until the coming of the automobile, sometimes becoming a linear village.

When automobiles came, so did Strip III (fig. 74). This was an early bypass, usually inserted along the back lot line of houses fronting onto Strips I and II. Many Strip III's were built in the 1920's as early paved roads. The character of Strip III varied from region to region. A New England Strip III might have been a mere kink in the road, but expanded in the Midwest to a larger scale.

The 1930's and 1940's ushered in heavier road-building equipment which carved out wider and deeper cut-and-fills through formerly inaccessible pathways. Highways took big parcels, no longer narrow tracts, and thus produced the next stage, or Strip IV (fig. 75), offering previews of the giant interstate routes a decade later. Highways became the biggest things around.

Next came Strip V (fig. 76), a product of the great road-widening era, in which old streets and highways were simply pushed out into the road-sides; lanes were added, roadsides reorganized, and new architectural forms developed. Left behind were thousands of houses and buildings, now truncated, defrocked, perched awkwardly (figs. 78, 79, 80, 81, and 82). This produced that familiar phenomenon, a multi-laned instrument of mixed access (fig. 83), and often a dangerous road to drive.

Familiar products of highway widenings-houses left in awkward attitudes and FIELDS CAS BOOK COURT POND IIa DBB MOTEL DENE INS DRIVE-IN THEATER 76 COMMUNITY :: COLLEGE SCHOOL FOREST PRESERVE INDUSTRIAL PARK







78

- 78. Darien, Connecticut, on U.S. 1.
- 79. South of Baltimore, Maryland, on Highway 176.
- 80. Delmarva Peninsula north of Norfolk, Virginia.
- 81. Starke, Florida, Highway 301 widened in 1963.
- 82. Gravois Road, St. Louis, Missouri.









81

**32** 



83. What is left behind after a major highway cutting is a two-level town such as Elk Park, North Carolina. The old stores, post office, etc., were strung out along an early road, right, until highway was cut into hillside. What you see here are Strips I, II, and III in one view.

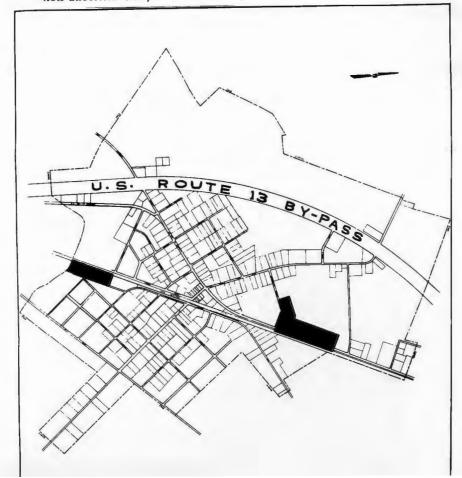
84. If you continue to see the same sign for a hundred miles, with different names, it indicates a major highway relocation. This is four-lane Highway 13 running north-south down the Delmarva (Delaware-Maryland-Virginia) Peninsula



Strip VI (fig. 77) tends to develop at right angles to the older strips, along the access roads joining the older strips to new interstate interchanges, and here you find variations of "Motel Row," "Drive-in Gulch," or "Gasoline Alley."

Finally, Strip VII is a radical reorganization of nearly everything within the influence of the interstate interchange (fig. 84), encouraging heavy injections of "foreign" energy into the vicinity. An interchange zone is a real-estate merchandising device manufactured with public funds; it is an economic cockpit where only the largest operators can afford to compete-oil and motel chains, national land developers, newtown promoters. Highway policy promotes bigness, and most proposals for "cleaning up the strip" turn into devices for getting it into the hands of fewer, richer private owners, or under control of large governmental agencies. (See figs. 85, 86, and 87).

85. Recapture: after being bypassed by Highway 13, in 1967, the town of Onley, Virginia, reached out, annexed the new highway, doubled its area, and now advertises itself as "The Home of Economic Development."





86. Early paved-road remnants show (bottom right), while later Dixie Highway (upper right) was built on earth fill to raise it out of the flood plain of the Driftwood and White rivers. Clear case of downgrading properties along older strip: note half-buried garage. Southern Indiana.

87. Making the best of both strips, this homeowner near Lancaster, Ohio, now has two "fronts," one facing the older strip in distance, and well-clipped lawn fronting on limited-access Strip IV. Note metal deer facing the newer strip.



How strips are to be reorganized is politically dynamic, since new interchange districts with self-governing powers can offer opportunities for financial and political enterprisers, unless they too are taken over by large-scale monopolists.

#### The Origins of Spotty Development

That old cut-and-fill process of digging through hills for dirt and rock to build up a roadbed across low spots is itself the cause of a plague afflicting most strips: "spotty development." Highway designers attempt to balance cut-and-fills to keep down the costs, but this makes spotty development inevitable where roads cross irregular terrain, as in most of North America (fig. 88).

Note that the crucial juncture is influencing future development where the slope of the land meets the level of the road. This is the only easy place you can get off the road onto the land, and return. I call it the topo-break. This is the first point at which roadside development takes place—where somebody can get on and off the road on an even keel.

For a clear view of spotty development caught in the act, look at Mt. Horeb, Wisconsin, between Madison and northern Iowa. Highway 18-

88. Cut-and-fill highway construction in the act of encouraging future spotty development: North Carolina Highway 19-E, between Spruce Pine and Crabtree, 1972. Surplus dirt from huge cuts is dumped as close to the cut as possible, setting up sites for future buildings.





89. Gonstead Clinic of Chiropractic (upper left) and its own motel occupy hilltop just outside Mt. Horeb, Wisconsin, with other hilltops occupied by driving range, implement dealer, etc .- while swales in between are vacant.

151, just outside Mt. Horeb, is a typical cut-and-fill product of a highenergy system; it cuts directly through the rolling terrain east of town to set up a landscape of castles on the hill, a dot-dash succession of cartruck dealers, chiropractors' offices, motel, and golf course, each perched atop its own knoll, with deep swales in between (fig. 89). Although Mt. Horeb is a growing touristic town, the energy is not there yet to fill in the ravines between those hilltop nodes. The result is classic of spotty development, an emerging strip at its most wasteful stage, forcing everyone to drive a hundred yards farther to the next node. Before it can change, the old cut-and-fill methods must be drastically modified to encourage unified development.

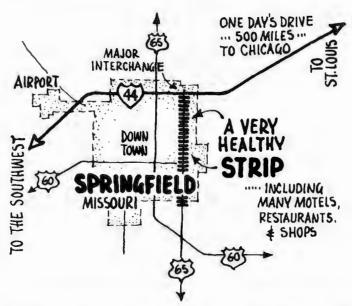
#### Pit-Stop America

There was a time when many city or suburban highway strips could be explained by saying they merely followed or ratified old commuting train or streetcar routes radiating from the city core. But the development of nonradial strips in hundreds of communities has shown that another dynamic is at work.

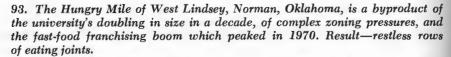
At some point in its life-usually when the strip becomes part of a highway network or web serving a region and not merely connecting two activity nodes-the strip becomes specialized as a pit stop for special markets (fig. 90). Strips which happen to be one day's drive from Chicago, Denver, or other travel generators quickly turn into motel strips as soon as interstate connections make the drive possible (fig. 91). Highway roadsides turn into long repair-sales strips for the region, as is the case outside Eugene, Oregon, where loggers' equipment for sale or trade lines the highway (fig. 92); and along Airline Highway between New Orleans and its airport-a strip for swamp buggies and oil drillers' equipment.

90. Nine miles of auto-directed businesses along southeast 82nd Avenue in Portland, Oregon, offer everything from food and drink at the Pit Stop Tavern to mobile offices next door and thousands of trailers, camper rigs, and trailer hitch repairmen.



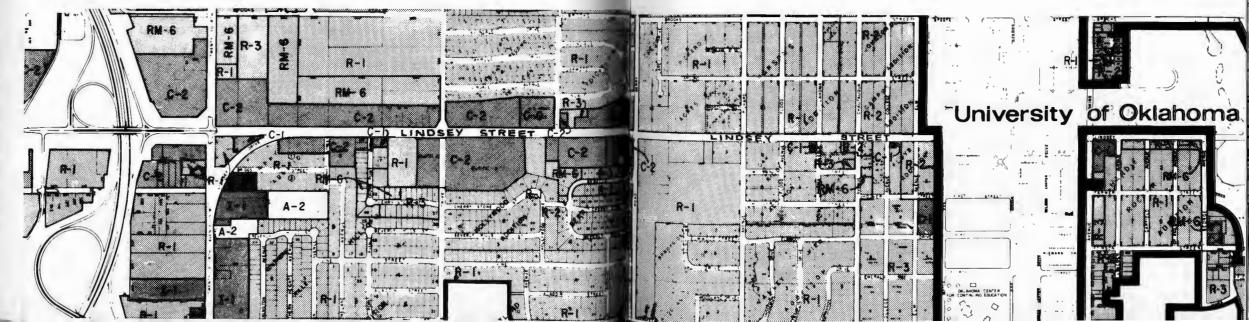


91. Defying the old wagon-wheel image of a city's radial highway strips, many strips now flourish along outskirts axes near interstate interchanges, such as this variation at Missouri's state capital.





92. Like leaping greyhounds or praying mantises, these big logging rigs line the highway outside Eugene, Oregon, within sight of forested mountains nearby. This is one of many pit stops catering to logging crews in Pacific Northwest.





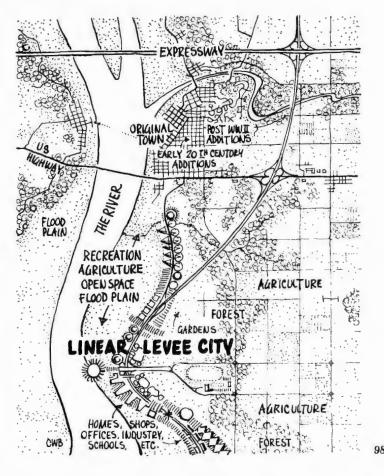
94. Quick-stop sex. Small sign under marquee advertises "top, less masseuses." One of many new highway and suburban porno-shops, this one in Southern Indiana has its outdoor movie lot screened (right, rear) so passersby cannot peek at X. rated movies.

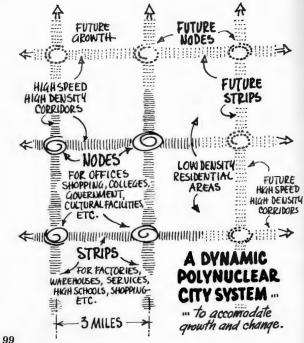




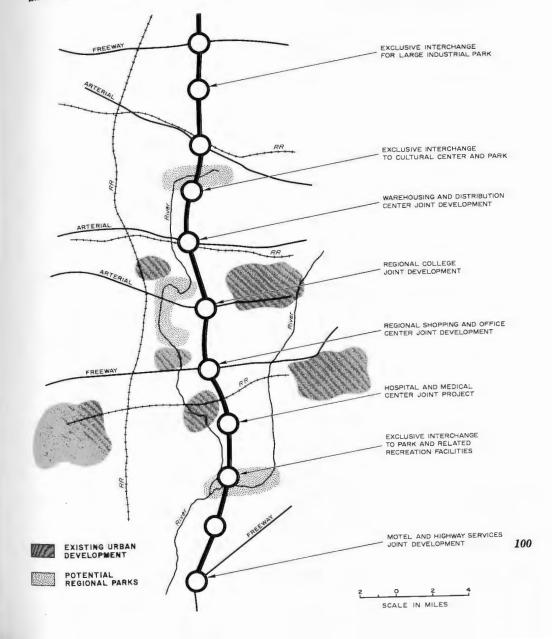
95, 96, 97. Jack-in-the-Box carries the quick-stop cram session to a 1972 conclusion in this multiple food-franchise drive-in corral on Morse Road, Columbus, Ohio, providing a haven for ten franchise feeders with joint parking around periphery and a common pool-patio in middle. Example of continued clustering.







98, 99, 100. Ways to go: These three sketches indicate how forces presently at work in Strips VI-VII may turn out. Some may use the Jefferson grid, getting reorganized into clusters or nodes at the intersections; or string along existing highways, settling down into specialized districts. Or they take advantage of the single-purpose flood-control levees of the U.S. Corps of Engineers, using them as linear building sites. What is most unlikely is that strips will disappear.



West of Norman, Oklahoma, the Hungry Mile of West Lindsey grew up during the fast-foods franchising boom of the 1960's between a new interchange and the University of Oklahoma—a multiple pit stop only five minutes' drive from thousands of hungry students (fig. 93). These linear pit strips serve the highway just as vitally as do the racing car pits at Indianapolis Speedway, LeMans, or Sebring. (See figs. 94, 95, 96, and 97.)

Even more specialized as a pit strip is Mission Road, just east of downtown Los Angeles. It has become the site of a remarkable auto-wreckers strip, lined with salvage, repair, and spare-parts shops covering hundreds of acres. Why here? Because much of the land was owned by railroads zoned for industry, had been filled in, and could not support large buildings. More than all this, it was easily accessible to that huge wreck-producing monster called the Los Angeles freeway system—and is now a vital stop at the end of the road. Thus the pits spin out their own explanations of the larger networks which they serve.

## The Strip Is Trying to Tell Us Something

The strip is trying to tell us something about ourselves: namely, that most Americans prefer convenience; are determined to simplify as much of the mechanical, service, and distribution side of life as possible; and are willing to patronize and subsidize any informal, geographic behavior setting that helps. The value systems of the strip derive from the open road rather than from the closed city. Strips become the city's vital contact zones with surrounding regions, and their fast changes reflect population and taste shifts on the urban fronts. (See figs. 98, 99, and 100.)

You will note that, especially in describing Strip I, I stressed the influence of geographic environment which forced people to obey natural laws: do not build where you get flooded, work with and not against natural processes, use gravity and local, rather than imported, energy.

For several generations now, the United States has been on an energy binge, squandering capital resources while thinking of them as Godgiven, perpetual surpluses. The era that produced Strips IV–VII, from the 1920's through today, has led too many of us to think of energy as inexhaustible, that saving was old-fashioned, and plenty our birthright. This belief deluded us into the simplistic and unrealistic view that we could locate any activity wherever it pleased us. It has made us forget the constraints which surround every decision to do something here rather than there. It encourages us to overlook the fact that every locational choice is a balancing act in which we counterpoise and compare our available time, energy, money, material, machines, and the distances

and sites over which they all must be deployed. In an affluent era we tend to overlook here-versus-there costs or to minimize their influence. But they still remain. Every day these decisions become more crucial, and as energy grows more expensive—gasoline at \$2 per gallon, for example—we will reconsider our every move and mode.

Strip dwellers must choose sooner than most of us whether to go or stay, to lease or buy, where to move, how to survive in shifting scenes. They already know what most of us must still learn—that the necessity to choose between here and there will become a pressing daily concern, influencing our every glance and movement into the world beyond our door.

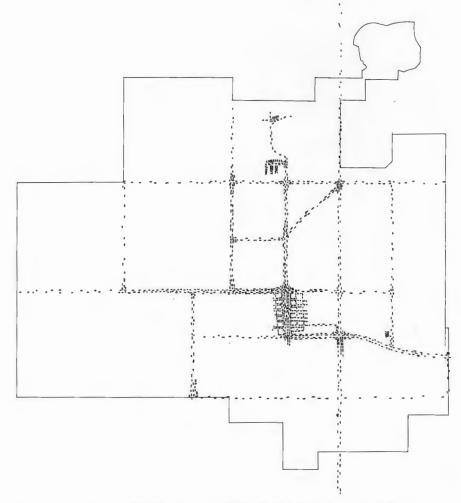
To move or not to move; that is the question. To decide whether to make a move is, now more than ever before, a crucial daily issue for millions of Americans. Not for nothing are they described as "the world's moving est people." By 1969 they were traveling in passenger cars 1.5 times more than in 1959, and by air 3.5 times as far in 1970 as in 1960.¹ Their vehicles increased from about 60 million in 1959 to some 90 million in 1969 (fig. 101).² And they change their residences more often every year.

Yet where is move-making taught as a special subject in school? Do we take that new job, transfer to another town, try a new resort or drivein, sell the old house, rent another flat, find a better bus, pick another commuting route, choose the sunny side of the street, stay off the interstate? Decisions, decisions, decisions...

The moment we move, we acquire other names and become newcomers, strangers, migrants, tourists, commuters, hustlers, surveyors, inspectors, deliverymen, runners, couriers, postmen, contact persons, scouts, agents, and traveling salesmen. As tourists, paraders, or travelers we may shed one self for another and turn into spendthrifts, lechers, or litterbugs; "There is no shame when you travel," goes an old Japanese saying. Once we quit moving and get back indoors we become different people with other titles: a route man stuck in the office is an anachronism.

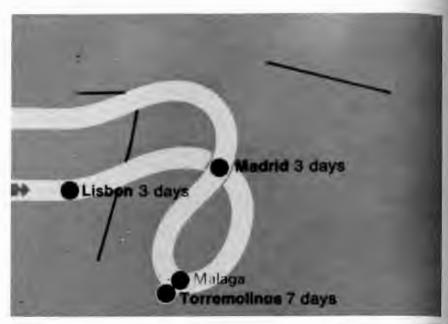
The unifying link in this is the way we make environments work for us as behavior settings for regular, periodic, recurring movements. These I

Beats



101. "Moving around it in an automobile is the most persistent impression that Clovis [New Mexico] residents have of their city," reported Windell Kilmer and Mark Miller (New Mexico Quarterly, Fall, 1968). Three out of four students have cars, and local radio station refers to the "City on Wheels." Dashes on map show vehicular activity.

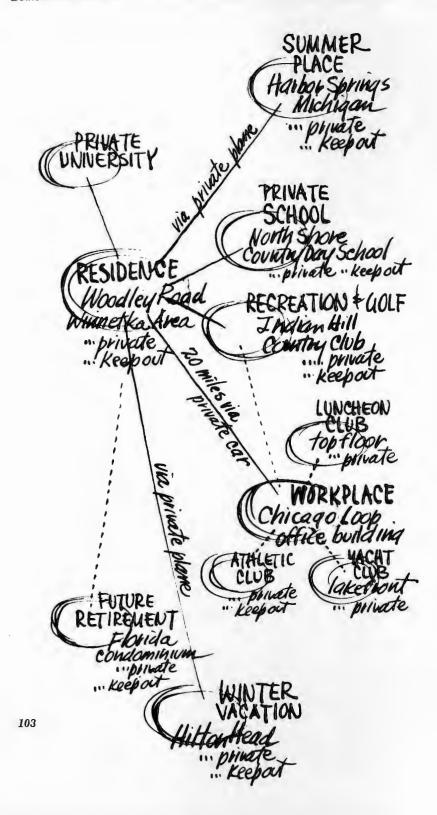
call "beats," but they can also be defined as runs, trips, swings, or commutes which follow circuits, orbits, paths, rounds, and courses. Or they may be just the same old treadmill. Some beats are forays and retreats which involve regular encounters with environments outside our home range. Others, more irregular, are called sprees, frolics, toots, and larks. Nobody ever went on a spree, frolic, toot, or lark that was worth a damn while standing stock still.



102

Because beats are cyclical and regular, they serve to organize human movements in and around cities and offer visible clues to cities' functional lives. Beats are predictable, mappable, and often negotiable. They can become quite valuable. If I can convince my banker that my property will become part of the beat of 30,000 tourists per day, he may lend me \$200,000 to build a motel, provided nobody else gets there first. In fact, one of the distinguishing marks of the new beat is that it can be packaged, mass-produced, and merchandised. The "package deal" vacation may be bought from a travel agency, from a bank, or by mail, and the American Express Company has exploited packaging to the hilt with its bargain "swinger" vacations (fifteen to twenty-two days in Europe for Americans at \$439 to \$789). (See fig. 102.) The volume of such packaged vacations, voyages, outings, and trips is on the rise, often at reduced prices for anyone willing to be packaged for mass mobility.<sup>3</sup>

Beats have scope and scale, they come long and short, safe or chancey. Some, as illustrated here, consist of predictable upper-level encounters with a limited cross section of safe little worlds (fig. 103). Other beats cut through all social classes (fig. 104), exposing one to risks and opportunities. With a bit of work, any beat may be mapped and computer; ized. Police in Chicago and elsewhere computerize their beats in order





104. Beating around the bush in Anchorage, Alaska, means flying. Plane ownership is so common that planes are sold on the main street. The city claims the largest plane ownership per capita in the United States.

105. Line-up for afternoon passengers: at northwest corner of Hemming Park in downtown Jacksonville, Florida, taxicabs and local residents, mostly black, rendezvous for a quick run north.



to even out their coverage; they plot the known beats of criminals. I mapped my own daily beats for several weeks while writing this book, and was surprised at the frequency of one funny looking loop representing trips from a semi-suburban magazine office to an old downtown. Once plotted on paper, beats take on another aspect, revealing waste ("Was that trip really necessary?"), opportunities, and unnoticed regularities.

New beats may appear suddenly as the result of shifts in costs, especially of transportation. For example, during afternoon rush hours in downtown Jacksonville, I have observed that every few seconds a black shopper or commuter strolls up to a line of taxicabs waiting at the northwest corner of Hemming Park, headed north on North Hogan Street. He or she stoops down, asks where the cab is going, and eventually gets in. When the cab is filled, it usually heads northeast where a large proportion of Jacksonville's blacks live (fig. 105). This became a new beat as the result of zone fares set up on June 10, 1971, whereby passengers could be taken from Hemming Park to their door for as little as thirty-five cents if they lived in one of two close-in zones. On the bus, however, you pay thirty cents, follow the bus's regular beat, and there is a longer wait. As I watched at Hemming Park, six cabs filled and took off in about five minutes.

#### The Buildup of the Beat

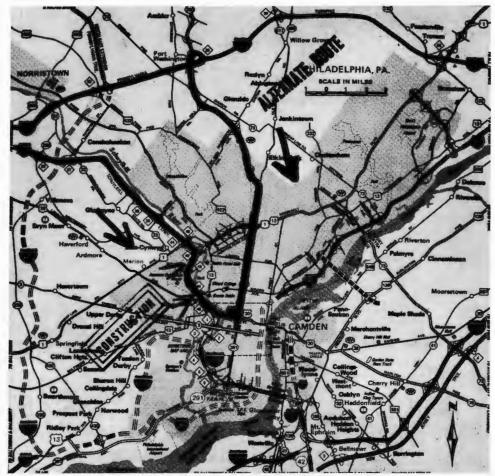
Gradually we are organizing an increasing percentage of our daily movements into beats. What may seem like an impromptu "run down to the beach" or a "dash over to the shopping center" is part of an accumulating buildup of beats. This is another aspect of population increase, of heavier traffic, of the need to make every trip pay and, thus, plan our movements. A decade ago Jane Jacobs described, in *The Death and Life of Great American Cities*, the "intricate sidewalk ballet" that took place around 8 a.m. in front of her West Greenwich Village home in New York. Hers was also a description of dozens of morning beats interlocking: garbagemen collecting, school kids walking, laundrymen delivering, shopkeepers opening, taximen cruising, and Mrs. Robert Jacobs putting out her family's garbage can before becoming a short-range commuter to an uptown job.

Describing Philadelphia's beats when he was that city's planning director, Edmund N. Bacon has observed that the city is composed of "a simultaneous movement system." It may help to picture all traffic jams as tangles at the confluence of many beats. And as we look at such movements today, we observe that random movement, the free play of



106. Keeping track of buildup of Chicago's traffic beats, reporter for Chicago radio shortwaves his sightings to station for broadcast. Position on top of John Hancock Building, 100 stories up, enables him to compete with helicopters.

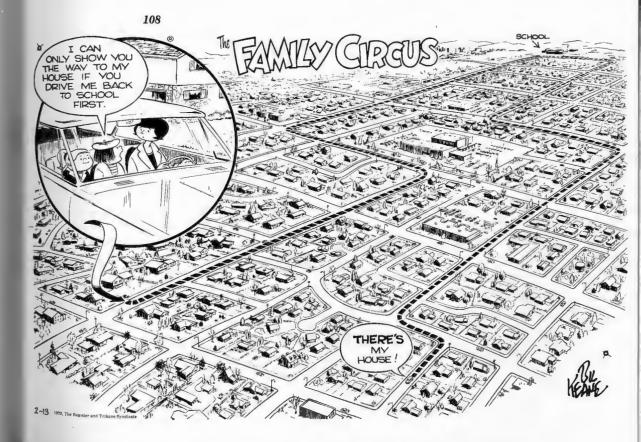
107. When schedules tighten, traffic grows unpredictable and routes uncertain, more and more of the beat-bound public turns to outside advisors—auto clubs, helicopter traffic patrols, friends, and tipsters. Typical problem area, 1972, is Philadelphia. AAA map shows strangers how to navigate local traffic currents.



the mobile human being afoot, ahorseback, or in vehicles, is slowly rigidifying and being scheduled into beats (fig. 106).

This means that before making a move, each of us must make complex computations, often unconsciously: musing in the doorway before leaving for work, checking a shopping list before switching on the car's ignition key, or stopping at the station for gas and a map. Ours has become a check-listed, calendared, scheduled society. Beat planning has become so complex that my local AAA reports a five-year increase of 20 per cent in the number of Trip-tiks issued to its members (fig. 107). Trip-tiks are thicker today than a few years back: they have twenty-six preprinted pages of hints and instructions inserted ahead of the page that actually maps your route. There is also an 8-inch square emergency red sign, "SEND HELP," in case you get in a wreck. "Turn to us before you get in a jam," advertises a Jacksonville radio station. "For a short stay you will need a fast tan," urges the Sea & Ski suntan lotion pitch from a Florida billboard.

So beats require tuning in, mapping, musing, checking, pondering, planning—and no breakdowns. Nobody can stick to the beat when the



car battery dies or the subway conks out. So we spend more time and money fixing and replacing machines to keep us on the beat.

Mothers once did their own mental computer runs to figure out safe routes between home and school for their kids, but this beat is increasingly calculated and mapped by school officials (fig. 108). Such is the invisible reality behind the presence of guards at school intersection. Another form of reality: the sight of elderly and often white-haired men serving as school crossing guards in the Newport Pier section of Balboa Beach, California. They are clues to the nature of the town's population which includes many retirees having little to do during what they consider a cold winter. Do not all societies put their population surpluses to work at such marginal jobs?

#### The Big Beat Changes

In and out, inhale-exhale, compression-expansion: for the first century of their growth most American cities could be depended upon to send out this single, overwhelming rhythmic message from their working beats. Many generations have learned to tell the time of day by the rattle of commuter trains, the noise of rush hour traffic that heads toward midcity in the mornings and outward at night.

But the traffic streams no longer all point downtown, but rather in every direction, and one encounters queueing, stacking, tightening, and galloping—those phenomena of rush-hour traffic—far out on the urban fronts and no longer exclusively on the old radial, spoke-of-the-wheel routes. "Trips related to the old center city now comprise only a small part of daily travel in metropolitan areas," reported the President's Task Force on Suburban Problems in 1968.6

To drive through the open rolling countryside of the newtown of Irvine, California, near Newport Beach, at 7:45 A.M. and suddenly be caught in half-mile-long lines of commuters waiting to get through the traffic-lighted intersection of Jamboree Road and MacArthur Boulevard is a puzzling experience. But lift your gaze to the horizon; then you realize that those distant shoeboxes are commuter destinations—dynamic clusters of aero-based company offices, the International Chemical and Nuclear Corporation Research Center, and warehouses serving the nearby Orange County Airport and this boom-town region (fig. 109). Hence the open-country jams.

To get caught in bumper-to-bumper traffic through Tobesofkee Swamp on Highway 247 south of Macon, Georgia, in late afternoon makes no sense at all—until we recognize that Warner Robins Air Force Base, built at frantic speed in World War II and still a big job center in open coun-



109. A horizon of commuter destinations in newtown of Irvine, California, under development on giant Irvine Ranch south of Los Angeles.

try, has just released part of its load into the twenty-four-hour flow of some 34,000 vehicles between the base and Macon.

All beats set up counterpart movements. Daily at 7 A.M., for example, the beat begins at Kenilworth, Illinois, an upper-income suburb north of Chicago, as executives and professionals head for work. A journalist observer from Northwestern University reported, "On the heels of the resident exodus . . . the workers move in. Postmen, leaf rakers, deliverymen, handymen, and maids converge upon the area." At certain morning hours, key intersections which link service and industrial areas to middle-to upper-income residential districts become crammed with delivery vans of every sort. At such a junction I recently found myself in a line with eight service vans, including a platoon of white, yellow, and blue telephone repair trucks on their daily beats from service center to house calls. Platoons do not happen; they are ordered and dispatched. As parts of larger systems, they are valuable clues to the way systems interact.

#### **Beats Within Beats**

Beats tend to generate their own language. A taxi driver in Eugene Oregon, described a local hotel run to me as "a ten-minute hustle to the airport." More often the phrase is "a \$3.50 run from downtown," and in Detroit it runs up to \$12.

A patrolman responds to his orders by following the beat assigned to him, mapped from a sergeant's memory of his days on the beat, plus what the computer or the grapevine says is happening out there. A patrolman or a news reporter is considered fit for his beat when he begins to know what to expect from his environment and can handle it. Each has achieved a fit with environment after first having sized it up by measuring its demands against his own time and energy resources.

Beat mastery may be found in all walks of life. Dean William L. C. Wheaton of the College of Environmental Design, University of California, observed during a Times Square inspection in Manhattan that "the hustlers walk against the traffic so they can avoid the fuzz [police] and display the goods." In some of Florida's larger cities, "the street-walkers don't walk, they cover their beats in Cadillacs," observed June

110. Once a busy port of call for impatient miners and railroadmen patronize ing a then-flourishing whore-house district east of the Wabash River, now the neighborhood is mostly cleared, inactive, and these cottages behind solid walls are only remnants of a once busy scene at Terre Haute, Indiana.





111. "World's Largest Classic Car Show"—the 17th annual Auburn-Cord-Duesenberg Festival has transformed Auburn, Indiana, by putting it on the Labor Day weekend beat of some 30,000 classic-car fans.

Cleo and Hank Mesouf in their Florida: Polluted Paradise. On one-way Commercial Street in Provincetown, Massachusetts, I have observed during the height of the August tourist season that homosexual queens appear to work the east side of the street, which is closer to the main, Highway 6 approach routes for newcomers. A similar position athwart the crucial movement system of prospective customers was occupied by a formerly flourishing whore-house district in Terre Haute, Indiana, now reduced to a historic remnant (fig. 110).

#### Seasonal and Annual Beats

"There's no place on earth that does not have at least a 25 per cent seasonal pulse," observes ecologist Howard T. Odum, 10 and most travelers in the 1970's would raise him at least 50 per cent, especially in July and August. To travel during tourist season is to encounter that crowd phe-

Be ats Be ats

nomenon known locally as Frontier Day (Cheyenne, Wyoming, and points west); The Great Shrimp Boat Race (Fernandina Beach, Florida). Cheese Day (Logan, Utah); Bonneville (Utah) National Speed Trials also called Amateur Week on the Salt Flats; Derby Week (Louisville Kentucky); Race Week (Indianapolis, Indiana); Clam Festival (Pismo Beach, California); the International Azalea Festival (Norfolk, Virginia); or, simply, Court Day, the County Fair, the Great Homecoming Day-any of which has become a festival. (See fig. 111.) During spring dogwood and fall leaf-turning seasons, sightseers turn U.S. Highway 25 through the Great Smoky Mountains into a fifty-mile traffic jam centered on the sights and resorts of Gatlinburg, Tennessee. Spring vacation raises the pulse rate at a thousand beach resorts, and "when ski lodges have carnivals at the same time, the road from Salt Lake City to Snowbird gets completely blocked, "commented Jerry McCoy of the University of Utah. 11 When deer season opens, the streets of Santa Fe, New Mexico, are jammed with hunters' jeeps. At every hand, art fairs are blocking more miles of streets every year as neighborhoods gain new influence over their own turf.

Now that important national holidays have been jiggered around on the calendar, we now celebrate George Washington's birthday, Memorial Day, Columbus Day, Veterans Day, among others, invariably on Mondays. This shift from midweek now makes it possible to pack vacation trips into longer weekends, so that highways leading back home to Appalachia from Detroit, Dayton, Cincinnati, and other centers are more than ever jampacked around major holidays.

Consequently, travel offers a grab bag of unpredictable encounters, Nobody is mapping these huge beats and jams. All travel is a risk unless the traveler wants to forget schedules, get off the road, lock the car, merge with the crowd in some unsuspected celebration, drink and dance in the courthouse square to celebrate some great event hitherto unknown except to local celebrants. Thus travel tips must be traded among friends. At Gainesville, I have heard University of Florida faculty members argue over whether it is easier to drive from their mid-state campus to Anastasia Island, Flagler Beach, or Crescent Beach some seventy-five miles east on the Atlantic coast, than to go westward to Cedar Key about ninety minutes away on the Gulf coast, debating the relative weekend rigors of each route.

There is a Friday afternoon buildup in Chicago's traffic beginning every April; it gets progressively tighter every week, especially on sunny days. The reason is simple: more and more mass-transit commuters begin driving their cars to work on Friday mornings, hoping to beat the rush hour in getting away for weekends and/or do some pre-weekend shopping. The elevators in New York City's CBS Building become crowded

in late fall, beginning early on Friday mornings, as skiers show up equipped for the weekend, skis and all, thus reducing the capacity of each elevator below its specified load.12

The reason drivers on interstate routes suddenly come upon those great highway "Food-Gas" strings and clusters of motels and gas stations is that they are all ganged up to capture travelers at the end of a particular beat, at predictable intervals. Most tourists' beats shape up into four-hour increments, or modules, of human behavior, according to Professor Richard Wilkinson of North Carolina State University. He observes that "the entire trip is structured about these units" and that "whole areas or districts [of new resorts] can logically be structured with these increments in mind."13

Take that sign outside the airport at Portland, Oregon, which says "Come home this summer-Continental to Denver [fig. 112]." Fly home? Who flies home? Asking these questions, I found Portland to be a city loaded with people from someplace else, especially the West and Midwest. What is more natural, if they have the price, than to fly east for holidays and reunions? A shuttle parking-lot operator outside the airport told me his 150-car lot is jammed every Christmas by Portlanders "going home."14 So that sign unlocks the eastward back-home beats of thousands of Pacific Northwest families.

But movement has its costs. When beats converge during rush hours in Los Angeles, susceptible people on certain freeways begin to suffer from carbon monoxide and other pollutants. Eventually such cities will be





metering, managing, and regulating the traffic's beat so as to overload neither freeways nor the air above them. Experiments are under way, from London to Los Angeles, in electronically administering the traffic beat, just as electronic regulators are being installed in patients with irregular heartbeats to get them back on the beat.

#### Places of First Resort

At the end of many beats lie resorts, spas, vacation spots, and special purpose retreats whose manufacture and operation is one of the nation's fastest-growing industries.

Resorts do not look like other places, as the Texas travel and "vacastionscape" specialist Clare Gunn has noted: "The shift from accepting tourists as guests to catering to them as consumers has changed the entire face of the land." The resort landscape has a distinctive look; it is full of special objects: portable, collapsible, transportable, movable, expandable. They serve as shelters, furniture, windbreaks, partitions, storages and transport. They may be boats turned upside down in winter to shelter lawn furniture, lawnmowers, etc.; trailers up on blocks packed with summer camping stuff or stacked with tourist tackle; anachronistic lobster pots, rental surfboards, cartoned suntan lotion. One views the off-season resort as a scene of make-ready.

As for resorters, once removed from their old self-serving scenes back home, they preen themselves into special uniforms and costumes which later may get translated into year-round gear. Thus resorts may be viewed as special hunting grounds for life-style pushers and fashion hustlers. To succeed at this game, resorts must provide fitting rooms for trying on a new self, so it is no wonder that the resort landscape resembles a high-fashion stage set for home movies: golf courses crammed with photogenic props, beaches with photogenic guards, waterfront dominated by clues such as non-navigational lighthouses—backgrounds for such rituals as family snapshots, weddings, or picnics. Thus millions of vacationers pursue avidly the vacation beats, eager to be separated from their old selves in special-purpose settings (fig. 113).

#### **Avoidance Areas of Last Resort**

For every traffic jam there is a gap, for every beat there is a void—a place of last resort, one that has been drained of activity, spooked, abandoned for the nonce. Places such as the low-activity zone of empty auto-sales lots south of Houston's business center; and parts of the ill-fated Pruitt-Igoe public housing in St. Louis, half-empty, partly burned out, and



113. No resort or historic mecca is complete without its tourist tackle, such as Williamsburg, Virginia's stocks in which visitors may go through "photogenic" routines to prove they have been there—i.e., to the Public Gaol.

tenanted by the poorest disadvantaged blacks, before vast sums were spent to demolish some of the buildings and rebuild others into a more humane community. Especially in the early 1970's there began to emerge whole neighborhoods of empty tenement and apartment districts in New York City and elsewhere, victimized by speculators, abandoned by tenants, plundered by passersby.

Unless they become fire hazards or threaten the larger community, most unofficial avoidance areas are well-kept secrets. Newspapers sel-

<sup>e</sup> One such map of "anxiety areas" in downtown Detroit was prepared by the staff of the City Plan Commission based on a small cross section of interviews with downtown office workers. After the above comments were written, permission to publish that map in this book was denied by the Commission director.

dom identify them on maps until conditions get officially labeled, for fear of protest from outraged property owners. Boosterism, fear, and pride conspire to shield them from public scrutiny, especially in the early stages. A stranger may observe boarded-up buildings, gang slogans spray-painted on walls, may get hard-look signals and hard talk from the residents. But for the most part, the designation of avoidance areas is informal, which means: look hard, ask around first, and do not barge in.

LOOMING QUIETLY as a backdrop in thousands of neighborhoods is a huge, piled-up mass of something-or-other. It just sits there quietly. Nobody pays it heed. Bulldozers snort around and nibble at its hindquarters. Trucks come and go, raising dust, paying tribute, leaving deposits, scurrying away.

And then one day it starts to burn, and, if the thing is made of sawdust or sulphur, the air turns nasty and the neighborhood flees; or if it is made of waste sludge or culm it may simply shift from inertia to movement, slipping and sliding and smothering all in the vicinity (fig. 114); or if it is building stone and nobody is using stone any longer, the pile may sit unmolested for years, the lumpy proletariat of the landscape.

Such a scenario gets played out wherever manufacturers depend on raw materials concentrated into local heaps, piles, tanks, or—the term I prefer—"stacks." Nobody puts stacks on tourists' maps, and everybody conspires to act as though they were not there. For raw materials are considered low-class stuff, economically and socially; they have been piled up on the wrong side of the tracks and worked over by low-wage labor. Consequently a neighborhood dominated by stacks has its own high density of clues even though it may be shoved into a backwater as the city's least visible of all districts.

I am using stack to mean a high-density mass of materials, minerals, objects, liquids, or energy, concentrated by man's efforts, which exerts

# Stacks