Public Streets for Public Use

Edited by
Anne Vernez Moudon

with a Foreword by
Donald Appleyard

COLUMBIA UNIVERSITY PRESS
NEW YORK

1.
The Making of Democratic Streets

MARK FRANCIS

"It is the idea of the street, not the reality, that is important . . ."
—A. P. Smithson, 1970

Streets are an important part of the landscape of everyday life. People rely on them for such daily activities as travel, shopping, and interaction with friends and relatives. Much social life and learning occurs along streets. Yet there is now growing concern that American streets are becoming "privatized," denying people basic rights of access, use, and enjoyment. Empirical research, historical analysis, and some demonstration projects (Rudofsky 1969; Whyte 1980; Appleyard 1981; among others) begin to show that good streets are democratic streets—streets that have meaning for people, invite access for all, encourage use and participation, are loved, and are well cared for by their users. These basic qualities of street democracy may be vanishing from our towns, cities, and neighborhoods (fig. 1-1).

In this chapter I will briefly review the history of street life and culture. I will discuss and critique recent design theories and applications including "pedestrianization," "livable streets," and "private indoor streets." Finally, I will introduce an alternative perspective, "democratic streets," which provides a broader and more holistic view of street culture.

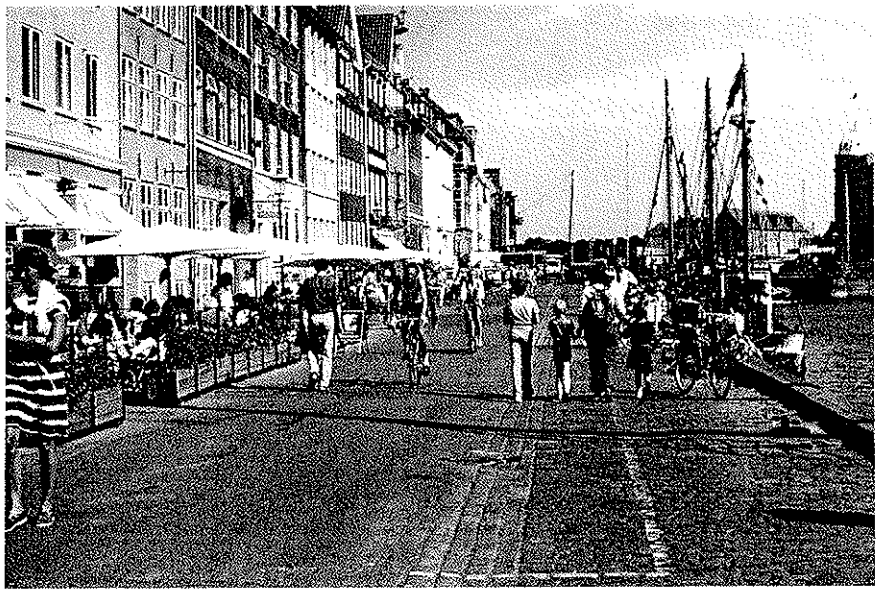
STREET DEMOCRACY IN HISTORY

Several historical influences may help to explain America's ambivalence toward streets and their complex role in public culture. J. B. Jackson, in his observations on the evolution of the American landscape (1972), suggests that the grid that shaped much of rural and urban form in America was largely intended as a democratic tool to distribute land and define the boundaries between public and private worlds. The grid created the systems of streets and street space as we now know them and gave form to the rural farmstead and urban neighborhood. Early public spaces, such as the commons, were not legally protected because they were understood as part of the public domain.

Early immigrants brought memories of lively European streets that influenced street life in such urban centers as New York City and Boston. Those streets were more democratic than our current ones. While dirty, overcrowded, and often dangerous, they were the center of public life, having been accessible to and used by all types of people. Unfortunately, however, the environmental problems of early urban streets were never resolved, in part because many people chose to leave the city in search of a better life outside. Leo Marx, in *The Machine in the Garden* (1964), claims that an idealized, romanticized view of nature may be partly responsible for suburbanization, the rise of privacy in American life, and the resulting decline in public culture. A majority of Americans believed, as many still do, that the countryside could provide a more pleasant, supportive living environment than the city.

Street democracy also declined with the rise of mass transit, followed by increasing speeds in transportation and, eventually, by the automobile. Not only did the automobile provide the means for people to move away from heavily trafficked streets to the suburbs, but it took people away from direct involvement with the streets themselves. Traffic engineering, with its concerns for efficient traffic movement, became a powerful shaper of city form and continues to dominate decision making regarding streets today. The result has been a decline in the attractiveness and desirability of urban streets (fig. 1-2).

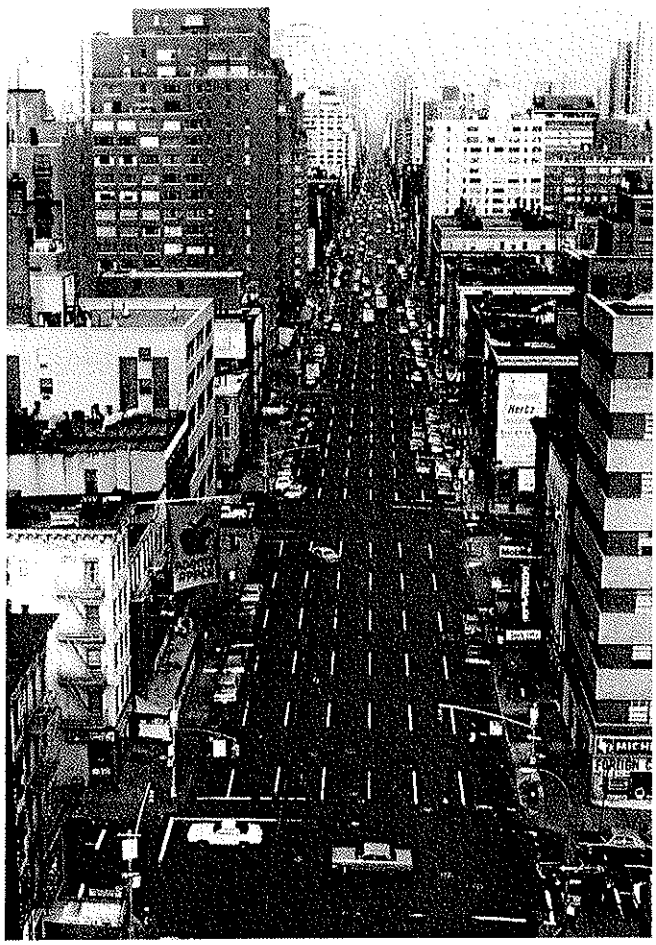
The preparation of this chapter was funded, in part, by a grant from the University of California Agricultural Experiment Station. All photos and graphics are by the author unless otherwise noted.



1-1. A lively democratic street in Copenhagen, Denmark, which mixes diverse activities and users.

The past two decades have seen increased interest in the role public space and the street can play in shaping public culture. The demonstrations of the 1960s used streets as a stage for political and social change. Since then, also, street activities, such as street vending, outdoor eating, walking, and bicycling, have increased. Local concern with controlling traffic speeds and improving public transit are further indicators of increased interest in the street as community space. Developers, recognizing the economic potential of the affluent moving back to the city, have reinvested in city centers on a large scale.

1-2. The problem of the urban American street, as pictured in New York City. Eighty-five percent of city street space is devoted to moving vehicles and 15 percent to pedestrians.



RECENT APPROACHES TO STREET DESIGN

Changes in attitude toward city life over the past twenty-five years have supported considerable design, planning, and management activity in transforming urban streets into more safe, secure, and comfortable places. New forms of urban streets have emerged, including "pedestrianized" streets, auto-restricted zones, malls, traffic-managed neighborhood streets, and, more recently, "privatized" indoor commercial streets. Advances in research and practice have contributed useful principles regarding street life and culture that can be generally placed in one of the following three frameworks.

Pedestrian Streets

"Pedestrianization" is the strongest and most influential of the street redesign movements that have

changed the public environment of many cities. Inspired by successful efforts in Europe, American planners set out to revitalize declining downtowns by closing or restricting main streets to traffic and constructing elaborate and expensive pedestrian malls. Labelled by some as the "malling of America," the movement involved the construction of over 150 malls in large and small cities across the United States during the 1960s and 1970s (Brambilla and Longo 1977; Kowinski 1985). Considerable design and research work has documented the impact, both positive and negative, of pedestrianization efforts (Breines and Dean 1975; Brambilla and Longo 1977).

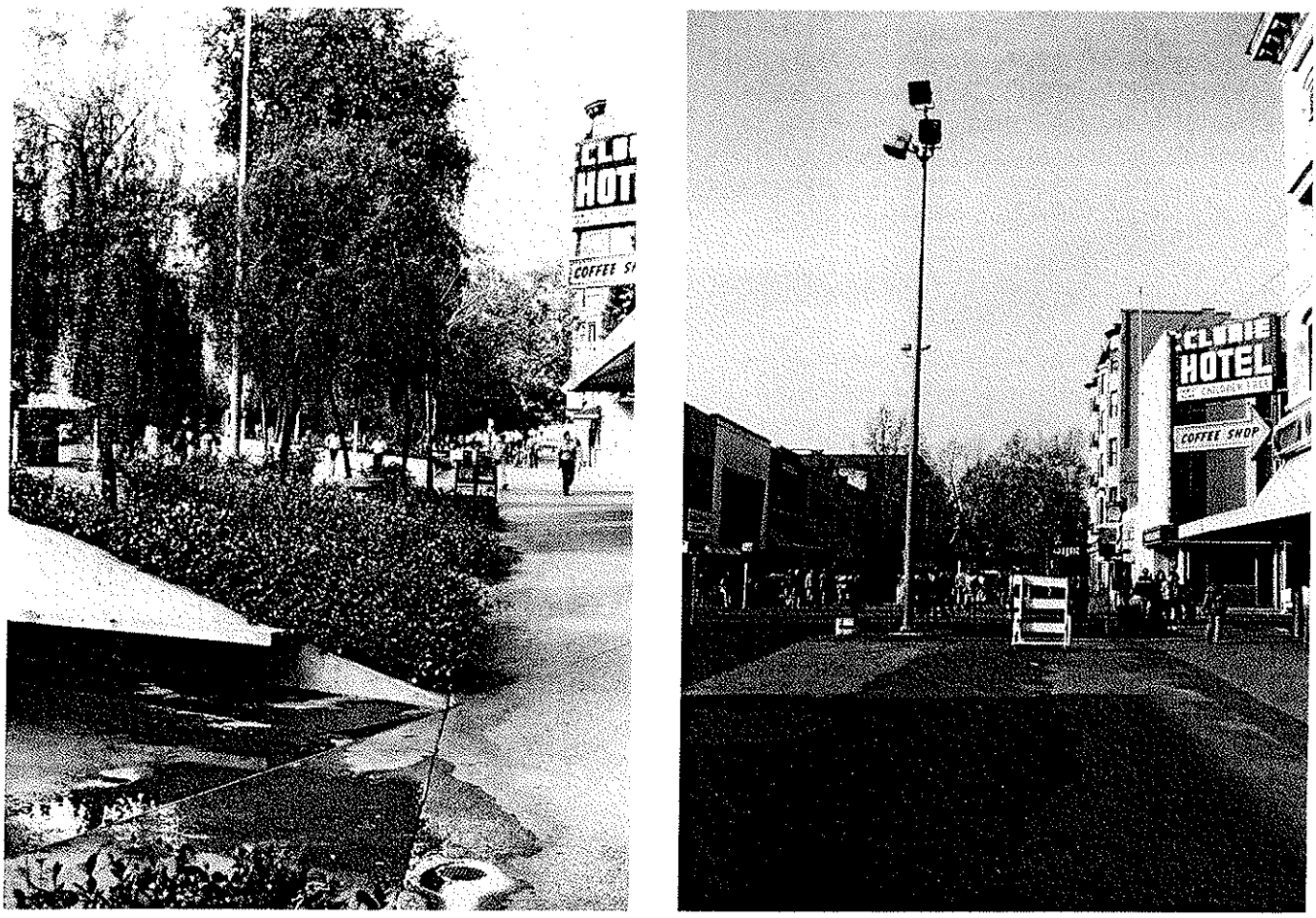
The pedestrian movement has experienced several historical shifts in intent and application. The pedestrian mall proposals of the 1950s and 1960s sought to reduce the negative impact of cars on shoppers. In the 1960s and early 1970s, emphasis was placed instead on creating elaborately landscaped and furnished downtown malls, which catered more to the comfort of pedestrians than to the needs of shoppers.[1]

As commercial ventures, downtown malls were not always successful. For example, merchants found that the mall did not lure shoppers back from suburban shopping centers. Several cities, such as Sacramento, California, have replaced strictly pedestrian malls with "mini-malls," where other forms of traffic, for example, buses, "light rail," and taxis, are allowed during certain periods (Knack 1982) (fig. 1-3).

In the mid-1970s auto-restricted zones became popular. Entire downtown districts were accorded priority access for public transit and people on foot. Bus routes were brought closer to the hearts of downtowns, and cars permitted only at selected times, such as evenings and weekends. Examples of this period, found in downtown Boston, Burlington, Vermont, and Portland, Oregon, have been commercially successful (fig. 1-4).

A few small towns and wealthy commercial areas have developed some of their neighborhood streets for shopping. These efforts have often been influenced by the historic preservation movement, where build-

1-3. The K Street mall, Sacramento, California, one of the early pedestrian malls in the United States: a. before demolition; b. after demolition for light rail in 1985. (Photos: Frieder Luz)



a. b.

1-4. Washington Street in Boston, Massachusetts, after implementation of an auto-restricted zone.

ings are restored to their original or idealized nineteenth- or twentieth-century character. Building uses have been transformed, with corner drug stores and neighborhood grocery stores replaced by expensive boutiques selling clothes, records, and gourmet foods.

The pedestrianization movement both at the downtown and neighborhood scale remains a commercialization effort committed to maximizing retail sales by creating a more comfortable relationship between moving vehicles and shoppers. Retail sales and private control often ensure the success of these projects, while qualities such as commercial diversity, public access, and street life are ignored.

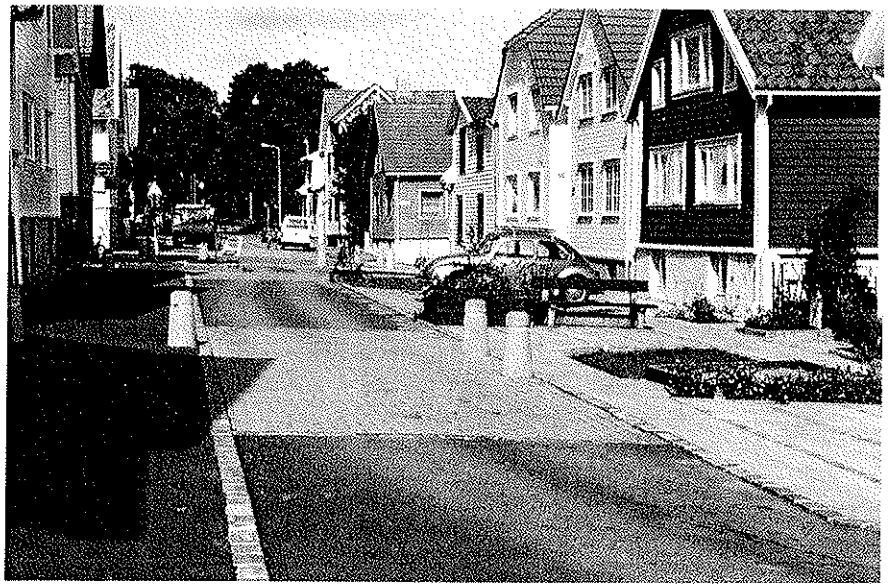
Livable Streets

A second, smaller movement in street design and management falls under the broad theme of street "livability" or "sociability" (Levine 1984). Pioneered by environmental design researchers such as William Whyte (1980) and the late Donald Appleyard (1981), the "livable streets" movement recognizes the importance of the street environment for the social life of cities. It emphasizes opportunities for greater safety, security, and social contact, particularly on residential streets, where traffic and street quality directly affect residents' satisfaction (Appleyard and Lintell 1977). As in the pedestrianization movement, design and planning innovations from Europe have served as a form of inspiration. For example, the Dutch *Woonerf*, or "play street," is viewed as an effective way to reduce traffic speed and provide for social activities, such as ball play, sitting, and communal use of neighborhood space (Royal Dutch Touring Club 1978) (fig. 1-5).

While popular in Europe, and with some planners and social scientists elsewhere, the livable streets movement has had limited application in the United States, due in part to the reluctance of many public works departments to turn control of the street back to the people. Livable streets efforts here have focused on speed-reducing traffic devices, such as speed bumps and barriers. And even those minimal efforts have been applied only to selected neighborhood environments. Comprehensive efforts that incorporate pedestrian space, reduce traffic, and allow for extensive user participation—such as those found in the Netherlands, Germany, and Norway—have not been extended into the larger public environment of cities in the United States.

Private Indoor Streets

In a third street prototype, the enclosed private street, public pedestrianization techniques, such as auto restriction and extensive landscaping, have been applied indoors. The return of affluent suburbanites to the city has fostered the development of many comfortable and revitalized urban areas. This process, commonly known as "gentrification," creates social enclaves in cities, resulting in the "suburbanization" of downtowns and neighborhoods with new developments such as indoor malls and enclosed atriums. The returning suburban gentry has also brought the forms of social control that have guarded and protected the suburban mall from undesirables. Labelled by some critics as the "Rousing of America" (after the highly publicized projects by the Rouse Corporation in Boston, Baltimore, and, more recently, New York City) this trend has yielded new part-private, part-



1-5. Neighborhood street in Stavanger, Norway, redesigned for children's play and slower traffic speeds.

1-6. Suburban mall concept applied to city center at Quincy Market, Boston, Massachusetts.

public spaces surrounded by boutiques and restaurants that many urban designers see as models for the rebuilding of declining downtowns (Barnett 1978) (fig. 1-6).

In contrast to the openness and plurality of urban streets, these new developments stand aloof from the everyday city environment. These projects often treat the nearby street as a hostile place, either to be ignored or guarded against with gates and even armed guards. Public policy and funding have supported this move toward "privatized" public space. For example, authors of the highly acclaimed San Francisco Downtown Plan (San Francisco Dept. of Planning 1985), under pressure from developers, have allowed enclosed pedestrian and atrium areas to be counted as public outdoor space (fig. 1-7).

As with the earlier "pedestrianization" movement, the privatization of the urban landscape remains largely a commercial venture where retail sales determine the social design of public space. Private developers have now moved indoors, where they can better control use and users.

At the same time, most streets in traditional neighborhoods and shopping areas remain untouched, at the mercy of traffic, and economically and ecologically unhealthy. Some are homes for transients and other unwanted citizens. The creation of privileged urban enclaves thus contributes to larger social prob-

1-7. New downtown indoor atrium street space, Oslo, Norway.

lems, while it works against the ideal of a democratic city with social and economic diversity.

There are signs that the privatization process may also be taking place in some European cities and towns—traditionally the models of democratic urban space. French environmental psychologist Perla Korosec-Serfaty (1980) has labelled this process "museumization," where natural public spaces, such as squares and small plazas in older towns in France, are being turned into nicely preserved but socially changed places. The atrium movement is now very popular in some parts of Europe and Japan, with large enclosed interior malls completed in several cities, including Paris, Amsterdam, and Tokyo. The international flavor of the privatization movement raises basic questions about the future role streets will play in supporting public life.

DEMOCRATIC STREETS: AN INITIAL DEFINITION

The decrease in plurality of public space, as shaped by current practices of urban design, and the growing trend of privatization, together create a troubling gap between the social goals and manifest results of current design and development initiatives. A broader and more holistic concept of "good" streets is needed.

The alternative perspective is "democratic" streets. Incorporating some aspects of pedestrian and livable streets, the concept of democratic streets is grounded in the notion of public use. It recognizes streets as playing larger social, economic, and ecological roles in towns and cities.

A democratic street is one that reflects the history as well as the social and economic diversity of the larger neighborhood and city. Friendly to pedestrians and livable for residents, it also reflects social justice, economic health, and ecological vitality. The democratic street does not exclude the automobilist but provides space for vehicles by striking a more equitable balance with other street users, namely, pedestrians and bicyclists. Like the livable street, it stresses safety and comfort. Yet the democratic street also emphasizes the access and needs of many different kinds of people, provides opportunities for discovery and challenge, and actively encourages user manipulation, appropriation, and transformation.

Street democracy grows out of the concept of *publicness*. While the concept of privacy has been well developed and legally protected in modern society, publicness is a relatively new concept that recognizes one's right to free and unlimited access to public places. Publicness is the foundation of street democracy, providing the framework in which a true public culture can develop and flourish.[2]

What specific ingredients are needed to create a democratic street? Past research on the quality of street life reveals some important characteristics.

Jane Jacobs (1961), one of the early advocates of democratic streets, made planners aware that the "eyes on the street" were important in creating a sense of place and security in neighborhoods. Observations of her own street in Greenwich Village encouraged her to advance important principles of street quality and democracy, such as the need for streets to support contact, safety, and child use.

Kevin Lynch, another keen observer of urban life, argues in *A Theory of Good City Form* (1981) that we have five basic public space rights: presence, use and action, appropriation, modification, and disposition.

These rights, simply stated, are that people should not only have access to a public space, but also freedom to use, change, and even claim the space, as well as to transfer their rights of use and modification to other individuals. Lynch's spatial rights provide an effective measurement of the street's publicness and democracy.

Based on the work of Jacobs, Lynch, Appleyard, and others, we can further define democratic streets as ones that are well used and that invite direct participation, provide opportunities for discovery and adventure, and that are locally controlled and broadly accessible.

What follows is a discussion of specific ingredients of street democracy that are useful for evaluating existing streets or for designing new ones.

USE AND USER DIVERSITY

Healthy streets are used by different people for a variety of activities. Yet streets are often designed primarily for one group or for a particular function, such as walking or driving. A lively and successful street demands a balanced mix of different user groups and activities.

User diversity exists when a variety of age groups and social classes can interact in a place, or at least tolerate one another without major physical or social controls. As Stephen Carr and Kevin Lynch have noted (1981), a healthy balance between freedom and control is needed to minimize user competition. For example, security problems in midtown Manhattan plazas (such as Exxon's) prompted plaza managers to redesign the spaces, with the aim of excluding low-income users and attracting more affluent ones. Yet a successful public place is one where users of different backgrounds can coexist without one group dominating another.

As Whyte has pointed out (1980), people-watching is one of the primary activities shared by different classes of people in public space. For the sake of diversity, it ought to be encouraged. Such simple amusements as walking, talking, eating, and sports also give a street diverse life. Unfortunately, planners have attempted to relegate these activities mainly to parks, restaurants, and public buildings. We need to bring them back to the street.

Failure of pedestrian malls can be traced to one social group's lack of tolerance for others that have been attracted by new amenities. In the case of the K Street mall in Sacramento, California (Becker 1973), pedestrianization failed to attract suburban shoppers downtown as long as existing elderly and teenage users found the mall to be a comfortable place for "hanging out." In 1982, after a decade of debate, merchants and planners agreed on a plan that sacrificed pedestrian improvements (and the undesirable users they bring) and improved transportation to the mall, introducing streetcar traffic on K Street.

The social success of the *Woonerf*, as documented in Leiden, Holland (van Andel 1985) and in Hannover, West Germany (Eubank-Ahrens 1985; see also chap. 4) results from the deliberate redesign of street space to foster user diversity. Both postconstruction evaluation studies found that more small children used the street space after the *Woonerf* was first built, whereas adult users spent more time in the space following reconstruction. These empirical findings support previous theories maintaining that a balanced diversity of use and users is needed for urban space to become truly public.

ACCESSIBILITY

Kevin Lynch (1981) and J. B. Jackson (1984) claim that a space is "open" only when it is publicly accessible. A fenced-in area along a waterfront, for example, cannot be classified as open space; the area may be vacant but it nonetheless prohibits public entry. As Lynch and Jackson suggest, degrees of publicness are crucial for classifying space. Such criteria extend beyond mere physical considerations to encompass humanistic concerns. Designers should use accessibility criteria as guidelines in determining whether a new project adds to or subtracts from the public landscape of the city.

Research on children's access to the outdoors has offered clues to the effect of public access on human development in general. Hart (1978), studied children's use of the public landscape, both in a small Vermont town and in New York City neighborhoods. He found that the environmental competence of children is directly related to their ability to gain safe access to built and natural environments. The space directly near the home environment was found to be especially important. Yet home-based recreation is still poorly planned on many neighborhood streets (Brower 1973), although safe and easy access to nearby street spaces continues to be a major factor in residential satisfaction (Appleyard 1981).

PARTICIPATION/MODIFICATION

Direct participation of street users in the design and management processes will help people establish an *ongoing* attachment to streets. Considerable advances have been made in the development of participatory methods that allow street users to involve themselves directly in the creation and maintenance of neighborhoods and urban centers (Francis 1979).

Streets also need to be modified by their users to fit the changing activities and needs of the community. Loose parts, such as toys and sports equipment, can encourage children to use the street environment (Nicholson 1971). Elements brought out by residents or merchants, for example, movable chairs and planters, can contribute to a sense of local control and responsibility for the street environment. Recent research has documented that users who develop vacant lots into community gardens and plant flowers and vegetables on sidewalks often encourage other people to participate in the improvement and care of the rest of the street (Francis, Cashdan, and Paxson 1984).

Direct, active engagement in modifying the nearby environment can have an important impact on a person's development and improve his or her competence in other aspects of life (fig. 1-8).

REAL AND SYMBOLIC CONTROL

Streets work democratically when people feel a sense of control over them. Conversely, streets fail when people perceive them as belonging to the "city" or when they seem to be controlled by no one (Francis 1987). Control is real for residents who maintain the sidewalk or street trees; it is symbolic when residents feel that their private space, such as their front yard or entrance, extends into the public environment (Hester 1984).

Largely ignored as an element of street design and management in the United States, control has been part of the success of European streets for centuries. It allows direct negotiation of the conflicting values of different publics. For example, the concern of merchants for a safe environment often competes with the needs of local teenagers for a place to socialize. The environmental values of children and adults are often quite different, as found in a study of a new neighborhood in Davis, California (Francis 1983). This study used an action-research approach employing methods such as favorite-place analysis and ideal landscape mapping, to design a new playground. Researchers discovered that adults wanted a clean and safe play structure while children wanted opportunities for playing with dirt, water, and natural elements. A participatory approach allowed for these two groups to educate and negotiate with one another directly to create a solution that provided elements from each group.

TRAFFIC MANAGEMENT

Traffic management is also an important ingredient of street democracy. Considerable research has demonstrated that control of traffic speed contributes to one's attachment to or detachment from a residential street (Appleyard 1981). For example, fear of auto

a.

b.

1-8. Residents taking control of street by planting trees in street space: a. Davis, California; b. West Germany.

traffic is largely responsible for parents restricting children's use of the street space in front of houses (Sandels 1975). Appleyard and Lintell (1977) determined that resident satisfaction with neighborhood streets in San Francisco depended in large part on traffic volume and speed. They also found greater social contact among residents on streets with less traffic. Ongoing traffic management is needed in order for other democratic elements, such as use, access, and participation, to be effective.

SAFETY/SECURITY

Peoples' concern about traffic is only part of their need to feel safe on a street. Like the auto driver, the pedestrian assesses the hazards of a street before deciding whether or not to use it, and street democracy depends on his or her sense of security.

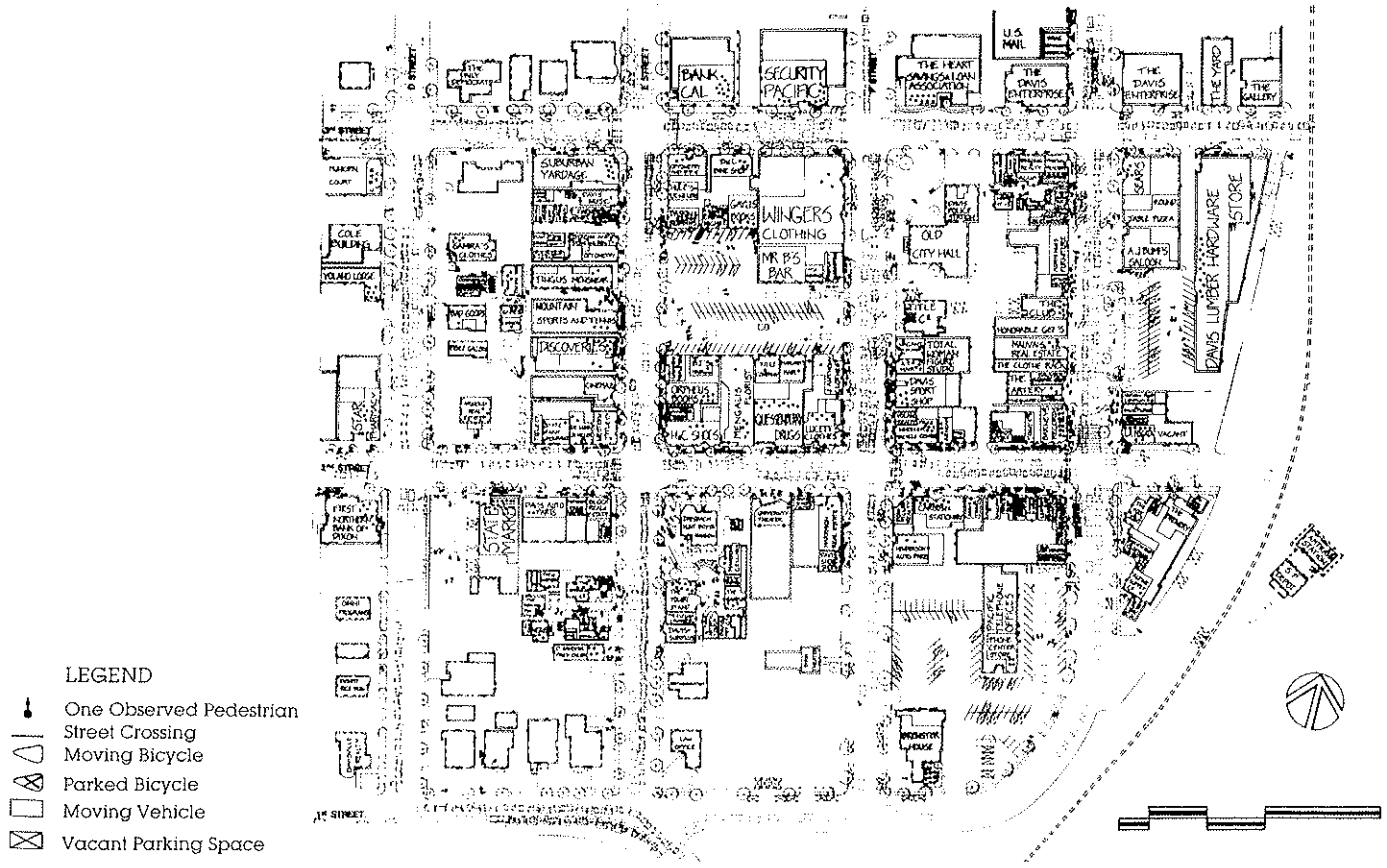
The effect of crime on street satisfaction is an important yet poorly understood dimension of city life. Fear of being assaulted or robbed, which is particularly acute for women, can be a major barrier to street use, especially at night. Drug sales commonly take place on streets and create a sense of insecurity for pedestrians. Often there is a gap between real and perceived crime that restricts a person's use of the public environment.

Many who are concerned with safety, especially merchants and developers, have argued persuasively for the development of private streets. Democratic streets, however, must strike an appropriate balance between safety and qualities denied by privatization, namely, discovery and challenge. This is particularly important for children. Risk and discovery contribute to their individual development and environmental competence, and a sense of safety can be maintained without removing the street's challenges.

GROUND FLOOR-STREET RELATIONSHIP

In democratic streets a social connection links ground floor building uses to the adjacent street space. A public street has a healthy relationship between private or semipublic life inside buildings and the public world outside (Fischer 1981). Whyte (1980) argues that "dead" uses, such as businesses without display windows, banks, offices, parking garages, and storage areas with blank walls, should not be placed along the

1-9. Activity mapping of pedestrians, bicycles, and autos in downtown Davis, California. (Source: Francis 1984: 21–35)



public street. On the other hand, uses such as newsstands or restaurants can enhance street life. Activity-mapping techniques have been developed that allow the ground floors of buildings to be designed in harmony with existing street uses and physical elements (Francis 1984) (fig. 1-9).

In residential neighborhoods there is a greater recognition of the importance of home-based recreation in everyday life (Brower 1973). For example, the placement of kitchen windows and other lived-in spaces overlooking the street, as well as of building elements, such as ledges and stoops that encourage sitting, can enhance the social life of the street and improve the sense of safety for residents.

COMFORT

A street needs to be comfortable to be democratic, and comfort involves adequate shading from hot summer sun and extreme temperatures, as well as solar access during cold days. The latter requirement is especially important. It was paramount, for example, in the recently approved San Francisco Downtown Plan (San Francisco Dept. of City Planning 1985), which stipulated that the physical form of new office buildings was to be determined by the solar access provided to the adjacent street environment (see chap. 15, by P. Bosselmann).

Adequate and comfortable seating space is also essential. William Whyte's recommendations for providing "sittable space" (1980) are particularly useful for design and management. One can use a "comfortability" factor to gauge the potential success of a new public space or street environment.

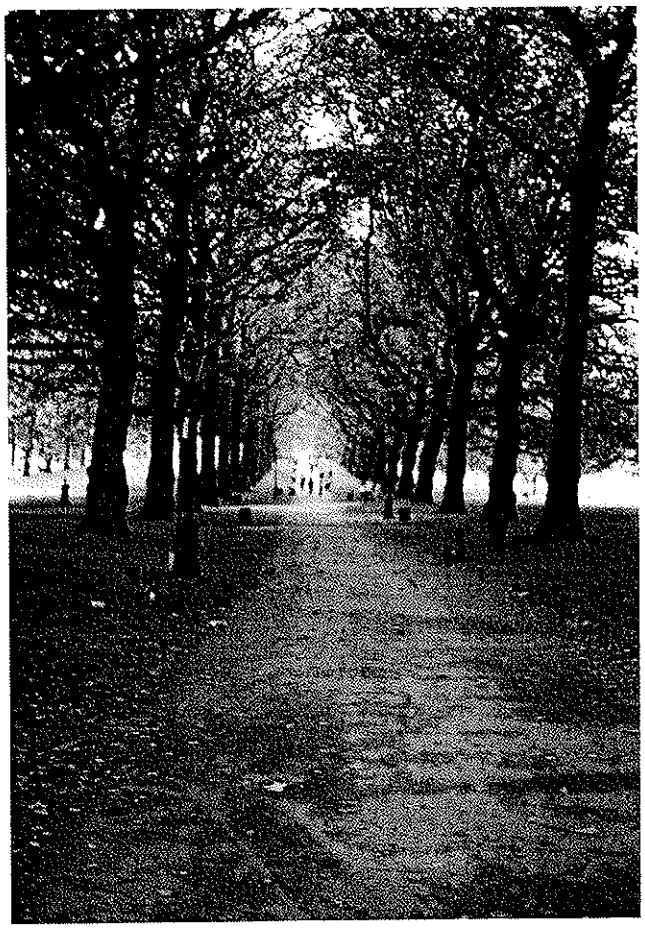
ECOLOGICAL QUALITY

The role of natural systems in urban environmental quality has been a neglected aspect of city and street design, as shown in theoretical work by Hough (1984) and Spirn (1984; see also chap. 26). A democratic street is an environmentally healthy one. Air and noise quality affect one's attachment to a street and should be carefully monitored and controlled through traffic management.

A healthy street is in turn a green one. Vegetation and plant materials contribute to clean air, buffer noise, and add visual relief (fig. 1-10). As documented by the research of Appleyard (1981), most street users value natural vegetation and rate trees as one of the street's most desired elements. Thus, trees, plants, and animals need to be reintroduced to street environments to help create greater user comfort and satisfaction.

ECONOMIC HEALTH

Related to ecological health is a need for streets to be economically healthy. A democratic street is one where businesses and land values prosper, and where abandonment, vacant lots, and disinvestment are discouraged. Yet economic health needs to be balanced with other dimensions of street democracy, such as diversity of uses and users, participation, and controlled traffic speeds. One type of business should not be allowed to take over, especially as a wide range of business activities can contribute to an image of prosperity.



1-10. Trees adjacent to urban paths and streets in London, England, add visual interest and clean air.

ENVIRONMENTAL LEARNING AND COMPETENCE

Democratic streets are places where we learn to deal more competently with our everyday environment (Ward 1978); they communicate much about the economy and social structure of urban life (see chap. 6, by G. Clay). Researchers have shown that much of a child's learning takes place close to home (Carr and Lynch 1968; Hart 1978. See also chap. 3, by R. Moore). The street should be a comfortable setting where learning by children, teens, and the elderly alike can take place naturally. The experience and

interpretation of the street by all age groups is critical to the continued education and development of an urban society.

The "town trail" concept, developed in Britain, exploits the educational potential of the street cheaply and innovatively (Goodey 1975). Reference material was prepared to help people understand the town environment as they walked along a designated route. The maps and guidebooks were designed to provide visitors of all ages with an incisive history of the town (see chap. 3, by R. Moore, note 2). The town trail approach has useful and inexpensive applications in the United States.

LOVE

Perhaps most important, streets need to be loved. Although difficult to measure, meaning and memorability are hallmarks of the successful street. A democratic street is rich with associations, a place you want to come back to, like the Champs Elysées in Paris or Times Square in New York. Democratic streets also mirror the history of a place, providing a connection between people and previous street use and revealing the larger social and political world in which the street exists.

Memories of favorite childhood street environments can be important sources of current design ideas. For example, one can map a favorite street to launch a participatory design and management process for a neighborhood or downtown street (Appleyard 1981; Francis 1981).

CONFLICT

Efforts to make streets democratic will unavoidably invite conflict because democratic streets, by their very definition, require greater user participation and negotiation. Street publics, as outlined in Donald Appleyard's foreword to this volume, will need to articulate and defend their values more clearly. Designers can play a significant role in translating the everyday experiences and values of people into concrete plans (see chap. 21, by J. H. Owen, Jr.). As a result of this process, streets will become stages for more diverse urban life and activity.

EXAMPLES OF SUCCESSFUL DEMOCRATIC STREETS

Given these dimensions of street democracy, which streets stand as successful examples? Based on a recent survey of public-space research (Carr, Francis, Rivlin, and Stone n.d.), several places may be considered prototypes.

Davis Farmers' Market, Davis, California

On Saturday mornings and Wednesday afternoons, farmers back up their trucks against the curb along C Street adjacent to Central Park, and residents of Davis turn out for the biweekly ritual of buying fresh fruit and vegetables. At first glance, the market is a place to purchase locally grown produce directly from farmers. However, a visitor does not take long to discover that much more goes on here. The market also serves as one of the central meeting places for the residents of this university town; it is a place to bump into friends, share news, lobby city officials, and obtain anything from fresh bagels and cut flowers to political information. As customers arrive, the sidewalk becomes a block-long promenade. The play area in the park is quickly filled with small children, dropped off by parents who go on to do their shopping (fig. 1-11).

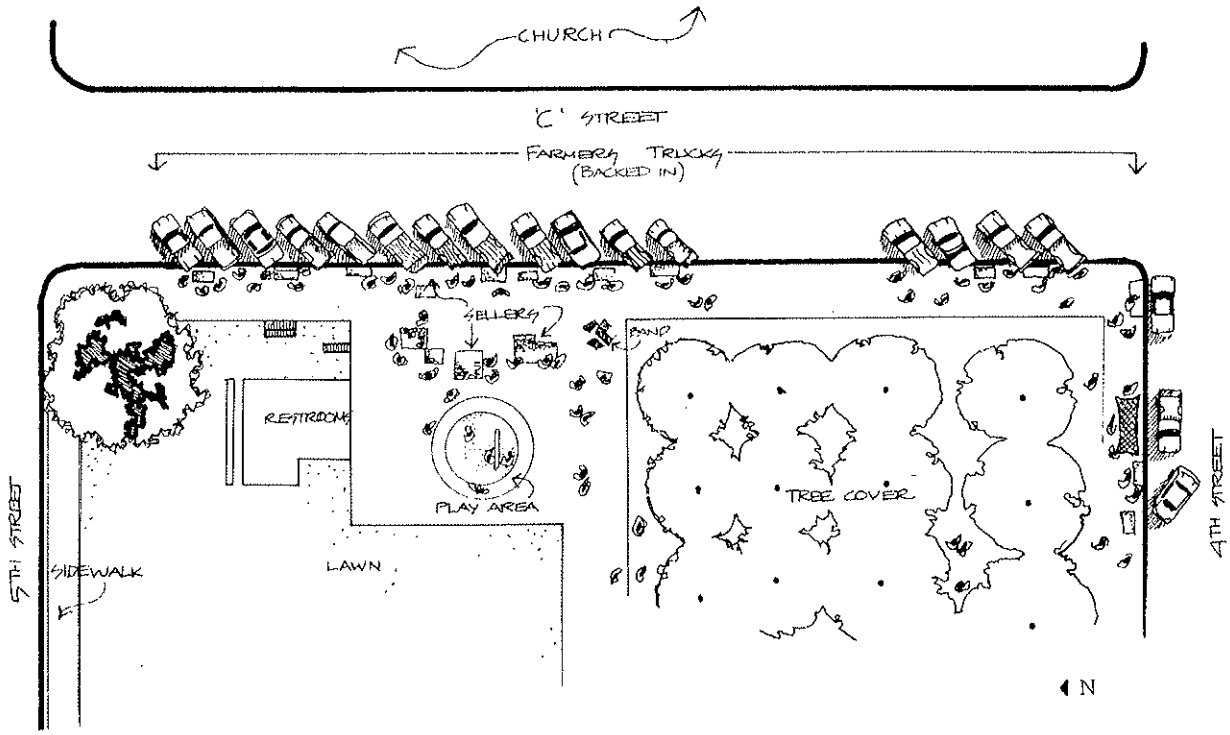
Robert Sommer has observed some of the public qualities of markets, of which there are now over fifty in California: "Farmers' markets are among the most social spaces in America today. People are there to buy, barter, converse, and watch the spectacle. In designing and modifying urban parks, there is a need to provide space and facilities for such gatherings to help build and preserve a sense of community" (1981: 26).

Grand Street Waterfront Park, Brooklyn, New York

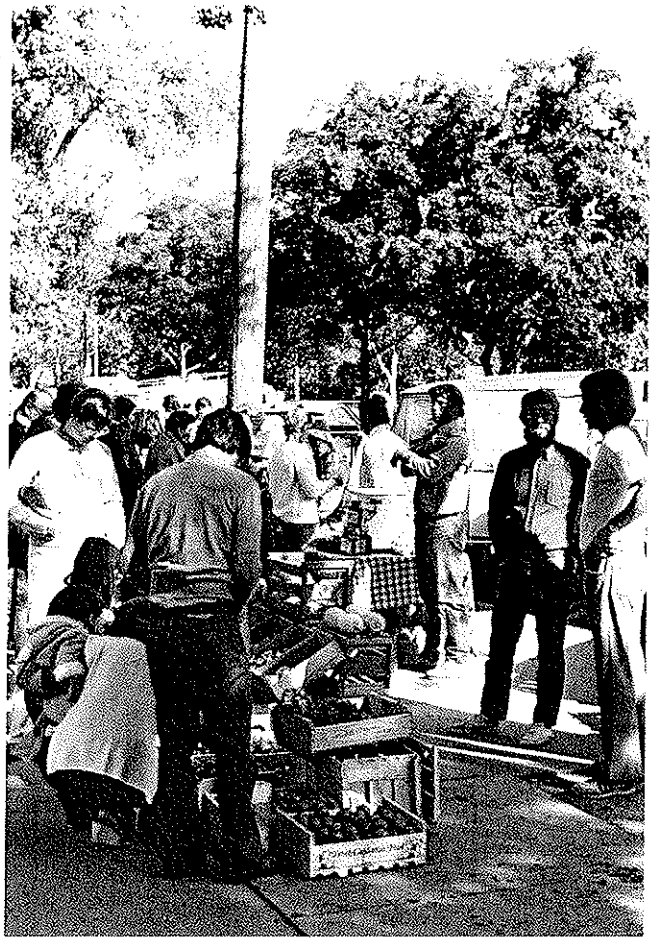
On a vacant lot at the end of Grand Street, near the East River in Brooklyn, Grand Street Park is an active part of the social life of the community (Francis, Cashdan, and Paxson 1984). Designed as a "drive-in park" by landscape architects Philip Winslow and Norm Cohen of the New York City Parks Council, the area is a local setting for community dances, teenage courting, and midnight views of the Manhattan skyline. Grand Street Park was designed and built with active participation by people in the neighborhood. It is a democratic place that is at the same time community controlled and publicly accessible (fig. 1-12).

Early on, the designers realized that the vacant lot was already well used. Their observations of the undeveloped park explains some of its social and community success:

> Though much of the street-ending was heaped with refuse, visitors were coming and we spent hours watching what they did. The results were extremely useful. We



a.



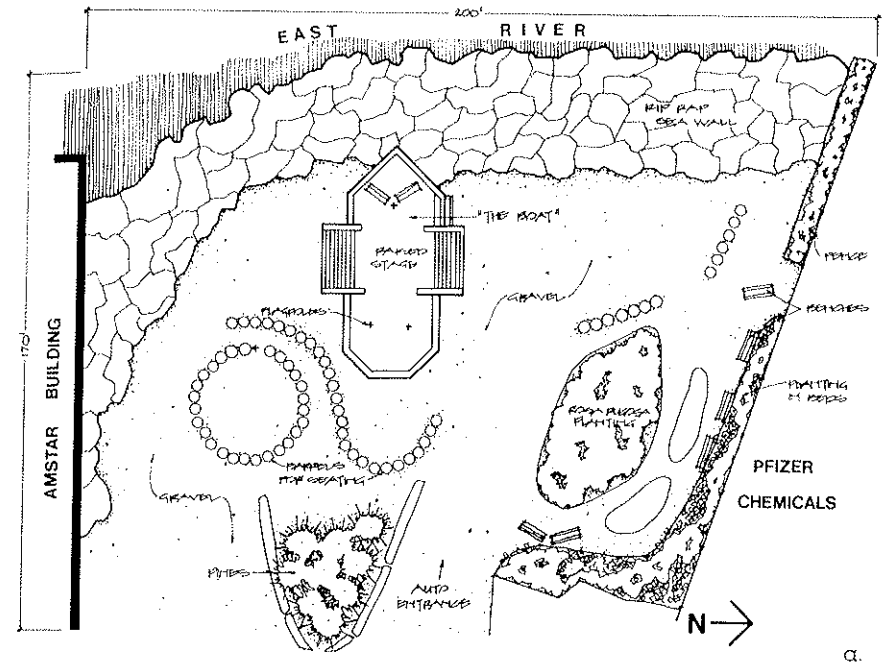
b.

1-11. Davis Farmers' Market, Davis, California: a. plan; b. farmers selling locally grown vegetables along C Street.

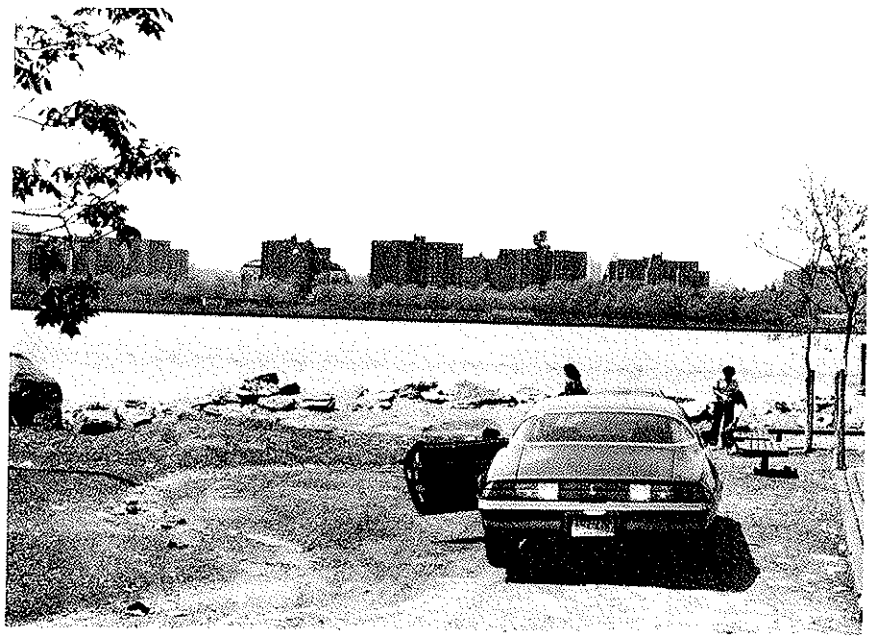
discovered that most of the visitors were children ages 6 to 16 who invariably headed straight for the water's edge to explore, throw stones in the river, etc. Adults on foot usually went to the point with the highest elevation where they stood quietly for a few minutes while enjoying the view. We learned that many visitors, in cold weather or warm, during the day or night, drove as close to the water as possible and stayed in their cars, looking on the river. We saw no reason to disrupt these existing uses by construction of the park; rather, we would seek to preserve and enhance them. They were activities we would expect to be popular after the site was improved (Cohen 1979: 43).

Woonerf, Delft, Netherlands

As one enters the traffic-protected *Woonerven* in the Netherlands, one immediately recognizes that something special is going on. Cars are moving at pedestrian speeds, and the street floor has been redesigned without curbs to allow for free pedestrian and bicycle flow. In *Livable Streets* (1981: 306), Donald Appleyard summarizes the features of the Dutch *Woonerf*: "You may walk anywhere on a road within a 'woonerf' and children may play anywhere; . . . anyone who drives a car or rides a moped . . . must not impede pedestrians. But pedestrians and children at play should not



a.



b.

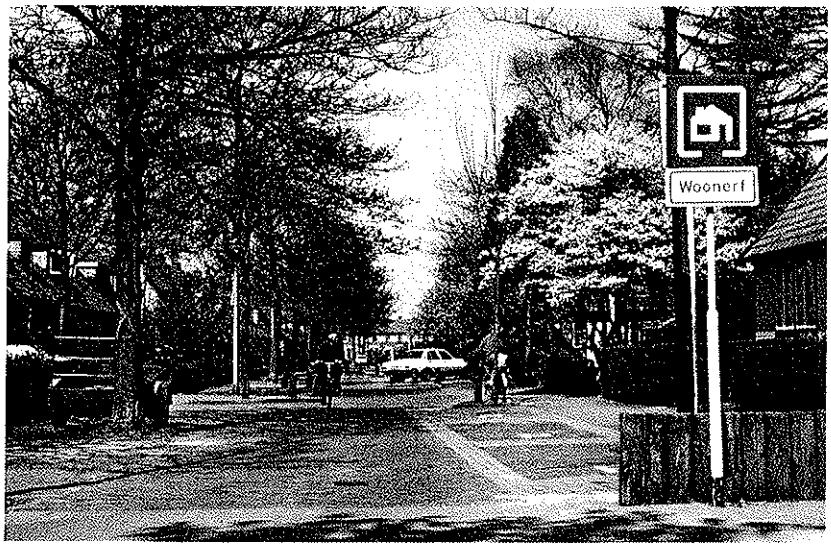
1-12. Grand Street Waterfront Park, Brooklyn, New York: a. plan; b. cars at "drive-in." (Drawing: Lisa Jovanovich)

obstruct or unnecessarily impede cars; and parking is only permitted where 'P' is painted on the street, parking elsewhere is forbidden." Now, over 800 of these traffic restricted zones have been developed in Dutch neighborhoods (fig. 1-13).

Gogate Walking Street, Røros, Norway

In Røros, a small historic town in the center of Norway, a thoroughfare running alongside is closed during the day to create a *gogate*, or "walking street." A feature of other Scandinavian countries, the *gogate* can be used by traffic only during the evenings or in the harsh winters (fig. 1-14). Limited vehicle use has enabled the street to keep much of its local character: neighborhood-oriented shops are located along its two-block length; restaurants have set out picnic tables for use by anyone; vendors with carts occupy the middle of the street, where they sell hand-crafted goods to tourists; and the local recreation department has placed inexpensive and portable play equipment in the street for use by children.

a.



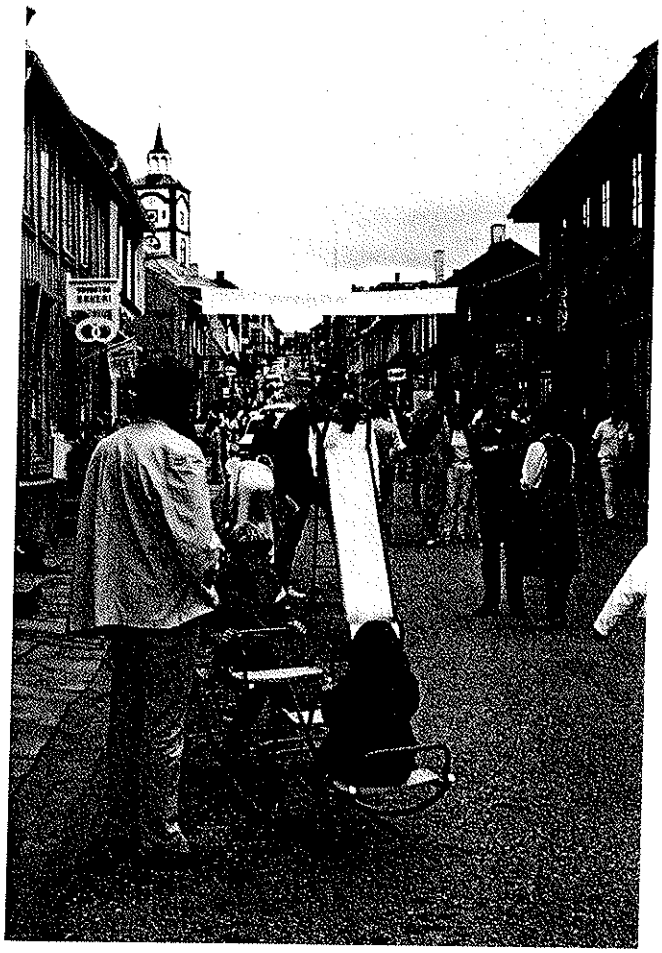
b.

c.

1-13. Dutch *Woonerf* street concept applied both to a. old, and b. and c. new neighborhoods in Delft.

MEASURING STREET DEMOCRACY

Clearly, every street or network of streets has its own level of democracy, and a variety of techniques are useful in assaying this quality (Jacobs 1985). Some of the more effective traditional research methods involve the observation of street use with behavior mapping techniques, including counts of pedestrian and bicycle flow, tracking of street users, mapping of physical elements on the street, and overlaying behavioral data (Project for Public Spaces 1981). Other, more interactive methods include the preparation by users of mental maps that feature what they like or dislike in a street; favorite-place analyses that illuminate the varied preferences of children, teenagers, and adults; group mapping or workshops on street quality; and user and nonuser surveys or questionnaires.



1-14. Children and parents using play equipment in *gogate*, Røros, Norway.

A DEMOCRATIC PROCESS FOR MAKING AND MANAGING STREETS

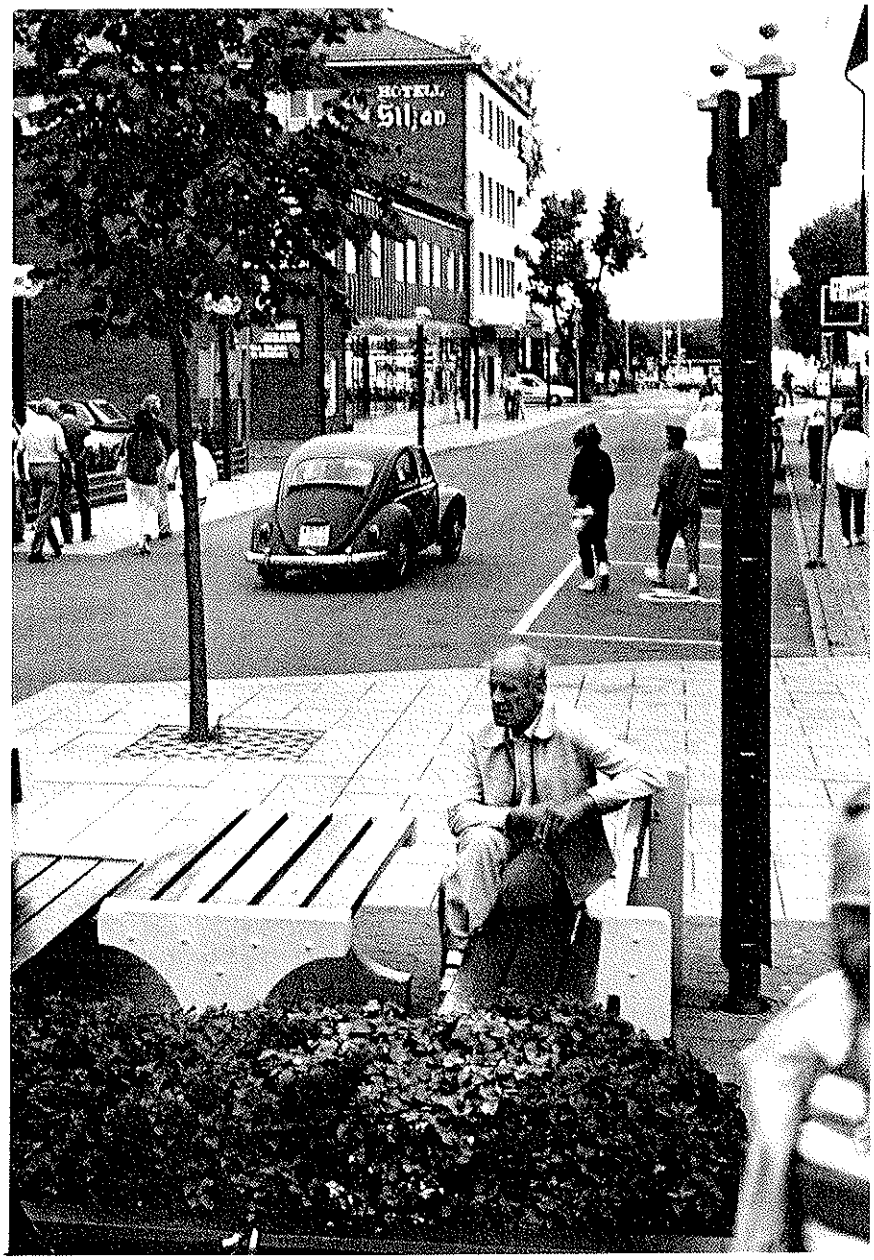
How can we ensure that streets are planned and preserved for democracy? Democratic streets are not possible without a democratic process charged with shaping their character and form. The failure of past attempts may rest in part with the absence of such an ongoing management process.

Street designers and managers should recognize that good streets are not designed but evolve over time (Seamon and Nordin 1980; Moudon 1986). Typically, streets are designed without provision for ongoing evaluation and necessary adjustments. While careful planning can enhance street quality, successful streets also result from a variety of social, economic, and political forces.

New public commissions must be developed that decentralize the control of streets; public works departments and traffic engineers need to share management responsibilities with interdisciplinary professionals, intergovernmental task forces, and, most important, local user groups. To this end, evaluation could be centered on areas, such as storefronts, where people can easily participate in the process.

Streets, in other words, cannot be successful without a new form of street politics that requires users and interest groups to negotiate directly with one another and share power in a continuous and open process. A democratic process, however, demands several additional—and essential—measures: the current privatization trend of the public environment must be reversed—cities have to recognize that downtown and neighborhood development projects must directly contribute to public street life; greater public education and understanding of street quality needs to be developed through the encouragement of public participation; and cities must explore ways to allocate space more equitably so that full public access, use, and enjoyment of downtown and neighborhood streets is ensured (see chap. 10, by M. Botta). A special effort needs to be made to improve the publicness of private indoor commercial spaces (fig. 1-15).

With much of the public life of cities still taking place on streets, they will continue to be places where public culture is developed and nurtured. Street democracy may be an important way to create a truly healthy and lively public environment.



1-15. A friendly, democratic street in Sweden.

NOTES

1. See Brambilla and Longo (1977) for a review of the goals and results of the pedestrian movement in the United States and Europe.
2. The concept of "publicness" was first developed by Lynn Paxson and Alan Forest in a study of the waiting room of Grand Central Station. Their research was part of a doctoral seminar in environmental psychology taught by Leanne Rivlin and myself at the City University of New York (1979).

REFERENCES

Alexander, C., S. Ishikawa, M. Silverstein, M. Jacobsen, I. Fiksdahl-King, and S. Angel. 1977. *A Pattern Language*. New York: Oxford University Press.

Appleyard, D. 1981. *Livable Streets*. Berkeley: University of California Press.

Appleyard, D., and M. Lintell. 1977. "The Environmental Quality of City Streets: The Residents' Viewpoint." *AIP Journal* 43, no. 2 (March): 84–101.

Appleyard, D., and K. Lynch. 1974. "Temporary Paradise?

A Look at the Special Landscape of the San Diego Region." Report prepared for the Planning Department of the City of San Diego.
Barnett, J. 1978. *Urban Design as Public Policy*. New York: Harper & Row.
Becker, F. 1973. "A Class-conscious Evaluation: Going Back to Sacramento's Mall." *Landscape Architecture* 64: 295–345.
Brambilla, R., and G. Longo. 1977. *For Pedestrians Only*. New York: Whitney.
Breines, S., and W. Dean. 1975. *The Pedestrian Revolution: Streets without Cars*. New York: Vintage.
Brower, S. 1973. "Streetfront and Sidewalk." *Landscape Architecture* 63: 364–69.
Carr, S., and K. Lynch. 1968. "Where Learning Happens." *Daedalus* 97: 4 (Fall).
———. 1981. "Open Space: Freedom and Control." In *Urban Open Spaces*, edited by L. Taylor. New York: Rizzoli.
Carr, S., M. Francis, L. Rivlin, and A. Stone. (N.d.) *Qualities of the Public Environment of Cities*. Book manuscript in preparation.
Cohen, N. 1979. "Park Design: Who Makes the Decisions?" In *Bronx River Current*. New York: Bronx River Restoration Corporation (Fall).
Cranz, G. 1981. *The Politics of Park Design*. Cambridge: MIT Press.
Eubank-Ahrens, B. 1985. "The Impact of *Woonerven* on Children's Behavior." *Children's Environments Quarterly* 1: 39–45.
Fischer, C. 1981. "The Public and Private Worlds of City Life." *American Sociological Review* 46: 306–16.
Francis, M., ed. 1979. *Participatory Planning and Neighborhood Control*. New York: Center for Human Environments, City University of New York.
———. 1981. "Designing Landscapes with Community Participation and Behavioral Research." *Landscape Architectural Forum* 2: 14–21.
———. 1983. "Some Differences between Child and Adult Design Values in Open Space Projects." *Childhood City Quarterly* 10: 20–24.
———. 1984. "Mapping Downtown Activity." *Journal of Architectural and Planning Research* 1: 21–35.
———. 1987. "The Park and Garden in the City: Some Different Meanings Attached by Users to a Public Park and Community Garden." *Landscape Journal* (in press.)
Francis, M., L. Cashdan, and L. Paxson. 1984. *Community Open Spaces*. Covelo, Calif: Island Press.
Goodey, B. 1975. "Urban Trails: Origins and Opportunities." *Journal of the Royal Town Planning Institute* 61: 29–30.
Hart, R. 1978. *Children's Experience of Place*. New York: Irvington Press.
Hester, R. 1984. *Planning Neighborhood Space*. New York: Van Nostrand Reinhold.
Hough, M. 1984. *City Form and Natural Process*. New York: Van Nostrand Reinhold.
Jacobs, A. 1985. *Looking at Cities*. Cambridge: Harvard University Press.
Jacobs, J. 1961. *The Death and Life of Great American Cities*. New York: Vintage.
Jackson, J. B. 1972. *American Space*. New York: Norton.
———. 1984. *Discovering the Vernacular Landscape*. New Haven: Yale University Press.
Knack, R. 1982. "Pedestrian Malls: Twenty Years Later." *Planning* 48, no. 11 (December): 15–19.
Kowinski, W. S. 1985. *The Malling of America*. New York: William Morrow.
Korosec-Serfaty, P. 1980. *The Main Square: Functions and Daily Uses of Stortget, Malmo*. Lund, Sweden: ARIS.
Levine, C. 1984. "Making City Spaces Lovable Places." *Psychology Today* (June): 56–63.
Lynch, K. 1981. *A Theory of Good City Form*. Cambridge: MIT Press.
Marx, L. 1964. *The Machine in the Garden: Technology and the Pastoral Ideal in America*. New York: Oxford University Press.
Moudon, A. V. 1986. *Built for Change: Neighborhood Architecture in San Francisco*. Cambridge: MIT Press.
Nicholson, S. 1971. "Theory of Loose Parts: How Not to Cheat Children." *Landscape Architecture* (October): 30–34.
Project for Public Spaces, Inc. 1981. "What Do People Do Downtown? How to Look at Mainstreet Activity." New York: Project for Public Spaces, Inc.
Rivlin, L., and M. Francis, eds. 1979. "Provisions for People: Grand Central Station and Citicorp Study." New York: Center for Human Environments, City University of New York.
Royal Dutch Touring Club. 1978. *Woonerf*. The Hague, Netherlands: Royal Dutch Touring Club.
Rudofsky, B. 1969. *Streets for People*. New York: Doubleday.
Sandels, S. 1975. *Children in Traffic*. London: Paul Elek.
San Francisco Department of City Planning. 1985. *The San Francisco Downtown Plan*. City of San Francisco: San Francisco Department of City Planning.
Seamon, D., and C. Nordin. 1980. "Marketplace as Place Ballet." *Landscape* 24: 35–41.
Sommer, R. 1981. "Farmer's Market Resurgence: Landscape Design Implications." *Landscape Architectural Forum 2* (Summer): 26–31.
———. 1983. *Social Design*. Englewood Cliffs, N.J.: Prentice-Hall.
Spirn, A. W. 1984. *The Granite Garden: Urban Nature and Human Design*. New York: Basic Books.
van Andel, J. 1985. "Effects of Children's Outdoor Behavior on Physical Changes in a Leiden Neighborhood." *Children's Environments Quarterly* 1:46–54.
Ward, C. 1978. *The Child in the City*. New York: Pantheon.
Whyte, W. 1980. *The Social Life of Small Urban Places*. Washington, D.C.: Conservation Foundation.