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Experiencing Downtown Streets in San Francisco



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# Experiencing Downtown Streets in San Francisco

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Toward these ends, current research is directed to the economics of urbanization in the West and in the Third World; techniques of environmental management; effects of using new energy sources; emergent patterns of suburbanization and central area reconstruction; evaluation of alternative modes of transportation; design of effective means for supplying social services; contemporary issues in housing policy; regulation of urban growth and uses of land; determinants of urban livability and the factors shaping urban life; and potential improvements in methods of analysis, evaluation, and planning.

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# 15.
# Experiencing Downtown Streets in San Francisco

PETER BOSSELMANN

## TALL BUILDINGS AND THE QUALITY OF THE URBAN ENVIRONMENT

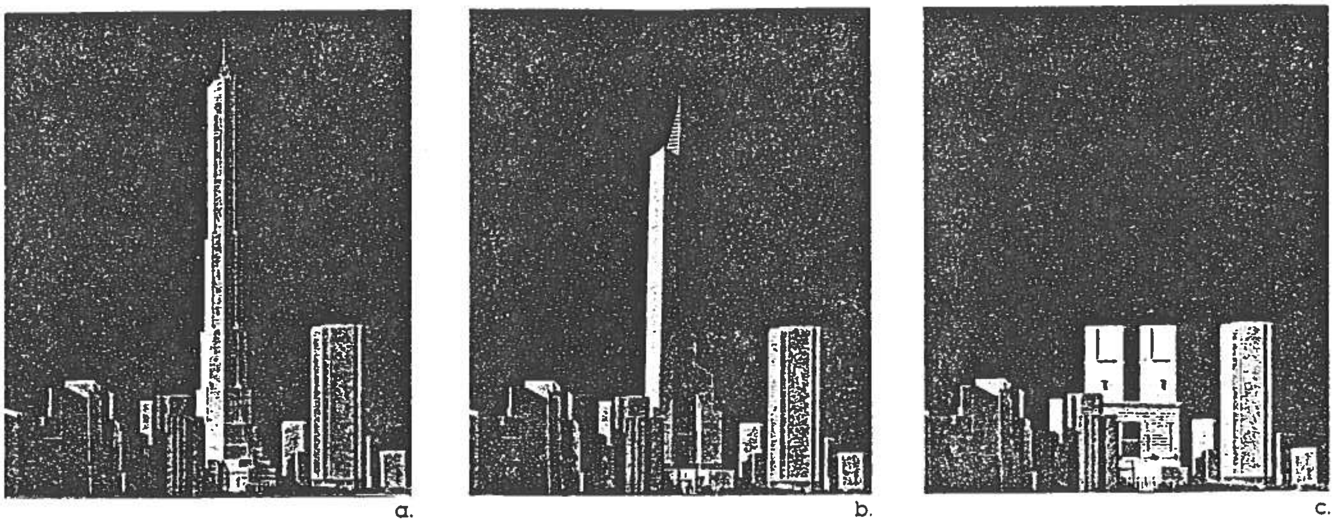
What in the eyes of the public appears to be a dramatic change in building form away from the glass box to buildings reminiscent of the 1920s is, in the eyes of many professionals, a revitalization of an American art form. In fact, few topics are discussed among architects with more passion than the new styles of tall downtown office buildings. Stunning examples have been built in recent years. Yet the discussion of style takes on a far more pragmatic tone in the corporate boardroom of the architect's client. There, the artistic qualities of a tall building will probably always be described as "prominent profile," or "institutional, timeless character."

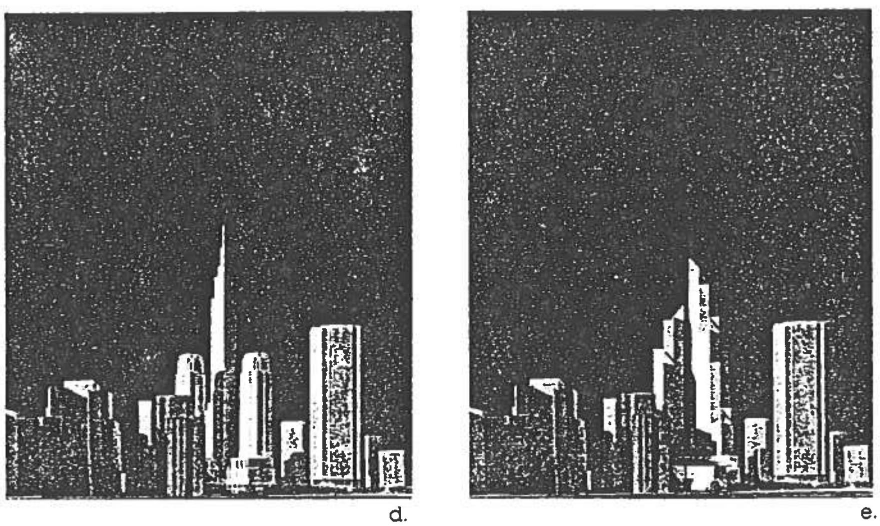
Already, a trace of fear can be discerned concerning the future of the tall office building in general. For example, Skidmore, Owings and Merrill, the nation's largest designer of downtown buildings, has completed a 2,000-foot-long building in a suburban location near San Francisco, instead of a more conventional 400- to 700-foot-high downtown structure. Not only does this design represent a changing aesthetic, but it also addresses an important socioeconomic trend, namely, that the vacancy rate for office space has grown in many downtowns, while less expensive development sites are available in suburban locations. Such shifts in the style and location of office buildings has led a prominent San Francisco attorney with many developer clients to refer to tall buildings as "dying dinosaurs." But his talk might be premature: a "super high rise" of 130 floors is currently proposed at the Coliseum site in Manhattan, and whether or not it is built, other cities will continue the competition for the tallest building (fig. 15-1). As before, engineers will tackle the project without technical difficulty. However, as Faslur Khan, engineer of Chicago's Sears Tower and Hancock Center, said fifteen years ago, "whether we will build such a building and how the city will handle it is not an engineering question, it is a social question" (Appleyard and Fishman 1979). We will see that, in San Francisco, it is also a political question.

Indeed, political controversies about the social and environmental impact of tall buildings are everywhere. Newspaper coverage of proposed buildings near Times Square in Manhattan have aroused New Yorkers. Now that One Hotel Tower has gone up where five theaters once stood, opposition is growing against this way of "cleaning up" the entertainment district. "Keep Times Square Alive" is an alternative goal suggested by community groups and newspaper articles (Goldberger 1985). A few blocks to the east, on Fifth Avenue, there is distress over the future of one of America's most famous shopping streets. Since the completion of the 60-story Trump Tower, citizens groups perceive the street space and the fine stores on Fifth Avenue as vulnerable. At election time, leaflets were sent to city officials that pictured Mayor Edward Koch participating in an outdoor parade and included the caption: "Do you want to continue to parade in the sun?"

San Francisco's height and bulk controls were legislated in response to tall structures built on the edge of the existing downtown, particularly the Bank of America Tower and the Transamerica Pyramid. The shape of those buildings may be less controversial today than it was twenty years ago, when they were first built; however, their location at the edge of the financial district is seen as being just as inappropriate today as it was when buildings first appeared on the

All photographs are by the Environmental Simulation Laboratory, Kevin Gilson, unless otherwise credited.





15-1. Scale-model views of five of the invited entries in the Coliseum competition in New York, all viewed from Fifth Avenue looking west on Fifty-ninth Street: a. Donald Trump's 130-story building, designed by Eli Attiz; b. Murphy/Jahn's entry; c. Michael Graves's entry; d. Cesar Pelli's entry; e. the winning entry by Moshe Safdie. (Photos: Peter Bosselmann, taken for the Municipal Art Society of New York)

skyline. In San Francisco, people on both sides of the downtown controversy now agree on precise limits to downtown highrise expansion toward neighborhoods to the north and the west.

## NEED FOR APPROPRIATE TOOLS

In San Francisco, as in several other cities, community groups are resisting the environmental impact of tall buildings and arguing their negative effects on the quality of the urban environment. Yet the ability to describe those experiential effects is a rarely found skill among professionals. Words and knowledge fall short of the environmental qualities that are experienced once places are built. There are few accurate techniques for explaining the experience a new development or plan will evoke. The experiential media of the twentieth century—film and video—have little importance in the planning and design professions (Appleyard 1979). Instead, architects' renderings of future buildings, while graphically elegant, convey little of the buildings' contribution to the street, neighborhood, or city. Philip Johnson was right when he said that the controversial top of the AT&T building is unimportant. The top cannot be seen at street level. However, Johnson failed to explain how the building destroys the scale of the narrow streets below. The renderings that were published showed views of the building that are unobtainable in the real world of the pedestrian. Furthermore, renderings for Johnson's round building on California Street in San Francisco show a sunny plaza with umbrellas and a gigantic, sunny glass lobby underneath the cylindrical tower. Yet only for one month in midsummer, at 8:30 AM, does the plaza receive sunlight. Most of the year, it is cold and windy.

Rather than admitting their inability to forecast future experiences accurately, designers have taken the liberty of construing a reality that will not come true. If, in many places, designers have been able to get away with it, in San Francisco, the public has insisted on more accurate and comprehensive ways of explaining the effects of proposed developments. By addressing these issues and developing tools to communicate about them, the environmental design profession has earned more credibility and promises to yield better environments.

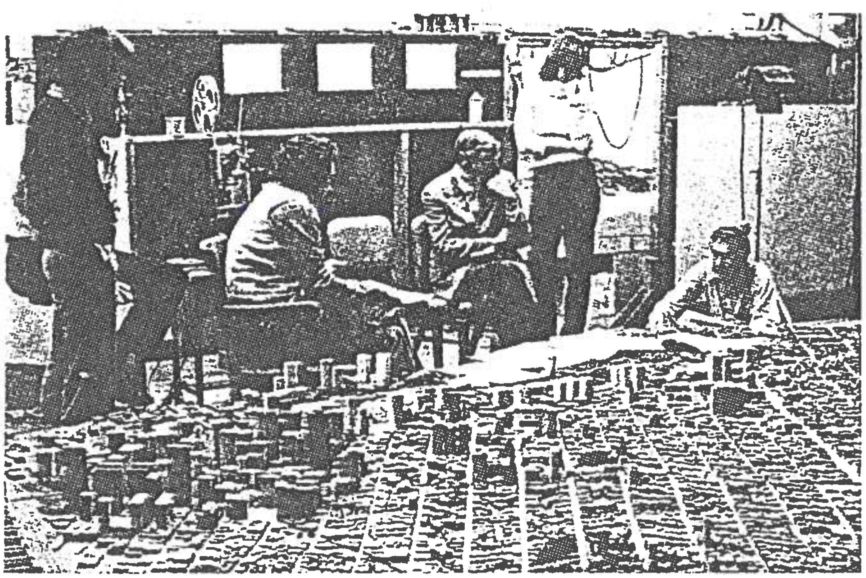
## SAN FRANCISCO'S DOWNTOWN PLAN

Continuing public concern with San Francisco's Downtown Plan led to new and innovative approaches in assessing the everyday experiential character of new development. Since the mid-sixties, citizens have mobilized to speak out at election time against what is locally called the "Manhattanization" of the city. The fight began over view blockage. Controversies continued when well-known old structures were replaced by monotonous, monolithic facades, oppressive in scale and incompatible with the surrounding architecture. Many also felt, and rightly so, that the new, taller buildings worsened the microclimate, producing additional shadows and making streets and open spaces cold and windy.

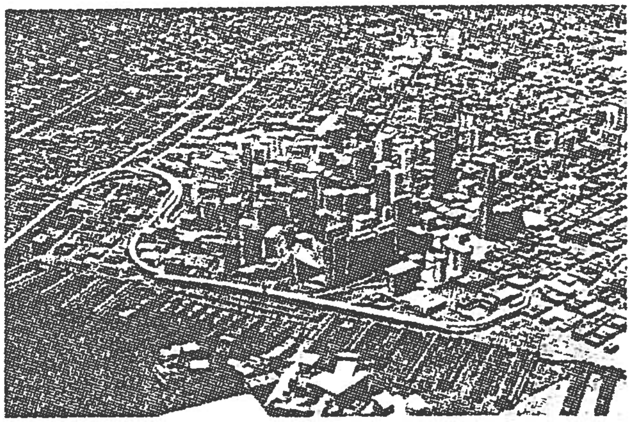
Four times in the past fifteen years, enough signatures have been gathered to qualify anti-high-rise initiatives for election ballots. Although all four initiatives were defeated, the last, in November 1983, failed to pass by only 1,919 votes, representing one-fifth of one percent of the voters. This sent a clear signal to politicians, planners, and developers, and their architects: the new plan had to address these issues.

Work on the new plan started in 1980, with growth projections made for the next twenty years of development. Existing height and density controls for downtown districts allowed significant development, which, early visual studies showed, would change the scale and character of several downtown districts. Most affected were the retail district around Union Square, the hotel distict in the Tenderloin, historic Chinatown, and Market Street. Studies of view blockage were done on the scale model of downtown San Francisco housed at the Environmental Simulation Laboratory in Berkeley (fig. 15-2). Views were taken from all directions, including those obtained by commuters travelling across the Bay Bridge, as well as those most San Franciscans are familiar with. Future development under existing controls was modeled, and slides were produced to show the before-and-after conditions. The views were tested against general master-plan policies that called for a skyline shaped in the form of a "downtown hill" (fig. 15-3). Although it was established that future views from Telegraph Hill would not change radically, views from Nob Hill and from other elevated points to the south of downtown showed an abruptly rising plateau instead of the gentle slopes expected of the "downtown hill."

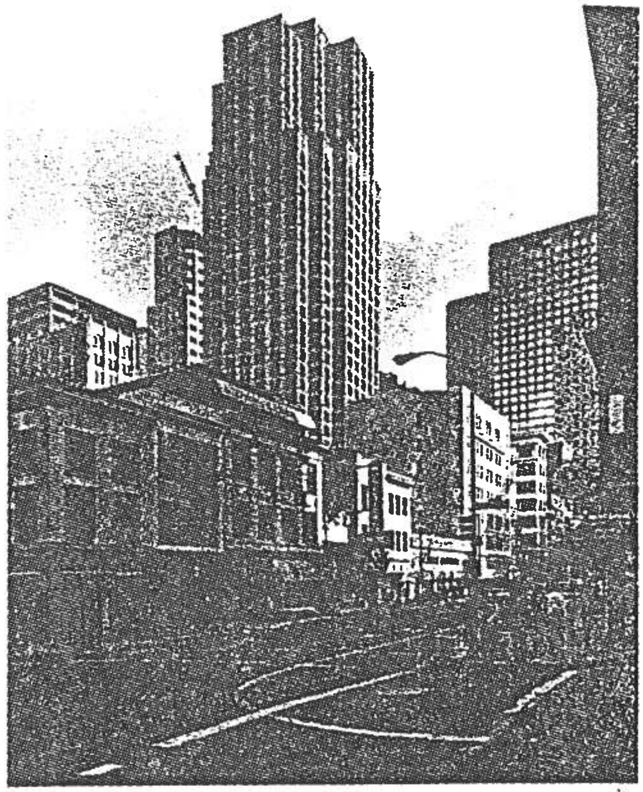
"Middle-range views," or views taken from publicly accessible points in the vicinity of downtown, were also studied (fig. 15-4). They included Chinatown's Portsmouth Square, Union Square, the Convention Center, the Transbay Bus Terminal, and the Embar-



15-2. Scale model of San Francisco. Donald Appleyard *(right)* and William H. Whyte *(sitting, center)*, with the author *(sitting, left)* and urban design students from the College of Enviromental Design at Berkeley. (Photo: Environmental Simulation Laboratory, Pechard 1980)



15-3. Model studies of downtown height zones.



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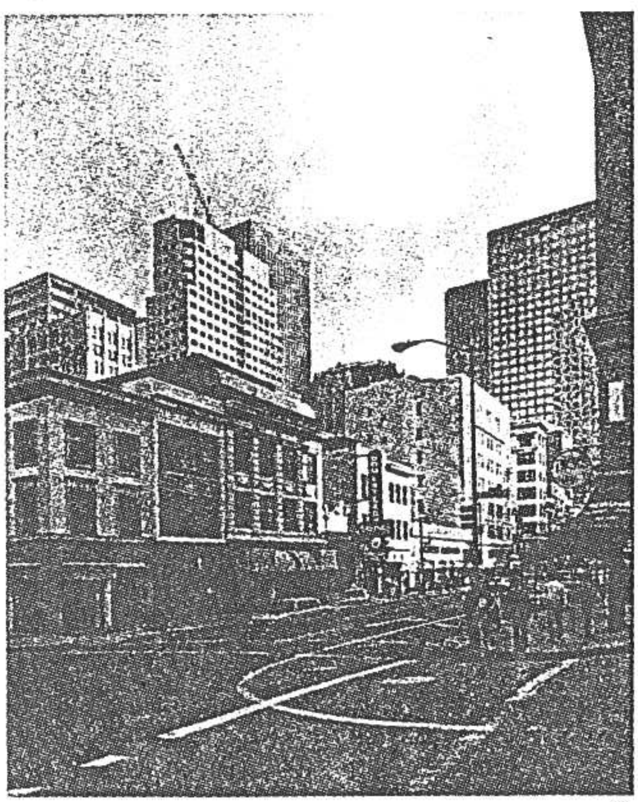
15-4. Typical middle-range views of development at the edge of San Francisco's financial district: a. existing conditions; b. model of proposed 40-story building montaged into existing conditions; c. model of the building, which violates the Urban Design Plan requiring new buildings to step down gradually to the heights of existing ones.



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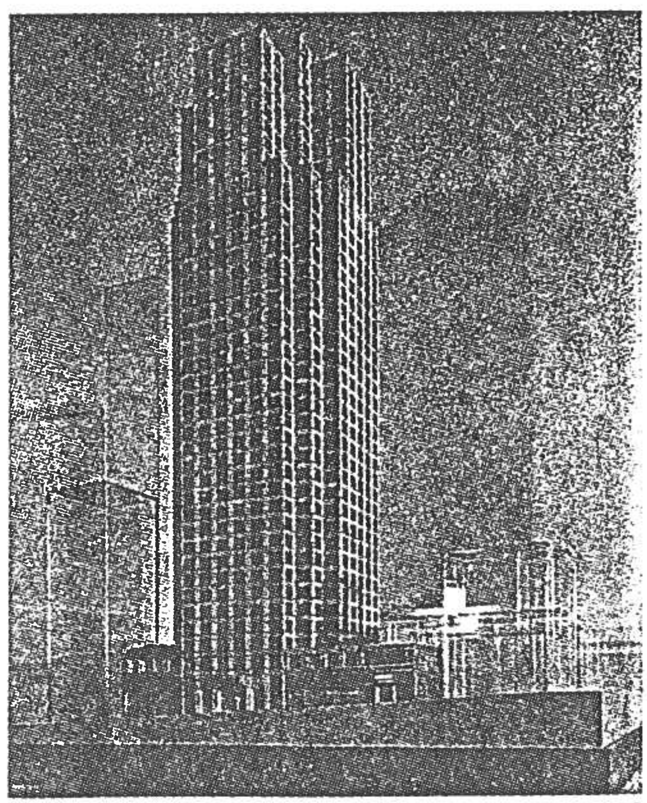

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cadero. With one exception, all showed a nonconformance with the urban design policy requiring downtown development gradually to step down in height to equal that of existing buildings in the neighborhoods surrounding the viewer.

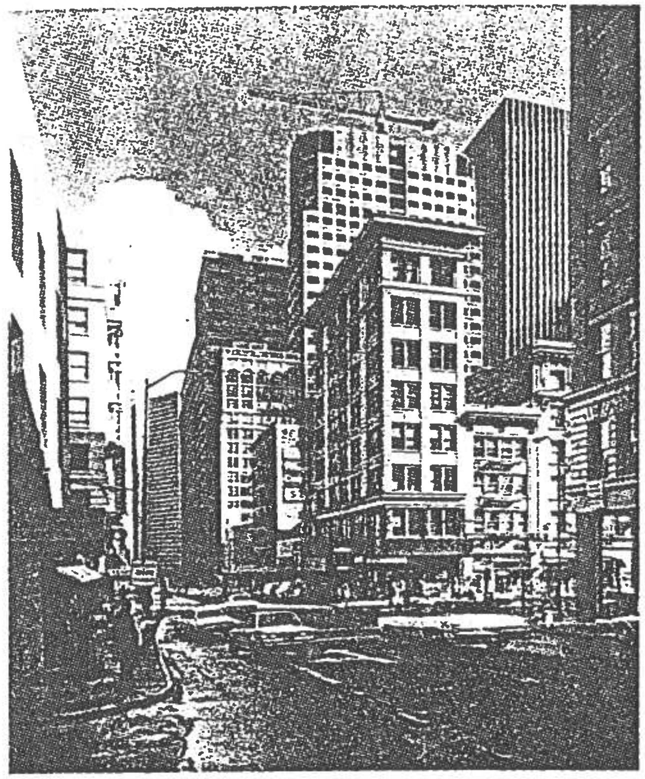
Most telling were the comparisons of existing and future views taken on downtown streets in areas heavily impacted by future development. For example, streets in the retail district, currently lined with buildings 70 to 100 feet in height, were to be changed dramatically by the tower walls of new office and hotel structures. The before-and-after eye-level views of those streets were stunning (fig. 15-5) The San Francisco Urban Design Master Plan (City of San Francisco 1971) did not provide sufficient guidance in that instance. The plan and subsequent legislation concerned themselves with the city as a whole, and their policies were too general to reduce the impact of new development on scale and to ensure the compatibility of new with old at street level. But a new approach, which accurately measured loss of sunlight and the decrease of overhead sky above a street, made a convincing case for new building height and setback rules (fig. 15-6).

## SUNLIGHT, CLIMATE, AND COMFORT

For almost a century, American zoning has responded to the need for sun and light on inner-city streets. Indeed, New York's recent development controls for midtown Manhattan reintroduced the 1916 standards for adequate daylight and openness of a street to the sky (see chap. 25, by H. Bryan and S. Stuebing) (fig. 15-7). These revised standards compare the light conditions along avenues and streets of Manhattan's historic development to conditions expected under new development. Building forms, setbacks, and height limits are all calculated for anticipated light levels (City of New York 1981). Planners, at the incipient stages of San Francisco's new Downtown Plan, carefully studied the New York method but regarded it as too complicated for the city's purposes.

San Francisco's winds, which blow from the ocean, are strong and constant. As tourists (including Mark Twain) know, the city's summers are cold and foggy. As a result, sunlight is imperative for outdoor comfort, especially for people sitting on benches or walking on sidewalks (fig. 15-8). Existing sun, wind, and outdoor conditions, as well as future conditions to be created at specific downtown streets under alternative growth strategies, were measured by a team of urban designers from the University of California at Berkeley. Large models were made and measurements

15-5. Typical street view: a. existing conditions; b. proposed 40-story development.



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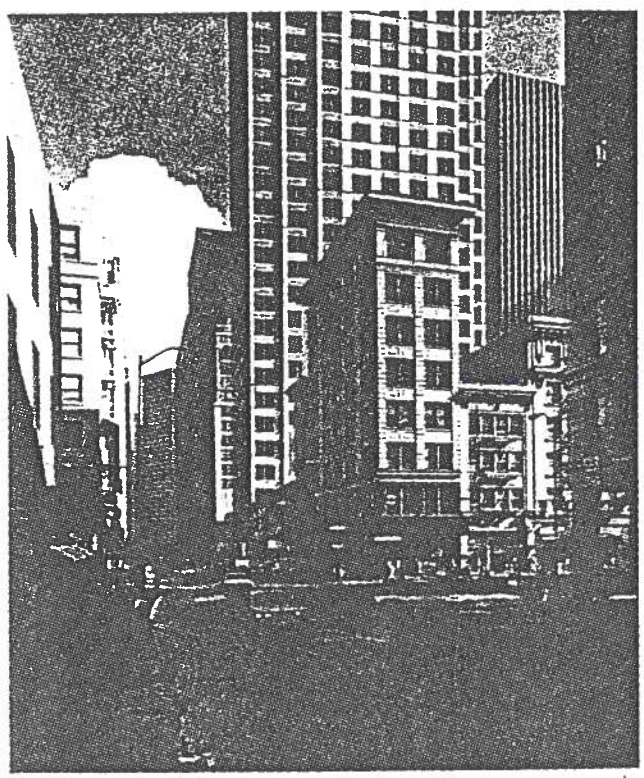

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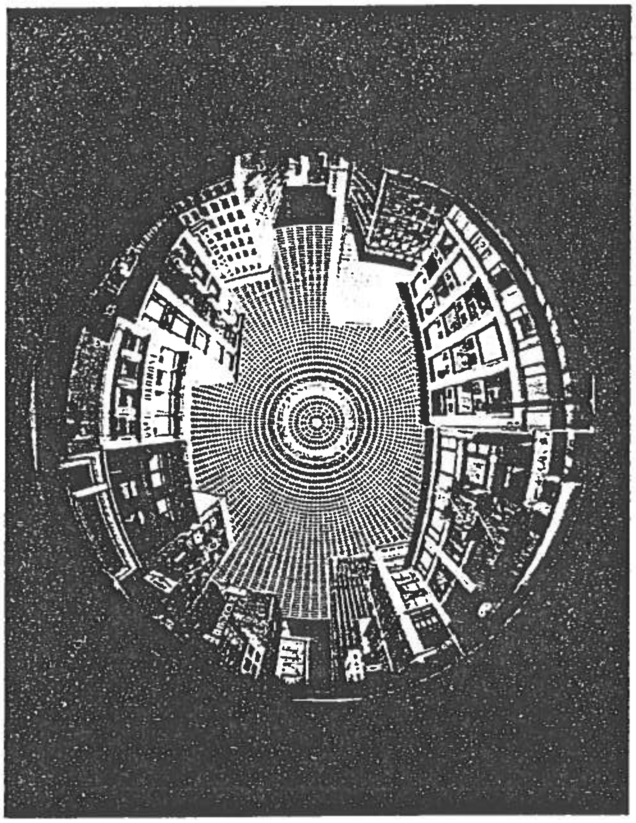

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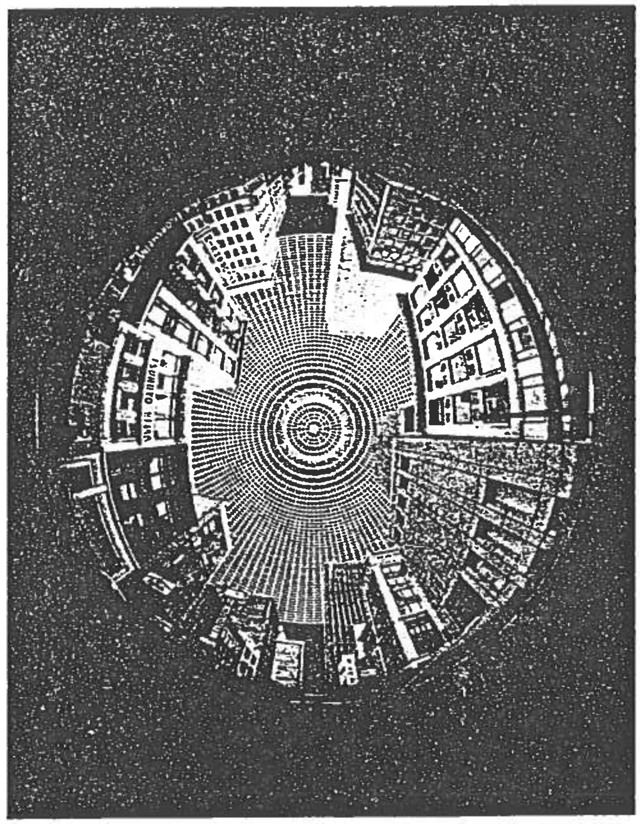

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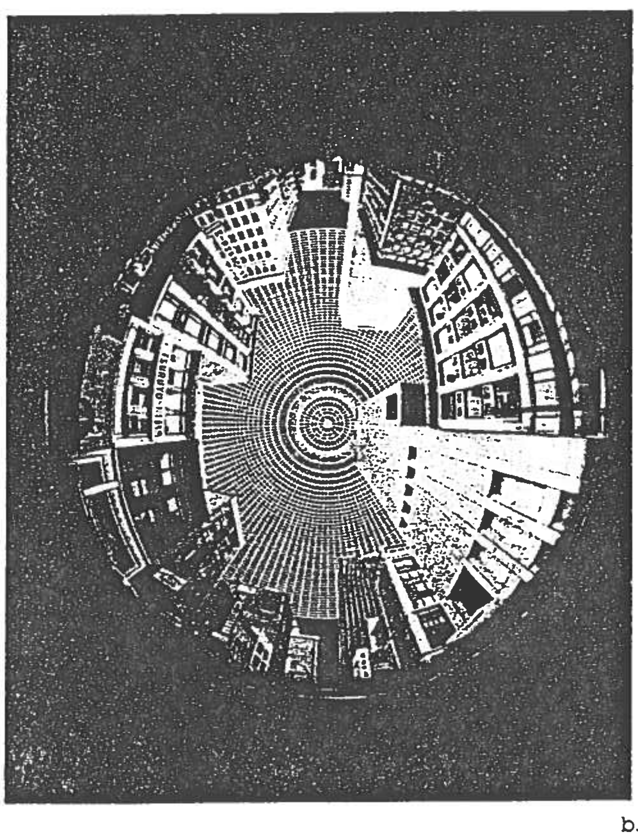

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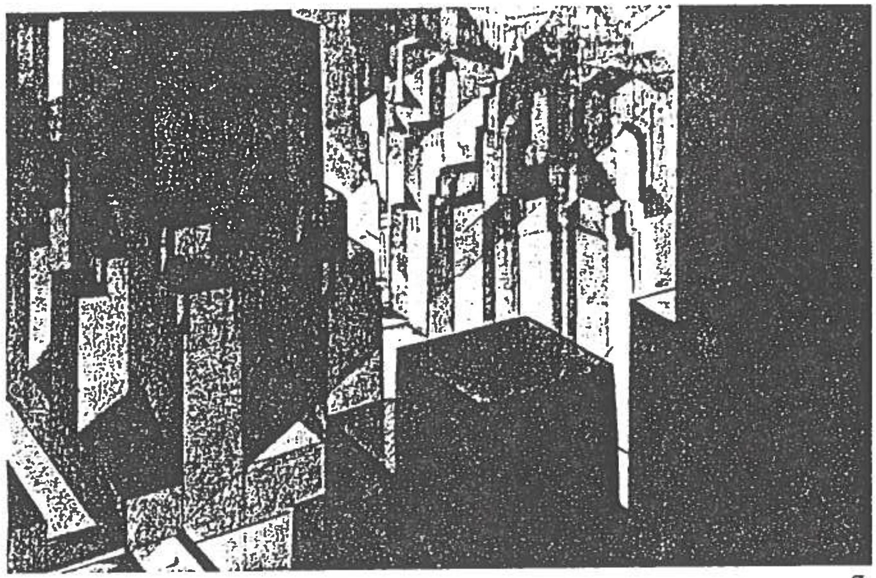
15-6. Fish-eye view: a. existing conditions; b. 40-story development without setback beyond the height of the established street wall; c. same development with setback. The grid is superimposed to measure the openness of the street to the sky. (Photo: Peter Bosselmann)

taken in the Simulation Laboratory and Boundary Layer Wind Tunnel at the College of Environmental Design (fig. 15-9). Tested with actual weather data in San Francisco, the initial observations of the Berkeley team were confirmed: sunlight is essential and shelter from winds is desired for a comfortable outdoor environment (fig. 15-10).

But research had only begun when the San Francisco Department of City Planning requested results. In the fall of 1981, a proposed 132-foot-high condominium project was threatening to shade a small playground in Chinatown, a place swarming with kids after school. The hours between 2:00 and 4:00 PM were prime time on the small square because many of the children left in the late afternoon to attend Chinese school (Bosselmann 1983a).

To evaluate the situation, researchers photomontaged possible building envelopes reaching the allowable building height of 160 feet into pictures of the playground taken with a fish-eye lens. These studies revealed the sky exposure afforded by new develop-

15-7. New York zoning, 1916: a. Hugh Ferriss' rendering of prototypical high-rise buildings; b. street sections.



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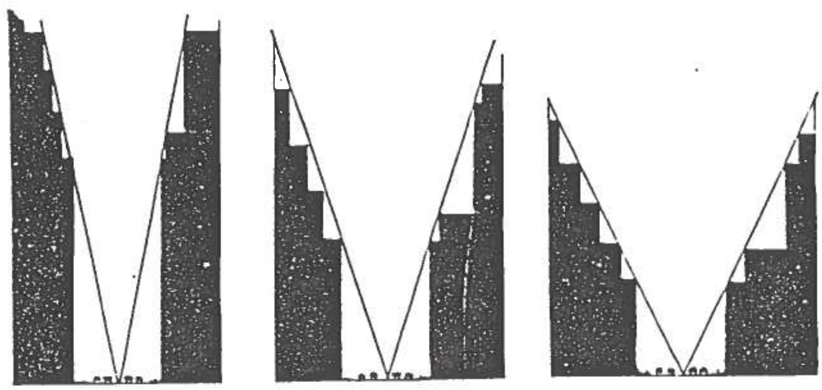

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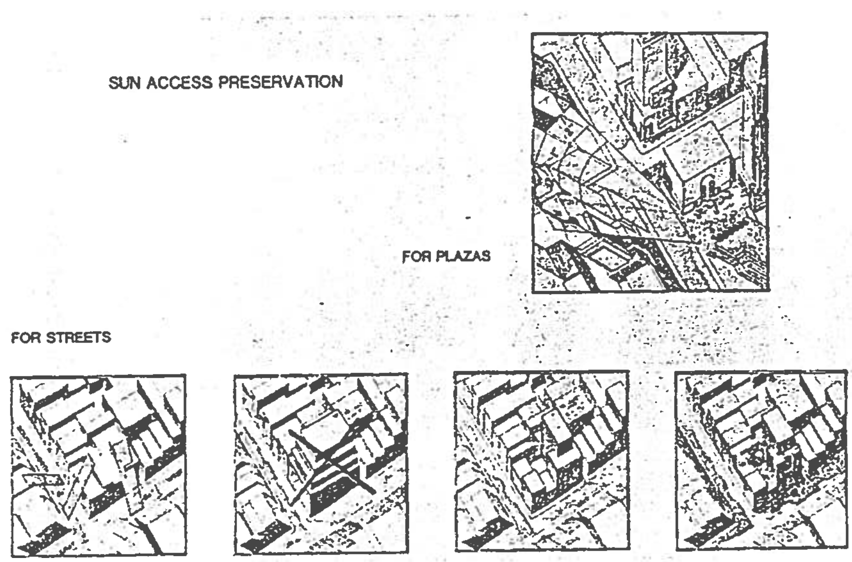
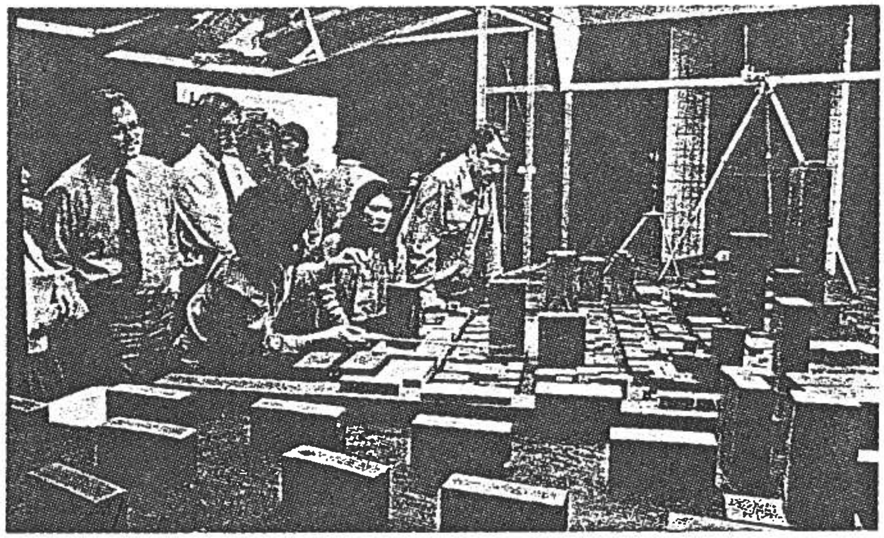
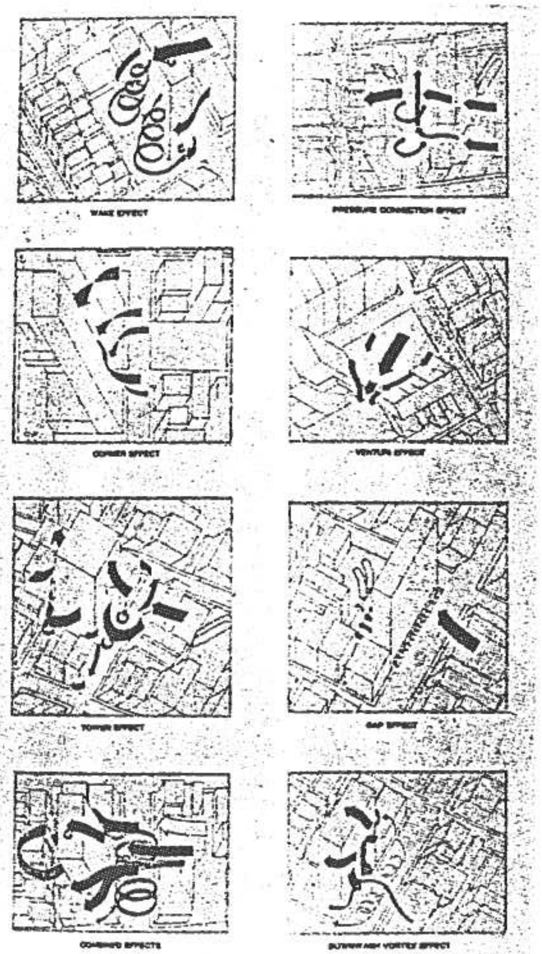
15-8. The preservation of sun access to streets, parks, and squares consists of a combination of height limits, bulk controls, Floor Area Ratio, and cutoff planes.





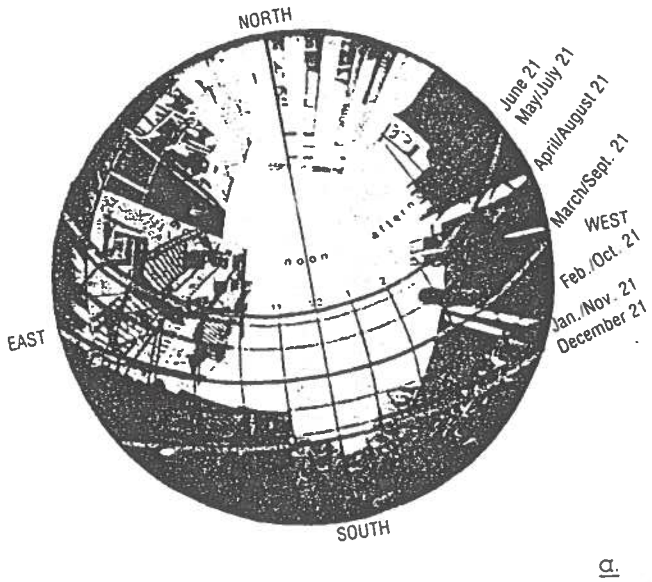
15-9. San Francisco planners watch a demonstration at the Berkeley Wind Tunnel. (Photo: Environmental Simulation Laboratory, Gray)

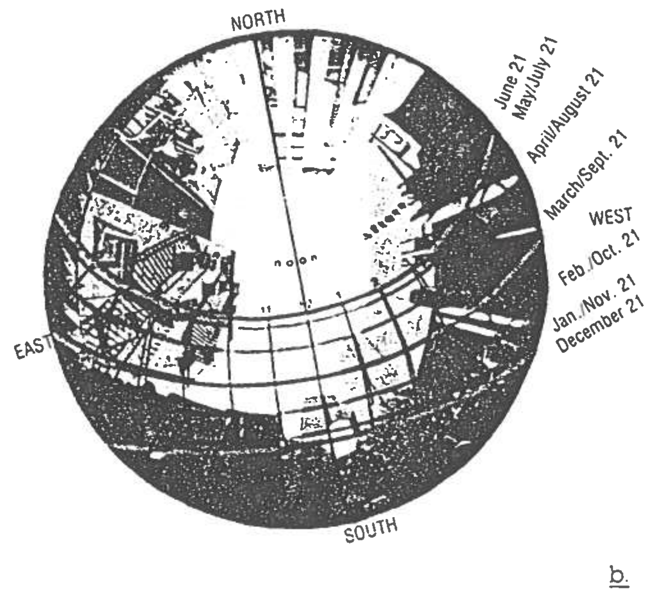
15-10. Wind effects and tall buildings.



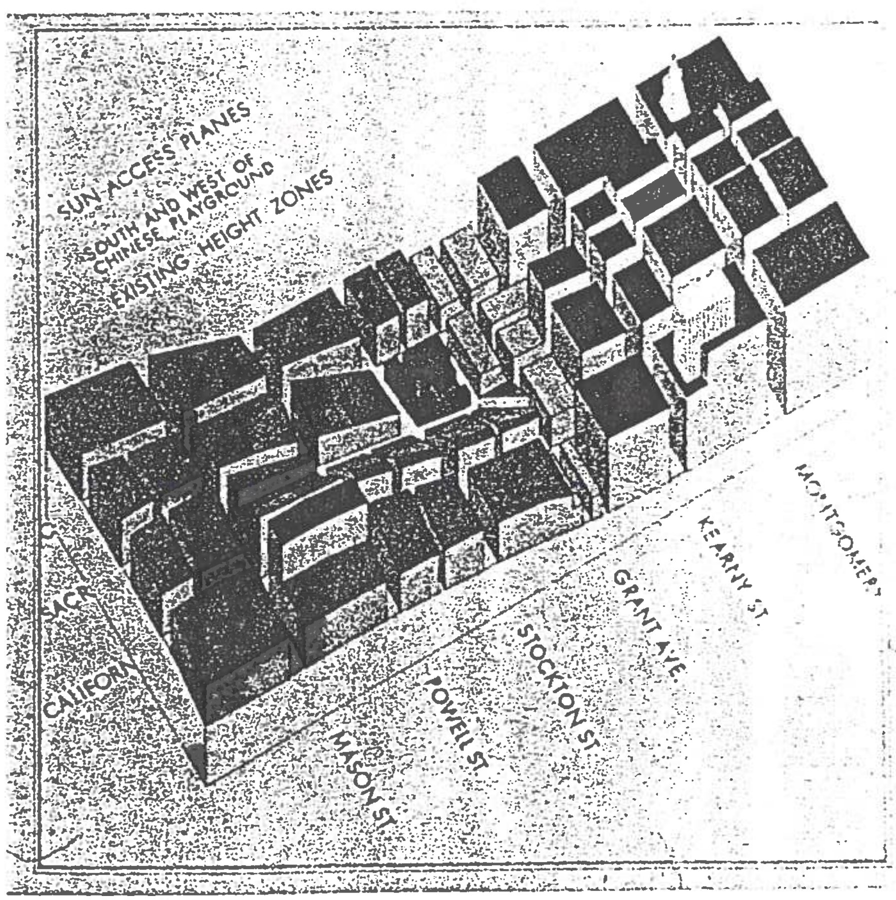

ment. By superimposing sun-path diagrams, they could measure the hours of sunlight that new development might take away from the playground (fig. 15-11). The studies showed that sunlight during afternoon hours would be diminished. In response, the Planning Commission quickly passed a resolution to lower the building heights. The Board of Supervisors (San Francisco's city council) upheld the resolution one year later, and the allowable building heights surrounding the playground were reduced from 160 feet to 50 feet. This resolution marked a departure from the traditional way of defining building heights according to contour lines. Instead, building heights were to follow "cut-off" planes based on the path of the sun and called "solar fans" (Bosselmann et al. 1983) (fig. 15-12).

The Planning Commission then ordered solar fans for all open spaces in downtown San Francisco. Although the mayor and several politicians tried to interfere, "Sun for Open Spaces" was, by then, a movement that had received such publicity that the momentum was hard to stop. As policies were made based on people's need for comfort, research had to continue. The Department of City Planning began conducting a user survey of twelve downtown open spaces. Questioned about qualities that attracted downtown office workers to open space, responders mentioned sunlight most frequently (Liebermann 1983). Yet the limited survey was not sufficient ammunition against developers who might have rejected the need to lower building heights in the vicinity of a public open space. One had to contrive a systematic study of the relationship betwen building form and the four important variables of the human thermoregulatory system: sun, wind, humidity, and temperature (Berglund and Stolwijk 1978). These variables were to be analyzed for all seasons in San Francisco.




15-11. Amount of sky above the small children's area of the Chinese playground: a. fish-eye picture of existing conditions; b. photomontage of possible building envelopes reaching the 160-foot allowable building height. The amount of sunlight taken away can be measured with the superimposed sun path diagram. The same measurements were taken from the center of all play areas within the playground. (Photo: Peter Bosselmann)




15-12. "Solar fans" for the Chinese playground.

Additional large models of four downtown areas were constructed to measure existing and future sun and wind conditions. The resulting data were related to a computerized comfort model for San Francisco's climate (fig. 15-13). Seasonal maps confirmed the initial hypothesis: areas that receive direct solar radiation are comfortable more than 50 percent of the year, while places in shade are rarely comfortable. Although shady places that are windy are especially uncomfortable, reducing high wind speeds is usually not enough to offer relief (fig. 15-14).

The team also verified that abrupt changes in building heights cause significant impact on wind velocities in adjacent streets and parks. This is particularly important along the edge of the city exposed to prevailing west and northwest winds. Zoning height changes should therefore be done gradually, in increments of less than 100 percent of the adjacent height zones (fig. 15-15). For similar reasons, height-zone changes should not be drawn along streets but in the middle of blocks.

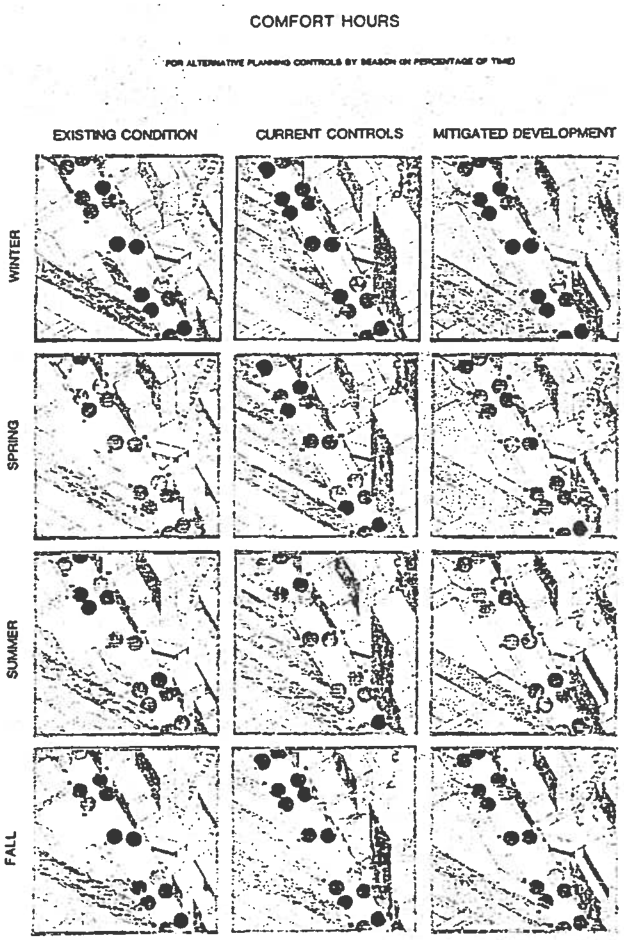
When the results were published (Bosselmann et al. 1984), work on the Downtown Plan had entered into a critical stage. Citizens' groups and members of the Board of Supervisors viewed the new plan as too development-friendly; others, including the mayor, were concerned about too many restrictions on downtown development. Environmental groups decided to take the issue a step farther and to make sunlight on public open space an initiative in the 1983 primary election ballot and a proposed amendment to the City Charter (fig. 15-16). Seven months after the narrow defeat of the previous referendum, a majority (64 percent) voted to preserve sunlight in parks and squares. This, many voters knew, limited high-rise development in major sections of downtown San Francisco, a not-so-small victory after a decade-long fight (Bosselmann et al. 1984).

## VISUAL QUALITIES

As the preservation of sunlight had become a political issue, the value of "visual continuity" in the city, undisrupted by major new development, received public support as well. But the *amount* of disruption was subject to a good deal of discussion.

A building's contribution to the visual quality of a street or of a skyline can be measured just as well as its contribution to the climate. In fact, the public is extremely sensitive to the visual environment for its symbolic attributes. Matters of scale, color, shape street character, and view affect a population's image of its city and of itself (Appleyard and Fishman 1979).

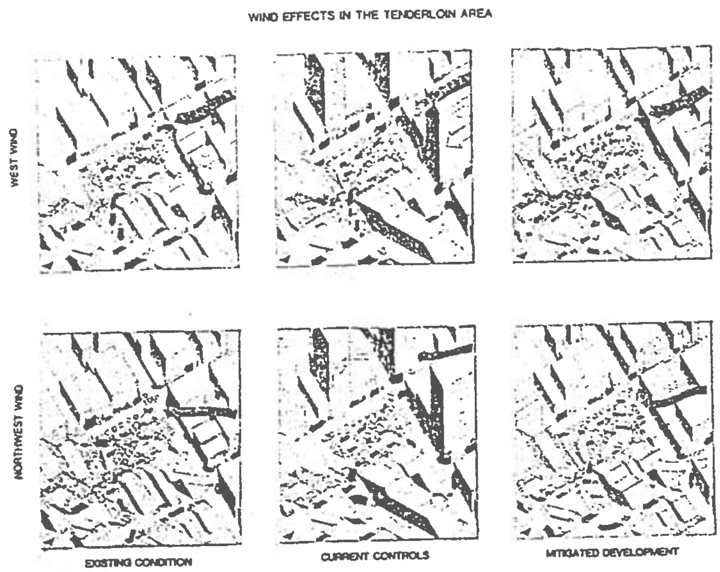
15-13. Seasonal comfort maps of a downtown street under alternative planning controls.. The darker the large dot, the less comfortable the particular portion of the sidewalk.



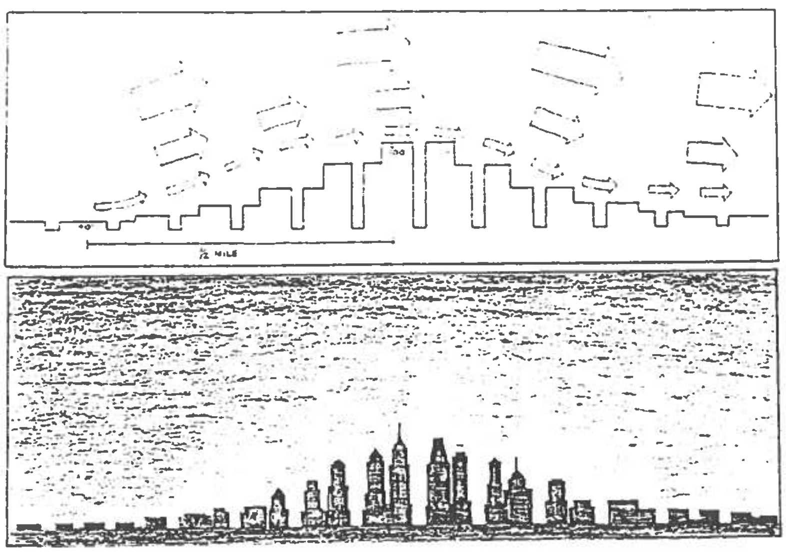

Visual qualities convey powerful emotional messages as to who dominates the city's environment.

Many planners, however, consider the visual aspects of the environment as trivial in comparison to the economic, fiscal, and social issues. When it came to deciding on height zones for the new downtown plan, planners never questioned the general policies in the Urban Design Plan. Discussion focused on maximum building heights and on heights in the south of Market portion of the financial district.

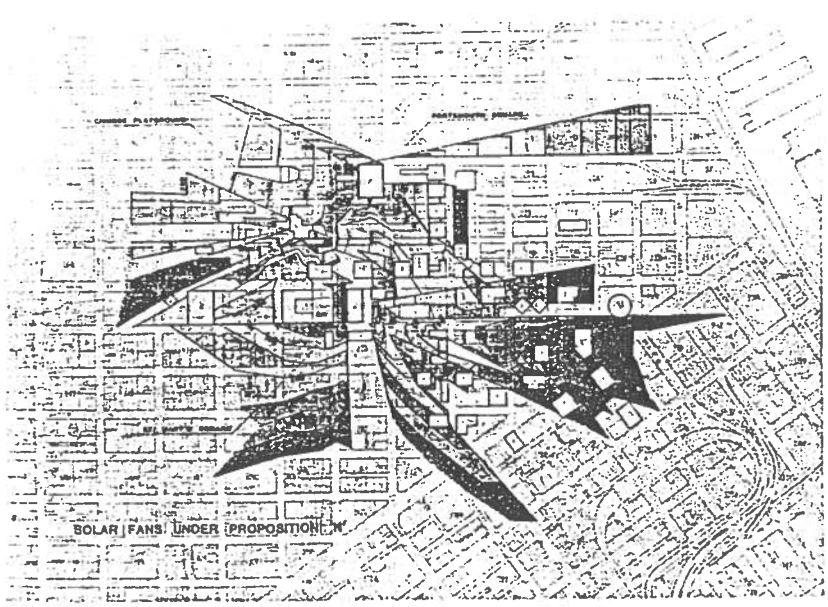
Naturally, groups in opposition to downtown development quickly blamed the city's permissive attitude for the degree of change to the skyline, middle-range views, and street views. In contrast, the development community frequently argued for higher buildings in certain locations to enhance the skyline. In such a politicized debate, clear methods of showing the visual and experiential impact of new development can




15-14. Wind effects in the vicinity of a downtown open space under alternative planning controls.



15-15. Gradually sloping "Downtown Hill."



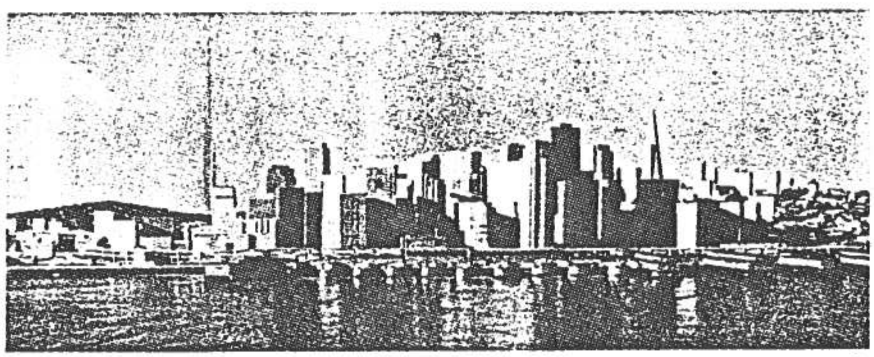

15-16. Allowable building heights near three open spaces *after* the passage of Proposition K, the "sunlight ordinance."

only aid in reaching compromises. To this effect, the team at the Environmental Simulation Laboratory prepared models of towers of various heights, ranging from 200 to 600 feet, to be inserted into the downtown model at locations with high-development potential. These simulations showed the impact of development on both the skyline (figs. 15-17, 15-18) and the street-scape, thus guiding discussions between various interest groups and, eventually, helping to reach a consensus.

The Urban Design Committee of the local chapter of the American Institute of Architects convened a meeting around the model for discussion with planners and members of the Planning Commission. Prior to the meeting, the architects had argued for higher buildings in specific locations. But after studying the model, the architects and the city's staff surprisingly reached a consensus regarding specific building heights. The planners were well prepared for this discussion. They had frequently discussed proposed height and bulk regulations, and alternative controls were modelled, tested, and remodelled. Opponents to downtown development requested to see the scale-model studies as well, which helped them realize that views of the future impact on the skyline were exaggerated. All parties frequently challenged the assumptions made in the modelling before they voiced their agreement.

It was interesting to see how, during the course of the planning process, changing political pressures influenced many people's assessment of the impact of development. After seeing film clips of the model, a high planning official decided that several buildings made possible under the new plan were too high. Previously, however, he had strongly defended the appropriateness of the height and bulk controls. His change of opinion did not correspond to changes made in the modelling technique or in the heights of the buildings modelled; rather, the plan had entered another critical stage in the political process. Simi-

15-17. Sequence of existing (1985) skyline views of San Francisco taken from publicly accessible locations: a. Treasure Island; b. Bay Bridge; c. Potrero Hill; d. Dolores Park; e. Buena Vista Park. (Photos: Environmental Simulation Laboratory, Gray)



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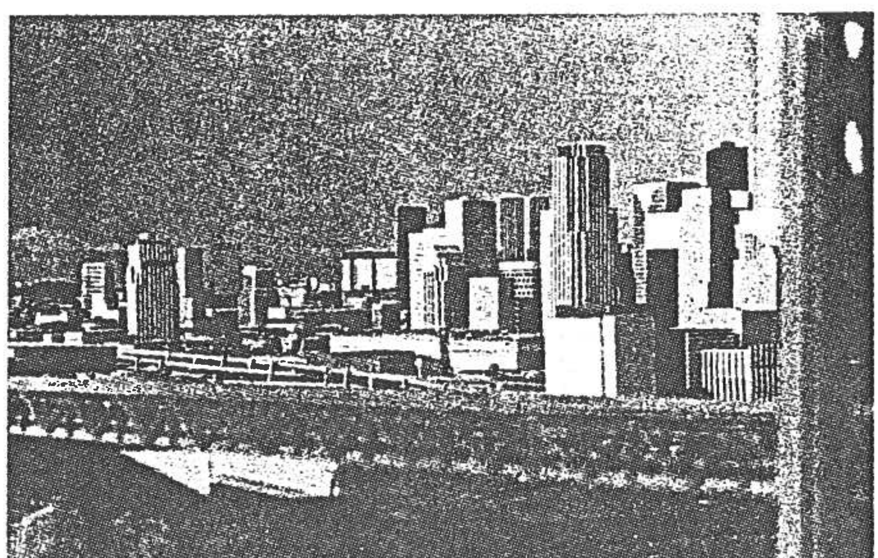

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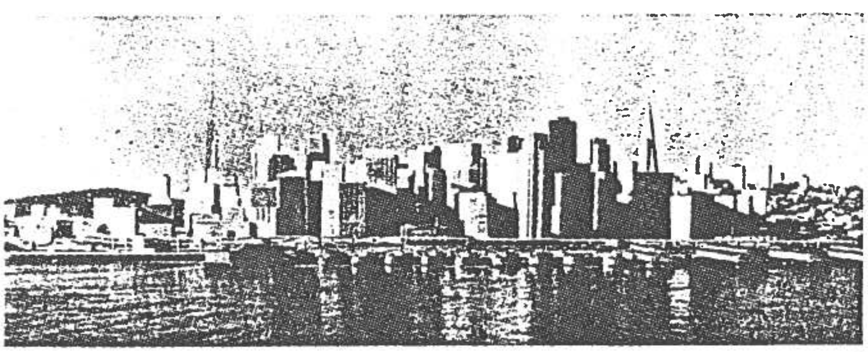
larly, several supervisors openly opposed to the plan made no reference to building heights as symbols of permissive growth after they saw the film.

Because the effects of development on street-level views can be more significant than those on the skyline, large models of typical street sections were constructed to measure primarily two factors: first, the impact of new development on the scale of city streets and, second, its compatibility with the surrounding architecture. The public frequently describes new buildings as monolithic, monotonous, and dull. The words *scale* and *compatibility* are rarely used. The ideas these words express need to be explained, since they encompass not only the visual impact of individual buildings, but the cumulative effect that several new constructions can have on the streetscape. Measurements therefore needed to take both phenomena into consideration.

The Downtown Plan defines goals to preserve visual continuity of street facades and to provide a visually interesting experience along the sidewalks. Yet it gives no standards to help measure those qualities. Empirical data shows, for example, that in streets between 60 and 80 feet in width a pedestrian most clearly perceives up to the first six stories from 200 feet away (Blumenfeld 1953). The difference of one story or so will not be perceived as a disruption of the street facade if most buildings maintain a height of six stories along the street. Even an additional two stories will not unduly disrupt the visual continuity of a street. The greater the height of the street facade, the wider the range of differences in height that will be invisible to the pedestrian. If the prevailing height of surrounding buildings is ten stories, then the acceptable range of additional facade height is two to four stories (Bosselmann et al. 1983).

If, however, a significantly taller building is built in the context of six-story facades, the base of the building ought to be visually separated from its upper stories. This can be achieved by setting the upper stories



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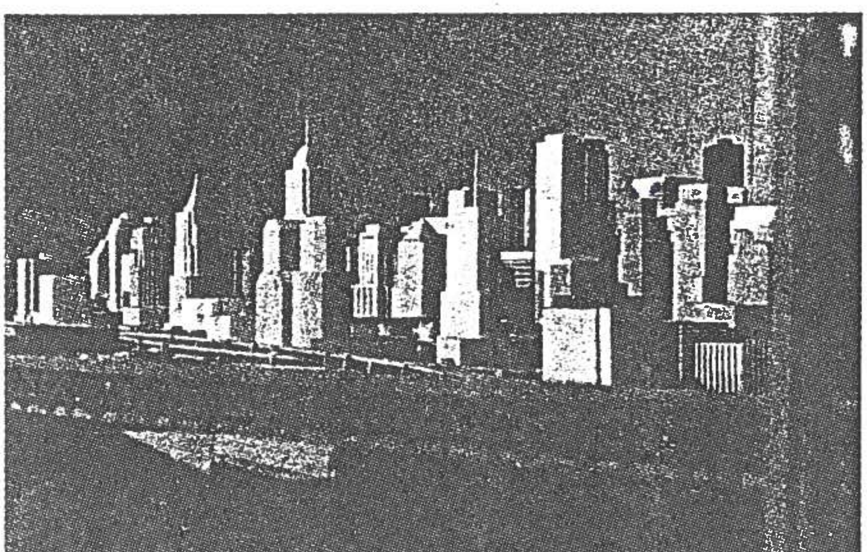
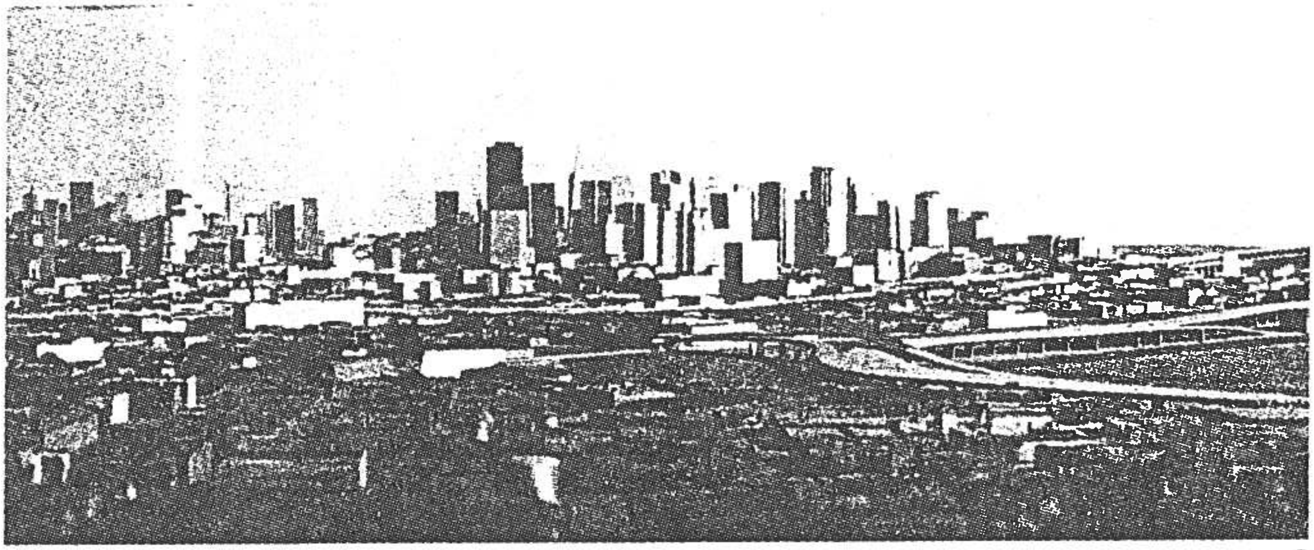


b.

15-18. Sequence of skyline views from the locations indicated in figure 15-17, showing development possible in the year 2000 under the 1985 Downtown Plan. (Photos: Environmental Simulation Laboratory, Gray)



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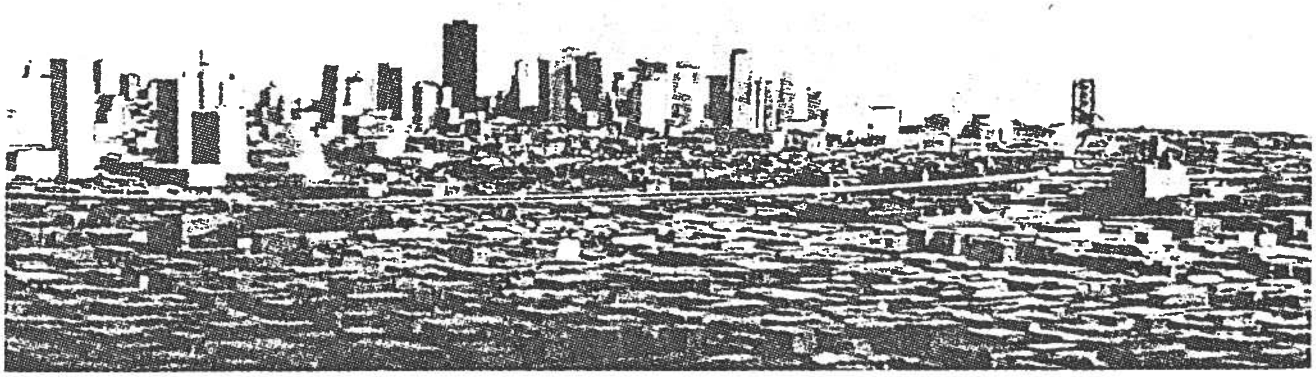

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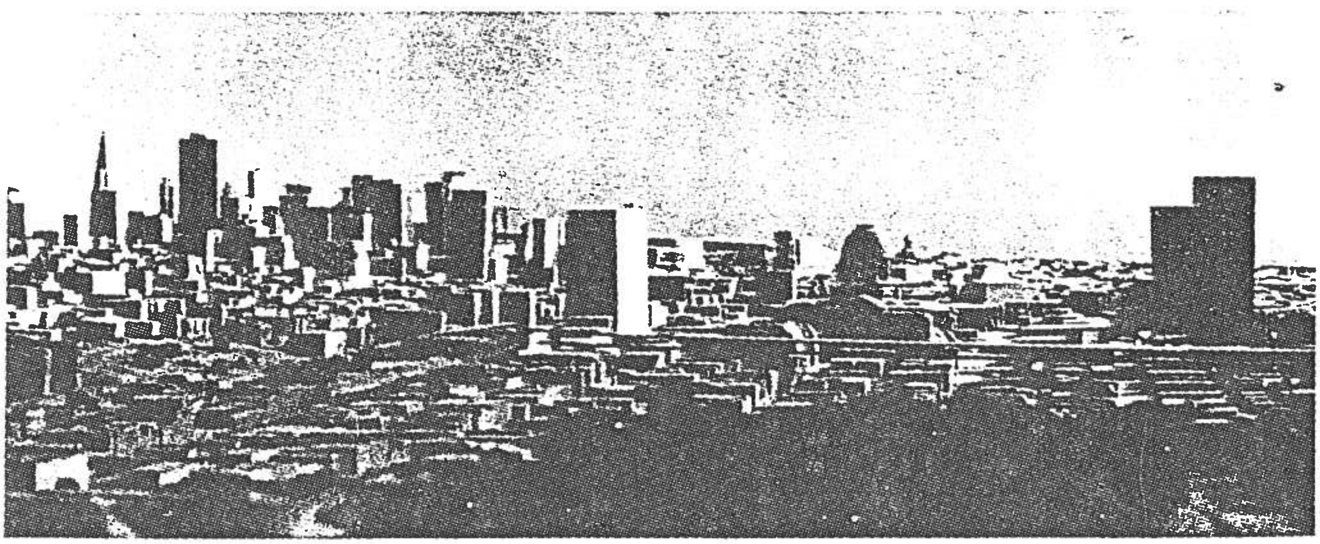
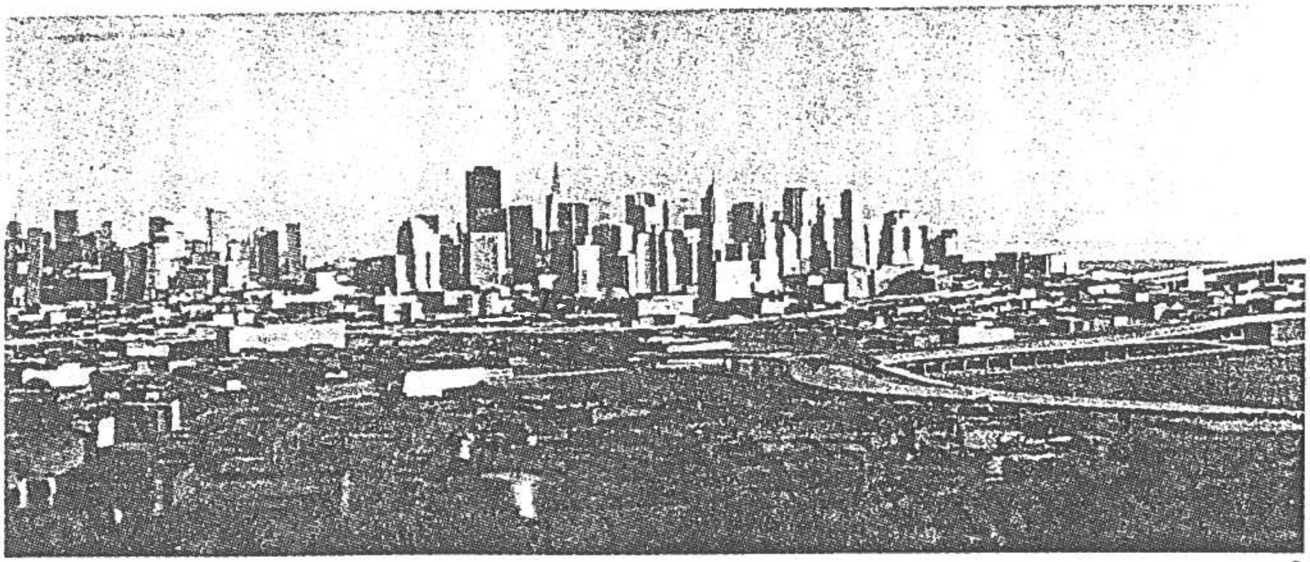


Figure 15-17 (continued).

e.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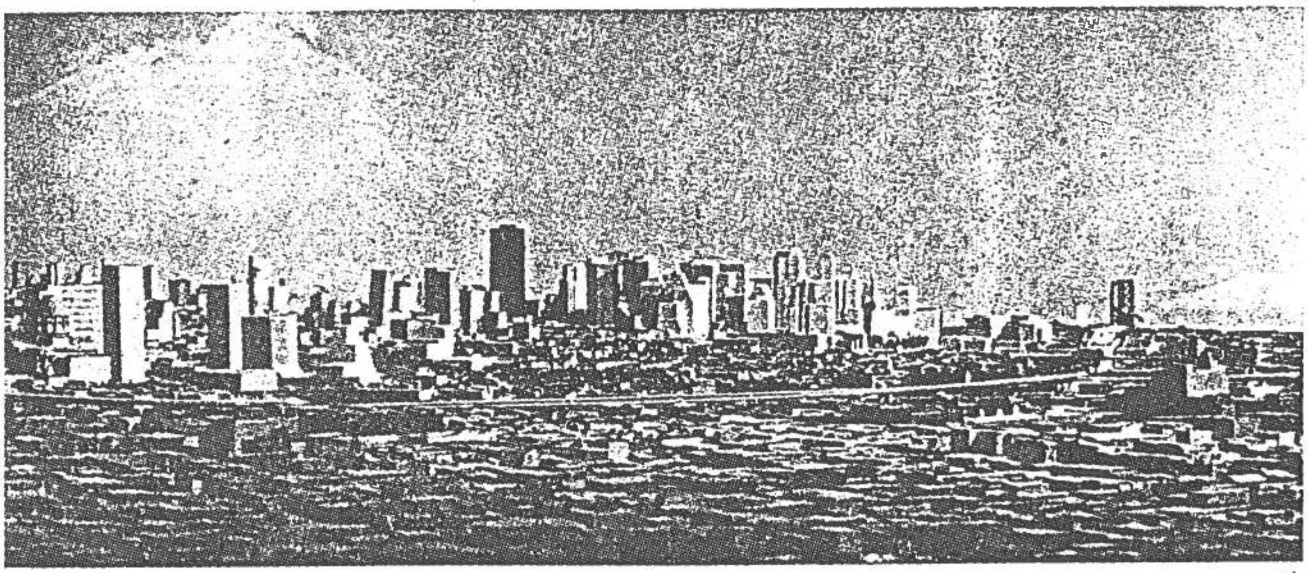
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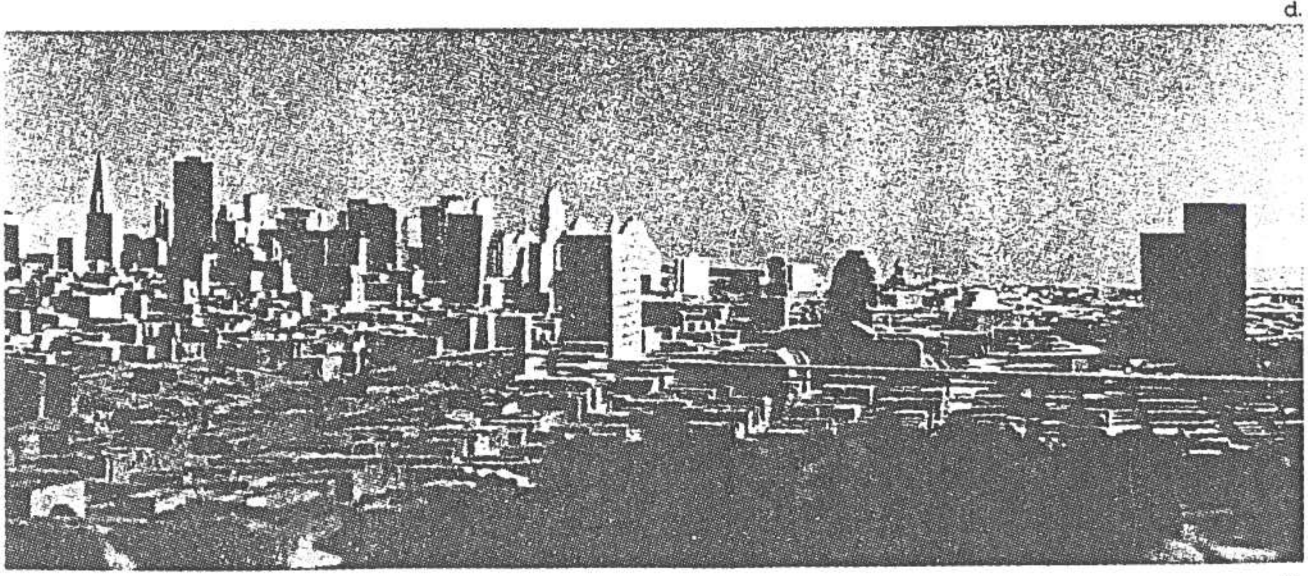

e.

Figure 15-18. (continued).

in a tower, back 14 to 20 feet from the base facade (Bosselmann et al. 1983) (fig. 15-19). Our three-dimensional model studies also repeatedly showed that, contrary to common belief, changes in facade materials do not provide the necessary visual separation; for example, the change from one shade of granite to another will not make a tall facade less looming.

As studies like these were conducted by the Berkeley team, results were made available at public presentations to the Planning Commission. Ranges of acceptable dimensions for setbacks, facade length of individual buildings in special districts, and street-wall heights have found their way into the new plan (City of San Francisco 1985).

In September 1985, a new downtown plan was approved, addressing most of the issues raised by San Franciscans over the years. Planners have called it bold and trendsetting. The *New York Times* found the proposals intelligent and sensitive and called them "one of the most complete prescriptions of growth" bestowed on an American downtown. But local opposition to the plan remains. Many San Franciscans say that it allows too much growth; that it will not preserve the character of the city; that coldness and monotony will spread into an increasing number of downtown streets; that housing will become even more scarce; and that roads and transit conditions will eventually become unbearable.

Only at the national level are the provisions of this plan seen as progressive; locally, the plan's image is, for the most part, conservative. This was not always so. Initially the plan was viewed as too restrictive, catering to the left of the political spectrum represented by the Board of Supervisors. Then came the very narrowly defeated high-rise initiative of November 1983 and the success of the "Sunlight Initiative" of June 1984. In the light of intense public pressure, the plan became politically acceptable for most supervisors, because any plan less restrictive would have had no chance for public approval.

## PUBLIC STREETS—PUBLIC INTEREST

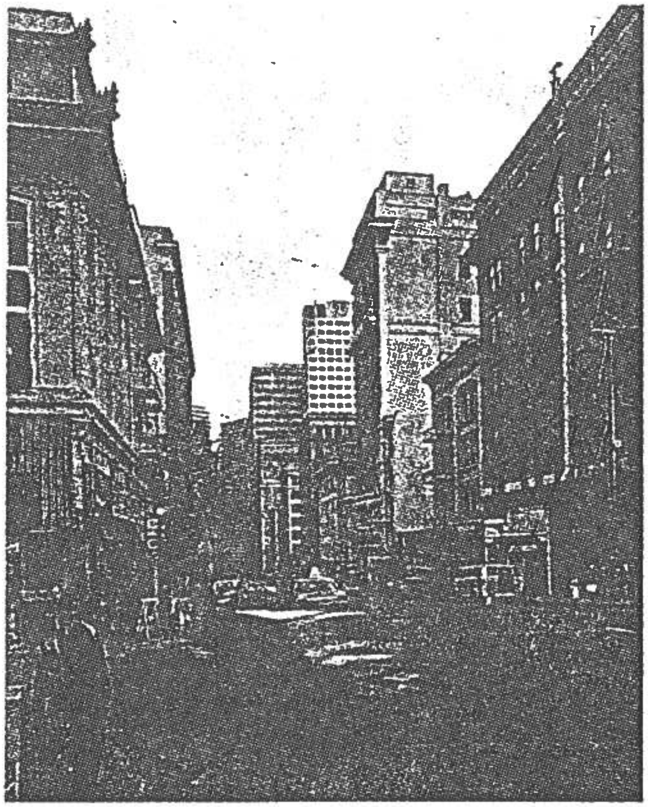
The issues raised by the public, and particularly the users of downtown streets, make it clear to planners and designers that considerations of stylistic qualities of high-rise buildings are not sufficient and are often meaningless. Environmental impact statements could, but unfortunately do not, yield adequate information on the experiential impact of new buildings. Since the National Environmental Policy Act of 1969, all significant structures are subject to an environmental impact study, where disclosure of all possible effects on the environment and on the community is mandatory. However, good portions of impact statements of individual buildings remain best guesses. Even where methods of measuring impact are available, the information presented is frequently faulty and erroneous.

In 1982, out of twelve environmental impact reports of downtown building in San Francisco, ten showed misleading or incorrect information on the shadows projected by future buildings. Since 1985, however, all environmental impact reports have very accurate shadow-impact analyses. Also, environmental impact report firms used to print shadow diagrams for three times of day, 9:00 AM, noon, and 4:00 PM, on three days of the year. The same firms have now demonstrated their ability to print shadow diagrams at any hour and minute on any date desired. One can be accurate; one only needs a strong public interest in the work.

Wind studies used to be done in a similarly cavalier manner. In May 1983, it was discovered that the weather station's records for northwest winds in San Francisco wrongly showed consistently calm readings. (The weather station's anemometer, located on the top of a downtown building, had been sheltered from northwest winds by a penthouse.) As a result, all wind-tunnel studies performed on tall buildings to that date used a calm baseline for northwest winds, although, as anyone who has sailed across the bay can confirm, northwest winds are not only the strongest winds in San Francisco, but also the most frequent. Thus, ten years of wind-tunnel tests became irrelevant.

Currently, six environmental impact reports on downtown buildings in San Francisco are in court for various reasons. Suits have been brought by citizens' groups. In San Francisco, these groups have proven to be the real hope for change.

The public accountability of planners and designers needs to be taken more seriously. New York's planning commissioners are now working on detailed specifications for those who make presentations of proposed buildings and plans. San Francisco's new Downtown Plan requires developers to construct scale models of proposed projects that fit into the large model of San Francisco housed at the Environmental Simulation Laboratory. Photographs are taken of the new building in the model from a variety of angles, with three criteria in mind. First, the presentation has to be tested for accuracy. Proponents as well as opponents have access to the facility, where they can check dimensions of the proposed building as well as those of surrounding buildings. Second, the model has to be realistic: color, shape, texture, detail, and light have to be as close to reality as possible. Third, 15-19. Eye-level views from a 600-foot and a 400-foot distance of: a. and c. existing conditions; b. and d. new development. The design of the building's upper stories was changed following presentation of these studies at the design review meeting.



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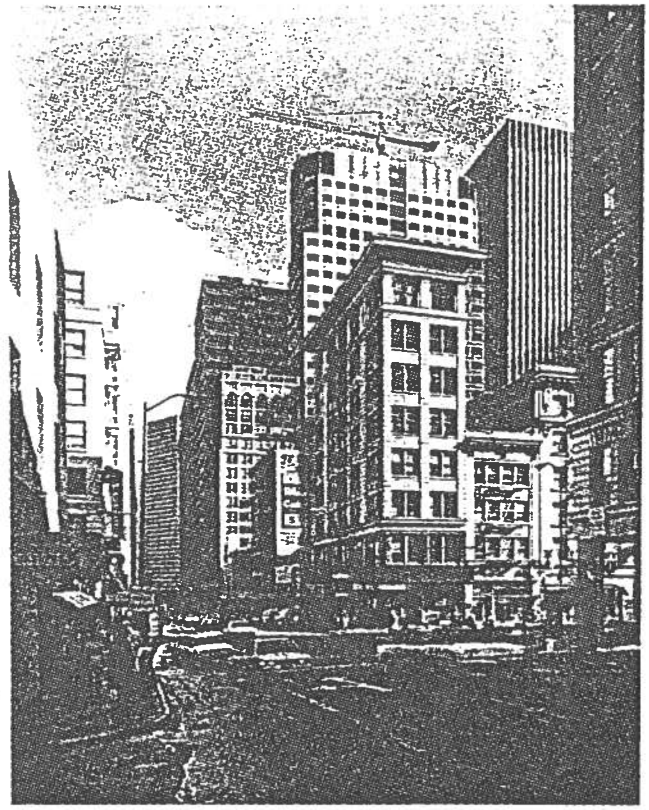

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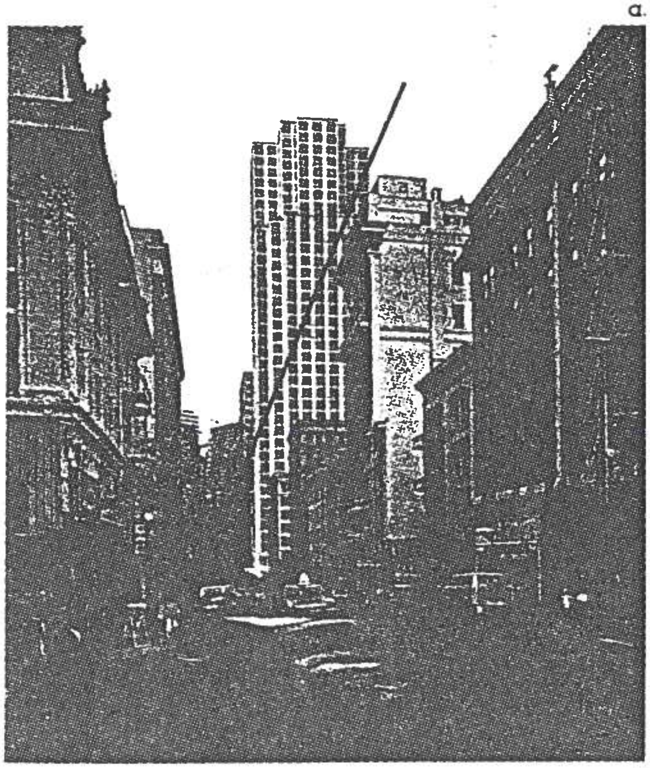

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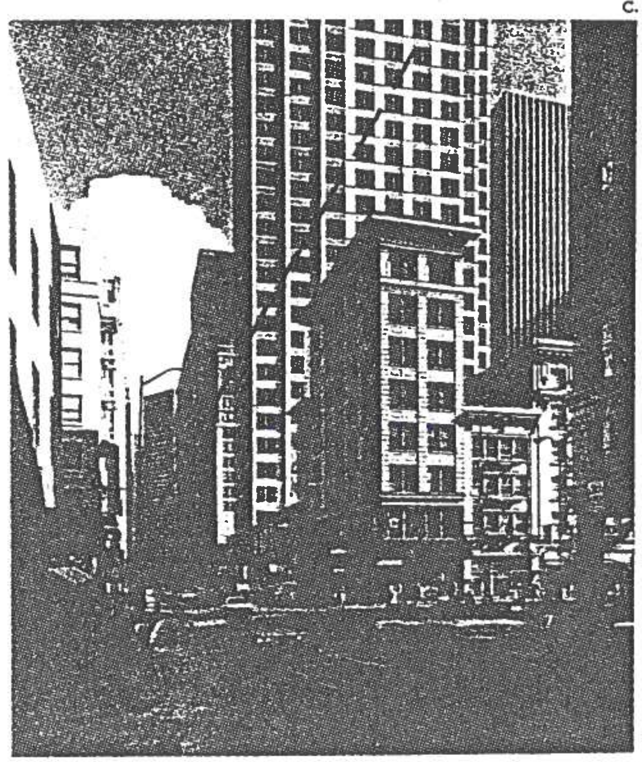

d.

the photographic presentation has to be objective. The new development is not only viewed from one angle (the most glamorous view or the most devastating, depending on who tries to make the point), but from as many angles as possible. Ideally, all views that can be obtained in the real world are matched.

With respect to urban environments, San Francisco is ahead of other cities because citizens have taken a great interest in the politics of downtown development. Innovative and useful, the ordinance that requires developers to give previews of their proposed structures is the result of a continuous concern by citizens and environmental groups for new development that is compatible with the city's character. The public has, with good reason, questioned the predictions advanced by planners and architects and it is now demanding (and will continue to demand) complete information and full disclosure regarding the impact of proposed projects.

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