DESIGN TRENDS

In the city, Nature itself takes on new meaning . . .

ARCHITECTURAL
RECORD

LANDSCAPE DESIGN

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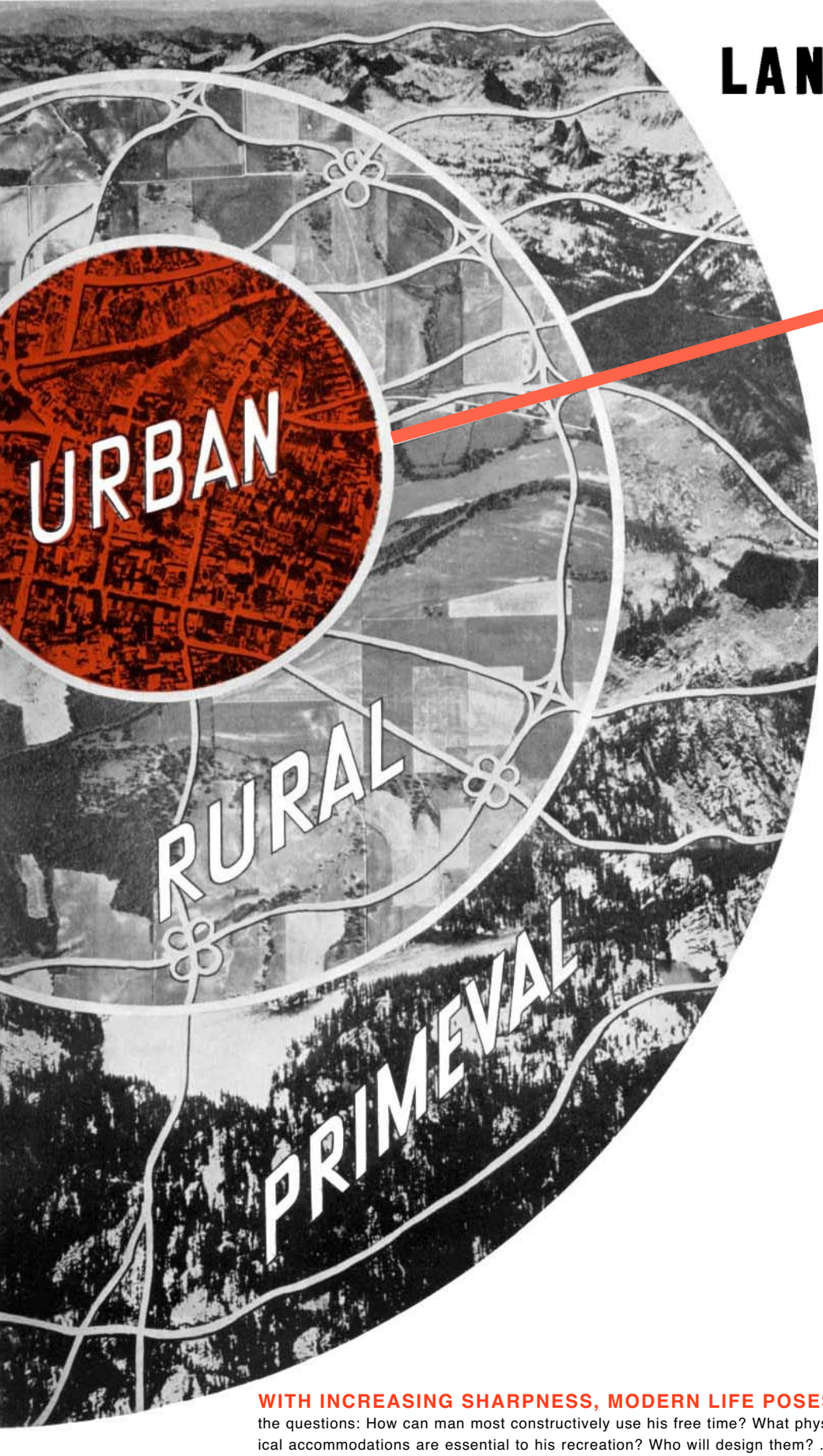


WITH INCREASING SHARPNESS, MODERN LIFE POSES the questions: How can man most constructively use his free time? What physical accommodations are essential to his recreation? Who will design them? . . Since nature—plant life, landscape, open air—are of at least as much importance in this phase of environmental control as architecture, ARCHITECTURAL RECORD has asked Messrs. Eckbo, Kiley, and Rose to explore the subject from the standpoint of landscape design. This study covers recreation in the urban environment; subsequent installments will analyze the rural and primeval.

ALL ORGANISMS SEEK the natural environment most favorable to the complete development of their species, and where nature fails to meet the biologic necessities, adaptation of either environment or organism must occur for life to continue. Each species produces its own forms which provide for its specific requirements in the struggle for existence. In lower organisms, the process of adaptation is so intimately related to the life cycle that it is hardly distinguishable; in vigorously motile and highly socialized organisms, the central forms are no longer individual, but are produced by the community to provide a wider adaptation to satisfy specific needs. The honeycomb of the bees and the beavers' dam are very advanced examples of such forms. Unlike the insects, however, the environmental adaptation of man is infinitely complicated by his own half-social, half-individual makeup, his uneven evolutionary development, and his distribution over every variety of geographic, topographic, and climatic conditions.

Generally speaking, man's central effort-the exploitation of all mineral, plant, animal, and insect forms for his own social welfare-has taken two forms, industrial and agricultural production. Where one of these production forms predominated, a characteristic type of environment resulted—*urban* for industry, *rural* for agriculture, *primeval* for those areas either untouched or only superficially exploited (trapping, lumbering, etc.). Although none of these environments were as socially desirable, efficient, or expressive as they might have been, they served one purpose admirably: they enormously increased man's productivity and laid the material basis for still higher forms of environment.

But as productivity rose, necessary labor time decreased: time for play as well as work became a reality for the average man. This, in turn, posed a new problem: the *absolute necessity* for and the *real possibility* of man's controlling his environment for his pleasure as well as his labor, for recreation as well as production.

IN THE URBAN ENVIRONMENT

England: televising a landscape lecture

This wide and expanding need of society for planned recreational environments offers tremendous new opportunities to landscape designer and building designer alike. These needs are so newly discovered, the means of meeting them so varied, and the design standards so nebulous, that it is perhaps wise to discuss the recreational needs of each type of environment relative to its dominant production forms, i.e., urban, rural, primeval.

Before beginning any discussion of the part of landscape design in creating such environments, a few facts about the origin of this specialized field might be worthwhile. The farmer was the first landscape designer. However remote from reality they may have since become, the great schools of landscape design sprang from the agricultures of the period. Most advances—new plant forms, new fertilizers, new construction equipments and methods—were developed to increase agricultural production, not to make possible a Tuilleries or a Kensington Garden.

The farmer has no preconceived ideas of form; he uses all available knowledge and technics to meet a given need; he plants and cultivates without abstract theories of design or beauty. He is interested in the maximum production for the minimum expenditure of time and effort. His forms are not static, but change constantly with the seasons, with advances in farming methods and plant materials. The resulting landscapes, at their best, assume a biologic, plastic quality which express man's achievements and aspirations in dramatic terms. The rice terraces of China and Japan, the wheat fields of North Dakota, the vineyards along the Rhine, are not only socially productive, they are designs which easily rival the gardens of Villa D'Este or the Alhambra.

This is not to discount for a moment the great schools of design of the past, as the English landscapist, Christopher Tunnard, has been quick to point out "If, then, a new garden technique is to be evolved, it need not necessarily reject the traditional elements of the garden plan. Rather, its aim must be to infuse them with new life. . . . Just as the design of the locomotive, the aeroplane, and, for that matter, the modern house, is being changed by scientific invention, in a similar way science will transform the garden of the future. The latter must necessarily be influenced by new materials and their methods of application, for example, by plant importation and hybridization, and the amelioration of soil and weather conditions." This is more than ever true when the landscape designer turns from the design of the individual garden* to the great recreational environments of tomorrow.

Cities redesigned for living . . .

"The remodeling of the earth and its cities," Lewis Mumford has said, "is still only at a germinal stage: only in isolated works of technics, like a power dam or great highway, does one begin to feel the thrust and sweep of the new creative imagination: but plainly, the day of passive acquiescence to the given environment, the day of sleepy oblivion to this source of life and culture, is drawing to an end. Here lies a new field. . . ."

Certain it is that the city today stands between man and the source of recreation, consuming his free time in traveling to and from those areas which provide a means of restoring vitality dissipated in work.

The sharp division of working and recreative worlds in today's urban areas has produced a fallacious weighting of their relative values. Work has become the dominant fact of human life—leisure and recreation a more or less luxurious afterthought which is fitted in around it. The dreary preponderance of building, the almost total absence of gardening, in our metropoli, is a direct reflection of this. Yet leisure and recreation, in their broadest sense, are fundamentally necessary factors of human life, especially in an industrial age. Recreation, work, and home life are fundamentally closely interdependent units, rather than entities to be segregated by wastefully attenuated transportation facilities, as they are today.

Since most production in the city takes place under roof, indoors, it is obvious that urban recreation must emphasize the out of doors, plant life, air, and light. In our poorly mechanized, over -centralized, and congested cities the crying need is for organized space: flexible, adaptable outdoor space in which- to stretch, breath, expand, and grow.

Trend towards recreational systems

The urban dweller requires a complete, evenly distributed, and flexible system providing all types of recreation for persons of every age, interest, and sex. The skeletal outlines of such systems are emerging in many American cities—New York, Cleveland, Washington, New Orleans, Chicago—although usually in a fragmentary and uncoordinated form. Of these, the combined park systems of New York City, Westchester County and Long Island (see p. 77) undoubtedly constitute the most advanced examples.

But, aside from their sheer inadequacy—no American city boasts even minimum standards of one-acre open space to each 100 population—these systems have many qualitative shortcomings. Public park systems are usually quite isolated: on the one hand, from the privately owned amusement and entertainment centers—theaters, dance halls, stadia, and arenas; and, on the other, from the school, library, and museum systems. This naturally makes a one-sided recreational environment. Even the largest elements—Lincoln Park in Chicago, Central Park in New York—are too remote from the densest population areas to service them adequately. And nearly all of these systems, or parts of systems, still labor under antiquated concepts of design, seldom coming up to the contemporary plane of formal expression. Nevertheless, the trend is more and more toward considering a well-balanced system essential, such a system including the following types:

*For detailed discussion of the potentialities of the modern garden, see recent series of studies by Messrs. Eckbo and Rose in *Pencil Points* magazine.

1.

2.

4.

3.

5.

NATURE, by its very scarcity, achieves a great cutlural significance in the city. Thus, instead of vacant lots (1), the urbanite's environments should provide for such things as demonstrations of scientific advances in plant growing (2), botanical gardens for exotic or out of season flora (3), opportunities to grow plants (4), reproductions of botanically interesting plant "communities" (5). Emphasis should be on scientific approach, encouraging active group participation in experiment wherever possible.

1. *Play lot*—a small area within each block or group of dwellings for preschool children. One unit for every 30 to 60 families; 1,500 to 2,500 sq. ft. minimum. A few pieces of simple, safe but attractive apparatus—chair swings, low regular swings, low slide, sand box, simple play materials, jungle gym, playhouse. Open space for running. Enclosure by low fence or hedge, some shade. Pergola, benches for mothers, parking for baby carriages.

2. *Children's playground*—for children 6 to 15 years. At or near center of neighborhood, with safe and easy access. I-acre playground for each 1,000 total population; 3 to 5 acres minimum area in one playground. Chief features: apparatus area; open space for informal play; fields and courts for games of older boys and girls; area for quiet games, crafts, dramatics, storytelling; wading pool.

3. *District playfield*—for young people and adults. 1/2- to 1-mile radius; 10 acres minimum size, 20 desirable. One playfield for every 20,000 population, one acre for each 800 people.

4. *Urban park*—large area which may include any or all of above activities plus "beauty of landscape." Organized for intensive use by crowds-zoos, museums, amusement, and entertainment zones.

5. *Country park and green belts*—for "a day in the country"—larger area, less intensive use, merely nature trimmed up a bit. Foot and bridle paths, drives, picnic grills, comfort stations.

6. *Special areas*—golf course, bathing beach, municipal camp, swimming pool, athletic field, stadium.

7. *Parkways and freeways*—increasingly used (1) to connect the units listed above into an integrated system and (2) to provide quick, easy, and pleasant access to rural and primeval areas.

But quantity is not enough . . .

But the types listed above constitute only the barest outlines of a recreational system; provision of all of them does not in any way guarantee a *successful recreational environment.* In other words, the problem is qualitative as well as quantitative—not only *how much* recreational facilities, but *what kind.* Here the element of design is vital, and success is dependent upon accurate analyses of the needs of the people to be environed. These needs are both individual and collective.

Every individual has a certain optimum space relation-that is, he requires a certain volume of space around him for the greatest contentment and development of body and soul. This space has to be organized three-dimensionally to become comprehensible and important to man. This need falls into the intangible group of invisible elements in human life which have been largely disregarded in the past. Privacy out-of-doors means relaxation, emotional release from contact, reunion with nature and the soil.

Collectively, urban populations show marked characteristics. Not only do their recreational needs vary widely with age, sex, and previous habits and customs (national groups are still an important item in planning); but they are also constantly shifting-influenced by immigration, work, and living conditions. Recent studies by Professor Frederick J. Adams of M.I.T. indicate constantly changing types of activity within definite age groups, and a gradual broadening of the ages during which persons participate most actively in sports. Organized recreation is spreading steadily downward (to include the very young in kindergarten and nursery) and upwards (to provide the elderly with passive recreation and quiet sports).

In addition, the urban population uses a constantly increasing variety of recreation forms-active and passive sports, amusements, games, and hobbies. Old forms are being revived (folk dancing, marionettes); new forms are being introduced (radio, television, motoring, etc.); foreign forms imported (skiing, fencing, archery).

Consideration of the above factors imply certain design qualities for the recreational environment which are generally absent from all but the very best of current work. Design in the recreational environment of tomorrow must (1) integrate landscape and building, (2) be flexible, (3) be multi-utile, (4) exploit mechanization, (5) be social, not individual, in its approach.

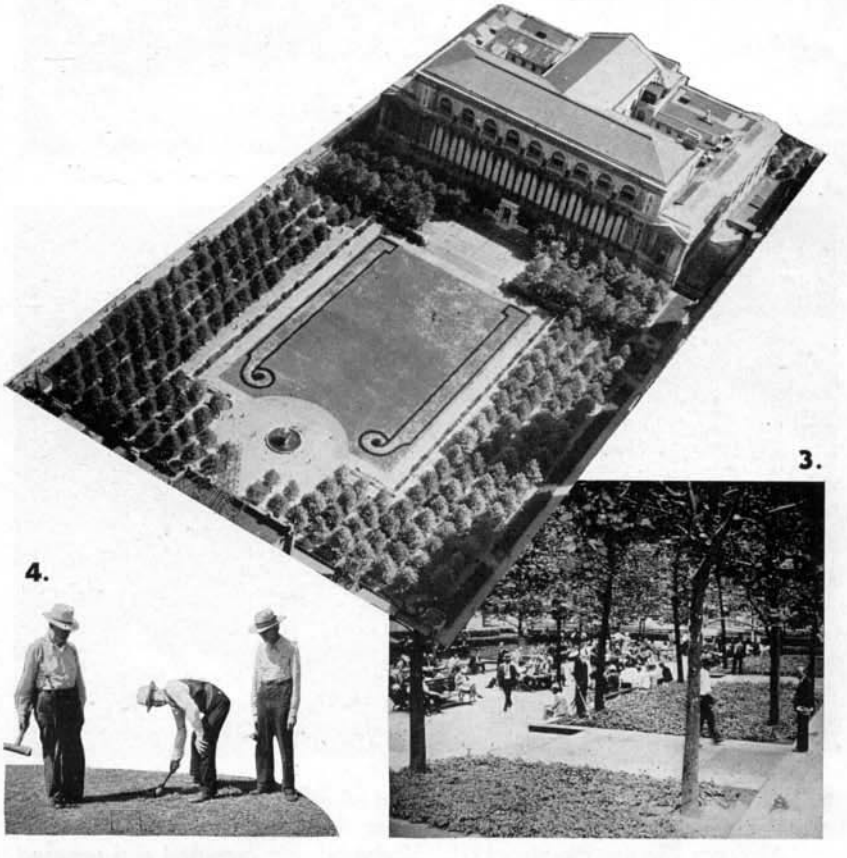
1. *Integration.* The most urgent need is for the establishment of a biologic relationship between outdoor and indoor volumes which will automatically control density. This implies the integration of indoors and outdoors, of living space, working space, play space, of whole social units whose size is determined by the accessibility of its parts. Thus landscape cannot exist as an isolated phenomenon, but must become

Provisions for: games and running; playhouse, play materials, and toys; slides, swings, sandpiles; rest and story-telling.

1.

2.

PLAYLOTS are the base of the recreational pyramid. They should provide as a minimum a quiet, protected space for preschool children in each block, (1) and (2); parking for baby carriages; benches for mothers. In some of the USHA projects, playlots are now combined with nurseries.



3.

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NEIGHBORHOOD PARKS, although common to most cities, are usually more decorative (3) than useful (4). Elderly persons increasingly need space for games—croquet, horseshoes, shuffleboard, checkers—as well as the more usual reading, knitting, gossiping, beer-drinking, etc.

Provisions for: apparatus, informal play, wading pool, various field and court games for older children, quiet games, dramatics, etc.

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PLAYGROUNDS for the most active of all age groups—6 to 15 years—are a generally recognized necessity. Yet the majority of urban children are still forced to use the street (1). Equipped, but crowded and exposed is (2), while good planning, plant life, and privacy add measureably to (3) and (4). Two-thirds of the children attending playgrounds live within 3 blocks, 75% within 4; thus, intimate relation between dwelling and playground—uninterrupted by streets and highways—is essential.

an integral part of a complex environmental control. It is quite possible, with contemporary knowledge and technics, to produce environments of sufficient plasticity as to make them constantly renewable, reflecting the organic social development. It is possible to integrate landscape again with building-on a newer and higher plane—and thus achieve that sense of being environed in great and pleasantly organized space which characterized the great landscapes of the past.

2. *Multiple-use.* Most types of recreation are seasonal and, within the season, can be participated in only during certain hours of the day or evening. In addition, different age and occupational groups have free time at different hours, and a great variety of recreational interests exists within the same groups. The trend toward multiple-use planning reflects needs which permeate all forms of contemporary design: decreased maintenance, increased utility, and saving of time in unnecessary travel.

3. *Greater flexibility* in building design—to provide for wider varieties of use and greater adaptability to changing conditions—can be extended into the landscape. The construction creates a skeleton of volumes which are perforated enough to permit air and sunlight for plant growth. Plants now replace the interior partitions, and divide space for outdoor use. When building and landscape achieve this flexibility, we discover that the only difference between indoor and outdoor design is in the materials and the technical problems involved. Indoors and outdoors become one—interchangeable and indistinguishable except in the degree of protection from the elements.

Flexibility in design expresses in a graphic way the internal growth and development of society. For this reason, the great tree-lined avenues and memorial parks terminating the axes are not satisfactory, though they may have twice the open area per person above that which might be called an optimum. Once such a scheme is built, it is a dead weight on the community because it is static and inflexible. It is neither biologic nor organic, and neither serves nor expresses the lives of the people in its environs.

4. If scientific and technical advance has created the urban environment of today, it—and it alone—has also made possible the urban environment of tomorrow. This implies a frank recognition, on the part of landscape designers particularly, of the decisive importance

of "the machine"; it must be met and mastered, not fled from. Indeed, the only way in which landscape design can be made flexible, multi-utile, and integral with building is by the widest use of modern materials, equipments, and methods.

As a matter of fact, this is already pretty generally recognized, though, again, in a fragmentary fashion. The great parkway systems of America are the best example of new landscape forms evolved to meet a purely contemporary demand. The sheer pressure of a mobile population forced their creation; and archaic design standards fell by the wayside almost unnoticed. The landscapings of the New York and San Francisco fairs are other examples, though perhaps more advanced in the construction methods employed than in the finished form. The use of modern lighting and sound systems, mobile, theatrical units (WPA caravan theaters, Randall Island rubber-tired stages, St. Louis outdoor opera theater) is already widespread. Throughout America, advances in agriculture, silviculture, horticulture, and engineering are constantly being employed by the landscape designer.

But there are, as yet, few examples which exploit the full potentialities or achieve the finished form which truly expresses them. Nor does the use of the fluorescent light, microphone, or automobile alone guarantee a successful design. The real issue will be the use to which such developments are put. The parkway, for example, can either serve as a means of integrating living, working, and recreation into an organic whole; or it can be used in an effort to sustain their continued segregation. The theoretical 150-mile radius at the disposal of all urban dwellers for recreation is a dream of the drafting board, which, for the majority of people, is blocked at every turn by the inconvenience and cost of transportation. Only if the parkway reduces the time, money, and effort involved in getting from home to work to play, will it justify its original outlay.

In building the recreational environment of tomorrow even our most advanced forms must be extended and perfected. Man reorganizes materials consciously; their form effect is produced consciously: any effort to avoid the problem of form will produce an equally consciously developed form. Nothing in the world "just happens". A natural scene is the result of a very complicated and delicately balanced reac-

Provisions for: playground; major sports—football, baseball, field hockey, soccer, etc.; swimming; tennis, bowling, archery, shuffleboard; theater, bandshell; recreation building.

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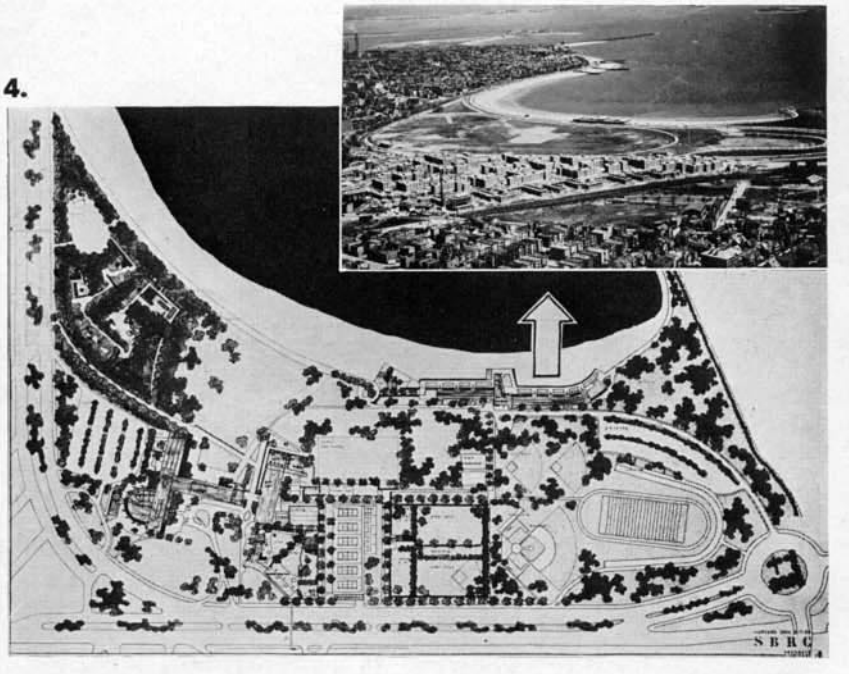

PLAYFIELDS, for young people and adults, are often combined with high schools—though this is not essential or necessarily desirable. Space (1), equipment (2), and plant life (3) are all essential to the success of the playfield; but design—such as indicated in the student project for the new USHA development in Boston (4)—is decisive. Four Harvard students here analyzed the recreational needs of an actual population: freedom of choice, flexibility, and segregation of functions are achieved.

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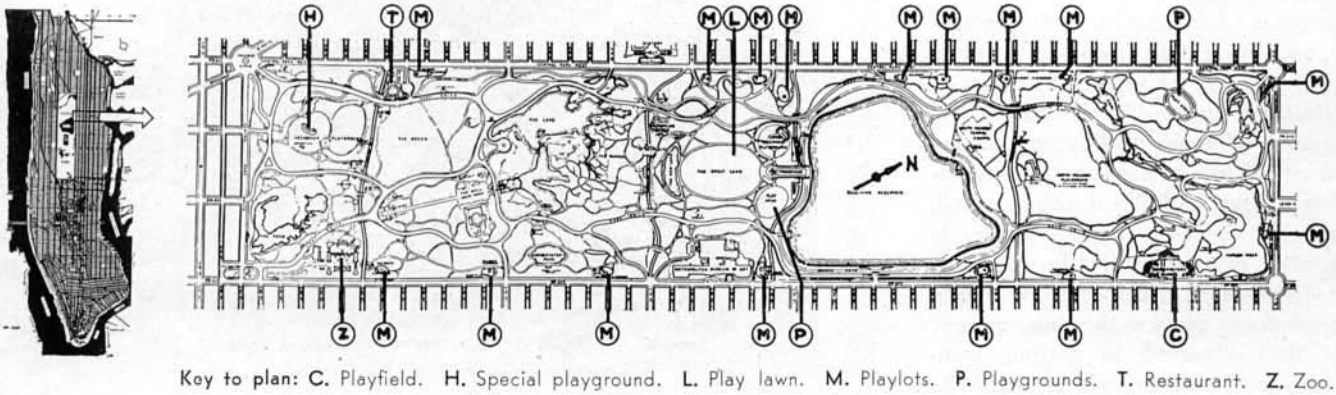


Key to plan: C. Playfield. H. Special playground. L. Play lawn. M. Playlots. P. Playgrounds. T. Restaurant. Z. Zoo.

PARKS—Since intown parks are the earliest of all recreational types, most urban recreational systems already include them. However, they are often too few and too small, too remote from the dwelling centers, and not up to contemporary levels of design. Most famous in this country is New York's Central Park (3), which has been greatly improved in recent years by addition of many specialized recreational facilities. Chicago's "lake-shore" parks (1) represent progressive design, although located at the edge of the city. Probably the most advanced intown-park design is that for Amsterdam's new Boschplan (2); located in the fastest-growing portion of the city, and connected to the rest by good transportation, it provides a wide variety of facilities.

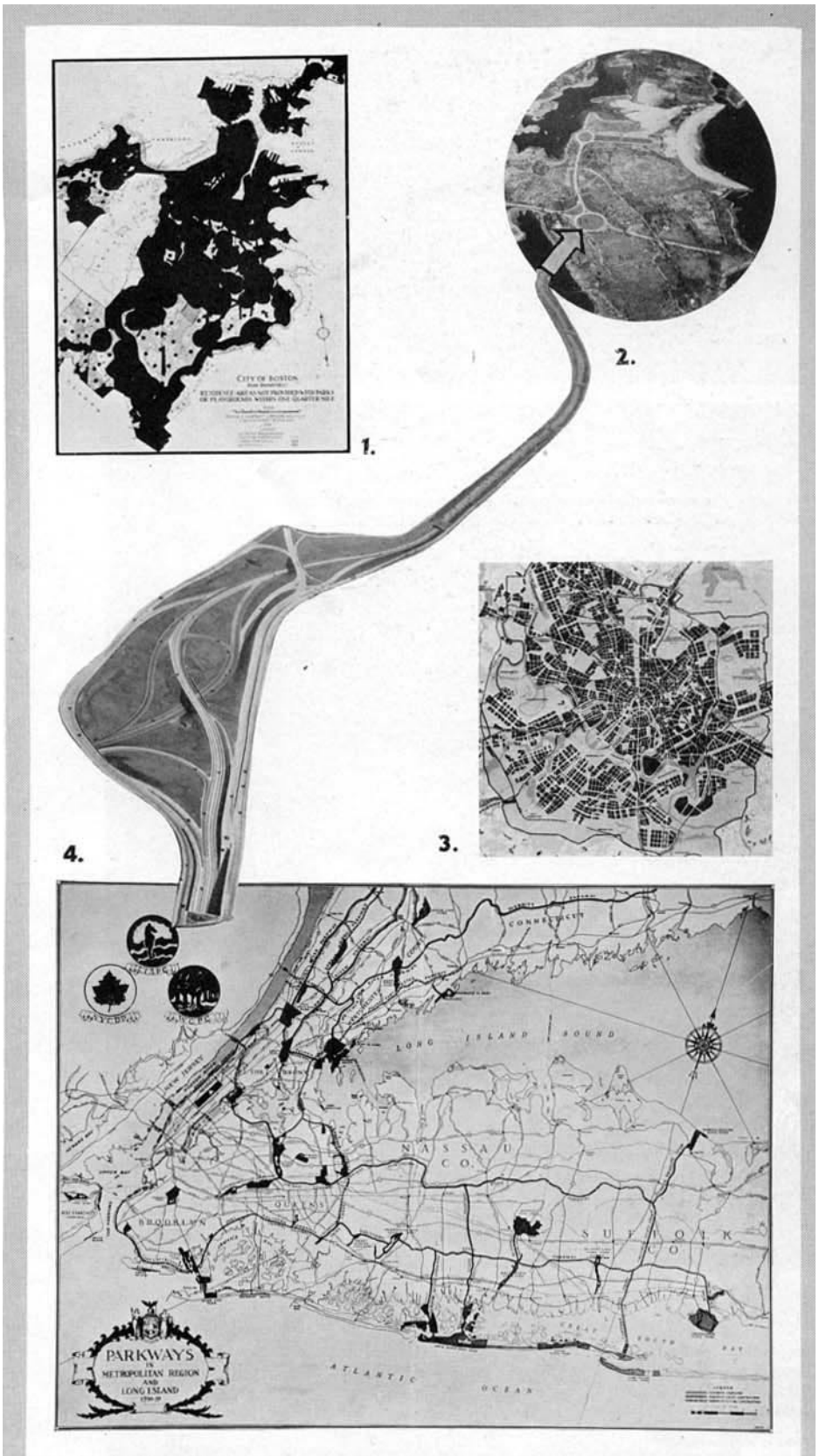
tion of very numerous natural ecological forces. Man, himself a natural force, has power to control these environmental factors to a degree, and his reorganizations of them are directed by a conscious purpose toward a conscious objective. To endeavor to n1ake the result of such a process "unconscious" or "natural" is to deny man's natural place in the biological scheme.

5. While the individual garden remains the ancestor of most landscape design, and while it will continue to be an important source of individual recreation, the fact remains that most urbanites do not nor cannot have access to one. And even when (or if) each dwelling unit has its private garden, the most important aspects of an urban recreational environment will lie outside its boundaries. The recreation of the city, like its work and its life, remains essentially a social problem.

Landscape—like building—moves forward

Landscape design is going through the same reconstruction in ideology and method that has changed every other form of planning since the industrial revolution. The grand manner of axes, vistas, and facades has been found out for what it is-a decorative covering for, but no solution to, the real problem. Contemporary landscape design is finding its standards in relation to the new needs of urban society. The approach has shifted, as in building, from the grand manner of axes and facades to specific needs and specific forms to express those needs.

Plants have inherent quality, as do brick, wood, concrete, and other building materials, but their quality is in. finitely more complex. To use plants intelligently, one must know, for every plant, its form, height at maturity, rate of growth, hardiness, soil requirements, deciduousness, color texture, and time of bloom. To express this complex of inherent quality, it is necessary to separate the individual from the mass, and arrange different types in organic relation to use, circulation, topography, and existing elements in the landscape. The technics are more complicated than in the Beaux Arts patterns, but we thereby achieve volumes of organized space in which people live and play, rather than stand and look.



PARK SYSTEMS. The recreational environment of tomorrow is at least indicated by the park systems of today; but the variation is extremely wide. A map of Boston (1), plotting areas not within 1/4 mile of playgrounds, shows more than half the city without facilities. Moscow (3), on the other hand, has a park system which penetrates and connects the entire city. In New York (4) the parkways have been extended to make special areas (2) available to the population, thus forming the skeleton of a recreational system; but other elements are still too few.