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Abstract

Many intellectual streams have contributed to the ideology of the American planning movement. Radburn, a partially built, planned, New Jersey settlement, represents the influence of English garden city theories. Radburn's plan was so well designed and rationally organized that it has become a permanent resource for planners who in every generation examine and sometimes adapt it to solve contemporary problems. As a result, it has survived as testimony to the planners' vision of suburban growth. It also represents, however, a neglected promise unfulfilled because of larger currents in American culture.

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Radburn and the American Planning Movement

The Persistence of an Idea

Eugenie Ladner Birch

SUMMARY. Many intellectual streams have contributed to the ideology of the American planning movement. Radburn, a partially built, planned, New Jersey settlement, represents the influence of English garden city theories. Radburn's plan was so well designed and rationally organized that it has become a permanent resource for planners who in every generation examine and sometimes adapt it to solve contemporary problems. As a result, it has survived as testimony to the planners' vision of suburban growth. It also represents, however, a neglected promise unfulfilled because of larger currents in American culture.

Planned cities have been part of America's heritage for over three hundred years, but a domestic city planning movement did not emerge until early in the twentieth century. Since that time, its leaders have refined techniques and ideas in the effort to make planning a unique profession and a supportable cause. As part of this process planners have developed a literature and an iconography of model plans to act as guides for practitioners.¹

In accordance with their beliefs, early proponents selected examples illustrative of their definition of rational land use. At first, they drew upon European experience, notably the British garden city projects. With the appearance of American developments, they turned to domestic efforts. One

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of the most publicized, long-lived, and influential models was Radburn, the partially built garden city located in northern New Jersey. Despite its failure in contemporary economic terms, the city planning supporters promoted it as a normative pattern for their movement. As such, Radburn represented many of the basic principles of planning theory from the thirties to the sixties. Although planners did not always practice according to the full Radburn ideal in this period, they believed they should aim for its objectives: decentralized, self-contained settlements, organized to promote environmental considerations by conserving open space, harnessing the automobile, and promoting community life.

So ingrained in planning thought were these tenets, that by the sixties, with the restructuring of the field to eliminate the emphasis on land and so-called middle-class values, planning theorists discredited Radburn. Nonetheless, by the seventies, they began to reaffirm the uniqueness of the project as an example of the foresight and expertise of the profession. While these later students renewed praise of features recognized by the earlier generations, they also discovered new, equally noteworthy, elements in the plan.

Radburn's history, then, is closely tied to the evolution of the planning movement in the United States. As a continuous element in planning theory, Radburn's story can be used as a case study to trace the development of the profession focusing on its changing aims, its propagation, and its reception in American society. Although there are other examples worthy of investigation, Radburn is unique for its constancy and familiarity in planning literature.

A study of Radburn must take place within the context of the times, rather than by solely focusing on the project itself. For this reason, Radburn will be assessed through an examination of four interrelated topics: first, its timely invention at a critical point in the development of the profession in the late twenties; second, the adaptation of its contributions to the planning process and physical design in the output of publicly financed land development schemes of the New Deal and later eras; third, its condemnation as a symbol of the defects of the field in the sixties; and fourth, its treatment in educational and promotional literature used in spreading the ideas of the movement throughout the period.

The Appearance of Radburn at a Critical Point in the Early Planning Movement

Radburn appeared at a critical juncture in the history of American city planning. While the movement's leaders were still struggling to define the

profession, they were soon to be thrust into the forefront of massive New Deal construction projects.

In 1928, the year of Radburn's initial construction, the movement was less than a quarter of a century old. Like the housing and social welfare campaigns, it was the product of progressive reform activities of the late nineteenth century.² Planning's formal organizational structure dated only from 1909 when the National Conference on City Planning (NCCP) began to hold annual meetings. By 1917, some NCCP members had created the American City Planning Institute (ACPI), a technical branch designed to "study the science and advance the art of city planning."³ Other peripheral but important participants were the American Civic Association (a conglomerate of municipal improvement societies), the American Institute of Architects, and the American Society of Civil Engineers.⁴ Overlapping memberships among these organizations were common. City planning ideas were as likely to be discussed as at the National Conference on City Planning.

From its beginning, the members of the American City Planning Institute vigorously promoted the development of a theory and process of systematized planning. Although the Institute members represented only a small percentage of the NCCP rolls, and purposely limited its numbers by imposing strict eligibility standards, they soon dictated the movement's concerns and direction.⁵ They exchanged ideas at their own annual meetings and the NCCP sessions, in their journal (entitled the *City Planning Quarterly*) and through an informal network based on friendship. All practitioners, they were driven by the need to identify specific professional skills, and develop momentum by capturing mass support. Their deliberations frequently weighed the relationship between theory, practice, and the public input. In 1926, Thomas Adams, head of the Committee on the Regional Plan of New York and its Environs, expressed a typical concern to Institute President and NCCP board member John Nolen:

No profession is so open as City Planning to the danger of being watered down to dilettante level by groups of amateur civic reformers and untrained exponents of civic improvements. . . . There is no danger of pushing out the new in city planning because it is all new and the very fact that it is still a long way from settling down, as a science and an art, means that some group is necessary to give it the right direction and a small degree of solidity.⁶

Throughout the early days, the city planners strove to develop the right direction referred to by Adams. Their varied activities ranged from the designing of war housing to promoting the creation of local planning and zoning boards, the writing of master plans and zoning ordinances for municipal governments, and participating in regional studies. In addition,

they kept pace with developments abroad through communication with their counterparts in the International Housing and Town Planning Federation. From these efforts they began to create a body of American planning thought for their followers.

By the late twenties, planners had articulated the basic goals of the profession. In 1927, then NCCP president Nolen's keynote speech before the 19th Conference presented several: relieving traffic congestion and promoting street safety, alleviating crowded living and working conditions, providing city dwellers with more sunlight and air, ensuring "a more favorable city environment for the rising generation," reducing the amount of waste generated by excessively large cities, regulating the size of cities, and combining a new, modern, and appropriate beauty with American ideas of efficiency.⁷ He followed by surveying the movement's progress toward meeting these objectives and admitted that "the record is not spectacular."⁸ Nolen closed with a challenge to his audience. He bid them to work to develop a broadened city planning science:

If we are to find real solutions, we must dig still deeper into the subject itself and more especially into a consideration of the related social, economic and governmental conditions which influence and color all that is now being done or attempted.⁹

It was into this environment of expansion and aspiration that Radburn came. It could not have been developed at a more critical time. The embryonic movement needed a symbol — a demonstration of its doctrine and a laboratory for its techniques. Radburn would fulfill many of these needs. In short, it was the right development at the right time.

Radburn and the Planning Process

Radburn was the brainchild of members of the influential Regional Planning Association of America (RPAA), and was constructed under the sponsorship of the City Housing Corporation (CHC), a private, limited-dividend company. The RPAA, founded in 1923 by a group of like-minded architects, engineers, economists, and sociologists, worked in conjunction with the CHC, which had been created in 1924 by a wealthy New York real estate entrepreneur, Alexander Bing.¹⁰ Although the RPAA addressed a variety of planning issues and drew inspiration from European concepts of regionalism, in Radburn it tailored British garden city ideas to the distinct legal and social customs of the United States. The CHC, the economic partner of the RPAA, began Radburn after experiencing financial and architectural success with an earlier, smaller project, Sunnyside Gardens in New York. Although restricting its dividends to 6 percent, lower than the current rate for

real estate development but in line with other interest-bearing investments, it sold enough stock to raise sufficient capital for its endeavors.¹¹

The RPAA members worked as a team on the Radburn project and in the process they developed the new planning methods Nolen had urged. In addition, the social scientists among them contributed significantly to the physical design. At first, the RPAA meetings were closed and casual, but later they were supplemented by lengthy technical sessions attended by outsiders. Referring to early activities, Clarence Stein reminisced to Catherine Bauer, "Our essential meetings were informal. There is no record except our memories."¹² However, when the group began to work seriously on Radburn, it held formal planning sessions. In October of 1927, it sponsored a weekend seminar at the Hudson Guild Farm in Netcong, New Jersey, to which it invited social scientists and others to study the preliminary plans and comment on important community issues of education, health, governance, and race.¹³ The minutes of this meeting list some of the questions discussed. The agenda underscored members' concern for alleviating social tensions with a better planned environment. A sample demonstrates the scope of their concerns: "What should be the policy in relation to the admission of negroes and other people of other races than white?"; "How many people must there be before there could be a good elementary school?"; and "What sort of unified controls are necessary to attain and protect an American garden city's beauty?"¹⁴

The RPAA continued its meetings in New York City, purposefully seeking information for rationally based decision making. Its members fully realized that they were undertaking pioneering work in planning. Charles Ascher wrote to Edith Elmer Wood in February of 1928, with an explanation of the group's objectives:

The fundamental problems of planning and policy as you can well imagine are most staggering. We have tried the plan of asking experts in various fields to meet with us to discuss the several problems — not so much initially to answer problems, as to suggest lines of thought and put us in touch with the people and agencies who can help to answer questions.¹⁵

The plan for Radburn, clearly the effort of the RPAA team, was not created in the traditional architectural manner. It reflected a multidisciplinary synthesis of the most current data and expert advice. Furthermore, decisions were made by a rudimentary form of what evolved into the "planning process."¹⁶ First, the planners formulated goals, then collected data, developed and selected a plan, implemented that plan, and later evaluated it (Plate 7.1).

A by-product of enlarging the participation in the planning meetings was Radburn's rapid acceptance by the general planning movement. The participants were influential propagandists. Not only did the RPAA have vocal members such as Lewis Mumford, Charles Ascher, and Clarence Stein, but



7.1 The final plan for Radburn reveals the hierarchical circulation system and a less rigid land use pattern than preliminary plans.

also the consultants included others of critical importance: Russell Van Nest Black (a long-time power in the American City Planning Institute), Edith Elmer Wood (a highly regarded housing authority), Thomas Adams (the prominent teacher, writer, and practitioner), and Harold Buttenheim (editor of the *American City Magazine*).¹⁷ All were in positions to promote Radburn and the planning process responsible for it.

Radburn's fame spread rapidly. *American City Magazine* had numerous articles (February, November, December, 1928, and November, 1929), the NCCP and the ACPI featured it in their discussions, and the academic and popular press gave attention to the experiment. At that time, the praised elements of the settlement, subtitled by its promoters as a "Town for the Motor Age," included the superblock (the high density clustering of single, double, and multifamily housing around large areas of commonly held parkland), whose demographic dimensions were based on the neighborhood principle so recently articulated by Clarence Perry in the *Plan for New York and its Environs*; the separation of vehicular traffic (with automobile routes designed in a hierarchical fashion to eliminate unnecessary traffic in residential areas); and the development of a community organization, the Radburn Association, to administer the public lands, enforce restrictions, and supply supplemental municipal services such as recreation and day care activities.¹⁸ A few years after the initial construction was completed critical comments extolled the development's quality of life. The *American Architect* made this observation in 1980:

[Radburn] represents the first scientific effort that has ever been made to establish a community designed exclusively to minimize the danger of automobile accidents. Yet there were other things to consider too. . . . It was the desire of the builders to create not only a [safe] community . . . but also one . . . of beauty in appearance and the utmost in modern efficiency.¹⁹

Ultimately the 1929 national financial collapse would cripple Radburn's sponsor, the City Housing Corporation. CHC's 1933 bankruptcy prevented the full execution of the original plan which had called for a complete town with housing, employment, and commercial facilities for a projected 30,000 population. Although only a small fraction had been executed (housing for about 3,000 and the commercial center), the plan and demonstration would be influential in the coming years.²⁰

Radburn and Its Transferal to the American Landscape

The American planning movement experienced a deep change in the thirties. The focus of its activity changed from local to national as New Deal programs undertook slum clearance, new town and public housing con-

struction, mortgage insurance, and national planning. Also, an increased number of planners were employed directly by the public sector rather than indirectly as consultants. Along with these changes, by the end of the decade, the Radburn imprint would be on most federal housing activities. However, because of the nature of the movement's organizational developments, only parts of the Radburn plan, not the totality, would be transferred to the American landscape.

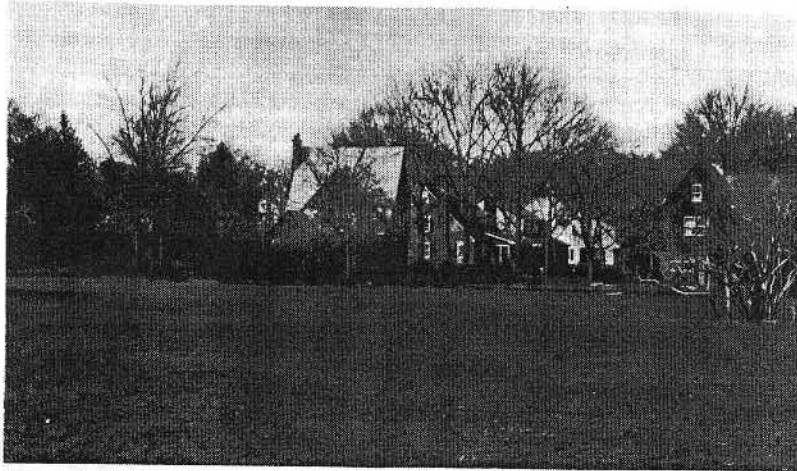
During the Depression, professional and lay supporters of city planning undertook the reorganization of the movement. In 1934, the National Conference on City Planning merged with the American Civic Association to become the American Planning and Civic Association. The American City Planning Institute became an independent professional organization, which later changed its name to the American Institute of Planners. An entirely new group, the American Society of Planning Officials, emerged to supply technical information to the growing number of paid and volunteer government leaders. The movement's leaders had designed a structure which would respond to the changed environment and conditions of planning.²¹

The movement, then, was actually a three-pronged structure. The American Planning and Civic Association channeled citizen support, the American Society of Planning Officials strengthened its public administrators, and the American City Planning Institute would develop professionals. All three organizations had separate offices and publications but they met together annually to exchange ideas about the state of the art.²²

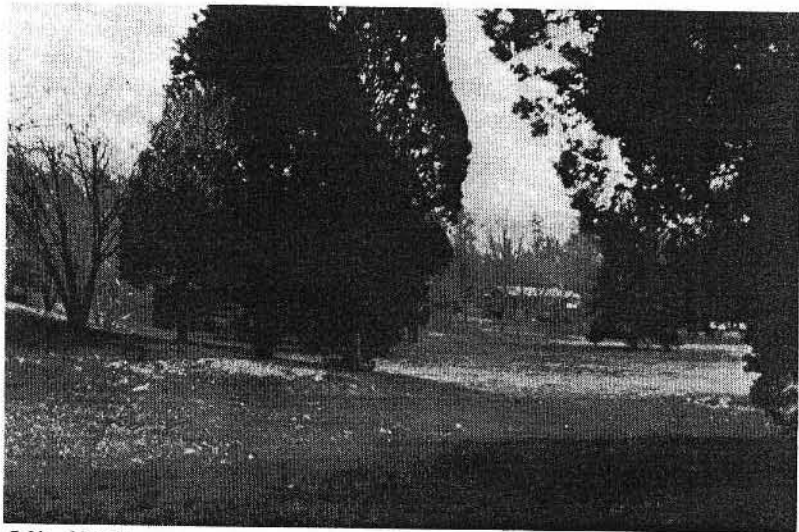
The Radburn plan was of critical importance to the restructured movement. For lay citizens, it provided a well-publicized and comprehensible image of planning. For government officials, enough of Radburn was built to show how it worked and what elements were successful. For professionals, it was a fertile laboratory experiment. Tracy Augur, planner for the Tennessee Valley Authority, articulated these three functions of Radburn in an article for the *Michigan Municipal Review*:

Radburn stands out singly not because it is the biggest or most beautiful of cities but because it is the first tangible product of a new urban science . . . that seeks to make the places of man's habitation and industry fit the health requirements of his daily life . . . Radburn is not a theory, it is a demonstration . . . Radburn cannot be a model for all types of city, nor for all cities of the residential type; it stands in recognition of the varying functions cities serve, and in planning to serve one of the more common of them, it points the way to the service of others.²³

Although many aspects of the Radburn plan were immediately incorporated in new town experiments of the thirties, its regional implications were only partially realized. Since the Tennessee Valley Authority and the Resettlement Administration, two of the key regional agencies, hired planners who either worked on or were aware of Radburn, it is not surprising that

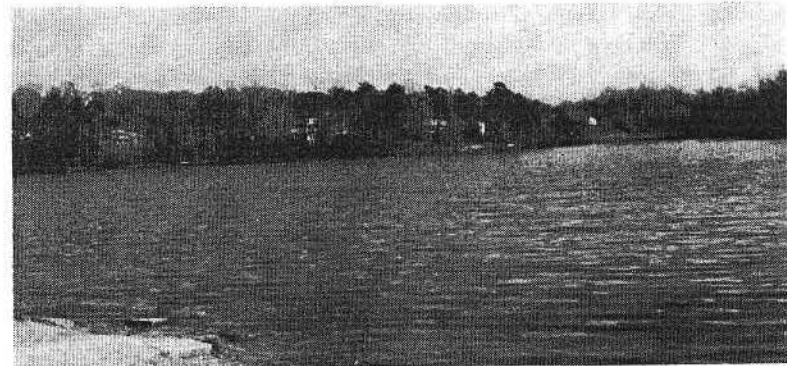


7.2a Radburn



7.2b Norris

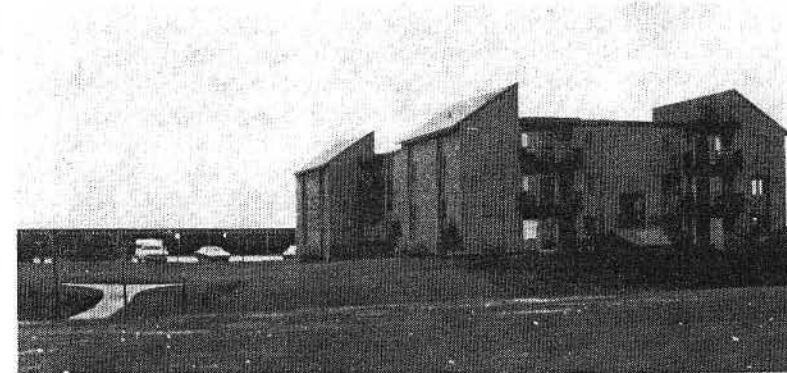
7.2 Radburn's interior park (a) is copied at Norris (b), becomes a lake at Greenbelt (c), is considerably smaller at Jonathan (d), and no longer protected from the street at Columbia (e).



7.2c Greenbelt



7.2d Jonathan



7.2e Columbia

transferable aspects of the plan such as the superblock, transportation system, and park arrangements cropped up repeatedly in designs for federal settlements.²⁴ Radburn's translation into these efforts, its propagation by the planning associations, its adoption by the British in their work, and its use as a model in graduate curricula, explain why the pattern became associated with later American new town development.²⁵ Reston, Virginia, Columbia, Maryland, Jonathon, Minnesota, and Irvine, California would repeat the design devices if not the overall concepts.

A brief survey of selected elements illustrates their transfer to the American landscape. Radburn's much noted interior park (Plates 7.2 a,b), designed by RPAA members Clarence Stein and Henry Wright, was adapted by Earle S. Draper in his plan for the Tennessee Valley Authority community of Norris. Draper, who had considerable experience in company town planning, frankly drew upon the Radburn concept but changed it to meet the topographical requirements and residential customs of the southern site.²⁶ For these reasons, he dropped the superblock cluster housing. At Greenbelt, Maryland, one of the four Resettlement Administration projects, the superblock-interior park constellation appeared along with a new variation, a centrally located lake (Plate 7.2c). In Columbia, Maryland, and Jonathon, Minnesota (later developments undertaken by private entrepreneurs with some federal aid), a faded remembrance of the space is seen in examples unenclosed by housing (Plate 7.2d) and unprotected from the street (Plate 7.2e). Comparisons of the cul-de-sac design, footpath systems (Plate 7.3), and underpass adaptations (Plate 7.4) show similar variations as the developers tailored the devices to meet their needs. Finally, the shopping center became a prototype for the later settlements as well as for others not related to overall residential plans throughout the United States.²⁷

Other less-publicized aspects of the Radburn plan became embedded in planning philosophy. For example, Augur, and later the Urbanism Committee of the National Resources Board, praised the town's homogeneous population of young, college-educated, middle-income families, claiming that their common backgrounds and interests promoted a "much fuller enjoyment of social life," "a healthier community" with a more responsive government than could be "had in larger cities, more diverse in scope."²⁸

Large-scale development, an integral part of the Radburn idea, carried over in both pre-war and post-war public housing as well as in urban renewal. The redevelopers favored the method for economic and moral reasons. Not only did they argue that large sites had lower infrastructure costs, but they also believed that superblocks stood as safe islands amidst crime ridden slums (Plate 7.5, 7.6).²⁹

In 1931, housing professionals argued:

A reduction of delinquency rates is most likely to result from a program which combines improvements in housing with modifications in other elements in the complex. This combination means at least, the development of improved housing in neighborhood units. . . . This neighborhood unit should have a physical plan which would make the neighborhood relatively distinct. . . . A physical plan of this nature will tend to produce neighborhood organization and a local social control which are lacking in many parts of the modern city.³⁰

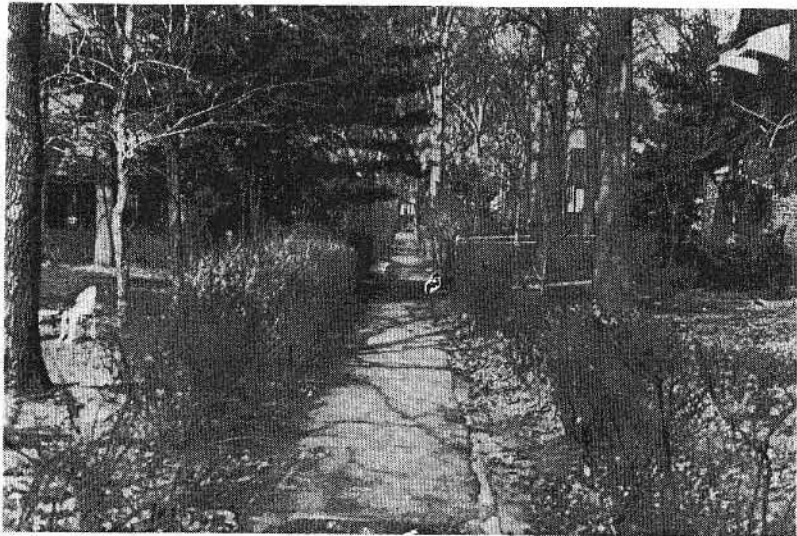
The concepts of homogeneity and large-scale development were further extended in the enormously influential work of the Federal Housing Administration (FHA). As with public housing, only parts of the Radburn idea survived. Barriers to its wholesale adoption came from two limitations. First, the FHA structure requires self-sufficiency, which dampened opportunities for experimentation as called for by Radburn. Second, American zoning prohibited clustering and mixed uses. Notwithstanding these strictures, less than ten years after the construction of Radburn, FHA officials promoted many of its principles. For example, the cul-de-sac idea, which Henry Wright had urged in 1928, was doctrine by 1939.³¹ Although this dead-end street design had appeared in several earlier developments, such as the British Letchworth, Hempstead Garden Suburb, and Welwyn, its more extensive use as part of a complete street system at Radburn aided in convincing the FHA administrators to call for its use in government-insured subdivisions. Their 1939 manual, *Planning Neighborhoods for Small Houses*, flatly stated:

Homes located on *cul-de-sacs* . . . offer distinct advantages especially to families with small children. In addition to the reduction of the traffic hazard, the creation of such sites has many other advantages to both the buyer and the developer. The cost of street improvements may be greatly reduced.³²

In the same manual many illustrations of ideal subdivisions incorporate Radburn ideas, and a section of the actual plan was even included (Plate 7.7).

Finally, the FHA endorsed the restrictive covenant, a tool used extensively by earlier twentieth-century high-priced real estate developments such as Palos Verdes, California, and Shaker Heights, Ohio, and adopted at Radburn. At Radburn, provisions in homeowners' deeds specified architectural controls. Unfortunately, the FHA recommendations suggesting their use as a "protection for residential development" ultimately led to vicious racial and ethnic discrimination.³³

FHA housing constituted up to 25 percent of all domestic new construction between 1934 and 1970.³⁴ In some features, it did perpetuate—though in a fragmentary manner—a few Radburn notions, namely the hierarchical transportation systems and large scale developments. This transferal bears



7.3a Radburn

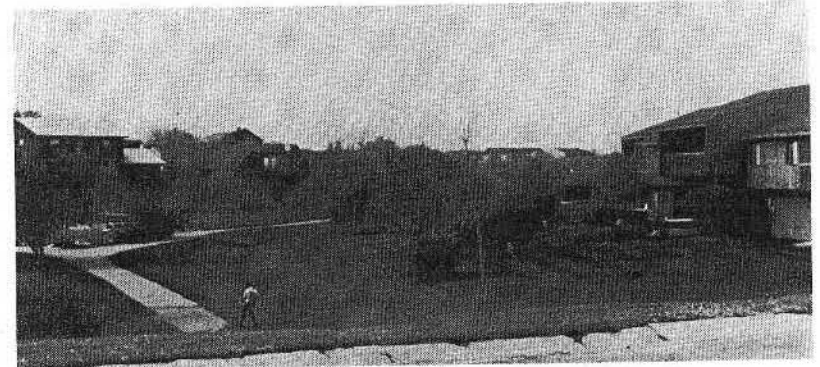


7.3b Norris

7.3 The footpath at Radburn (a) is copied at Norris (b), crosses at street at Greenbelt (c), goes under an underpass at Jonathan (d), and is placed next to a main street at Columbia (e).



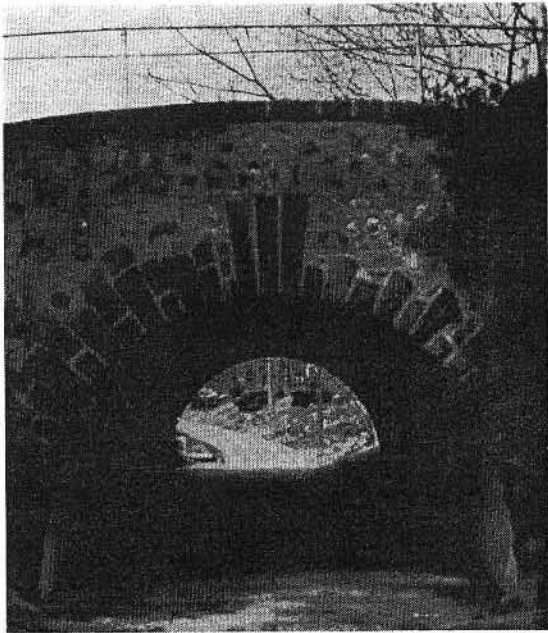
7.3c Greenbelt



7.3d Jonathan



7.3e Columbia



7.4 The underpass at Radburn (a) shows up at Norris (b), Greenbelt (c), and Jonathan (d), and becomes an overpass at Columbia (e).

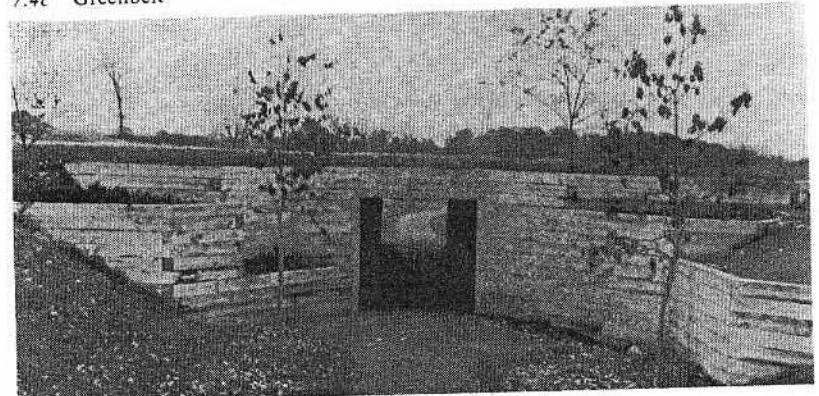
7.4a Radburn



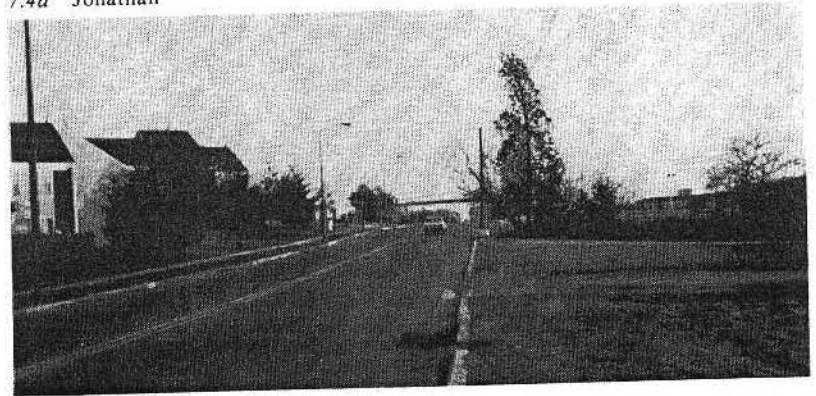
7.4b Norris



7.4c Greenbelt



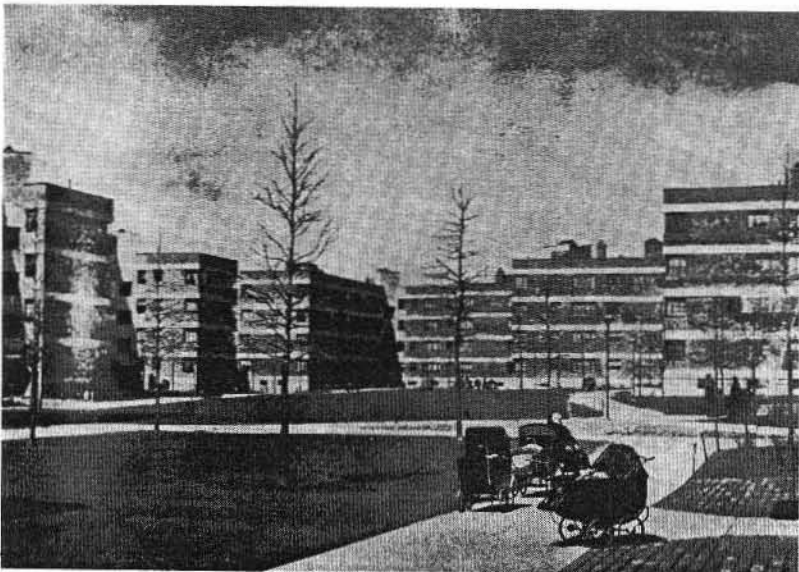
7.4d Jonathan



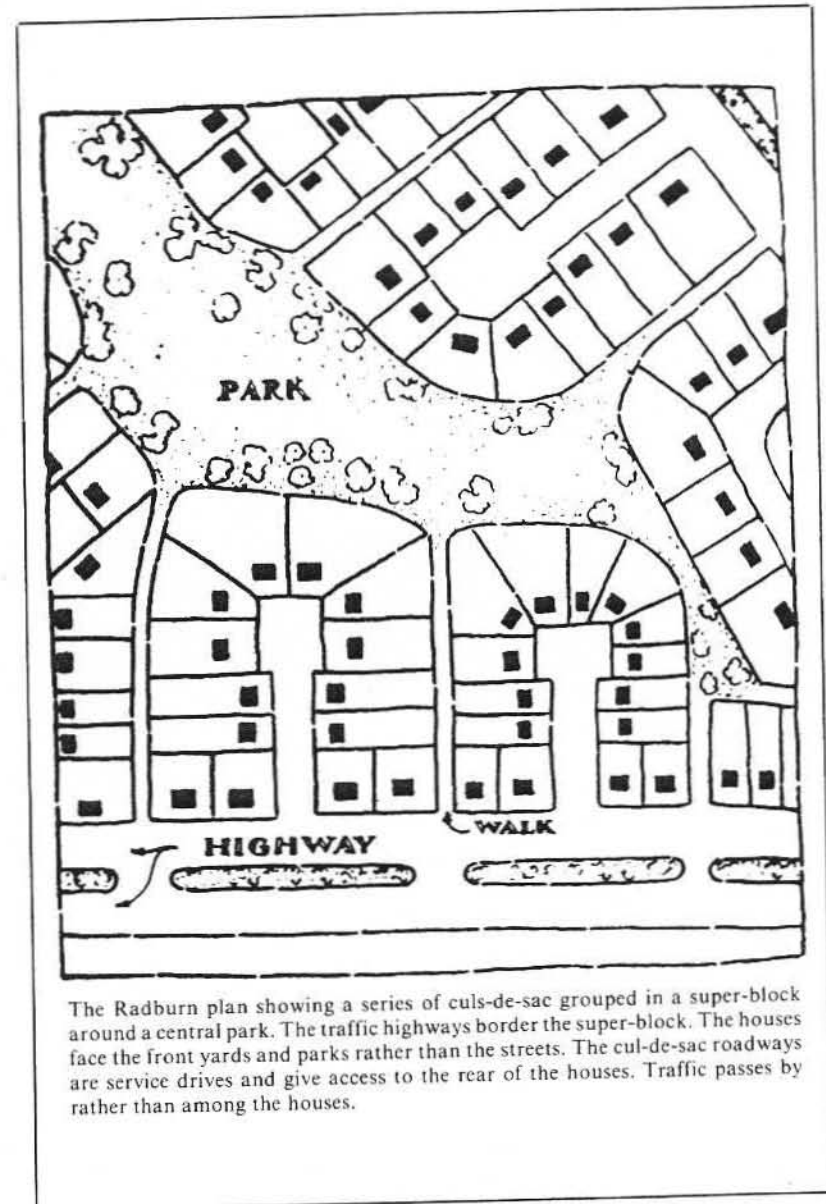
7.4e Columbia



7.5 View of a typical PWA low cost housing project incorporating Radburn principles.



7.6 The interior court of Brooklyn's Williamsburg Houses, also a PWA effort, is safe and serene.



The Radburn plan showing a series of cul-de-sac grouped in a super-block around a central park. The traffic highways border the super-block. The houses face the front yards and parks rather than the streets. The cul-de-sac roadways are service drives and give access to the rear of the houses. Traffic passes by rather than among the houses.

7.7 The 1939 FHA manual reprinted part of the Radburn plan.

testimony to the strength and adaptability of these aspects of the plan; yet the absence of wholesale adoption indicates that the total pattern was still alien to the majority of American land developers. Planners had not convinced them of the plan's desirability. In the main, it remained an ideal, most frequently emulated in public, not private, projects.

With the expansion of public planning programs, the movement—as measured by organizational affiliation—had grown rapidly. However, its actual numbers were small. Furthermore, between the two planning associations, the influence of the government officials' group (ASPO) surpassed that of the professional society (AIP). (Membership figures show ASPO's 450 dues payers in 1934 expanding to 3,600 twenty years later while the AIP 200-member constituency grew to only 1,000.)³⁵ During this time, ASPO took over the direction of the movement. It did so not by membership growth alone but also by extending essential services to local government. In 1949, when ASPO's original grants from the Spelman Fund ran out, its longtime executive director, Walter Blucher, developed the *Planning Advisory Service* and the *Zoning Digest*. Dependent on selling subscriptions, he marketed them to municipal leaders of the expanding metropolitan areas who sought immediate, tangible, technical advice on how to deal with the postwar onslaught of people and automobiles.³⁶ By 1954, these widely circulated publications reached 60 percent of all American cities having populations of 50,000 or more, and all the key federal and state agencies.³⁷ Through these publications, ASPO promoted some Radburn principles—particularly the by now quite acceptable large scale development and hierarchical transportation systems—but it did not fully endorse the clustered superblock. It more readily promoted anti-Radburn policies such as single-lot, large-individual-yard residential zoning.³⁸ The AIP continued to advance Radburn's garden city ideas, but on the whole, these remained textbook principles too utopian for complete American adoption and undercut by ASPO propaganda.

Thus, while the planning movement accepted the Radburn plan as a model, its few practitioners, frequently operating within a relatively unsympathetic environment, could execute only those aspects which melded easily with pre-existent customs. While suburban property and energy were abundant and low priced, the conservation aspects, particularly the superblock, mixed-density residential units and the regional organization of employment, were not attractive to land developers and municipal officials who favored simpler, cheaper Euclidean-based subdivision arrangements. In contrast, the superblock based on the neighborhood principle was more widely applied in postwar public housing projects but with a new twist. The carefully calculated human scale densities of Radburn were distorted as legislative, economic, and political considerations dictated the construction of high rise buildings in slum cleared areas.

Radburn's Fate in the Sixties

In the sixties, the planning movement continued its geometric growth of the fifties. The number of practitioners more than doubled, the number of planning schools expanded to meet the demand, and the opportunities for employment proliferated as the federal government became increasingly involved in urban programs.³⁹ For the first part of the period, the profession's intellectual capital remained primarily tied to the ideals articulated in Radburn.

Basically, the official objectives of the movement remained unchanged from the earlier period. Shortly before the beginning of the decade, MIT professor John T. Howard, also a former president of the AIP, articulated the goals in "City Planning as a Social Movement, a Government Function and a Technical Profession," a paper he presented before the Joint Committee on Planning and Urban Development of the Carnegie Institute of Technology and the University of Pittsburgh. Later the influential study group, Resources for the Future, published the remarks. Howard noted:

The ultimate goals are clearly social although plans themselves are related to physical things and physical places. . . . Within this broad framework, I suggest the following: First would be the arrangement of functional parts of the city—residence, commerce and industry, etc.—so each part can perform its functions with minimum costs and conflict. . . . Second would be linking of all the parts of the city to each other and to the outside world by an efficient system of circulation. Third, the development of each part of the city according to sensible standards—for lot size, for sunlight, for green space in residential areas, for parking in business areas. Fourth, the provision of housing that is safe, sanitary and comfortable and pleasant—in a variety of dwelling types to meet the varied needs of all kinds and sizes of families. . . . Fifth, the provision of recreation and schools and other community services of a high standard of size, location and quality. And sixth, the provision of water supply, sewerage and other utilities and services, adequately and economically.⁴⁰

Radburn's plan of course, continued to act as a model for fulfilling these objectives.

Soon, however, the standard theories came under heavy attack. Leading the critics was *Architectural Forum* author Jane Jacobs, whose 1961 *The Death and Life of Great American Cities* condemned planners' bias toward decentralization as "city destroying ideas" and questioned their indices of blight and deterioration. Her work had been preceded in 1947 by the Goodman brothers' *Communitas*, in which the philosopher-architect team dismissed the highly touted garden city community life with the comment that "rather than live in a Garden City, an intellectual would rather meet a bear in the woods" claiming that such an existence was too lackluster. Following Jacobs in the early sixties, a number of social scientists, including Herbert

Gans, John R. Seeley, and William Moore, Jr., expanded her theses through a series of detailed studies. They concluded that the mindless application of the superblock-neighborhood unit principle in public housing needlessly destroyed the useful social structure of low-income communities. They further charged that projects replacing slums were "badges of social identification and affliction [which] the outside community reacts to as though they were leper colonies and the lives of the residents seem to have neither dimension nor meaning."⁴¹

Soon others joined, calling for a total reevaluation of the field. For example, in 1964 designer Kevin Lynch condemned the use of stereotypical plans noting that the repetition of the garden city and superblock without reference to purpose demonstrated a glaring "unawareness of the vast range of potential city forms."⁴²

Another equally important criticism attacked the profession's traditional reliance on technical expertise coupled with political neutrality. As heirs to the progressive assumption that knowledge of problems would lead to their rapid, scientific solution, planners had long ignored political realities. Hunter College professors Jewel Bellusch and Murray Hausknecht noted this behavior in their 1967 collection, *Urban Renewal: People, Politics and Planning*. They observed that numerous studies, in particular Martin Meyerson and Edward Banfield's documentation of the failure of the Chicago Housing Authority in *Politics, Planning and the Public Interest*, made planners realize that this "naiveté [had to be] abandoned [and] the profession [had to] recognize the intimate relationship of politics and planning."⁴³ From these thoughts, it was not a very long step to the citizen participation-advocacy planning movement that developed in this period. This effort brought the pluralistic nature of American society to the planners' attention, and called for practitioners to represent the interests of a variety of clients, specifically the powerless lower-income groups.⁴⁴

Ironically, some critics continued to support the broader Radburn ideas, now relabeled new town planning. In 1965, Herbert Gans, intent on his criticism of urban renewal, made the following proposal:

If the slums are really to be emptied and their residents properly housed elsewhere the rehousing program will have to be extended beyond the city limits, for the simple reason that that is where most of the vacant land is located. This means admitting the low income population to the suburbs; it also means creating new towns—self-contained communities with their own industries.⁴⁵

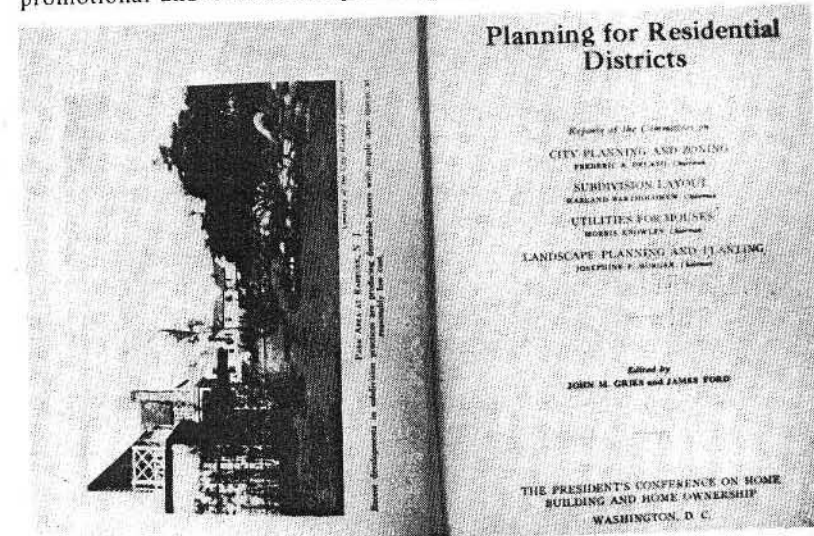
The decade of the sixties was a turbulent period for planning. Former *AIP Journal* editor Melvin Webber caught the spirit of the times in his landmark essay "Comprehensive Planning and Social Responsibility" when he diagnosed the nature of the changes:

City planning is moving through a period of rapid change; some have called it a revolution, so dramatic is the transformation likely to be. The major sign is a growing sophistication. The main prospect is a large increase in the profession's effectiveness. The chief stimulant has been the injection of a large body of theory and method that has been accumulating in the social and behavioral sciences over the decades and which until recently the profession has been largely immune to.⁴⁶

By the late sixties, the movement had absorbed much of the change. The professional associations amended their objectives to reflect the practitioners' activities, which now included the use of new analytical tools—namely the computer—and also added concerns such as environmental issues, energy conservation, and human resources. Nonetheless, as the Gans proposal reflects, the ideals articulated by the Radburn plan lived on to be adjusted for contemporary needs. Their persistence can be further studied in the following survey of their propagation in planning literature.

Radburn's Treatment in Promotional and Educational Planning Literature

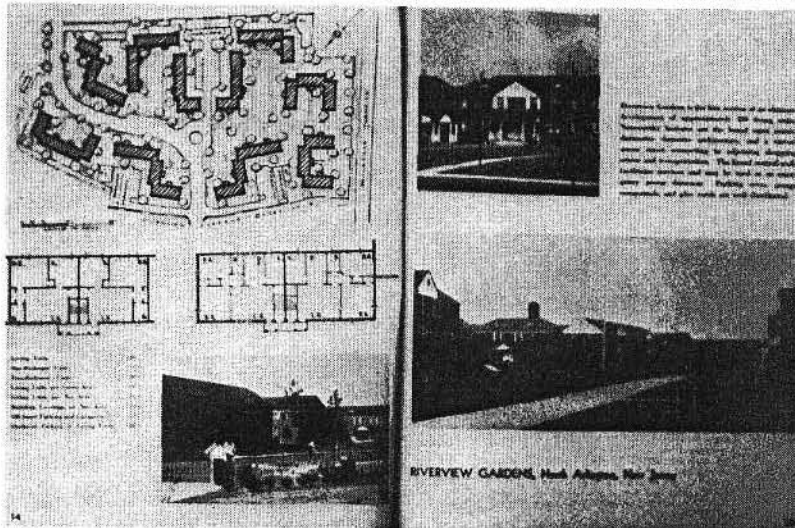
From the outset, Radburn was highly visible. From 1929 to the present, promotional and educational planning literature has consistently pictured



7.8 The report of the Committee on Subdivision Layout of the President's Conference on Home Building and Home Ownership recommended adoption of Radburn principles. (Note the frontispiece.)

and discussed it. Over time, planners have restudied the plan to find new solutions for their own work. Thus, Radburn has been a remarkably resilient model for the movement.

Throughout the thirties, writers looked to Radburn as a major accomplishment. In 1932, the reports of the Conference on Home Building and Homeownership (a meeting called by President Herbert Hoover and attended by three thousand delegates), pictured Radburn in the frontispiece of one, *Planning for Residential Districts*.⁴⁷ In 1934, Thomas Adams's *Design of Residential Areas*, part of the multivolume Harvard City Planning Series, also featured Radburn as the frontispiece (Plate 7.8). Even then Adams recognized its fame: "it is unnecessary to describe the features of the . . . plan in detail as these are well known."⁴⁸ He concluded his critical evaluation of the plan with the judgment that it was a success. Later in the decade, Lewis Mumford's *The Culture of Cities* would promote Radburn, comparing it favorably with similar work by Frank Lloyd Wright and LeCorbusier.⁴⁹ At the same time, the Urbanism Committee of the National Resources Board surveyed 154 American planned communities and focused on Radburn as one of the 29 given detailed coverage.⁵⁰ In 1939, the Federal Housing Administration publicized it in *Planning for Small Neighborhoods* (Plate 7.9), already discussed; its 1947 manual carried on the tradition.⁵¹ In 1949, the passage of a housing act with comprehensive urban renewal provisions led Coleman Woodbury to compile a basic handbook, *Urban Redevelopment*,



7.9 Illustration in *Neighborhoods Built for Rental Housing*, the 1947 FHA manual, shows the incorporation of some Radburn design elements.

Problems and Practices. In this extensive collection of essays, Charles Ascher contributed "Government by Contract in Radburn, New Jersey," an evaluation of the settlement's use of restrictive covenants, giving attention to the possibility of their use in urban renewal sites.⁵² About the same time, two new textbooks appeared: Arthur B. Gallion's *Urban Pattern* and Christopher Tunnard's *City of Man*. Both praised Radburn. Tunnard challenged his readers with this question: "How much longer can we coast along on the . . . reputation for good-looking civic design achieved by Radburn?"⁵³ These texts have been used extensively in schools of architecture and planning.

In the sixties, despite the strife created by differing opinions about the ranking of social and physical priorities, a spate of articles appearing at the time often entitled "Radburn Revisited" showed that professionals and lay supporters alike found the settlement still worth studying.⁵⁴ In 1964 Anthony Bailey, writing in the *New York Herald Tribune*, observed its enduring quality:

To Radburn . . . come engineers, architects and planners from all over the world and Mr. Sporn takes them around to see the parks, lanes, paths, pools and the famous Olmsted-type underpass. . . . There also come study groups from the Urban Land Institute and the FHA . . . and students from Harvard, Princeton and Cornell who . . . reflect on how relevant Radburn seems. . . .⁵⁵

Furthermore, the Radburn visits probably added a vision of the benefits of cluster zoning and planned unit development which municipal governments would begin to accept in this period.⁵⁶

The planners of the seventies have not forgotten Radburn. In 1970, John Lansing of the University of Michigan included Radburn in an important study of six American planned environments, and concluded that Radburn's plan remains a model.⁵⁷ He found its design to have important implications for energy conservation, recording that 47 percent of Radburn's residents shopped for groceries on foot while comparable figures were 23 percent for Reston, and only 8 percent for a nearby unplanned community. Other findings, such as low figures for weekend trips and low average numbers of miles traveled by car per resident, bore out this claim.

In September 1978, *Building Magazine* reported on a contemporary extension of the Radburn concepts, the Harmon Cove project built by Hartz Mountain Industries in the newly reclaimed meadowlands area of northern New Jersey. Only a few miles from its prototype, the forty-acre settlement designed by architect Jerome Larson, Land Design Associates of Long Island, and Hartz Mountain planners has approximately six hundred dwellings clustered around centrally located open space laced with separate vehicular and pedestrian systems, including the typical underpass.⁵⁸

Finally, in the spring of 1979, professional and lay interest arose again, probably stimulated by Radburn's fiftieth anniversary. The *New York Times* ran a feature article in April and *Planning Magazine* had one in May.⁵⁹ In addition, John Gallery, then Director of Housing and Community Development for the City of Philadelphia, reassessed Radburn in an address before the annual meeting of the Society of Architectural Historians. In this talk he emphasized the plan's lessons for him in his current position, noting that the community's mix of residential uses allowing for a multigenerational population was a particularly important model.⁶⁰

Also, in 1979, revisions of the standby planners' textbook, *The Practice of Local Government Planning*, issued by the International City Management Association, included extensive coverage of Radburn in its sweeping "Planning Portfolio." Seeking to demonstrate the story of planning in the United States in the last generation, its author, Louis B. Schlivek, perpetuated Radburn, labeling it "a pioneering new town." Using photographs and text to highlight the major features, Schlivek concluded that this "most ambitious and durable of planning efforts was and is in many ways even more relevant to our present problems than it was at the time it was conceived."⁶¹

Conclusion: Radburn's Impact

Radburn has had a significant impact on planning theory and vision in the twentieth century. Not only did it act as an exemplar of the profession's principles but also its design became a steady resource for practitioners. Furthermore, in every generation since the beginning of the movement, planners—always affected by the economic, social, and political environment of their times—have found answers to specific contemporary problems in Radburn. Though the issues change, Radburn, the icon, does not.

The original group of Radburn designers, the members of the Regional Planning Association of America, developed the plan as a team, each contributing his individual skills and seeking additional advice when needed. Their product, a comprehensive, rational, technical plan, demonstrated the benefits of this prototype city planning process. Later planners would emulate these procedures.

They produced a superior plan. Its complex program addressed contemporary needs, primarily the integration of the automobile into residential life. Its failure to anticipate mid-century multiple car ownership and its awkward positioning of dwellings with back doors fronting the streets were notable weaknesses, but they were excused by the originality of Radburn's suggested suburban pattern based on the hierarchical arrangement of streets and large recreational areas. Over time the plan acted as a permanent resource for practitioners' reference. Durable and ingenious, the design suggested

seminal solutions to a panoply of new concerns ranging from community organization to energy conservation.

In succeeding years, planners considered Radburn a success, a view based on the plan's intellectual strength, not on its execution. Their stance bolstered their ambitions for promoting a profession claiming expertise in land use matters. In the thirties, planners working with various New Deal projects treated the Radburn design as dogma; but they were only able to propagate parts of it in efforts as diverse as the Resettlement Administration's Greenbelt towns and Federal Housing Administration regulations. In training new generations of planners, practitioners proselytized the Radburn plan—along with other adaptations—with the result that individual design devices became associated with enlightened planning.

However, the New Deal planners failed to convince the majority of land developers, public and private, to adopt the complete Radburn concept. The consequent application of diluted Radburn forms to planning problems, in particular in the postwar public housing and urban renewal programs, set the scene for later attacks on physical planning solutions. (Certainly, in this period Radburn was only one of many examples of designs for large-scale neighborhood unit development, but it was well known and lingered on in the literature as a normative pattern.)

By the sixties, critics discredited Radburn and all that it had come to represent. They attacked the planners' assumption that designs based on middle-class values could promote social progress. They indicted the technically based procedures producing physical plans for their failure to include citizens in the planning process. Ironically, they called for holistic solutions, such as the original Radburn planners had suggested. Even in these turbulent times, then, the Radburn idea persisted but in a new form.

Planners have based their positive reevaluation of Radburn in the seventies on a new application of the plan's design and on its seeming proof of the field's accomplishments. As professionals seek to reassert themselves as technically competent, Radburn provides useful evidence of this expertise.

Finally, this brief case study of Radburn demonstrates a chronic issue in the planning field: the divergence of theory from practice. Postwar suburban developments clearly did not follow the Radburn pattern, even though planners participating in this radical transformation of the American landscape held the Radburn plan as an ideal. The profession was too weak, its practitioners too few, and its existence too market-oriented for practicing planners to overcome deeply ingrained political, economic, and social traditions with the rational but radical goals expressed by the Radburn concept.

Unquestionably, Radburn has been an important influence in the intellectual tradition of the American planning movement. It has served as a

testimonial of the profession's potential. It has acted as a permanent reference for generations of planners, and it persists as a respectable icon in the field's literature. However, as an applied pattern, it has failed to be a determining force.

NOTES

1. John Reys in *The Making of Urban America* (Princeton: Princeton University Press, 1965) gives an ample survey of American town planning from the colonial period to the modern era. Mel Scott in *American City Planning Since 1890* (University of California Press, Berkeley, 1969) covers the growth of contemporary efforts. John L. Hancock has written two excellent studies of the early planning movement: "Planning in the Changing American City, 1900-1940," *Journal of the American Institute of Planners* (Sept. 1967) and "John Nolen, The Background of a Pioneer Planner," *Journal of the American Institute of Planners* (November, 1960).
2. The growth of the housing movement can be found in Roy Lubove, *The Progressives and the Slums* (Pittsburgh: University of Pittsburgh Press, 1962) and E. L. Birch, "Woman-Made America: The Case of Early Public Housing Policy," *Journal of the American Institute of Planners* (April, 1978). The emergence of the social welfare movement is covered by Allan F. Davis, *Spearheads for Reform* (New York: Oxford University Press, 1967) and Robert Bremner, *From the Depths, The Discovery of Poverty in the United States* (New York: New York University Press, 1964).
3. This statement of purpose comes from the Constitution of the American City Planning Institute, June 1925.
4. Scott in *American City Planning* discussed the American Civic Association and its development. Early planners such as Nelson P. Lewis, Henry V. Hubbard, and John Nolen were extremely active in the professional organizations pertaining to their respective areas of interest, engineering and landscape architecture.
5. Correspondence among the early officers reveals their concern with membership standards. See, for example, George Ford to John Nolen, letters through 1927 in the John Nolen Papers, City Planning Collection, Cornell University, Ithaca, New York. Among the requirements for membership were eight years of practical high level experience and personal endorsements from sponsors.
6. Thomas Adams to John Nolen, October 17, 1926, John Nolen Papers.
7. John Nolen, "Twenty Years of City Planning Progress in the United States," in *Planning Problems of Town, City and Region*. Papers and Discussions at the 19th Conference on City Planning (Washington, D.C.: National Conference on City Planning, 1927), p. 19.
8. *Ibid.*
9. *Ibid.*, p. 20.
10. Roy Lubove, *Community Planning in the 1920's: The Contributions of the Regional Planning Association of America* (Pittsburgh: University of Pittsburgh Press, 1962). Clarence Stein, *Towards New Towns for America* (Cambridge: MIT Press, 1973).
11. *Ibid.*, pp. 68-72.
12. Clarence Stein to Catherine Bauer, September 27, 1961, Clarence Stein Papers, City Planning Collection, Cornell University.
13. "Summary of Discussions of Problems Connected with a Garden City at a Series of Conferences of the Regional Planning Association of America," Oct. 8 and 9, 1927, Clarence Stein Papers.
14. "Problems Connected with a New City," Clarence Stein Papers.
15. Charles Ascher to Edith Elmer Wood, February 6, 1928, Edith Elmer Wood Collection, Avery Library, Columbia University.

16. Actual codification of the planning process did not appear until much later. See, for example, Alan Altshuler, *The City Planning Process* (New York: Cornell University Press, 1968).
17. See, for example, Louis Brownlow, "Some Problems in New Planning," in *Proceedings of the National Conference on City Planning* (Philadelphia, 1929); "Economy, Charm and Safety of the Cul de Sac Street," *American City Magazine* (November, 1928); Henry M. Propper, "Radburn's Unique Plan Shows Results," *American City Magazine* (November, 1929); and "New York's First Satellite Town, An Interview with Mr. Alexander M. Bing," *National Municipal Review* (March, 1928).
18. Louis Brownlow, "Radburn: A New Town Planned for the Motor Age," *International Housing and Town Planning Bulletin* (February, 1930); Committee on Regional Plan of New York and its Environs, *Regional Plan of New York and its Environs*, Vol. VII (New York: Russell Sage Foundation, 1929); Stein, *Towards New Towns*, pp. 37-73.
19. "Radburn, A Town Planned for Safety," *The American Architect* 137 (January 1930): 42.
20. Frank So, Israel Stollman, Frank Beal, and David Arnold, *The Practice of Local Government Planning* (Washington, D.C.: International City Management Association, 1979), p. 447.
21. "Report of the Committee on Re-organization of the National Conference on City Planning," Spring, 1934, Russell Van Nest Black Papers, City Planning Collection, Cornell University.
22. For further discussion of these changes see Donald A. Krueckeberg, "The Story of the Planner's Journal, 1915-1980" and E. L. Birch, "Advancing the Art and Science of Planning: Planners and their Organizations, 1909-1980," *Journal of the American Planning Association* (January 1980).
23. Augur, "Radburn—The Challenge of a New Town," *Michigan Municipal Review* (February 1931): 40.
24. For details see Aelred J. Gray, "The Maturing of a Planned New Town, Norris, Tennessee," *The Tennessee Planner* (xerox sent to the author by the TVA Library, Knoxville, Tennessee); Tracy B. Augur, "The Planning of the Town of Norris," *American Architect* (April, 1936); Joseph L. Arnold, *The New Deal in the Suburbs* (Athens: Ohio University Press, 1971); and Clarence Stein, *Towards New Towns*.
25. British new town administrators used Radburn principles. By the sixties Radburn had become common parlance for them. See for example, A. E. J. Morris, "Private Sector Housing: The Radburn Dilemma," *Official Architecture and Planning* 33 (May 1970); Michael Fagence, "The Radburn Idea," *Built Environment* 2 (August, 1973).
26. Scott, *American City Planning*, p. 312.
27. John T. Howard to E. L. Birch, Sept. 5, 1979; Clarence Stein and Catherine Bauer, "Store Buildings and Neighborhood Shopping Centers," *Architectural Record* (February 1934).
28. National Resources Committee, *Urban Planning and Land Policies* (Washington, D.C.: U.S. Government Printing Office, 1939); Augur, "Radburn," p. 40.
29. Housing literature of the period promoted this view. See, for example, Catherine Bauer, *Modern Housing* (Boston: Houghton Mifflin Company, 1934); Louis Pink, *A New Day in Housing* (New York: John Day Company, Inc., 1928); Kenneth K. Stowell (ed.), "Housing and the Emergency," *Architectural Forum* (March 1932).
30. This is only one of many such statements of this and later periods. President's Conference on Home Building and Home Ownership, *Housing and the Community* (Washington, D.C.: U.S. Government Printing Office, 1932), pp. 47-48.
31. Wright struggled to convince his followers in an article appearing in *American City* (December 1928). He wrote:
In order to appreciate the economics of the plan it is necessary to examine an individual lane. This lane contains 16 house lots averaging 43 feet wide or 680 feet of frontage. The lots are served by 1/2 of 230 linear feet of utilities on the main street and 300 lineal feet from the

center of this street to the end of the lane, a total of 415 lineal feet of utilities or 26 feet per lot. However, let us suppose the street end of the land containing the first 10 lots to be doubled on axis A, forming a normal block 400 feet long continuing 20 lots, averaging 45 feet. This would require twice 1/2 of 230 lineal feet of utilities on the two end streets, and 4 feet of utilities from center to center of the main streets, total of 710 lineal feet for 20 lots or 35.5 lineal feet of utilities per lot, an increase of 36 percent in utilities required by the Radburn plan. . . . Admitting the obvious problems brought up by this or any other new method of planning, it would seem worth an experiment to save from 25 to 30 percent of the utilities now required in residential neighborhoods.

Federal Housing Administration, *Planning Neighborhoods for Small Houses* (Washington, D.C.: U.S. Government Printing Office, 1939).

32. *Ibid.*, p. 31.

33. *Ibid.*, p. 64.

34. Henry J. Aaron, *Shelter and Subsidies* (Washington, D.C.: The Brookings Institution, 1972), p. 15.

35. American Society of Planning Officials, *Newsletter* 20, 9 (September 1954): 6; Perry Norton, Interview, Leonia, New Jersey, January 29, 1979; "Kit for Board of Governors," 1952, APA Archives, Washington, D.C.

36. For further discussion, see Birch, "Advancing the Art and Science."

37. *ASPO Newsletter* (September 15, 1954): 7.

38. A survey of the *ASPO Newsletter*, the list of *Planning Advisory Service* topics, and the *Zoning Digest* reveals these tendencies.

39. Birch, "Advancing," p. 34.

40. John T. Howard, "City Planning as a Social Movement, A Governmental Function and a Technical Profession," in Harvey S. Perloff (ed.) *Planning and the Urban Community* (Pittsburgh: University of Pittsburgh Press, 1961), pp. 153-154.

41. Jane Jacobs, *The Death and Life of Great American Cities* (New York: Vintage Books, 1961), p. 18; Paul and Percival Goodman, *Communitas* (New York: Vintage Books, 1947), p. 35; Herbert Gans, *The Urban Villagers* (Glencoe: The Free Press, 1962); John R. Secley, "The Slum: Its Nature, Use and Users," *Journal of the American Institute of Planners* (February 1959); William Moore, Jr., *The Vertical Ghetto* (New York: Random House, 1969), p. 214.

42. Kevin Lynch, "Quality in Design" in Lawrence B. Holland (ed.) *Who Designs America?* (New York: Doubleday, 1966), p. 123. He went on to decry the lack of innovation among designers, contemptuously observing: "We notice that the plan for a new port city in Africa looks suspiciously like a student scheme for an American 'new town.'" The Goodmans also questioned some aesthetic assumptions of elements of the Radburn plan; "Urban beauty does not require trees and parks. . . . And when finally . . . the aim is to make a city in the park, a Garden City, one has despaired of city life altogether." In all fairness, the Goodmans did approve of greenbelts, an integral part of garden cities which actually did not appear at Radburn because of the CHC's objections to their expense. In *Communitas* they were working toward a clearer definition of urban space (*Communitas*, p. 50).

43. Jewel Bellusch and Murray Hausknecht, *Urban Renewal: People, Politics and Planning* (New York: Doubleday, 1967), p. 214.

44. For a discussion of advocacy planning see Paul Davidoff, "Advocacy and Pluralism in Planning," *Journal of the American Institute of Planners* (November, 1965); Lisa R. Peattie, "Reflections on Advocacy Planning" and Richard S. Bolan, "Emerging Views of Planning" in *The Comprehensive Planning Process: Several Views* (Washington, D.C.: AIP, 1977), 45.

45. Herbert Gans, "The Failure of Urban Renewal, A Critique and Some Proposals," *Commentary* (April 1965): 35.

46. Melvin M. Webber, "Comprehensive Planning and Social Responsibility," *Journal of the American Institute of Planners* (November 1963): 237, or reprinted in *The Comprehensive Planning Process*.

47. President's Conference on Home Building and Homeownership, *Planning Residential Districts* (Washington, D.C.: U.S. Government Printing Office, 1932).

48. Thomas Adams, *Design of Residential Areas* (Cambridge: Harvard University Press, 1934), p. 237.

49. Lewis Mumford, *The Culture of Cities* (New York: Harcourt Brace Jovanovich, Inc., 1938), p. 437.

50. National Resources Committee, *Urban Planning and Land Policies*.

51. Federal Housing Administration, *Neighborhoods Built for Rental Housing* (Washington, D.C.: U.S. Government Printing Office, 1947).

52. Coleman Woodbury, ed., *Urban Redevelopment Problems and Policies* (Chicago: University of Chicago Press, 1953), pp. 278-93.

53. Arthur B. Gallion, *The Urban Pattern* (New York: D. VanNostrand Co., 1950). This book has had four printings, the latest in 1980. Christopher Tunnard, *City of Man* (New York: Scribner, 1953), p. 343. This book was also reissued recently. In addition, Tunnard and Henry Hope Reed's *American Skyline* (New York: Houghton Mifflin, 1953) dealt extensively with Radburn.

54. See for example, Henry M. Wright, "Radburn Revisited," *Ekistics* 199 (March 1972), a reprint of an earlier article; Alden Christie, "Radburn Reconsidered," *Connection* 7, 1964. The latter piece was critical of the settlement as its author's views reflected the unrest of the times.

55. Anthony Bailey, "Radburn Revisited," *New York Herald Tribune*, reprinted in *The Regional Plan News* (December 1964).

56. The political leaders were aided by several publications, including Frederick H. Bair Jr.'s "How to Regulate Planned Unit Development for Housing" (Chicago: ASPO, 1965) and the U.S. Federal Housing Administration's *Planned Unit Development with a Homes Association* (Washington, D.C.: U.S. Government Printing Office, 1964).

57. John B. Lansing and Robert W. Marans, *Planned Residential Environments* (Ann Arbor: University of Michigan, 1970), p. 213.

58. Michael B. McNally, Vice President of planning and engineering, Hartz Mountain Industries, Interview, June 25, 1980; Hale Cole, partner, Land Design Associates, Interview, June 27, 1980; "The Meadowland Tweet Smell of Success," *Building Magazine*, September 1978 (reprint).

59. Paul Goldberger, *New York Times* April 19, 1979; Mildred Jailer, "Model Community Little Changed at 50," *Planning Magazine* (May 1979).

60. John Gallery, "Radburn, 1929-1979," Annual Meeting, Society of Architectural Historians, April, 1979; John Gallery, Interview, Savannah, Georgia, April 5, 1979; January 13, 1979.

61. International City Management Association, *The Practice of Local Government Planning* (Washington, D.C.: 1979).