

Landscape Design and the Modern Highway

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RESEARCH IN TRANSPORT

The significant technological advances in highway design and construction are regularly enumerated and discussed, but some who are seriously concerned with highway engineering, including outdoor aesthetics, believe that perhaps the most basic and fundamental phase of investigation is transport research.

Reports of the Committee on Roadside Development published in recent years make no reference to a new type of transport which has been in the research stage for some time. This proposed new method of transportation is termed ground-cushion supported vehicles, and when perfected for civilian use it is predicted that it will render obsolete the present-day highway. The Director of Defense Research and Engineering, the staffs of Research and Development (U.S. Army and Navy) have been engaged in collaboration with various industrial firms for some time in an effort to perfect ground-cushion transport for defense use.

At the Hearings on "The Ground-Cushion Phenomenon" before the Committee on Science and Astronautics of the House of Representatives (86th Congress), Karl Kucher of the Ford Motor Co. said: "We hope some day to have a flyable automobile, if you please, rather than a roadable airplane. These are different, fundamentally. Again you are in the philosophical area of concept. Our convictions are that a flyable automobile is feasible, provided the power-to-weight ratio is great enough and your anticipatory sensing can direct the necessary control. We reject the concept of widespread wings and ailerons as necessary for achieving stability in flight."

John McCormick, Representative from Massachusetts, after asking if the Ford Company is not looking to the future, and being assured that it is, stated: "That is a serious question, and a very important question, too. I am thinking of the economic impact of these future developments upon peoples and individuals. The new economic system that might develop, the wiping out of billions of dollars of invested capital in what are now up-to-date activities, but which would be completely out-dated in the world of tomorrow. I assume those are some of the thoughts, applied not only to this mode, but telephone, television, and everything should be looking ahead; is that right?"

J. B. Macauley, Deputy Director of Defense Research and Engineering, was asked when he foresaw some practical use developing from this theory. He replied that such use would occur in the period 1965-70.

J. G. Fulton, Representative from Pennsylvania, said: "There is no particular necessity of revising our highway design, is there, for this type vehicle operating over the ordinary highway? Maybe you are making all our highways obsolete all over this country, and our highway program will have to be revised before we go ahead and spend \$75 billion on old-fashioned highways."

C. W. Bollum, Sr., Chairman of the Board and President of Spacetronics, Inc., replied: "Congressman, we think there is a lot of work to be done with the various highway departments in changing some of the rules and regulations; we feel that in the future you may have the grading to do that you have today, but instead of putting down ribbons of concrete, you may use some sod, and you will glide over the sod never touching it."

HIGHWAY ESTHETICS

Despite the possibility of future transport innovations, the present problems of roadside development must be faced.

Are enough people in the United States sufficiently cognizant of the over-all picture of roadside development today to know if present efforts will result in a highway network which is excellently designed and constructed from both the physical and esthetic standpoints? Considering the tremendous effort and expense involved, the Interstate System, and ultimately the entire network of highways should be a thing of beauty, a genuine contribution to civic design in this country and the world.

The observations of a number of foreign experts in outdoor esthetics who have visited America during the past decade are interesting in this respect, because it appears that the American reputation in the international field of civic art leaves much to be desired.

In 1950 a committee of experts in civic design from Europe was employed by the American Institute of Architects to make a survey and report their findings. This group visited all sections of the United States. On being pressed for a frank report, the chairman replied it appeared that wherever man had gone in America, he had left a trail of ugliness—through the cities and towns, the agricultural regions, public

parks and beaches, and along the highways. This visit was made shortly after World War II and conditions have improved somewhat since that time, but the visitors were able to see that the unchecked strip development along the highways, the billboards, the block after block of undistinguished residential and public architecture, the treeless subdivisions, and the seemingly too many service stations draped with garish pennants waving in the breeze could not be attributed to the War. It was clear that man's impact on the scene of America had been to exploit rather than to cherish and cultivate.

A number of distinguished landscape architects here from Europe, Asia and South America attended the Biennial Congress of the International Federation of Landscape Architects in 1958. It was a first visit for most of them, and the majority of these delegates traveled to various parts of the country.

A French landscape architect, after traveling to Washington from New York by bus stated politely that he was pleased with all he had observed—and then added that he was astounded to see the countless number of power and telephone poles paralleling the highways and more especially along the streets of Washington in front of government buildings, some of which had cost 2 or 3 million dollars. He stated that no poles of this sort marred the beauty of Paris because the lines were placed underground.

A Swiss landscape architect then pointed out that in some European countries electric power companies were engaging the consultation services of landscape architects. They were being used to site the location of cross-country lines to subordinate these man-made elements to the landscape, and integrate them with the existing scenery in the most inconspicuous way possible.

A representative from Japan told of his astonishment in observing how ruthlessly some of the highways cut across the countryside, dividing communities and cities. He also confessed that he found an automobile drive on Chicago's Outer Drive during the afternoon rush hours to be a new and rather frightening experience.

The President of the British Institute of Landscape Architects, who made a comprehensive tour stated:

The parkways and some of the throughways are magnificent, but many of the other roads are depressing: a means of reaching a destination rather than a part of pleasant living. A void between home and wilderness is inevitable in a pioneer country, and by European standards America is still that, with all the energy and initiative, all the restlessness and rawness which it implies. Fortunately the two bridge ends of home and wild are firmly held. No home can excel the American home at its best, and no other country can show so many homes of high standard. At the other end the wilderness is well and jealously guarded by the National Park Service. But between them lie great areas where nature has been trodden down and man has not yet created his civilized alternative.

How far is this no-man's land the reason for the American urge to go places, ever faster and further? How soon can a landscape be developed which invites men to linger, to enjoy a journey of pauses rather than of speed, to look, to stroll, to see.

In all parts of the U.S.A. I found my greatest lack was the absence of a certain quiet humanized background to life which in many European countries makes the simple act of living a thing of pleasure. The American scale is that of the automobile, not of the human body, which seems to feel a stranger. One may find reassurance in the delightful homes, humanized in the best sense of the word, or one may travel rapidly to some place of scenic interest. But apart from a few of the older villages which have escaped rapid growth, there is little humanized background in the open air.

At the 1958 IFLA Congress, the professional collaboration of architects, city planners, engineers and landscape architects which produced the new towns of Vallingby and Blackborg, Sweden, was discussed with Scandinavian landscape architects who were present. This revealed that the United States is approximately 50 years behind Sweden in providing the legislation necessary to make such skillfully integrated professional teamwork possible.

LANDSCAPE DESIGN PRINCIPLES

Civil engineers have said that they feel the medium of landscape architecture is a loosely defined one. Some of them have asked if the work of the practitioner of this design profession is not the result of a highly individualized art based on idealized and vague concepts rather than a rational application of generally accepted principles.

Landscape architecture is a broad field which partially overlaps but does not pre-empt the prerogatives of engineering, architecture, agriculture, art, sociology and other specialties with which it is concerned. Its strength and effectiveness lie in its wide scope and its partial overlapping of several fringe areas.

Landscape architecture is an art, a science, and a craft all in one. A landscape architect is an expert who designs outdoor space for man's use and enjoyment. Lessons learned from a close study of nature, combined with a knowledge of the history of landscape architecture and a thorough grounding in the principles of design as they are applied in the visual arts, form the basis of a practitioner's philosophy of landscape design.

CONCLUSION

Despite the great technological accomplishments of the United States, a mature approach to problems of physical planning and outdoor esthetics as they relate to large and small land areas has not been assumed. The landscape architect is in the most important position of any member of a design profession to solve the broad as well as the minute and detailed problems of highway esthetics. Since the beginning of highway systems, the civil engineer has always been regarded as indispensable for handling the technical engineering phases. The time has arrived when there must be closer collaboration between the practitioners of these two professions to secure ideal integration and correlation of effort in solving the complex problems of design of this linear element in the landscape.

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