## **Book Reviews**

## **Emergence of a Modern Profession**

American City Planning since 1890. A History Commemorating the 50th Anniversary of the American Institute of Planners. MEL SCOTT. University of California Press, Berkeley, 1969. xxiv + 748 pp., illus. \$17.50. California Studies in Urbanization and Environmental Design.

In 1917 a group of architects, engineers, lawyers, and men in other professions organized the American City Planning Institute. A dozen years later Harvard established our first school of city planning. Thus Americans had already done a great deal of city building, and the urban population had outstripped the rural, before the city planning profession took form. Since then, the new profession has played a significant part in efforts to remedy the defects of unplanned urban development inherited from the past and to create better urban communities for the future.

As its 50th birthday neared, the American Institute of Planners (so renamed in 1939) commissioned the writing of a history. It is obvious that the work deeply absorbed its author, an experienced planner, who produced (two years late for the anniversary) a very large book. Fortunately Scott is also an experienced writer, and the book is as readable as would be expected of a work that attempts to survey so broad and complex a subject in a dispassionate manner,

This is not a history of the institute or of the profession, but a planner'seye view of the city planning movement and of some of the social, economic, and political forces that have affected it. The author relies heavily upon the published materials to which city planners were being exposed as their profession developed: speeches at their annual meetings, articles in their journal, study reports, and city plans. Sometimes the use of these sources gives a peculiar slant to the story, as when we learn of the pioneering Radburn (New Jersey) plan through a quotation from a nonplanner who happened to discuss it at an annual meeting. But the method has its virtues, offering useful insights into the formation of a new professional mentality. The gradual widening of the planner's horizon to include not just the city but the whole metropolis, and the social as well as the physical aspects of urban development, is well depicted.

Especially valuable are Scott's descriptions and interpretations of some important events and forces that have both stimulated and limited American city planning. These include the Chicago World's Fair of 1893, which gave a powerful impetus to the City Beautiful movement; the pell-mell rush by cities and towns to adopt zoning ordinances (usually without benefit of an underlying plan) after New York led the way in 1916; the brief splurge of planning activity in state governments in response to the leadership of the National Resources Planning Board in the 1930's; and the proliferation of federal grant-in-aid programs during the last 20 years.

Since Americans seem to be more dissatisfied with the condition of their cities now than they ever were, a reader can hardly refrain from scanning these pages for clues to where we have gone wrong. Have we had too little city planning? Has the profession been giving us wrong answers? Have we failed to heed the planners? Or do our problems lie in a different realm? History seems to offer some grounds for affirmative answers to all these questions.

The small band of founders grew very slowly. Scott tells of repeated challenges which were not adequately met, partly for lack of qualified manpower a recent example being the interstate highway program. The institute had only 240 members in 1945, when the nation stood on the threshold of a vast urban expansion. Although membership increased rapidly to 2100 in 1958 and 3800 in 1965, these numbers still seem pitifully small when one notes that in the latter year there were more than 700 cities in the United States with populations over 25,000 and that planners are needed also in many counties, the state governments, several federal agencies, and the universities and other institutions.

But the planners were not always headed in the right direction. From the early days through the 1930's, many of their references to slums included the terms "demolition" or "removal." A more positive outlook, emphasizing production of better housing, might have prevented much suffering. The destruction of the old dwellings, at a time when little low-cost housing was being built and rural people were pouring into the cities, often led to the overcrowding of other housing, which soon was as deteriorated as the old slums.

Of course the planning profession, which for the most part strongly supported public housing, can hardly be blamed for the limited scale of our public housing programs. The most prominent historical theme in Scott's book is the failure of government to make use of the planners' work. City plans are well known for their tendency to gather dust on the shelves at City Hall, and Scott mentions many meritorious proposals that have gone largely unheeded to this day, such as one for neighborhood centers for public and social services (proposed by a St. Louis committee in 1907), recapture of costs of municipal improvements by condemnation of excess land or by fiscal devices (Benjamin C. Marsh, 1908; John Nolen, 1912), and use of eminent domain to assemble land for new towns (Thomas Adams, 1924).

Thus the story inevitably leads from the realm of planning to the realm of politics. The slow growth of the profession was partly due to the slowness of cities to employ planners; the focus on slum "removal" was dictated by the fact that there was political support for renewal of business districts but not for public housing; the failure to provide neighborhood centers or build new towns was a failure of political institutions. Scott devotes perceptive attention to the political milieu at every stage. But as the narrative draws to a close, it becomes mired in ever-longer descriptions of federal aid programs. These have provided greatly increased funds for the work of the planners, but one finds little evidence that they can, as presently constituted, overcome or greatly change the local attitudes and

institutions that have so severely limited the accomplishments of the profession. One hopes that the historian of the next half century will be able to record a more constructive joining of plan and action than we have yet achieved.

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## **Processing Sensory Information**

**Principles of Perceptual Learning and Development.** ELEANOR J. GIBSON. Appleton-Century-Crofts, New York, 1969. x + 538 pp., illus. \$8.50. Century Psychology Series.

It will not be possible to teach or even discuss the topic of perception for many years to come without bringing in the name of Gibson. James J. Gibson made a major theoretical statement about the nature of the perceptual process in his book The Senses Considered as Perceptual Systems in 1966 (Houghton Mifflin); and now Eleanor J. Gibson has produced a book about perceptual development, a book which is much broader in scope than her husband's and clearly intended for use as a textbook, but which just as clearly makes its own theoretical contribution. This book will have many uses, not all of them confined to the special aspect of perception denoted by the title.

After an introductory chapter defining the subject of perceptual learning and a chapter on the traditional theories of perception-Helmholtz, Titchener, William James, and the Gestalt school-the author devotes two chapters to contemporary theories of two major varieties: Cognitive theories are those that emphasize various internal processes such as hypotheses, inferences, and attitudes; in this category she places Brunswik's probabilistic cue learning theory, the transactionalism of Ames, Cantril, and Ittelson, and the schema theories of Bartlett and Vernon, as well as the theories of Piaget and Bruner. Response-oriented theories are those that emphasize the role of more overt responses in the perceptual process; among these are the motor copy theories (and she includes Hebb and J. G. Taylor along with the Soviet theories) and the discrimination theories such as those that emphasize the acquired distinctiveness of cues. She considers both the cognitive and the response-oriented theories to be enrichment theories in that the organism is

presumed to add something to the stimulus input, something that makes the stimulus more meaningful and possibly more complex. Whatever the rightness of her classifications (and certainly there will be some objections from those classified), these early chapters provide an excellent survey of the diversity of theories of perception, one that will be useful in any study of that subject.

The next four chapters are devoted to the development of her own theoretical position, which she terms differentiation theory, in contrast to the enrichment theories. For her, differentiation theory is unequivocally stimulus-oriented, for what is learned is the nature of the stimulus, its properties, its distinctive features, its invariants. In the learning process abstraction, selective attention, and filtering or rejection of unwanted information all play a large role. While such experimental techniques as the use of verbal labels may improve perceptual discrimination, they do so not by enriching the stimulus through an associative process but by providing information to the experimental subject concerning pertinent distinctive features or higher-order properties of the stimulus. This theoretical position puts Gibson comfortably within the current informationprocessing approaches to the study of perception, in that she is concerned with the organism's role in obtaining information about the environment and then doing something about it. But the doing something about it definitely is not itself perception: it is only a consequence of a process.

The rest of the book deals with various aspects of perceptual development, and the topics range widely from the development of the aspects of perception that the author considers most important (perception of objects, space, events, representations, and coded stimuli) and that are most directly pertinent to her own theoretical position, to topics much less easily encompassed in it, such as phylogenesis of perception and even imprinting. When she is dealing with the latter topics, or for example with distortions of the visual field with special lenses, the exposition has less a feeling of flow. Yet it is to her credit that she chose to write a book on perceptual development, and did not confine herself to those aspects of that subject that easily fit the informationprocessing approach she favors. The result is a first-rate text and reference book.

Gibson does not herself use the term information processing in describing her point of view. I have used it because her theory does comfortably fit into current notions about information processing (the four chapters outlining her own theory can easily be used in a course on information processing). But I have used the term also to contrast the point of view Eleanor Gibson elaborates with the one James Gibson has stated. Clearly the two Gibsons think much more alike than differently, but both the similarities and the differences so epitomize some general problems in the study of perception that a bit of comment on this point is worth while. They agree entirely that perception is about the world out there; they are both realists in the epistemological sense. Both are critical realists, arguing not that the world is known in a simple isomorphic fashion but rather that its properties must be deduced, possibly inferred, from complex informationseeking activities of the organism. In line with this position, they also agree that the role of the overt response in an experiment on perception is as an indicant of a process, and is not itself the process. In fact, for both of them this is a rather important point.

Where are the differences? James Gibson is very much concerned with understanding perception as knowing of the world, as cognition in its literal sense. In fact, he has more than once been heard to say that perception is synonymous with cognition. Thus for him it is reasonable to ask, for example, what the nature of depth perception is. It is not enough to know that one depth can be discriminated from another; rather, a single perceptual experience directly leads to the experience of depth, and it is worth asking what the nature of that experience is. For such questions even phenomenal report is at times a necessary experimental procedure. Eleanor Gibson. on the other hand, has emphasized an approach to perception much more in the tradition of discrimination learning, a tradition which has always depended on overt discriminative responses. Thus she defines the difference between perceptual skills in terms of the experimental response required. To illustrate, a detection experiment is one that requires a response indicating presence or absence; thus energy detection and determination of whether a target letter held in memory exists in a given display of letters are both called detection processes, an association that I find

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