in the discussion of chain addition polymerization. The authors manage to cover a surprising amount of territory in a relatively modest space and succeed in bringing the reader up to date on most subjects.

The book appears to cover the main principles required for understanding polymerization reactions. It is valuable to the serious research worker, less as a compendium of work done than as a guide to the handling and study of polymerization reactions. There is an ample supply of the former but too few of the latter, so this book should fill a real need.

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Urban Time Allocation

Human Activity Patterns in the City. Things People Do in Time and Space. F. STUART CHAPIN, JR. Wiley-Interscience, New York, 1974. xxiv, 272 pp., illus. \$12.50. Wiley Series in Urban Research.

Analysis of the spatial distribution of social populations and activities has been a revealing approach to understanding urban growth and the organization of modern societies. The study of the temporal distribution of individuals and their activities has had almost an equally long history, but it has not attracted the same volume of research and has remained somewhat isolated from the central problems of urban sociology.

Chapin's Human Activity Patterns in the City attempts to integrate the temporal and spatial distribution of individual activities in order to enrich our understanding of urban life. The author hopes to provide a better understanding of different urban subgroups and to suggest more effective ways to deliver public services to these groups. The early chapters in this book dwell on these good intentions and are among the least effective in it. The key theoretical orientation is that individual activities are heavily restricted by a series of constraints imposed by an individual's work, sex role, child-rearing obligations, and bodily health, but that most people retain some discretionary time that they can allocate according to their personal concern with status, their career ambitions, their desire for neighborhood safety, and their attachment to public welfare or "degree of alienation." This idea is scarcely new, and, while it is not "wrong," it does little to integrate studies of the spatial and temporal allocation of activities in urban areas. The discussion is not improved by a rather mechanical effort to combine a Meadian social psychological approach with a Skinnerian behaviorist approach.

The real contribution of this study is the data it makes available and some of the rather surprising findings it documents. It would appear that Americans differ very little in the way they allocate their time except as they differ in statuses such as age, sex, employment, or education that are not related to membership in a particular urban subgroup. Sample surveys from the entire nation, from Washington, D.C., and from two subcommunities within the Washington Standard Metropolitan Statistical Area show pretty much the same findings. The gross differences found in time spent on 12 categories of activities (job, eating, shopping, family activities, and so forth) are expectable. Those employed full time have less discretionary time than those working fewer hours, women have slightly less discretionary time than men, and working women with young children have the least discretionary time of any grouping.

Drawing on the sample survey of Washington, the author presents a detailed comparison of the allocation of time among blacks and nonblacks as well as among various occupational and income groups. The differences between the time allocations of racial groups are usually small: blacks spend somewhat more time watching television and less time eating, shopping, socializing, participating with family, and in recreation. These differences may be attributable to differences in income and education.

The author then turns to a sample survey of two low-income subcommunities in Washington, one an inner-city black neighborhood and the other a white community near the District line. Some ethnographic descriptive material is presented, indicating that the inner-city black community is heavily preoccupied with the day-to-day problem of economic survival. The second neighborhood seems to be dominated by southern whites who are sometimes a little better off and are given to a pattern of radical individualism. Even

so, there are few major differences in how the residents in the two communities spend their time. Once income differences are controlled, whites spend more time eating, shopping, socializing, and in recreation, while blacks spend more time watching television, resting, and relaxing. A subsequent stepwise regression analysis shows that neither obligatory duties nor personal concerns have much effect on separate discretionary activities. As the author points out, this may be an artifact of his categories for identifying discretionary activities, since some groups, such as blacks, may merge many activities into the same time period, which would lead to underreporting.

The final chapter reviews the value of these findings for social planning and comes to the reasonable conclusion that their use is premature until more effective research is done on people's opportunities to engage in various activities. The author goes on to suggest the inclusion in future studies of a number of additional variables that might provide a fuller account of how social groups spend their time. In some ways this emphasis is unfortunate. It detracts from explaining the mass of information presented here and integrating it into our findings on urban spatial distribution. Actually, very little attention is given in this book to spatial distributions of activities, and this may be one reason the study ends on such a tentative and inconclusive note. Attention to past research would show that the spatial segregation of social groups and their activities is often very great. Judging from the rather small differences this study finds in the temporal distribution of activities within subgroups, one is led to the conclusion that the fragmentation of urban life results primarily from the spatial segregation of ethnic groups, income groups, and economic functions. The counterweight to this fragmentation is that members of various subgroups are involved in a common set of activities that help incorporate them into a mass society. Chapin's study documents this involvement in common activities but does not explore its implications. The book does provide a wealth of data that will help open discussions of such broad social issues.

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