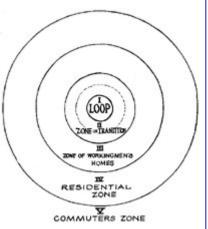


Center for Spatially Integrated Social Science

Robert Park and Ernest Burgess: Urban Ecology Studies, 1925 By Nina Brown

Background

During the 1920s Robert E. Park (1864–1944) and Ernest W. Burgess (1886–1966) developed a distinctive program of urban research in the sociology department at the University of Chicago. In numerous research projects focused on the city of Chicago, Park and Burgess elaborated a theory of urban ecology which proposed that cities were environments like those found in nature, governed by many of the same forces of Darwinian evolution that affected natural ecosystems. The most important of these forces was competition.



Park and Burgess suggested that the struggle for scarce urban resources, especially land, led to competition between groups and ultimately to the division of the urban space into distinctive ecological niches or "natural areas" in which people shared similar social characteristics because they were subject to the same ecological pressures.

Competition for land and resources ultimately led to the spatial differentiation of urban space into zones, with more desirable areas commanding higher rents. As they became more prosperous, people and businesses moved outward from the city center in a process Park and Burgess called succession, a term borrowed from plant ecology. Their model, known as concentric zone theory and first published in *The City* (1925), predicted that cities would take the form of five concentric rings with areas of social and physical deterioration concentrated near the city center and more prosperous areas located near the city's edge.

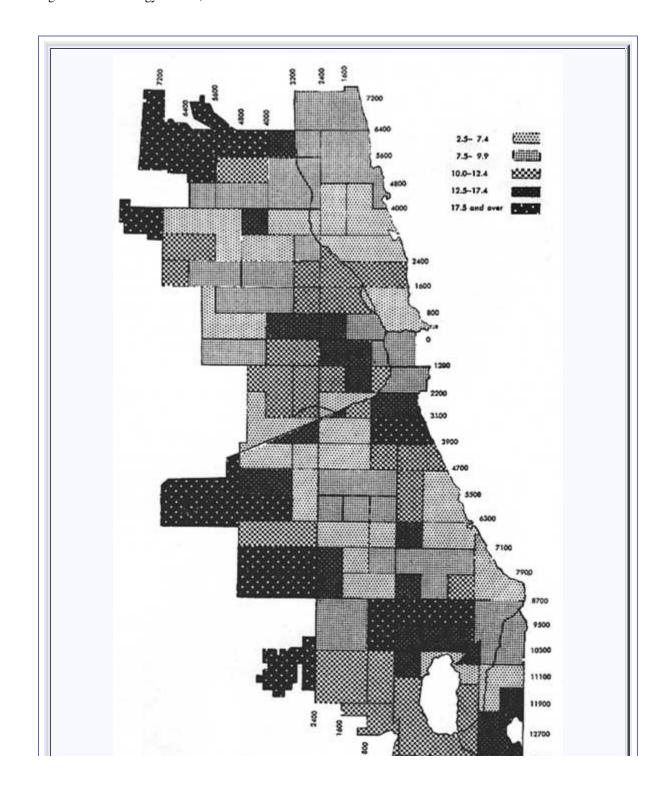
Innovation

Concentric zone theory was one of the earliest models developed to explain the spatial organization of urban areas. As sociologists, Park and Burgess, along

with their students, used concentric zone theory extensively to explain the existence of social problems such as unemployment and crime in certain districts of Chicago. Their research program also involved the extensive use of mapping to reveal the spatial distribution of social problems and to permit comparison between areas. Burgess was particularly interested in maps and used them extensively, requiring that students in all of his seminars acquire proficiency in basic map-making techniques. Burgess and his students scoured the city of Chicago for data that could be used for maps, gleaning information from city agencies and making more extensive use of census data than any other social scientists of the time (Bulmer 1984).

In 1923–1924 Burgess and his students completed the *Social Science Research Base Map of Chicago*, a map that combined all available information about the physical features, political boundaries, zoning, residential and commercial developments, and vacant areas in the city. This map was used subsequently as the base for dozens of thematic maps on the social characteristics of Chicago. Because the researchers were working within the Park and Burgess' urban ecology framework, they were most interested in identifying zones or natural areas. The typical map produced during this time was a dot or choropleth map showing the rate or incidence of certain social characteristics throughout the city, and researchers used these maps to identify gradients between areas that might indicate zone boundaries (Bulmer 1984) [see illustration].

In the post-war period, the ecological models articulated by Park and Burgess fell out of favor as critics suggested that the models were overly simplistic. In particular, Park and Burgess' search for "natural" or "organic" process was criticized as a superficial undertaking that neglected both the social and cultural dimensions of urban life and the political-economic impact of industrialization on urban geography. Overall, the synchronic urban ecology studies of the 1920s were largely oblivious to issues of class, race, gender, and ethnicity. However, the concentric rings model has become one of the best known formulations in urban sociology and is still applied creatively to studies of urban processes. In The Ecology of Fear (1992), Mike Davis used the concentric rings model to describe the troubled state of Los Angeles, a city he suggested had an inner core of "urban decay metastasizing in the heart of suburbia." Finally, one of the most important legacies of the urban ecology studies undertaken at the University of Chicago in the 1920s was the addition of map-making to the methodological toolkit of the developing disciplines of sociology, criminology, and public policy.



The Amount of Real Estate Tax Delinquency in Chicago as a Percentage of Amount of Real Estate Tax Levy, 1928-1937

This map was created by Vera Miller, a student of Ernest Burgess, at the University of Chicago. Miller explained the the spatial distribution of tax delinquency according to Park and Burgess' model of urban ecology and concentric zone theory:

"The pattern of tax delinquency in Chicago in the period of this study appears to have been related to the pattern of the city's ecological development. As the city expanded outward, the encroachment of industry in the areas adjacent to the central business district blighted these sections. The original residents drifted outward and the inner neighborhoods were occupied successively by people with lower incomes unable to find dwellings elsewhere. Never fully utilized for industrial purposes and constantly deteriorating as residential areas, these sections became characterized by physical deterioration and social disorganization as well as by tax delinquency" (Miller in Burgess and Bogue 1964: 105).

From: Miller, Vera. "The Areal Distribution of Tax Delinquency in Chicago and Its Relationship to Certain Housing and Social Characteristics." In Ernest Burgess and Donald J. Bogue, eds. *Contributions to Urban Sociology*. Pp. 100-111. (Chicago: University of Chicago Press, 1964).

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Related Works

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