

SOCIAL ECOLOGY IN URBAN SETTING

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Summary

This is a short introduction to the roots of human ecology as it was developed in urban sociology during the first half of the twentieth century. Notwithstanding severe criticism human ecology has remained inspiring and timely as is illustrated by three examples related to urban symbolism, urban greenery and mega-urbanization.

1. Introduction: Human Ecology

In the science of ecology the reciprocal relations between organisms and their biotic and abiotic environment are studied. The term ecology is derived from the Greek word *oikos*, which refers to a house or a place to live including the inhabitants. General ecology consists of three parts, namely the ecology of plants, animals, and humans. In social ecology, also referred to as human ecology, the relationship between the human group and its environment is studied. Human ecology flourished particularly under the influence of the urban studies of the Chicago School in the 1920s and 1930s with leading figures such as Park, Burgess, and McKenzie. In the 1970s, with the sharp rise in environmental problems and crises, there was a revival of human ecology in the field of urban studies. Hawley defines human ecology “as the study of the form and the development of the community in human population.” In understanding this definition, the distinction between community and society is decisive. It means that human group life has two levels, namely the subsocial order of community and the social order of society. In the subsocial order the principles of competition and dependence result in particular spatial patterns and processes analogous to those patterns and processes in, for example, the animal world where certain species dominate particular habitats in relation to other species. The subsocial order is characterized by a certain level of specialization and distribution of activities. Human social life is more flexible than animal and plant communities. That is why the concept of society is needed to refer to

the sociocultural order, which is regulated by communication, consensus, values and norms; that is, to grasp human social life. The society is a result of conscious social processes, in contrast the community, which is the order or organization pattern that comes into being when a great number of individuals are living together in a limited area.

2. Territorial Organization

It takes no stretch of the imagination to see that the focus at a separate subsocial level or community level made social ecologists very much aware of the territorial organization of human life. They engaged in the study of all sorts of human phenomena and their distribution in space, urban space particularly. In cities natural and cultural areas and zones were distinguished as part of spatial organization and the characteristics of these areas as well as the differences between them were studied. Processes of centralization, segregation, invasion, and succession were dominant in the explanation of social territorial structures. Referring to segregation, Gist and Fava, in their work published in 1974, pointed out that the roots of urban spatial organization lie in the fact that citizens differ from each other with regard to class, ethnicity, religion, age, and so on. These characteristics create different opportunities in people's competition with one another to settle in a particular area. Both the desires as well as the possibilities are important in the process of competition. These result in segregation, every group occupying the optimal position. This way the various parts of cities acquire their specific character as central business district, gold coast, slum, and so on.

Classical human ecology was severely criticized in the past for being contaminated with biological and geographical determinism. Nowadays the distinction between community and society is no longer acceptable, because of the tendency to neglect customs, habits, values, and norms. New formulations of social ecology stress the role of the economic aspect in the location of ecological units or the importance of sociocultural phenomena. For example, Quinn and Firey, respectively, revived this theoretical approach, which has remained very influential in its consequences, as many of its attainments have been incorporated into current sociological and anthropological thinking on the city.

3. Internal Organization of the City

One example of this general attainment in social ecology is related to the internal organization of the city. The idea of natural areas and segregation as a result of invasion and succession has led Burgess to develop his 'concentric zone model' based on Chicago. Burgess argues that five concentric zones may be distinguished in this city. The central zone is made up of the central business district with its shops, offices, hotels, and so on. Around it is located the transition zone with slums occupied by migrant groups generally living in poor conditions. The bad situation of the transition zone is caused by invasion, from the central business district. Pending this invasion, the zone is neglected and no investments are made. The third concentric zone consists of neighborhoods of the working class. Then follow the middle classes with better houses and a higher standard of living. The outermost zone is constituted by the richer people and also involves the suburbs, satellite towns, and small villages attracted into the orbit of the big city. This "concentric zone model" developed by Burgess gave a strong

impetus to further empirical research on the internal structure of cities. It evoked heavy criticism from alternative models, such as the “sector theory” postulated by Hoyt and the “multiple nuclei theory” by Harris and Ullman. These authors respectively show that sometimes cities are not made up of concentric zones, but of sectors along exit routes (such as the sector of light industry and the sector of the working class) or of several cores or nuclei (related to different types of housing, industry, and business). This approach led to elaborated model construction on the internal structure of cities from all over the world.

In the course of time the use of statistical data and computerized analysis became predominant, leading to the application of principal component or factor analysis. This resulted in the so-called factor ecology approach, which demonstrated that, notwithstanding completely different sociocultural contexts all over the world, three main dimensions determine the internal structure of cities, namely socioeconomic status, living conditions, and ethnicity. These three dimensions are generally predominant, albeit in divergent combinations. The models developed apply to a great number of cities, such as Chicago, Calcutta, Kuala Lumpur, Cairo, Helsinki, Montreal, Miami, and Toledo. They constitute a valuable body of data and knowledge for the comparison of cities on different continents with divergent cultures.

4. Urban Symbolic Ecology

Today the influence of human ecology can still be clearly discerned in anthropological research on the symbolic dimension of the city. Analogous to the concept of human ecology, in the field of urban culture the concept of “urban symbolic ecology” was introduced. In first instance this referred to the study of the distribution of symbols in urban areas, as exemplified in the volume edited by Nas in 1993. In a wider sense this approach covers the social production of symbols in the urban arena as well as the resulting distribution patterns and underlying mechanisms. Basically this branch of social anthropology and social ecology tries to comprehend the collective memory of urban units as expressed in a wide variety of phenomena, such as statues, street names, architecture, street patterns, graffiti, festivities, processions, myths, written texts, video presentations, rituals, and so forth. In the past decade a great number of case studies on urban symbolism have been produced. These cover such cities as Jakarta, Padang, Denpasar, Baghdad, Lucknow, Canberra, Leiden, Ankara, Esfahan, Banská Bystrica, and Ljubljana. The scientific harvest of these studies has made it clear that most cities have an elaborate cultural dimension on the basis of which they can be characterized as wholes. This means that, in addition to all sorts of classifications of cities in the classic sense—mainly on the basis of the sources of income such as Court town, Coke town, and Commerce town—real anthropological characterization becomes possible when it is founded on the cultural dimension of the city. Urban symbolic ecology seems to be promising as an elaboration of social ecology, when it appears to be possible to supplement the case studies mentioned above with a thorough comparative approach in order to accommodate them within one framework.

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Biographical Sketch

Dr. Peter J. M. Nas (1944) is associate professor in the Department of Cultural Anthropology and Sociology of Non-Western Societies, Leiden University, the Netherlands. His field of study is Urban and Applied Sociology and Anthropology. His regional specialization is Indonesia, where he has conducted fieldwork in a wide range of urban settings.