SECOND EDITION

Key Concepts in Urban Studies

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BURGESS MODEL – CONCENTRIC ZONES

Ernest W. Burgess developed a theory of city growth and differentiation in the 1930s based on the social Darwinist or biologically derived principles that were common in the work of Robert Park and Roderick McKenzie (see entry on The Chicago School). According to Burgess, the city constantly grew because of population pressures. This, in turn, triggered a dual process of central agglomeration and commercial decentralization; that is, spatial competition attracted new activities to the center of the city but also repelled other activities to the fringe area. As activities themselves located on the fringe, the fringe itself was pushed farther out from the city, and so on. Thus the area of the city continually grew outwards as activities that lost out in central business district (CBD) competition were relocated to the shifting periphery.

In Burgess’ theory, the city would eventually take on the form of a highly concentrated central business district that would dominate the region and be the site for the highest competitive land prices, while the surrounding area would comprise four distinct concentric rings: a zone in transition; a zone of workingmen’s houses; a residential zone; and a commuter zone.

Research shortly after Burgess unveiled his model, in the 1930s and 1940s, contradicted his theory and questioned the concentric zone hypothesis. Many people to this day still think of the city in Burgess’ terms, with a large central district that dominates the surrounding area constituted as rings. This is quite remarkable when we acknowledge that shortly after Burgess published his theory it was questioned by more accurate conceptions of how urban regions grew that were based on better research. As indicated in several entries of this book, city-dominated thinking is deeply entrenched in urban studies, even if it is a fallacy (see the entry on Multi-Centered Metropolitan Regions).

HOMER HOYT – THE SECTOR MODEL

Published in 1933, Hoyt’s model was also based on Chicago but it contradicted Burgess’ work (Hoyt, 1939). His sector conception of space was derived from a study of changes in the land prices within the city of Chicago extending back 100 years. Hoyt argued that cities were carved up, not by concentric zones, but by unevenly shaped sectors within which different economic activities tended to congregate. These were produced by competition for locations within a capitalist market in real estate that translated the functional needs of business into land prices. The proximity of radial railway lines is one explaining factor of this pattern.
Hoyt further argued that manufacturing and retailing, in particular, had the tendency to spin off and away from the center and agglomerate in sectors that expanded outward, while leaving other economic activities behind in a more functionally specialized central business district. This conception is quite accurate today, although Hoyt’s general approach is limited because it remained city-based.

**CHAUNCY HARRIS AND EDWARD ULLMAN – THE MULTIPLE NUCLEI MODEL**

Harris and Ullman, like Hoyt, were essentially correct in conceiving of the development of urban space as consisting of irregular sectors and centers rather than concentric zones under pressure of real estate competition among users with different needs. However, both of these alternative models assumed that the CBD, or the central core of any city, would remain dominant. They did not foresee the way the entire metro region would experience functional specialization.

Harris and Ullman (1945) argued that the spin offs of activities from the CBD would take the shape of separate centers rather than sectors radiating from the central core. These smaller centers were conceived as ‘homogeneous urban districts’ and they remained organized around a CBD of some kind. In their model, unlike Burgess, no regular pattern could be found where spin-off districts were located in relation to each other.

The entry on *Multi-Centered Metropolitan Regions* argues, in contrast to all city-centered approaches, that the separate centers are functionally differentiated and not linked to the larger whole. Malls are not placed around the region at random, they are located by their developers according to marketing or service areas that have nothing to do with the CBD, but are dependent, instead, on the population distribution of the entire metro region. For Burgess, Hoyt, Harris and Ullman, and I should add many urbanists today, the CBD remains an all-purpose shorthand concept for economic concentration within a city. This view of urban space is false. Multiple centers are spread throughout the metro region and are produced and sustained by regional, national and global modes of societal organization.

**CENTRAL PLACE THEORY AND GROWTH POLE THEORY**

European urban and regional economists and geographers have been influenced by the work of two German regional scientists, Christaller (1933) and Lösch (1945), who are credited with the invention of central place theory. At its simplest, central place theory offers an explanation for two kinds of urban phenomena: the existence of an urban hierarchy, i.e. the ranking of cities from ones with the most functions and importance to those with the least; and the spatial structure of the urban system – in other words, the relationship between different cities in a region (Evans, 1985). Originally based on a study of southern Germany that was predominantly rural, central place theory has been weak on explaining the existence of an urban hierarchy in industrialized economies. Despite criticism and reworking, central place theory in the context of other theoretical developments does offer
insights into the formation of Multi-Centered Metropolitan Regions (MMRs) and the earlier variant, Polycentric Urban Regions (PURs) once used in Europe. Its other utility has been to explain the hierarchy of financial services offered within the urban system of a country (Parr and Budd, 2000).

Another of the important concepts emerging from work in Europe has been that of French theorists in advancing the concept of ‘regional growth poles’ and development strategies using this perspective. A growth pole is defined as:

a set of industries capable of generating dynamic growth in the economy, and strongly interrelated to each other via input–output linkages around a leading industry (or propulsive industry) [in the original French meaning]. (Richardson, 1978: 165)

The concept of the natural growth pole (defined in abstract economic space) derives from the work of Perroux (1950). Influenced by the work on innovation by the Austrian economist Schumpeter, Perroux viewed growth within an economy as stemming from domination and disequilibrium, in other words uneven development (Parr, 1999). Following Perroux, a subsequent generation of economists developed growth pole strategies for many urban developments around the world. ‘New towns’ in the UK and the French equivalent, les grandes ensembles, are examples of growth pole schemes whose central purpose was the deconcentration of urban areas. The subsequent relative failure of this form of urban policy in a European setting is based on many causes. Part of the problem is that the original Perroux model was focused on inter-sectoral or inter-industry linkages and little or no consideration was given to the external effects of the flow of goods and people across an urban region. The latter is currently the key factor of spatial development as a consequence of globalization, along with transport and computer innovation.

In sum, central place theory, despite limitations, states that individual centers exist within a wider system and are characterized by complex interactions (as in a Multi-Centered Metropolitan Region). Growth pole theory focuses solely on the internal workings of the pole and not its external relationships within a wider region. There are limitations to the applications of central place theory, the most dominant being that it deals with spatial equilibrium at a specific point in time, while growth pole theory is concerned with dynamic change over time. There are further objections concerning the range of economic activities covered by central place theory, and the spatial-hierarchical structure implies few levels of centers. However, as Parr (1973) demonstrates, many of these objections can be overcome. In doing so, these approaches open up rich possibilities for exploring the Multi-Centered Regional – or Polycentric Urban Regional – perspectives in a European context.

REFERENCES


The urban form of historic cities can be explained as the result of an evolutionary process where many local decisions aggregate together over time. Yet, the old civilizations, from ancient China to medieval Europe, did engage in forms of planning. Often building was carried out according to an overarching symbolic scheme based on religious beliefs. In medieval Europe and in some places in Asia, urban form was defined by planned fortifications for self-defense. Modern urban planning is linked to capitalist industrialization. During the 19th century, first in Europe, then in the United States, new conceptions of how to guide city growth emerged, replacing the rationale of religion or defense. Some of the most notable ideas in the 19th century sought to overcome the ills of pollution and public health crises, characteristic of the industrial cities under capitalism.

One important 19th-century thinker was Ebenezer Howard. He thought that the industrial city was too large and non-human in scale. Howard proposed, instead, that new development should take the form of garden cities, mixing factory construction with countryside living and regional connectivity by train. Exemplified by Welwyn Garden City and Letchworth in England, the garden city, then, brought together the best sides of city and country living (Howard, 1902). In the United States, garden cities in Long Island, New York, and Baldwin Hills outside Los Angeles, California, were built according to this model. Other early landmarks are