

Zonal and Sector Theories of Internal Urban Structure Applied to Tulsa

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In the past several years there have been three theories or models put forth as an explanation and description of a city's internal structure. These theories, the concentric zone theory by Ernest Burgess, (Park, 1925), the sector theory by (Hoyt, 1939), and the multiple nuclei theory described by Ullman, Harris, and McKenzie, (Harris, 1945), have been gaining popularity with the increased study of urbanized area in the social sciences and urban geography in particular. It shall be the purpose of this paper to apply the first two theories, the concentric zone and the sector, to land use in Tulsa, Oklahoma.

In Burgess' model of internal urban structure the organization of the city is illustrated by a series of concentric circles which may be used to designate both the successive zones of urban extension and the types of areas differentiated in the process of expansion. In his original model Burgess used five circles or zones: (I). Loop (Central Business District); (II). Zone in Transition; (III). Zone of Workingmen's Homes; (IV). Residential Zone; and (V). Commuters' Zone. Through common usage by various authors the names of these zones have changed to the Loop (CBD), Zone in Transition, Low Class Residential, Middle Class Residential, and High Class Residential. The Loop or Central Business District is the focal point for interaction within the city and would therefore be situated at center of the zonal city. The Central Business District, then, is the core around which the concentric zones will lie in the idealized model. The transitional zone which encircles the Central Business District is an area of low class dwelling units which are being invaded by the expanding business and manufacturing establishments of the first zone of land use. The Third zone is the area that relieves the pressure of expansion in the second zone. This area is one of low class residential land use which is little better than the zone in transition. The fourth zone, the middle class residential, is an area of better residential units which is the area of the white collar worker. The last of the concentric zones is the high class residential which is made up of high rent apartment buildings and/or districts of restricted single family dwellings. It may be noted that Burgess made no provisions for outlying shopping areas or industrial districts.

Hoyt's sector model assumes a shape much like that of a pie from which pieces are cut at random. Each of the types of land use is orientated to an important factor in its growth and development, i.e. industry is drawn to railroads and waterways, commercial establishments are drawn to main traffic arteries, while residential areas tend to be situated around the other areas (the low class residential sectors are located around the various manufacturing and functional elements as a matter of convenience to the worker rather than being drawn to the Central Business District).

In the application of both models to Tulsa the Central Business District will be considered as the core or focal point for the intra-city structure. Applying Burgess' concentric zone model the second zone of land use, the zone in transition, may clearly be seen surrounding the Central Business

District. In the area immediately north and east of the core is found a quite extensive grouping of wholesale and light industrial land uses while to the south and west of the CBD is found rapid development of commercial establishments, office buildings, and the new civic center. The next zone, the zone of workingmen's homes, or any of the other concentric zones are not found in Tulsa.

In the application of the sector theory to Tulsa we find the transitional area is best described as a zone. The remaining classifications of land use seem to be described best by the sector theory. The industrial districts are associated closely with the railroad network of the area. Around the various industrial districts are found the low class residential areas. Between these industrial districts is found other types of residential uses conforming, for the most part, with the economic "rules" or urban real estate, i.e. the high class residential areas tend to be located on the more rolling topography while the middle class residential areas act as a buffer between the two extremes.

It is observed then that the sector theory is probably the best single explanation of Tulsa's intra-urban structure. Should the concentric zone theory be rejected as being too generalized? Does it really help explain internal urban structure? The high class residential area located southeast of the Central Business District has been divided into three sub-classifications: (H_1) low-high class residential; (H_2) middle-high class residential; (H_3) high-high class residential. By drawing boundary lines between the areas of the sub-classifications they were found arranged in a pattern much like that of the concentric zone model. The H_1 zone is nearest to the CBD while the H_2 and H_3 areas constitute the next two successive zones. This "semi-concentric zone" pattern is found also in the low class residential area in West Tulsa. This "semi-concentric zone" pattern does not present itself in all residential areas; though; the middle class residential area directly east of the CBD when sub-divided into M_1 , M_2 , and M_3 is found to be arranged in "sub-sectors".

One should not reject either the concentric zone theory or the sector theory without careful examination. It may be found that a combined model is the best explanation. This seems to be the case for Tulsa.

LITERATURE CITED

- Harris, C. D. and E. L. Ullman. 1945. The Nature of Cities. *Annals of the American Academy of Political and Social Science*: 7-17.
- Hoyt, Homer. 1939. The Structure and Growth of Residential Neighborhoods in American Cities. Federal Housing Administration, Washington, D. C.
- Park, R. E. and E. W. Burgess. 1925. The City. Macmillan Co.
- Sketch Plan 1975. 1957; Tulsa Metropolitan Area Planning Commission. Tulsa, Oklahoma.
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