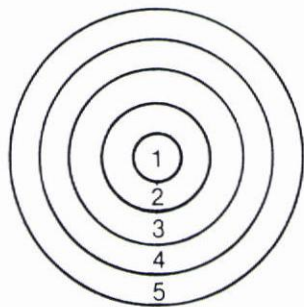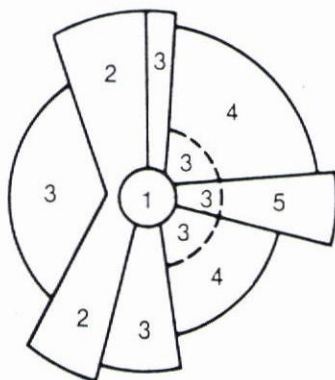(a)
Burgress Concentric Zone Model
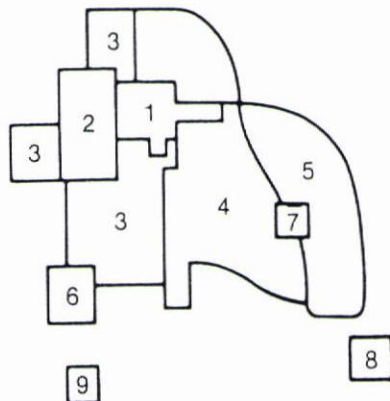
1 = CBD;
2 = wholesale and light manufacturing; lower-income residential;
3 = working-class residential;
4 = middle-class residential;
5 = commuter zone

(b)
Hoyt Sectoral Model

1 = CBD;
2 = wholesale and light manufacturing;
3 = lower-class residential;
4 = middle-class residential;
5 = upper-class residential
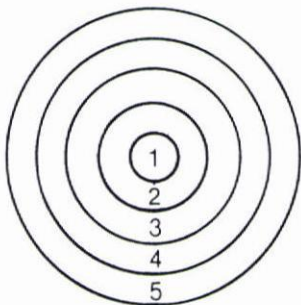
(c)
Harris and Ullman Multiple Nuclei Model

1 = CBD;
2 = wholesale and light manufacturing;
3 = lower-class residential;
4 = middle-class residential;
5 = upper-class residential;
6 = heavy manufacturing;
7 = outlying business district;
8 = dormitory suburb;
9 = industrial suburb

FIGURE 3-2
Traditional land-use models. (*Chauncy Harris and Edward L. Ullman, "The Nature of Cities,"* Annals of the American Academy of Political and Social Science, *vol. 242, no. 1, 1945, p. 13.*)

**Burgress Concentric
Zone Model**

1 = CBD;
2 = wholesale and light
    manufacturing;
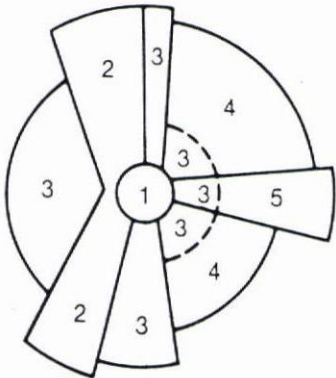   lower-income
    residential;
3 = working-class
    residential;
4 = middle-class
    residential;
5 = commuter zone

(b)
Hoyt Sectoral Model

1 = CBD;
2 = wholesale and
    light manufacturing;
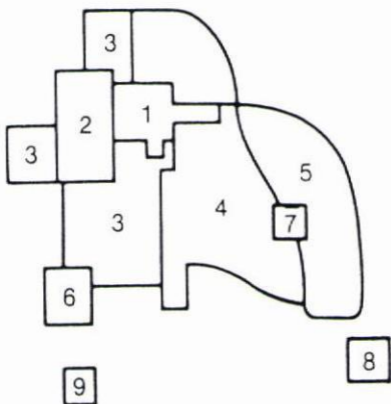3 = lower-class
    residential;
4 = middle-class
    residential;
5 = upper-class
    residential

(c)
Harris and Ullman Multiple Nuclei Model

1 = CBD;
2 = wholesale
and light manufacturing;
3 = lower-class residential;
4 = middle-class residential;
5 = upper-class residential;
6 = heavy manufacturing;
7 = outlying business district;
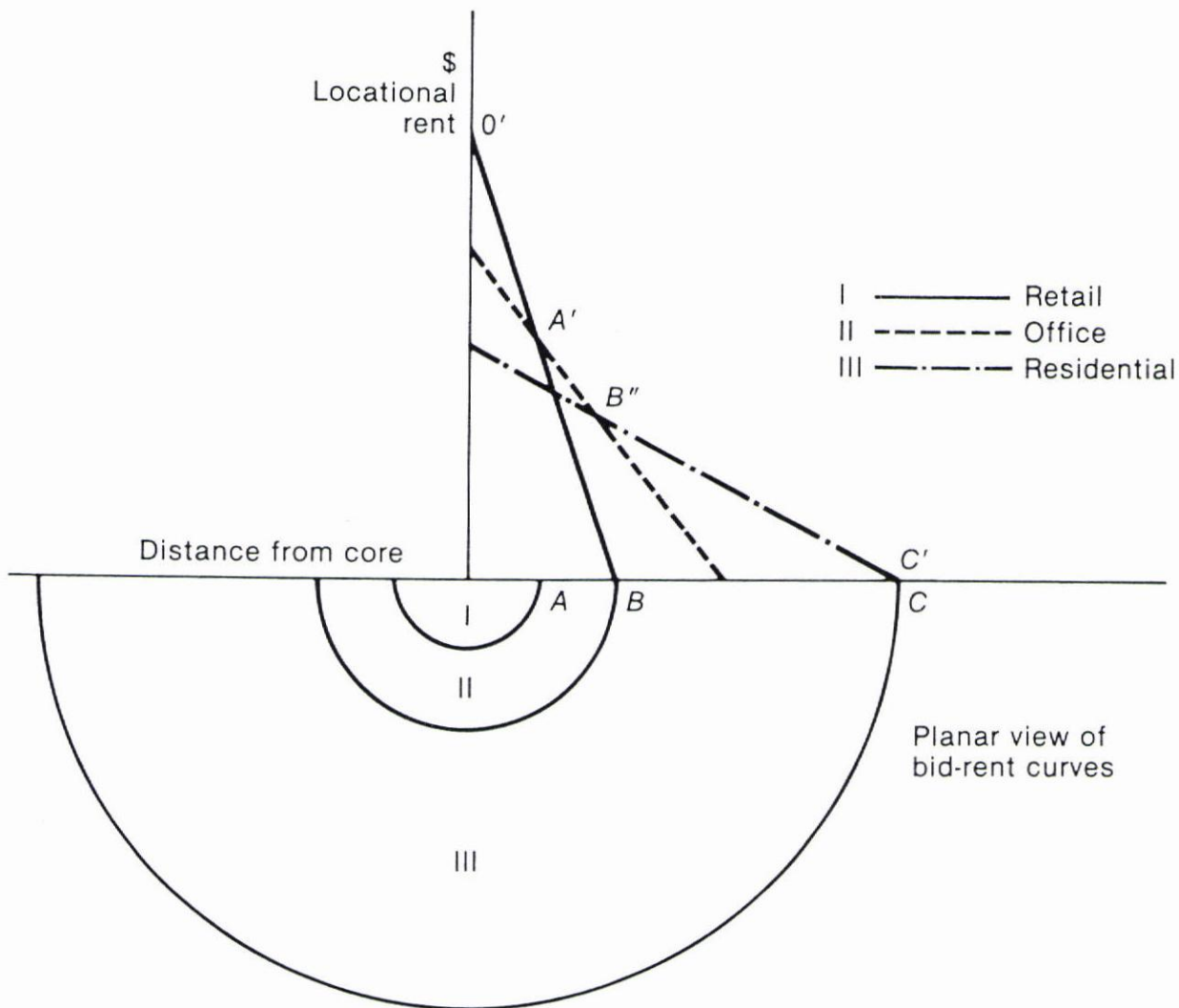8 = dormitory suburb;
9 = industrial suburb

FIGURE 3-3
Bid-rent curves of competitive land uses in the Alonso model. The spatial
implications of the bid-rent curves can be seen if we simply transpose the two-
dimensional graph to a planar view. Thus, in zone 1 we would expect to find retail
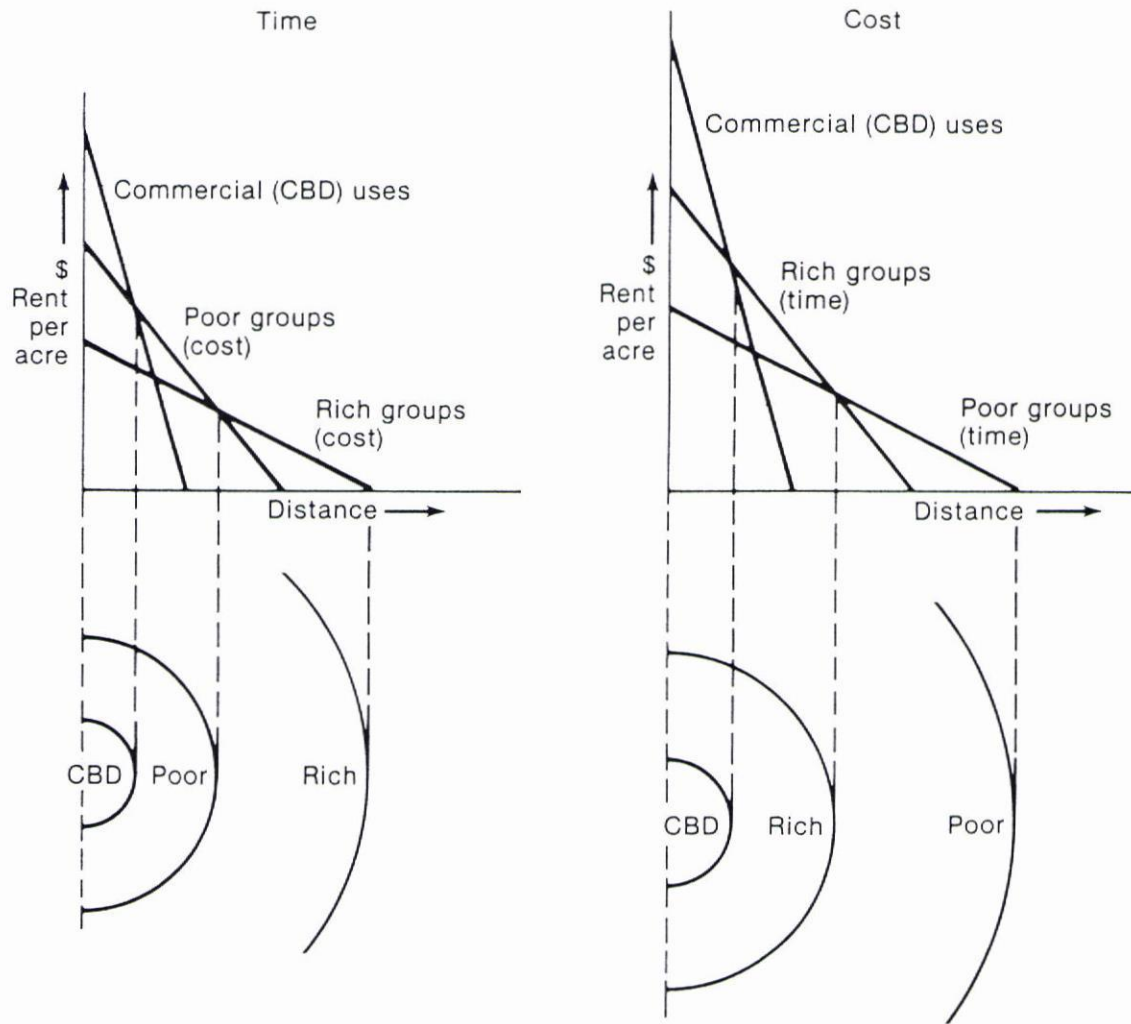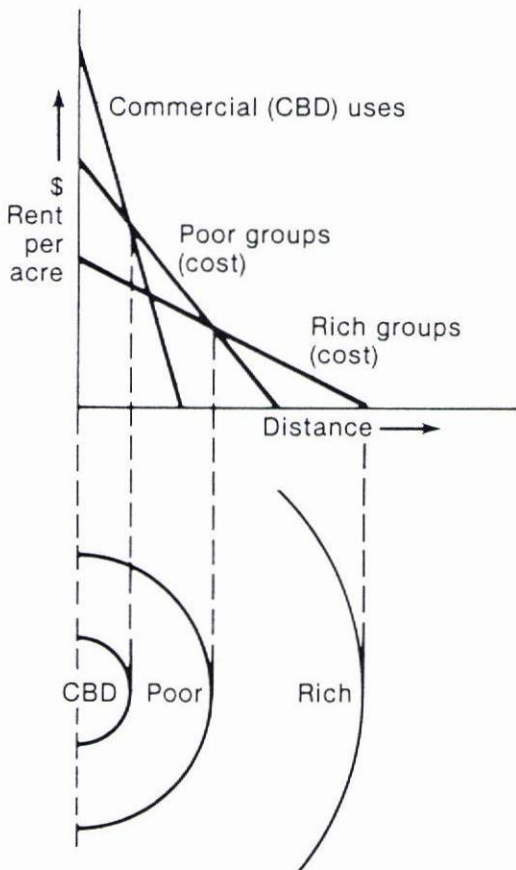activities; in zone 2, offices; and in zone 3, residential units.

FIGURE 3-4

Bid-rent curves for low- and high-income groups using time versus cost considerations. Harvey's argument is illustrated by the differences in the gradient of the bid-rent curves for the two income classes. If time is important in the locational decision, the wealthy will outbid lower-income residents and be located near the city. If commuting costs are the important element in the decision, the wealthy will select locations on the fringe, leaving inner-city sites to the lower-income residents. (*David Harvey,* Society, the City and the Space-Economy of Urbanism, *Association of American Geographers, Commission on College Geography, Resource Paper No. 19, 1972.*)

$ Rent per acre

Commercial (CBD) uses

Poor groups (cost)

Rich groups (cost)

Distance

CBD

Poor

Rich

Cost

Commercial (CBD) uses

$ Rent per acre

Rich groups (time)

Poor groups (time)

Distance →

CBD   Rich   Poor