

to the city's outer edge, creating zones that are shaped like a piece of pie. Hoyt found that the pie-shaped pieces describe the high-rent residential, intermediate rent residential, low-rent residential, education and recreation, transportation, and industrial sectors.

Researchers studied both theories, and Chauncy Harris and Edward Ullman argued that neither the concentric rings nor the sector model adequately reflected city structure by the mid-twentieth century. In the 1940s, Harris and Ullman proposed the multiple nuclei model (Fig. 9.22 C). Their model recognizes that the CBD is losing its dominant position as the single nucleus of the urban area. Several of the urban regions shown in the figure have their own nuclei.

Most urban geographers think these models are too simplistic to describe the modern city. With the availability of personal automobiles and the construction of ring roads and other arteries around cities in the 1970s and 1980s, suburbanization exploded around the new transportation corridors. The outer city grew rapidly and became more functionally independent of the central city, and new suburban downtowns emerged to serve their new local economies. Often located near key freeway intersections, these suburban downtowns developed mainly around big regional shopping centers and attracted industrial parks, office complexes, hotels, restaurants, entertainment facilities, and even sports stadiums. They became **edge cities**. Edge cities such as Tysons Corner, Virginia (outside Washington, D.C.) and Irvine, California (outside Los Angeles) flourished. They attracted tens of thousands of nearby suburbanites—offering workplaces, shopping,

leisure activities, and all the other elements of a complete urban environment—thereby loosening remaining ties not only to the central city but to other suburban areas as well (Fig. 9.23). As early as 1973, American suburbs surpassed the central cities in total employment. By the mid-1980s, in some metropolises in the Sunbelt, the majority of jobs in the metropolis were in the suburbs.

Geographers use the term **urban realm** to describe the spatial components of the modern metropolis, where each realm is a separate economic, social, and political entity that is linked together to form the larger metropolitan framework (Fig. 9.24). The urban realms model takes the latest step forward in interpreting the American urban structure. It clearly demonstrates that today's outer cities are not satellites of the central city; they too are shaping the metropolis.

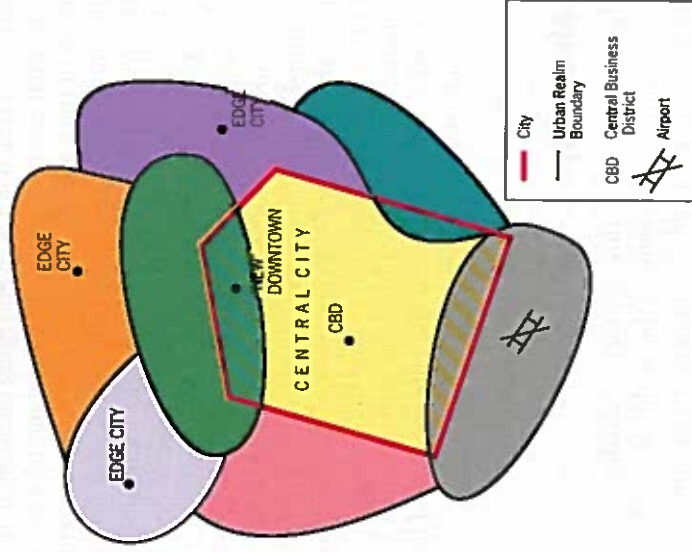
### Modeling the Cities of the Global Periphery and Semiperiphery

The number of cities in the world with millions of inhabitants can now be counted in the hundreds; it therefore becomes increasingly difficult to model, classify, or typify urban centers. In the 1960s, researchers classified “colonial” cities as urban areas where European transplants dominated the form of the city, laying it out with Western styles. They also drew models of “indigenous” cities that remained remote from globalizing influences and various forms of the Western city. Today, the “colonial” cities that served as the colonial headquarters (and have since



**Figure 9.23** In the suburbs of Washington, D.C., on Interstate 495 (the beltway), Tysons Corner has developed as a major edge city, with offices, retail, and commercial services. © Rob Crandall/The Image Works.

### URBAN REALMS MODEL



**Figure 9.24**

**Urban Realms Model.** The Urban Realms Model includes a central business district, central city, new downtown, and suburban downtown. *Adapted with permission from: T. Hartshorn and P. O. Muller, “Suburban Downtowns and the Transformation of Metropolitan Atlanta’s Business Landscape,” *Urban Geography* 10 (1989); p. 375.*

grown through massive migration) defy generalization. Even indigenous cities deep in continental interiors (such as those in West Africa’s Sahel and in Central Asia) have been swept by the forces of globalization and immigration, and in the process they have been transformed.

In Middle and South America, Mexico City (Mexico) and São Paulo (Brazil) are now the kinds of megacities that make analysis difficult. But South American cities have been endowed with strong Iberian cultural imprints that define a certain common social-spatial geography. In Sub-Saharan Africa, some former colonial cities have retained the spatial components lost in enormous cities like Lagos (Nigeria) and Kinshasa (The Congo). And in Southeast Asia some middle-sized cities continue to exhibit a fairly consistent pattern.

### The Latin American City

In 1980, geographers Ernst Griffin and Larry Ford studied Latin American cities and derived a model of the Latin American city referred to as the **Griffin-Ford model**. Griffin and Ford found that Latin American cities blend traditional elements of Latin American culture with the forces of globalization that are reshaping the urban scene, combining radial sectors and concentric zones.

Anchoring the model is the thriving CBD, which remains the city’s primary business, employment, and

entertainment focus. The CBD is divided into a traditional market sector and a more modern high-rise sector. Adequate public transit systems and nearby affluent residential areas assure the dominance of the CBD. Emanating outward from the urban core along the city’s most prestigious axis is the commercial spine, which is surrounded by the elite residential sector. This widening corridor is essentially an extension of the CBD. It features offices, shopping, high-quality housing for the upper and upper-middle classes, restaurants, theaters, and such amenities as parks, zoos, and golf courses. At the end of the elite spine sector lies an incipient edge city shown as “mall” on the model and flanked by high-priced residences. This reflects the emergence of suburban nodes from the North American model in South America’s cities.

In the Griffin-Ford model, the remaining concentric zones are home to less well-off residents, who compose the great majority of the urban population. Socioeconomic levels and housing quality decrease markedly with greater distance from the city center (Fig. 9.25). The zone of maturity in the inner city contains the best housing outside the spine sector, attracting the middle classes, who invest sufficiently to keep their solidly built but aging dwellings from deteriorating. The adjacent zone is one of much more modest housing. Interspersed with the more modest areas are densely populated unkept areas, which represent a transition from inner-ring affluence to outer-ring poverty. The outermost zone