

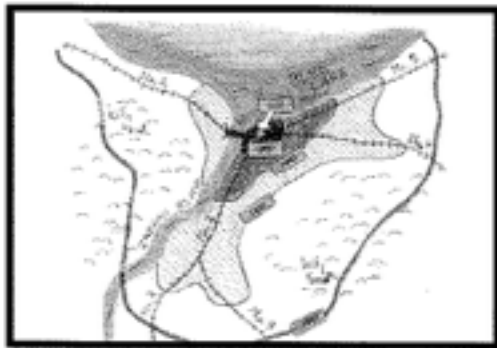
BORCHERT & ADAMS URBANIZATION MODELS

Borchert's systems are based on the impact of the evolution of transportation and communication technology on the development of the North American system and also make use of the concept of the system of hierarchy. Borchert discusses the way cities' growth and decline affects their position in the hierarchy. He has been able to define different periods or epochs in North America based on the technology that significantly impacted urbanization. Students should also pay close attention to the concept of innovation waves so they can understand how technology will have great impact on the location and nature of urbanization in the future.

Borchert's system starts with the Sail and Wagon Epoch from 1790-1830. During this period, the movement of people was limited and slow because of the difficulty of overland transportation; primary goods were moved along waterways. The system changed with the development of steam and its



application to boats and early railroads. Hence the second epoch is called the Steamboat Iron Horse Epoch and runs from 1830 to 1870. The third epoch is called the Steel Rail or long haul, which runs from 1870 to 1920, which coincided with the Industrial Revolution. Cities expanded their hinterlands dramatically; goods were moved long distances, making it possible to develop intensively industrialized areas. The fourth period -- running from roughly from 1920 to 1970, but really continuing into the present -- is called the Auto/Air Amenity Epoch. The urban system has been transformed dramatically by the use of automobiles, which opened up new locations for development. Many people believe now we are in our fifth epoch, the so-called High Technology Epoch or Telecommunications Epoch, since both are shaping cities in many ways.



Adams Model for urbanization

explains changes over time in spatial form of cities. Based on changes in transportation technology. Four Stages:

1. Walking- Horsecar Era (pre-1888)

- pedestrian city, horse drawn trolleys, compact urban structure (had to be within 30 min walking distance), grid pattern of cities (logical, tight structure)
- little specialization of land use
- no distinct ethnically distinct neighborhoods - must live near where they worked

2. Electric Streetcar ERA (1888-1920)

- streetcar - didn't have to walk everywhere - street travel wider

- cities expanded beyond trolley lines

- "starburst shaped city"

- more differentiation of land use - didnt have to live near where you worked

- city had industrial area and residential area

3. Recreation Automobile Era (1920-1945)

- cars and highways, suburbanization, more individual mobility

- dont have to live near transportation corridors - filled in those starburst shapes

- center city at its peak - "downtown"

- residential areas broken up into distinct neighborhoods - tried to live near people like themselves.. apart from people they weren't like

4. Freeway Era (1945-present)

- big impact from cars, interstates
- beltways bypass cities altogether, businesses moving out now too
- creation of suburban downtown
- "edge cities" - on perimeter of city limits
- multi centered metropolis

