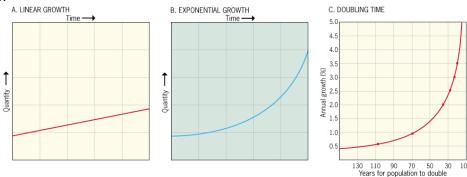
## **Models: Useful primarily in Free Response Section**

Understand that it is not enough to know what the models/theories are, but that you should be able to understand the assumptions made, applicability, and limitations of the models. Most questions ask you how readily the can be applied to a certain issue....

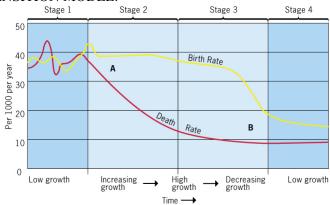
#### MALHTUS:



# I. Early warnings

- A. Thomas Malthus: concerned over the population spiral
  - 1. Wrote an essay in 1798: Population was increasing faster than the means of subsistence
  - 3. Recognized the nature of exponential growth
  - 4. Suggested population growth in Britain might be checked by hunger within 50 years
  - 5. Malthus could not foresee the future
    - a) Multiple impacts of colonization and migration
    - b) He was incorrect about the linear growth of food production
      - (1) More acreage put under production
      - (2) Improved strains of seed and fertilizer
- B. Those who continue to share Malthus's concerns are sometimes called neo-Malthusians
  - 1. Their numbers are growing
  - 2. Point out human suffering is now occurring a scale unimagined by Malthus
  - 3. Difficult to apply Malthus's ideas below the global scale

#### **DEMOGRAPHIC TRANSITION MODEL:**



## I. Demographic change

- A. The three demographic variables
  - 1. Births
  - 2. Deaths
  - 3. Migration (immigration and emigration)

- B. The demographic transition: a multistage model based on Western European experiences of changes in population growth, often seen in countries undergoing industrialization
  - 1. The four stages: underwent as countries develop
    - a) High stationary stage—high birth and death rates
    - b) Early expanding stage—high birth and declining death rates
    - c) Late expanding stage—declining fertility, but already declining mortality show continuing significant growth rates
    - d) Low stationary stage—low fertility and mortality, with a low rate of growth
  - 2. **Demographic transition** is represented by stages 2 and 3, during which there are high birth rates and death rates decline
- C. Demographic change in developing countries
  - 1. The developing countries have not had the advantages afforded the developed countries
    - a) Industrialization, Urbanization and general modernization
    - b) They are starting with a much higher base population
  - 2. It cannot be assumed all countries will go through all four stages
  - 3. Some countries may have subsiding population growth without economic growth
- D. Epidemiological Transition Model: a shift in a country away from infectious disease and towards degenerative diseases, often occurring as a country develops

#### RAVENSTEIN'S LAWS OF MIGRATION AND GRAVITY MODEL

- I. Theories about migration
  - A. Ravenstein's "laws" of migration
    - 1. Net migration amounts to a fraction of the gross migration between two places
    - 2. The majority of migrants move a short distance
    - 3. Migrants who move longer distances tend to choose big-city destinations
    - 4. Urban residents are less migratory than inhabitants of rural areas
    - 5. Families are less likely to make international moves than young adults
  - B. *Gravity model* defined: larger and closer together two cities are, the greater the interaction between the two (predicts measure of interaction between two places)

#### CATALYSTS OF MIGRATION:

- A. Economic conditions
  - 1. Poverty
  - 2. Perceived opportunities in destinations
- B. Political circumstances
  - 1. Oppressive regimes, Cuba, Vietnam's "boat people", Uganda
- C. Armed conflict and civil war
  - 1. Three million people driven from their homes in former Yugoslavia
  - 2. Civil war in Rwanda
- D. Environmental conditions
  - 1. Potato famine in Ireland in the 1840s
  - 2. Major earthquakes and volcanic eruptions
  - 3. Many emigrants return home after the crisis is over
- E. Culture and tradition
  - 1. Muslims migrated out of India when it was partitioned
  - 2. Jews left the former Soviet Union for Israel
  - 3. Whites left South Africa during the turbulent political transition of the 1990s
- F. Technological advances
  - 1. Modern transportation makes migration easier
  - 2. Air conditioning reduced return migration from the Sunbelt back to the north
- G. Flow of information

- 1. Fast transmission of information by television, radio, and telephone
- 2. Allows people to migrate where jobs available: Examples: Turks, Algerians, Haitians

## H. "Push" and "pull" factors

- 1. Usually push and pull factors are combined in a person's decision to migrate
- 2. Push factors
  - a) Likely to be more accurately perceived
  - b) Include individual and personal considerations
- 3. Pull factors
  - a) Likely to be more vague
  - b) Many move on the basis of excessively positive images and expectations

#### POPULATION POLICIES

- A. Three groups of population policies
  - 1. Expansion population policies
    - a) Encourage large families
    - b) Use of tax incentives and other fiscal means to encourage more children
    - c) Used by countries where the population has stopped growing: example of Singapore
  - 2. Eugenic population policies
    - a) Some were designed to favor cultural sector of the population over another
    - b) Until the time of the Civil Rights movement, some accused the United States of pursuing social policies tinged with eugenics that worked against interest of African-Americans
    - c) Japan's nearly homogeneous culture is sometimes said to result from deliberate eugenic social policies

These policies can be practiced covertly through discriminatory taxation

- 3. Restrictive population policies
  - a) Toleration of officially unapproved means of birth control
  - b) Outright prohibition of large families
  - c) Can have unintended consequences (aging population, lack of labor force)

## CONQUEST, AGRICULTURE, RENFREW, GREENBERG

- I. Theories of language diffusion
  - A. Roots
    - 1. Proto-language had words for certain landforms and other features of the landscape
    - 2. More specifically some contained words for certain types of vegetation–trees, grass, etc.
    - 3. Such information helps indicate the environment in which a language may have developed

## **B.** Conquest theory

- 1. Some believed the Proto-Indo-European language originated somewhere north of the Black Sea in the vast steppes of Ukraine and Russia
- 2. The language then spread west judging by the sound shifts
- 3. More than 5000 years ago, these people used horses, developed the wheel, and traded widely

## C. Agriculture theory

- 1. Some felt the spread of agriculture, not conquest, diffused the Proto-Indo-European language through Europe
  - a) Postulated the source area as the hilly and mountainous terrain Anatolia in Turkey
  - b) Proto-Indo-European language has few words for plains but many for high and low mountains, valleys, mountain streams, rapids, lakes, and other high-relief landforms
  - c) Language also has words for trees, and animals that never lived on the plains

- d) The realm's leading hearth of agricultural innovation lay in nearby Mesopotamia
- 2. Support for the theory
  - a) Research proved the existence of distance decay in the geographic pattern
    - (1) Certain genes become steadily less common as one moves north and west
    - (2) Farming in Anatolia led to overpopulation, which led to outmigration
    - (3) Farming peoples of Anatolia migrated in a slow moving wave into Europe
  - b) Nonfarming societies held out, and their languages remained unchanged
- 3. Drawbacks of the theory
  - a) Anatolian region is not ideal for farming
  - b) Some believe the proto language(s) was first carried eastward into Southwest Asia, then across the Russian-Ukrainian plains and on into the Balkans (Figure 9-2)
  - c) May be some truth in both hypotheses (Figure 9-3)
  - d) An eastward diffusion must have occurred because of relationships between Sanskrit and ancient Latin and Greek
- II. The search for the superfamily
  - 1. Language development and divergence have been occurring for 90,000 or more years
  - 2. Renfrew proposed three agricultural hearths gave rise to language families (Figure 9-5)
  - 3. **RENFREW MODEL:** 3 hearths: Anatolia, E arc of fertile crescent and W. arc of fertile crescent, each spreading in different directions and accounting for the widespread nature of the Indo-European Family



- 3. Russian scholars have long been in the forefront of research on ancient languages
  - a) Vladislav Illich-Svitych and Aharon Dolgopolsky
    - (1) Studied independently of each other yet came to similar conclusions
  - b) Established the core of a pre-Proto-European language named *Nostratic*

## B. Nostratic

- 1. vocabulary revealed much about the people speaking it
- 2. No names for domestic plants or animals
- 3. People were hunters and gatherers, not farmers, May date back 14,000 years
- 5. Believed to be the ancestral language for many other languages
- 6. Nostratic links widely separated languages

# III. The Greenberg hypothesis



- 1. Proposed there are only three families of indigenous American languages
- 2. Each corresponds to a major wave of migration from Asia
  - a) Amerind, the superfamily, is the most widely distributed
  - b) Na-Dene, spoken by indigenous people in northwest Canada and part of Alaska
  - c) Eskimo-Aleut is still concentrated along Arctic and near-Arctic shores
- 3. Many linguists disagree with Greenberg b/c he did not follow proper reconstruction
- 4. Implies an earlier than 12,000-to-13,000-year-ago immigration into Americas
  - a) Archaeological dating in Pennsylvania (16,000 B.P.), and Chile (poss. 33,000 B.P.)
  - b) May lend credibility to Greenberg's hypothesis, if proved beyond a doubt
  - c) May mean the first wave came across the Bering Strait more than 40,000 years ago
  - d) Dental data gathered by Christy Turner conclude that three waves of immigration took place over a longer period that 12,000 years

## LINGUA FRANCA, PIDGIN, CREOLIZATION

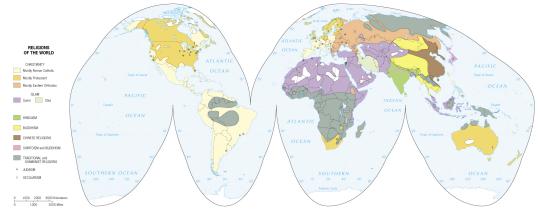
## A. Lingua franca

- 1. Created by traders before the Europeanization of the world
- 2. The term *lingua franca* comes from the Mediterranean Sea and its trading ports
  - a) A mixture of Frankish, Italian, Greek, Spanish, and Arabic
  - b) A product of linguistic convergence
- 3. The term is used to denote any common lang. spoken by peoples w/ diff. native tongues
- 4. Swahili has become the lingua franca of East Africa
  - a) Developed from African Bantu languages, Arabic, and Persian
  - b) Has a complex vocabulary and structure
  - c) Even used in eastern Congo
- 5. In West Africa Hausa is a regional tongue

## B. Creolization

- 1. Pidgin—a language modified and simplified through contact with other languages
  - a) Common in the Caribbean region
  - b) English and African languages combined to form a pidgin English
- 2. May sometimes become a mother tongue
  - a) The process is known as Creolization
  - b) Pidgin becomes a lingua franca
- 3. Important unifying forces in a linguistically divided world
- 4. Sometimes difficult to distinguish between a dialect and a pidgin or creole language
- 5. Pidgin and creole languages are important unifying forces

## UNIVERSALIZING AND ETHNIC RELIGIONS



# A. Universalizing religions

- a) Global religions
- b) Actively seek converts
- c) Spread of Christianity was important consequence of colonialism
- d) Relatively few in number and of recent origin (Christianity, Islam, Buddhism)
- e) Often seen in syncretic religions: overlying universalizing religion with underlying animist beliefs

# B. Ethnic religions

- a) Sometime called cultural religions, do not seek converts outside the group
- b) Tend to be spatially concentrated (Hinduism, etc)
- c) Main exception is Judaism (spread due to diaspora)

## ORGANIC THEORY, HEARTLAND THEORY, RIMLAND THEORY



#### A. Geopolitics

#### 1. Ratzel's organic theory

- a) Held that a nation which is an aggregate of organisms would itself function and behave as an organism
- b) Gave rise to a subfield of political geography called *geopolitics*
- c) Term geopolitics fell into disuse after World War II
- d) Geopolitics is now used for the study of spatial and territorial dimensions of power relationships past, present, and future
- 3. *Heartland theory*—Sir Halford Mackinder
  - a) Believed a land-based power, not a sea power, would ultimately rule the world
  - b) Pivotal area extended from Eastern Europe to eastern Siberia
- 4. *Rimland Theory*—Nicholas Spykman, a critic of Mackinder, argued that the Eurasian rim, not its heart, held the key to global power (RIMLAND THEORY)
- 4. Spykman coined the world "*rimland*," which is still used today
- B. World Systems analysis: See core Periphery model in development section...

#### CENTRIFUGAL AND CENTRIPETAL FORCES

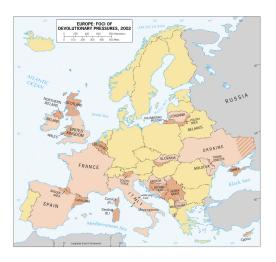
# A. Centripetal forces

- 1. Forces that promote unity (Example of Nigeria, past and present)
- 2. Governments everywhere seek to promote nationalism to overcome more local loyalities
- 3. Try to ensure minorities are represented in government
- 4. Need for a charismatic individual as leader to unite the people
- 5. Real or perceived threats to a country can unite
- 6. Education from institutions or the church
- 7. A national ideology
- 8. Circulation—people moving about the country diffusing national norms

# B. Centrifugal forces

- 1. All states must deal with centrifugal forces
- 2. States collapse when they outweigh centripetal forces
- 3. In the early twenty-first century, centrifugal forces seem to be on the rampage

#### **DEVOLUTION:**



#### I. Forces of devolution

- A. The counterforce to supranationalism
  - 1. Today, many states are afflicted by internal centrifugal forces
  - 2. No New World Order can be established as long as destabilizing forces exist
  - 3. Even some the world's oldest states are subject to devolution
  - 4. Time has failed to submerge regionalism in the United Kingdom
    - a) Rising tide of separatism in Scotland and Wales
    - b) Underscores the cultural forces at work in many states

#### B. Ethnonational forces

- 1. Ethnicity is often based on cultural commonalities
- 2. Peoples sharing a strong sense of ethnicity feel they are part of a group
- 3. *Ethnonationalism* can be a fundamental force promoting devolution
- 4. Canada—the French speaking province of Canada
- 5. Devolutionary forces exist in Europe
  - a) Spain—greater autonomy desired by Basques and province of Catalonia
  - b) Belgium—Flanders and Wallonia
  - c) Czechoslovakia—peacefully divided into the Czech Republic and Slovakia
  - d) Discussion on the break-up of Yugoslavia
- 6. Devolution elsewhere
  - a) Sudan—Muslim north and non-Muslim south
  - b) Sri Lanka
- 7. Ethnonational differences are weakening the fabric in many states today

## C. Economic forces

1. Catalonia, discussion of Italy, France, Corsica, and Brazil

## D. Spatial Influences

- 1. Devolutionary events occur on the margins of states
- 2. Many islands are also subject to devolutionary forces
- 3. Discussion of devolutionary forces in the United States
- 4. *Gateway states*—political entities situated in border zones between geopolitical power cores

## **ECONOMIC ACTIVITIES:**

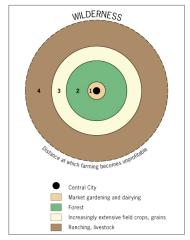
- I. Classifying economic activities
  - A. Primary activities
    - 1. Hunting and gathering
    - 2. Farming of all kinds
    - 3. Livestock herding, fishing, forestry, and lumbering
    - 4. Mining and quarrying
    - 5. All are activities in the extractive sector
  - B. Secondary activities
    - 1. Concerned with the conversion of raw materials
    - 2. An infinite range of production from simple to complex
  - C. Tertiary activities
    - 1. Service industries
    - 2. Connect producers to consumers
  - D. Quaternary (and quinary) activities
    - 1. Quaternary—economic activities concerned with information and exchange of money or capital
    - 2. Quinary—spheres of research and higher education

#### LAND SETTLEMENT PATTERNS:



- I. Patterns of settlement and land use
  - A. Influence of physical environment
    - 1. Limitations on types of agriculture that can be practiced
    - 2. Numbers of people the agriculture can support
  - B. Property inheritance
    - 1. *Primogeniture*—all land passes to the eldest son
    - 2. Where land is divided among heirs considerable fragmentation can occur over time
  - C. *Cadastral system*—delineates property lines
    - 1. Rectangular survey system
      - a) Adopted by the U.S. government after the American revolution
      - b) Known as the *township-and-range system*
      - c) Basic unit is the one square mile section, a similar system is used in Canada
    - 3. Metes and bounds survey
      - a) Natural features are used to demarcate irregular parcels of land
      - b) Used along the eastern seaboard
    - 4. Long-lot survey
      - a) Used in Louisiana and Texas
      - b) Divides land into narrow parcels along roads, rivers, or canals

## VON THUNEN:



- A. Understanding the spatial layout of agriculture
  - 1. Discussion of Von Thünen's Spatial Model of Farming
    - a. Concentric zones of differing agricultural activities
      - i. Governed by land rent and perishablility
      - ii. Nearest city: dairying and market produce
      - iii.Further: wheat and then cattle
    - b. assumptions: flat terrain, uniform soils and environmental conditions
  - 2. Many factors have combined to produce the spatial distribution of farming systems existing today (Refrigerated shipping, core-periphery relations, cheap labor/land costs)
  - 3. Decisions made by colonial powers led to the establishment of plantations
  - 4. Food-poor countries continue to grow commercial crops when food crops are needed

#### SJOBERG:

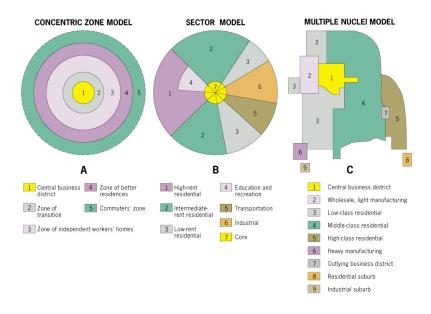
- A. Models of urban places
  - 1. Gideon Sjoberg
    - a) Cities should be viewed as products of their societies
    - b) Argued city levels could be divided into four categories
      - (1) Folk-preliterate
      - (2) Feudal
      - (3) Preindustrial
      - (4) Urban-industrial
  - 2. A European city during feudal times was little more than a village
  - 3. Cities grew during the consolidation of political power and the expansion of states
  - 5. The dominant aspect of the pre-industrial city was the imposing complex of religious and governmental structures at its heart

# TYPES OF CITIES:

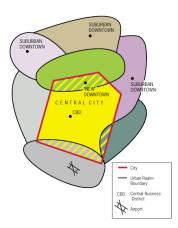
- A. Primate cities
  - 1. Sjoberg recognized emergence of the *primate city*
  - 2. Not always largest but dominant, their influence underscored by the cluster of religious or governmental buildings at their center, spaciousness, and wealth
  - 3. Generalizations about pre-industrial cities are always open to debate
    - a) Not all cities were structured as Sjoberg suggested
    - b) Examples: Muslim cities, city centers in Middle America, black African cities
  - 4. Another viewpoint holds that the term "preindustrial" represents an inaccuracy
- B. The global spread of urbanization

- 1. Oases and resting places along the Silk Route grew into towns and some into cities
- 2. *Urban banana*—a crescent-shaped zone of early urbanization extending across Eurasia from England to Japan
- 3. Effects of European maritime exploration and overseas colonization
  - a) Ushered in an era of oceanic trade
  - b) Coastal cities gained prominence
- 4. The *mercantile city* of the colonial era brought revival and sometimes prosperity
  - a) A central square became what we today call "downtown"
  - b) Became nodes of a global network of regional, national, and international commerce
  - c) Powerful trading companies and wealthy merchants established settlements in distant lands
  - d) Was engulfed by desperate immigrants during the worst years of the "Little Ice Age"
- 5. Emergence of the *manufacturing city* 
  - a) Emerged in British Midlands and spreading to Western Europe
  - b) Cities became unregulated jumbles of activity
  - c) Elegant housing was converted into overcrowded slums
  - d) Sanitation systems failed, water supplies were inadequate and often polluted
  - f) Children worked 12-hour shifts in textile mills
- 6. Improvements were made by government intervention and city planning
- 7. Many manufacturing cities in the New World never suffered as much as European cities
- 8. During the second half of the twentieth century manufacturing cities stopped growing
- 9. Today the global urban scene is undergoing another major transition
- 10. Cities in the developing world have been growing at unprecedented rates
- 11. Effect of transportation innovations
  - a) Dispersal of urban population creating suburbanization
  - b) The *modern city*
- 12. Some geographers see what is often referred to as *postmodernism* in cities of technologically advanced societies, resulted in the modernization of the American manufacturing city, importance of the electric trolley and the automobile

#### NORTH AMERICAN CITIES:



- 1. The concentric zone model (Burgess Model) discussed p. 277
  - a. Zones defined by their function, grew as a city grew
  - b. Based on Chicago
  - c. Encroachment of zones on one another...
- 2. The sector model (Hoyt's) discussed on p. 277-278
  - a. Response to concentric zone model
  - b. Zones shaped like pieces of a pie radiating out from CBD
  - c. Focused on residential pattern (where wealthy in a city choose to live)
  - d. Land rent figures in heavily
- 3. The multiple nuclei model (Harris and Ullman) discussed on p. 278
  - a. Later model that asserts that the CBD is losing its dominant position as the nucleus of the Urban area
- 4. *Urban realms*—components of giant conurbations that function separately in certain ways but linked together in a greater metropolitan sphere, much more modern model, each realm a separate entity but functioning in a loose wat together
  - a. Early post-war period, reduced volume and level of interaction between the central city and suburban cities
  - b. Outer cities became more self-sufficient
    - i. Began to duplicate certain functions of the central city
    - ii. Regional shopping centers were becoming the CBDs of the outer nuclei
    - iii. Business and industrial parks were locating outside the central city
    - iv. The term *urban realm* came into use in the 1990s
      URBAN REALMS MODEL



- 5. Growth of outer cities has been the hallmark of the American urbanization since the 1960s
- 6. As early as 1973, American suburbs surpassed central cities in total employment
- 7. Outer cities became so-called edge cities
- 8. Outer cities have become equal partners in the shaping of the polycentric metropolis
- B. Economic forces and institutions behind racial patterns that developed in cities
  - a) **Redlining**—financial institutions refused to lend money to risky neighborhoods marked off on maps by red lines
  - b) **Blockbusting**—Offering an African-American a house in a white neighborhood at a very low price to convince white neighbors that the neighborhood was going downhill
  - b) Racial steering—used after blockbusting became illegal in the 1960s
  - c) Concerns about the dangers of urban life led to the proliferation of *gated communities*

## RANK SIZE RULE:

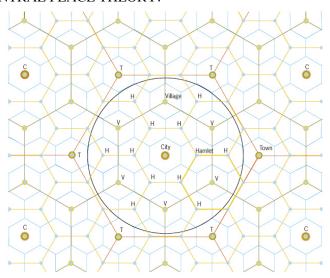
#### VII. Patterns of cities

- A. Rank size rule— a model of urban hierarchy, occurs mainly in developed core
  - 1. The population of a city or town will be inversely proportional to its rank in the hierarchy 2<sup>nd</sup> largest 1/2 the size, 3<sup>rd</sup> 1/3 etc...
  - 2. Does not apply in countries with dominant primate cities
  - 3. Tells little about the reasons behind the distribution of places at various levels

#### MULTIPLIER EFFECT

- C. Functional specialization
  - 1. *Employment structure*—data on the number of people employed in various basic and non-basic jobs
  - 2. All cities have multiple functions—the larger the city larger the number of functions
  - 3. Functional specialization
    - a) A characteristic of European cities even before the Industrial Revolution
    - b) Association between the names of cities and their functional specialities has little relevance today
    - c) There was a time when many cities were identified with certain products
  - 4. Three 1943 maps by Chauncy Harris of distribution of United States' cities according to their dominant functions
    - a) Reveal a situation that no longer exists
    - b) Only slightly more than a dozen northeastern cities could still be mapped as manufacturing centers
  - 5. Explanation of the multiplier effect (each basic job creates two nonbasic jobs)
  - 6. Every city and town has an economic base
    - a) **Basic sector**—work that results in exports and inflowing money
    - b) *Non-basic sector*—also called the service sector
  - 7. The number of non-basic workers is always greater than the number of basic workers; the ratio tends to increase as city grows

### CHRISTALLER"S CENTRAL PLACE THEORY:



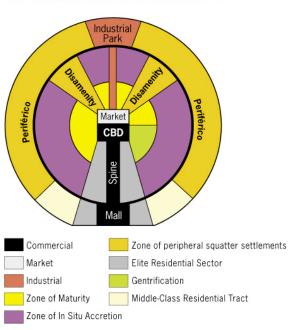
- I. Central place theory
  - A. Developed by Walter Christaller
    - 1. Spatial distribution of one place in the hierarchy to another (services offered)

- 2. Began with a simple set of assumptions
  - a) Surface of ideal region would be flat and have no physical barriers
  - b) Soil fertility would be the same everywhere
  - c) Also assumed an even distribution of population and purchasing power, and uniform transportation network
  - d) Assumed a constant maximum distance for sale of any good or service produced in a town would prevail in all directions from urban center
- 3. He wanted a means to calculate the degree of centrality of various places
- 4. What distance people would travel to acquire goods and services
- 5. Because circles overlapped or left spaces hexagons were used (Figure 22-9)
- 6. His model yielded some important conclusions that had practical application
- B. The real world
  - 1. Physical barriers, resource distributions, etc. create modification of the spatial pattern
    - a) Geographers were divided on relevance of the model
    - b) Some saw hexagons everywhere, others saw none
  - 2. Some areas do tend to confirm the model
  - 2. Christaller stimulated urban and economic geography in general and location theory in particular

#### MODELING MODERN CITIES:

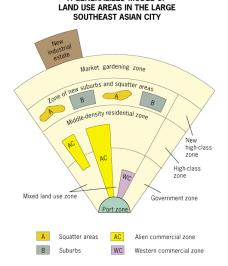
- I. Modeling the modern city
  - A. Introduction
  - B. The Ibero-American city

# A NEW AND IMPROVED MODEL OF LATIN AMERICAN CITY STRUCTURE



- 1. South and Middle America are urbanizing rapidly
  - a) Especially in cities where "Latin" cultures dominate
  - b) Urban population grew from 41 to 77 percent between 1950 and 2002
  - c) Discussion of the model proposed by Ernst Griffin and Larry Ford
- 2. Cities of South and Middle America display so much diversity no model will encompass all aspects

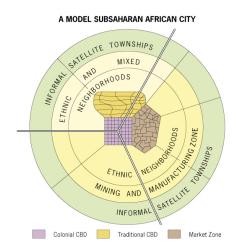
## II. The Southeast Asian city



A GENERALIZED MODEL OF

- A. Besides Singapore, other cities are growing and modernizing
  - 1. Example of Kula Lumpur, capital of Malaysia
  - 2. First megalopolis is emerging centered on Jakarta, Indonesia
  - 3. Urbanization in this realm was just 36 percent in 2002
  - 4. The cities exhibit similar land use patterns

# III. The African city



- A. Sub-Saharan Africa is the least urbanized and the fastest urbanizing realm in the world
  - 1. Colonial imprints remain in many African cities
  - 2. Traditional cities occur mainly in the Muslim zone in the west
  - 3. South Africa's major urban centers are essentially Western with elements of European as well as American models
- B. Difficult to formulate a model African city
  - 1. In African cities the central city often consists of three CBDs
    - a) Remnant of colonial CBD
    - b) An informal and sometimes periodic market zone
    - c) Transitional business center where commerce is conducted
  - 2. Many cities are ringed by satellite townships

## LEAST COST THEORY:

#### A. Weber's model

- 1. Least cost theory
- 2. Minimization of three critical expenses
  - a) Transportation costs most critical
  - b) Labor costs
  - c) Agglomeration—when a substantial number of enterprises cluster in the same area
- 3. Some argued his theory did not account for variations in costs over time

#### B. Factors of industrial location

- 1. Most, but not all economies are guided by market mechanism and relationships between supply and demand
  - a) Some evolved under state planning—example of the former Soviet Union
  - b) Discussion of capitalists who built great iron works in Europe and practice of moving iron ore to coal fields

#### 2. Raw materials

- a) Transportation costs affect industry location
- b) Example of steel plants along the U.S. northeastern seaboard
- c) Example of Japan, which has few raw materials
- d) Example of colonial powers that controlled raw materials
- e) Wealthy countries can keep prices lower for raw materials by finding other sources

#### 3. Labor

- a) Availability of cheap semiskilled labor has had an immense impact on regional
- b) Example of Japan's development
- c) Example of Taiwan and South Korea competing with Japan
- d) Economic development on the Pacific Rim
- e) Example of China with its huge labor force
- f) Industry keeps shifting as new low-cost labor locations are found
- g) Intense debate about the United States moving factories to Mexico
- h) Cost of labor still looms large in location of industry

#### 4. Transportation

- a) Crucial to industrial location
- b) Enables manufacturers to purchase raw materials from distant sources
- c) Allows for distribution of finished products to dispersed populations
- d) Location of industry also needs an alternative system of transportation
- e) Container systems allow for bulk transport
- f) For most goods, truck transport is cheapest over short distances
- g) Railroads are cheapest over medium distances
- h) Ships are cheapest over longest distances

#### 5. Infrastructure

- a) Includes all the different kinds of services offered by an area or city
- b) Without needed services industries cannot succeed
- c) Example of Southeastern China trying to industrialize without needed infrastructure
- d) Vietnam has infrastructure problems that will not soon be overcome
- e) In many Western cities excessive agglomeration is driving firms away from crowded decaying urban areas

#### 6. Energy

- a) Not as important as it once was
- b) Can be brought from long distances over electrical lines
- c) Industries needing exceptionally large amounts of energy still locate near sites of abundant available energy

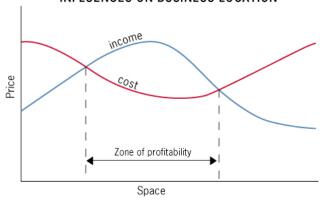
- d) A huge system of pipelines and tankers delivers oil and natural gas to manufacturing regions throughout the world
- e) In the early 2000s the United States' reliance on foreign energy resources was even greater than in the 1970s
- 7. Other factors
  - a) Some similar industries tend to cluster together
  - b) Political stability and receptiveness to investment
  - c) Taxation policies
  - d) Environmental conditions
  - e) Hong Kong's success and the role of geographic location is discussed

#### HOTELLINGS LOCATIONAL INTERDEPENDENCE:

I. Locational Interdependence (ice cream vendors on the beach ending up back to back)

#### LOSCH'S MODEL:

# DIAGRAMMATIC REPRESENTATION OF ECONOMIC INFLUENCES ON BUSINESS LOCATION



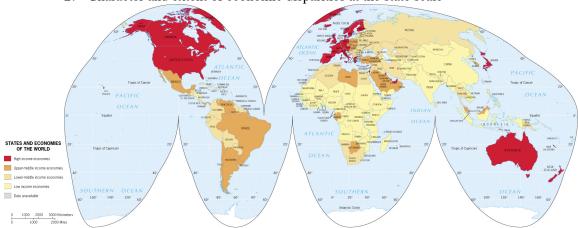
## I. Emphasizes profit maximization

- a)Includes spatial influence of consumer demand
- b)Establish a zone of profitability
- c)Other businesses can come in a shift the zone of profitability

#### **DEVELOPMENT MODELS:**

- I. Concepts and approaches
  - A. Classifying countries into categories of development
    - 1. **Developed countries**—countries with high levels of urbanization, industrialization, and high standards of living
    - 2. *Underdeveloped countries*—opposite end of the development scale
    - 3. Concept of development is complicated
    - 4. The GNP index is commonly used to measure development
      - a) Criteria used for comparison will influence the outcome
      - b) Data is not always reliable
      - c) Discussion of the use of the GNP and its problems
    - 5. Other measures of economic development
      - a) Occupational structure of the labor force
      - b) Productivity per worker
      - c) Consumption of energy per person
      - d) Transportation and communications facilities per person
      - e) Consumption of manufactured metals per person

- f) Dependency ratio
- g) Social indicator rates
- 6. Some countries come out in approximately the same position no matter which measure is used
  - a) None of the approaches produces a clear dividing line between levels
  - b) Classifying countries became more acute in the 1960s and 1970s
  - c) Some countries classified as underdeveloped began shooting ahead
  - d) The term developing countries came into use
  - e) Examples of South Korea and Taiwan
- 7. Term underdeveloped has a negative connotation and has been replaced with developed-developing
- 8. Discussion of how the effort of classifying countries in terms of levels of development has come under attack
- II. World Systems Analysis: (Wallerstein's core-periphery model)
  - 1. Some scholars have argued for a new approach to describing global economic disparities
  - 2. They have proposed the *core-periphery model: a three tier structure* 
    - a) *Core* regions are those that have achieved high levels of socioeconomic prosperity
    - b) **Periphery** regions are poor and dependent in significant ways on the core, and do not have much control over their own affairs
    - c) *Semi-periphery* regions exert more power than peripheral regions, but are dominated to some degree by core regions
  - 3. A key component of many theories because it focuses attention on economic relationships among places
  - 4. Does not assume socioeconomic change will occur in the same way in all places
  - 5. Has the advantage of being able to describe developments at any spatial scale
  - C. Patterns on the map
    - 1. Development concepts are still widely used despite their limitations
    - 2. Character and extent of economic disparities at the state scale



# LIBERAL AND STRUCTURALIST DEVELOPMENT MODELS:

- I. Models of development
  - A. *Liberal models*: Assume that all countries follow the same stages along a development trajectory, economic disparities are a result of short term market inefficiencies
    - 1. Rostow's modernization model (also known as the ladder of development)
    - 2. One of the most influential liberal models
    - 3. Formulated by Walt Rostow in the 1960s

- 4. Suggests all countries follow a similar path through five stages of development
  - 1. Traditional
  - 2. Preconditions of takeoff
  - 3. Takeoff
  - 4. Drive to maturity
  - 5. High mass consumption
- D. **Structuralist models**: regional economic disparities are a structural feature of the global economy, disparities are a result of inequality during the development of the global economy and the unequal relationships make it difficult for poorer regions to improve their situations
  - 1. Dependency theory
    - 1. Holds that political and economic relationships between countries and regions of the world control and limit economic development possibilities of less well-off areas
    - 2. Sees very little hope for economic prosperity in regions and countries that have been dominated by external power
    - 3. Like modernization theory, is based on generalizations about economic change
    - 4. Pays very little attention to geographical differences in culture, politics, and society (need to consider core-periphery for that)