

AP HuG – Models List

<u>Model</u>	<u>Function/Purpose</u>
Demographic Transition	<p>Population growth stages:</p> <ol style="list-style-type: none"> 1. Low growth- high death rates (hunter-gatherer societies) 2. High growth- lowering death rates (subsistence farming) 3. Moderate growth- birth rates decline (commercial farming/industry) 4. Low growth- birth rate & death rate are low (industrialization) 5. Stationary growth
Epidemiological Transition	<p>Focuses on distinctive causes of death in each stage of the demographic transition:</p> <ol style="list-style-type: none"> 1. Pestilence and famine stage-infectious and parasitic diseases 2. Receding pandemics stage-small reduction due to better sanitation, nutrition, medicine 3. Degenerative and human-created diseases stage-more chronic disorders caused by aging 4. Delayed degenerative diseases stage-life expectancy goes up 5. Reemergence of infectious and parasitic diseases stage
Gravity Model	<p>Holds that the potential use of a service at a particular location is directly related to the number of people in a location & inversely related to the distance people must travel to reach the service</p> <p>Steps to follow:</p> <ol style="list-style-type: none"> 1. identify site; 2. identify where potential user lives; 3. measure distance between service and customer; 4. divide each potential user by distance to site; 5. sum all of the results of potential users divided by distances; 6. select a second possible location for service, and repeat; 7. compare results; site with highest score has highest potential number of users = optimal location
Laws of Migration {Ravenstein}	<ol style="list-style-type: none"> 1. Every migration flow causes a counter or return migration 2. Majority of migrants move short distances 3. Migrants who move long distances choose big cities 4. Urban migrants are less migratory than rural migrants 5. Families are less likely to make international moves than young adults
Von Thünen	<p>Geographers use to help explain the importance of proximity to market in the choice of crops on commercial farms;</p> <ol style="list-style-type: none"> 1. market 2. market-garden crops and dairy 3. wood lots, where timber was cut for construction and fuel 4. various field crops, rotated from one year to the next 5. animal grazing, which requires lots of space

Least Cost Theory {Weber}	<ul style="list-style-type: none"> • Optimal location and minimal cost for manufacturing plants, also applied to service organizations such as investment firms, and more broadly to certain political and cultural systems • Relevant at the end of the 19th century, when the industrial revolution was well established, and development of rail transport, energy, telecommunications and urban growth provided more options for distributing firms and components of the manufacturing process • The point for locating an industry that minimizes costs of transportation and labor requires analysis of three factors: <ul style="list-style-type: none"> 1. The point of optimal transportation based on the costs of distance to the raw materials & weight of raw materials to finished product (weight reducing & weight gaining industries) 2. Favorable sources of lower cost labor may justify greater transport distances. 3. Agglomeration and deglomeration
Locational Interdependence {Hotelling}	Location of an industry cannot be understood without reference to other similar industries
Zone of Profitability {Losch}	Manufacturing plants choose locations where they can maximize their profit
Modernization Model [Rostow]	Five stages: <ol style="list-style-type: none"> 1. Traditional society – limited technology and static society 2. Preconditions for takeoff – commercial exploitation of agriculture & extractive industry 3. Takeoff – development of a manufacturing sector 4. Drive to maturity – development of wider industrial & commercial base 5. Age of mass consumption- tertiary, service jobs
Stages of Growth Model {Nolan}	Six Stages: <ol style="list-style-type: none"> 1. Initiation- little technology used 2. Contagion- contagious diffusion of technology 3. Control- confusion/frustration with technology 4. Integration- practical use 5. Data Administration- technology used for collection/ storage 6. Maturity- new uses for technology
Dependency Theory	Colonialism created political and economic structures that caused the colonies to become independent on colonizers. Core countries continue to prosper and periphery countries remain in poverty
Structuralist Theory	Economic differences are built into the world system & cannot be easily changed

Periphery Model	Inner city surrounded by large suburban residential areas & business tied together by a ring road or beltway
S-curve vs. J-curve (Population)	J → unlimited supply of resources S → limited supply of resources; more realistic
Core-Periphery Model {Wallerstein}	<ol style="list-style-type: none"> 1. World market has one market & a global division of labor (capitalism & commodification) 2. Everything takes place in the context of the global market (colonialism, dependency theory) 3. 3-tier structure: core, periphery, semi-periphery
Domino Theory	If one country came under the influence of Communists, then more would follow. It was used by the United States government during the Cold War to justify American intervention in world affairs
Central Place [Christaller],	Explains how services are distributed; and why a regular pattern of settlements exist in MDCs; area surrounding a service from which customers are attracted is the hinterland; the shape is a hexagon; closer to the periphery of hexagon the greater % of consumers to obtain services from other nodes
Bid-rent Theory	<ul style="list-style-type: none"> - Land in the CBD is most expensive so only business-owners can afford it - The price of land gets cheaper the farther you get from the CBD
Rank Size Rule {Zipf}	<ul style="list-style-type: none"> - Explains the size cities in a country - Smaller cities should represent a proportion of the largest city <ul style="list-style-type: none"> ○ the second largest city will have half as many people ○ the third largest city will have 1/3 as many people as the largest city ○ the fourth largest city will have 1/4 as many people as the largest city

<p>Concentric Circle [Burgess]</p>	<p>Central Business District Zone of transition Zone of independent workers homes Zone of residences Commuter zone</p>
<p>Sector [Hoyt]</p>	<p>CBD Transportation industry Low class residential Middle class residential High class residential</p>
<p>Multiple Nuclei</p>	<p>CBD Wholesale lite manufacturing Low class residential Middle class residential High class residential Heavy manufacturing Outlying business district Residential suburb/Industrial suburb</p>