Models in APHUG

[**Agriculture**](https://apmodels.wikispaces.com/Agriculture)

***Von Thünen’s Land Use Model***

**Definition-** This model is used by geographers to explain the important relationship between the proximity a farm has to market and the crops grown on the farm. The principle belief of this mode is that farmers must consider the types of animals and crops to grow by evaluating the location of the market they are targeting in order to obtain the largest profit.
**Explanation-** This model is typically conveyed via six concentric rings, each representing an agricultural activity, with the market as the central node. The six rings in order of smallest to largest distance from market are as follows: Market-Gardening, Dairy, Livestock Fattening, Commercial Grain Farming, Livestock Ranching, and Nonagricultural Land Use. In this way, perishable goods as well as bulky products are kept closer to the market to avoid the cost of shipping from far off locations, while easily transported products and activities requiring large amounts of space are kept farther away. However, this model is becoming less applicable with the rapidly changing economy which now allows for products to be shipped globally; also this model fails to take into account the physical geography of various regions. To its credit this representation of homogenous geography has been modified in some cases.
**Example-** In the case of the average farm, fruits and dairy stuffs will be produced relatively close to the market in order to cut shipping costs. In comparison, activities such as reaping and threshing through the use of combines and ranching, which require a great deal of space, are segregated to outlying rings where more space is available.

**Burgess’ Land Use Model**

**Definition-** As used in urban areas, the Burgess' land use model depicts society within an urban area as being arranged in a series of concentric rings in positions defined by social factors.
Explanation- Society as defined by this model is arranged into five rings within an urban area.
1. Central Business District
2. Zone in transition
3. Zone of independent workers' homes
4.Zone of better residences
5.Commuter's Zone
Within each ring different levels of society are arranged, where those with higher income are nearer the outskirts while inner city and low class residents are closer to the center.
**Example-** Traditionally, this model was based upon the city of Chicago, where the population was arranged in a way reminiscent to this model.

**Three Agricultural Revolutions**
**Definition-**
1st Agricultural Revolution (Neolithic Revolution) - This agricultural revolution occurred approximately 10,000 years ago and was characterized by the development of sedentary lifestyles through the domestication of plants and animals and conversion of lifestyle from hunter-gatherers to farmers.
2nd Agricultural Revolution - The second agricultural revolution took place from the 1700s through the 1900s and resulted in the development of greater agricultural technologies and practices, such as crop rotation. This revolution also resulted in the expansion of a previously segregated market.
3rd Agricultural Revolution (Green Revolution) - This revolution took place in the mid-20th century and resulted in a rapid growth in biotechnology and genetic engineering. Also, this series of events resulted in the creation of a global market for agricultural products.
**Explanation-** Each agricultural revolution resulted in various changes to the global connections present in the agricultural industry. For one, the first agricultural revolution produced the very first instances of domestication and also the adaptation of different means of planting crops (vegetative planting and seed agriculture). The second agricultural revolution did not only result in the expansion of technologies but also acted as a catalyst for the Industrial Revolution. The third agricultural revolution allowed for the development of higher yield seeds and more successful fertilizers.
**Example-** The primary hearths of the first agricultural revolution were located throughout present-day Africa, Asia, and Latin America. The second agricultural revolution was centered in Britain, and would diffuse its ideas readily to spark the Industrial Revolution in the same area. The third agricultural revolution was primarily centered in India and would spread throughout the globe as a global economy developed.

# [Culture](https://apmodels.wikispaces.com/Culture)

**Culture**
1.**Gimbutas Indo-European Origins theory**-
The theory states that the first Proto-Indo-European speakers were the Kurgan people, whose homeland was in the steppes near the border between modern day Russia and Kazakhstan.

**Explanation-**
The theory was used to explain from where Indo-European firstly developed, since this was found out, it spread out ideas that the people first started to migrate and spread ideas from this location. It also gave a location from where one of the major religions of today developed.

2.**Renfrew's Indo-European origins theory**-
Renfew argues that theProto-Indo-European people lived before the kurgan population by 2,000 years ago in eastern Anatolia in which is what today we call Turkey.

**Explanation-**Renfew believed that the population which spread the Indo-European branch began somewhere in what would be in the central area of Turkey. Thus he believed that they began diffusing the language branch two thousand years before the Kurgan population.

3.**The Eight major Language Families-**
Indo-European, Sino-Tibetan family,Afro-Asiatic,Austronesian,dravidian,altaic,niger Congo, and Japanese.

**Explanation-**48% of the worldwide population is able to speak of a language which is from the Indo-European branch, such as English.26% of people speak of a Sino-Tibetan family language, such as mandarin.6% of people speak Afro-Asiatic, such as arabic.5% of people speak Austronesian, such as Vietnamese.4% of people speak Dravidian, which would be a branch to a language such as Tamil.3 % of people speak Altaic which would be the main family of a language such as Turkish.3% of people speak a Niger-Congo originated language, there are many small isolated tribes in Africa, so they each have their own language though they have some similarities.2% of people speak the Language of Japanese, which would be considered its own family. While the remaining of the 3% of the population worldwide speaks another language of 100 smaller families.

4. **The major universalizing religions**
The 5 major universalizing would be:
Sikhism, Baha'i, Buddhism, Islam, and Christianity

***Explanation-***
Sikhism was originally had a hearth of present day Pakistan, found by Nanak.
Buddhism can have its origins traced back to present day India near the border of Nepal and India, which was found by Siddhartha Gautama.
The Baha'i religion was found in Shiraz, Iran in 1844 was found by Siyyid.
Islam was found in Middle Eastern countries and northern Africa and was based on Muhammad the prophet of God.
Christianity was found most likely in Israel and based on the teachings and events which Jesus did and
his teachings.

5.**The major ethnic religions-**
The major ethnic religions would be Hinduism, Confucianism, Daoism, and Judaism

***Explanation-***
Hinduism is mostly located in India and Nepal, and was found by someone unknown, still during modern times.
Confucianism was found by Confucius who was a philosopher and teacher, Confucianism most likely diffused from the Chinese province of Lu.
Taoism was found by Lao-Zi, a contemporary of Confucius.
Judaism's founder has been debated to be either Moses or Abraham, and the religion sprang up in the country of modern day Israel.

# [Industry and Economic Development](https://apmodels.wikispaces.com/Industry%2Band%2BEconomic%2BDevelopment)

**Capitalism, Socialism, and Communism**
**Definition-**
Capitalism- Capitalism is an economic system through which businesses are privately owned in order to make a profit. This system follows the laws of Adam Smith, including the law of competition, law of self-interest, and law of supply and demand.
Socialism- The economic and political system of socialism is operated through the regulation of private business by the government and government control of the means of production (factors necessary for life or business)
Communism- The economic and political
system of communism effectively dictates what can and cannot be done in the realm of business. There are defined limitations for the amount a business can produce and how much money they can earn. In addition to directly controlling the means of production, communism places strict rules on the way businesses operate in such a way that a classless society is born. No matter what field a business specializes in the same amount of funds will be allocated to each, and each worker will receive the same amount of money.
**Explanation-**
Capitalism- Through capitalism a private business can benefit from its own services and use revenue in a number of ways. Citizens in a country are able to produce to care for themselves and continue to grow economically and socially to a limitless extent if they so wish. Businesses in this system work for their own interests and work more productively through competition, also the availability of a given commodity is determined by its natural occurrence and by the demand of the public. In some cases this system may result in a small group of wealthy businesses and individuals that control the inner workings of a population.
Socialism- Within this system a private business has the ability to produce for itself, but the means of production are controlled. Basically, resource allocation, machinery, and factories are controlled by the government. This effectively limits how far a business can travel economically and socially creating a balanced society where wealth is not concentrated in a small upper class.
Communism- The economic and political system of communism effectively dictates what can and cannot be done in the realm of business. There are defined limitations for the amount a business can produce and how much money they can earn. In addition to directly controlling the means of production, communism places strict rules on the way businesses operate in such a way that a classless society is born. No matter what field a business specializes in the same amount of funds will be allocated to each, and each worker will receive the same amount of money.
**Example-**
Capitalism- Countries that follow the economic system of capitalism include the United States and Canada. The primary incentive for this action is the rate at which it encourages development.
Socialism- There is a fine line between socialism and communism, one such country that is considered to have socialist ideals in some instances of government is Germany.
Communism- On the other side of this fine line are countries such as Cuba and China which are both communist states that fully regulate production and productivity on a business and individual scale.

**Agglomeration**
**Definition**- The mutual benefits of industries and or businesses locating near one another.
**Explanation**- In the case of many businesses, location is the most important factor and often the first to be considered. While proximity to customers is important, locating near other businesses is just as important. Outlets that specialize in specific products will optimally locate near similar outlets that carry complementing merchandise. Such is the case with clothing retailers, which are often located near one another. Building a shoe store next to a jean outlet would be beneficial to both outlets since the added customers of the shoe store and the old customers of the jean outlet would both shop at both businesses more often than not.
**Example**- The concept of agglomeration is applied in malls across America and the world over. Having numerous retailers located in a single area draws customers interested in a number of products, and individual customers are likely to spend money not only at their initial destination but also in surrounding businesses. Such is the case with fashion as aforementioned; when retailers specializing in a specific article of clothing locate near each other, people will usually shop at each business to create an outfit as opposed to only visiting one.

**Weber’s Least Cost Theory**
**Definition**- This theory basically encompasses a simple triangular assessment that ultimately shows the most effective location to place a factory with minimal transportation costs in accordance with the location of the desired market and resources, labor costs, and transportation.
**Explanation**- Weber’s Least Cost Theory governs the placement of a factory by assessing the costs of transportation. Factories associated with weight gaining industries, producing products that weigh more than the raw materials used to make them, should allocate closer to the desired market. Weight reducing industries, which manufacture products that weigh more than the original materials, should be allocated closer to the required natural resources or raw materials. In doing this transportation costs of products will be at the lowest rate since the transportation of heavier merchandise usually costs more. Factories should also be as close as possible to a means of transportation such as a railway to cut shipping costs and must take into account the type of labor needed, either skilled or unskilled.
**Example**- In the case of a weight gaining industry such as the bottling of soft drinks, light materials are incorporated such as plastic, syrup, and water into a final product that weighs more. This type of industry will allocate its factories closer to the market it is targeting in order to reduce transportation costs. In contrast, the copper industry, which is a weight reducing industry, locates near the bulky natural resources due to the expense associated with the transportation and processing of copper in its raw form. Once it has been processed it can then be shipped more easily and less expensively. In this way, the final product weighs less than the raw materials and the allocation of factories closer to natural resources is fiscally beneficial.

**Human Development Index**
**Definition-** The human development index, or HDI, is an indicator of development for a given country constructed by the United Nations. This indicator combines economic and social factors including GDP, life expectancy, and education.
**Explanation**- Using a rather complex formula a country is given a decimal number between zero and one based on its level of development in the areas of education, economy, and demography. By taking into account a country’s GDP, education information such as literacy rates, and demographic information such as life expectancy a clear level of development is attained. More developed countries have levels closer to one, indicating a greater level of development overall.
**Example**- The highest ranking country using this indicator of development is Norway with a score of .971. In contrast the United States is ranked 13th with a score of .956.

**Core Periphery Model of Development**
**Definition-** The core periphery model of development states that as a given region grows and develops from a central starting point, the core, its development is bound to spread to and influence peripheral locations as it continues to expand.
**Explanation**- As a region expands it will eventually meet another region with a separate economy and or societal factors. In order to continue to grow a given region must “engulf” surrounding regions so that it effectively spreads from its initial core to the periphery, outlying locations. These outlying locations are either influenced or completely overcome by the new incoming governances that have spread from the initial core.
**Example**- The most notable example of the core periphery model of development can be seen in the development of countries. The MDCs centered closely together, such as in Europe and North America which act as a large core, have spread their influence throughout LDCs which comprise the periphery.

**Rostow’s Growth Model**
**Definition**- This growth model defines development of all regions as occurring in five stages of varying lengths dependent on a region’s rate of development. The five stages are as follows: Traditional society, Preconditions to takeoff, Takeoff, Drive to maturity, and Age of mass consumption.
**Explanation**- The tenant of this model is that all states move through these stages of development at varying rates. All societies are said to begin by devoting large amounts of time to nonproductive activity such as military and religion while many are employed in the agricultural line of work. Following the stage of traditional society, a small group begins to initiate economic activities that stimulate productivity by investing in technology and infrastructure. Next, a society “takes off” where a few of the industries that have been able to establish themselves gradually advance technologically while other sectors remain “traditional”. Then, according to this model, a state matures as technology that has developed in only a few sectors spreads to all others as productivity grows and workers becoming increasingly skilled and specialized. Lastly, a society shifts from “heavy industry” to the production of consumer goods.
**Example**- If the history of the United States were broken down into these five stages they would be as follows:
1) Colonial United States- Society is focused on establishing ownership of land and settling the country through agricultural, military, and religious means.
2) United States Early 1800s- Society begins to establish transportation networks and an infrastructure for the future.
3) United States During the Industrial Revolution- Industry expands rapidly as diffusion from Europe reaches the United States.
4) United States Early 1900s- The momentum generated by the Industrial Revolution drives other sectors of the economy to expand and workers to begin to specialize and become skilled in specific craft.
5) Present Day United States- The economy is primarily concerned with producing consumer goods such as automobiles.

**Richard Nolan’s Growth Model**
**Definition**- This growth model concerns the growth of information technology within a business or organization. It is divided into six stages concerning the development of technology within a given organization including initiation, contagion, control, integration, data administration, and maturity.
**Explanation**- A business begins its movement through the Richard Nolan growth model as technology, primarily computers, is first introduced. Next, technology advances and becomes more widespread, followed by control mechanisms being put into effect in order to control spending. Then, users of computers and technology begin to further understand the usages of the devices and control them to a greater extent. Finally data administration is introduced and technology such as computers becomes more of a data resource than a machine.
**Example**- The typical example of information technology used to display this model is the computer, which, when tracked via this model, grows quickly into a data resource as control and utilization increase.

**The 5 Themes of Geography**

**Definition-** The five governing themes of geography are Movement, Region, Human Environment Interactions, Location, and Place.
Movement- The movement of individuals across any given scale
Region- An area distinguished by a unique combination of trends or features.
Human Environment Interaction- The effects humans have on the environment
Location- The position of anything on Earth’s surface.
Place- A specific point on Earth distinguished by a particular character.
**Explanation-** The 5 Themes of Geography are basically the governing principles of geographical studies. They play a major role in the explanation of various concepts and can be applied in nearly any geographic situation.
**Examples-**
Movement- This geographic theme encompasses migration and diffusion, such as migration of cultures or diffusion of certain ideas (religion).
Region- A way that humans have divided up the world, such as into formal regions like California (any other state or country would also suffice)
Human Environment Interaction- Humans clearing land to create farmland or mountains preventing humans from establishing settlement.
Location- Either an absolute location or relative location would suffice as an example of this geographic theme.
Place- The physical characteristics of a location that sets it apart from other locations is defined as its characteristics of place.

**Environmental Determinism and Possibilism**

**Definition-**
Environmental Determinism- How the physical environment causes social development.
Possibilism- How humans adjust to the challenges posed by the physical environment.
**Explanation-**
Environmental Determinism- This type of human environment interaction is characterized by the various limitations posed by the physical environment such as ways in which human development is altered or hindered by the environment.
Possibilism- This type of human environment interaction is basically the way in which humans overcome the environment.
**Examples-**
Environmental Determinism- An example of Environmental Determinism would be any climactic or geographic hindrance to humans, such as deserts or mountains.
Possibilism- Possibilism can be observed in any situation where humans conquer their environment, such as through building roads through arid land or establishing radical settlements in inhospitable conditions.

**Geographic Regions and 3 Types of Regions**

**Definition-**
Formal Region- (or uniform or homogenous region) An area in which everyone shares in one or more distinctive characteristics.
Functional Region- (or nodal region) An area organized around a node or focal point. Vernacular Region- (or perpetual region) An area that people believe exists as part of their identity.
**Explanation-**
Formal Region- A formal region is defined as any geographic location whose boundaries are clear and whose territory is set. There is no disagreement over the relative area a formal region may occupy.
Functional Region- A functional region is a region whose territory is organized around something central, such as a newspaper. The distribution of a given local newspaper is limited to a certain area, which is its functional region.
Vernacular Region- A vernacular region is nonexistent in a literal sense, and the territory it occupies is not clearly defined. There is disagreement on the location of a given vernacular region, and stance is dependent solely upon personal view.
**Examples-**
Formal Region- Any country would serve as an adequate example of a formal region, such as the United States, Russia, or China.
Functional Region- The distribution of a local newspaper would suffice as functional region as well as the fan base of a sports team.
Vernacular Region- An example of a vernacular region in the United Sates in particular would be the South. Any given person may have different beliefs of where the South is located and what regions it encompasses.
Example of Functional Regions in Australia

**The Heartland Theory

Definition -** In 1904, Sir Halford Mackinder published the Heartland theory. The theory proposed that whoever controls Eastern Europe controls the Heartland. It also supported the concept of world dominance.
**Explanation -** A more revised version explains that whoever controls the heartland, controls the world island. Whoever controls the World Island, will soon rule the world. In other words, the group or nation who dominates the heartland, can then extend its domination over a far wider area. The heartland has primarily been Central Asia, the high seas, and Eurasia.
**Example -** The Nazi party was in favor of the concept during World War II. The idea was very popular with the party, and they sought to achieve it. Also, the theory was accepted by the Soviet Union during the Cold War. Each nation made great territorial strides toward the heartland, but to no avail

***The Rimland Theory***

**Definition -** In 1942, Nichols Spyman created a theory which countered Mackinder’s Heartland theory. Spyman stated that Eurasia’s rimland, the coastal areas, is the key to controlling the World Island.
**Explanation -** The rimland contains the Heartland. Whoever would control the rimland, would eventually control the World Island. Whoever would control the World Island would soon control the world.
**Example -** His theory was influential mainly during the Cold War. The Soviet Union desired to control the rimland around them. If accomplished, the Soviet Union would control the heartland, rimland, and the World Island.

***The Domino Theory***

**Definition -** The domino theory speculated that if one land succumbed to communism, then the surrounding would follow in domino effect. The effect suggests that some change, relatively small in itself, will cause a similar change nearby, which then will cause another similar change, and so on.
**Explanation -** The domino theory was a foreign policy that existed during the 1950s to the 1980s. It was primarily promoted by the United States at the time. The domino theory was used by the successive United States administrations during the Cold War to clarify the need for American intervention around the world. However, there is much controversy regarding the theory, since there is evidence that suggests the theory is true and that it is also untrue.
**Example -** The major evidence that supports the domino theory is the communist takeover of three Southeast Asian countries in 1975. These three countries were South Vietnam, Laos, and Cambodia. In addition, this theory can be further supported by the rise of terrorist incidents in Western Europe. In Italy, this includes the kidnapping and assassination of former Italian Prime Minister Aldo Moro. In West Germany, this includes the terrorist actions of the Red Army Faction. Finally, terrorist actions took place in the United Kingdom, while receiving weapons from the Soviet Union.

***Wallerstein's World Systems Theory***

**Definition -** The basic World-systems approach is a view of the recent five countries of world history, as well as ideas by several theorists, to studying international relations, world history, and sociology. The world-systems theory was proposed by world-systems analyst Immanuel Wallerstein.
**Explanation -** Immanuel Wallerstein proposed that the world system as a set of mechanisms which distributes resources from the periphery to the core. He stated that the core is the more developed, industrial part of the world, and the periphery is typically the raw materials-exporting, poor part of the world. The market being the means by which the core exploits the periphery. Wallerstein evaluates the World System as, “A system is defined as unit with a single division of labor and multiple cultural systems.” In the current world system, the United States is the key core country.

# [Population and Migration](https://apmodels.wikispaces.com/Population%2Band%2BMigration)

1. **Malthus Population Growth Model**-A series if which is allowed to increase exponentially, then it will surpass linear growth.
**E*xplanation***- That overall in the years, population will begin to surpass food productions, leading to worldwide starvation if no new source can be found.
2. **Demographic Transition model**-The process of change in a society’s population from a condition of high crude birth and death rates and low rate of natural increase to a condition of low crude death and birth rate, low rate of natural increase, and a higher total population.
**E*xplanation***-Four different demographic stages which describe the stage a country might be in, 1 has very high birth and death rates(making them even out. Stage 2- has rapidly declining deaths, though it has high birth rates making a boom in population growth. Stage 3- birth rates begin to lower and the natural increase rate begins to moderate. Stage 4- has very low increase rates, birth rates, and death rates leading to little or no population growth
3.**S and J curve graphs**
S-curve-shows varying population growth
J curve-Exponential population growth
***Explanation*-**
-S-curve-The graph rises to a certain point, before reaching its climax/limit.
-J-Curve-The J curve is a graph used in a variety of fields which shows the curve fall but then gradually rise again.
4. **Epidemiological transition model**-Distinctive causes of death in each stage of the demographic transition model.
***Explanation***-The first transition occurs because the human population and growth numbers depart from their usual cycle because of maybe, death, famine, or war. While in the second transition there seems to be the receding of the pandemic. While in stage 3 there seems to be a decline of deaths through famine and disease, and there seems to be more chronic disorder deaths, such as heart attacks, tumors, or aging in general. In stage four is the stage of delayed degenerative diseases, but the leading causes of death would be cardiovascular diseases and distinct types of cancers. In stage 5 there is the reemergence of the pandemic because of anti-biotic resistant bugs. Such as insects which are immune to insect pesticides, and produce more baby insects which would also be resistant.
5. **Economic, cultural/political, and environmental push and pull factors-**
Economic-When people immigrate or migrate into a location in which there could be greater economic opportunities such as increase in jobs. People migrate when there might be a depression in the economy.
Cultural/Political-When a population migrates to a location which would be more accepting of a belief or custom. While a population leaves because of suppression, such as WWII when the Jewish community was forced to move from Poland too the U.S.
Environmental-Pull factors would be migrations of something as simple, such as nice weather, while push factors would be natural disasters, or horrible weather
***Explanation*-**
Economic-Displays when people will migrate to lands,countries,or governments which will have better access to the fundamentals of sustainable work, affordability of homes, and opportunities which are given.
Cultural/Political-People would be attracted to locations such as the U.S. Because of the allowance of free speech and self-expression is fine, while the refugees might depart there country because of a harsh dictator, war, or lack of self-expression.
Environmental-environmental really depends whether if the migrator seems to be in good weather conditions or if there seems to be all the problems around him are caused by the enviroment.good climate would be the attracting force while bad climate would spring Immigration to a different country with better climate.
6.**The five laws of migration**-
Most migration occurs over long distances
Migration occurs in steps
Long range migrants usually move to urban areas
females are more migratory than males but males are more migratory over long distances
migration is usually caused by economic causes.
***Explanation***-since there is migration occurring all the time around the globe, there have to be reasons and concepts behind this. Migration is usually caused because of economic factors, such as if there is a loss of jobs due to a plant shutting down, people who earlier had their jobs at the factory, would then move to a different city to get a job with a different employer. The reason why most adult men travel is basically because of that reason, one to acquire a job to support their family they possibly left behind, and to make traveling quicker and more affordable.
7. **Distance Decay and the gravity model for migration**-
The gravity model predicts the optimal location of a service is directly related to the number of people in the area and inversely related to the distance people must travel to access it.While distance decay states that the farther away one group is from another, the less likely the two groups are to interact.
***Explanation***-
Distance decay states that the farther away u migrate from one another you would sooner or later lose your communication status. So because of distance decay, you will eventually lose information on another person/country/group which might lead to distrust and then warfare. While the gravity model might lead to isolation of groups and it would greatly limit trade, slowing the diffusion of ideas and eventually could cause curiosity to neighboring people to go into the country and look into their habits, government, or issues so they could prevent it for themselves as well.