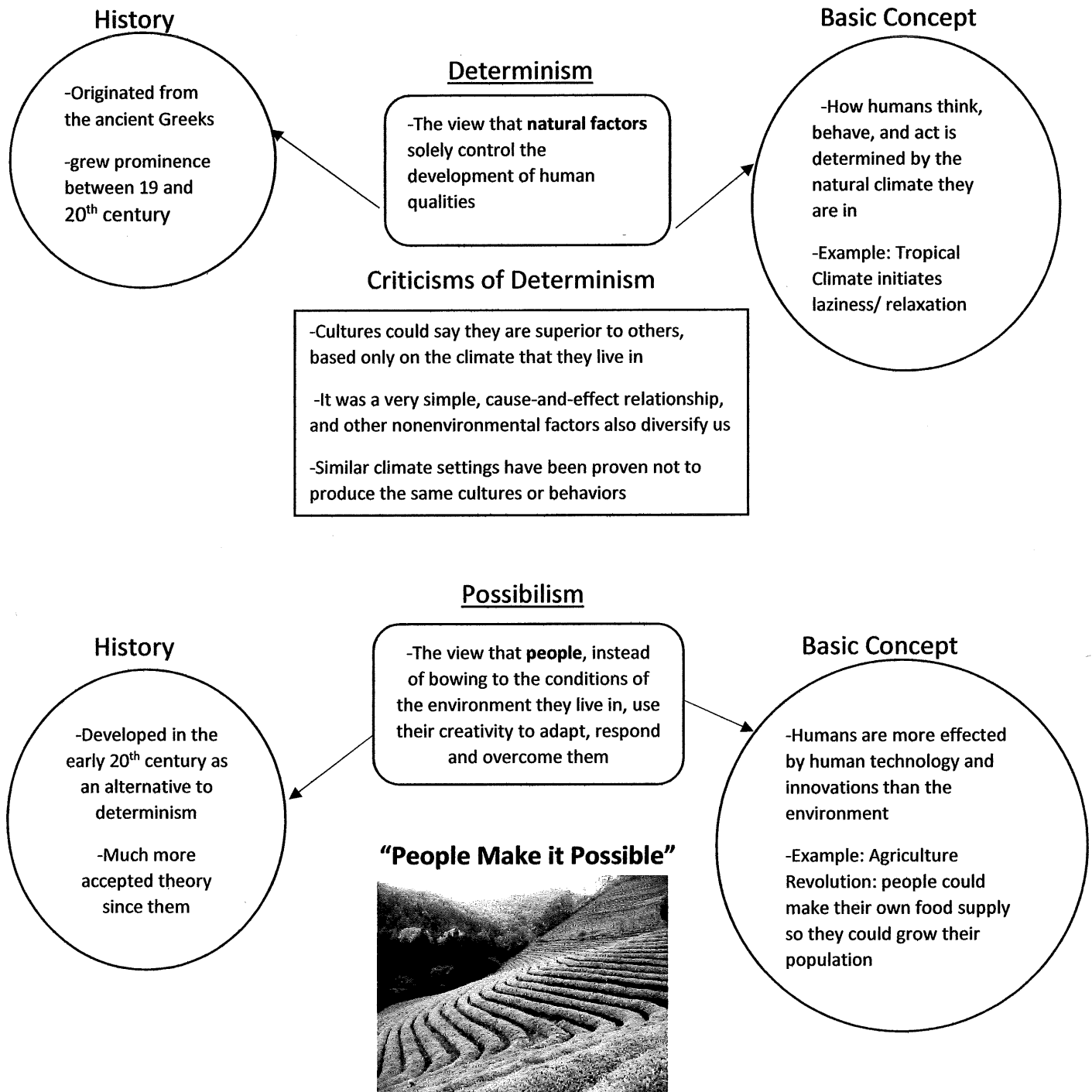


Theories of Human Environmental Interaction



https://www.google.com/url?sa=i&source=images&cd=&cad=rja&uact=8&ved=2ahUKEwihz9rAu4_hAhUFUt8KHW-

Cultural Landscapes

Cultural Landscape Definition: Cultural landscapes are landscapes influenced in some way by people.

Examples:

- Methods of agriculture practices
- Types of clothing
- State parks
- Types of religion

Mormon Landscape From American West Example:

- A community in the American West
- Created by the founders and followers of the *Church of Jesus Christ of Latter-Day Saints* when migrating west.
- Settlers established farming villages where croplands surrounded clustered houses to provide protection.



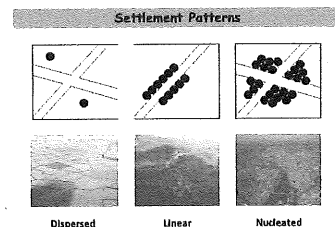
https://www.reddit.com/r/DnD/comments/7qp4b8/oc_work_in_progress_farming_village_map/

Ways to Analyze Cultural Landscape:

You can analyze a cultural landscape through the **visual** aspects of the culture.

Examples include:

- Land use
- Settlement patterns
- Architecture
- How people travel (transportation)



<http://slideplayer.com/slide/5821269/19/images/1/Settlement+Patterns+Dispersed+Linear+Nucleated.jpg>

What can cultural landscapes uncover?

They can reveal all sorts of cultural and lifestyle traits in an area, such as:

- Religion(s) practiced
- Agricultural practices
- Form of government
- Social structure
- Daily routines

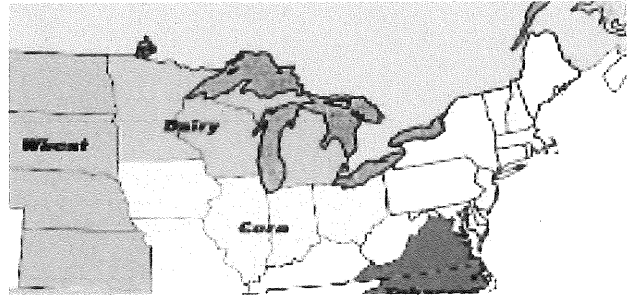
Additional Information (Pages 8-12):

- Carl Sauer used cultural landscapes as an argument against environmental determinism
- Two Key Principles:
 - 1.) The Earth is a system made up of diverse components interacting in complex ways.
 - 2.) The Earth is constantly changing due to natural and human-induced events.

Regionalization: Culture Regions

Formal Region:

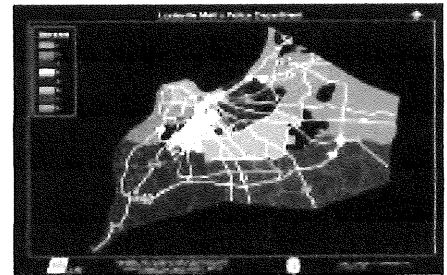
- Region described by having **unifying** cultural or physical characteristics
- Traits that can characterize a formal region:
 - *Commonalities*
 - *Religion*
 - *Language*
 - *Boundaries*
 - *Ethnicity*
- **Examples:**
 - The Dairy Belt is a formal region due to the commonality of dairy farms in states like Minnesota, Wisconsin, and Michigan.
 - A country, such as India, is a formal region due to defined boundaries.



http://www.tomchabin.com/dairy-belt-united-states-map_us-agricultural-map-teach-geography-pinterest_13.html

Functional Region:

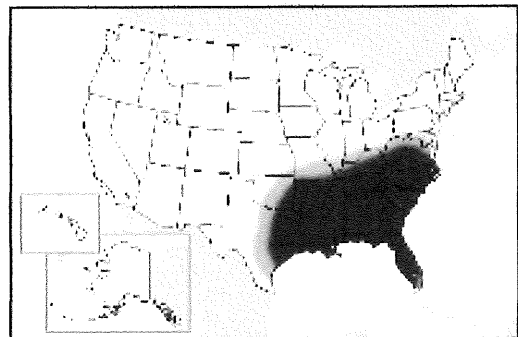
- Region defined by a political, social, or economic characteristic. The area must also have a **center of activity**, like a corporation, entity, or business that organizes the activity.
- **Examples:**
 - TARC, Louisville's transportation service, has its office downtown and organizes its bus systems throughout Louisville, spanning from areas like PRP to Prospect.
 - LMPD's service in Jefferson County is an example of a functional region due to its central headquarters downtown, the division offices in different neighborhoods, and the streets they patrol.



<https://www.louisville.gov/transportation/transportation-services/transportation-services.aspx>

Perceptual Region (Vernacular Region):

- Region characterized by a population's **sense of identity** and attraction towards an area, and tend to have undefined boundaries.
- **Examples:**
 - The American South is often regarded as a perceptual region due to the shared "Southern" identity of people in the region and the heavy debate on the exact boundaries of the South.
 - The Bible Belt, a region with a high presence of fundamentalist Christians, is defined as a perceptual region because of the undefined boundaries associated with it.



<https://www.nonprofitquarterly.org/2018/01/04/place-based-philanthropy-and-the-bible-belt/>

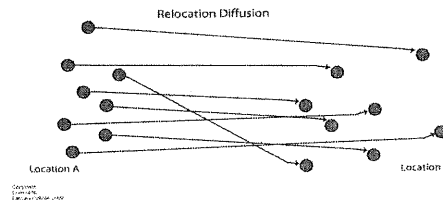
The Spread of Ideas: Cultural Diffusion

- What is cultural diffusion?
 - Diffusion is the spread of an epidemic, innovation, or idea throughout space and time.

Absorbing barriers- an obstacle which completely stops an idea from diffusion
Permeable barriers- obstacle which slows down diffusion without stopping
Independent Invention- idea created without diffusion

Relocation Diffusion:

- Phenomena is spread across space
- Population of people = same
- Ex. Migration
- Not expansion diffusion



https://www.google.com/search?q=relocation+diffusion&safe=active&source=lnms&tbm=isch&sa=X&ved=0ahUKEwiecopyUkYHaAhXJwVkkHYqaAHwQ_AUICigB&biw=1366&bih=626#imgre=_4NNPMOMQZcxpM

The diagram shows the dots moving from 'Location A' to 'B', note that the number of dots is same

Stimulus Diffusion:

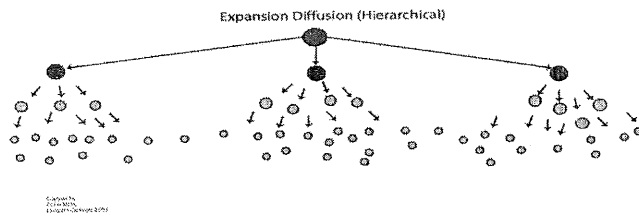
- Spreading of idea prompts new ideas
- Ideas change based on the culture of an area
- Ex. McDonalds in India changes menu to suit the population's taste.
- Examples include: McCurry Pan and McVeggie These have no beef and are vegetarian (Pg. 44, figure 2.7)

Expansion Diffusion:

- Includes all diffusion except relocation
- Diffusion which results in a change of numbers (increasing)

Hierarchical Diffusion:

- Spreads in a rank-order
- From highest to lowest rank (this could be social ranks, or ranks based on size of population)
- This is how most of pop culture spreads
- Spreads based on areas with similar characteristics
- Ex. Fashion brands start in Paris, skips over smaller cities like Vatican, and goes to another big city like New York and eventually arrives in Louisville



https://www.google.com/search?safe=active&biw=1366&bih=626&tbm=isch&sa=1&ei=UE00WtORicfl5gKo4J6oBQ&q=hierarchical+diffusion&oq=hi&gs_l=psy-ab.3.0.0i67k116j0l2j0i67k112.162738.163818.0.164494.3.3.0.0.0.148.260.0j2.3.0...0.1c.1.64.psy-ab..0.2.258.0...110.Fc5WmRnWKmE

Reverse Hierarchical:

- Opposite of hierarchical
- Spreads from lowest to highest rank

Contagious Diffusion:

- Spreads randomly based on proximity
- Ex. Infectious epidemics, like H1N1 in 2009 (Pg.16)

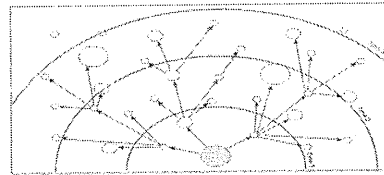


Figure 3.3a Spikes contagious diffusion spreading like a wave

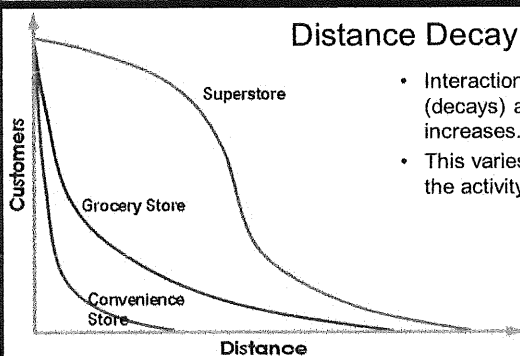
https://www.google.com/search?safe=active&biw=1366&bih=626&tbm=isch&sa=1&ei=80K0WpOdOsWy5gKFh7KYDQ&q=contagious+diffusion&oq=contagious&gs_l=psy-ab.3.1.0j0i67k1j0l2j0i67k1j0l5.88620.90396.0.91586.11.9.0.2.2.0.216.1260.0j6j2.9.0...0.

Interactions Between Places

Full Book Pages: 17-20

Distance Decay: Book Page: 19-20

- When a process, pattern, or event has less impact due to a change in distance, (normally increase in distance.)
- Advances in technology, transportation and communication, change the impacts of distance-decay.
- Examples of distance decay in cities might be; population density gets smaller the further outside the center, price of property gets cheaper further out, and building height gets smaller further out.
- Ex: More people traveling longer distance to a superstore than a convenience store. (Interaction decreases with distance.)



- Interaction falls off (decays) as distance increases.
- This varies based on the activity.

Accessibility:

Book Page: 18

- Describes the ease of accessing a specific place.
- Often refers to travel time or cost.
- More accessibility= Low travel time and low cost.
- Ex #1: Public Libraries- Located near town/city centers, and generally free to use
- Ex #2: Fast food restaurants- Located close to most living areas, and often cheap.

Tobler's First Law:

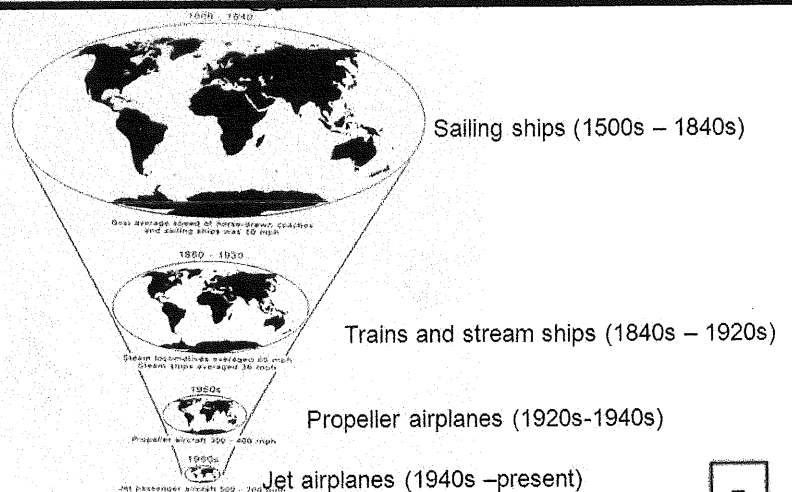
Book Page: 20

- Law says that "everything is related to everything else, but near things are more related than distant things."
- Created by geographer, Waldo Tobler.
- Displays important ideas from distance decay and spatial interaction.
- Example: Would mean that Louisville and Lexington are more related than Louisville and Tokyo.

Time-space Convergence-

Book Page: 20

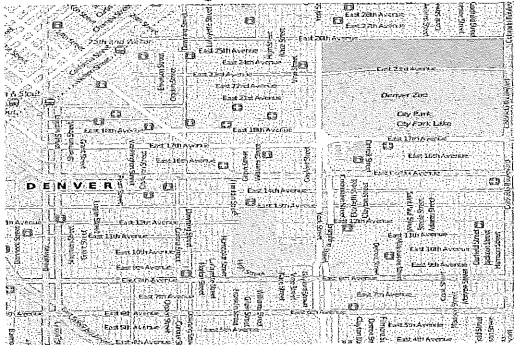
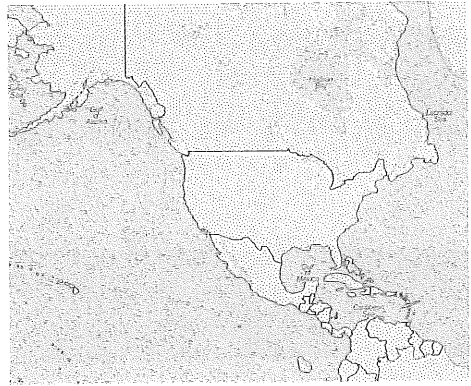
- The process of when advances in communication and transportation lessen the effects of distance, making places seem closer. (In terms of travel and communication.)
- Can travel and get to distant locations quicker and communicate with people further away much easier.
- Example: Can travel from Louisville to Paris in just 10.5 hours, less than half the walking time from Lou. to Lexington.

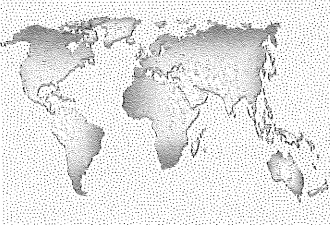
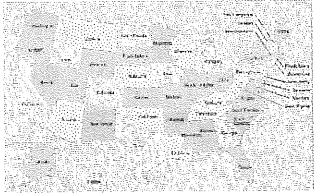




Scales of Analysis

- Scale: ratio of distance on the map and what it represents in real life (Ex. 1 cm: 1 mi)
- Geographic Scale: a way of depicting (in reduced form) all or part of the world
 - Two Types: Cartographic & Methodological

Cartographic Scale

<u>Large Scale:</u> larger amount of detail	<u>Small Scale:</u> smaller amount of detail
<ul style="list-style-type: none"> • Smaller area (shows more detail) <ul style="list-style-type: none"> - Regional & Local 	<ul style="list-style-type: none"> • Larger area (shows less detail) <ul style="list-style-type: none"> - Global & National 

<u>Global</u>	<u>National</u>	<u>Regional</u>	<u>Local</u>
<ul style="list-style-type: none"> • Shows entire globe (very little detail) • Shows: continents <ul style="list-style-type: none"> - Ex. Earth  <p>pngtree.com/freepng</p>	<ul style="list-style-type: none"> • Shows entire country (little detail) • Shows: states/cities <ul style="list-style-type: none"> - Ex. US map  <p>commons.wikimedia.org</p>	<ul style="list-style-type: none"> • Shows region/state (decent detail) • Shows: counties/cities <ul style="list-style-type: none"> - Ex. Kentucky  <p>www.yellowmaps.com</p>	<ul style="list-style-type: none"> • Shows community (a lot of detail) • Shows: towns/small cities <ul style="list-style-type: none"> - Ex. Louisville  <p>www.louisville.com</p>

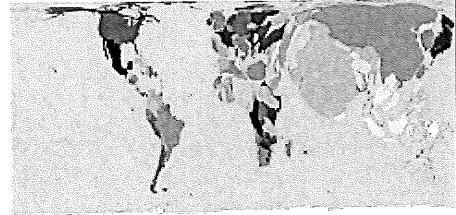
TYPES OF THEMATIC MAPS

Reference map- The map displays the boundaries, names and unique identifiers of standard geographic areas, as well as major cultural and physical features. Ex. Map of Louisville or World

Thematic map- A thematic map is a map that emphasizes a particular theme or a special topic

Cartogram- This map distorts land area to show changes in value. For example on a Cartogram of total population China and India are going to be more rounded, and have a noticeably higher land area.

-Cartogram- The greater the value being measured, the greater the land area and vice versa.

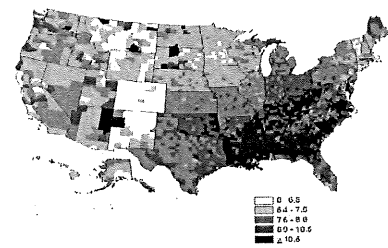


<https://www.esri.com/news/arcuser/0110/cartograms.html>

Choropleth Map- This map uses different shades to show the variation of the values. When looking at a Choropleth Map when you see a darker shaded area that typically means that it has a higher, more dense value.

TRICK TO REMEMBER When trying to name this map, just look at the one with multiple different shades of **COLORS**, think **CHORO**.

2008 Age-Adjusted Estimates of the Percentage of Adults¹ with Diagnosed Diabetes

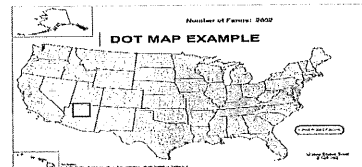


<https://247wallst.files.wordpress.com/2011/06/diabetes.jpg>

Dot Map- Uses dots to show different values.

-More dots=Greater value

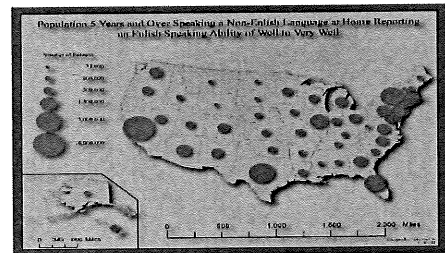
-In this example each tiny grey dot represents 200 farms.



<https://slideplayer.com/slide/7072505/>

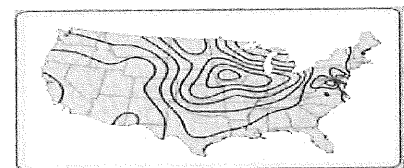
Graduated Symbol- This map uses a symbol to represent a certain value. The larger the symbol, the higher the value, and vice versa.

-One example of this is the literacy rate in the US. In places where the literacy rate is higher there will be a larger symbol.



<http://tcgeographytechniques.blogspot.com/2013/12/proportional-symbol-bilingualism.html>

Isoline Maps- maps with lines drawn to link different places that share a common value.

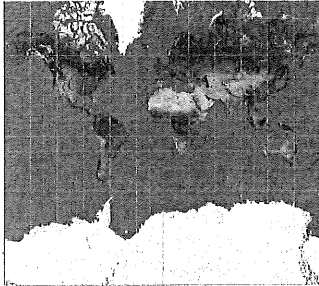


<https://www.flickr.com/photos/8>

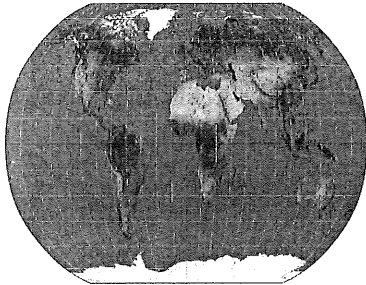
MAP PROJECTIONS

A **map projection** is a transformation of the latitudes and longitudes of locations of a sphere (like Earth) into locations on a flat surface (map). All **map projections** distort the surface (distance, direction, area, or scale) in some fashion.

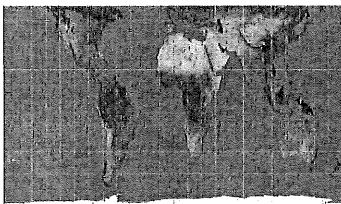
MERCATOR PROJECTION



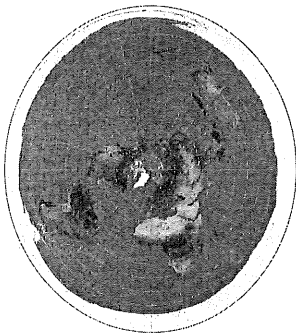
ROBINSON PROJECTION



PETERS PROJECTION



POLAR PROJECTION



TYPE & CREATOR	BENEFITS	PURPOSE	DISTORTION
Conformal 1569 – Gerardus Mercator	Preserves 90° angles and straight lines of longitude and latitude Shows true direction	Best map for nautical use to help ship captains Most commonly-used and accurate projection	Poles appear much larger than they are (areas become larger with latitude)
Compromise 1963 – Arthur Robinson	Shows accurate shapes and sizes (area) of land masses	Commonly used by schools Used in atlases	Distorts poles
Equal-Area 1967 – Arno Peters	Not much distortion of continents (size is preserved) Superior alternative to Mercator	Used for navigation Used in world maps	Distorts oceans
Azimuthal Equidistant 1581 – Guillaume Postel	Distances from the center (poles) are preserved	Used by airline pilots to navigate best routes around the Earth Used as an emblem on the United Nations flag	Distorts land size Distorts parallels of latitude

EQUAL AREA MAP PROJECTION

Oceans are distorted to minimize the distortion of the continents

CONFORMAL MAP PROJECTION

preserves the shape of features on the map but may greatly distort the size of features.

Geographical Tools



-Remote sensing tracking an oil spill

Remote Sensing-

Gathers information on Earth using sensors and instruments set at a far distance from what is being studied

-Often used to track disasters and gather data on regions

↳ Ex) Storm tracking satellites

Textbook pages 23-25

<https://www.semanticscholar.org/paper/Oil-Spill-Remote-Sensing>

Global Positioning System (GPS)-

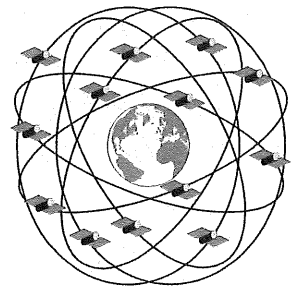
Determines the absolute location of people, places, and geographic features on lines of latitude and longitude.

-Uses satellites, radio signals, and receivers

-Created by US Department of Defense to locate and navigate between places on Earth

-Also used for data gathering and determining legal boundaries

-The ability of GPS to track a person's exact location can be considered an invasion of privacy, also known as *Geoslavery*



Textbook page 26

<https://hubtechinsider.wordpress.com/2011/07/06/how-does-gps-work>

Geographic Information System(GIS)-

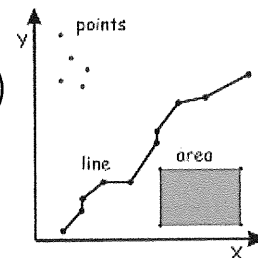
Collects and stores *georeferenced data*

↳ (Data tied to locations on Earth)

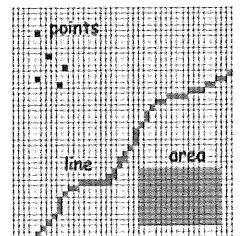
-Created to improve the functionality of maps and the spatial analysis of data

-Criticized for being too expensive, creating a power divide

Vector



Raster



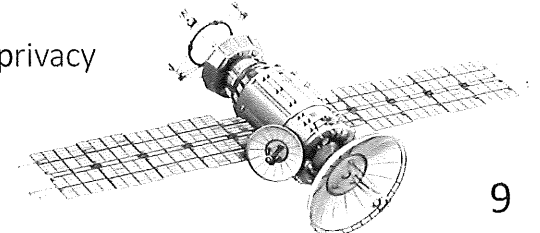
(See figure 1.18 for more info)

Textbook pages 27-29

http://www.geo.umass.edu/courses/geo494a/Chapter2_GIS_Fundamentals.pdf

<https://www.citizenwatch-global.com/gps>,

- All of these raise ethical questions regarding an individual's privacy
- All of these also use satellites to carry out their function



See textbook pages 23-29 for more information!

GEOGRAPHIC DATA:

QUALITATIVE vs QUANTITATIVE

QUALITATIVE DATA

THINK: What **QUALITIES** (traits) does it have?

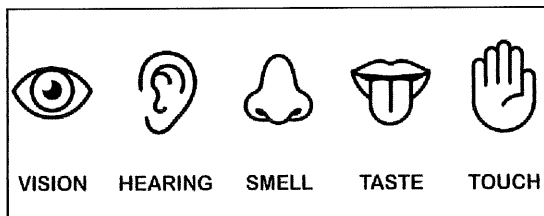
Data is **SUBJECTIVE** (opinion based) and relies on the **5 SENSES**.

This includes:

- Descriptions
- Physical characteristics
- Observations

Examples:

- Color
- Texture
- Ethnicity

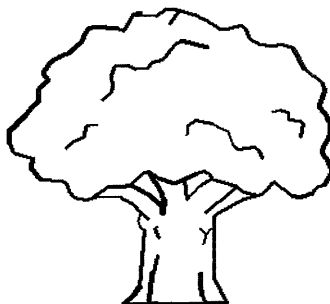


<https://www.worldatlas.com/articles/what-are-the-five-senses.html>

Qualitative:

"The tree looks tall."

<http://clipart-library.com/tree-drawings-black-and-white.html>



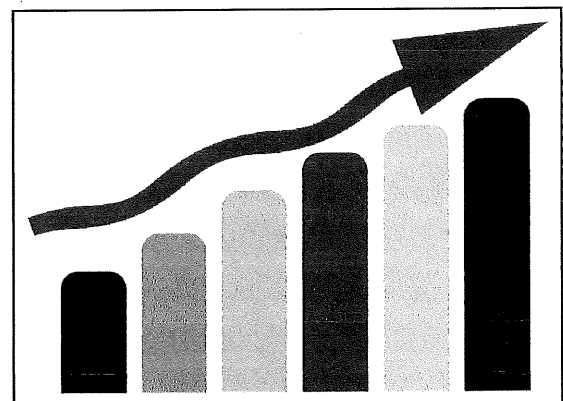
QUANTITATIVE DATA

THINK: What **QUANTITIES** (numbers) does it have?

Data is **OBJECTIVE** (fact based and measurable) and relies on **NUMBERS** and **UNITS OF MEASUREMENT**.

Examples:

- Distance
- Height
- Percentages



<https://www.kisspng.com/png-bar-chart-statistics-graph-of-a-function-diagram-m-1296039/>

Quantitative:

"The tree is 25 feet tall."

Key Population Statistics

Fertility

Crude Birth Rate (CBR)- number of births per 1,000 people per year

- Shows trends as a whole instead of by age
- High in **LDCs** (Ex: Africa =35)
- Low in **MDCs** (Ex: Japan = 8, Europe = 10)

Results in high/low CBR

Total Fertility Rate (TFR)- average amount of kids a woman will have in her life

- Used to gauge family sizes
- Replacement Level- fertility rate in which population needs to replace itself
TFR=2.1
- High in **LDCs** (Ex: Niger= 7.2)
- Low in **MDCs** (Ex: U.S.= 1.8)

Mortality

Life Expectancy- the average age someone is expected to live based on death rates

- Population Pyramid would be top heavy with a high life expectancy (Ex: Japan)

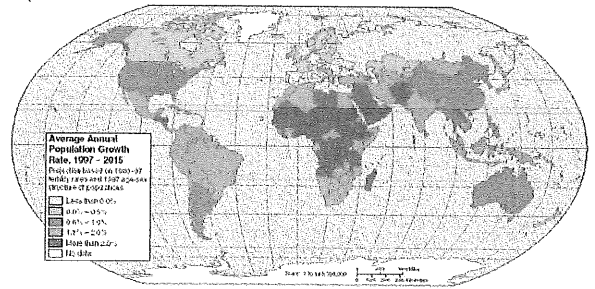
Infant Mortality Rate- number of infant deaths under 1 year old, per 1,000 births

- Afghanistan has highest at 112.8

Results in fast or slow RNI

Rate of Natural Increase (RNI)- the percentage of growth in an area excluding migration

- $(CDR - CBR) \div 10$
- High in **LDCs** (Ex: African= 2.6%)
- Low in **MDCs** (Japan= -2.1%)



<http://pages.uwc.edu/keith.montgomery/demotrans/demtran.htm>

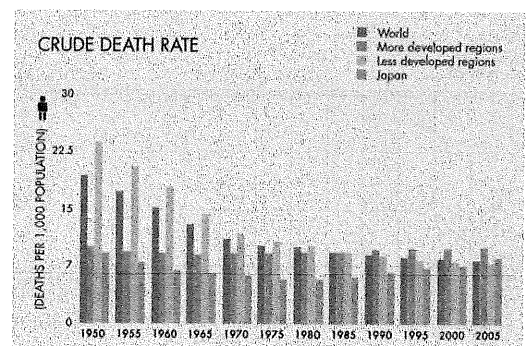
Doubling Time- amount of time it will take for a population to double in size

- $71 \div RNI$

CDR impacts Life Expectancy

Crude Death Rate- the number of deaths per 1,000 people per year

- Has overall decreased because of better healthcare and medicine, but not true for all countries
Ex: Lesotho=15, Qatar= 1.5



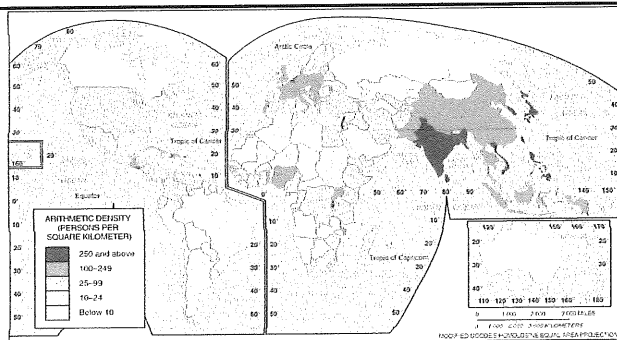
<https://quizlet.com/244007862/lb-ess-topic-81-births-deaths-and-fertility-flash-cards>

Population Density

Population density is the pressure a population exerts on the land.

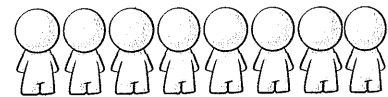
ARITHMETIC DENSITY: *Number of people living in a given unit of land*

- Does not take into account the different land types in an area
 - Some land may be unusable (not arable)
 - Ex: Australia has an arithmetic density of **7** people per sq. km, while Japan has an arithmetic density of **340** people per sq. km
-



<https://www.behr.ufl.edu/population/website-article/measuring-population-density-counties-florida>

Map of Arithmetic Density Levels Around the World



total population

(divided by)
total land area

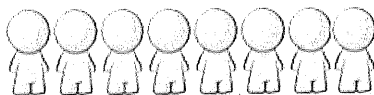
= ARITHMETIC DENSITY

AGRICULTURAL DENSITY:

Number of farmers per unit of arable land

PHYSIOLOGICAL DENSITY: *Number of people per unit of arable land*

- **Arable land**: land that can be used for agriculture
- Takes into account that some land might be inhospitable
- Ex: US has a physiological density of **186** people while Egypt has **2,633**.

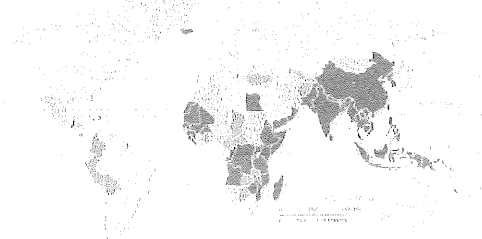


total population

(divided by)

total arable land

= PHYSIOLOGICAL DENSITY



<https://content.openclass.com/eps/pearson-reader/api/item/33c1ac75-46ce-4867-ae30-5281538f14a6/1/file/RubensteinCHG3-071415-MB/OPS/s9ml/chapter02/filep70004968340000000000000000000a4c.xhtml>

Map of Physiological Density Levels Around the World


For more info, see pages 66-67 in your textbook.

Population Distribution

3 Basic Dispersion Patterns

- ① Uniform - equally-spaced apart
- ② Random - no predictable pattern
- ③ Clumped - bunched in groups

distribution influencing
FACTORS

physical 



Climate: extreme areas have a ↓ pop density
ex. Europe's temperate climate attracts many people




Water Bodies: river valleys may also promote human settlements
ex. Egypt - 95% of the population lives within 5 miles of the Nile River.



Landforms: rugged terrain restricts the concentration of population in any area
ex. Himalayan Mts. have a ↓ pop. density

VS

human 



Politics: stable/fair governments have a ↑ high pop. density
ex. Sudan has an unstable gov't and a ↓ pop density



Economy: areas w/ developed markets and skilled workers bring in high populations
ex. India has a huge economy and a ↑ pop. density



Culture: cultural practices and ethnic relationships can influence settlement



History: ancient settlement locations and colonialism have impacted pop. distribution.
ex. Nigeria, the US, and India, all former colonies, have ↑ pop. densities

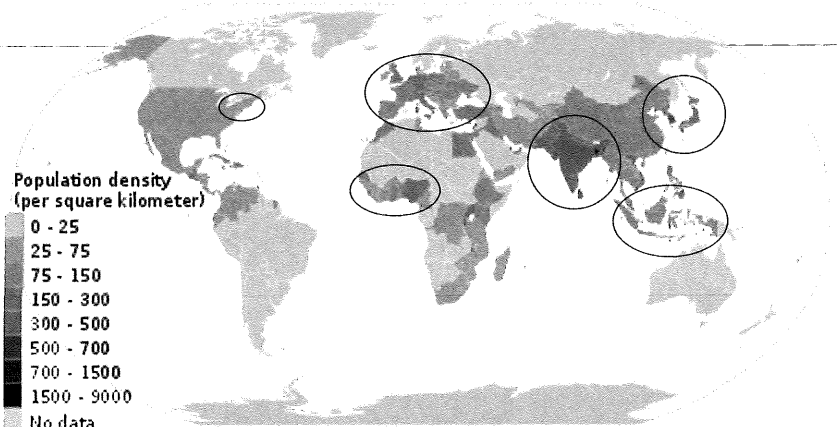
pattern of where the ppl live

population density ≠ population distribution

of ppl per unit of land

Major Population Clusters

- ① East Asia
- ② South Asia
- ③ Southeast Asia
- ④ Nigeria
- ⑤ Europe
- ⑥ Northeastern United States



<https://esa.un.org/unpd/wpp/Download/Standard/Population/>

for more information, see textbook pages 66-67

Population Policies

Pro-Natalists (MDC's)


What <ul style="list-style-type: none"> • Increase Birth Rates /Total Fertility Rates 	Why <ul style="list-style-type: none"> • Low Population • Aging population • Low fertility rates • Decrease of birth rates
When <ul style="list-style-type: none"> • DTM Stage, 4 	
Problems <ul style="list-style-type: none"> • Uncontrolled birth rates • Infertile mothers can't get benefits 	Policies <ul style="list-style-type: none"> • Banning sales of contraceptives (France) • Antiabortion laws can be enforced • Money for additional children • Cheaper baby needs (Clothes, diapers, food, etc.) • Workers paid during maternity/parental leave
Country Examples <ul style="list-style-type: none"> • France • Germany • Japan • Russia • Sweden 	

<https://jvisa.info/china-offers-to-remove-juds-for->

Mother embraces newborn



Anti-Natalists (LDC's)

What <ul style="list-style-type: none"> • Decrease Birth Rates /Total Fertility Rates 	Why <ul style="list-style-type: none"> • Low resources available for everyone • Not enough space for settlement
When <ul style="list-style-type: none"> • DTM Stage 2 	
Problems <ul style="list-style-type: none"> • Imbalance of male to female ratio • Not reaching replacement level (TFR 2.1) 	Policies <ul style="list-style-type: none"> • Cheaper sales of contraceptives • Increased prices of baby needs (Clothes, diapers, food, etc.) • No pay during maternity/parental leave
Country Examples <ul style="list-style-type: none"> • China • India • Kenya • Nigeria 	<div style="display: flex; align-items: center;">  <div style="margin-left: 10px;"> <p>https://www.pinterest.com/pin/186617978286312758/</p> <p>Eugenic Steering of (pro and anti) natalist policies on distinctive groups (Example: Nazis favored Germans with pro-natalists policies and Jews anti-natalists policies)</p> </div> </div>

Babies not wanted

See Text Book pg 70 for more Info

Population pyramids

Definition: a bar graph that shows the age and gender composition of a population; helps us see population change in a country

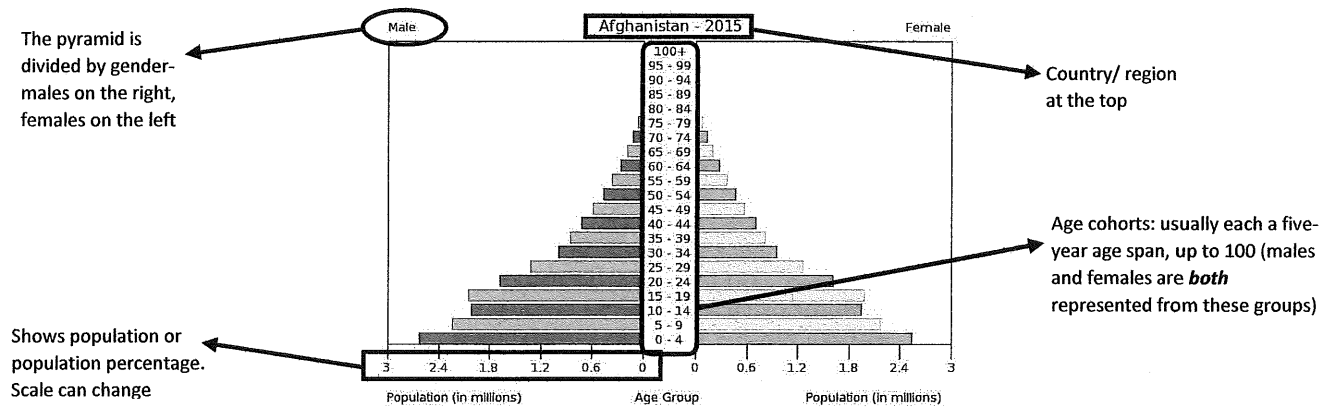


Image source: http://www.randalolson.com/wp-content/uploads/united_states_population_pyramid.jpg

Pyramids at different geographic scales

Country scale

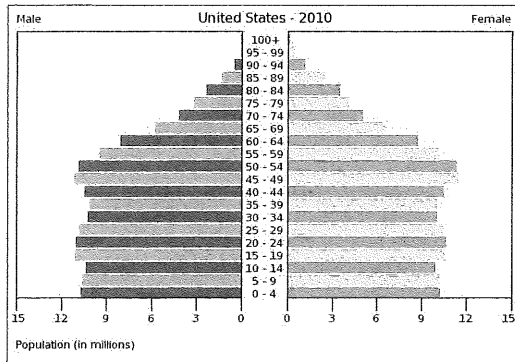
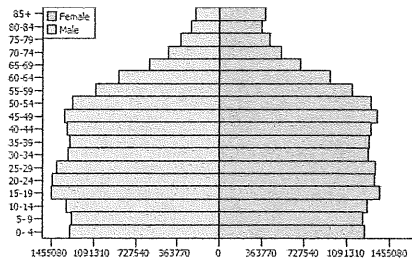


Image source: http://www.randalolson.com/wp-content/uploads/united_states_population_pyramid.jpg

State scale

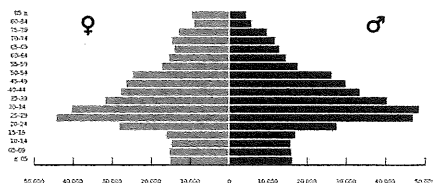
California 2010



http://proximityone.com/chartgraphics/pp06000_2010_001.png

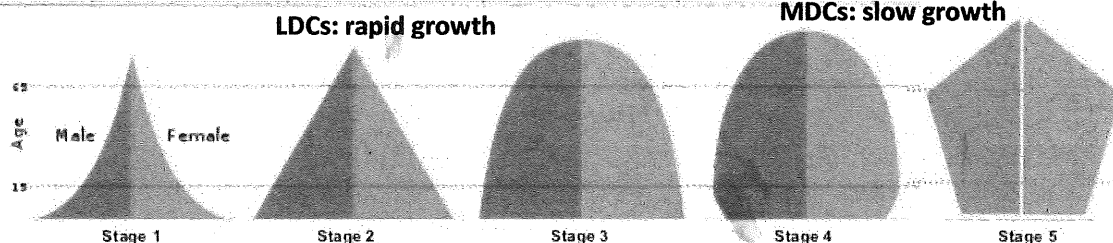
City scale

San Francisco 2009



- The scale of the pyramid can change what it looks like
- The U.S. and CA have very similar pop. Pyramids
- San Francisco's pop. Pyramid is different from the other two

Population Pyramids and the DTM

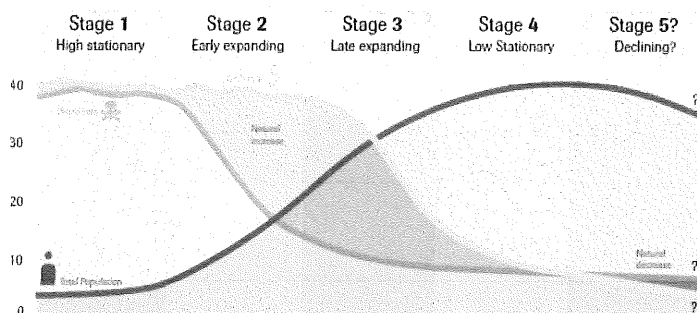


For more information see pages 73-75 in your textbook

Demographic Transition Model (DTM)

Demographic Transition Model- shows population change over time.

- Based off population trends in Europe
- Observed by Warren Thompson
- Relates changes in RNI to social change as a result of urbanization and industrialization
- Describes a shift from high birth and death rates to low birth and death rates over time



Limitations:

- Doesn't take migration into account
- partial picture of population change
- no predictive value
- not directly applicable to developing countries

Stage 1: Preindustrial: (until 1750)

Birth Rate: High because.....

- children needed for farming
- children die at an early age
- no family planning

Death Rate: High: because.....

- disease
- famine
- poor medical knowledge

Natural increase or decrease:

stable or very slow increase

Example Countries:

- no example countries
- Amazon Tribe Basin

Stage 2: Early Industrial: (1750-1880)

Birth Rate: High because....

- children needed for farming
- children die at an early age
- no family planning

Death Rate: Falls Rapidly because..

- contagious diseases
- but improvements in
 - medical care
 - water supply
 - sanitation

Natural increase or decrease:

very rapid increase

Example Countries:

- Egypt
- Kenya
- Ethopia

Stage 3: Late Industrial: (1880-1970)

Birth Rate: Falling because...

- improved medical care
- improved diet
- industrialized

Death Rate: Falls more slowly because..

- contagious diseases
- but improvements in
 - medical care
 - water supply
 - sanitation

Natural increase or decrease:

increases moderately

Example Countries:

- Brazil
- India

Stage 4: Post Industrial: (1970-Present)

Birth Rate: Low because...

- family planning
- good health
- improving status of women
- later marriages

Death Rate: Low because..

- chronic diseases
- better health care
- reliable food supply

Natural increase or decrease:

stable or very slow increase

Example Countries:

- USA
- France
- UK

Stage 5: Declining: (Future)

Birth Rate: Very Low because..

- family planning
- good health
- improving status of women
- later marriages

Death Rate: Low because..

- chronic diseases
- better health care
- reliable food supply

Natural increase or decrease:

slow decrease

Example Countries:

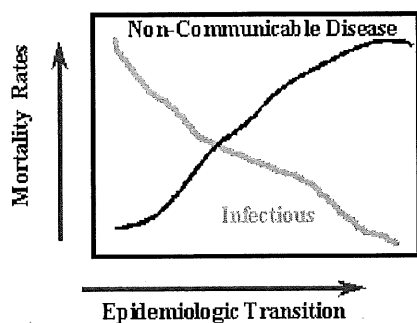
- Germany
- Russia
- Japan

The Epidemiological Transition

The shift from infectious diseases to chronic diseases.

- Aligns with the demographic transition model (DTM).
 - Shows most common causes of death in each stage of the DTM.
 - As a country develops more, the main cause of death shifts towards chronic diseases.
- The main cause of death in LDCs are due to infectious diseases
- The main cause of death in MDCs are due to chronic diseases

Epidemiological Transition Model



Demographic Transition Model

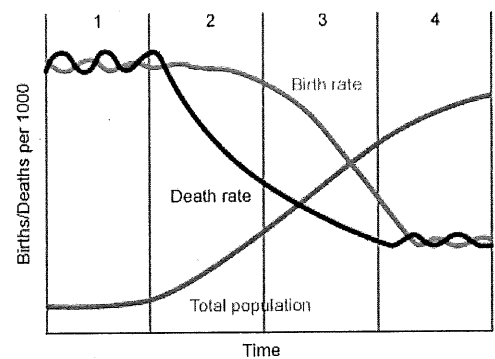


Figure 1: (Epidemiological Model) <https://www.slideshare.net/kdjw/epidemiological-transition>

Figure 2: (DTM Model) http://papp.iussp.org/sessions/papp101_s01/PAPP101_s01_090_010.html

Infectious Diseases	Chronic Diseases
<ul style="list-style-type: none"> -Spread from human to human -Often temporary -Caused by bacteria and/or viruses -Prominent in LDCs -More common due to poor sanitary regulations -Occurs in stages 1 and 2 of the DTM -Examples include measles and influenza 	<ul style="list-style-type: none"> -Is not spread from human to human, instead develops over time as the body becomes weaker -Prominent in MDCs -More common due to higher life expectancy -Can not be cured or prevented usually -Examples include multiple sclerosis and arthritis.

Real World Examples

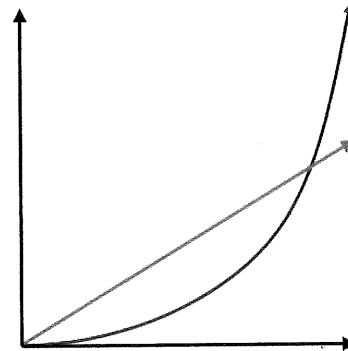
- According to the World Health Organization, in 2015 about 429,000 people died from malaria, an infectious disease. 91% of the reported deaths came from Sub-Saharan Africa, which consists of many LDCs.
- According to the CDC, every year about 610,000 people die to heart disease, a chronic disease, in the United States, which is an MDC.

POPULATION THEORIES

THOMAS MALTHUS

English Economist

- Population growth leads to poverty and misery.
- Environmental Determinist
- Did not consider technological advancements
- **Positive Checks**– Reduce population; famine, disease, etc.
- **Preventative Checks**– Actions to prevent population growth; postponing marriage, less sex, etc.



According to Malthus, population would outgrow food production.
Food grew arithmetically.
Population grew geometrically.

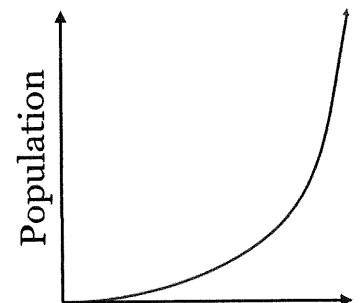
NEO-MALTHUSIANS

People who share similar ideas to Malthus

- World space and resources were limited, but the environment was not the determinant.
- **Carrying Capacity**– The maximum number of people that can live on Earth comfortably
- Want strict population control

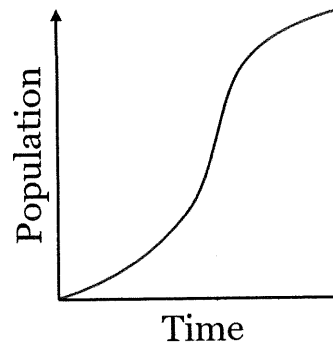
J-CURVE

Exponential growth of population over time



(This is what Malthus saw happening)

S-CURVE



Population growth begins to level out due to limited resources.
(Malthus said this would happen due to checks)

ESTER BOSERUP

Danish Economist & Main Critic of Malthus

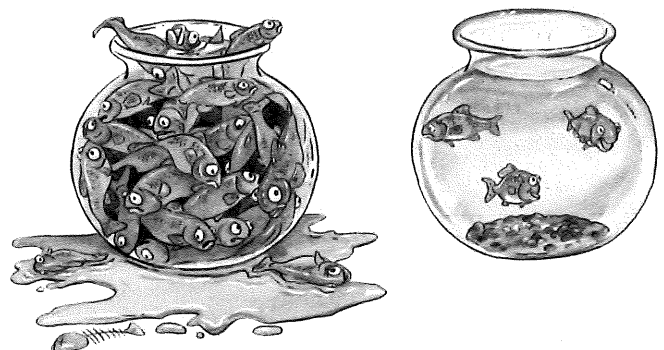
- As the population grows, there would be more technologies to produce more food.
- Possibilist
- Argued food production could be increased

CORNUCOPIANS

"Necessity is the mother of invention."

- **Cornucopian Theory**– Humans can innovate ways to expand the food supply
- People are a valuable resource.

The carrying capacity in the fish bowl is 3 fish.
<http://smcarthur.com/tecset/wp-content/uploads/2015/08/Carrying-Capacity-Image.jpg>

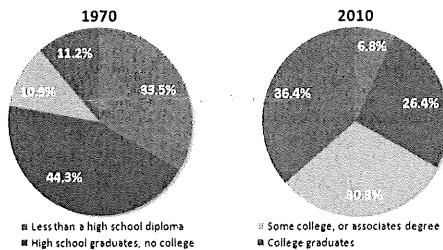


Women and Population

Education

- Women typically have much less access to education than men
- This trend is strongest in LDCs, and among impoverished areas
 - Ex: Somalia- 95% of poorest females aged 7-16 have never attended school
- In recent decades, rates of higher education in women have increased (mainly in MDCs)
- Increased education leads to decreased fertility rates but increased participation in the work force

Percent distribution of women in civilian labor force, aged 25 to 64 years, by educational attainment, 1970 and 2010



Source: U.S. Bureau of Labor Statistics

www.bls.gov

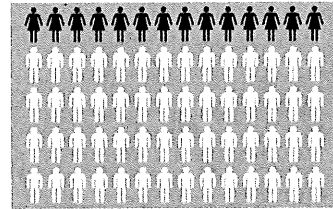
Source: <https://www.bls.gov/spotlight/2011/women/>

Economic Roles

- Women have uneven participation in different sectors of the economy
 - Concentrated in the service sector, in careers such as teaching and health care
 - Underrepresented in jobs requiring higher education, such as STEM jobs including architecture or engineering
- **Gender Wage Gap**- a global trend in which women are paid less than men
 - Ex: U.S. (2007)- median income for men was about \$32,500, compared to about \$20,000 for women

Political Roles

- Women participate less in political affairs than men
 - Ex: 2016- only 22.8% of parliament members were female



Source: <http://www.cawp.rutgers.edu/facts>

- Similar to education and economy, this significant gap has been lessened in recent decades (mainly in MDCs)
 - More educated women leads to greater political participation

Fertility

- **Fertility**- the births within a given population
- Lower in MDCs
 - Women's increased education and participation in politics and the economy cause them to wait to have children
 - Ex: Japan- fertility rates are decreasing as more women pursue careers rather than have children
- Higher in LDCs
 - Earlier marriage and children due to lack of education or career
 - Ex: Niger- highest total fertility rate of 6.62 (almost 7 children per woman)
- Gender roles provide many women with a low status, and they do not have access to contraceptives or the opportunity for family planning

Mortality

- **Mortality**- the deaths within a given population
- Educated women have a lower mortality rate, as they can pursue careers to financially support themselves and have access to healthcare
 - Ex: Sub-Saharan Africa- maternal deaths would be reduced by 70% if all women had a primary education
- Women are often responsible for the nutrition of the family, especially the children
- Women's prenatal health impacts Infant Mortality Rates
 - Better prenatal healthcare = lower IMR

Aging Population

(see pages 71-75 in book)

Death Rates Decreasing

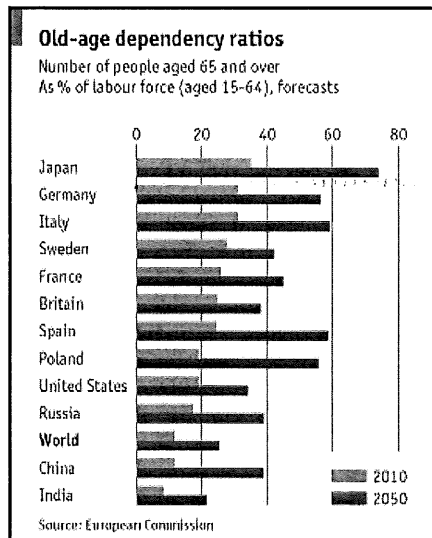
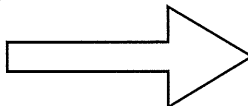
- ☆ Better Healthcare
- ☆ Improved medical technology
- ☆ Less infectious diseases

Birth Rates Decreasing

- ★ Education of women
- ★ Less desire for large families
- ★ Increased use of contraception
- ★ Rising cost of having/raising children

Effects

- ☆ Not as many people in the workforce
- ☆ Governments push pronatalist policies to maintain population
- ☆ Money spent on healthcare increases
- ☆ Services for elderly increase ex: retirement homes
- ☆ Politicians become conservative to appeal to elderly



Age-dependency Ratio

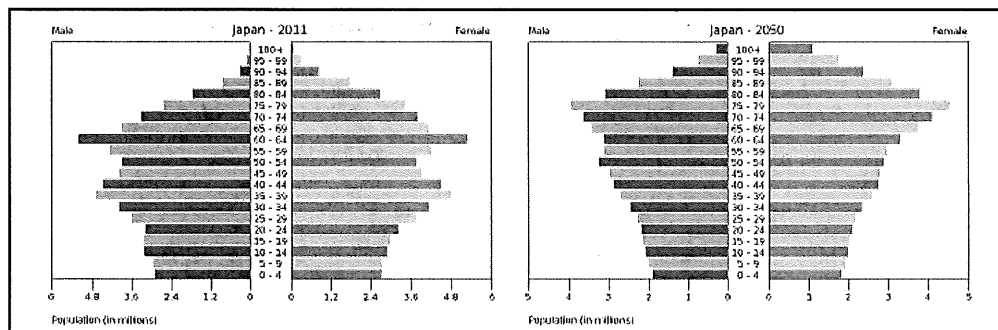
Number of people under 15 and over 65 ÷ Number of people between 15 and 65 (working age)

<https://ibdpgeographyrevision.weebly.com/populations-in-transition.html>
<https://www.slideshare.net/aldelaitre/population-pyramids-exercises>

Blue Zones

Areas that have populations with substantially long lives

- ☆ Okinawa, Japan
- ☆ Loma Linda, California
- ☆ Ikaria, Greece



Japan is projected to have 40% of its population to be 65 years or older by 2050.

Upside down pyramid (2050 Japan)- depicts an aging population

Young Populations

- Young Populations are **found mostly in LDCs**
- Young populations occur in areas with **short life-expectancies**
- **Age dependency is low** in areas with young populations because there are few people over the age of 65
- **CDR is high** in these areas because people are dying at faster rates, preventing the population from aging
- **Infant mortality is high** because the death of infants prevents a population from aging

Age Dependency- the number of people under the age of 15 and over the age of 65 as a proportion of the working age population

Life Expectancy- the average number of years a person is expected to live given death rates within a given population

CDR (crude death rate)- the annual number of deaths per 1,000 people

Infant Mortality- the number of deaths of infants under one of age per 1,000 live births

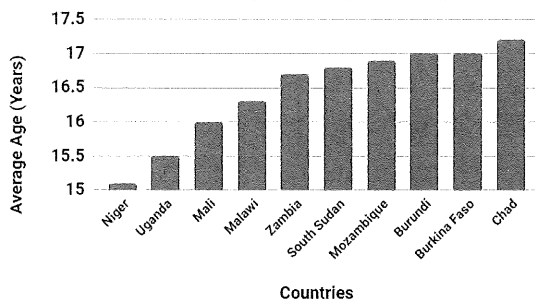
Causes of Young Populations

- Increasing fertility rates
 - lower status and education of women
 - lack of family planning
 - more desire for large families
- Short life expectancy and high CDR
 - less medical technology
 - minimal knowledge of good nutrition

and hygiene

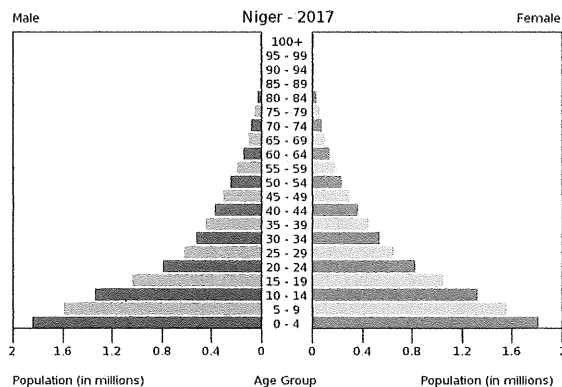
- Unstable political and social conditions

Top 10 Countries with Young Populations Population (July, 2017)



Effects of Young Populations

- Less government spending on healthcare and pension
- More people in workforce
- Pronatalist policies were enforced by government to make up for high CDR
- Politicians target young people to get more votes



This is a population pyramid for Niger in 2017. It shows how a population pyramid for a country with a young population would look.

http://www.coopami.org/en/countries/countries/niger/country_description/index.htm

<https://www.telegraph.co.uk/travel/maps-and-graphics/oldest-and-youngest-countries-populations/>

Migration Patterns

Emigration: movement of people out of a specific place

Immigration: movement of people into a specific

Circulation: temporary movement of people between places

Net Migration: total amount of people gained/lost by an area due to migration

$$\text{Immigration} - \text{Emigration} = \text{Net Migration}$$

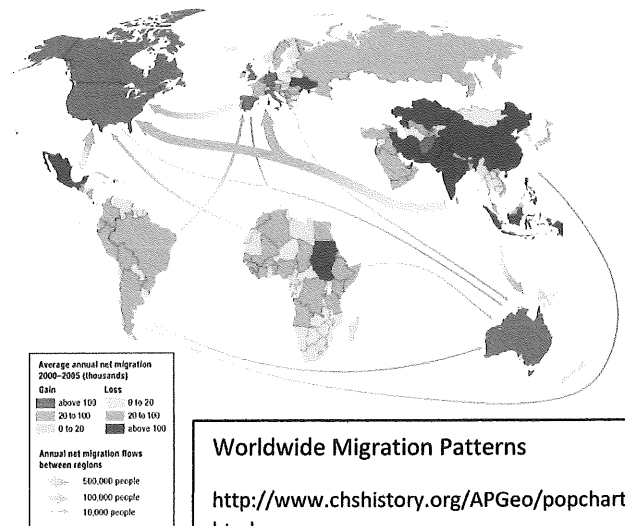
Demographic Equation: New Population = Old Population + (Births – Deaths) + Net Migration

Chain Migration: movement of people to a place where they already have connections

Ravenstein's Laws of Migration

- The majority of migrations are short distance and not across international borders
- Migration from a city allows space for more distant migration into that city
- Migration includes dispersion (leaving a location) and absorption (entering a new location)
- Migration results in counterflows
- Long distance migration is most often to an urban area
- People in rural areas are more likely to migrate than people in urban areas
- Women are more likely to migrate within a country, while men are more likely to migrate to a new country

- People who migrate are generally single and in their twenties
- According to the gravity model larger, closer cities attract the most immigrants
- Highly educated or skilled workers in LDCs tend to migrate to MDCs in a process called **brain drain**
- The majority of migration occurs from LDCs to MDCs
- Largest Current Migration Flows:
 - Asia to Europe
 - Asia to North America
 - Latin America to North America



Worldwide Migration Patterns

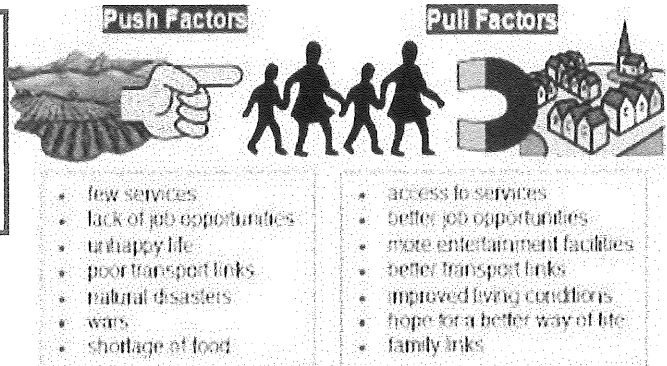
<http://www.chshistory.org/APGeo/popcharts.html>

- **Europe** is experiencing high immigration of **refugees** (people who leave a location for safety), especially from the Middle East (highest #s from Syria and Afghanistan)
- In **Africa**, migration often is connected to former colonization. Conflicts have led to many **internally displaced persons** (forced to move to a new location inside their country). Ex: Sudanese conflicts have led to an estimated 5 million IDPs
- Political and economic instability has led to high emigration from **Latin America**.
- In **Asia**, migration is often based on jobs. Asia accounts for 25% of the world's migrants, most moving to the Southeast region of Asia, the United States, Canada, or Europe.

Voluntary Migration

Voluntary Migration

People **decide** to move somewhere permanently/ or for long periods of time



<https://ibgeo14.weebly.com/population-and-migration.html>

Pull Factors— Positive/ favorable conditions that **attract** migrants to a certain place

Ex. ↑ Job opportunities, ↑ Transportation



The 3 G's (GGG)

God, Glory, Gold

<https://www.amazon.co.uk/GreatGadgets-8028-Door-Stop-Shape/dp/02YYEDF8>

Push Factors— Negative/ unfavorable circumstances that **push** people away from a certain place

Ex. Poverty, Natural Disasters, No jobs, War

Caused By: Environmental, Social, Political, and/ or Economic Factors

Ravenstein's Laws of Migration

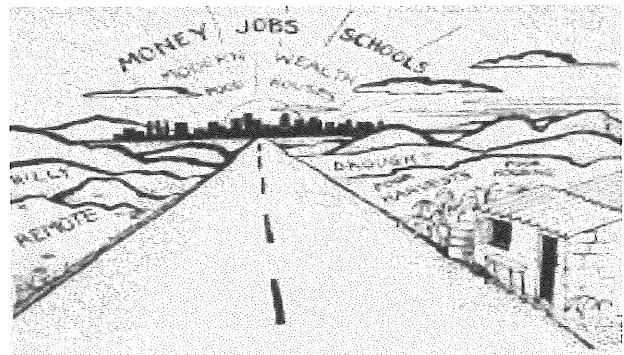
1. Most migrations occur over **short distances**
2. Migrants move between cities **creating gaps of people from far places**
3. 2 Processes: **Dispersion & Absorption**
4. **Counterflows** occur with Migration flows
5. Long distance migrants travel: **rural to urban**
6. Residents living in **urban areas** are less likely to migrate than those in **rural areas**
7. Women usually migrate **inside country**; men usually migrate **abroad**

★ Most migrants are **single & 25 years old**

Real Life Examples— Great Atlantic Migration, Partition of India (**both push & pull**)

Migration— movement of people from one place to another for **long periods of time**

Migrants— the **people** who move in migration



Learn more by seeing pages 81-83 in
your textbook!

<https://sites.google.com/site/humangeo123/ravenstein-s-laws-of-migration>

Current Issues with Migration

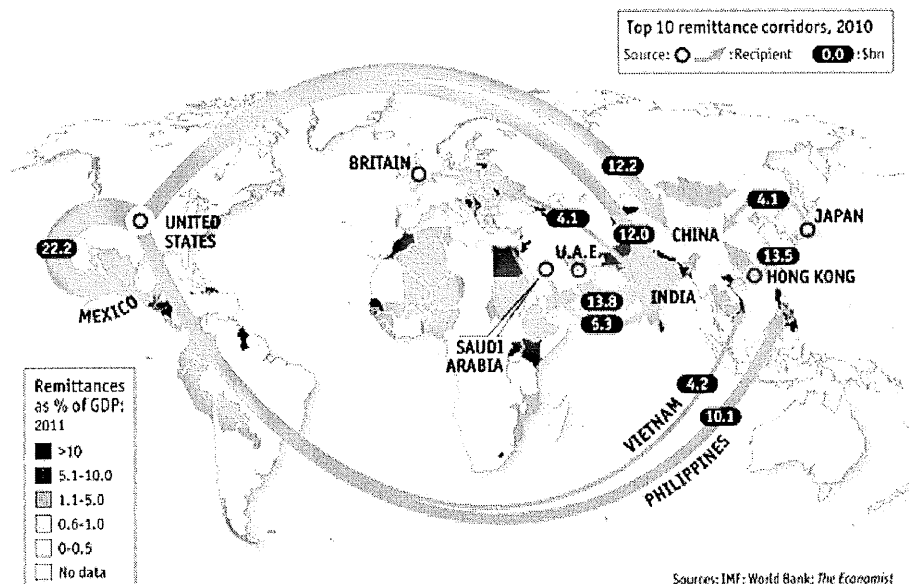
- **Unauthorized Immigrants-** people who manage to remain in a country by overstaying their visa or crossing the border while being undetected.
 - Also known as undocumented or illegal immigrants.
 - **Authorized Immigrants-** Immigrants who become legal permanent residents
 - Also called green-card holders
 - In 2008, the United States let 1,107,126 immigrants have legal permanent residence; these are authorized immigrants. (figure 3.14, page 84 of text book)
-
- **Guest workers-** people who receive temporary permits to travel to a country and work there.
 - This concept was first seen within Europe when countries such as Germany and France needed workers, but later on Morocco, Turkey, and Algeria became important guest worker sources
 - Guest workers are typically men.
 - Many guest workers do not return home after their temporary permit expires or employment ends
 - Chain migrations sometimes occurred if a guest worker did not return home.
 - **Brain drain-** the specific migration of people who are considered skilled professionals.
 - Brain drain is typically associated with developing countries or regions.
 - This can lead to issues in some regions. Some African Countries have 10% of health professionals leave which decreases ability to fight diseases in some LDCs
 - Benefits the destination country's economy with more skilled workers.
 - **Remittances-** money, goods, or services that are sent by immigrants to their home countries.
 - Example of transnationalism (process by which immigrants develop ties to multiple countries)

www.languagefiles.com/en/dictionary/brain-drain



<https://www.economist.com/node/21553458>

Textbook pages 81-91



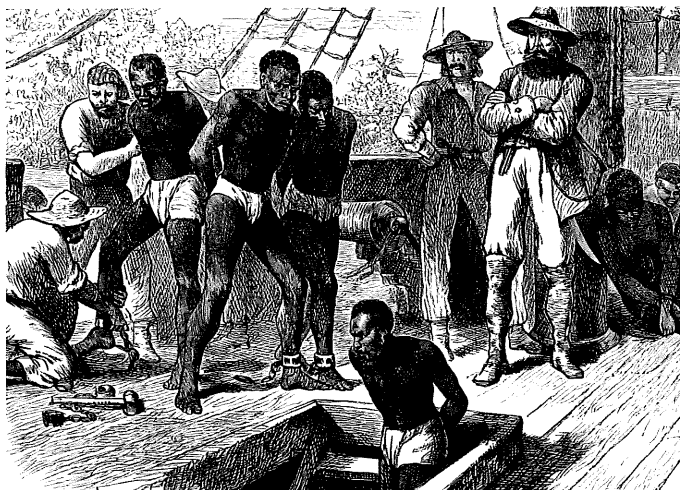
Sources: IMF; World Bank; The Economist

Forced Migration

Forced Migration- Occurs when a person, group, government, or other entity insists that another individual or group must relocate. The people being moved have no say in where they are going or the conditions they are going in.

Refugees:	Asylum Seekers:	Internally Displaced Persons (IDP's)
<ul style="list-style-type: none"> One who flees to another country out of concern for personal safety or to avoid persecution. Ex: People from all over the Middle East (such as Syria, Iraq, and Afghanistan) have sought refuge in Europe and North America because of civil unrest. 	<ul style="list-style-type: none"> Someone who has migrated to another country in hopes of being given refugee status. Ex: In the 1990's, European countries received a lot of asylum applicants due to the war that developed when Yugoslavia broke apart. 	<ul style="list-style-type: none"> People forcibly driven from their homes into another part of the same country. Ex: Sudan is estimated to have more than 5 million IDP's due to civil war within its boundaries.

See pages 87-90 in the textbook for more



<https://www.internationalinside.com/history/transatlantic-slave-trade/>

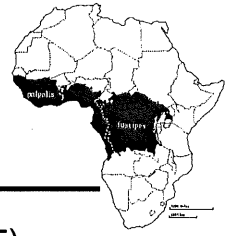
Human Trafficking:

- Uses force, violence, or coercion to recruit people for work in exploitative conditions.
- Southeast Asia is the leading region from which victims are trafficked and they are mainly sent to places like Japan, Thailand, and Malaysia.
- An estimated 2-4 million people are trafficked annually.
- See pages 90-91 for more

Atlantic Slave Trade (1500-1800)

←
Forced Migration

12 million forced out of homes in West Africa, separating tribes and families



Colonial (1st Wave) Migration (1609-1775)

←
Pull Factors: adventure, new start
Push Factors: religious persecution

Arrivals mostly from England, but many others from other



Second Wave of Immigration (1820-1870)

←
Pull Factors: gold rush
Push Factors: potato famine

Poor Irish stayed on east coast from their famine back home and Germans moved inland. Chinese came for gold rush



Third Wave of Immigration (1881-1920)

←
Pull Factors: Cheap travel, agents, jobs
Push factors: political instability

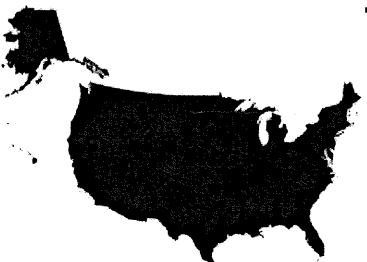
Immigrants from all over Europe (for the first time from southern and eastern Europe) came, facing lots of discrimination. A 1921 law combined with the Great Depression



Fourth Wave of Immigration (1965-Present)

←
Pull Factors: Cheap travel, lowered restrictions, jobs
Push factors: economic instability

A 1965 act loosening up immigration led to an influx of Asian and Latin American immigrants, where most come from now. Illegal immigration has become a huge problem as part of this.



Popular vs. Folk Culture

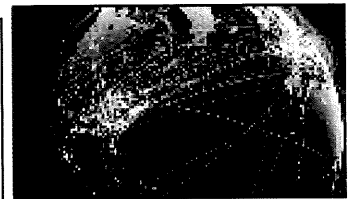
<u>POPULAR CULTURE</u>	<u>FOLK CULTURE</u>
<ul style="list-style-type: none"> • Practices, attitudes, and phenomena that are shared by large amounts of people and are considered “trendy” • Includes things that are mass-produced like music, video games, TV shows, cars, and clothing <ul style="list-style-type: none"> ◦ Influenced by the media and the internet • Associated with large diverse groups of people as it encompasses a large area • Associated with modern, urban areas • Changes rapidly over time • Usually starts in MDCs (North America, Western Europe, and Japan) and spreads quickly through contagious and hierarchical diffusion -- With the help of globalization • Conflicts: can cause placelessness, commodification, and can have a negative environmental impact 	<ul style="list-style-type: none"> • Local traditions/practices shared by members in a common community that is in a specific place • Best example: The Amish • Shared traditions, but hearth of these traditions are often unknown - also includes artifacts that are handmade • Associated with small homogenous groups of people that are concentrated in one area (usually isolated due to a fear of assimilation) • Associated with rural areas • Varies over space more than time • Spreads only through relocation diffusion but doesn’t usually result in an increase of #s • Depends on and uses local materials (environmental determinism) for things like houses
<u>Other Examples:</u> <ul style="list-style-type: none"> • Memes • Slang/Texting Language • Fads 	<u>Other Examples:</u> <ul style="list-style-type: none"> • Mormons • Native American tribes • African tribes

Causes and Effects of Globalization

Globalization- a greater interconnectedness amongst the world's people, places, and institutions

- Ex: iPhone conceived of and designed in US but manufactured in China
- Ex: Company hires people in another country to do their computer programming

Causes	Effects
<p>Internet Technologies- internet allows international commerce and spread of ideas</p> <ul style="list-style-type: none"> • Ex: people overseas can be employed by companies in US <p>Transportation Advances- shipping products has become easier</p> <ul style="list-style-type: none"> • Companies collaborate in other countries <p>Free Trade Agreements- easier to trade goods</p> <p>Cheap Labor Supply- encourages companies to manufacture in other countries</p>	<p>Cultural loss- assimilation due to spread of ideas that make us all the same</p> <ul style="list-style-type: none"> • Placelessness- loss of the unique aspects of a place ex: subdivision where all houses look the same <p>Growth of multinational corporations- cheaper labor and easier trade means higher profits and allows MNCs to prosper</p> <p>Global Economic Growth- places around world depend on each other and support each other's economies</p>



https://usercontent1.hubstatic.com/13771918_1520.jpg

Commodification- making something once not purchasable into a good/service that can be sold

- Ex: slavery, online dating websites, sperm donors

Cultural commodification is making a profit by selling items that have specific cultural value to people

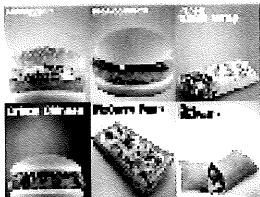
- Ex: dream catchers



https://upload.wikimedia.org/wikipedia/commons/thumb/6/60/Numbers_341_to_385_Lordship_Lane_N17.jpg/300px-Numbers_341_to_385_Lordship_Lane_N17

Cultural Consequences of Globalization

<p>Homogenization Thesis</p> <ul style="list-style-type: none"> - Globalization makes places more alike (placelessness) • Also leads to Americanization- spread of American culture and ideas • Ex: Spread of McDonald's worldwide 	<p>Polarization Thesis</p> <ul style="list-style-type: none"> - Globalization causes separation • War and struggle over identity - Makes people more aware of their differences therefore causes conflict 	<p>Glocalization Thesis</p> <ul style="list-style-type: none"> - Global and local forces interact and are both changed in the process • Can be result of neolocalism - Ex: McDonald's in India changes the menu to not serve cow meat
---	---	---



<https://2.wp.com/deshoda.com/wp-content/uploads/2010/07/mcdonaldsindianmenu>

Imperialism- direct or indirect control over another country's political affairs

• **Colonization**- Type of imperialism where country forms colonies in another country and puts its own government in charge of affairs

- Both are ways to extend power
- British Empire = largest empire

See pages 36-44 and 199-201 in textbook for more information

Local Culture

Neolocalism - An effort to promote the diversity of a place

- ❖ Efforts to advance the neolocalism of a place are normally led by local communities
- ❖ It's a way to prevent **homogenization** created by globalization
 - Homogenization is related to **placelessness** and **Americanization** (everything looks the same)
- ❖ Ex. Keep Louisville Weird
 - A local movement that encourages residents to buy locally in support of Louisville's unique culture
- ❖ Ex. Opposition to the opening of a Walmart in Chicago

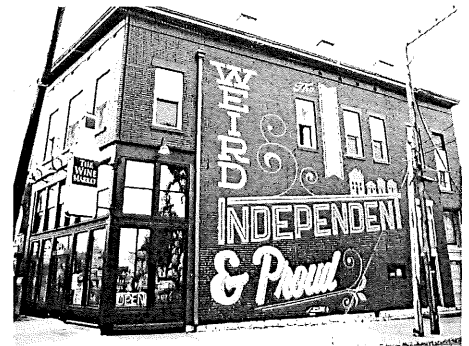


Image Source: <https://www.bbc.com/news/business-30115555>

Stimulus Diffusion - When an idea changes as it spreads place to place

- ❖ Normally affects the production of goods and of services
 - Ex. Fast-food chains, automobiles, etc.
- ❖ It contributes to how local and global forces interact and affect each other
 - The relationship between local and global forces can be seen in **glocalization**
- ❖ Companies will change how they operate to appease the local population's preferences and generate more revenue
- ❖ Ex. McDonald's
 - The company will alter its menu based on local preference and cuisine
 - The majority of the population in India doesn't eat beef or pork which leads to a menu with only vegetarian, fish, and chicken options



Image source: <https://www.bbc.com/news/business-30115555>

Race and Ethnicity

Race: An idea that we can use genetic traits to identify groups of people.

- is highly influential
- a mistaken idea

Four initial groups of Earth:

1. African
2. American (Native Americans)
3. Asiatic
4. European

←
based on skin color

Racism: discrimination or treating of someone differently based on thinking they're inferior to them.

Ethnicity: belonging to a group of people with common national or cultural tradition and traits.

- includes who we think we are
- is subjective

Ascription: thinking that a quality or identity is assigned to others, or yourself (self-ascription)

Examples:

African
American,
Hispanic,
Latino.



https://www.idzea.com/store/p430/THERE%27S_ONLY_ONE_RACE_HUMAN..html

Apartheid and Ethnic Conflict

Apartheid: (meaning apartness) a policy that was backed by the South African government that kept people of different "race" separate.



-In South Africa: Indians, Colored, Whites, and Blacks were separated.

<http://www.digitaljournal.com/article/293425>

Ethnic Conflicts: conflicts caused by the clashing of one or more ethnic groups.

- can be internal or external
- not just caused by one thing
- can be caused by
 - political exclusion
 - disputes over land and resources
 - ethnic differences
 - ethnic hatred, and others
- example: Palestine vs Israel

Ethnic Enclaves

Ethnic Enclaves: areas with a high concentration of a certain ethnic group.

-Ethnic islands, ethnic neighborhoods, and ethnoburbs are all example of ethnic enclaves.

-A *ghetto* is a type of ethnic neighborhood

-Example: Chinatown

<http://www.littleitalywines.com>



Cultural Adoption

Acculturation

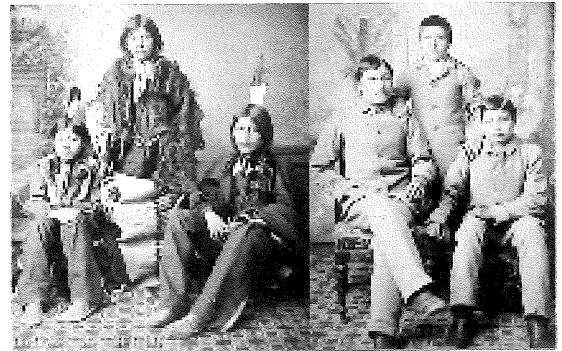
- The process of adapting to or borrowing traits from another culture while still keeping parts of one's original culture
- Example: an Italian could live in the United States and adopt certain traits, such as speaking English, while keeping their native Italian customs/practices ex. speaking Italian

Source: <https://www.buzzle.com/articles/acculturation-explained-with-examples.html>



Assimilation

- The gradual loss of cultural traits, beliefs, and/or practices from immigrant ethnic groups that distinguish them from others; the complete adjustment to a new culture while original values are replaced
- Promotes the view of society as a melting pot
- Can be **voluntary or forced**
- Example: In North and South America, Australia, Africa, and Asia, colonial policies toward indigenous peoples frequently resulted in religious conversion, children forced to leave from their families, etc. (for more info: <https://www.britannica.com/topic/assimilation-society>)

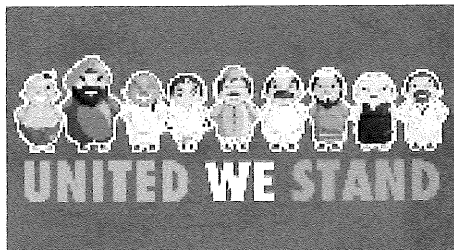


Forced assimilation of Native Americans. Source: <http://www.gwichinstancingcommittee.org/the-forced-assimilation-of-native-americans.html>

Multiculturalism

- The coexistence of more than one culture in one's values or a society/environment
- Example: Mexico is an example of a multicultural country, with people of ethnic groups including indigenous backgrounds, many European backgrounds, Africans, and a small Asian community. (for more info visit: <http://www.mexconnect.com/articles/1932-ethnic-diversity-in-mexico>)

Image Source: <https://laffaz.com/multiculturalism-around-the-world/>



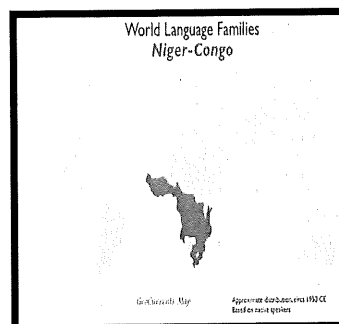
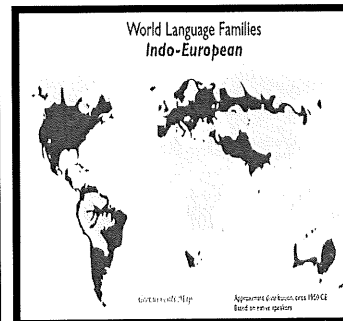
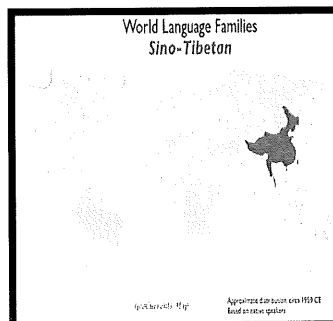
THE SPREAD OF LANGUAGE

- **Language**- a system of communication based on symbols that have agreed upon meanings
- **Hearths**- places where an idea has originated or begun
- **Language hearths**- places where people believe languages have begun
- **Language families**- a collection of languages that share a common but distant ancestor
- There are many language families, but the main ones are Indo-European, Sino-Tibetan, and Niger-Congo

• THREE MAJOR LANGUAGE FAMILIES:



- **INDO-EUROPEAN**
 - Largest language family
 - Includes English, Hindi
 - Has the MOST SPEAKERS
- **SINO-TIBETAN**
 - Second largest language family
 - Includes Chinese (Mandarin), Burmese
 - Has the MOST NATIVE SPEAKERS
- **NIGER-CONGO**
 - Africa's largest language family
 - Includes Yoruba, Zulu
 - Has the MOST LANGUAGES



Source:
<http://www.geocurrents.info/cultural-geography/linguistic-geography/world-maps-of-language-families/attachment>

CAUSES FOR LANGUAGE DIFFUSION

- **Political, economic, and religious** forces influence language diffusion

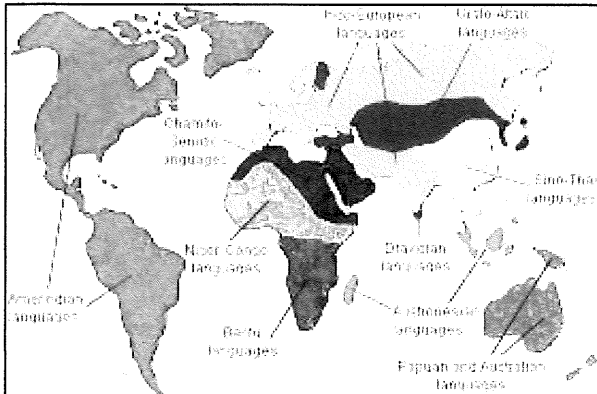
Religious	ex: Muslims whose first language isn't Arabic have to learn the language in order to understand the Qur'an
Economic	ex: Tourism and foreign business are main sources for revenue, therefore languages need to be know or learned in order to communicate.
Political	ex: The rise of the British empire across different countries spread out over the world influenced the spread of English as a result of English colonization

- European colonization played a major role the diffusion of European languages such as Spanish, French, English, and Portuguese
- Linguistic geographers also consider the contexts in which language is used, such as a language, in one place, may be used at home, another in school, etc.

Language Patterns Today

Language - system of communication based on symbols that have agreed upon meanings

Language Family - a collection of languages that share a common but distant ancestor



Lingua Franca –

A language used by people who don't speak the same language to communicate for trade or business.

- can be a single language or a mixture of multiple languages

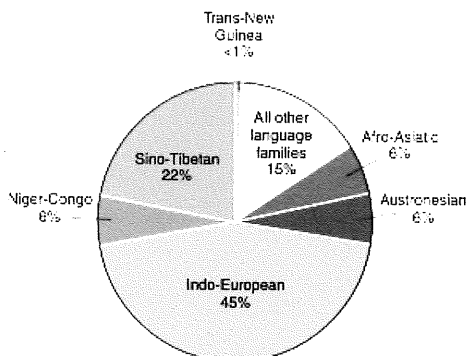
English is considered today's lingua franca because:

- British colonization
- Majority of internet is in English
- Computer programming in English
- Spread of English films, music, and more

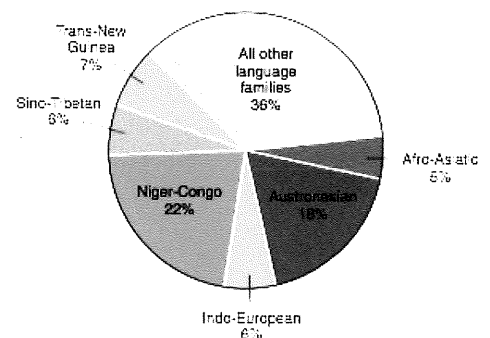
Indo-European	<ul style="list-style-type: none"> • Family with largest number of speakers • Example: English & Hindi 	
Sino-Tibetan	<ul style="list-style-type: none"> • Has the language with largest amount of speakers (Mandarin Chinese) • Examples: Burmese & Mandarin 	
Afro-Asiatic	<ul style="list-style-type: none"> • Longest recorded history of any language family • Examples: Arabic & Hebrew 	
Niger-Congo	<ul style="list-style-type: none"> • Family with the highest number of languages • Examples: Yoruba & Zulu 	

Maps are from <http://www.geocurrents.info/gc-maps/geocurrents-maps-by-topic/geocurrents-maps-of-languages-language-families>

This graph shows the percentage of languages in each family



This graph shows the percentage of speakers in each family



Graphs from https://issuu.com/wiley_publishing/docs/greiner_visualizing_human_geography/120

Language Convergence and Divergence

Language convergence –
when two or more languages
come together to form one
language that is a mixture of
the languages.

Creole language – a
language that develops
from a pidgin language
and is taught as a first
language

example:

-Hawaiian Creole English is used in Hawaii because of the ethnically diverse population. It was used by native Hawaiians, Americans, and immigrant Chinese, Japanese, and Portuguese.

-Tok Pisin is used in Papua New Guinea and is a mixture of indigenous languages, Polynesian languages, German, and English.

Pidgin language –
a language that
combines vocabulary
and grammar from two
or more languages

example:

-Tay Boi was used between the French and Vietnamese when Vietnam was French colony.

Extinct language – a
language with no
living speakers

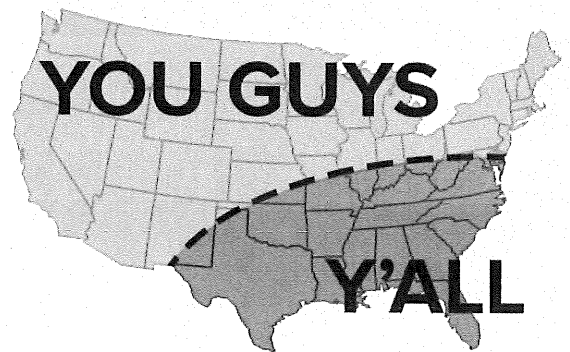
-almost half of the
world's languages are
in danger of going
extinct

Language divergence –
when a language breaks into
different dialects due to a lack
of interaction among speakers

Dialects – different versions of a
language based on grammar and
pronunciation

Accent – the
pronunciation of a
language, typically
associated with
nations, countries,
or social classes

Isogloss – a line that
marks a boundary of
word usage



source of image:
<https://kristybeers.wordpress.com/>

For more information, see pages 109-113 in your textbook for language convergence, pidgin and creole languages, and language extinction, and see pages 117-119 in your textbook for dialects, accents and isoglosses.

Language on Cultural Landscape

Cultural Landscape: Imprint of human existence on the natural landscape of a place
Example: The Great Wall of China, KFC Yum Center, etc.



Source:

<https://images.fineartamerica.com/images-medium-large-5/1-great-wall-of-china-black-and-white-brendan-reals.jpg>



Source: <https://www.louisvillecardinal.com/media/2016/10/myway.png>

The Imprint of Language on Cultural Landscape

- Most areas have a common language which is used for communication amongst them
- Language has an effect on the development of the **cultural landscape** - WHICH IS DIFFERENT IN DIFFERENT AREAS
- The most common imprint of language on the landscape is signs.

Signs

- Show the dominant language in an area
- Show the history of a region
Ex. In Quebec, french signs reflect the french colonization
- Usually in the official language
- Send political messages
- Discriminate against certain groups, etc.



HISTORY

Source:
https://www.ctvnews.ca/polopoly_fs/1.4033952.15329890871/httpImage/image.jpg_gen/derivatives/landscape_960/image.jpg



DOMINANCE

Source:
<http://www.terrageria.com/images/black-white/china/chin4816-bw.jpeg>



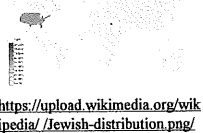
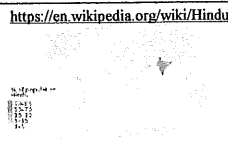


DISCRIMINATION

Source:
<http://i2.cdn.turner.com/cnn/2011/images/12/12/theatrex.jpg>

Ethnic Religions







- **Ethnic Religion**- a system of beliefs specific to a certain ethnic group and not trying to expand or bring in converts
- Observers are usually born into the religion
- Spreads mainly by relocation diffusion since they aren't seeking converts
- The majority of religions in the world are small ethnic religions such as indigenous religions in Africa
- Often are small because they do not seek converts and place great importance on native land
- Examples: **Judaism, Hinduism, Taoism, and Shinto.**

	Judaism	Hinduism
	○ <u>Semitic Hearth</u> (Palestine and Israel area)	○ <u>Indic Hearth</u> (Punjab region in India)
Symbol	 <p>“Star of David”</p> <p>http://clipart-library.com/symbols-of-judaism.html</p>	<p>“Aum”</p> <p>https://upload.wikimedia.org/wikipedia/commons/thumb/0/0a/Aum_Om_black.svg/2000px-Aum_Om_black.svg.png</p> 
Sacred scripture	○ Torah	○ Vedas
Beliefs	<ul style="list-style-type: none"> ○ Monotheistic ○ Abrahamic- believed God sent Abraham to the promised land ○ Moses lead people out of Egypt to Israel ○ <u>Zionism</u>-a movement by Jews to recreate their promised land by the creation of the Jewish state of Israel 	<ul style="list-style-type: none"> ○ Polytheistic ○ Vedic- follow the Veda texts ○ <u>Karma</u>-positive and negative influence of deeds upon reincarnation ○ In a cycle of reincarnation until you obtain enough positive karma to reach moksha ○ Moksha is the state of eternal bliss
Associated Terms	<ul style="list-style-type: none"> ○ <u>Diaspora</u>-the dispersal of a group of people through forced migration <ul style="list-style-type: none"> ➤ Babylonian exile 500BCE ➤ Roman destruction 70CE ➤ Nazi persecution WWII era 	<ul style="list-style-type: none"> ○ <u>Caste System</u>- social system of India based upon reincarnation where the karma of your past life controls the caste you are in for this life. (5 levels)
Place of worship	○ Temple	○ Temple
Number of followers and locations	<ul style="list-style-type: none"> ○ 15 million <ul style="list-style-type: none"> ➤ Israel ➤ United States  <p>https://upload.wikimedia.org/wikipedia/en/Jewish-distribution.png/</p>	<ul style="list-style-type: none"> ○ 1.1 billion <ul style="list-style-type: none"> ➤ India ➤ Smaller numbers in Nepal and Bangladesh  <p>https://en.wikipedia.org/wiki/Hindu</p>
Sacred sites	○ Israel and Jerusalem	○ River Ganges in India

For more information, see pgs. 131-135 in textbook

Universalizing Religions

Universalizing Religion: A belief system that is worldwide in scope, welcomes all people as potential adherents, and may work actively to acquire new converts.

Religion	Buddhism	Christianity	Islam
Type	Vedic Faith Non-Theistic	Abrahamic Faith Monotheistic	Abrahamic Faith Monotheistic
Origin	<ul style="list-style-type: none"> ➤ Founded 2500 years ago (6th century B.C.E) ➤ Founded in Northern India ➤ Founded by Siddhartha Gotama. ➤ Origin story: Siddhartha was a Hindu Prince sheltered from sufferings. Troubled by these sufferings he became the "Buddha" or enlightened one 	<ul style="list-style-type: none"> ➤ Founded 2000 years ago (33C.E.) ➤ Founded in Palestine ➤ Founded by Jesus Christ ➤ Origin Story: Jesus Christ, a Jew, spread his teachings of Christianity 	<ul style="list-style-type: none"> ➤ Founded 1500 years ago (570 C.E.) ➤ Founded in Mecca (Saudi Arabia) ➤ Founded by the prophet Muhammad ➤ Origin Story: While meditating, Muhammad received revelations from Allah(god) via the angel Jibril and spread these teachings
Diffusion Patterns	<ul style="list-style-type: none"> ➤ Spread to Southeast and East Asia ➤ 500 million followers ➤ Top countries <ol style="list-style-type: none"> 1. China 2. Japan 3. Thailand ➤ Spread Via silk road, traveling teachers ➤ Divisions <ul style="list-style-type: none"> ○ Theravada ○ Mahayana ○ Tantrayana 	<ul style="list-style-type: none"> ➤ Spread to Europe and then to European colonies ➤ 2.3 billion followers ➤ Top countries <ol style="list-style-type: none"> 1. U.S.A. 2. Brazil 3. Mexico ➤ Divisions <ul style="list-style-type: none"> ○ Catholicism ○ Protestant ○ East Orthodox 	<ul style="list-style-type: none"> ➤ Spread to North Africa and Southeast Asia via trade ➤ 1.6 billion followers ➤ Top countries <ol style="list-style-type: none"> 1. Indonesia 2. Pakistan 3. India ➤ 62% in South/South east Asia ➤ Divisions <ul style="list-style-type: none"> ○ Sunni 80% ○ Shiite 15%
Major Beliefs	Nirvana=Cycle of Life and death Four Noble truths and 8-fold path	The Trinity: Father(God),Son(Jesus),Holy spirit Sacred Text: Bible	5 pillars: Faith, Prayer, Support Needy, Fast during Ramadan, Pilgrimage to Mecca Sacred Text: Qur'an
Place of Worship	Temple  common.wikipedia.org	Church  avemariardio.net	Mosque  En.wikipedia.org
Symbols	 en.wikipedia.org	 www.religionfacts.com	 www.patheos.com

See pages 130-137 in your textbook for additional information.

The Spread of Religion

Indic Hearth Religions

~Hinduism~Buddhism~Sikhism~
(AKA the Vedic religions)

Hinduism: (ethnic religion)

originated in the Punjab region of India



spread throughout India and Ganges River Valley

-mostly practiced inside of India because it is an ethnic religion

Buddhism: (universalizing religion)

originated in northern India



spread through and out of India and into Southeast Asia and China

-contagious diffusion allowed Buddhism to spread along the "Silk Road"

Sikhism: (universalizing religion)

originated in the Punjab region of India



hasn't spread far from the Punjab region

-it is still a young religion and even though it is a universalizing religion it has not diffused far from its place of origin

Semitic Hearth Religions

~Judaism~Christianity~Islam~
(AKA the Abrahamic religions)

Judaism: (ethnic religion)

originated in Israel and Palestine



spread out of Palestine and Israel but returned over time because of

Diaspora: the scattering of a group of people through forced migration

-formation of Israel happened in 1948 after WWII, when millions of Jews were killed

-located mostly in the USA and Israel today

Christianity: (universalizing religion)

originated in Palestine



spread throughout Europe and is now found all over the world

-spread through contagious and hierarchical diffusion

-most common in Europe, South America, North America, Australia, and Sub-Saharan Africa

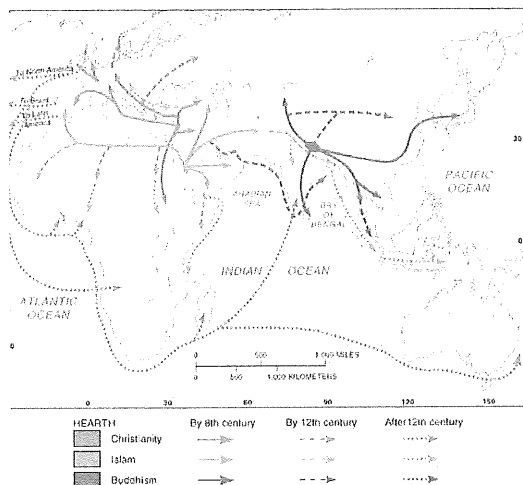
Islam: (universalizing religion)

originated in Saudi Arabia (Mecca and Medina)



spread quickly to the Middle East and North Africa

-spread mostly through contagious diffusion



For additional information see textbook pages: 138 to 141i

Fundamentalism VS. Secularism

Fundamentalism

WHAT?

- Strict interpretation of faith controls ALL ASPECTS of life.
- Fundamentalists REJECT modernism in favor of tradition.
- Believe state/law and religion should be connected.

WHERE?

- LESS COMMON in Westernized places, but found everywhere.

WHY?

- Fundamentalists want to uphold religious tradition and live by **strict interpretations** of **religious teachings**.

Secularism

- Belief that religion and government should NOT be connected.
- **REDUCES** scope of religion.
- **MODERNIST** views contribute to secularism.

- **MORE COMMON** in WESTERNIZED PLACES.

- Secularists think religious rules and ideas should be **MORE FLEXIBLE** to fit in **MODERN** society.

What are some examples?

Fundamentalism

- Strict **SHARIA LAW** (under Taliban)
- Banning teaching of evolution
- Blue Laws-(allow Sunday closings/prohibit alcohol certain days)

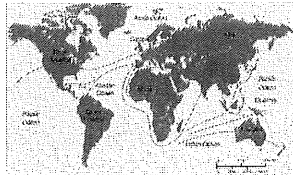
Secularism

- Separation of Church and State
- Bans on Burqas (like in France)

Religion Patterns Today

Christianity:

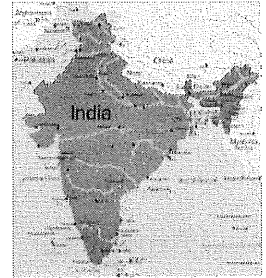
- 2.3 billion followers
- Majority Worldwide
- Americas- 800 million followers
- Europe-565 million followers



<https://www.pinterest.com/pin/564005553303729129/>

Hinduism:

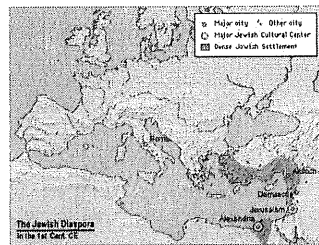
- 1.15 billion
- Located in India, United States, United Kingdom
- India – 90% of all followers



<http://nextcourier.com/hearth-of-hinduism/hearth-of-hinduism-religions-ralph-and-chandlers-study-of-religions/>

Judaism:

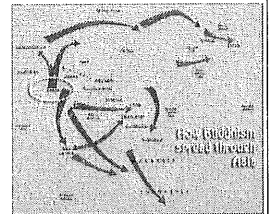
- 13 million followers
- Israel- 6 million Jews
- U.S. -5.5 million Jews



<https://www.pinterest.com/pin/564005553303756240/>

Buddhism:

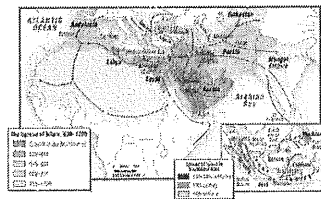
- 495 million followers
- Southeast Asia
- Thailand - 95% Buddhist
- Cambodia – 90% Buddhist



<https://www.ancient.eu/buddhism/>

Islam:

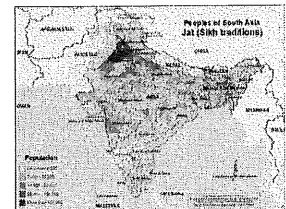
- 1/5 of world pop.
- North Africa, Middle East, and South Asia
- Indonesia - 200 million followers
- Pakistan – 170 million followers



<http://coppercartcafe.com/islam-hearth/islam-hearth-islamic-timeline-sutori/>

Sikhism:

- 23 million followers
- Northern India- 90% of all Sikhs
- Canada – 500,000 followers



<https://prezi.com/jf3x8iycfpik/sikhism/>

- Islam is the fastest growing religion
- By 2050, Islam will be the same size as Christianity
- 7% of the world is atheist

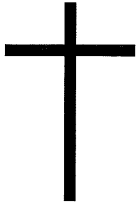
For more statistics on religion go to www.pewforum.org

Textbook pages, 130-137

Religion on the Cultural Landscape

Cultural landscape- landscapes that have been affected, influenced, or shaped by human involvement. Can be seen through architecture, symbols, icons, housing and sacred sites.

Christianity



Symbol: Cross



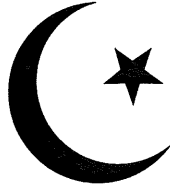
Worship in church

Architecture: Central steeple, large churches have 2 tall bell towers

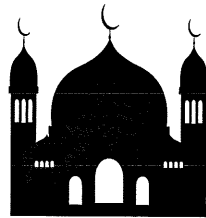


Sacred sites: Israel

Islam

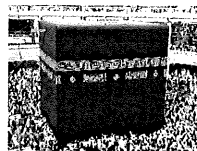


Symbol: Star and crescent



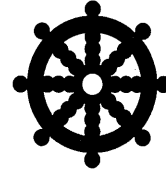
Worship in mosque

Architecture: Typically, Central dome, minarets



Sacred Sites: Mecca, Saudi Arabia

Buddhism



Symbol: Dharmachakra



Worship in temple

Architecture: Can be -dome or tower with eyes (Stupa)
-Several stories, winged roofs (Pagoda)

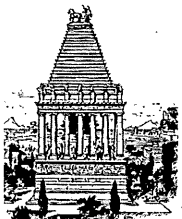


Sacred sites: Bodh Gaya

Hinduism



Symbol: Om



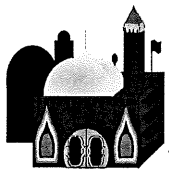
Worship in temple

Architecture: Rectangular body, short towers of carved stone, carvings of deities
Sacred sites: Varanasi, Allahabad

Sikhism



Symbol: Khanda



Worship in Gurdwara

Architecture: Domes, Domed spires

Sacred sites: Amritsar

Judaism



Symbol: Star of David



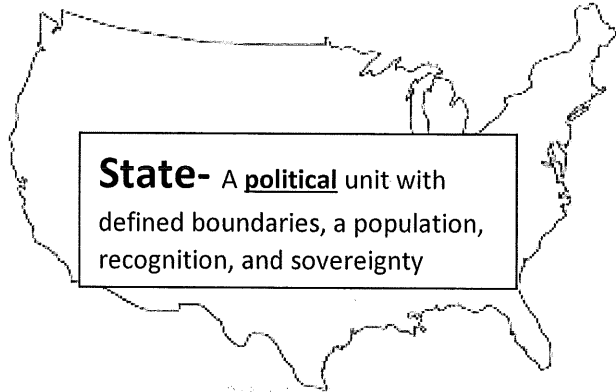
Worship in Synagogues

Architecture: Varies, Domed spires

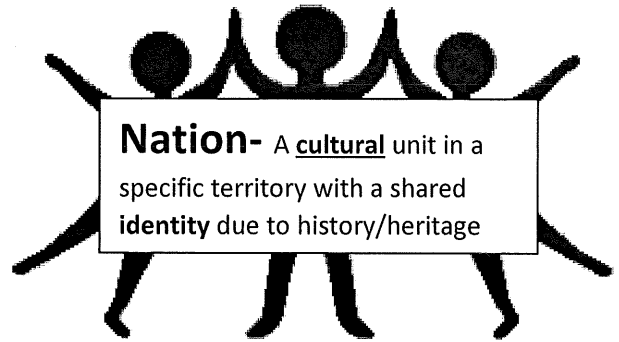


Sacred sites: Israel

Basic Political Terminology



State- A political unit with defined boundaries, a population, recognition, and sovereignty



Nation- A cultural unit in a specific territory with a shared **identity** due to history/heritage

Nation-State- the political boundaries (state) and cultural boundaries (nation) match. Nation-states are **homogenous**. This is not very common. Some of the best current examples are Iceland and Japan.

The main advantage of a nation-state is that since there is cultural unity it is often easier to maintain political unity as well (since the population already identifies together). Also, nation-states avoid the issues of irredentism, cultural tension, etc.

Multinational State- A state (country) with more than one cultural group. Multinational states are **heterogenous (diverse)**. This is much more common than nation-states, most countries are multinational states.

Advantages of a multinational state can include-

- Openness to immigrants
- Political links to other countries
- Economic links to other countries
- Improved perspectives

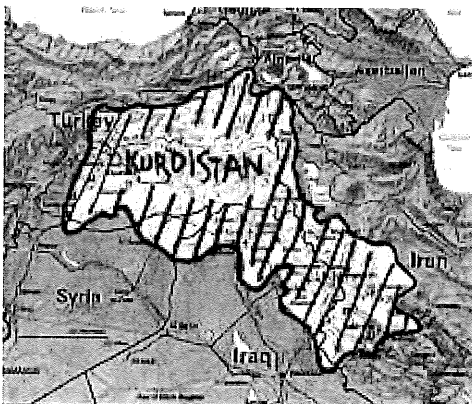


Image from <https://ekurd.net/kurdistan-we-live-between-artificial-lines-2015-04-10>

Multi-state nation- when a nation stretches across state boundaries. In the map to the left, the Kurdish people are found within the boundaries of six states.

Stateless nation- when a nation lacks control of a state. The Kurds are also an example of a stateless nation. They wish to create the country of Kurdistan shown on the map, but have received international recognition for the proposed state. Stateless nations can sometimes undermine established governments as they seek establishment of a state.

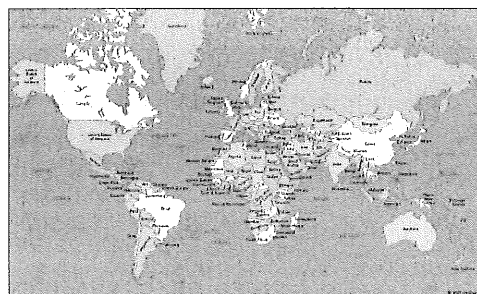
Autonomous Region- when a country gives autonomy (some degree of freedom) to one or more regions. Sometimes countries might do this because the region is geographically distinct OR, more commonly, that there is a dominant minority group (majority-minority) in the region. The creation of autonomous regions can help manage competing forces in multinational states and can help appease stateless nations so that the country can remain unified.

Example- Indian Reservations in the United States function as autonomous regions.

Requirements to be a State

State - political unit with:

- According to 1933 Montevideo Convention
- Defined boundaries and specific territory
- Permanent population
- International recognition
 - *prominence of the countries recognizing a state is more relevant than number of countries recognizing it
 - Most challenging
- Has government with sovereignty over its domestic and political affairs
 - Challenging



• <https://geology.com/world/world-map.gif>

	Potential States			
1933 Montevideo Convention criteria for state	US	China (People's Republic of China)	Taiwan (Republic of China)	Principality of Sealand
Defined Boundaries and Specific Territory	- 3.797 million mi ² - Shares borders with 2 sovereign states	- 3.705 million mi ² - Island; does not share any borders with sovereign states	- 13,974 mi ² - Shares borders with 14 sovereign states	- 43,060 ft ² - Became part of UK territorial waters as it expanded from 3 to 12 nmi - Does not possess a status of island, does not affect the delimitation of territorial seas, EEZ, or continental shelf
Permanent Population	- 325.7 million (2017)	- 1.379 billion (2016)	- 23.55 million (2017)	- 27 (2002)
International Recognition	- 189 sovereign states including all of the UN Power Five states - Is member of various supranational organization such as UN	- 175 sovereign states including all of the UN Power Five states - Is member of various supranational organizations such as UN	- 19 sovereign states all of which are less prominent states - PRC claims it as its 23rd province	- Not officially recognized by any established sovereign state - Claim that it has been recognized by Germany and UK
Sovereignty over domestic and international affairs	- Has a constitution - Administered as a liberal democratic, Federal, constitutional republic, under a presidential system - Sovereign over international affairs	- Has a constitution - Administered as a Communist / Socialist, unitary, one-party republic under the people's democratic dictatorship - Sovereign over international affairs	- Has a constitution - Administered as a democratic, unitary, constitutional republic under a semi-presidential system - Successful informal diplomatic relations	- Has a constitution - Administered as a Constitutional Monarchy - Successful defense of HM Fort Roughs from Dutch and German mercenaries - Successful negotiation with German diplomat following brief hostage situation, - Involvement in minor business operations
State?	Yes	Yes	Debatable	No

Land Boundaries

Boundary - A vertical plane, often found on maps to fix the territory of a state

Geometric	Uses straight lines to divide areas of land	Often use lines of Latitude & Longitude	<i>U.S & Canada (49th Parallel)</i>
Consequent Ethnographic or Cultural	Drawn to show some sort of cultural divide	Oftentimes differences are in religion, language and ethnicity	<i>India (Hindus) & Pakistan (Muslims)</i> <i>Northern Ireland (Protestants) & Ireland (Catholics)</i>
Superimposed	Forced Creation of a boundary by an outside power or force	Disregards culture of the area	<i>African countries formed by European Powers (France, Spain, U.K, Italy, Belgium, Portugal etc)</i>
Relic	Once existed as an official boundary, now no longer recognized	Can still affect the surrounding area	<i>Great Wall of China</i> <i>Berlin Wall</i>
Subsequent	Created during human settlement alongside the region's culture	Rarely geometric	<i>Eastern U.S</i> <i>China & Vietnam (Disputes have affected boundaries)</i>
Antecedent	Existed before human settlement & cultural landscape emerged	Often Box shaped	<i>Western U.S (State shapes formed before settlement)</i>

Boundary Process

steps that are needed to create a boundary

Defining	Where the location of a boundary is negotiated and decided	The decision can be made by the UN or different states
Delimiting	A boundary being placed on a map	<u>NOT PHYSICAL</u>
Demarcating	Physically <u>marking</u> a boundary	Can be accomplished by placing walls, fences etc
Administering	How a boundary will be maintained	Regulates how goods, people etc will cross the boundary

Boundary Conflicts

Definitional	Official language of border agreement	<i>Andes Mountains (Chile & Argentina)</i>
Locational	Where border lines are placed on map	<i>Rio Grande (U.S & Mexico)</i>
Operational	Difference of how to manage/run the border	<i>Migration (U.S & Mexico), Nomadic Movement</i>
Allocational	Distribution of resources	<i>Oil (Iran & Kuwait), Fish (U.S & Canada)</i>

Sea Boundaries

Boundaries

- A vertical plane
- Normally represented by a line
- Marks the territory a state has sovereignty over
- Divides airspace above ground
- Divides the rock and resources below ground
- Coastal and Island states' boundaries extend offshore

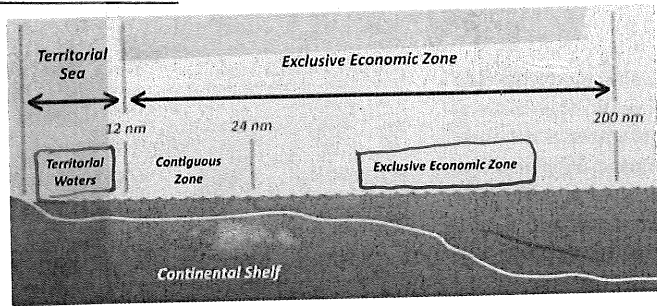


Figure 1- <https://www.quora.com/Who-owns-the-sea>

Territorial Waters

Are waters that are enclosed by boundaries off the shore of coastal and island states which are considered part of the state's territory.

- Defined by the 1982 *United Nations Convention on the Law of the Sea (UNCLOS)* – Is a belt of coastal water extending, at most, 12 nautical miles (22.2 km or 13.8 mi) from the baseline (normally the average low-water mark) of a coastal state
 - **Nautical mile** = 2,025 yards (265 yards more than a normal mile)
- The states have full sovereignty over the resources in these waters and on its ocean floor
 - **Sovereignty**- The full right and power of a governing body over itself, without any interference from outside sources or bodies.

Exclusive Economic Zones (EEZs)

Sea zone over which a state has special rights regarding the exploration and use of marine resources.

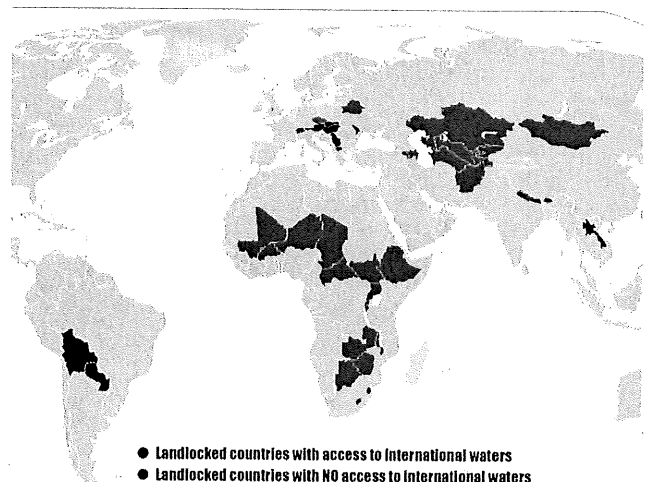
For example: Any energy production, from wind or water, in these areas will be under control of the state which boundary it is within

- Set and agreed on by the **UNCLOS**
- Extends 200 nautical miles (230 miles) from shore
- Unlike territorial waters, EEZs have a reduced sovereign right on the resources in them

Landlocked Countries




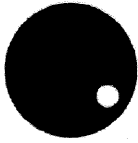

Landlocked countries are at a huge disadvantage because their international trade depends on transit through other countries.

Figure 2- <http://i.imgur.com/hLHZC3c.jpg>



Textbook page 202

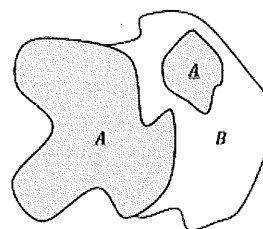
State Shapes

State Shape	Image	Description	Pros	Cons	Examples
Compact		Circular or square shape.	Easy communication and transportation.	Lack of variety of natural resources.	Belarus, Poland
Elongated		A stretched out, long and skinny, shape.	Easy transportation allowing more trade. Better access to resources.	Difficult communication that can lead to unrest.	Chile, Italy, Argentina
Fragmented		Broken into two or more parts.	Harder to be conquered.	Difficult transportation and communication.	Philippines, Japan, Indonesia
Perforated		Contains a sovereign state within the state.	Less conflict with an ethnic group in the enclave.	Exclave makes transportation and communication difficult.	South Africa (Lesotho), Italy (San Marino and Vatican City)
Prorupt		A piece of the state hanging to form a "panhandle".	Better access to resources. More trade.	"Panhandle" often fought over.	Thailand, Burma

Enclave- a state completely surrounded by another state. Examples: Lesotho and Vatican City.

Exclave- an area of a state completely separated from its state by another state. Examples: Alaska and Kaliningrad.

The separated portion of A is an exclave. <https://ars.els-cdn.com/content/image/1-s2.0-S0096300315008954-gr3.jpg>



State shape pictures from: <http://bigthink.com/strange-maps/595-its-always-chile-in-norway-the-five-types-of-territorial-morphology>

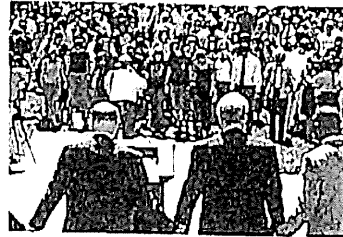
See pages 202-205 in the textbook for more information.

Centripetal and Centrifugal Forces

Centripetal Forces- events or circumstances that help unite the people of a state

Examples include:

- ❖ Equality
- ❖ Cultural Homogeneity
- ❖ Shared Language
- ❖ Patriotism
 - Armed Forces
 - Binding together of the country after the 9/11 attacks
- ❖ Good Leadership
- ❖ Geographic Boundaries keeping people inside
 - Ex: Pakistan is an isolated river valley surrounded by mountains
- ❖ Flourishing Economy
- ❖ Uniform Government Policies
- ❖ Strong Infrastructure
- ❖ Raison D'etre



<http://uncmain.sites.unc.edu/files/20>

Raison D'etre- the purpose or reason for the initial existence of a state

- ❖ Literally translated in French as "the reason for being"
- ❖ It is the most significant centripetal force

Example: Israel's Raison D'etre → to create a homeland for the Jews

Pakistan's Raison D'etre → to create a Muslim majority state apart from India

Centrifugal Forces- events or circumstances that divide and split the people of a state.

Examples include:

- ❖ Discrimination & Inequality
- ❖ Cultural Diversity
- ❖ Various Languages
- ❖ Various Religions
 - Ex: Hindus and Muslims in India
- ❖ Economic Disparities
- ❖ Government policies that exclude one or more groups
- ❖ Geographic Boundaries splitting a country
 - Ex: Mountains that spread across Nepal can split communities
- ❖ Multinational States
- ❖ Poor Leadership
- ❖ Poverty
- ❖ Weak Infrastructure
- ❖ Lack of a Raison D'etre
 - Ex: Yugoslavia was created as a multinational state with split religions and languages and did not have a Raison D'etre. Eventually, the country broke apart.

For more information, see textbook pages 206- 207

Forms Of Government

Unitary System

Vs.

Federal System

Central gov. is supreme
Operates as one unit
Centralized
Ex. China



Divides power between
the different subdivisions
Not as Centralized
Ex. USA

Examples of Unitary and Federal states:

Unitary - China, Pakistan, Turkey

Federal - Australia, United States, Brazil

Unitary government

vs.

Federal government

PROS

Gov. can make quick decisions

Diffusion of power leads to no corruption

Unity: people follow same laws, have same policies

More efficient: states can create their own solutions that are more effective.

CONS

Decisions are cost efficient

Peoples voices are heard and represented

Easy to abuse their power or become overwhelmed

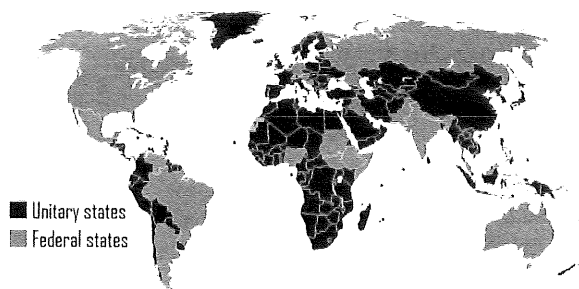
Inequalities between states: not the same throughout the country

Peoples voices aren't heard or listened to

Less unified, conflict between the different levels

visionlaunch.com/pros-and-cons-of-unitary-government/federalism.htm

<https://bloomp.net/articles/benefits-of->



Federal states: North America, most of South America, Russia, Australia, India, parts of Africa

Unitary states: Iceland, most of Africa, parts of Asia, parts of South America

<https://saint-tepes.deviantart.com/art/unitary-federal-map-federation-unitary-states-465970656>

more on pg. 206 in textbook

What is Supranationalism?

- Supranationalism is where states work together for a common political, economic, military or cultural purpose. (pg 209-212)

PROS	CONS
More collective power, increase trade, political security.	When a state joins a supranational org they give up some of their own power to the org.(loss of sovereignty)

The following are example of supranational organizations (keywords on arrows):

UN

PEACE

~Most countries in the world are part of the United Nations~

- ~The United Nations~**
- Formed after WWII to promote peace in world
 - Mission is to build peaceful relationships among states
 - Conflict is resolved peacefully
 - Has many agencies or organs w/in it (ex: World Health Org)



NATO

MILITARY

~United States, Western Europe and Canada are involved~

- ~North Atlantic Treaty Organization~**
- Largest military budget in world
 - Main goal is to protect the states involved through military



<https://www.militaryimages.net/attachments/military-silhouette.png.162007/>

EU

ADDRESSES GOODS AND PEOPLE

~Europe except Norway, Switzerland Russia and a few others~

- ~European Union~**
- Goal was to create a free trade zone
 - Free movement of goods, services and people
 - Contains a parliament, central bank and flag

ASEAN

PEACEFUL WATERS

~Southeast Asian Countries~

- ~Association of Southeast Asian Nations~**
- Set up to promote cultural, economic and political development in the region
 - Manages the water resource issues in the seas in the region



https://3pg9wh47692.cloudfront.net/500px_CTOURB/0X31175661.jpg

African Union

UNITY

~Countries in Africa (53)~

- ~African Union~**
- Main supranational org for Africa
 - Encourage economic development and political stability for members
 - Leaders hope to reach same unity as EU

NAFTA

ECONOMIC/TRADE

~Agreement between US, Canada and Mexico~

- ~North American Free Trade Agreement~**
- Goal was to remove trade barriers btw US, Canada and Mexico
 - Factories moved to Mexico it was cheaper labor and taxes were not a problem anymore



<https://www.pinterest.com/pin/648177677575043469/>

Devolution

Devolution is the shift of power from the central government to a smaller, sometimes community-sized subunit within it. These power shifts aren't equally distributed among the receiving subunits.

Examples:

- ❖ The United Kingdom: Scotland, Wales, and Northern Ireland have individual authority over their own territory, but they are still part of the larger United Kingdom.
- ❖ Canada: Quebec has authority over everything they possibly can in their land but is still part of the country of Canada.
- ❖ Spain: Catalonia has its own laws and way of running things but is still part of Spain.



Political Cartoon from: <https://alexhughescartoons.co.uk/1995/03/devolution-dogs-x/>

Though Devolution gives smaller areas some sovereignty, it's not evenly dispersed among each of the subunits

Devolution is a form of decentralization. (See Visualizing Human Geography pg. 240 for definition)

Effects of Devolution can include:

- A less unified state
- High financial costs due to political structures
- "Bandwagon Effect", as in more subunits will want to have some form of sovereignty, as well

PROS

- Balances the economic development in the country
- Brings government closer to the people
- Manages social diversity
- Cooperative decision making among people/groups

CONS

- Could lead to exclusion (socially and politically)
- Could lead to decentralized authority
- Loss of sovereignty (what everyone wants)
- Large expenses (running, starting it up, etc.)

FRAGMENTATION OF STATES

BALKANIZATION

The breaking up of a state into 2 or more states

EXAMPLES

Before	After	When
Austro-Hungarian Empire	<ul style="list-style-type: none"> - Poland (part) - Czechoslovakia - Hungary - Austria - Yugoslavia (part) - Liechtenstein 	1918
USSR (Soviet Union)	<ul style="list-style-type: none"> - Russia - Belarus - Ukraine - Estonia - Latvia - Lithuania - Moldova - Georgia - Armenia - Azerbaijan - Kazakhstan - Uzbekistan - Tajikistan - Kyrgyzstan - Turkmenistan 	1991
Yugoslavia	<ul style="list-style-type: none"> - Slovenia - Croatia - Serbia - Bosnia-Herzegovina - Montenegro - Kosovo (disputed) 	1991-2008
Czechoslovakia	<ul style="list-style-type: none"> - Czech Republic - Slovakia 	1993
Sudan	<ul style="list-style-type: none"> - Sudan - South Sudan 	2011

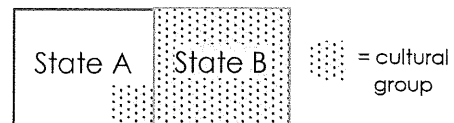
THE FRAGMENTATION OF THE SOVIET UNION

Image from www.ribttes.com

For more information see pg. 198-199, 206-207

WHAT CAUSES A STATE TO SPLIT?

- **Irredentism:** a minority ethnic group wants to leave a multinational state (A) to form a new state or to join another culturally similar state (B)



- other **centrifugal forces**
 - Discrimination/Inequality
 - Geographic boundaries that separate a state or a state's communities
 - Poor leadership
 - No Raison D'etre
 - Etc. (see pg. 206)

ETHNIC NATIONALIST MOVEMENTS

A nation of people without their own state (stateless nation) desires a nation state

Example: the creation of Israel

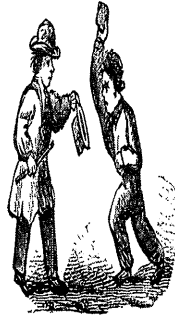


The Cold War

- ❖ The Cold War was a rivalry between the United States and the USSR that lasted from the late 1940's (after WW2) to the late 1980's.

United States: capitalists

- ❖ Allies:
 - NATO states
 - South Korea
 - South Vietnam
 - Japan
 - Israel



USSR: communists

- ❖ Allies:
 - East Germany
 - North Vietnam
 - China

Resulted in a **Bi-Polar** world- a world divided into two opposing groups

Causes of the Cold War:

- ❖ U.S. and Russia were in the space race
- ❖ Both were spending a lot of money on military
- ❖ Both were growing in power
- ❖ Both had very different governing systems, influencing the U.S. in two ways:
 - **Domino Effect**- belief that if one country was communist, nearby countries would also become communist
 - **Containment**- limit the spread of an opposing idea

- ❖ **Client states** were states that depended on the USSR or the US were used to fight instead of the main states.
 - Ex. North/South Vietnam

Effects of the Cold War:

- ❖ **Fall of Communism**- occurred during 1980's/1990's
 - Led to: Breaking of Berlin wall, separation of USSR, and creation of the DMZ (cease-fire line between North and South Korea).
 - The DMZ is an example of a **fortified** boundary- which is monitored and maintained
- ❖ **Fall of USSR**- 23 new states were created (largest: Russia)
 - An example of **balkanization**- the division of a state into separate states.
 - Democratization grew
 - Communism was out of Europe

http://etc.usf.edu/clipart/65100/65154/65154_2-fight.htm

Impact of Imperialism and Colonialism on modern states

COLONIALISM - a form of imperialism in which a state takes possession of a foreign territory, occupies it, and governs it.

PROS:

- Caused accelerated nation growth
- Westernized medicine practices were brought to the colonized countries

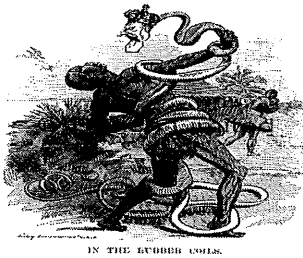
CONS:

- Loss of culture
- Exploitation of labor(using natives)

Example:

- England's control over india from the 1700s to 1947

<http://www.indiana.edu/~liblilly/cartoon/colonial.html>



IMPERIALISM- one states exercise of direct or indirect control over affairs of another political society

PROS:

- Furthering of exploration
- The creation of more efficient trade routes.

CONS:

- Boundary disputes
- The production of cash crops caused famine (common industry in imperialized countries)

Example:

- China's invasion of Tibet in the 1950s destroying their culture in the process

<https://www.facinghistory.org/resource-library/image/imperialism-cartoon>




Berlin conference connection to Imperialism:

- The conference consisted of European countries creating formal boundaries for africa.
- Made for regulation of trade in imperialized/colonized areas

For more information see pages 199-201

Decolonization & Neocolonialism

Decolonization	Neocolonialism
<ul style="list-style-type: none"> ➤ The action of changing from colonial to independent status ➤ Examples of this include the U.S. declaring independence from Great Britain; Latin & Central America freeing themselves from Spanish and Portuguese control 	<ul style="list-style-type: none"> ➤ A policy where a major power uses economic & political means to extend its influence over its former colonies ➤ Can be applied to MDCs controlling LDCs (sometimes) ➤ An example is how Europe controlled Africa <p>CONTROL BY</p> <p>POWER</p>

Self-determination

- The ability of a country to make its own political choices

Choke point

- A geographical land feature (like a lake, river, valley, etc.) that makes it harder for a area to be captured
- An example is the English Channel which separates England from France (shown in image to the right)



Shatterbelt

- An area of instability between regions with opposing political and cultural views
- Examples are Israel or Kashmir today or Eastern Europe in the Cold War



Multinational corporation (MNC)

- A company that owns facilities in one or more countries
- In the picture to the left, examples of MNCs are shown

For more information see page 201 :)

<http://culttech.com/7-ways-to-earn-free-google-play-credit/>
 <http://canacopegdl.com/synonym/power.html>
<https://www.worldatlas.com/aatlas/infopage/englishchannel.htm>
<https://www.slideshare.net/FreezingIcePatrickChau/Multinational-corporations-and-financial-Accounting-framework>

Internal Boundaries

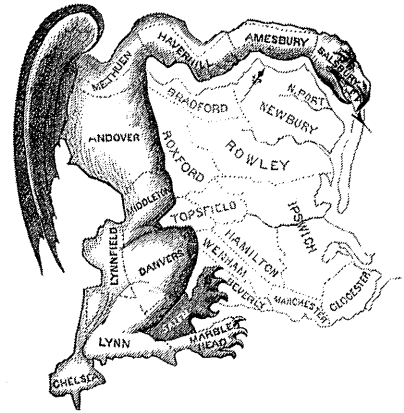
Census (every 10 yr) → reapportionment → redistricting → possible gerrymandering

Reapportionment-

- Reassigning legislative seats among districts after census reports so they each represent the same amount of people

Redistricting-

- Redrawing voting district lines (usually due to population change)



*Elbridge Gerry in 1812 (used to benefit his political party in Boston-and won)

Gerrymandering*-

- Manipulating voting district boundaries to make people favor one political party over another
- Process is disliked, but not illegal
- Common tactics= packing and cracking

Packing-

creating district where support for opposition is overwhelming

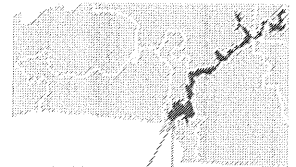
Why: While they may win those districts, they aren't in others, so they can't win majority control.

(access vote gerrymandering: since the opposition has more votes than needed in districts they're packed in)

Cracking-

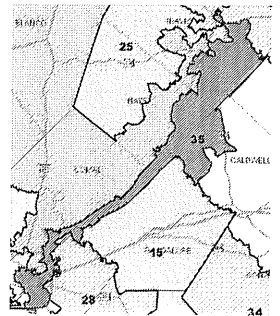
disperses the opposition among districts so that they lose everywhere
(wasted vote gerrymandering: the votes for opposition are all wasted since none of them are expressed)

Gerrymandering Ex: North Carolina 12th

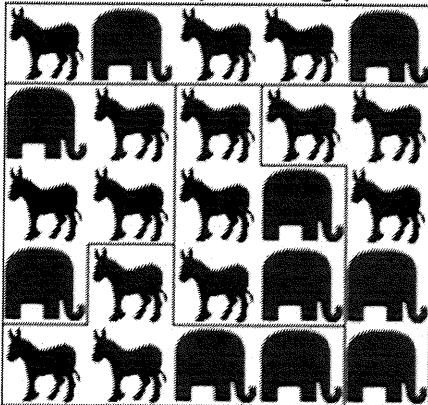


12TH CONGRESSIONAL DISTRICT

Texas 35th



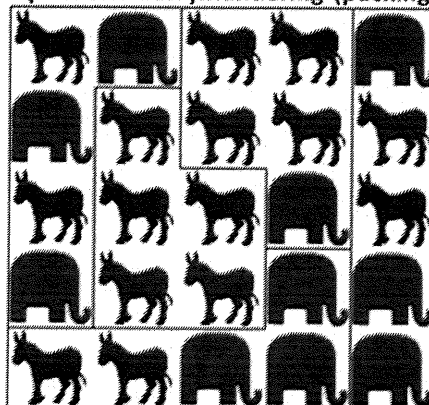
Democratic Gerrymandering (cracking)



The Republican stronghold at the bottom right corner has been "cracked".

Result: complete Democratic victory (5D-0R)

Republican Gerrymandering (packing)



The Democratic stronghold in the middle has been "packed".

Result: narrow Republican victory (3R-2D)

See pages 218-221 in the textbook or this cool video,
<https://www.youtube.com/watch?v=bh4qAJDUOcc>, for more explanations and examples.

https://www.washingtonpost.com/blogs/the-fix/post/name-that-district-texas-35th-district/2011/08/09/gIQA0rvm4I_blog.html?utm_term=.23c23d2fa29f

<https://www.smithsonianmag.com/history/where-did-term-gerrymander-come-180964118/>

<https://www.npr.org/2016/03/10/469548881/north-carolinas-congressional-primaries-are-a->

<https://owllcation.com/social-sciences/Why-the-US-is-not-a-proper-democracy>

First Agricultural Revolution (Neolithic Revolution)

Agricultural Goal: Produce more in the same amount of space.

Before The First Agricultural Revolution:

- Most of the earliest humans were nomadic hunter-gatherers living in small groups following animals and collecting fruits, vegetables, and nuts along the way.
- Some groups lived along coasts and got their food from fishing.

HUNTER-GATHERER FAMILY 2



agnesyu.blogspot.com

During The First Agricultural Revolution (Neolithic Revolution):

- Starting In about 8500 BC in several different hearths, people began to settle in areas and domesticate plants and animals (farming).
- Once farming became more prominent, hunter-gatherer groups began to disappear.

Pros and Cons of Farming

- | | |
|---|--|
| <ul style="list-style-type: none"> • Faster food production • Cities were developed • Population growth • Allowed Specialization. | <ul style="list-style-type: none"> • A caste system was established. • Fatal diseases became more frequent. • The human lifespan decreased. |
|---|--|

- The First Agricultural Revolution developed through independent invention. This means it began in multiple different places at once. These places were called hearths.

Hearths:



Andean Highlands (3500 BC)

Animals:
Llama, Turkey, Guinea Pig
Crops: Potato, Cotton, Peanut

Mesoamerica (7000 BC)

Animals:
Turkey
Crops: Corn, Beans, Squash, Cotton

China (7500BC)

Animals: Pig, Silkworm, Cattle, Chicken
Crops: Rice, Millet, Soybeans

Fertile Crescent (8500 BC)

Animals: Sheep, Cattle, Horses, & Camel
Crops: Wheat, Barley, Dates, Onion

Eastern United States (2500 BC)

Crops: Sunflower, squash

dmsancech.cz

For more info see pages 327-328 in text book

The 2nd Agricultural Revolution

(occurred during the Middle Ages)

Hearth: The origin or starting place of a phenomenon. (There can be more than 1)

The Role of the Industrial Revolution:

- Started in England (lead to more urbanized cities there),
- Development of new machines and high speed/effective production.
- Lead to rural---urban migration in search of factory/manufacturing jobs. (today many immigrants move to big, successful cities for jobs)
- It effected the textile and agricultural industries drastically.

New Agricultural Inventions:

1. **Cotton Gin:** separates cotton fibers from seeds.
2. **Moldboard Plow:** curved metal plate that allows farmers to turn over soil.
3. **Seed Drill:** places seeds quickly into small holes along the field.
4. **Horse Collar:** enabled farmers to use horses for labor, which was much more efficient.

The Effects of this Revolution:

-These new inventions and agricultural practices made farming more efficient.



-Less farm jobs are needed & food yields can support more people!

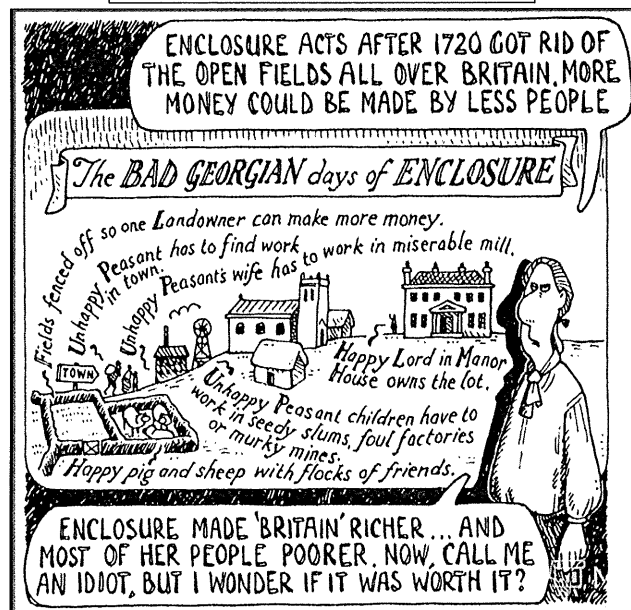


-People sought out work/jobs in the cities. (**a surge of rural to urban migration!**)

What is the Second Agricultural Revolution?

- The development of new tech and agricultural practices in Western Europe.
- These new advancements meant more efficient farming and larger yields.
- Effected mostly Europe and North America (no LDCs)-
- This was the first-time mechanization was introduced to agriculture.
- Very closely related to the Industrial Revolution,

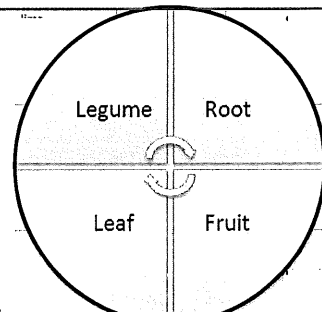
What Where the Enclosure Acts?



4 Course Crop Rotation (4-year process)

-Farmers rotate the types of crops they plant every year to ensure the soil's fertility.

-This avoids a fallow period & increases yields & productivity.



[http://veganslivingofftheland.blogspot.com/2015/06/crop-](http://veganslivingofftheland.blogspot.com/2015/06/crop-rotation.html)

Von Thunen

Model made in 1826 by J.H. Von Thunen to explain patterns of agricultural processes

Assumptions in model

- Market is in the center of an isolated state
- Land is flat
- Farmers transport goods to market in wagon
- Farmers act to maximize profit

First Ring- Intensive Farming and Dairying

- Close to city because more perishable, would not spoil before city
- Needed less space for goods like fruits, vegetables

Second Ring- Forest

- Timber heavy and expensive to transport over distances
- No longer exists in modern world

Third Ring- Extensive Crops

- Lighter and lasted longer for farther away travel
- Needed more room for lots of crop

Fourth Ring- Ranching

- Animals self transport to city, so very cheap
- More land required for animals

Fifth Ring- Wilderness

- No agricultural practices because distance from city too large

Bid-Rent Theory

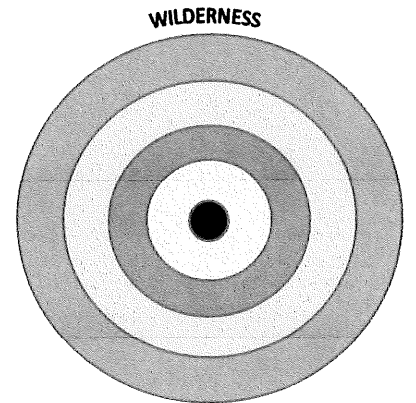
- As you move closer to the market, the land becomes more expensive, and farther away from the market is less expensive
 - Buy less land, for intensive farming (inner rings)
 - Buy more land, for extensive farming (outer rings)

Relevance today

- More tech (refrigeration) so perishability is less of issue
- More than one market
- Transportation more efficient

Specialty farming does not apply, as their goods will be transported to multiple markets no matter the distance!

e.g. Florida fruit, avocados from Central America, etc.



- Central City
- Intensive farming and dairying
- Forest
- Increasingly extensive field crops
- Ranching, animal products

Extensive-

- Needs less inputs, more spread out
- E.g. cattle and grain

Intensive-

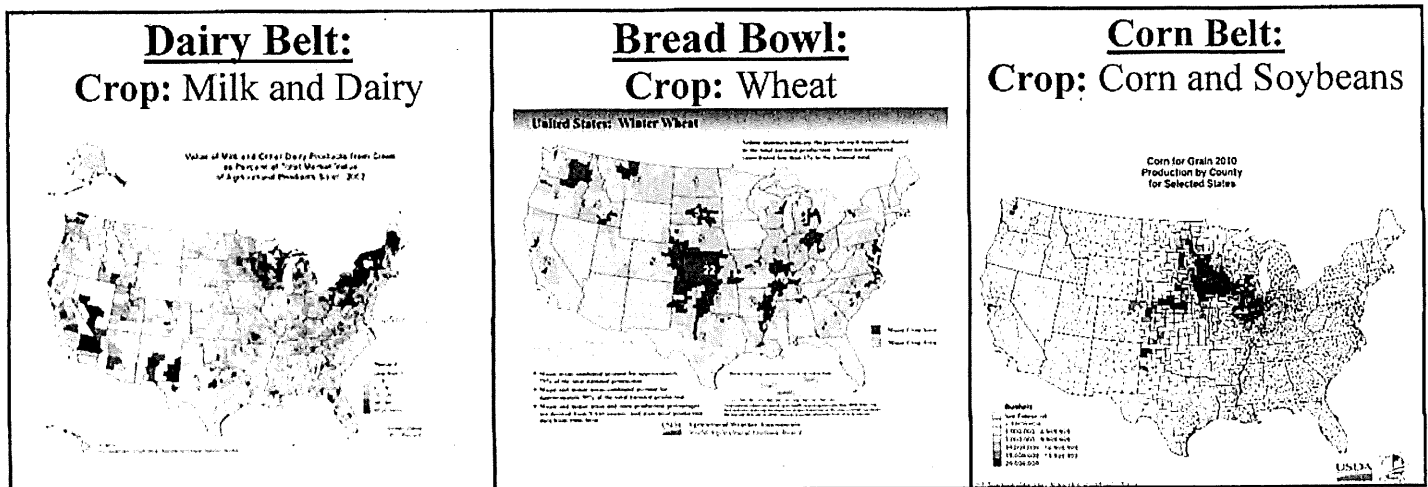
- Requires more labor/machines
- Crops are closer together
- More planted in less space
- E.g. produce

For more information, see pages 342-343 of textbook ☺

Agricultural Regions

Types of Agriculture	Location/ Climate Type	Crops grown
<p><u>Mediterranean-</u> (Commercial) Integrated cultivation of livestock, a grain crop, and a tree or vine crop, and today is increasingly affected by specialization.</p> <p>Agroforestry- The purposeful integration of trees with crops and/or livestock in the same field simultaneously or sequentially.</p>	The lands surrounding the Mediterranean sea and the Central Valley of California. Climates of dry, hot summers and cold, wet winters.	Vine crops such as grapes, olives and citrus fruits such as oranges.
<p><u>Shifting Cultivation-</u> (Subsistence) An Agricultural system that uses fire to clear vegetation in order to plant crops in a cycle rotation of fields and a fallow period. (slash-and-burn)</p> <p>Fallow period- A rest period of about 5-10 years for the field to gain nutrition.</p> <p>Intercropping- planting two or more crops in a field at the same time.</p>	Practiced in Southeast Asia, Central and South America and Africa. Climates of tropical and subtropical areas or rainforest zones.	Upland rice, maize, cassava, or other staples are grown with two or more crops.
<p><u>Pastoral Nomadism-</u> (Subsistence) An agricultural system in which a mobile group uses open-grazing of herding animals is the dominant farming activity. The animals are used as resources rather than their meat.</p> <p>Transhumance- moving herds on a seasonal basis to new pastures or water source.</p>	Practiced in the Sahara desert, Mongolia, and the Amazonia Rain Forests. Climates are arid or semi-arid regions.	Reindeer in the colder areas. Camels, cattle, goats, or sheep in arid regions.

U.S. Agricultural Regions- Climate type- Humid Continental



SUBSISTENCE AGRICULTURE

Subsistence Agriculture - a type of farming to supply a small family or small community. They don't rely on outside purchases.

4 Types of Subsistence Agriculture:

- Shifting Cultivation
- Pastoralism
- Wet Rice Farming
- Smallholder crop and livestock farming

INTENSIVE	EXTENSIVE
<p><u>Smallholder crop and livestock farming</u></p> <ul style="list-style-type: none"> → In South America, Sub Saharan Africa and parts of Asia where they can't practice wet rice farming → The people have a variety of plants and animals that they grow and raise → Small quantities; just enough for the family → Nutrients in the soil can be used up <div data-bbox="283 1010 446 1145"> </div> <div data-bbox="490 985 715 1141"> <p>https://www.google.com/img?sa=i&source=images&oc=&ved=2ahUKEw0bunpF_gAhURDQ0K1tH9BkQjR6BAGBEAU&url=https://www.fao.org/2f/teachin/2f/ser_upload/2f/emergencies/2f/docs/2f/PoA%250Yamen_web%250en/poAcsi.pptx?w=349&h=1000&v=05matMEE&u=15525095436657</p> </div>	<p><u>Pastoralism</u></p> <ul style="list-style-type: none"> → In the Middle East, North Africa, Northern Europe → Places with low rainfall and cold climate → Where herders raise animals by open grazing → Transhumance - moving herds from one spot to another based on seasons → Loss of biodiversity <div data-bbox="784 983 1028 1147"> </div> <div data-bbox="1080 1018 1329 1173"> <p>https://www.google.com/img?sa=i&source=images&oc=&ved=2ahUKEw0bunpF_gAhURDQ0K1tH9BkQjR6BAGBEAU&url=https://www.fao.org/2f/teachin/2f/ser_upload/2f/emergencies/2f/docs/2f/PoA%250Yamen_web%250en/poAcsi.pptx?w=349&h=1000&v=05matMEE&u=15525095436657</p> </div>
<p><u>Wet rice farming</u></p> <ul style="list-style-type: none"> → Mostly in Asia → Field in flooded and then rice is planted → Use a lot of fertilizer and water → Water flows out of the field, carries the fertilizer downstream and leads to water pollution <div data-bbox="192 1558 410 1681"> </div> <div data-bbox="519 1558 685 1703"> <p>https://www.google.com/img?sa=i&source=images&oc=&ved=2ahUKEw0bunpF_gAhURDQ0K1tH9BkQjR6BAGBEAU&url=https://www.fao.org/2f/teachin/2f/ser_upload/2f/emergencies/2f/docs/2f/PoA%250Yamen_web%250en/poAcsi.pptx?w=349&h=1000&v=05matMEE&u=15525095436657</p> </div>	<p><u>Shifting cultivation</u></p> <ul style="list-style-type: none"> → In Southeast Asia, Central and South America, and Africa → A.k.a. Slash-and-burn → They cut down the trees in the area and burn everything to clear the space → A shortened fallow period - a time to allow the soil to regain nutrients → Move to a new area after soil lost all their nutrients → Aids to deforestation <div data-bbox="784 1641 975 1818"> </div> <div data-bbox="1107 1677 1299 1790"> <p>https://www.google.com/img?sa=i&source=images&oc=&ved=2ahUKEw0bunpF_gAhURDQ0K1tH9BkQjR6BAGBEAU&url=https://www.fao.org/2f/teachin/2f/ser_upload/2f/emergencies/2f/docs/2f/PoA%250Yamen_web%250en/poAcsi.pptx?w=349&h=1000&v=05matMEE&u=15525095436657</p> </div>

Modern Commercial Agriculture

Commodity chains – network connecting different steps from design to retail of producing a good

- Ex: orange juice
 - Grow oranges, pick oranges, smooch oranges, put orange juice in bottle, transport orange juice bottles to selling destination, sell orange juice, drink orange juice, tah dah



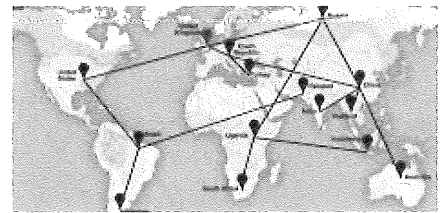
(<https://blog.generalmills.com/2015/05/how-general-mills-is-advancing-a-sustainable-supply-chain>)

Agribusiness – All the businesses involved in the production an agricultural product

- Ex: all the businesses that partake in the production of orange juice (in the image above all of the stages listed make up an agribusiness)

Global supply chains – commodity chains on a global scale

- Ex: (still using orange juice :)
 - Farm the grows and picks oranges is in Costa Rica, factory that smooches and bottles them is in China, then grocery store that sells the orange juice is in Texas



(<https://www.google.com/imgres?imgurl=http%3A%2F%2Frd4h6>)

Monoculture – planting a single crop in a field (almost always on a large scale and for profit)

- Ex: if the farm growing and harvesting oranges to make orange juice only grew oranges in one field with no other crops mixed in



(<https://www.google.com/imgres?imgurl=https%3A%2F%2Ffarmfolio.net%2Ffrontend%2Fwp-content%2Fuploads%2F2016%2F12%2FOrange.jpg&imgrefurl>)

GMO (genetically modified organisms) - shockingly these are organisms that have been genetically modified with the use of fertilizer, antibiotics, or other “gene enhancing” techniques

Pros of GMOs	Cons of GMOs
More reliable yields -less unpredictable than natural foods	Long term health consequences are unknown
Overcoming environmental problems -More resistant to weeds, pests, disease, drought, etc.	Loss of genetic bio diversity -more susceptible to extinction
Sometimes have higher nutritional value than non-GMO foods -food mixture (grape+frog=healthy and delicious)	Pollution - Fertilizer run off
	On average less nutritious than non-GMO food

***For more information see pages 329-332, 338, and 304-305

Green Revolution

High-yield seeds, chemicals, mechanization, positive and negative consequences

When and where did The Green Revolution take place?:

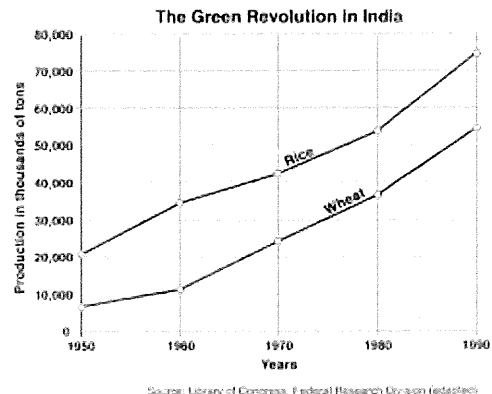
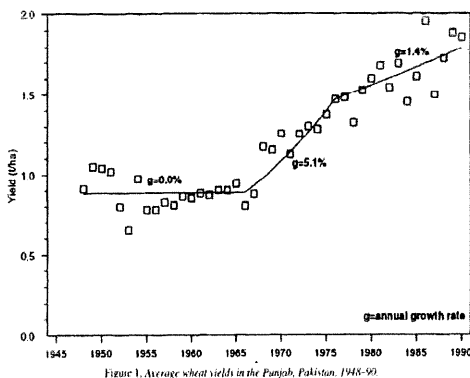
- Main purpose: to alleviate world hunger, specifically in LDCs
- Lead to a dramatic increase in grain production, between 1965 and 1985, in Asia and Latin America
- Did NOT affect Sub-Saharan Africa

Positive and negative consequences

Positive	Negative
<ul style="list-style-type: none"> -Large supply of grain -Wheat production has dramatically increased -India became self sufficient in grain production -Staved off famine in Asia 	<ul style="list-style-type: none"> -Farmers debt has risen -Soil fertility has declined -Fertilizer and pesticide residues have built up in the environment -Groundwater has been overexploited

How were chemicals, mechanization, and high-yield seeds used?:

- Chemicals: Chemicals (ex.fertilizer) were used to enhance plant growth
- Mechanization: Machines and tools were made to make the process of planting and harvesting easier and quicker
- High-yield seeds: High-yield seeds largely increased the amount of crops produced. Ex: High-yielding seed varieties were exported to India and Pakistan in the 1960s; in less than a decade, wheat production nearly doubled in both countries



<https://hnrs353.wordpress.com/history/history-the-green-revolution-in-pakistan/>

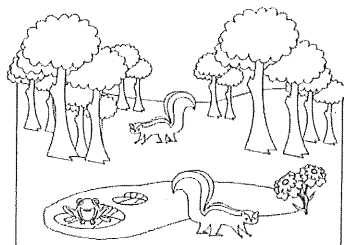
<http://howtofeedtheworld.eklablog.fr/from-the-green-revolution-to-the-evergreen-revolution-a125056626>

Definitions (for more information see pages 326-332 in your textbook!!)

High-yield seeds: seeds that respond well to fertilizer	Mechanization: is changing from hand work to machine
---	--

Agriculture: Environmental Effects of Agriculture

Biodiversity: a variety of plants and animals



Land cleared for farming

Field with covered with one crop = low biodiversity.

- Fast spread of disease
- Instability
- Harm to environment



Over use of land by

- Shortening fallow periods
- Use of pesticides/fertilizers in soil
- Overuse of irrigation (drains ground water)

Leads to



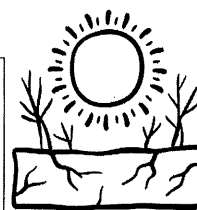
Salinization:

Accumulation of salt in the soil

Leads to

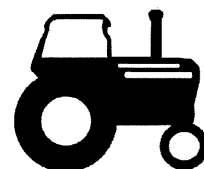
Desertification:

The shift of usable land to desert like conditions because of humans and/or environment



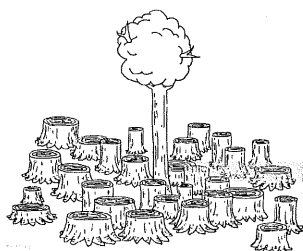
Ex: In India, desertification affects 413,000 square miles, one third of its land area.

Farming causes pollution



Clearing Land for Farming Causes:

- Land coverage change (use of land and what is covering it changes)
- **Deforestation:** the clearing of large areas of trees



Ex: forests are disappearing at the rate of 46-58 million square miles annually, the equivalent of 36 football fields per minute

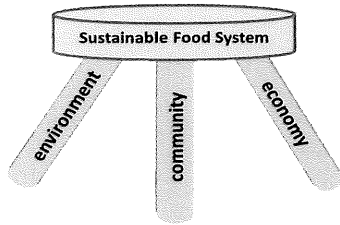
Image Sources

Biodiversity: <http://laoblogger.com/forrest-animal-clipart-black-and-white.html>
 Field: http://www.clipartpanda.com/clipart_images/farm-clipart-black-and-white-62273115
 Salt: http://www.clipartpanda.com/clipart_images/salt-black-and-white-clipart-64087047
 Desertification: https://www.flaticon.com/free-icon/desertification_532748
 Deforestation: <https://www.gettyimages.com/illustrations/deforestation>

Text Book Pages 344-345

Sustainability

Sustainable Agriculture- farming practices that carefully manage natural resources and protect environmental conditions to help future generations, while maintaining farm profits.



Environment: reduce pollution and waste

Community: good working conditions and healthcare

Economy: employment and fair trade (helps developing countries get a fair price for their products)

https://serc.carleton.edu/integrate/teaching_materials/food_supply/student_materials/1193

World Trade Organization(WTO)- seeks to make trade freer through removal of tariffs and more, that distort the market.

→ Domestic subsidies= market distortions and prevent free trade in agricultural goods

Organic agriculture- a farming system that promotes sustainable and biodiverse ecosystems by using natural processes rather than synthetic inputs.



- Fastest growing sector of agriculture today
- Australia, Argentina, and Brazil have largest areas under organic management, however, largest percent (25%) of organic land is found in Europe
- Products do not contain any GMOs (the USDA determines if a product can have the organic sticker on the packaging)

<https://www.ams.usda.gov/rules-regulations/organic/organic-seal>

Eat Local Movements- Encouragement of utilization of local products, distribution, and production, which replaces national/international food systems (Ex. Local Farmer's Markets)

Pros	Cons
<ul style="list-style-type: none"> ❖ Less transportation costs ❖ Local economy boost ❖ Fresher foods 	<ul style="list-style-type: none"> ❖ More expensive local produce ❖ Local pollution due to livestock methane and/or methane

Community Supported Agriculture (CSA)- a network of individuals, who support one or more local farms, with growers and consumers sharing the risks and benefits of food production

Pros	Cons
<ul style="list-style-type: none"> ❖ Save money ❖ Support local farms ❖ Fresh foods 	<ul style="list-style-type: none"> ❖ Transportation barriers ❖ Increased food preparation labor ❖ Not all CSAs are profitable

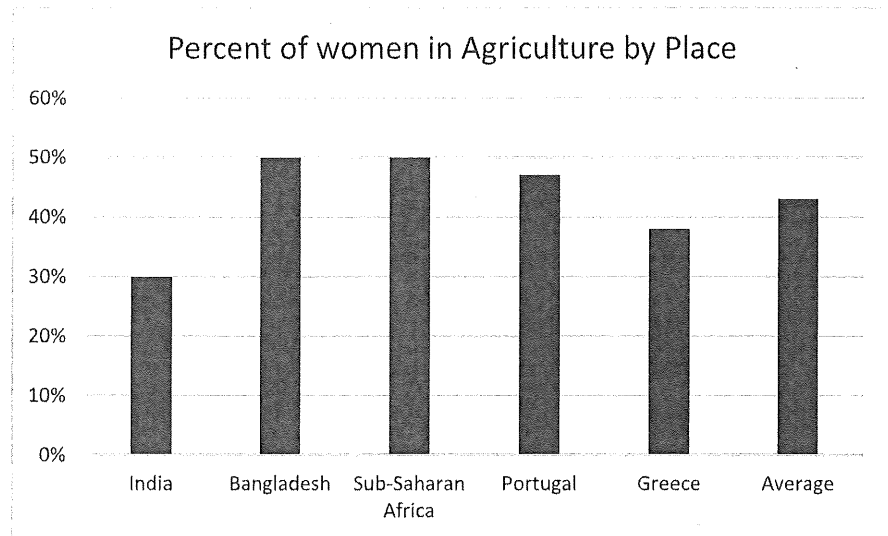
Urban Agriculture- a practice to help improve food security at the household level using vacant lots, rooftops, balconies, or other spaces to grow food

WOMEN IN AGRICULTURE

- Women are approximately 43% of the agricultural workforce overall
-This fluctuates from place to place.

(made in excel with the data by me)

- ~30% in India
- ~50% in Bangladesh
- ~50% in Sub-Saharan Africa
- 47% in Portugal
- 38% in Greece
- ~10% deviation from the mean



- In Sub-Saharan Africa, South Asia, and North and Northeast Africa, the percent of women working in agriculture is greater than the percent of men working in agriculture
-This means that if the female and male populations of those regions were equal and this statistic wasn't changed, more females would be working in agriculture than men.
- Women in agriculture have unequal (access to):

-Pay	-Training
-Finance	-Insurance
-Education	-Seeds
-Rights	-Water
-Land	-Tools
-Livestock	-Aid and resources in general
- If women had the same access to resources as men, then it is speculated:
 - 20-30% Farm yield increase
 - 2.5-4% Total Agricultural output increase in developing countries
 - 12-17% Hunger reduction of the world

Sources: <http://www.fao.org/docrep/013/am307e/am307e00.pdf> and

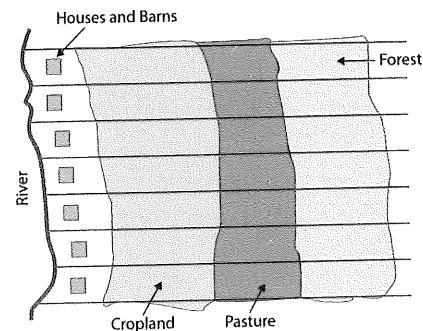
http://ec.europa.eu/eurostat/statistics-explained/index.php/Agricultural_census_in_Portugal

For more info, visit **page 326** in the Textbook

Survey Methods

Long Lots

- A system that divided land into narrow lots which were perpendicular to a river, but could be seen near roads or canals.
- Created so each settler would have equal access to the river.
- Uses lines from natural features.
- Long lots can be found in many French colonized places, such as Quebec and Louisiana.

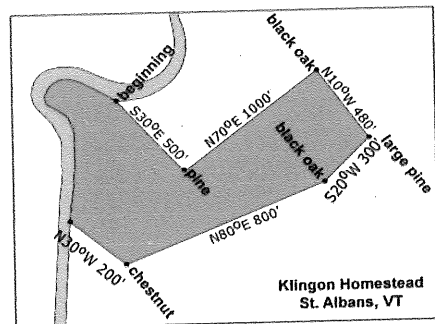


Each row represents a different lot.

<https://www.smores.com/rtvyg-rural-settlement-patterns>

Metes and Bounds

- A system which used natural features to define the land boundaries.
- "Metes" refers to specific points which are measured by direction and distance. "Bounds" refers to a more general description, such as "the big tree is the corner of this lot".
- Irregular, imprecise, and unreliable as resources changed (trees dying, or a stream rising)
- Used in the colonial US.



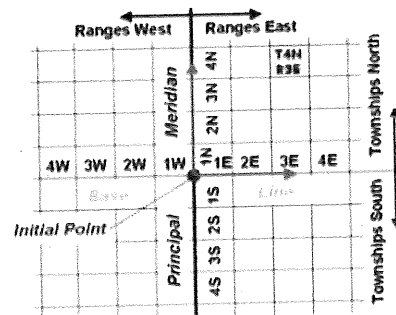
Example of Metes: N10°W 480'

Example of Bounds: Black Oak

<https://sites.google.com/a/st.cabarrus.k12.nc.us/averell-aphg-llamas-ftw/home/key-terms/concepts-models-people>

Township and Range

- A system that was created to disperse settlers evenly across farmlands of the US.
- "Range" is a measure of the distance east or west from a designated point, in units of six miles.
- "Township" is a measure of distance from north or south from a designated point, in units of six miles.
- Each township and range block would be broken down into 36 blocks, each one square mile.
- Township and range can be found in many US states, such as Montana, North Dakota, and Wyoming.



<https://sites.google.com/a/st.cabarrus.k12.nc.us/averell-aphg-llamas-ftw/home/key-terms/concepts-models-people>

Economic Sectors

Industry activities are grouped into five total Economic sectors. These go into more detail of how a product or service is being made and presented.

Primary sector :

- ❖ Extraction and resource-based.
- ❖ When the Economic activity is based around extracting natural resources/foods from the earth.

❖ Mainly found in **LDCs**

Examples:

- ❖ Mining for coal,
- ❖ Farming-raising cows that we will eventually eat.



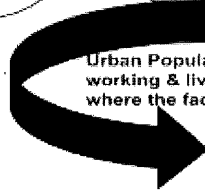
http://dir.coolclips.com/Industry/Resources/Mining/Coal/coal_miner_vc026732.html

Secondary Sector:

- ❖ Manufacturing/industrialization
- ❖ When the industry Manufactures and process the raw material derived from *primary sector* into a good/service thats ready to be sold/used

Examples:

- ❖ Processing wheat into flour
- ❖ Turning metal into cars.



Urban Population ↑ more people working & living in/around the CBD where the factory is

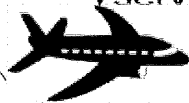


<https://www.shutterstock.com/image-vector/industrial-factory-cartoon-vector-illustration-black-306597719>

Note: Each sector requires people to perform the action. This opens up jobs and you eventually see an increase of workers in the industry, as a whole.

Tertiary Sector:

- ❖ "Service sector"
- ❖ The services provided by the industry to its consumers-sells the finished product.
- ❖ Examples: Banking, Transportation to take you places, Education, Delivery services.



<https://clipartxtras.com/categories/view/c438e3d72c45b9c1d72c0bdd751f521a5085e98e/cartoon-airplane-clipart.html>

- In more detail, They can be classified into two branches:

Quinary Sector

-Requires high-level of knowledge around a certain skill(e.g.Doctor-Health)



http://www.momjunction.com/articles/nurse-coloring-pages_0098819/

Quaternary Sector

- Based on research and development (knowledge) of industry
Ex: Development of new tech




<https://www.shutterstock.com/work-computers-furniture-people-chalk-technology-working-646722>

The Industrial Revolution

Fundamental changes in technology and systems of production that began in England in the late 18th century and changed manufacturing from small scale craft to factory-based production

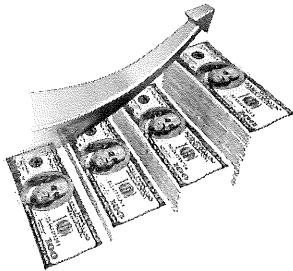
Starting in England, diffused in 3 phases:

Phase 1 1760-1880	Belgium, the Netherlands, France, Germany, the US https://qph.fs.quoracdn.net/main-gimg-948406e1a0458aa3927122d6416e73eb 
Phase 2 1880-1950	Russia, Japan, Canada, British dominions [IC]
Phase 3 1950-Present	Countries affected by phase 2, Israel, some Pacific Rim Countries

Causes

Greater access to capital (caused by English control over global trade [IC])

- More investment (in factories)
- More money: more demand for goods
- More money to open factories



<http://www.blogforweb.com/wp-content/uploads/2013/06/more-money.jpg>

Multiple technological innovations

- Allows factories to develop
- Faster production of goods

Rural to urban migration

- Second agricultural revolution makes farming more efficient leaving many previous farmers without work



<https://cache.pakistantoday.com.pk/2013/11/rural-urban-migration.gif>

- Previous farmers need jobs; move to cities and provide cheap labor necessary for factories

Effects (of the Industrial revolution)

Boost to the second agricultural revolution

- Innovations used in agriculture are produced more, and can therefore be bought for cheaper

Increased urbanization

Global diffusion of the factory system

- The factory system spread to newly industrializing countries with every phase

----- (end of cause and effect) -----

Natural Resources: During phases 1 and 2 of the industrial revolution, factory locations were determined by the geography of natural resources.

Factories were built close to their energy sources, mostly coal, or to the material they processed, mostly iron ore. Most present-day factories value access to the market, and not raw materials.

https://upload.wikimedia.org/wikipedia/commons/b/b9/British_Empire_Mercator.svg



Imperialism and

Colonialism: England's empire of many colonies was a key factor, supplying the money needed for the industrial revolution to begin.

Because of their relation to England, these colonies

industrialized quicker than many countries free from colonial control.

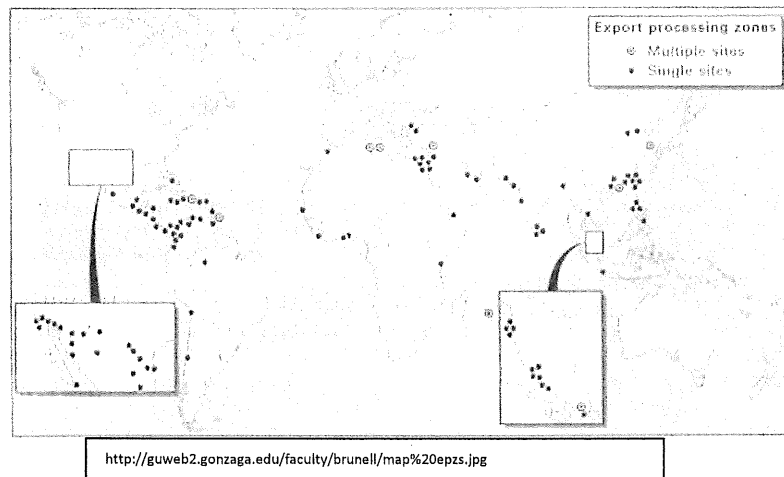
[IC]=Links to imperialism and colonialism



Post Industrial and Newly Industrialized Countries

In many cases of manufacturing and industrialization, special **zones** are created in the economy to assist with growth.

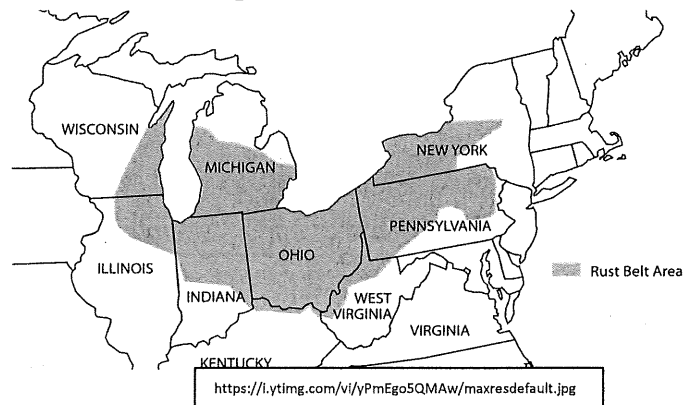
- **Special economic zone (SEZ)**- area within a country attracting foreign business with tactics such as tax incentives and less environment regulations.
-ex. China (1979) created SEZs in select areas, changing their strict economy
- **Export processing zones (EPZ)**- established by countries in periphery or semi-periphery regions to attract foreign trade and investment with favorable arrangements
-**Maquiladoras** created along Mexico-US border to create jobs closer to US markets



- **Free trade zone (FTZ)**- all trade barriers and tariffs between two or more countries are eliminated in these zones
-ex. European Union

There are **effects of manufacturing** on countries.

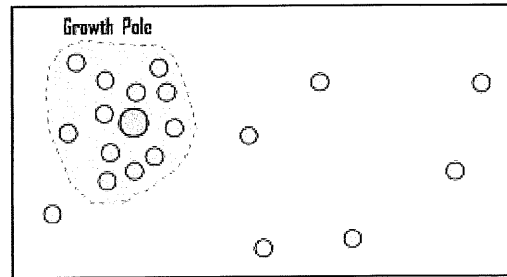
- **Outsourcing**- separating some economic activities from main production
-mainly due to cheaper labor
 ↓
 -decline of secondary sector jobs in core as they transition to tertiary sector
 -ex. Nike brand
- **Rust belt**- heavy industry areas that lost economic base to cheaper labor
-ex. Ohio, Michigan, Pennsylvania



GROWTH POLES

PAGE 318 IN THE TEXTBOOK

In MDCs, related industries are not typically spread far apart from one another. Instead, related businesses cluster together. These clusters are called **growth poles**:



<https://khairulhikamarudin.files.wordpress.com/2013/04/kuliah-growth-pole-theory-1.pdf>

Growth pole - An area of economic development consisting of a large amount of businesses involved in a similar industry.

➤ **Technopole** - A type of growth pole.

An area of economic development consisting of businesses in the **high-tech** industry.

(Businesses in a technopole research, design, develop, and manufacture **technology**.)

- ex: **Silicon Valley**
(An area in California that consists of multiple high-tech companies, including Apple, Google, and Facebook.)
- ex: **Research Triangle**
(An area in North Carolina that includes many universities and businesses that have a focus on researching and innovation in technology.)

Growth poles typically develop in MDCs or areas with:

- **High education** (and highly educated labor source)
- **High tech** (or the presence of sophisticated research labs and facilities)
- Financing and investors to support new businesses

PROS OF GROWTH POLES	CONS OF GROWTH POLES
<ul style="list-style-type: none"> • Boosts economic development • Source of employment • Development of ideas, products and technologies • Attracts others, including new workers, businesses, investors, etc. 	<ul style="list-style-type: none"> • Uneven development (Investments are going into technopoles and growth poles instead of rural areas, which leaves rural areas behind in growth.)

Measures of Development

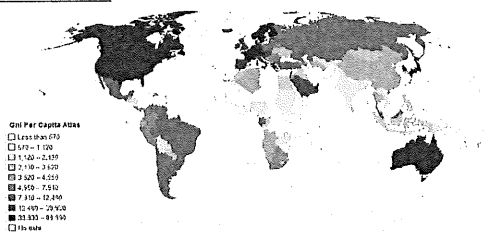
Indicators of a positive relationship

- ❑ **Gross National Income (GNI):** includes all the income residents and businesses make whether it's in the home country or not.

Highest in: Norway, Qatar, Luxembourg

Lowest in: Burundi, Central African Republic

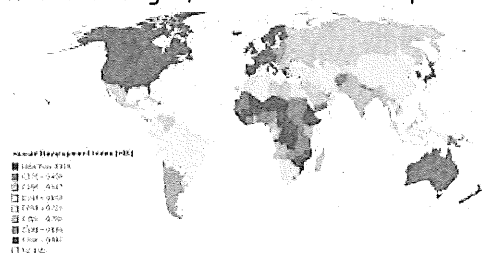
<http://cdn3.chartsbin.com/chartimages/l110841f342d4837617e152d1323c48ed4bd90>



- ❑ **Human Development Index (HDI):** a statistical tool used to rank countries based on GNI, life expectancy, literacy rate, and education.

Best in: Norway, Australia, Sweden

Worst in: Niger, Central African Republic

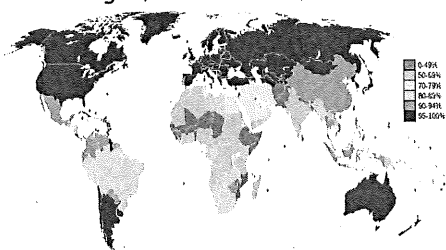


<https://goo.gl/images/273ts8>

- ❑ **Literacy Rate:** percent of population over 15 that are literate (can read and write) within a country.

Best in: Andorra, Finland, Liechtenstein

Worst in: Niger, South Sudan, Guinea



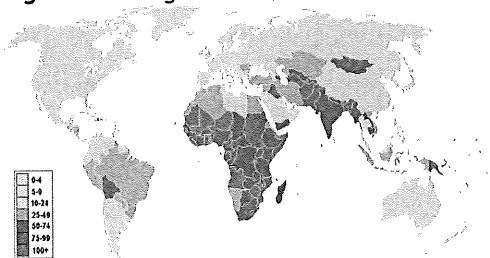
<https://goo.gl/images/XoKYn9>

Indicators of a negative relationship

- ❑ **Infant Mortality Rate (IMR):** number of deaths under the age of 1 year old in a given area per 1,000 live births.

Lowest in: Monaco, Iceland, Japan

Highest in: Afghanistan, Somalia

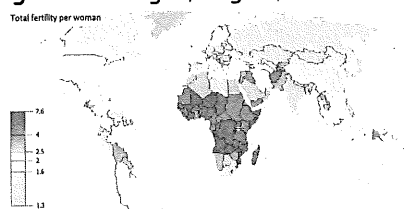


<https://goo.gl/images/sozxKk>

- ❑ **Total Fertility Rate (TFR):** the average number of children a woman will have in her childbearing age (12-51).

Lowest in: Singapore, Taiwan, Puerto Rico

Highest in: Niger, Angola, Mali



<https://goo.gl/images/ueaQHe>

- ❑ **Income Distribution:** how income is divided between different groups (rich and poor); relates to income equality.

Lowest in: Norway, Slovenia, Slovakia, Sweden

Highest in: South Africa, Haiti, Botswana

Direct vs Inverse

- Positive relationships are direct because the **HIGHER** the rate is for a country the better developed it is.
- Negative relationships are inverse because the **LOWER** the rate is the more developed a country is.

ROSTOW'S STAGES OF GROWTH VS. DEPENDENCY THEORY

Rostow's Stages of Growth *similar to the Demographic Transition Model*

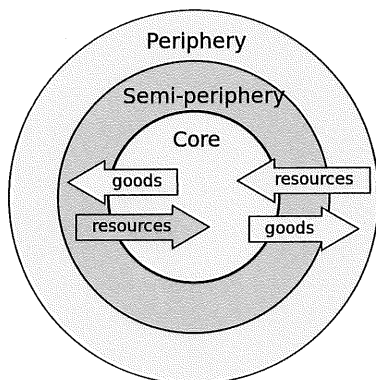
- Proposed by Walt W. Rostow in 1960
- Considered as the "Classical Model of Development"

What was it? A five-stage development model describing the economic transitions of countries based on the causes and effects of economic growth.

Three Criticisms:

- 1) assumes every country begins their process of development from the same starting point.
- 2) works from a very basic understanding of development, with the primary focus on a pattern of linear economic growth.
- 3) is very Eurocentric, as it predicts that development will result in a technologically advanced and modernized Western society.

<https://sites.google.com/site/theoriesofdevelopment/stages-and-theories/dependency-theories>



The picture to the left shows the Dependency Model that resources flow from a "periphery" of the poor to the "core" of the wealthy.

https://en.wikipedia.org/wiki/Dependency_theory

Stages:

Stage 1: Traditional:

- focuses on subsistence agriculture (primary sector)

Stage 2: Preconditions for take-off

- focuses on commercial agriculture (primary sector)
- infrastructure develops
- may include low level manufacturing, such as mining (Ex: Bangladesh)

Stage 3: Take-off

TURNING POINT

- focuses on manufacturing
- export-based
- shifts from a focus on the primary to secondary sector
- agriculture becomes more mechanized (Ex: Vietnam)

Stage 4: Maturity

- focuses on manufacturing (secondary sector)
- increased use of technology in manufacturing (Ex: India)

Stage 5: High Mass Consumption

- focuses on services (tertiary sector)
- high-technology
- many material goods (Ex: USA)

Dependency Theory (1960s-70s)

- Argued development might be better understood as a relational process, rather than a series of stages → linked to international trade
- Two kinds of states: **Dominant** and **Dependent**
 - **Dominant:** the most developed states that command the economic resources and power to international trade
 - **Dependent:** lack economic resources and power; represent developing countries
- Stems from patterns of international trade and results in underdevelopment
- **Contrary to Rostow's model:** as Europe grew more developed and richer, development in Africa and Latin America were hampered

For more information, check out pages 280-81 in the textbook! :)

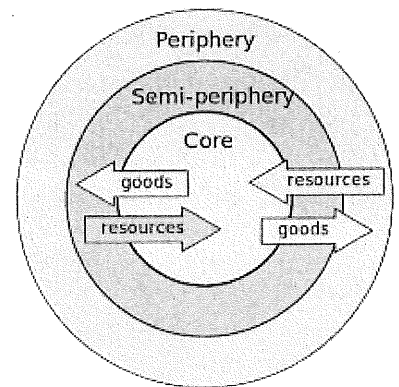
World Systems Theory & International Trade

Wallerstein's World Systems Theory

~ states that throughout economic and social well being, larger more dominant countries benefit from other lesser developed countries being exploited

~ divided into three groups:

- **CORE:** high level of developments, within these areas only a small percentage of people are in the Primary Sector. Ex: USA, Canada
- **SEMI-PERIPHERY:** contain traits that relate to both Core and Periphery, have economic diversity and are balanced within the world's economy. Ex: Mexico, India
- **PERIPHERY:** LDC and poorer countries. Most workers are part of the primary sector. Many have have been previously colonized. Ex: Iran, Iraq, Majority of Africa.



International Trade

WHY	WHAT HAPPENS
<i>Complementary:</i> by helping another country you are able to carry out their needs	<i>Outsourcing:</i> companies decide to hire other companies to do different parts of their work.
<i>Comparative Advantage:</i> the ability for one country to produce a good cheaper/more efficiently than another	<ul style="list-style-type: none"> • Certain countries, who have an abundance of certain resources may get much more traffic and have an increase in their economy. (mexico)
<i>Labor Costs:</i> you are able to pay less for labor, due to the fact that some countries have an overflowing amount of factory workers available.	<ul style="list-style-type: none"> • When larger countries are able to pay much less for labor, the price of the goods will also decrease • Goods are much more quickly produce since affording more worker is much easier. (China)

Footloose: in industry in which can be relocated without being affected by factors like transportation. Ex: Diamonds

Break Of Bulk: the process of unloading transferring and distributing small parts of cargo.

Least cost theory: of industrial location which tries to explain and predict the locational pattern of the industry at a macro-scale. It emphasizes that firms seek a site of minimum transport and labor cost.

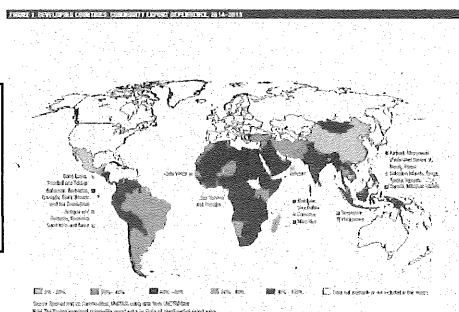
Interconnected Economies

Commodity: A raw material or primary sector product that can be bought and sold

Ex: Oil, Iron, Corn, Coffee

Commodity Dependence: When a country's economy is heavily based on a single primary sector activity. Usually describes countries whose economy consists mostly of drilling oil for export purposes.

A country has a high commodity dependence when it's four major commodities account for 60% or more of their exports.



- Commodity dependence is high in many parts of **Africa**, **South America**, and **Asia**.
- Commodity fuel dependence is high in many parts of **Africa** and the **Middle East**
- Commodity dependence is often highest in developing countries (called **commodity-dependent developing countries**, or **CDDCs**)

https://twitter.com/unc_tad/status/918774317923495937

---TrAnSiTiOn---TrAnSiTiOn---TrAnSiTiOn---

Tariffs: A tax charged on imported or exported goods, often manifests as a percentage of the cost the consumer has to pay.

Purpose of tariffs: Can make imported goods look less desirable by increasing cost.

- Raises revenue for government
- Bolsters domestic economy by decreasing competition
- Can potentially harm quality of domestic products by decreasing competition

---TrAnSiTiOn---TrAnSiTiOn---TrAnSiTiOn---

<https://www.bankersadda.com/2016/05/all-about-world-trade-organization.html>

European Union (EU)

28* *(-Britain ((Brexit)) = 27) countries that cooperate as a political and economic union. **Founded in 1993**

Creates a free trade zone through Western Europe by slashing tariffs and promoting free movement of people and goods.

UK, France, Italy, etc.

Organization of the Petroleum Exporting Countries (OPEC)

12 of the world's major oil-exporting nations est. **1960**
Has been criticized for increasing political landlordism/neocolonialism of North American countries over Middle Eastern and African LDCs

Iran, Iraq, Libya, etc.

World Trade Organization (WTO)

Creates rules for international trade **Circa 1995**
Regulates tariff agreements, attempts to make imported goods no less desirable than domestic ones

Most countries are members

International Monetary Fund (IMF)

Provides last-resort loans to struggling nations
Created in 1945
Criticized for continuing neocolonialist practices and contributing to LDCs being commodity dependent.

Most countries are members

<https://think.ing.com/articles/opec-meeting-output-set-to-jump/>



www.imf.org

UN Millennium Development Goals and Sustainable Development Goals

Millennium Development Goals

(MDG)

Where were they made?

- Made at the UN conference at the Millennium Summit in New York

When were they made?

- September 2000

Why were they made?

- To help other countries develop
- To fight poverty
 - They coincided with Poverty-Reduction Theory

What were they?

1. Halve extreme poverty and hunger
2. Achieve universal primary education
3. Promote gender equality/empower women
4. Reduce child mortality
5. Reduce maternal mortality
6. Combat the spread of different deadly diseases
7. Ensure Environmental sustainability
8. Create a global partnership for development

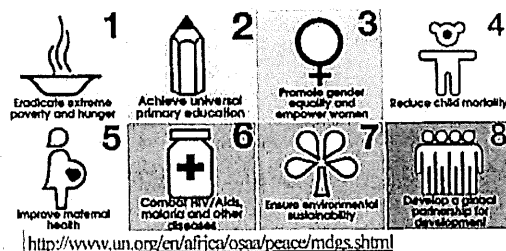
Summary:

- Set to be completed by 2015
 - Progress was made, but the goals were not fulfilled
- Ex: Albania's poverty reduction methods are linked to the MDGs

Sustainable Development Goals

- In 2015, when the MDGs were not fulfilled, the UN met up again.
- They established new goals to be met by 2030
- These included eradicating poverty and hunger, improving education, health, equality, and partnerships, etc.

For more info, see pages 285-288 in the textbook



<http://www.un.org/en/africa/osaa/peace/mdgs.shtml>

<http://news.gtp.gr/2015/09/28/travel-tourism-welcome-new-un-sdgs/>

SUSTAINABLE DEVELOPMENT GOALS

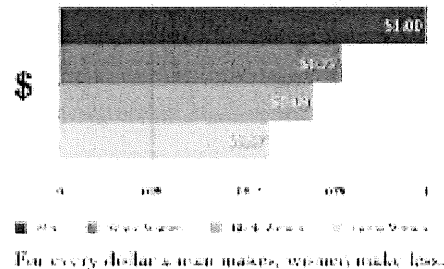


Women and Economic Development

Wage Inequality

- Women lose more than \$10,000 a year because of the wage gap
- In the US (an MDC) on average a woman makes 77 cents to a man's dollar

Gender Pay Gap



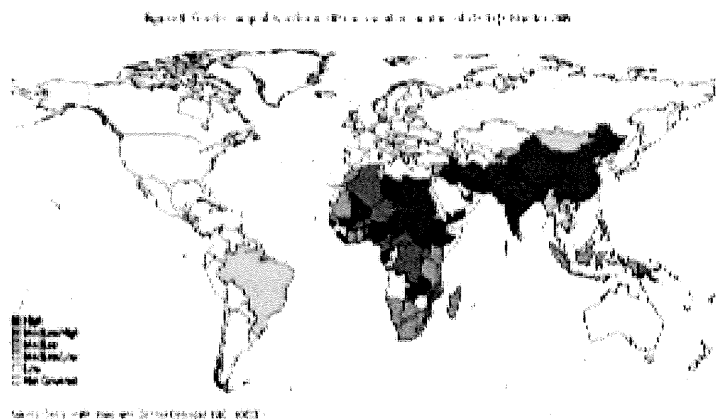
Gender Inequality Index (GII)

- 0 = perfect equality
- 1 = absolute **inequality**
- In 2015, Switzerland was ranked #1 for their GII of .040

Countries with more equality are lightest in color

The darkest countries have the lowest equality

Some of the countries; like Angola, Africa; are not covered, so appear white but don't necessarily have high equality levels



Percentage of Women in the Workforce

- Women make up roughly half of the workforce
- 3/4 of the **service industry** is women in more than 50 countries
- About 70% of agricultural workers are women, and in West Africa, 80% of the whole labor force is women
- Women are the primary employees in EPZs (EPZs are in LDCs, made by government to promote industrial development)
- Female labor force participation is highest in the richest and poorest countries and lowest in the countries with an average income

Connection to the TFR (Total Fertility Rate)

Women become more involved because of more jobs → earn more money → better life → more education → decrease in the TFR

Environmental Effects of Industrialization and Development

Natural Resource Depletion

Resource depletion - consumption of a resource faster than it can be replenished.

- Water
- Fossil fuels
- Land use and soil

Industrialization contributes to natural resource depletion through:

- Heavy use and reliance on fossil fuels to power factories
- Using greenspace to build manufacturing plants, factories, and warehouses

Pollution

Pollution - the introduction of harmful materials into the environment.

- Water pollution
- Air pollution
- Soil contamination

Pollution from industrialization comes from:

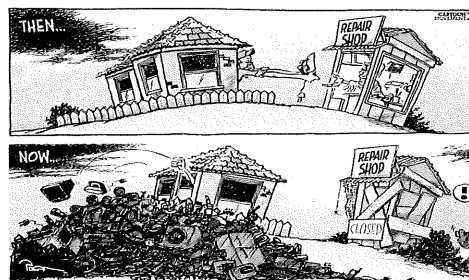
- Burning of fossil fuels
- Toxic runoff from factories
 - Vietnam: Formosa Plastics illegally disposed toxic waste into the ocean, killing huge amounts of marine life.
- Poor disposal of factory waste



Mass Consumption

Mass consumption - the use or purchase of goods/services by a large number of people.

- Leads to higher demand, which then leads to increased production
 - Increased production can cause pollution, climate change, and natural source depletion.
- Leads to waste
 - U.S: Produces 40% of the world's waste.



Climate Change

Climate change - significant long-term change in the expected weather patterns of a region.

- Increased temperatures
- Irregular weather patterns
- Rising sea levels

Industrialization contributes to climate change by:

- Increasing CO₂ emissions released by factories (directly related to increased global temperatures)
 - Globally, the burning of fossil fuels such as coal and oil pumped out 38.2 billion tons of CO₂ emissions (2012).

Sustainable Development

Sustainable Development: Achieving the needs and goals of the present without abusing/compromising the resources needed for the future generation

- ❖ ex. 104-unit apartment development
planned for Butchertown, Louisville (2019)



<https://insiderlouisville.com/economy/real-estate/new-104-unit-apartment-development-planned-for-butchertown/>

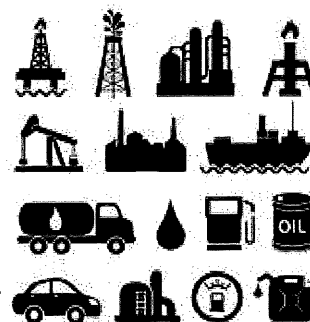
- Uses renewable sources,
- Costly, may cause unemployment, more requirements for companies, factories, etc.
- Microlending: granting very small loans to people in need
 - ❖ ex. KIVA gives loans and allows you to borrow
- Ecotourism: tourism using the environment and wildlife as an interest
 - ❖ ex. California- trails, Golden Gate Park, redwoods, ocean views, etc.
- Green spaces/ environment are safe
- Needs to end poverty in order to function



<http://clipart-library.com/black-and-white-images-of-trees.html>

Conventional Development: Achieving the needs and goals of the present while paying little attention to the impact of these gains on the future environment, resource use, & consumption

- Not as costly to function
- More harmful to environment
- Uses non renewable resources
 - ❖ ex. fossil fuels, oil, natural gas, and coal used for cars, electricity, etc.
- Can cause global warming, endangered species, etc.



<https://www.goograph.com/vector-clip-art/oil-rig.html>

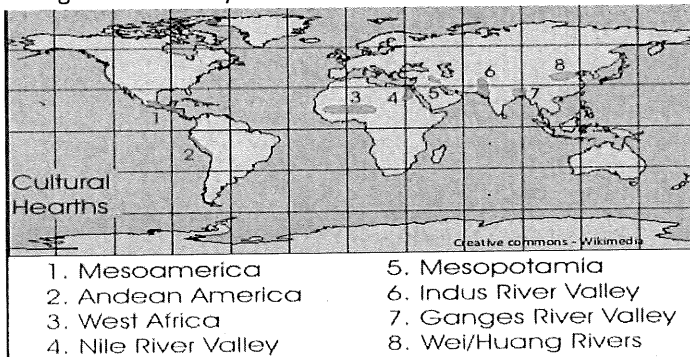
→ In order to save the future world, development experts have started to apply sustainability

****For more information, see page 263****

1st Urban Revolution

1st Urban Revolution

- The innovation of a city
- **Most of the Urban Hearths overlapped with the Agricultural Hearths**
- Occurred in 6 different **hearths** (independent invention)
 - Mesopotamia
 - Nile River
 - Indus River Valley
 - Mesoamerica
 - Wei/Huang Rivers
 - Ganges River Valley



Independent Invention

- When there are two or more hearths without contact or communication with each other from which an innovation originates.

Hearths

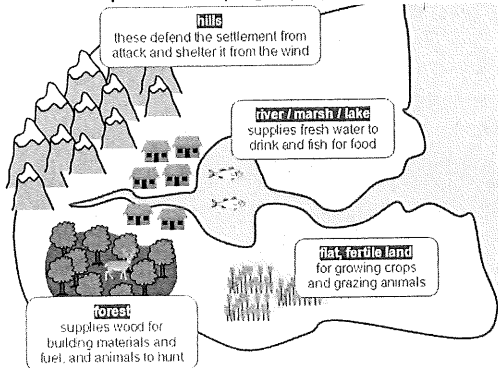
- A place or region where an innovation, idea, belief, or cultural

Causes and Effects of the 1st Urban Revolution

- **Causes:** Social Stratification and surplus of food
- **Effects:** Creation of cities and creation of population clusters

Site

- The physical characteristics of a place.
- For example: It's topography, vegetation, and water resources

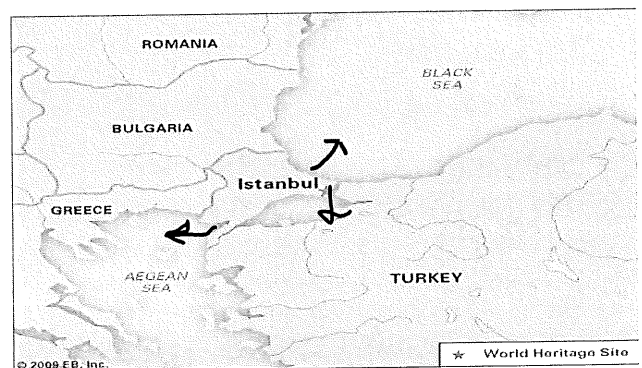


This picture is an example of a site, on the map it displays physical characteristics (resources) that are located in that area.

<http://geography.parkfieldprimary.com/the-united-kingdom/population-and-migration>

Situation

- The geographic context of a place
- For example: Its political, economic, social characteristics



Istanbul's situation allows for easy trade because of its position beside the sea.

<https://www.britannica.com/place/Istanbul>

2nd Urban Revolution

2nd Urban Revolution-

- Started in England, spreading to Europe and then America in the late 1800s
- Linked with **2nd Agricultural Revolution**
- Surplus of food also linked with **Industrial Revolution**
- Many innovations in machine technology paved the way for factories
- Because there were a lot of factories many people moved to the area which made the area more and more urbanized as more people came for jobs

Effects of the 2nd Urban Revolution

- Rapid Growth in the area
- Harsh conditions as the area was starting to expand and there wasn't care for the health and standards
- Lots of pollution



Residential areas and the city were always trashed as there weren't any standards as the expansion of the city was too rapid.

(Picture from <https://www.historycrunch.com/living-conditions-in-industrial-towns.html>)

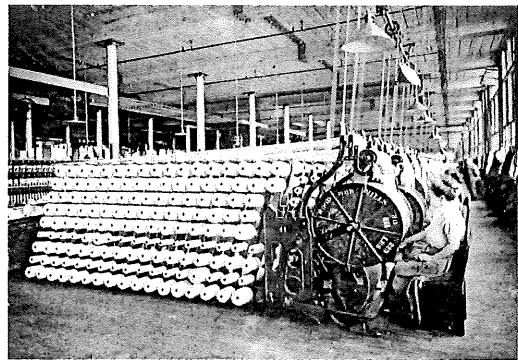
2nd Agricultural Revolution

- Further increased efficiency of farming
- Increased the amount of crops yielded
- New Technology such as machines to plant and harvest crop
- Use of Fertilizer to increase yield amount
- Added drainage and irrigation centers for more efficiency

(Pages 327-328)

Industrial Revolution

- The transition from manual labor to machine labor in the 1800s
- Made manufacturing goods far more efficient than before through the use of machines



Factories started looking more mechanized like the photo above

(Picture from <https://www.britannica.com/event/Industrial-Revolution/images-videos>)

(Pages 298-300)

Primate Cities

A city where the population is **2 or more times greater** than the second biggest city in the country.

Example:

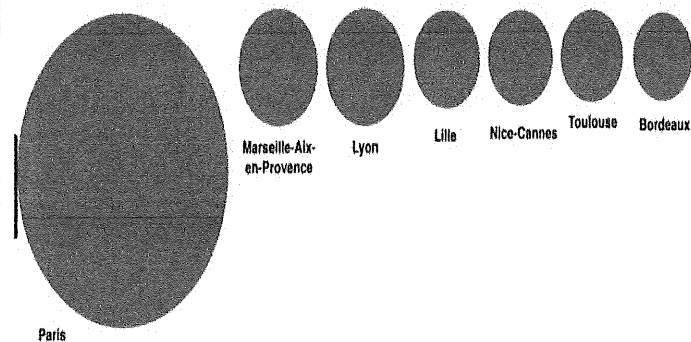
France

Size	City	Population
1	Paris	2,200,000
2	Marseille	790,000

<http://www.geonames.org/FR/largest-cities-in-france.html>

Pros	Cons
<ul style="list-style-type: none"> City is a hub of growth/development Country can be involved in global economic affairs Large market for goods and services 	<ul style="list-style-type: none"> Uneven distribution of wealth, development, resources, transportation technology, etc. Rapid city growth can lead to slums Brain drain to primate city

<https://quizlet.com/133187434/rank-size-rule-v-primate-city-pros-cons-card-sort-2011-frq-flash-cards/>



<http://expeditieaarde.blogspot.com/2014/02/primate-city.html>

Textbook pgs. 235,236

Rank-Size Rule

All of the cities are **$1/n$ of the largest city** in the country, **n representing its rank by population.**

Rank (by population)	Population
1	1,000,000
2	500,000
3	333,333

The **second** largest city is **1 half** of the largest city's population, the **third** largest is **1 third**, etc.

The United States is the closest example country that follows this rule.

http://www.citymayors.com/gratis/uscities_100.html

Pros	Cons
<ul style="list-style-type: none"> More even distribution of wealth, development, resources, transportation technology, etc. Regional economic development 	<ul style="list-style-type: none"> Unequal representation in global economic affairs Smaller market for goods and services Decrease in flow of information

<https://quizlet.com/68316708/ap-human-geography-sec2345-flash-cards/>

A country **cannot** follow the rank size rule *and* have a primate city.

Central Place Theory and World Cities

Central Place Theory

A spatial theory explaining why cities and towns have specific *distribution patterns* and *sizes*, using market forces.

Threshold

The smallest # OF CONSUMERS needed to support a business
Large Threshold; Apple Store
Small Threshold; gas station

Assumptions by Christaller:

1. Landscape = flat surface
2. Population = evenly distributed
3. People purchase good/service from the *closest* central place

Urban Hierarchy – A ranking of places which is based on the services available

Hamlet – only few dozen people – very limited services – people are around urban center (like general store)

Village – very small/ but larger than hamlet – few more services (clothing, furniture)

Towns – around 50 to a few thousand – urban area including a defined boundary – hinterland = surrounding farms

Cities – tens or thousands of people – large, densely pop areas

Metropolises – focus around 1 city – gov. states 50,000+ people

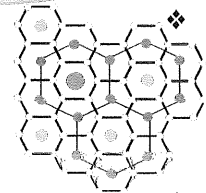
Megalopolis – a bunch of metropolitans linked together – BosWash

For more Information, see pages 236-239 of the textbook

- Developed by **Walter Christaller**
- Theory confirmed the **INTERDEPENDENCY** of central places
- **SMALLER** places:
 - MORE frequent
 - CLOSER together
 - LESS specialized goods/services (like milk)
- **LARGER** places:
 - LESS frequent
 - FURTHER apart
 - MORE specialized goods/services (like a brain surgeon) – larger places still have less specialized things!

Range

The MAX. DISTANCE a consumer will travel to obtain a good/service
Big Range; rare brain operation
Small Range; milk



HEXAGONS



https://www.education.psu.edu/geog597l_02/node/681

WORLD CITIES

- A center that *influences* the world's business
- Have developed into *nodes*, influencing the flow of info., goods, and capital around the globe

- ❖ NEW YORK
- ❖ LONDON
- ❖ TOKYO

RISE OF WORLD CITIES

1. Growth/Location of multinational corps.
2. Increasing importance of **advanced** professional services (ex. Banking)

SOME INDICATORS:

- Recognized center of political power
- International Airport
- Strong integration in global economy
- High rep. of arts + entertainment

CHRISTALLER'S MODEL FALLS SHORT!

Megacities and Patterns of Urbanization

Urbanization- process of concentrating people in urban areas

RATE of Urbanization

- Annual percent increase in urban population
- Most urban growth will take place in LDC's
 - Highest in LDC's
- Dhaka, Bangladesh has a high rate of urbanization

LEVEL of Urbanization

- Percent of people living in urban areas
 - Highest in MDC's
- North American cities like New York have a high level of urbanization

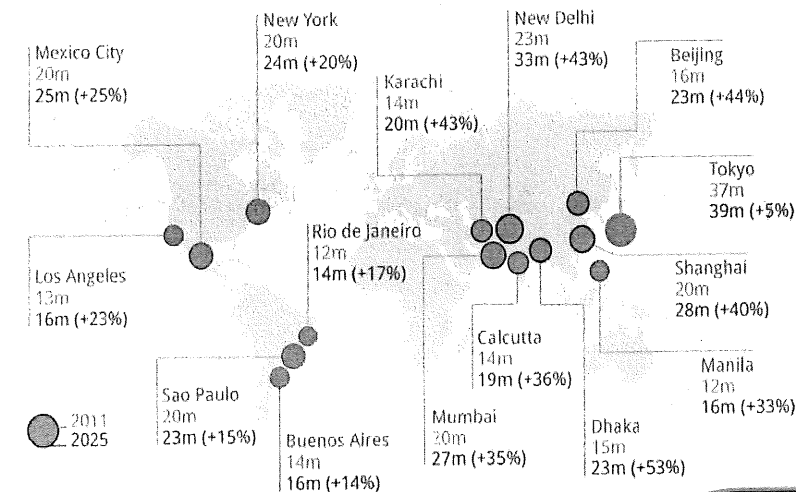
MDC's have a higher level of urbanization, but LDC's have a higher rate of urbanization.

Megacity- a city with 10 million or more residents

- Rapid urbanization causes megacities
- Can lead to many problems like unemployment, slums/shantytowns, and pollution

The World's Megacities Are Set for Major Growth

Population growth of the world's top 15 megacities (millions, 2011-2025)



including metropolitan areas
Source: UN Population Division, World Economic Forum

statista

Most megacities are located in Asia

Most megacities are located in LDC's

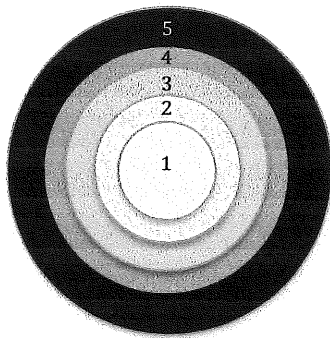
Tokyo is the largest megacity in the world

<https://www.statista.com/chart/1826/population-growth-in-the-worlds-megacities/>

North American City Models

- Multiple models can generalize changes in American (and Canadian) patterns of urban spacial use over time
- **Models change with transportation innovations**
- Models show trend of decentralization, a shift of activity away from the CBD
 - CBD- the central bussiness district, the “downtown” area. The economic focus of an urban area, usually where the city was founded eg Manhattan, Downtown Louisville

Burgess Concentric-Zone Model

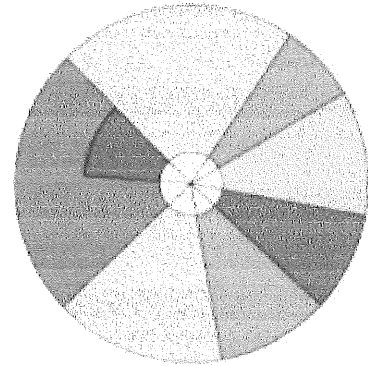


1. CBD
2. Transition Zone
3. Low Income Housing
4. Middle Income Housing
5. Commuting Zone

Main transportation- Walking, horses

- Relies on Bid-Rent Theory- Land is cheaper towards central node (CBD)
 - Shows more intensive use closer and more extensive use further from CBD
 - Much like Von Thünen model
- Poorer people must live closer to CBD to walk, meaning they live very densely eg Butchertown
- Rich can afford horses, live further from CBD in large houses eg Old Louisville

Hoyt Sector Model



<https://pranilblogs.wordpress.com/2016>

Main transportation- Streetcar

- Shows wedges of similar areas, sectors, radiate from CBD along streetcar lines
- Affordable transportation allows city to expand
- Poor cluster near factories, streetcar lines
- Activities agglomerate in sectors, often sectors for retail, education, separate residential areas for different income levels

Harris-Ullman Multiple Nuclei Model



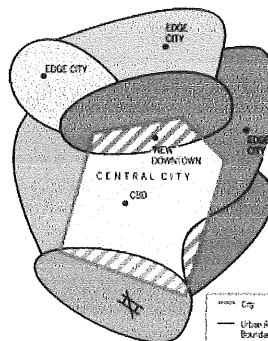
- Central Business District
- Wholesale, light manufacturing
- Outlying business district
- Low class residential
- Medium class residential
- High class residential
- Residential suburb
- Heavy manufacturing
- Industrial suburb

Main transportation- Car

https://en.wikipedia.org/wiki/Multiple_nuclei_model

- CBD continues to lose importance as edge cities develop
 - Edge cities develop clusters of economic activity outside CBD, increasing complexity and decentralization
- Cities continue to sprawl with transportation
- Many industries still cluster in certain areas

Galactic City/ Urban Realms Model



<https://www.thinglink.com/scene/74172286207891865>

Main transportation- Cars on Interstate-highways

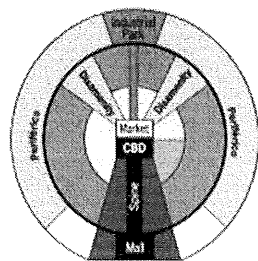
- Sprawl, decentralization and suburbanization at their greatest extent
- Lack of taxable economic activity leaves many cities poor, leading to mergers like the Louisville- Jefferson County merger in 2003
- Most urban areas become almost entirely dependent on cars for transportation
- More edge cities appear as rich mostly live in suburbs

Urban Models Outside North America

Latin American Cities Model (Griffin-Ford Model):

- Main Comparison: Spine that extends from the CBD surrounded by high-class residents and connects to the mall
- Created by: Ernest Griffin and Larry Ford in the 1980s
- “Periferico” zones are slums, squatter settlements or shantytowns that contain lower-class people (AKA Barrios and Favelas)
- The Perifericos are also where the industrial areas are located
- It is the opposite of North American models, further away from CBD the poorer the people
- The model shows where the rich and poor are located in relation to the spine
- High class difference
- The gentrification zone is where the preserved historical buildings are located
- Examples: Buenos Aires, Argentina; Bogota, Colombia; Santiago, Chile; Caracas, Venezuela; Havana, Cuba; Mexico City, Mexico

A NEW AND IMPROVED MODEL OF LATIN AMERICAN CITY STRUCTURE



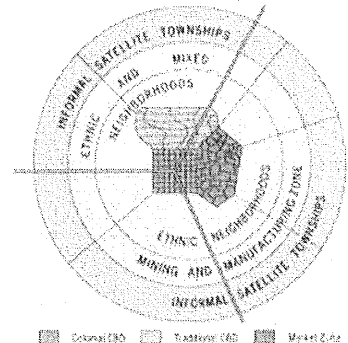
- Commercial
- Market
- Industrial
- Zone of Medium
- Zone of Low Access
- Zone of peripheral squatter settlements
- High Residential Sector
- Gentrification
- Middle Class Residential Tract

<http://valdezonline.weebly.com/global-city-models.html>

Sub-Saharan African Cities Model (De Blij Model):

- Main Comparison: There are 3 CBD's: Colonial, Market and Traditional
- The colonial CBD has aspects of European cities, because it is from when the city was colonized
- The traditional is where vertical integration occurs
- The market is basically an open-air market
- The CBDs are surrounded by ethnic neighborhoods that represent the different types of the ethnic groups of that region before it became urbanized
- Outside of the neighborhoods are the industrial zones
- The poverty is spread throughout the city, meaning that there isn't much of a class difference at all
- The informal satellite townships are the slums/squatter settlements of the African cities
- Examples: Accra, Ghana; Ouagadougou, Burkina Faso

A MODEL SUBSAHARAN AFRICAN CITY

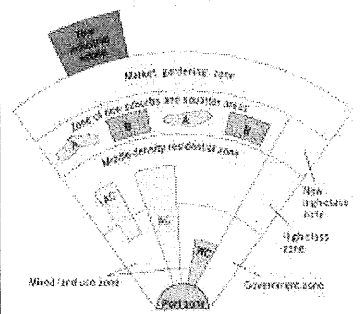


<http://slpaphumangeography.wikifoundry.com/page/Urbanization+Models+and+Notable+People>

Southeast Asian Cities Model: (McGee Model)

- Main Comparison: The cities have a port zone near bodies of water
- Created by T.G. McGee in 1967
- There is no actual CBD, it's dispersed throughout the city
- There is a very large middle-class population in the alien commercial zones
- The higher-class citizens live on the right edge of the city by the government zone and away from any industrial areas or commercial areas
- There is a specific zone for slums and new suburbs right above the middle-class area, the suburbs and squatter areas are right next to each other
- The different zones represent the dispersed CBD: Western Commercial, Alien Commercial, Mixed Land-Use, and Government
- Alien commercial areas are home to Asian merchants
- Newer industrial Parts are located on the outskirts of the city
- Examples: Hong Kong, China; Manila, Philippines; Jakarta Indonesia; Beijing, China

A GENERALIZED MODEL OF LAND USE AREAS IN THE LARGE SOUTHEAST ASIAN CITY



<https://aphug.wikispaces.com/Models+to+Know>

Islamic Cities: They are centered around a mosque, very private and share many structural similarities with European Cities. They are also made to link the local Muslim population with the global population.

European cities: They have medieval traits, are pedestrian and bike friendly, public transports are cheap and central cities are the ideal living location. They have green belts that are used to stop complete urbanization and to retain some aspects of the natural land.

Further information can be found on pages 244-247 of the textbook

Urban Issues in LDCs

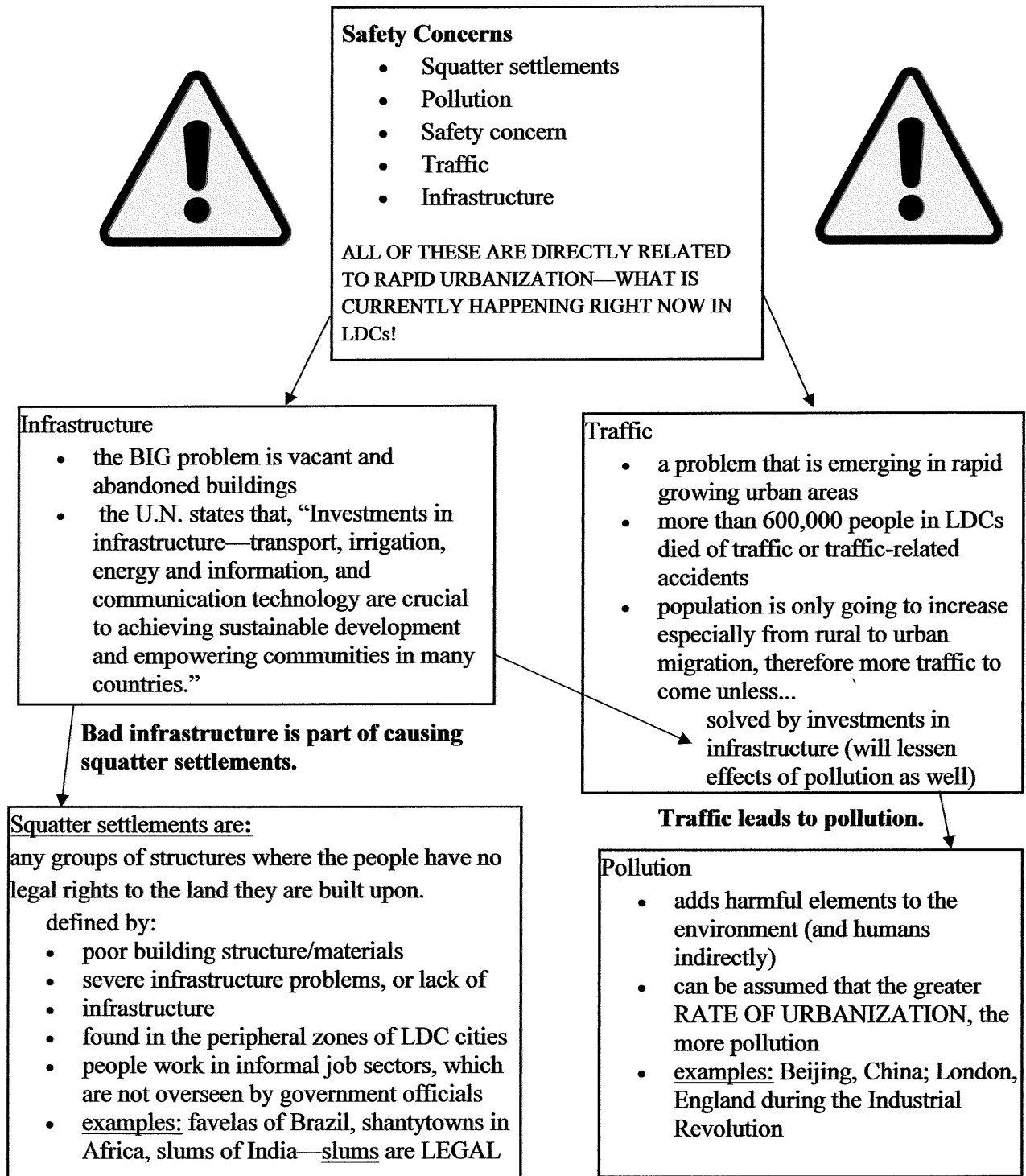




Image source: <https://www.fsunion.org/services/safety/health-safety-guide.html>

See textbook pages 252 to 253 for more information

Causes of Suburbanization in North America

Cause	Details
<i>GI Bill</i>	<ul style="list-style-type: none"> • Provided veterans with low-cost mortgages after World War II • Paid for higher education • Introduced in 1944
<i>Interstate Highway System</i>	<ul style="list-style-type: none"> • Increases access to places further away from the central city • Begun in the 1950s • Large, limited-access superhighways connected cities and increased accessibility • Funded largely by the federal government
<i>Racial tensions</i>	<ul style="list-style-type: none"> • Tensions between races resulted in white people leaving areas with minorities (White Flight) <i>pg. 248</i> • Started in the 1950s and 1960s • Led to filtering <i>pg. 241</i> <ul style="list-style-type: none"> ◦ The process in which changes in housing patterns leads to lower and lower social classes occupying them (for example, the houses in Old Louisville) • Contributed to redlining <ul style="list-style-type: none"> ◦ A process in which banks, companies, etc. drew lines on a map and labeled areas by "status", and refused or limited mortgages, etc. often at the disadvantage of minorities
<i>Bid Rent Theory</i>	<ul style="list-style-type: none"> • The theory that as you move further away from the CBD, land becomes cheaper • Price of land closer to CBD is higher <i>pg. 240</i> • Accessibility increases the potential for more customers • Often leads to trade-offs between accessibility and the cost of land <div data-bbox="635 1070 1252 1360" data-label="Figure"> </div> <p data-bbox="509 1366 1381 1391"><i>(https://www.researchgate.net/figure/Bid-rent-curve-for-a-mono-centric-city_fig10_238733275)</i></p>
<i>Declining transportation costs</i>	<ul style="list-style-type: none"> • Transportation costs decreasing means that it's more feasible for people to live further out of the city while still having access to services (horses to cars)
<i>Services outside the city (edge cities)</i>	<ul style="list-style-type: none"> • Services from the CBD have moved to edge cities, so people are able to live further away from the CBD but still have access to those services (for example, Charlotte, North Carolina) <i>pg. 243</i> • Edge cities: a large node of office and retail activities on the edge of an urban area; offices outnumber bedrooms in these areas
<i>Applying mass production model to housing</i>	<ul style="list-style-type: none"> • This was a quicker and more efficient way to build houses • Came from Fordism <ul style="list-style-type: none"> ◦ The system of mass production pioneered in the early 20th century by Henry Ford with the production of Ford Motor Company cars • Mass production: each worker is assigned one specific task to perform repeatedly, speeding up the "assembly line"

Effects of Suburbanization in North America

<p>Declining Central Cities-</p> <ul style="list-style-type: none"> • Suburbanization is the growth of areas on the outskirts of an urban area • With the suburbs increasing, the central city decreases 	<p>Decentralization-</p> <ul style="list-style-type: none"> • Central city is declining • The process in which people and businesses move out of the central city, usually to the suburbs
<p>Edge Cities-</p> <ul style="list-style-type: none"> • A center of business, shopping, and entertainment located outside of a traditional urban center 	<p>Sprawl-</p> <ul style="list-style-type: none"> • Occurs when the rate of land urbanization exceeds the rate of population growth. This leads to low-density land use.
<p>Residential Segregation-</p> <ul style="list-style-type: none"> • Redlining: Denying home loans based on the race of the person or neighborhood instead of the actual property • Blockbusting: Retailors sell property to minorities and then encourage white people to sell their homes because the neighborhood is “going downhill” 	 <p>Infrastructure Strain-</p> <ul style="list-style-type: none"> • As sprawl happens, more roads, sewer lines, and water lines are needed
<p>Lack of Affordable Housing-</p> <ul style="list-style-type: none"> • Homes built in suburbs are catered to middle-class and high-class people • Along with redlining, this means that even though more homes are being built, low-class people cannot benefit. 	<p>Environmental Impacts-</p> <ul style="list-style-type: none"> • Buildings further apart because of sprawl so cars are often used – leads to emission of greenhouse gases and air pollution • More land being used to build = less farmland

Picture Credits:

http://tribune-files.imagefortress.com/attachment1s/1512933/medium_wm/BFE-595-BS_F.JPG?1299813851

[https://upload.wikimedia.org/wikipedia/commons/thumb/0/07/Rio_Rancho_Sprawl.jpeg/640px-](https://upload.wikimedia.org/wikipedia/commons/thumb/0/07/Rio_Rancho_Sprawl.jpeg/640px-Rio_Rancho_Sprawl.jpeg)

[Rio_Rancho_Sprawl.jpeg](https://upload.wikimedia.org/wikipedia/commons/thumb/0/07/Rio_Rancho_Sprawl.jpeg/640px-Rio_Rancho_Sprawl.jpeg)

URBAN RENEWAL

Gentrification - When people purchase old buildings in poor neighborhoods to revitalize them. (Is normally when middle class comes back to the central city). (Pg. 249, 250)

Pros

- increases property values
- boosts city's overall economy due to increasing property tax revenues
- can act as a centralizing force

Cons

- lower income residents have nowhere to go (due to higher property values)
- economically challenges poor urban residents since the city is no longer affordable

<http://doughayka.com/Stop-Gentrification>



Tear Downs - The tearing down of old buildings for new ones by the government when in blight.

<http://www.toledoblade.com/local/2012/05/09/Apartments-start-to>



Pros

- can stop ongoing blight
- areas are more aesthetically pleasing
- increases property values

Cons

- displaces long-standing neighborhoods and lower income residents
- can decrease the historical attachments of a place

Conventions – When the local government draws conventions (a gathering of individuals based on a common topic) to the city.

Pros

- city sales can be increased
- attracts more people
- generates activity

Cons

- in attempts to compete with other cities, when convention prices are lowered so do profits
- is not a long term solution since visitors won't stay/temporary fix

<https://fanboy.com/articles/get-schooled-proper-comic-book-convention-attendance/>



Example of Gentrification:

Tel Aviv, Israel, was once an area reserved for commerce and trade. Now, it is an area with well-tended beaches, Bauhaus-inspired buildings, etc. After a growth in population the old buildings were revitalized and redesigned.

Example of Tear Downs:

Iroquois houses get torn down in an attempt to replace them with a more modern landscape in Louisville, Ky.

Example of Conventions:

A convention center opened up in Louisville, Ky, to attract people with a variety of interests to visit and spur activity.

Reference Pages 249 and 250 for more information on urban renewal and revitalization

Urban Sustainability

The idea that a city can be organised without excessive reliance on the surrounding countryside and be able to power itself with renewable sources of energy.

Smart Growth- planned economic and community

to development that attempts to curb urban sprawl and worsening environmental conditions. →

New Urbanism- ideology striving

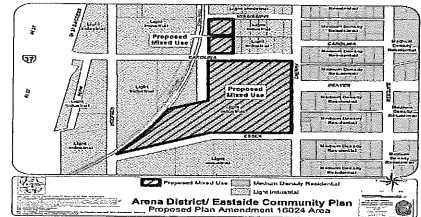
prevent sprawl and create walkable neighborhoods.



- ❖ **Mixed Land Use**- enables a range of **land uses** including residential, commercial, and industrial to be co-located in an integrated way.

➤ **Walkability** is enhanced because now you can everything you need within walking distance (ex. Norton Commons)

≈ less automobiles



www.expressnews.com/real-estate/article/Partnership-buys-land-for-mixed-use-project-in

- ❖ **Public transportation development**
 - Developing more public transport means of transportation lower the negative fossil emissions caused by excessive automobile use.
- ❖ **Green Belts**- an area of open land around a city, on which building is restricted.
 - green belts **restrict sprawl** and protects surrounding environmental conditions.
- ❖ **Redevelopment of Brownfields**- a former industrial or commercial site where future use is affected by real or perceived environmental contamination.
 - Allows you to sustainably reuse a contaminated area
 - ≈ Rejuvenated environment and job growth
 - Ex. Successful redevelopment in Austin, Texas from old chemical facility
- ❖ **Inclusionary Zoning**- municipal and county planning ordinances that require a given share of new construction to be affordable by people with low to moderate incomes.

Affect: Slow Growth Cities- cities where smart growth initiatives are put in place that cause them to develop slower than normal cities. ¹

¹ Further Information can be found on pages 254-255