Unit 1

Geographic Tools and Data:

Asking/answering geographic questions:

- **What** is happening **where**? **Why** is it happening **there**? **Why** do we **care**? - Geographers want to know the WHY of WHERE phenomena are happening - Phenomena: something that is happening - The three questions which all geographic inquiry begins How do we answer these questions:

- Observations: collecting information by watching, measuring, using the senses, using primary and secondary resources (to figure out where something is happening, we first have to find out what is happening) - Visual Aids: Anything that can help the geographers make sense of the patterns they are seeing

(photographs, maps, charts and graphs, satellite images, and etc.) - Models: Visual diagrams that are created to help geographers understand patterns and processes (ex: Von

Thunen Model, Galactic City Model, Burgess Model, etc.) - Maps: Can be used to identify patterns within an area. There are two types of maps- reference maps and

thematic maps - Reference Maps: Used for reference (sets of maps made for the general population to refer to the basic

geographic information such as roads, political boundaries, or physical geography) - Thematics Maps: Maps geographers use the most, these are the maps that show occurrences of phenomena

under study. Thematic maps reveal patterns that are not visible on the landscape by just looking at it (ex: election results, majority of a language spoken, annual income per capita, and etc.) - Different Types of Thematic Maps: There are 6 different types of thematics maps and each of them can

display the same data but in just a different
format

- Choropleth: Areas are shaded a different shade of the same color to organize data
- Graduated Symbol: One symbol is used at different sizes to represent the data
- Isoline: Lines are drawn and the area between each line represents the same data (weather maps)
- Cartogram: The area that is being displayed on the map is distorted to a certain shape
- Dot Density: Each dot represents an amount
- Heat Maps: Combination of dot density and choropleth (2 colors are used) - Map Scale: Shows the relationship between distance shown on a map and the distance on the surface of the Earth (representative fraction (1inch is 2000 in real-world, the small scale shows a big area but limited detail, and large scale maps shows a small area but greater amount of detail) (A visual scale is represented in the bar format and the verbal scale is spoken i.e- 1 inch on the map equals 10 miles on the ground) - Grid System: Latitude (north to south) and longitude (west to east) - Map Projections and Distortion: different projections produce different types of maps, and all map

projections have some level of
distortion

- Mercator/cylindrical: distorts distance and size of landmasses (most accurate at the equator, but the area around the poles are greatly exaggerated)

● Conic: projection of the earth onto a cone with its point over one of the earth's poles

● Polar/Azimuthal: true compass directions; longitude lines are straight and latitude lines are circles (most accurate at the pole and distorts shape and size more toward the outer edges)

● Compromise/Robinson Map: It maintains overall shapes and relative positions

● without extreme distortion. This is done by slightly distorting every characteristic in order to limit the overall distortion.

● Equal Area: these maps distort size and distance in order to maintain the area

- Quantitative data: objective in nature – it any form of measurement, including counts (census), distance, etc. This data is generally displayed through charts, graphs, and maps. - Qualitative data: subjective and descriptive in nature. This data is typically presented via written description. - Geospatial data: qualitative or quantitative data that has been tied to a geographic location. The researcher has taken the data and attached it to the place where it is happening. - Spatial information and analysis: It is studying the patterns of a phenomenon to figure out where things are happening there and the characteristics that allow for that occurrence to happen there, as opposed to places it is NOT happening and the characteristics that prevent or discourage the phenomenon from happening in that place.

Using Geospatial Data:

- Geospatial Data: Data records that include a location (recording where the observation occurred) - Types of geospatial data: Geo-referencing means to tie a location to a record, such as in a database or on a photograph

● Geo-referenced phenomena: Fancy way of saying "observation of something (a phenomenon)" was made, and the location was noted (ex: when your phone takes a picture, it also notes down where the picture was taken)

● Geographic Information System (GIS): software programs used by analysts to combine multiple layers of information into single maps

● Satellite Navigation (GPS): Absolute location on the surface of the earth

● Remote Sensing: Data collection is taken from a distance (done via satellite, high-flying aircraft, or using sound waves) (ex: satellites are able to collect temperature data of different land uses by measuring the radiation emitted by different surfaces)

● Satellite Imagery: Images of Earth or other planets collected by imaging satellites operated by governments and businesses around the world

● Demographic Data (census): Data that is statistically socio-economic in nature such as population, race, income, education, and employment, which represent specific geographic locations and are often associated with time (ex: the US census is taken every 10 years to get an approximate population count) - Uses of Geospatial Data: It has a long history of governance, conflict, and scientific discovery

● Government Services: Property maps, zoning (residential, business, etc.), planning for growth, and service funding allocation

● Disaster Response: Geographic data is used in all phases of disaster management (prevention, mitigation, preparation, responding, and recovery)

● Business: Companies use GIS to track employees, assets, and equipment, and to collect and interpret data in real-time to make informed decisions.

● Personal Decision Making:

GPS **Spatial Concepts:**

- Absolute/relative Location: Absolute location is a unique spot on the surface of the earth (the latitude/longitude, a physical address, or pinpoints of an exact location on the surface of the earth). Relative location is different in that it refers to WHERE something is in RELATION to another place (cardinal directions, always includes two places or descriptive). - Distance/direction: Distance and direction are typically used to describe a relative location. There must be a starting point and an ending point to make comparisons. - Clustering/dispersing: Clustering and dispersal are types of patterns. When something is observed, are the observations mostly clumped together in distinctive places like on the map to the left, or are they more dispersed such as the map on the right?
- Space/place: Space is the blank slate of a particular area of the earth's surface, and the place is the physical and human characteristics of that space - Site/situation: The site is the physical characteristics of a place, and the situation is the relationship between this place and other places. - Location Theory: Addresses questions of what human activities are located where and why. This is the Why of Where question. Why does *that* happen in *that place* but not in other places? These are the key questions geographers seek to answer. - Connectivity/accessibility: Connectivity refers to connections between places, and accessibility is how easy it is to access a place. - Centrality: How central is the location (is it located in the middle and how accessible is it) - Tobler's First Law of Geography: "Everything is related to everything else, but near things are more related than distant things". Patterns and relationships form due to flows, distance decay, and time-space compression, and geographers study the pattern.
    - Flows: Places that are connected to each other through culture, economics, or politics will have greater flows between them of goods and ideas than places that are disconnected.
    - Distance Decay: A geographical term which describes the effect of distance on cultural or spatial interactions (the farther the distance the less interaction and vice-versa)
- Time-Space Compression: Time-space compression occurs when the friction of distance is overcome by technology (countries that are far away can communicate)

Human-Environmental Interaction:

- Concepts of Nature and Society: Society is the collective group of people living together in a more or less ordered community, and nature in the broadest sense, is the natural, physical, or material world or universe (Society NEEDs nature to survive, and in turn, society also impacts nature).
    - Cultural Landscape: Anything humans have built touch, touched, altered, and etc.
    - Land Use: How the land is being used (residential, commercial, and etc)
    - Natural Resources: Materials or substances such as minerals, forests, water, and fertile land that occur in nature and can be used for economic gain
    - Sustainability: meeting the needs of the present without compromising the ability of future generations to meet theirs.
    - Natural Disasters: natural events such as a flood, earthquake, or hurricane that causes great damage or loss of life.
    - Technological Disasters: Technological disasters occur when human-built modifications to the

environment fail such as dam failure.

● Modification of the environment: This occurs when people change the physical environment to suit their own desires, needs, and economic activity.

● Adaptation to the Environment: Changing our human practices to live and function in the environment as it exists. - Theories of Human-Environmental Interaction: Does the environment shape the culture or does the culture

shape the
environment?

● Environmental Determinism: The natural environment is the main determinant of human activity in various places.

● Possibilism: The modern-day leading scholarly school of thought in terms of cultural development and exchange, and came about as a result of the industrial revolution.

The scale of Analysis:

- Scale of Analysis: The geographic unit at which data is being displayed combined with the ranges of

observations found in the
legend.

● Global Scale: Unlikely to be used for a unit of analysis. There would be no patterns revealed due to no geographic units unless we were looking at the larger solar system (more likely to be a study area). When we talk about something happening on "a global scale", what that means is that the occurrence is world-wide or impacts many people in many places.

● Regional Scale: Large chunks on the earth sharing similar physical or human characteristics.

● National Scale: AKA country scale (data is displayed by country, and for the national scale to be the appropriate scale of analysis, the study area must be larger than a country. It may be the entire world, or it may be a major world region).

● Sub-national Regions: Smaller regions within a country

● Local Scale: Smallest geographic units (county, city, zip code, neighborhood, etc) - Patterns and Analysis: Make an observation, identify locational patterns, analyze underlying characteristics

of the place, ask additional questions, data location, and repeat. **Regional Analysis:**

- Region: A region is a basic unit of geography, area of land that has common features, and can be defined by natural or human characteristics. - Unifying Characteristics: Regions divide the earth's surface by looking at unifying characteristics – all the

places included in that region will share the characteristic (with some level of generalization, of course), and places outside that region will be different. The more "zoomed out" you are, the more generalization will need to assume. - 3 types of regions:

● Formal: based on quantifiable data (measurements such as rainfall totals, elevation, census data, etc.) of a shared trait OR they are political units with defined boundaries.

● Functional: based on spatial interaction between a node/hub and the surrounding area – there are flows of people, goods, or ideas within this type of region.

● Perceptual: based on the individual's unique experiences and understanding of the area – their perceptions. - The trouble with Boundaries:

- ● Overlapping Regions: Regions may be referred to as different names (i.e., The Middle East instead of Southwest Asia) that are more political or Eurocentric due to our own political and cultural histories.
- ● Transitional: A political boundary between two regions/areas of land-based off of culture (language, traditions, religion, and etc.)

● Contested: A political boundary that was formed as a result of war or some sort of political conflict - Regions at Varying Scales: Just like the scale of analysis, regions come in varying scales. We will have much more specific criteria to determine a region that's really "zoomed in" compared to one clump together a large portion of the earth (local, national, supranational, and global) - S.P.E.E.D: social, political, economic, environmental, and demographic - Development: a relative term that describes a country/region's economic development, the standard of

living, and human
development.

- ● MDCs: More developed countries (USA, Canada, etc)
- ● LDCs: Less developed countries (Chad, Angola, etc)
- ● NICs: Newly industrializing countries (India, China, etc)

- Major World Regions:

- ● The West: It refers to Western Europe and North America (or those countries populated and settled by Europeans, such as Australia, and to a lesser extent Latin America). These places are linked together economically, culturally, and politically. "Western Culture" is the culture in which you live.
- ● The East: refer to countries in the Eastern Hemisphere. Like the West, they share common historical, political, cultural, and economic ties. You May have heard the term "Eastern Medicine" or "Eastern Philosophies" (religions).
- ● The Islam Realm: Also known as the Islamic World or the Muslim World. This is the region where the majority of the people are followers of the Islamic religion. Notice it stretches out beyond Southeast Asia/North Africa to include most of South Asia (a large percentage of Indians are Muslim, though Hindu is the majority religion in most of the country), Central Asia, and Indonesia (the most populous Muslim country).
- ● The Global North: These countries are more economically developed (MDCs) as they industrialized first and procured their resources from their own land or their colonies. These countries are often referred to as "Core" industrial countries
- ● The Global South: The Global South refers to the countries that are currently experiencing an industrial boom (NICs) and the LDCs. Many of the countries in the Global South were colonial holdings for the core countries and supplied the raw materials needed for manufacturing in the North.

Unit 2

Population Distribution:

- Physical Factors: One of the main factors that contribute to the population distribution as it is today are physical factors that influence people to live where they live today

    - Climate: Hot, cold, dry, and etc (suitable for farming)
    - Landforms: Mountains, rivers, and etc (suitable for farming)
    - Water Bodies: More people tend to live near water because of the resources that are available - Human Factors: Factors that are imposed by humans that affect the way we live
    - Culture: Religions, traditions, languages, and etc.
    - Economics: Urban centers serve as hubs for economic activity
    - History: Since the early population had large numbers, maybe that carried on
    - Politics: What type of political system do they have - Population Density: calculation of how many people live within a certain unit of land. The value for the unit of land will be different depending on the characteristics of the land we are considering
    - Ecumene: ancient Greek term for the known, the inhabited, or the habitable world. The term is used by geographers today to mean permanently inhabited land.
    - Arithmetic: Total population / total land
    - Physiological: Total population / total arable (farmable) land
    - Agricultural: Number of farmers / total arable (farmable) land - Consequences of Population Distribution:
    - Population Pressure: the sum of the factors within a population that reduces the ability of an environment to support the population and that therefore tend to result in migration and expansion of range or in extinction or decline of the population.
    - Carrying Capacity: the number of people that a region can support without environmental degradation.
    - Over-Population: occurs when a population's size or consumption of resources exceeds the carrying capacity of the land and results in damage to the land, a lack of resources, or even conflict (war) as people fight over control of the limited resources, such as water, farmland, or non-renewable resources such as oil/natural gas.
    - Under-Population: occurs when a population's size is lower than normal or than is desirable.

Demographic Transition Model (DTM):

- Crude Birth Rate: Is the number of babies born per every 1,000 people in the population. - Crude Death Rate: Is the number of people who die per every 1,000 people in the population. - Total population: This is the sum of the entire population – it is generally an estimate based on a combination of different data, such as birth records and census projections. - Rate of Natural Increase: You subtract the crude death rate from the crude birth rate - Population Doubling Time: The number of years it will take for the population to double - Demographic Transition Model: When a country's level of development increase or decreases, you can see this in the DTM model (there are 5 stages) - Review of Key Demographics:

    - Life Expectancy: How many years a person born today can be expected to live.
    - Infant mortality rate: For every 1,000 babies born, the number that will die before their first birthday.

- GNI per capita: The total sum of the value of all goods and services produced both within a country and their holdings abroad (outside of the country) divided by the total population.
- Access to sanitation: The percentage of people with operational plumbing within their homes.

● Labor force by sector of the economy: The percentage of people who work in agriculture, manufacturing, or service jobs - Stage 1: High CBR, high CDR, low life expectancy, high infant mortality rate, very low GNI, death due to

exposure and starvation common, and access to sanitation is not applicable (no access) - Stage 2: High CBR, falling CDR, low life expectancy, high infant mortality rate, low GNI, access to

sanitation low (<30%), and death due to infectious diseases and dirty water - Stage 3: Falling CBR, slowly declining CDR, increasing life expectancy, falling infant mortality rate,

increasing GNI, increasing access to sanitation, and death due to chronic disease. - Stage 4: Low CBR, low CDR, long life expectancy, low infant mortality rate, high GNI, high access to

sanitation, and death due to delayed chronic disease and cancer - Stage 5: Very low CBR, low CDR, long life expectancy, very low infant mortality rate, very high GNI, and

universal access to sanitation - The Epidemiological Transition Model (ETM): Looks at major causes of death related to the stage of

economic development

- Stage 1: (Stage 1/early stage 2 on DTM)- Starvation, hunger, illness
- Stage 2: (Stage 2/early stage 3 on DTM)- communicable illnesses are the leading cause of death, particularly related to lack of access to improved sanitation (water-borne illness is a leading cause of infant mortality)
- Stage 3: (Stage 3/early stage 4 on DTM)- chronic illnesses such as type 2 diabetes or cardiovascular diseases such as coronary artery disease or high blood pressure

● Stage 4: (Stage 4 through stage 5 of DTM): delayed chronic illnesses (treatments for type 2 diabetes and CVD are available) - Tourism Economics: Does not fit DTM progression, uneven social development in the country, resources

diverted from locals to tourists, and profits often leave the country

Population Composition:

- Population Composition: How old/young the population is, the ratio of men to women, the ratio of very old

to working ages, and the ratio of very young to working ages. We need it for political practices, economic processes, and social processes - Population Pyramid: Visual representations of population composition

- Gender: males will be on one side, and females will be on the other.

● Age: displayed horizontally, stacked from youngest to oldest. - Dependency Ratio: the balance between the "bearing bracket" – those of working age, 15-60ish, who

"bear" the economic, social, and political burden of the society. (The bearing bracket must: care for the children, provide the income for their families, pay into their employer's retirement system to provide salaries and, healthcare for retirees) - Concave Shape: Rapid growth, low life expectancy, high infant mortality rate, low literacy rates, low life

expectancy, high infant mortality rate, low per capita income, high birth/death rates, high total fertility rates, and low education levels for women - Rapid Growth: Wide base (many children being born in each

of the youngest cohorts), large % of

population entering reproductive years, few old people, high birth rate, and beginning development/less developed countries (low literacy rates, low life expectancy, high infant mortality rate, low per capita income, high birth/death rates, high total fertility rates, and low education for women) - Bell Shape: Newly industrializing countries and DTM stage 3 (moderate but increasing literacy rates,

increasing life expectancy, decreasing infant mortality rate, increasing per capita income, birth rate/death rate falling low, fertility rate falling rapidly, and education of women increasing in suburban areas) - Box Shape: Slow growth, population fairly constant until old age, more developed countries, and stage 4

DTM (high literacy rate, high life expectancy, low infant mortality rate, high per capita income, low birth rate/death rate, low total fertility rate, and education to women is universal) - Convex Shape: Negative growth, base much smaller than the middle, population shrinking, more

developed, and stage 5 of DTM (high literacy rates, high life expectancy, low infant mortality rate, high per capita income, low birth rate/death rate, extremely low total fertility rate, and education of women is universal) - How are the pyramids used: To assess the health of a population, assess predicted population growth, and

predict markets for goods and services **Theories of Population Growth and Decline:**

- Carrying Capacity: # of people the environment can support without sustaining damage - Out-of-balance Populations:

- Overpopulation – there are too many people in a given area to be supported by the environment without damaging it
- Underpopulation –the environment can sustain the population without damage - Models of Population Growth: The J-curve and the S-curve are two models of population growth
  - J curve- models ONLY exponential growth, with population growth continuing unchecked indefinitely
- S-curve- models a period of exponential growth before it tapers off and the population stabilizes again - Malthusian Theory: Thomas Malthus believed that the population growth would continue exponentially

until it was checked (reduced) by some event (positive checks which would reduce the population include famine, war, and disease) (preventative checks includes “moral restraint”) - Eugenics: The idea of improving human populations through selective breeding or sterilization

- Neo-Malthusians; A term used for 2nd wave of Malthusian-based population theory (focus on controlling

population through contraception, particularly for poor populations) (preserve resources for themselves and their future needs) - Critics for Malthus:

- Could not have foreseen the agricultural, industrial, technological advances that made it possible for population growth to slow and stabilize
- Was looking at small closed systems- it only applied to England and the world is not so simple
- Did not take migration into account - Cornucopians: Believe that people will find a way to solve the problem, and they do not believe in

population doomsday (population growth drives technological advances, and in turn, these advances raise food production and improve economic development) (opposite of Malthus) - Role of Technology:

- Machinery: change the landscape to create more farmland (terraces), and increase distance produce can be shipped
- Fertilizers and Pesticides: science created, and organic vs. chemical

● Digital Technology **Women and Demographic Change:**

- Changing Social Values: a set of moral principles defined by society dynamics, institutions, traditions, and cultural beliefs, and with changing social structure, there is a change in the role of women in society (women's role in the family, access to education, access to healthcare, economic rights, and political rights) - The Changing Role of Women in Society: The social status and values of women in society have changed gradually over time

    ● Hunter/Gatherer Society: Egalitarian tribes and both sexes were responsible for the survival of the tribe (both male and female deities)

    ● Sedentary Farmer: Patriarchal societies, male-dominated politics, male deities, marriage (dowry), and primogeniture (only men were allowed to own land)

    ● Industrial Era: Increased income leads to better access to education, a lot of women worked in factories (paid way less than men), and child labor laws for enforced

● Post-Industrial Era and Women's Rights: Improved status and change in status quo, all women are allowed to vote, access to education and healthcare, and etc. - Access to Education: Results in more political participation, economic independence, more demand for equal rights and protections, and delayed marriages and the start of family results in fewer children - Access to Healthcare: Prenatal care and safer childbirth lead to a reduction of infant mortality rate and maternal mortality rates, and access to contraceptives (birth-control) increases - Reduced Fertility Rates: Shift to focus on education and careers - Status in Society: Empowerment results in improved social status (equal pay, equal rights, dual-income families, and environment) - Population Policies: Political policies designed to influence the birth rate and population growth

    ● Pronatalist Policies: policies that encourage people to have babies (ex: the baby bonus is a government-sponsored stipend or benefits for families having a child, or paid maternal or paternal leave)

● Anti-Natalist Policies: Policies that discourage citizens from having babies, and used as a means to control population growth (ex: forced sterilization, one-child policy, and etc.) **Aging Populations:**

- Young Populations: "Bottom heavy" pyramid aka "rapid growth" populations
- Causes of Rapid Growth: Decrease in crude death rate, improved health care, multiple factors of high fertility existing at once, and high numbers of especially rural to urban (remember rapid growth occurs during stages 2 and 3 of the DTM) - Economic Consequences: Job shortage, the perpetuation of low-wage jobs, income inequality, loss of traditional economic practices, lack of affordable housing in overcrowded cities - Social Consequences: Large family networks, educational needs, childcare, healthcare, food insecurity, and overcrowded cities - Political Consequences: Infrastructure presses, changing voting patterns, and political and social unrest - Environmental Consequences: Land stress, deforestation, and pollution and water contamination of soil, water, and air - Aging Populations: "Top heavy" pyramids aka "declining populations" - Causes of Aging Population: Birth rates fall below replacement rate, increased life expectancy, and

negative migration balance (young people moving out) - Economic Consequences: Labor shortages, the increased tax burden on working ages, increased poverty

among elderly, and concentration of wealth among fewer families - Social Consequences: Changing family structure, healthcare needs and costs, retirement systems, and

education - Political Consequences: Changing voting patterns and military service - Environmental Consequences: Reforestation (return to the natural state of abandoned areas), and urban

ruins **Causes of Migration:**

- Migration: The movement of people from place-to-place that redistributes the population (included in the

demographic equation) - Voluntary Migration: Has an element of choice based on some perceived opportunities (people tend to

move for job opportunities, as well as family links) - Push Factors: Circumstances that make a person want to **leave the** place of origin

- **S**ocial Push Factors: cultural issues, such as religious persecution or ethnic discrimination.
- **P**olitical Push Factors: violence such as war, opposition to taxes, oppressive governments, environmental restrictions, or any other law that would make a person living in that place want to move to a place with more favorable laws.
- **E**conomic Push Factors: state of the economy in the place of origin – job loss/high unemployment is a major factor in the decision to move to a new location with better economic opportunities – **economic factors are the most common reason people move.**
- **E**nvironmental Push Factors: flooding, hurricanes, earthquakes, or prolonged drought (some sort of natural disaster)
- **D**emographic Push Factors: Overcrowding is a major reason for migration, particularly as a country is going through the rural-to-urban transition. - Pull Factors: Perceived opportunities at destination (why a migrant would choose that destination)
  - **S**ocial Push Factors: good schools, active social scene, or family ties may be attractive reasons for someone to move to a new place.
  - **P**olitical Push Factors: Favorable laws in one place may attract people to move there.
  - **E**conomic Push Factors: the biggest reason why people move – the economic opportunities (better-paying jobs, lower-cost housing/cost of living, etc.) at the destination city are better than the ones in the place they are leaving.
  - **E**nvironmental Push Factors: where people move somewhere because the weather is nice, or because there is some kind of outdoor recreational activity they would like to participate
- **D**emographic Push Factors: The ratio of opportunities to population is low (meaning there are fewer people competing for the same jobs). - Where do they go: More likely a short distance, than a long-distance, and the further they move, the more

likely they are to move to a bigger city

- Gravity Model: Illustrates the "pull" on migrants – The closer one place is to another, the greater the "gravitational pull" of that place on migrants, and there will be movement of people between the two places.
- Inverse Relationship: between the number of migrants and the distance between cities - **the**

number of migrants declines as the distance they must travel increases.

● Distance Decay: The amount of movement (therefore interaction) between places decreases with distance (model applies to migration as well-people are much more likely to move to a close-by city than to a distant, far away, unknown city) - Intervening Opportunities: something that causes a person who is migrating to stop at a place between the place they left and the place they intended to go, such as a new job opportunity or lower-cost housing somewhere else. - Intervening Obstacles: something that blocks the person from reaching their destination, such as a policy

change restricting immigration. -

When/Who do People Migrate:

• Young, single adults are more mobile than families with children in school. The young adults make the move when they first leave their parents' home and before they have a family of their own.

• Young, single women are more likely to move within their same country (move to the cities to work in factories or retail)

• Young, single males are more likely to move internationally (across national boundaries)

• Families with children are unlikely to move internationally. -

Types of Migration:

● Cyclical Movement: Transhumance is the movement of animals from one pasture to another during different parts of the year, pastoral nomadism is purposeful and takes place along long-familiar routes pastoral nomads move their animal's long distances to water sources and pastures, and seasonal movement

● Activity Space: This is the daily cyclical movement of each person. It is centered around the home and includes places like school/work, the grocery store/gas station/other stores, friends' homes, etc.

● Commuting: Traveling between one's home and place of employment on a regular basis- Transportation networks are key to commuting movement

● Periodic Movement: Movement that occurs every so often, but doesn't necessarily involve returning to the same places (college/education, military service, and migrant labor)

● Intraregional (internal) Migration: Migration within the same geographic region (can be applied at different scales)

● Interregional Migration: Movement between two distinctive geographic regions

● Rural-to-Urban: Moving from rural (often agricultural based) regions to urban (city) areas

● Trans-National Migration: International migration (move from one country to another)

● Chain Migration: When migrants move along kinship links, there must be some reverse communication (people who have already moved encourage more people to follow them) and remittances come along with this communication, and it results in ethnic neighborhoods/communities

● Step Migration: Series of smaller moves that eventually add up to a long-distance migration

● Guest Workers: are international migrants who are granted temporary permissions to work in a country other than their home country.

● Forced Migration: the element of choice has been removed, and the person either moves as they are told or they face imprisonment or death.

● Refugees: Forced to leave their home country due to political, social, or environmental factors (fear of death or imprisonment if they do not leave)

● Internally Displaced Persons: Forced migration, relocate to a new location within the same country and do NOT have a refugee status

● Asylum Seekers: Someone seeking legal protections from another government (may qualify as a refugee, but status upon arrival and application is undetermined) **Effects of Migration:**

- Political Effects: Changing voting patterns, and changing immigration policies - Social Effects: Provision of services (ex: Syrian Refugees), and slums (rural-to-urban migration in China) - Economic Effects: Income disparity (ex: Chinese became merchants in Southeast Asia), filling jobs

(immigrants that move to get a job), interregional migration, and lack of jobs - Cultural Effects: Diffusion of cultural traits, counter migration (every migration stream has a

counter-migration), ethnic neighborhoods (ex: Chinatown, Little Italy, and Little Havana), political and cultural conflict (Vietnam migration), and cultural conflict (The Great Partition of Indian and Pakistan)

Unit 3

Cultural Landscape and Patterns:

- Carl Sauer: Coined the phrase "The Cultural Landscape" to describe how material expressions of culture appear on the landscape, fierce critic of environmental determinism (says culture change over time) (environmental determinism was the dominant school of thought (guiding thought) for the study of geography) - Cultural Landscape: Cultural landscape is the physical manifestation of human activity on the surface of the

earth (and beyond – i.e, space junk is part of the cultural landscape). When you see the imprint of human activity on the natural landscape, you are looking at a cultural landscape - Physical Landscape: The physical environment reflects the values of the culture - Human Features: Material and non-material features or trait are the identifiable elements of a culture, and it

can be organized into three components: artifacts, mentifacts, and sociofacts

● Artifacts: Tangible (can be touched/material items), objects (houses, clothing, and etc.), food, and technology (both computers and machinery)

● Mentifacts: Intangible, shared ideas, values, and beliefs of culture (religion, language, viewpoints, and ideas about right or wrong behavior)

● Sociofacts: Social norms, institutions (family structure, social structure, education structure, government structure, and religious structure) - Religious and Linguistic Characteristics: Language and religion are central to cultural identity, visible on

the landscape through symbols, culture is transmitted through communication, and language is necessary to communicate with others. - Sequent Occupancy: the notion that successive societies leave their cultural imprints on a place, each

contributing to the cumulative cultural landscape. -
Land-Use Patterns:

● Single: The land is being used for only one function – i.e., housing or farming or industry or retail.

● Mixed-use: The land is being used for a variety of functions – i.e., a building that has housing on the upper floors and retail shops, restaurants, and other businesses on the lower floors.

- The scale of Analysis: Think of Scale of Analysis for culture as being a set of Russian nesting dolls – the

smallest fits inside the next until all together they make one big

"culture"

- Cultural traits Are those individual identifiable elements of culture. Taken on their own, traits can only provide us with limited information about a particular culture. However, when we look at how culture traits connect, we gain greater insight into the overall character of the culture.
- Culture Complex: When two or more traits interact with each other. A culture complex is a group of traits that together make up a certain activity and influence the life of the person exhibiting those traits.
- Culture Complexes: A collection of cultural complexes creates a culture system.

● Culture Realms: The most "zoomed out" scale.– this is a very large area that contains a collection of culture systems – think global regions for the cultured realm – i.e., the Islamic World, Western Europe, North America, etc. - Sense of Place: based on perceptions – both of the people who are from that place and those from the

outside. The character of a place can be described by those characteristics that make it unique. People, especially locals/natives, will have a strong attachment to a place where they feel they belong. - Centri**p**etal Forces: are the forces that bind a people together and give them a sense of unity ("we are all one") (**Pull-in**) - Centri**f**ugal Forces; forces divide people (for example an "us vs. them" mentality) (**F**all out) - Ethnicity and Cultural Identity: State and feelings of belonging to a group with similar shared features. Our

cultural/ethnic identity shapes our:

- Attitudes: A settled way of thinking or feeling about someone or something typically one that is reflected in a person's behavior.
- Role of women in the workforce: Do women work outside of the home? What are a woman's responsibilities in society?
- Food preferences: Wheat bread or rice? What is our staple food of choice? (often shaped by our cultures, which in turn was influenced by what foods were able to grow in the place our cultures developed) Do we eat beef or not?
- Entertainment/recreation: What do we do for fun? Do we watch TV or do we get together with other members of the community and sing songs?
- Taboos: What is forbidden or frowned upon in different cultures? For example, in both Jewish and Islamic cultures, it is taboo (forbidden) to eat pork (pig). It is taboo in Hindu culture to eat beef.

● Ethnocentrism: Evaluation of other cultures according to preconceptions originating in the standards and customs of one's own culture. In other words – ethnocentrism is judging another culture (either contemporary or of the past) by your own cultural standards. - Patterns of use of Space in Society: Our cultures also determine how we organize and use space within our

communities, often based on our cultural
values.

- Gendered spaces: Separate spaces for males and females. It is common in our culture for places like restrooms, but what about larger spaces such as a library or coffee shop? Some cultures prefer to keep men and women separate unless they are related.
- Ethnic neighborhoods/ethnic islands: Ethnic neighborhoods are communities within a larger urban area, while ethnic islands are ethnic communities in more rural areas. Either way, ethnic neighborhoods/ethnic islands form because people, in general, prefer to live around others who are like them. Most of these communities form voluntarily as the result of chain migration

● Indigenous communities and lands: Indigenous peoples are the natives of a location. - Globalization:

The process of interaction and integration among people, companies, and governments worldwide. - The Good of globalization: More interaction means more opportunities to share and exchange ideas, trade, and improve the lives of people.

- The negatives of globalization: Loss of traditional ways of life and cultures – with interaction comes from the spread of culture. More dominant cultures tend to take over the less dominant ones, which can result in a loss of tradition and way of life, including languages, religions, economic practices, and social structures.

Historical Causes of Diffusion:

- Cultural Hearths: an area where cultural traits develop and from which cultural traits diffuse (spread). - Language Hearths: Difficult to trace to a specific place of origin, spoken language dates back to very first humans, and written language developed in the earliest civilizations - Innovation: new methods, ideas, or products – develop in a hearth. From that hearth, they diffuse to other places (Independent innovation- a trait can be traced back to multiple hearths where it developed independently of other places) - Types of Diffusion: Two types of diffusion: relocation and expansion - Relocation Diffusion: Innovations/culture are diffused because a person **physically** moves from one place to another, and the number of people practicing the cultural trait remains the same. It is caused by migration, and the number of people exhibiting cultural traits remains unchanged - Expansion Diffusion: The number of people who have **adopted** the cultural trait increases. Expansion diffusion occurs as a result of cultural convergence. The number of people exhibiting cultural traits increases through cultural convergence. There are 3 types of expansion diffusion:

- Contagious Diffusion: Occurs due to direct contact/sharing from person to person
- Hierarchical Diffusion: Spread of cultural traits through a place or person with power (large cities, kings and queens, celebrities, and media sources), and it has a "top-down" spread of innovations.
- Stimulus Diffusion: Idea is adopted in a new location, and the idea is changed to reflect local culture (ex: McDonald's is different in every country based off of cultural/religious taboos, such as there are no hamburgers in India because eating beef in the Hindu culture is not allowed) - Historical Causes of Diffusion:
  - Colonization: European colonization of the Americas resulted in the spread of European culture was first the result of relocation diffusion – the colonists/settlers physically relocated to the new continent.
  - The Columbian Exchange: The Columbian exchange marked the first time that the world (and cultural exchange) was true "Global" – before it was blocked by oceans, but technology (boats and the ability of sailors to measure longitude for navigation purposes across the ocean) made world travel and cultural exchange a possibility.
  - Imperialism: a policy or ideology of extending a nation's rule over foreign nations, often by military force or by gaining political and economic control of other areas that already had an existing political, economic, and social structure (nations).
  - Trade Routes: Connected people from different places, and led to cultural diffusion - Effects of Historical Diffusion:
  - Mercantilism: the economic theory that trade generates wealth and is stimulated by the accumulation of profitable balances, which a government should encourage by means of protectionism.
  - Development of "core and periphery" countries: A core country is one that manufactures the

products and sells the product, and a periphery country is one that produces the raw materials for the product (ex: cotton was produced in many countries in Africa which were considered periphery countries, and the cotton was manufactured into products in Europe and America which are considered core countries)

● Dependency Theory: maintains that the core countries are dependent on the periphery countries for the raw materials, and by necessity, the Core countries kept the periphery countries dependent on them as a market for their raw materials.

● Creolization: the blending of distinctive cultures, particularly those based around plantation agriculture and slavery - Lingua Francas: came to mean a 3rd language used by two people who speak different languages in order to communicate (especially to conduct business), and examples include Swahili, English, French, and Esperanto

Contemporary Causes of Diffusion:

- Urbanization: Cities are cultural hearths (popular culture), influence TV, movie, and radio media, and it is a hierarchical diffusion - Globalization: **Economic globalization** is the process by which businesses or other organizations develop international influence or start operating across multiple countries – most major corporations are global by necessity – products are designed in one (or more) country, raw materials are sourced in varying countries, manufacturing takes place in other countries, and the final product is assembled in yet another country, and then it's all shipped to the stores to be sold (also multiple countries). **Cultural globalization** refers to the transmission of ideas, meanings, and values around the world in such a way as to extend and intensify social relations. - Time-Space Convergence: Removes the barrier of distance, acceleration of diffusion, and reshapes interaction between places - Communication Technology: Telegraphs, phones, mobile phones, and internet - Effects of Contemporary Diffusion:

● Cultural Convergence: means the interactions of multiple cultures – whether they mean to or not, two people from different cultures interacting with each other will transmit something of their culture to the other person – even if it is just a perception of the place the other comes from (ex: pidgin languages)

● Cultural Divergence: results from isolation – all cultures shift and change over time, and if one group is isolated from others, these changes will look different in the different cultures. - Pervasive Popular Culture: Popular culture is fast culture – it is whatever trend is popular at the moment. It's designed to be mass-produced, sold for profit, and consumed before moving on to the next "it" thing. - Folk/indigenous/local culture: By contrast, folk culture is long-lasting and carries generation to generation. It is based around tradition. - Changing Cultural Patterns: Many cultural/traditional practices have been changed due to media influence and urban culture. Social media has also changed the way diffusion occurs, which has led to social and - political revolutions in several places. - Loss of Indigenous Culture: More culturally homogenous, decreased isolation, and disinfection of traditional cultures

Diffusion of Language:

- The Language Tree: an illustration of how varying religions are related (language family, language branch, language, and dialect) - Language: Is the words, their pronunciation, and the methods of combining them used and understood by a community/society. Language branches are a group of closely related languages. - Dialect: a particular form of a language which is peculiar to a specific region or social group. Dialects have

their own sets of diction and syntax but are almost always mutually intelligible because they are the same language – the words, spellings, and idioms - Pidgins and Creoles: Simplified mixture of multiple languages, Pidgins have no native speakers, and

Creoles began as Pidgins but became the first language for that place. - Tracing diffusion of Language: Backwards construction (sound shifts, cognates, and toponyms) - Soundshifts: the result of cultural divergence – it is a systematic change in the pronunciation of a set of

speech sounds as a language
evolves.

- Cognate: Means having the same linguistic derivation as another –that words in different languages are

derived from the same original word or root. - Toponyms: Are place names, linguists use place names to trace the occupancy of different regions across

space to track the spread of a language. - Diffusion of language families: Language hearths, and there are two theories of diffusion, the conquest

theory, and Renfrew hypothesis - Conquest Theory: when a person or a group of people take control of an area and make everyone in that

area follow their rules and beliefs. - Renfrew Hypothesis: the theory of language dispersal in which the Indo-European languages spread out of

their theorized hearth (still Anatolia) into Europe and South/Westward into Asia with the outward movement of sedentary farmers from the Fertile Crescent (the earliest agricultural hearth). - Barriers to Diffusion of Language: Some countries are very strict about their language and other countries

using the same language as them. - Modern
Day Distribution of Languages:

- Migration and Legacy of Colonialism: Relocation and hierarchical diffusion, contagious diffusion through business and trade, and printing press
- Contemporary Diffusion: Availability of language-learning software and learning 2nd languages in school (hierarchical), TV/Media, and internet - Impact of Language in Culture:
- Standard Language: is one that has been codified for standard grammar, spelling, and usage.
- Official Language: is a language given a special legal status in a particular country, state, or other jurisdiction.
- Vernacular Language: is also known as regional slang – it is the speech variety used in everyday life by the general population in a geographical or social territory - Linguistic Conflicts: Quebec because it is the French-speaking region of Canada, and Belgium because

there are two areas Flanders and Wallonia and they speak different languages but they speak different languages **Effects of Diffusion:**

- Changing Cultures: People of different cultures interact (cultural convergence), and it results in:
- Assimilation: Complete adoption of the more dominant culture
- Acculturation: Some aspects of original culture remains (adopts enough of the dominant culture to participate in society)
- Multiculturalism: Multiple culture groups occupy the same geographic area
- Transculturalism: Transmission across cultures
- Syncretism: Combination of separate concepts into one new, unique idea. - Fundamentalism:

fundamentalism refers to the belief in the absolute authority of a sacred religious text or teachings of a particular religious leader, prophet, and/ or God. - Religious Extremism: Fundamentalism to the point of violence, and terrorism for political goals (increased authority of religious)

Unit 4

Political Patterns and Processes:

- Independent State: A state is a country, and sovereignty is the authority of a state to govern itself - Centripetal: Uniting this can happen throughout all the people Uit the whole country OR centripetal forces can happen within distinctive nations within a country.
- Centrifugal: Within a country creates division – these divisions become even more critical when there is a regional geographic separation between divided groups. - Political Entities: are basically systems of governing authority organized as governmental power structures.

The basic political "unit" is an independent state.

- Nations: Group of people bonded by heritage/history, language, religion, ethnicity, tie to culturally significantly geographic location (The nation is the people, while the state is the political entity)
- Nation-States: a state in which the great majority shares the same nationality/ethnicity and is conscious of it.
- Stateless Nation: a nation (people) without their own political entity (state)
- Multinational States: Multiple nations within a single state (ex: Canada, Belgium, Spain, and United Kingdom)
- Multi-state Nations: A single nation spread across multiple states (ex: North and South Korea) - Self-Determination: means the process by which a country determines its own statehood and forms its own allegiances and government. - Autonomous/Semi-Autonomous Regions: An autonomous region is a subdivision or dependent territory of a country that has a degree of self-governance, or autonomy, from external authority, in this case, the larger state. Semi-autonomous regions have partial local control but are still subject to the laws of the central government. - Colonialism and Imperialism: Governments are under the sovereignty of a foreign power (the mother country) - Independence Movements: Portion of the state breaks off and declares independence and often results in war

Political Power and Territory:

- Political Power: In government, authority is often used interchangeably with power. However, their meanings differ: while power is the ability to order or accomplish a goal or to influence others, authority refers to a claim of legitimacy, the justification, and the right to exercise that power. - Control over people: Authority to govern- participatory governments include a democracy, republic, and constitutional monarchy, and authoritative governments include a dictatorship, totalitarian dictatorship, and

absolute monarchy - Control over Territory: Also means control over the resources located on that territory (minerals, metals,

fertile soil, water, fish, and etc) -
Example of Political Power:

- Sovereignty and the Independent States: The authority of a state to govern itself or another state
- Neocolonialism: The use of economic, political, cultural, or other pressures to control or influence other countries, especially former colonies (economic dependent or political protectorates)
- Shelterbelts: An area that lies between two powerful spheres of influence (i.e the West and East). A satellite state is a country that is formally independent in the world, but under heavy political, economic, and military control or influence from another country.

● Choke Points: A narrow crossing by water (straights, canals, etc.) or by land (mountain pass) which is easily controlled by military standpoint- control of these strategic locations can interrupt international trade or block military troops from passing through (ex: The Strait of Gibraltar, Turkish Straits, Panama Canal, Strait of Hormuz, and etc.) - Territoriality: The end of the Feudal System, the rise of modern Nation-States, and the diffusion of the

European Model - Connection of People and Culture to the Lands: Nations are tied to the land – the group has a historical

connection to it, which includes the belief that that particular piece of land belongs to that particular group of people (emotional ties, historical occupation, and economic dependency)
- Connection of Economic Systems to the Land: Control of natural resources is a significant part of the concept of territoriality, especially if the nation depends on those resources for their economic viability (resources and traditional occupations) - Types of Political Boundaries: Boundaries can be determined in a number of ways. They are drawn based on the decisions of outside forces without regard to the existing national patterns that exist in the real world. ● Geometric Boundaries: Based on latitude/longitude or another coordinate system, are “straight”

lines on the map (ex: Canada and US border)

- Antecedent Boundaries: Boundaries set before an area is populated, mostly geometric or physical landmarks, and set BEFORE the area was settled (ex: most of the western portion of the US)
- Subsequent Boundaries: Developed “organically” as a result of a nation occupying a territory, state boundaries evolve over the time as the cultural landscape takes shape, long process of adjustments, and typically follow ethno-national boundaries (ex: Great Britain- England, Scotland, and Wales)
- Consequent boundaries: Drawn after an area is already populated, but take into regard the existing ethno-national/cultural patterns that exist. These boundaries are different from subsequent boundaries. Subsequent boundaries occur “organically” where there was an existing divide between states as the states’ boundaries were formalized over a long period of time, while consequent boundaries are created was no political boundary existed before.
- Superimposed Boundaries: Drawn and enforced by outside powers without regards to existing cultural/ethno-national patterns (ex: the scramble for Africa)

● Relic Boundaries: they are boundaries that used to exist but no longer do. They are typically still visible on the cultural landscape (ex: Vietnam DMZ, Great Wall of China, and Brandenburg Gate) **Political Boundaries:**

- The function of International Political Boundaries: They clarify a state’s claims to territory, control access

to that territory, and contribute to the national identity. - Defined Boundaries: Two political entities define the boundary between them (treaty/agreement), and the

location is decided based on physical landmarks and geometric (coordinates) - Delimited Boundaries: Boundaries are defined by political agreement (usually treaties). These boundaries

are then delimited on a map (a line is drawn on the map) by cartographers to create a border. - Demarcated Boundary: a boundary that has physically been marked onto the surface of the earth. - Administered/Operational: Border administration agreements determine who/what is allowed to cross the

boundary and what documentation or fees need to be paid to do so. - Contested Borders: Contested borders occur when the political entities involved do not agree on the

definition, demarcation, or operations of the boundary between their respective territories. - Enforced Boundaries: Sometimes the boundaries of states may be enforced by outside parties. - Impact of Political Boundaries:

- Influence of National/Regional Identity: National identity is a person's identity or sense of belonging to one state or to one nation. Having defined borders and a recognized territory helps give the nation a sense of cohesiveness and contributes to this identity. Other political acts that contribute to national identity include independence day celebrations, voting, anthems, flags, and pledges.
- Encourage/discourage interactions: Inclusionary borders encourage interaction between adjacent states. The border crossings on the left are inclusionary. There is little to no attempt to impede entrance into the state from the adjacent state.

● Disputes over Resources: Disputes over resources occur most often when the resource is a fluid – water, oil, or natural gas deposits. The plane of the border extends below the surface of the earth and above it into the airspace.

Forms of Governance:

- Federal States: Division of power between local governments and central government. Federal states have a

hierarchical government structure, and they have dispersed central powers meaning the central government takes actions for the whole country (declare war, coin money, etc) whereas the local government takes actions for local necessities (build roads, public safety, etc.) (ex: United States, Mexico, and Germany) - Unitary States: a system of political organization with a central supreme government that holds the

authority over and makes the decisions for subordinate local governments. (ex: the United Kingdom

and China) ● Positives: Centripetal impact of strong government and national identity, the efficiency of

implementing laws/government services, efficiency if disaster response, and fewer tax/government agencies

● Negatives: Disconnect between the central government and some regions, the domination of politics by predominated culture/ethnic group, and possible slow response to local issues - The confederate system; Strong local governments, and limited power in central governments (opposite of

federal states) (ex: Switzerland and European Union) - Internal Political Boundaries: An administrative division, unit, entity, area or region, is a portion of a

country or other region set for the purpose of administration (ex: counties in the US have the duty to appraise property values, collect taxes, provide services such as welfare and healthcare to citizens) - Reapportionment: the redistribution of seats in the House of Representatives that occurs following each

census. - Redistricting: the process of drawing electoral district boundaries in the United States. - Gerrymandering: A practice intended to establish a political advantage for a particular party or group by manipulating district boundaries. The political growth that draws the lines tries to draw them to their advantage

for future elections. **Devolutionary Forces:**

- Devolution: the transfer of power from the central government to local governments. Devolution is the decentralization of the state's central government. It typically involves the peaceful transfer of political power to subnational governments, though, throughout history, violent conflicts have occurred in the process. - Devolutionary Forces: There are a number of factors that create a push for devolution of a central government

    - Physical Geography: Isolate areas and make it difficult for areas to feel incorporated into the core of the country. Barriers to diffusion such as mountain or bodies of water can also lead to cultures much different from the rest of the country in the more isolated places (ex: Basques and Spain)
    - Political Ecology: the study of the relationships between political, economic, and social factors with environmental issues and changes. Political ecology involves government policies in regard to natural resources or response to pollution (ex: Dakota Access Pipeline)
    - Ethnic Separation: a form of nationalism in which nations are defined by a shared heritage, which usually includes a common language, common faith and common ethnic ancestry (ex: Quebec)
    - Ethnic Cleansing: the systematic forced removal of ethnic, racial and/or religious groups from a given territory by a more powerful ethnic group, often with the intent of making the territory more ethnically homogeneous (ex: Yugoslavia)
    - Genocide: the deliberate killing of a large group of people, especially those of a particular ethnic group or nation. Genocide is considered a war crime by the United Nations, but those killed are civilians (ex: WW2)
    - Terrorism: the unlawful use of force and violence against persons or property to intimidate or coerce a government, the civilian population, or any segment thereof, in furtherance of political or social objectives (ex: Basques in Spain)
    - Economic Division: Uneven economic development can cause political problems in a state and have influences on devolution (ex: Belgium)
    - Social Divisions: The major examples of social inequality include income gap, gender inequality, health care, and social class. Social divisions are the result of institutions of oppression, which is the systematic mistreatment of people within a social identity group, supported and enforced by the society and its institutions, solely based on the person's membership in the social identity group (ex: The civil war)

- Irredentism: occurs when members of an ethnic group wish to be reunited with members of another ethnic/linguistic group on the opposite side of a political border. - Results of Diffusion: Fragmentation into autonomous/semi-autonomous regions (ex: Spain, Canada, Nigeria, and Belgium), the disintegration of states (failed states, formation of newly independent states, and ex: Eritrea, South Sudan, and East Timor) **Challenges to Governance:**

- State Morphology: the study of how the shape of a country can affect its culture, politics, economy, and overall well being. Shapes aren't always something we think about when considering why states act the ways they do, but there's actually a lot to be said about the geometry of the human world.

    - Compact: Altogether, and usually looks circle like (ex: Cambodia)
    - Protruded: Compacted but then it has a long piece sticking out (ex: Thailand)
    - Perforated: Country that has a hole in the middle (ex: South Africa)
    - Fragmented: Multiple islands that makeup one country (ex: Philippines)

● Elongated: A country that is long (ex: Vietnam) - Technological Change: Changes to technology forced people to change their view of territory and power. - Benefits: Expandability to control territory, movement of goods, effective communication, and increased

involvement in global politics and conflicts - Challenges: Increased movement of people, increased interactions with other states, and increased

involvement in global politics and conflicts - Globalization and Trans-National Corporations: globalization refers to the process by which businesses or

other organizations develop international influence or start operating on an international scale.Transnational corporation is any enterprise that undertakes foreign direct investment, owns or controls income-gathering assets in more than one country, produces goods or services outside its country of origin, or engages in international production - Supranationalism: defined as the transfer of power from the national to the supranational level, leading to increased dependence on foreign political partners and increased social and cultural exchange (ex: United Nations, European Union, African Union, World Trade Organization, Arctic Council, and NATO) - The Domino Theory: a geopolitical theory that posits that a political event in one country will cause similar

events in neighboring countries, like a falling domino causing an entire row of upended dominoes to fall (goal is containment). - Shelterbelt: a region caught between stronger colliding external cultural-political forces, under persistent

stress and often fragmented by aggressive rivals (conflict: Vietnam War, Korea, and Afghanistan)

Consequences of Centripetal and Centrifugal Forces:

- Consequences of Centripetal Forces: Promoting cultural cohesion and more equitable infrastructure

development - Nationalism: is the identification with one's own nation and support for its interests. It is a strong binding

force within a group With ethnonationalism, the nation is created by a shared ethnic and/or cultural identity. Civic nationalism, on the other hand, is a political identity built around shared citizenship within the state. - Consequences of Centrifugal Forces: Primate city (negative), uneven economic development, and stateless

nations - Balkanization: a geopolitical term for the process of fragmentation or division of a region or state into

smaller regions or states that are often hostile or uncooperative with one another (mutually-warring factions).

Unit 5

Agriculture, Settlement Patterns, and Survey Methods:

- Physical Geographic Patterns: Every continent has a variety of landforms. Some landforms are more

suitable for farming/agriculture than others and some are more suited to one type of agriculture compared to others. - Climate Regions: Climate regions are zones of the earth’s surface with distinctive/predictable patterns of

temperature and
precipitation.

- Tropical Climate: Zone is characterized by warm temperatures year-round and abundant (high amounts) of precipitation (ex: South America, Central Africa, and Southeast Asia)
- Desert Climate: Arid (dry) – they receive very little rainfall. The major deserts of the world are located on either side of the tropical zone (ex: Sahara)
- Polar/Tundra: Zones are cold year-round. The ground is typically frozen or covered with ice/snow for a majority of the year. This zone is not suitable for agriculture (ex: Antarctica)

- Temperate: Zone, (also referred to as the "mid-latitudes") is the region of the earth located between the polar zone (frigid) and the "torrid" zone (hot – tropics and deserts, and the long-summer, short winter subtropical zones) (ex: China) - Commercial vs. Subsistence Farming: Commercial farming is a type of farming in which crops are grown

for profit/sale only, whereas Subsistence agriculture occurs when farmers grow food crops to feed themselves and their families. - Intensive Farming/Agriculture: a type of agriculture with higher levels of input and output per cubic unit of

agricultural land area. The inputs are high in intensive farming. The farmers invest a lot in terms of inputs in order to maximize their output. With intensive farming, the amount of food produced per unit of land is high. - Market Gardening: the term used to describe the commercial production of vegetables, fruits, flowers and

other plants on a scale larger than home gardening, but smaller scale than huge corporate farms. Market gardens typically grow food for nearby cities as the product is perishable in its raw form and needs to be sold and consumed quickly. - Plantation Agriculture: an intensive form of commercial farming where crops are grown for profit. Large

amounts of capital investment (money) are needed to start a plantation. Large land areas are needed, as well as machinery or an inexpensive labor force in order to maximize profits.

- Mixed crop/livestock Systems: A typical mixed crop and livestock farm devotes nearly all land area to

grow crops but derives more than three-fourths of its income from the sale of animal products, such as beef, milk, and eggs. - Intercropping: Intercropping is a multiple cropping practice involving growing two or more crops in close

proximity. - Intertillage: a subsistence agricultural practice, commonly used in slash & burn agriculture, which spreads

out production over the farming season by planting different crops in the field. - Extensive Farming: an agricultural production system that uses small inputs of labor, fertilizers, and capital,

relative to the land area being farmed (ex: ranching, grazing animals, and nomadic herding) - Shifting Cultivation; a form of agriculture, used especially in tropical Africa, South America, and Southeast Asia, in which an area of ground is cleared of vegetation and cultivated for a few years and then abandoned for a new area until its fertility has been naturally restored. - Nomadic Herding: sometimes referred to as pastoral nomadism, is the practice of caring for roaming groups

of livestock over a large area. - Ranching: an area of land, including various structures, given primarily to the practice of ranching, the

practice of raising grazing livestock such as cattle or sheep for meat or wool. - Classification of Rural Settlements: Where people farm, they need a place to live. However, these

settlements differ greatly from urban settlements in that there are often little more than a few houses scattered across the horizon or clustered into a group surrounded by farmland.

- Clustered Settlements: is an agricultural- based community in which a number of families. live in close proximity to each other, with fields. surrounding the collection of houses and farms.

● Linear Settlements: are a group of buildings that are formed in a long line. Many follow a transport route, such as a road, river, or canal.

● Dispersed Settlements: also known as a scattered settlement, is one of the main types of settlement patterns used by landscape historians to classify rural settlements found in England, the US, and other parts of the world. - Rural Survey Methods: also known as a scattered settlement, is one of the main types of settlement patterns

used by landscape historians to classify rural settlements found in England, the US, and other parts of the world. ● Metes and Bounds: Surveying system uses landmarks including rivers, roads, stakes, or other such

natural or manmade markers. Metes and bounds descriptions are typically used whenever land survey areas are irregularly sized and/or shaped, so that the boundaries of the property can be more clearly defined.

● Township and Range System: also known as the Public Land Survey System, is the surveying method developed and used in the United States to plat, or divide, real property for sale and settling.

● Long Lots: Creates linear settlement patterns which are long and thin usually along a river.

Agriculture Diffusions and Origins:

- Domestication of Plants and Animals: Like language, the origins of agriculture are difficult to trace because they predate written records.The first agricultural revolution, known as the Neolithic Revolution was the wide-scale transition of many human cultures during the Neolithic (New Stone Age) period from a lifestyle of hunting and gathering to one of agriculture and settlement. - Root Propagation: means growing a new plant from a piece of the old plant. This is also known as

Vegetative propagation. - Hearth of Agriculture: Fertile Crescent (Anatolia/Mesopotamia), Indus River Valley, Southeast Asia, and

Central America
(Mesoamerica)

- Diffusion of Agriculture: Contagious diffusion, relocation diffusion, Columbian Exchange, crops and animals from old world to America, diffused to countries with the same climate, and the influence of the industrial revolution

The Second Agricultural Revolution:

- Impact of the Columbian Exchange: Disease (smallpox wiped out 90% of the African and Native population), War, new foods and animals, and cash crops (tobacco) - New Technology: Having free time is necessary for inventing. The abundant food supply that resulted from

the Columbian Exchange provided the time needed for people to experiment with new techniques and develop new technology that in turn led to an even greater surplus of food (ex: Tractors, steel plow, etc.) - Enclosure Movement: was a system of private ownership of land in European kingdoms that began in the 14th century. By the 18th and 19th centuries there was push by those with the means to take land that had formerly been owned in common by all members of a village, or was at least available to the public for grazing animals and growing food, and change it to privately owned land. - Crop Rotation: the practice of growing a series of dissimilar or different types of crops in the same area in

sequenced seasons. It is done so that the soil of farms is not used for only one set of nutrients. - Improved Transportation and Infrastructure: Improvements in Agriculture made it possible to have a

surplus of food – and improvements in transportation and infrastructure made it possible for food to be grown in locations far from where they were sold, purchased, and consumed. - New Energy Sources: Water power and wind power became huge during this time especially because of the

citizens trying to save power (ex: the steam engine and tractors) - Impacts of the Second Agricultural Revolution: The Agricultural revolution led to better diets, which led to

a longer life expectancy (and drop in the infant mortality rate), which led to rapid population growth (later part of stage 2, early stage 3 on DTM – circled in red above).

Von Thunen Model:

- Assumptions of the Von Thunen Model: Models are a simplification of the real world. There will not be

ANY one place that perfectly fits the model, as models are not reality.

- Farmers are working for maximum profit
- One city=one marketplace urban profit
- Land is relatively flat and of equal quality in all directions from the market
- Transportation costs are fixed - Key

Components to the Von Thunen Model:

- Transportation costs: The most important factor of any economic geography model is transportation costs. If transportation costs are high, being close to the market is vital if you are moving a perishable or heavy item or need to get somewhere quickly. In the von Thünen model, it is assumed that there is only one mode of transportation and that the cost is fixed – therefore, the further you are from the market, the higher the cost of transportation will be.
- Land Costs: Land costs are assumed to decrease at a constant predictable rate with distance from the market. This means that land near the market will be the most expensive, while the land furthest from the market will be the least expensive. This is known as the bid-rent or land-rent curve.

● Distance from market: von Thünen theorized that farmers seeking to maximize their profits will locate their agricultural activity in the most ideal location – the point where land rent and transportation costs are optimized – the point where each is the lowest it can possibly be without causing the other to be excessively high. The balancing point. - Market: The market is the place where people exchange money for goods (products) or services – it is a

cluster of stores, bakeries, blacksmith shops, etc In the von Thunen model, the market is assumed to be at the center of the settlement. (CENTER OF THE RING)

- Market Garden: is basically the “garden” for the urban center – this is where the perishable products are

produced. Agricultural goods such as fruits and vegetables, eggs, and milk are grown in the market garden. The market garden is the first ring of the von Thunen model- fruits and vegetables (known as horticulture) and dairy are located in this zone (FIRST RING) - Forestry: The 2nd ring of von Thünen is the forestry ring. Trees are grown for harvest and sale as wood is

the primary fuel used to heat homes and cook at the time. Wood is very heavy, and a constant supply is needed (SECOND RING) - Grains: Unlike the market garden, cereal grains tend to be harvested just once per year. Cereal grains (aka

“field grains” or just “grains). As grains also take a large amount of land to grow, the farmer will move out away from the market in order to pay less for the land. These crops are not perishable, however, and are meant to be stored for a long time after drying and processing (THIRD RING) - Grazing Animals: Grazing animals is the most extensive agricultural land use in this model (with market

gardening being the most intensive and forestry and cereal grains falling in the middle of the spectrum)

(FOURTH RING/LAST RING) - Exceptions to the Von Thunen Model:

- Farmers do not always make decisions based on profits
- Specialty Farming (Horticulture, pumpkins, pine trees, and etc.)
- Luxury Products (coffee, tobacco, and etc.)
- Impact of transportation technology (railroad, interstate highway system, and etc)
- Impact of refrigeration

Spatial Organization of Agriculture:

- Large-Scale Agricultural Operations: There was a shift from small family farms to large commercial farms (reduction in the number of small family farms, corporate farming, and agribusiness) - Agrarian Capitalism: A mode of production in which the form of production vary according to the internal distribution of property rights (how land is divided and owned) and market involvement. - Reduction in the number of Farms: Under the consolidation of small farms into large commercial farms, the amount of land under cultivation did NOT decrease. Instead, the many small farms were consolidated into a single large farm under a single owner. - Corporate Farming: is the practice of large-scale agriculture on farms owned or greatly influenced by large companies. Corporate farms don't just grow food and sell it – the business is responsible for selling off agricultural products, but the company also participate in/influence agricultural education, research, and public policy through funding initiatives and lobbying efforts. - Agribusiness: Commercial agriculture is more than just growing and selling food. There is a whole segment of the economy that involves all the component parts of making commercial agriculture function. This collection of businesses/economic activity that involves agriculture is known as Agribusiness or business-related to agriculture. - Commodity Chains: is a process used by firms (businesses/companies) to gather resources, transform them into goods or commodities, and finally, distribute them to consumers. It is a series of links connecting the many places of production and distribution and resulting in a commodity that is then exchanged on the world market (commodity is a raw material) - Positives Consequences of Technological Change: Increased yield, improved carrying capacity, and economies of scale - Negatives Consequences of Technological Change: Soil degradation, salinization, runoff pollution, and unintended consequences

The Green Revolution:

- Commercial Agriculture: Large scale farming and ranching operations that employ vast tracts of land, large mechanized equipment, factory type labor forces, and the latest technology

- Agribusiness: is a trend where large corporations buy and control many different steps in a food processing industry. The term "agribusiness" is an encompassing term for a business that provides a vast array of goods and services to support the agricultural industry. - Commodity Chains: A network of labor and production processes beginning with the extraction or production of raw materials and ending with the delivery of a finished commodity

- 1. Inputs - what goes into the field – labor, pesticides, chemicals, seeds, etc.
- 2. Production - what comes off the field: produce or animal products
- 3. Processing – preserving produce through canning or freezing or making a processed food with the raw food materials (i.e., boxed Mac and cheese)

- 4. Distribution – the transportation of food from the processing facility to the grocery stores or restaurants (it's a multi-step process involving warehouses and various modes of transportation)
- 5. Consumption – begins when the food is bought by the consumers. -

Effects of Commercial Agriculture and Agribusiness on small family farms:

- Farmers have guaranteed market and assured prices as long as their product is uniform and they meet the delivery timeline of the processor
- Poor farmers are unable to afford the investment needed for the crops and are unable to keep up since they can't produce as much
- Family farms enter into contracts to produce for larger corporations- this is often the only way they can stay in the business as they cannot compete against corporate farmers - Effect of Commercial Agriculture and Agribusiness on Cultivation Regions:
- Multi-cropping is replaced with monoculture
- The land is cleared and vegetation is lost in areas to facilitate agriculture and trade
- Erosion can be a problem as well as increased use of chemicals in the soil
- Due to the movement towards commercial agriculture monoculture farming, there is a loss of food security as there is no longer a variety of crops for the local farmers - Global Supply Chain: The supply chain consists of continuous buying and selling of goods and services.

The supply chain covers all the steps it to get a good/service from the supplier to the consumer. - Economies of Scale: The more units you produce, the cheaper each unit costs to produce - Factory Farms: Focus on raising the maximum number of animals possible on a given piece of land - Feedlot: Larger commercially raised animals such as cattle and hogs often go to a feedlot before they are sold. At a feedlot, animals are fed so that they can recover from their transportation from farm/ranch with the goal of reaching the maximum weight possible before being sold.

Agricultural Production Regions

- Subsistence Farming: occurs when farmers grow food crops to meet the needs off themselves and their families. - Nomadic Hunters: are in the far northern parts of North America and Asia (The tundra regions mostly, with some extending into more temperate climate zones) - Nomadic Herding: is mostly found across the dry span of Northern Africa, the Middle East, and Central Asia - Extensive Subsistence: is mostly found in tropical regions and typically includes slash and burn/swidden/shifting cultivation. Remember, this type of agriculture requires a large amount of land because the land loses its fertility very quickly, so the amount of food produced off the total amount of land needed is very low - Intensive Subsistence: is mostly found in South Asia and Southeast Asia. The most commonly grown crop on these subsistence farms is wet rice. - Commercial agriculture: is a large-scale production of crops for sale, intended for widespread distribution to wholesalers or retail outlets.
- Plantation agriculture: is found mostly in tropical regions as well – tea, sugar, rubber, palm, coffee, banana, and most other crops suitable for this type of agriculture require a tropical climate, making it most likely to take place in tropical regions. - Pastoral: commercial agriculture is much different than subsistence nomadic herding. In commercial pastoral ag, the agricultural products being produced are grazing animals. These operations are much larger and

have many more animals and set property limits upon which those animals can graze (compared to open grazing land and fewer animals with subsistence nomadic herding) - Grain (commercial grain): farming has very high inputs: fertilizers, pesticides, heavy machinery, processing

equipment, etc. The grain is then stored in grain elevators (grain storage facilities) until it is sold. - Intensive commercial agriculture: It is where you find your market gardens – tomatoes, potatoes, lettuce,

strawberries, grapes, etc. - Mediterranean agriculture: in Mediterranean regions, commercial agriculture exists alongside commercial

agriculture. Many crops such as wheat, barley and vegetables are raised for domestic consumption, while others like citrus fruits, olives, and grapes are mainly for export. - Value-added specialty crops: Adding value to the agricultural products through processing (milling flour or

making jelly/jam), marketing (branding and advertising), and using methods that command a higher price (organic farming) - Monocropping/monoculture: is the cultivation of a single crop in a given area – this means that an entire plantation may be devoted to only ONE crop – and sometimes the vast majority of agriculture in a given place (especially small countries) may be devoted to growing that one crop. - Plantation Agriculture: a form of commercial farming where crops are grown for profit. Large land areas

are needed for this type of agriculture. Countries that have plantation agriculture usually experience tropical climate with high annual temperatures and receive high annual rainfall (ex: Coffee, rubber, cotton, and etc) - Global Commodity Chains: The global commodity chains for agriculture include all the steps from the farmer (and often before – the companies that supply the farmers with seeds and the inputs (fertilizer and pesticide) have commodity chains of their own) to the consumer – there are MANY steps along the process, and each step is a link in the chain. **The Global System of Agriculture:** - Benefits of a Global Supply Chain:

- 1. Lower Costs- While it's important to factor in things like freight costs and shipping time, the cost savings from purchasing goods from other countries can be significant.
- 2. Greater Variety- Different foods grow in different parts of the world. The desire for variety was what inspired the explorers to set off to new locations (i.e., the silk road, the Indian Ocean trade routes, European exploration, etc.)
- 3. Broader Perspective on Business- Businesses that operate in multiple nations learn from each other to improve their practices (more on this in our Industry unit)
- 4. Higher Volume – more produced
- 5. International Customers – more markets - Export Commodity: is a raw material or agricultural product that is produced and sold primarily for export

to another country. - Commodity Exporters: include countries with large deposits of natural resources or large amounts of

farmland. Sometimes, the country has populations too small to use all their own resources. - Political Relationships: Influence how food moves between countries. Member nations of the United

Nations have attempted to work together to provide aid with high food insecurity due to extreme poverty, war, natural disasters, famine, or other conditions. - Boycott: is a case where a country refuses to trade with or accept imports from another country

- Embargo: Is a government order that completely restricts commerce with a specified country or the

exchange of specific goods. - Trade/Economic Sanctions: are similar to embargos, but are usually partial bans on trade or targeted toward specific goods or transactions that are meant to coerce the elite or leaders of a country to cooperate with international law/UN resolutions - Trade Deals: Exports are crucial providing a market for a major share of crop production and a growing

share of meat output. - Free Trade: Are agreements between countries that remove any import tariffs on products traded between

the two countries – this gives the country with the ability to produce the product for the lowest cost the advantage in the market between the two countries. - Challenges of Feeding a Growing Population:

- Food Security: Means that the state of having reliable access to a sufficient quantity of affordable, nutritious food.
- Hunger Crisis: Hunger defines a short-term physical discomfort as a result of chronic food shortage, or in severe cases, a life-threatening lack of food
- Malnutrition: Hunger defines a short-term physical discomfort as a result of chronic food shortage, or in severe cases, a life-threatening lack of food. The condition may result in an inadequate or unbalanced diet.
- Famine: is a widespread scarcity of food, caused by several factors including war inflation, crop failure, population imbalance, or government policies.

● Food Desserts: An area that has limited access to affordable and nutritious food, in contrast with an area with higher access to supermarkets or vegetable shops with fresh foods, which is called a food oasis. - Influence on Food Production Practices:

● Location of Food-Processing Facilities: Accessibility, infrastructure, transportation, labor costs, and favorable legal conditions

Consequences of Agricultural Practices:

- Environmental effects of Agricultural Land Use:

- Pollution: Agricultural pollution is the contamination we release into the environment as a by-product of growing and raising livestock, food crops, animal feed, and biofuel crops.
- Land-Cover Change: the term used to describe the natural vegetation/state of the land or what has been built by humans to replace it (cultural landscape).
- Desertification: the process by which fertile land becomes desert, typically as a result off drought, deforestation, or inappropriate agriculture.

● Soil Salinization: the process by which water-soluble salts accumulate in the soil. Salinization is a resource concern because excess salts hinder the growth of crops by limiting their ability to take up water. - Agriculture Changes the Physical Landscape: Some modifications include land cover change

(slash-and-burn and deforestation), terracing, irrigation, and draining wetlands - Societal Effects of Agriculture Practices: Changing diets (healthy to unhealthy processed food), the role of women in agricultural production, economic purposes of agriculture, and cost of technology and seeds - Debate of Environmental, Cultural, and Health Impacts of Modern Agriculture: Biotechnology (alter living

organisms), GMO (genetically modified organisms), Organic Farming, and “Eat Local” movements

Challenges of Contemporary Agriculture:

- Challenges of Recent Agricultural Innovations:

- Biotechnology and GMOs: you know that the area of the world least impacted by these new technologies in agriculture are among the poorest of countries where a high % of people make their living (developing appropriate seeds, affordability, cultural and religious issues, and international agreements and protocols)

● Aquaculture: the rearing of aquatic animals or the cultivation of aquatic plants for food. Aquaculture(or

fish farming) makes up over 50% of the world market for fish products. - Sustainable Agriculture: is farming in sustainable ways (meeting society's food and textile needs in the present without compromising the ability of future generations to meet their own needs) based on an understanding of ecosystem services, the study of relationships between organisms and their environment. - Climate Change: can disrupt food availability, reduce access to food, and affect food quality. - Patterns of Food Production and Farming:

- Urban Farming: is the practice of cultivating, processing and distributing food in or around urban areas.
- Community Supported Agriculture: is a system that connects the producer and consumers within the food system more closely by allowing the consumer to subscribe to the harvest of a certain farm or group of farms.
- Value-Added Specialty Crops: are an extension of specialty crops (high value, often decorative produce and nursery plants that often does not fit normal patterns of production location, i.e., pumpkins, Christmas trees, flowers, etc.).
- Fairtrade: is trading between companies in developed countries and producers in developing countries.
- Local-Food Movements: The biggest benefit of eating local food is the reduced fossil fuel use because the produce does not have to shipped such long distances.
- Dietary Shifts; Modernization, urbanization, economic development, and increased wealth lead to predictable shifts in diet, referred to as “nutrition transitions.”