

Geography Matters

Places: specific geographic settings with distinctive physical, social and cultural attributes

Regions: territories that encompass many places, all or most share attributes different from attributes of places elsewhere

Human geography: study of the spatial organization of human activity and of people's relationships with their environments.

Global Inequality: inequality between at least two groups

- Developed and developing nations
- First and third world
- Core and peripheral

On average: **living conditions are getting better but, the equality gap between rich & poor is growing**

Factors leading to improvement

- Basic hygiene
- Medical advances
- Better nutrition
- Higher productivity, division of labour, trade

Remote Sensing: collection of information about parts of Earth's surface by aerial photography or satellite imagery designed to record data.

- E.g. google earth

How has collection of data changed our lives? (satellites, geo-demographic research, remote sensing, GIS (method in which big data can be processed than outputted into maps → comparing maps will allow you to see change in patterns), GPS)

Remote sensing → through timelapse (global, zoomable video that lets you see how the Earth has changed over the past 32 years) we can see how the Earth is changing in the last few decades

Orbital Insight: uses artificial intelligence to teach computers how to recognize patterns in data (e.g. predict company performance, monitor oil pipelines for leaks)

Satellites: we can get pictures of anywhere in the world within an hour or two

GIS: organized set of computer hardware, software and spatial data that is designed to capture, store, update and display information

- Handle data and produce maps quicker than ever better
- Planning, commercial and military applications
- Allows ranges of problems to be addressed (spread of diseases, how to manage farmland, changes in ecosystem)
- Disadvantage: location where data are measured must be known (e.g. postal code)

Geo-demographic research: uses census and commercial data about populations of small districts to create profiles of those populations for market research

- Used by market research to identify geographical distribution of different types of Canadian households
- Characteristics based on income, education, occupation, home value → social attitudes, consumer preferences, and cultural backgrounds
- Location decisions about stores, restaurants, gas stations, etc.

GPS: determine latitude, longitude and elevation at any given point

- Calculate precise position
- Have helped find people washed out to sea by earthquakes

Spatial Analysis → location, distance, space, accessibility and spatial interaction

Maps: simplifies reality so we can comprehend it better, faster and more thoroughly

- Express particular interpretations of the world
- Affect how we understand the world
- How we see ourselves in relations to others
- Simplifies reality so we can comprehend reality better/faster/more thoroughly
- Not true representations

Visual literacy

- Maps can help visualize
- Message on map due to difference scales, colour schemes
- Mindful of message from map, is it justified?
- Aware !!! → picture inequality in systems
- Can be bias

Decisions to be made:

Map scale:

- How much do we want to show?
- Area and detail (inverse relationship)

Small scale: small representative fraction covering large part of earth's surface on printed page

Large scale: large representative fraction covering small part of earth's surface on printed page

Map type:

- What do we want to show?
- Map type needs to suit the type of data
- E.g dot, choropleth, isoline, proportional symbol, cartogram

Map projection: systematic rendering of the earth's surface on a flat map

- Since earth is a sphere, impossible to display perfectly on a flat surface without any distortion
- None of them can represent distance correctly in all directions
- Distance, direction, area and shape can be distorted to attempt to balance the properties of the map (robinson)

Equidistant projections: distance accurately in only one direction

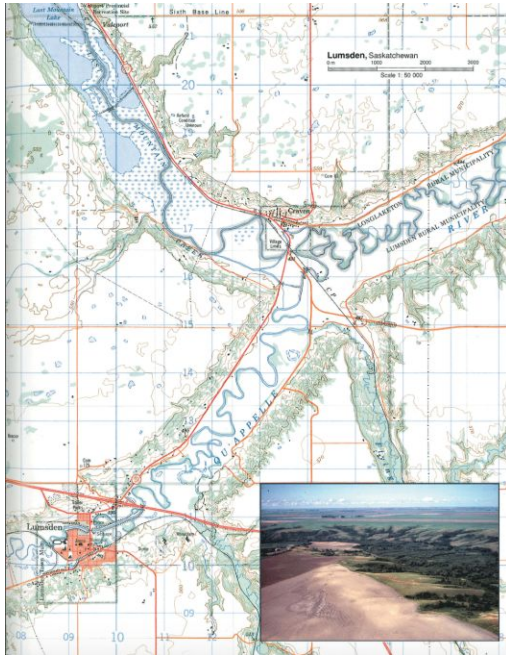
- Represent large portions of Earth

Conformal projections: compass bearings are accurate

Equivalent projections: portrays earth's surface in their true proportions

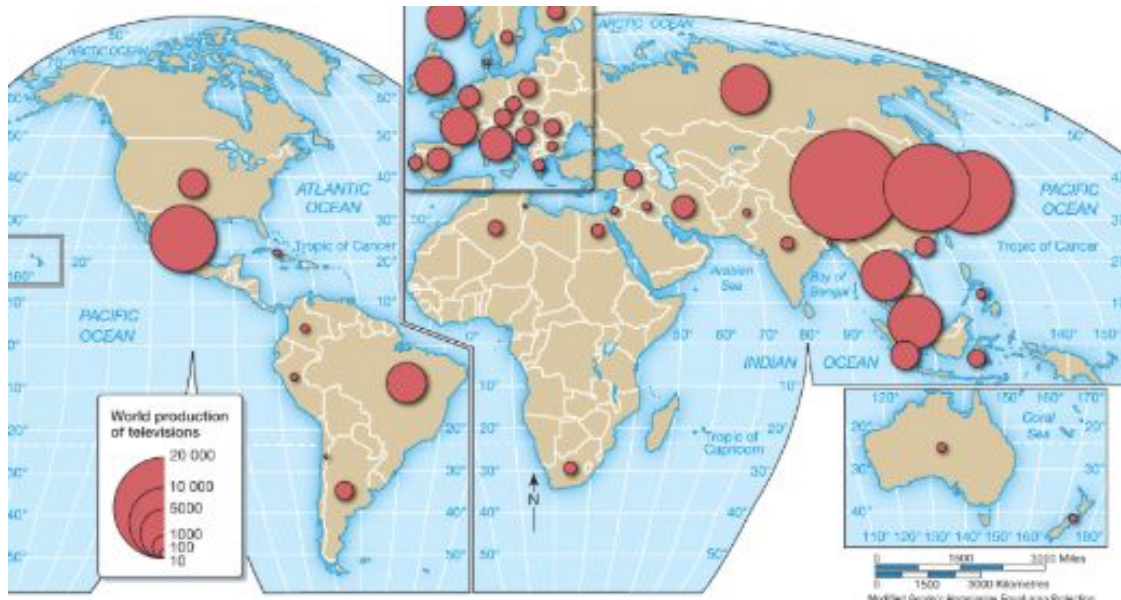
- Used to compare and contrast

Topographic Maps: represent the “form” of earth’s surface to show permanent features (buildings, highways) → represented by a contour



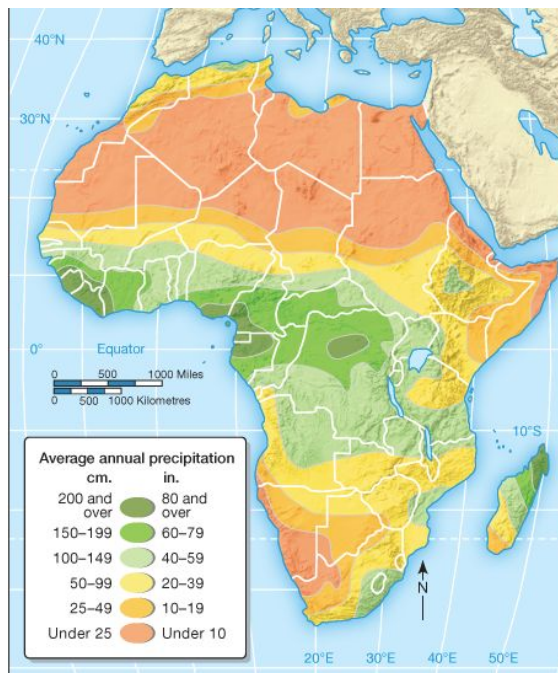
Thematic Maps: represent the spatial dimensions of particular conditions, processes, or events

- Proportional Symbols: circles, squares, cubes, other shapes drawn



Isoline Maps

- Isoline: a line that connects places of equal data value
- Continuous phenomena (temperature, rain)
- Weather maps



Dot Maps: single dot or other symbols represents a specified number of occurrences of some particular phenomenon or event

- Exact locations

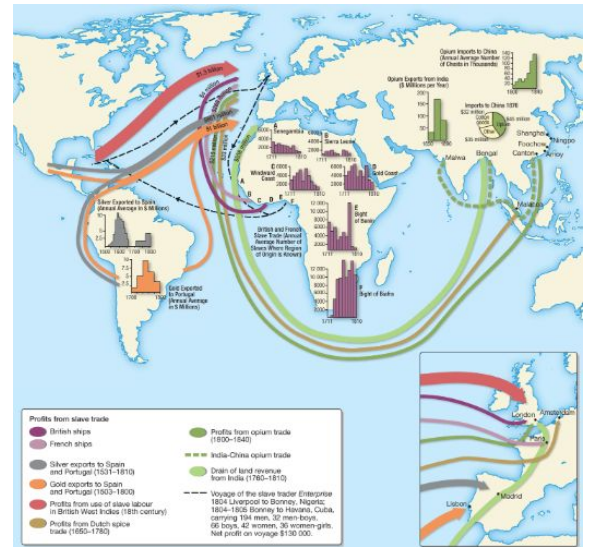
Choropleth Map: tonal shadings are graduated to reflect variations in numbers, frequencies, densities

- derived values (%), density/frequency, “colouring”
book map
Darker the colour, the more intense/large the statistic

Proportional Symbol Maps: symbol proportional to the value of the phenomenon → → →

Cartograms: distort a space on a map to emphasize the particular attribute of places/regions.

- # of people in an area who are affected by HIV
(distorts the space of Africa by making it larger in order to indicate that there are more people with HIV there)



What does World-System Theory help us understand?

- The entire world is tied together in one system based on competition for power, resources and territory.
- The gain of one group is achieved at the expense of another; always one side benefits more in the deal. (e.g. core countries will partner with peripheral for their cheap labour forces resulting in iPhones, t-shirts, etc.)
- Core relies on cheap resources from periphery to produce goods for its own consumption
- Countries had an initial advantage because they industrialized first and strong enough to colonize with other countries
- Result: Inequality → core countries continue to be advantaged, peripheral continue to be disadvantaged (GB had an initial advantage, paradox of plenty = Congo as their death rate due to due is drastically increasing)
- Competition for power and resource, peripheral are resource dependent
- Global economic system is skewed towards the needs of the core

- The global core maintains its dominance through the exercise of the economic, political, military, and cultural forces
- The core also maintains its dominance through environmental and ecological means
- Still dominated by Europe and offsets because they enjoy the effects of initial advantages brought by the European Expansion and imperialism allowing powerful control

Started with European Expansion and Colonization in the 16th century

Core countries: depend on their dominance over weaker regions and the weaker regions participation in the world system

- Rich and more developed
- Political and economic clout
- Advanced technology and military power
- Dominated trade
- Population on average is educated and good health care, high standards of living and long life expectancies
- Strong enough to dominate other countries
- France, Germany, U.K, U.S, Canada

Peripheral countries

- Poor and less developed
- Little to none political or economic power on a global stage
- Little or no technological capacity
- Dependent and disadvantaged by trade relationships
- Population that is extremely poor, little access to health and education
- Too weak to dominate other countries
- Dependent on core because they have to sell their resources to the core
- Dependent on core because they have to buy technology from the core
- Brazil, South Korea, South Africa, Mexico
-

Why are peripheral countries still dependent on their natural resources? (paradox of plenty, initial advantage, early start)

- **Paradox of plenty: poor countries benefit from their natural resources as they trade with core countries who need them. Peripheral agriculture, cheap labour and natural resources aid core countries in remaining dominant.**

Semi-peripheral countries

- Better than peripheral but below core in all factors listed above
- Former peripheral countries are advancing in the global hierarchy and moving towards core status, while peripheral countries are falling further behind

- China, India, Greece

The global core: made up of a number of regional cores, semi-peripheries and peripheral regions.

Regional cores are made up of local cores and peripheries

E.g. Canada as a region can be part of both the global core and semi-periphery as the standard of living and GNP allows Canada to be part of the core, but large parts of the Canadian economy are American-Owned which can make it semi-peripheral

Narrative: the events we currently witness are all interconnected

Climate change (driver of many other processes → creating natural disasters)

- People migrate as they cannot feed their families

Ecological: droughts, flooding, salinization of drinking water

- Build up in drinking water = unproductive land = refugees = flee, come our way

World is a system → Impacts are felt everywhere, not necessarily at the time of the cause (cause and effect)

Responsibility → desires to overconsumption (core) → world issues else place (peripheral)

^^ Overpopulation → responsibility → inequality

1. Globalization = global change through GHG pollution
2. Effects of global change are felt directly in the availability of water, production of food, and loss of topsoil
3. Global change brings more droughts, floods, etc. crises will continue to grow in periphery
4. People are feeling unsustainable environments: migration to other countries
5. Ecological crises → intensifies economic and political crisis → rising unemployment, rise of political fundamentalism
6. Globalization: shifts manufacturing jobs from core to peripheral countries (squeezed middle class)
7. Peripheral: increasing urbanization is a must for survival
8. Core: increasing urbanization increases society's vulnerability to infrastructure attacks

Why is inequality persisting on this planet? (neo-colonialism)

- Due to neo-colonialism; economic, political and cultural pressures control and influence the world around us. Core countries have higher growth and statuses, making them have more global power over peripheral.
- Control is determined through neo-colonialism
- transnational companies hold strong economic power
- Peripheral countries continue to be heavily shaped by the influences of former colonial powers

- CC is also a factor. In terms of qualitative overpopulation, effects are felt on peripheral countries → making them fall behind, not able to reach core status as they cannot succeed with CC effects

Colonization

Colonizer (rich), colony (poor)

- Initial advantaged: industrialized first and strong enough to colonize other places
- Colonies were exploited for their resources and labor to fuel the colonizers industrial growth
- Success in world system = economic strength and competitiveness and military power
- Individual states dominate the system based on those factors (hegemony)

Narrative - Syrian Boy washed up on beach

→ Picture has a deeper meaning than presented

- Two worlds colliding: people who live there vs. refugees
- Refugees risking their lives due to safety in country, die from lack of needs while trying to escape
- Flee conflicts = huge refugee camps

Climate Change: effects are felt worldwide

- Human influence is the dominant cause
- Peripheral nations are much less equipped to deal with the effects
- Stresses the need to keep warming to 1.5 degrees instead of 2 degrees
- We need to move from fossil fuel economy to non-based fossil fuel economy (wind-solar)

Consequences: earth is system

- CC changes the way this system functions
- Fast CC leads to system shifts: new temperature regimes, rainfall patterns, etc.
- More potential natural disasters

Result

Changes the way this system functions

- “New normal” state
- People will adapt to the “new normal” if they can, or move

Ecosystems: require too much time to adapt, resulting in failing

- They no longer support the current adaptations, may become extinct
- Changes in agriculture, diseases come

People: will adapt to new normal if they can through technology or migration

- People will both voluntary or involuntary migrate
- Ecomigration: driven by food scarcity leading to internal migration to cities

- Alters where people can live (flooding), where food can be grown (drought), where diseases spread

Climate Change: warming and extremes

- Caused by GHG that trap heat in atmosphere
- Oceans are warming
- Change is happening faster than the Earth's ecosystems can adapt

Secondary effects

- Sea level rise, warming ocean absorb more CO₂, sea ice shrinks, ecological changes

Bottom Line 1

- Africa only produced 2.5% of all GHG emissions since 1980 but still stands to suffer the most from CC
- Europe will benefit from CC as its located farther north

Effects of CC are distributed unevenly: the south (periphery) stands to experience worse effects than the North (core)

- Climate is warmer/drier in the first place
- Infrastructure is less developed
- People are less wealthy and uninsured

Yet the south contributed much less to the causes of CC than the North

Bottom Line 2

- CC = global inequality
- Prevent the periphery from developing the way the core did
- CC will lead to large-scale shift in the global system

Syrian civil war is the first war partly caused by climate change

- Worst-ever drought from 2006-2010
- Grain harvest dropped by one third
- Whole gov't pushed cash crops for export
- Meanwhile, governments exploded from 4 million in the 1950's to 23 million today
- All this fueled the desperation of the population

Food & Water

Food and conflict: population growth and increase in food prices = food riots

Challenges: climate, development, political factors

Global Change: CC, loss of biodiversity, erosion

- Food scarcity is what causes people to migrate

Limiting factors:

- Population growth
- Economic development (resources)
- Human development (disease)
- Conflict

End result = migration

Agriculture: international division of labour built on climatic advantages, changing with CC

- Competition to deliver cheapest product to consumer
- Concentration: a way to be more competitive and a way to be forced into even more intense competition

Horizontal Concentration: few companies dominate their sector (e.g. grocery retailers)

Vertical concentration: few corporations control the entire production chain

- Yemen: worst humanitarian crisis, $\frac{3}{4}$ people need international aid (consequence: migration of refugees)

Yemen = war leading to worst humanitarian crisis → two powers between Saudi Arabia and Iran are supporting different parts of Yemen, supplying them with supplies and machinery.

- War would be over if both powers withdraw their support as they would run out of resources to keep fighting

Central Place theory: seeks to explain the relative size and spacing of towns and cities as a function of consumer behaviour.

- Walter Christaller
- Based on Christaller's observations of southern Germany where smaller towns were more numerous and were closely spaced to each other. These smaller towns were offered a limited amount of services which were considered the basics for living (markets.). These smaller towns were located around larger towns. The larger towns were less numerous and were farther away from each other but offered a greater variety of shops. Finally, these larger towns surrounded cities which were even less numerous but offered a large number of shops that were exclusive to the city and couldn't be found anywhere else (specialty doctor)
- Designed it using the range or the maximum distance that consumers would travel to obtain a particular product/service
- people travel certain distance for services (health, going to court, groceries, etc.), hierarchy of central places by looking at distribution of big, medium and small settlements

- smallest settlements in an urban system provide only those goods and services that meet everyday need, relatively close to another because consumers are only willing to travel a certain distance
- people are willing to travel farther for more expensive, less frequently purchased items.
- Top tier cities: Toronto, Montreal → cities that provide high-order functions to the national marketplace
- Second tier: Quebec City, Halifax → general-purpose cities with diverse functions but only regional importance
- Third tier: Charlottetown, Yellowknife → specialized centres of subregional importance (third-order functions)
- Fourth-tier: only local importance, basic range of shopping of services (towns in B.C.)

Nazis and Central Place Theory:

- During WW2 after invasion of Poland, Hitler planned to essentially redesign Poland using CPT in attempt to create the perfect German civilization where his people would live
- Result was the destruction and removal of large amount of Polish infrastructure, buildings and even towns
- Large amounts of the population were relocated from their homes and some killed

Theories never are just theories

- Central place theory was drafted by Nazis to “remodel” Poland → used theory to change landscape into a German landscape
- 30 million slaves to be “resettled” (aka displaced/killed and to be replaced with German settlers), another 145 million Germanized
- Wanted to renew the land structure and completely renew it according to central place theory by taking down Polish villages with German
- Theory can be abused by political power to achieve a goal (political purposes)

Population

- More than 90% of all population growth occurs in peripheral countries
- Core countries are experiencing decline in population (U.S. = only country with stable population without migration)
- Human desires make the population grow faster than the world can supply us with resources
- Immigration → stable population

Pyramids

Age-Sex: representation of the population based on its composition according to age & sex

- Males are displayed on one side, female on opposite

- Age categories are ordered sequentially from youngest at bottom to oldest at top
- Allows gender at certain ages to be compared next to another in terms of population
- Identify changes in the age & sex of populations over time
- Display whether the population is growing, shrinking or staying the same
- Population pyramid with wide base (lots of youth) & less older people = growing population
- Population pyramid with large base (lots of youth) & lots of adults but less elderly = slow growing population
- Population pyramid with small base (less youth) & large mid section and top section (lots of adults and elderly) = negative growth

Quantitative overpopulation: too many people- government is overwhelmed by # of people

- E.g. cities in Asia

Qualitative overpopulation: too much consumption; impacting global resource use & environment

- E.g. Canada

World-System Theory & Population

- Periphery: high population growth rates
- Semi-Periphery: decreasing population growth rate, increasing consumption
- Core: low population rates/shrinking; increasing consumption

Overpopulation & Inequality

Quantitative: peripheral countries struggle to meet their basic needs due to too many people,

- the government cannot manage the mass number of people
- many cities have reached well over their carry capacity

Qualitative: core countries are raising their ecological footprint

- Too much consumption = affects peripheral countries it creates consequences for them and their living conditions
- Core has money to keep buying their countries demands, peripheral gets stuck behind

TFR: average number of babies born per woman in her reproductive year

CDN: 1.5 (lower than ever)

High TFR: congo = 6.5

Singapore: 1.2

Driven down by social and economic security

Demographic transition: fertility and mortality rates of a country are directly tied to the development of said country

- population change in which high birth and death rates are replaced by low birth and death rates

- Pre-industrial → industrial = slow population growth due to development
- Slowing of population growth = improved economic production, higher standards of living brought by nutrition, health care, education and sanitation
- With basic information about a country's birth and death rates, it is possible to identify that country's position within the demographic transition process

Phase 1: pre-industrial region w/ stationary population rate; high birth and death rates

Phase 2: transitioning region w/ growing population; death rate declines and birth rate high

Phase 3: transitioning region w/ growing population; death rate low and birth rate declining

Phase 4: industrial region w/ large but stable population; birth and death rates are low and stable

Demographic momentum: tendency for growing population to continue growing after a fertility decline because of their young age distribution.

- Important because once this happens a country moves to a different stage in the demographic transition model

Epidemiological transition: distinctive cause of death in each stage of demographic transition

- Explains how countries' population changes

Replacement fertility level: # of children required to replace the parents and keep population stable

Crude birth rate (CBR): # of live births within a single year for every 1000 people in the pop

Language and Geography

Language → means of communicating ideas/feelings by system of signs, gestures, marks, or vocal sounds

In geography: studied by geographers because it plays a large part in the development of a culture and its central aspect of cultural identity

- Distribution and diffusion of languages throughout the world allows geographers to follow migration of a culture
- Language gives clues as to the serial occupancy of an area

Examples of linguistic influences in North American places

- French: Sault Ste. Marie, Detroit
- Spanish: Las Vegas, Los Angeles

- German: New Hamburg

Discourse Analysis: present only one perspective

Case Study: Easter Island

- Discovered by Europeans in 1722: no trees, vegetation burn, starving population, signs of warfare & cannibalism, cultural memory lost, unaware other humans existed

Explanation

- Trees were cut for log road/shelt
- No more edible fruit
- No more wood for boats
- No more fishing
- No more birds, food, pollination
- Increased erosion
- Dramatic species extinction

Deforestation

- Tribal welfare
- Depopulation
- hunger/cannibalism
- Loss of culture

Environmental destroyed in the process of creating Moai (all resources were expended to create them for their symbolic function)

Migration:

Mobility: ability to move from one place to another, either permanently or temporarily

Migration: long distance move to new location

- Emigration: moving from a particular location (out-migration)
- Immigration: moving to a particular location (in-migration)
- Internal migration: move within a particular country or region

Why?

- Economic betterment
- Adverse political conditions (war/oppression)
- Environmental degrdation
- Push factors: events/conditions impel individual to move from a location
- Pull factors: forces of attraction influencing individal to move to location

Result

- Brain gain
- Brain drain

Voluntary migration: individual chooses to move, mainly due to pull factors

Forced migration: migration occurs against individuals will (push factors) → refugees

Urbanization = growth, process of development & qualitative/quantitative changes made over time in an urban area

- Proportion of world's population living in urban settlements is growing at a rapid rate
- Largest cities in the periphery are growing
- Canada = majority of population is urban, extreme vulnerability to terrorism
- Planned development = infrastructure precedes people
- Core cities get built before people move in

Trends in Canada

- Immigration: diversity
- Millennials = largest demographic group, not as economically successful
- Lower birth rate, higher life expectancy rate
- Women = more educated than men

Urban growth

- All over the world, mostly periphery
- Periphery = waits for people to move in, later comes negative circumstances (overpopulation, emergencies)
- Cities are getting overwhelmed
- Infrastructure cannot keep up

Urban Geographers

- Study the development of towns and cities around the world
- Concerned with what makes towns/cities distinctive and how these identities evolved over time
- Focus on the relationships between particular sets of urban areas and how they interact with towns, cities and territories around them

Geopolitics: the states power to control space or territory and spar the foreign policy of individual states and international political relations

- Influenced by Freidrich Ratzel
- Describes the growth and development of his 7 formulated laws
 1. Territory of state grows with expansion of population having the same culture
 2. Territorial growth follows other aspects of development
 3. State grows by absorbing smaller units

Economic Geography

- China is returning to world economic dominance

China fell from the top to the bottom for 2 centuries:

1. Unified country = no internal competition that promoted innovation and inventions

- Competition such as Europe was innovative and liberalized

China benefited from large, cheap labour pool

- Used this as an advantage, returned to status of economic power
- Now clamouring to become a political world power
- Giving away infrastructure in exchange to loans, countries who cannot pay back loans owe China and China receives infrastructure back

A new wave of economic restructuring is occurring: changing the competitiveness of states, corporations, and individuals.

- Yemen: worst humanitarian crisis, $\frac{3}{4}$ people need international aid (consequence: migration of refugees)

Yemen = war leading to worst humanitarian crisis → two powers between Saudi Arabia and Iran are supporting different parts of Yemen, supplying them with supplies and machinery.

- War would be over if both powers withdraw their support as they would run out of resources to keep fighting

Explain what is behind the conflicts in the middle east

Historical roots (Syria), legacy of colonialism, cultural differences (Shia-Muslim competing with other Muslim, Kurdish people), geopolitical concepts that can help us understand them (prevent Iran from building Shia Belt/Bridge), etc.

Globalization

- Your life is governed by global processes that follow the logic of globalization
- Offshoring of entry-level jobs (tuition earned over summer??)
- Higher education, the higher the risk of your future job is being offshored

Consequence for you

- Routine skills are no longer enough to obtain and retain a job
- Lifelong learning is necessary
- Emphasis is now on key soft skills: communication, teamwork, adaptability, problem solving
- Men in particular cannot find work (feminization of worker profile)

Connections

Clear connection between Climate Change, Ecomigration, Natural Disasters, and Conflict

Complexity → situation in inequality → CC driver for even more changes (food, water) → leading to migration → cultural clashes

Bonus → what a connection between what you learned from class and labs and take it to your outside life??

- **Parkside closure: temp refugee staying??**
- **Backlash, uprisings → political and cultural oppositions, difference views**
- **Mindblowing: as part of a core country we continuously overconsume and the way we live creates more GHG emissions than other countries = CC**
- **Which then, these peripheral countries, are feeling these effects**
- **We havent come to then realization that the reason refugees are in desperate need to seek countries such as ours, are due to crises that we contribute too.**