

# Economic Geography

This is the story of economic geography. As a diverse sub-discipline within geography, there is not one single definition that can capture its entirety. Dr Roberta Hawkins a professor at the University of Guelph, and expert in the field explains that economic geography today involves thinking about it as interconnected with all kinds of other processes and not just economic ones.

To define economic geography we will tell the story of its evolution through its connections to historical, political, and environmental geography. First, historical and current trends observed in economic geography are rooted in colonialism. Beginning in the 16th century the Atlantic slave trade shaped the distribution of economic activity throughout the world when millions of enslaved African people were transported to European colonies. This allowed the dominant colonial countries to increase production aiding the development of their national economies while expanding their global import and export markets. This created an unequal division of economic wealth and power between the global north and the global south. A phenomenon also known as core versus periphery.

The political economy perspective states that the evolution of places is conditioned by their positions within the territorial divisions of labor. Meaning that the current and former European colonies will continuously hold more influence within the global economy. A big influence from these core countries was neoliberalism. In favor of free market capitalism and little government involvement neoliberal policies are meant to change the nature of labor with the goal of profit maximization. The capitalist economy has become so normalized that it has created an illusion that other forms of economy are inferior. This has resulted in a trend of deregulation of labor standards and creation of free zones and sweat shops, further contributing to the uneven distribution of wealth within borders. To identify these spatial differences in the accumulation of wealth, it's important to analyze global and regional commodity chains. Due to neoliberal policies, the beginning of supply chains have producers and manufacturers that are paid very little, while large retailers profit the most. The unawareness that consumers have for where their products come from and how they are made has led to over consumption and a need to balance economic and environmental concerns. Naomi Klein, Canadian author and activist, states that our economic system and our planetary system are now at war. Consuming the earth's resources at an alarming rate has caused the climate crisis, global warming. Yet, why don't we act now to save the future? The pain theory invented by Harvard psychologist Daniel Gilbert, states that people choose not to deal with issues unless they are personal, abrupt, immoral, or happening now. The world has prioritized the economy rather than the environment. So what is economic geography? Economic geography describes and explains economic processes and actions that occur in diverse spaces and places which can be historically, politically or environmentally driven. Why should you care? Economic geography affects each and every one of us through globalization. It takes the complex world we live in, and makes it easier to understand its processes its interconnectedness and its people That is the story of economic geography.

# Cultural Geography

Cultural geography examines how cultural factors affect the relationship between humans and their environment. Cultural geography seeks to answer questions; like how does culture affect the land, and how does land affect culture? In this context culture includes things like material objects, emotional responses, traditions, rituals, beliefs, and social ideas. Geography itself refers to the physical characteristics and conditions of a physical landscape. Social media plays a huge role in how people understand what cultural geography is.

Specific places can come to be very powerfully associated with particular social groups. In order to fully understand what cultural geography is, we must venture to other places in the world and understand what their cultures are like. When we allow ourselves to experience what other cultures are truly like, it allows us to create a deeper understanding of what that culture truly is. Social media allows us to take part in these experiences with the click of a button. We have the ability to learn almost everything about a culture at the tips of our fingers. Social media can also help us learn how culture and geography become one. In addition we must ask ourselves how geography factors form places and cultural identities. By using the example of the Mississippi delta blues, we can better understand the ways in which culture and geography connect.

Let's look at an example. Between 1900 and 1980 over 20 million southerners left their homes in the south to look for jobs in cities suburbs in the north and west. In this case the geographic factors of migration brought African identity to urban areas. For example Muddy Water spread his rural roots of southern folklore and his expression of challenging social restrictions against African Americans. His emotional response was possible by geographic factors of migration technology, able to transfer music to Europe as well. Receptive movement is critical to understand why cultural activities happen in particular ways in what geographic context. The diaspora had significant influence on spreading delta blues to the rest of the world and impact social change responsible for new social ideas such as the evolution of the civil rights movement. Cultural geography studies the ways in which people connect with the landscape using examples of social media and the Mississippi delta blues we can better understand how these relationships shape our communities.

# Health Geography

What is health geography? Health geography is the study of how health and medicine are influenced by region in different environmental factors. The study and research within the subject of health geography is essential to human wellbeing due to the fact that it allows us to understand how our environment coincides with health. Health geography is used as a tool to link our environment to a disease and illnesses manifest.

So how did health geography come to be? As the father of medicine, Hippocrates was the first to address that air water and places all had a significant impact on human health. Leonhard Ludwig Finke was a pioneer of medical geography and was interested in the cause and effect in which environment played a role in the spread of disease. In 1854, John Snow made a groundbreaking discovery within the field when he linked the cholera outbreak to a water source in London, England, which led to a better understanding of how public health is influenced by location. Here is John Snow's disease map showing the pump of the cholera outbreak first. Who is a key thinker in the field of health geography?

Robin Kearns is a professor of geography at the University of Auckland and runs a collaborative research program that focuses on place and well-being.

What has Robin Kearns done for health geography? Robin Kearns has had a significant impact within the field of health geography. His research has focused on how political and cultural aspects of places impact human health and wellbeing. In the mid-90s Kearns published "Place and health: Towards a reformed medical geography" that sparked a transition in the field of health geography which incorporated a greater focus on holistic views of health and well-being.

How does the environment impact indigenous health? The environment provides multiple sources of health benefits for indigenous populations but can also contribute to health risks. The health status of indigenous people is significantly lower than for non-indigenous people due to the implications that arise from environment. For example traditional foods are a source of nutritional, economic, and cultural benefits but at the same time they pose risk from exposure to environmental contaminants such as lead, PCBs, and mercury in some species and tissues.

Health geography today. Health geography continues to use a combination of disease maps and spatial analysis to come to find the link between diseases. As we can see here in this current disease map from Ontario that tracks the spread of Lyme disease throughout the province.

Throughout the last year we have used disease maps to track global covid-19 cases around the world. As human development continues to change so will our environment. Health geography allows us to apply quantitative and qualitative research measurements to better understand how the physical environment can influence the health of our population.

# Social Geography

What is social geography it begins in late 1800's first appearing in the letters of French geographers. Since then it has been used on and off by various fields within geography for different purposes. Early geographers such as professor G W Hoke attempted to define it in 1907, when he used the term to describe the relationship between people and places.

There are many analyses of how society changed leading up to the world wars and during them, yet the geographers who look at this time period only did so after the fact. Moving on to the 1970s where researcher David Lee makes the argument that subjectivity and objectivity are so intertwined when trying to approach social aspects of the world that researchers should be cautious.

There has not been a defined underlying philosophy that defines how social geography is to be applied. The enigmatic nature of social geography is a testament to the complexity of human social interactions and early geographers were aware of this.

Contemporary social geographers are interested in the idea of the social, and it's everywhere. Current social geography is complex given the inter-connectivity of socio-spatial relations including issues such as inequality, race, and power.

On May 25th 2020, 46 year old George Floyd was murdered by police officer Derrick Schulman in Minneapolis, Minnesota, but the outrage was felt worldwide. The social structures and processes responsible for racism are complex, and change across social and geographic borders. After George Floyd's murder, spatial analysis made protests visible in over a hundred cities, creating a social and political movement. This international collective responsibility invited hard conversations about racism.

As Zayden mentioned already, social geography is everywhere, which is why it's even important when we think about the covid-19 pandemic. Through the pandemic we have seen social inequality through a social geography lens. The best way to put all this is that the covid-19 pandemic has been compounded by political economic and social crisis that have exacerbated existing inequalities. I now see how much class plays a role in the inequalities through place and space. With cutting down on costs and maybe even resources a wave of uncertainty has passed over students and employees which is felt around the globe. By using a geographical lens with a focus on socialization we notice the social inequalities that many students face such as class, and how some students don't have the certain resources they need to fulfill their academic career based on place.

The future of social geography: there are significant correlations between viruses' poverty and equality race and gender. In my own experience in Ethiopia, I've witnessed many families struggle to access ambulance or hospitals due to poverty and their geographical locations. Social geography hasn't done enough research outside of the west or the methods of research were unethical. With critical reflexivity and ethical consideration social geography has to reach places like Ethiopia it has to be careful of not exploiting and controlling the research like in colonial times or in the present time with globalizations. Social geography needs to adopt and predicting the future identifying new methods and striving for improvement.

# Urban Geography

In this video we will answer what is urban geography and why is it relevant to today. Formally urban geography can help us understand urbanization trends and their expression in urban spatial structure and how to relate these to our lives and concerns. More simply urban geography is the study of cities and other urban landscapes and any processes that might occur there. Some of these processes could be how urban spaces have interconnected relationships with fields such as culture and art or technology and economics. It could help to understand issues in relationships across cities such as those associated with race gender sexuality and inequality. Urban is anything related to or a characteristic of a town or a city urbanization is the increase in the proportion of people living in urban areas urban sprawl is the uncontrolled expansion of urban areas and lastly urban density is the number of people inhabiting a given urbanized area.

The existence of major urban areas have been predominant throughout human history, places like ancient Rome, assuming international influence. Geographers began to study this field in more depth in the early 1900s but our group was fascinated by the work of a key thinker in particular Dorian Massey was a celebrated scholar specializing in economic and regional geography in her most famous publication entitled *World City* she explains that particular cities around the world have attained major international influence and are fueled by an economic engine. While many instantly think about cities such as Tokyo or New York City having world influence our group wanted to consider the city of Toronto which is home to the most heavily trafficked airport in Canada niche market expensive lifestyle and booming economy.

Urban geography and its subfields will help us understand how to face the issues of increased population growth climate change and sustainability Toronto is the largest city in Canada and the fastest growing in North America it is estimated that the population will increase from 7 million to 9.5 million by 2046. Sustainable development is an example of something that an urban geographer might study but also an example of how urban geography studies are becoming ever so important to our world with the urban densification and sprawl trends that we are seeing today. There is a range of environmental consequences such as air pollution ecosystem transformations and overuse of resources that are increasing by the minute some cities have even experienced urban heat island effect which causes higher heat due to greater thermal capacity and conductivity in urban areas it is essential that if the majority of the society wants to live in urban places that we must create sustainable cities in order to not cause catastrophic changes to our environment. This is where urban geography comes in to inform how to create sustainable cities in their first sustainable world. It's essential that we continue to follow the United Nations sustainable development goals and to continue to perform environmental impacts assessments for continued development in the context of Canada a sustainable Toronto could be a learning point for other urban cities in the future. About 50 percent of the world's population lives in cities today. By 2050 the percentage will reach 75. Urban geography is an ever-growing practice and will be an important part of our everyday life as we move closer towards total urban living.

# Historical Geography

Historical geography is an incredibly diverse sub-discipline of geography with many different potential areas of focus. This can include geographical focus on ancient human activity, paleo physical geography, political geographies of ancient city-states and more. From the times before common era to the post-modern world historical geography is the key to unlocking the past behaviors of humans and the world around them. Discovering these relationships can help us better understand our current world, for example, climate change record comparison through the centuries.

Our first example highlights the history of earth through the pre-cambrian, paleozoic, mesozoic and cenozoic time periods involved with the geological time scale. The precambrian area started 4.5 billion years ago with the creation of our solar system and earth's early forms of land, ocean, and atmosphere. Next, roughly 545 million years ago the paleozoic era began. This marked the starting point of life on earth due to the evolution of the first organisms and plants. Later, 250 million years ago the mesozoic era commenced which included the presence of dinosaurs and the eventual K-T event that led to the extinction of dinosaurs. Finally, around 65 million years ago a cenozoic era began which created the modern separation of continents and evolution of the human species that continues to advance on earth today.

For our second real-life example of historical geography we will examine the expansion of the Roman Empire from 27 BCE to 1453 CE. Rome experienced innumerable changes to its physical borders. Eventually covering 4.4 million square kilometers through Europe and Northern Africa the Roman Empire was a central power for the pre-modern world. Their culture distribution and political and religious beliefs are preserved through ancient artifacts that still stand today nearly 2 000 years later. These historical artifacts are far more important than some may believe at first.

By using historical geography to examine roman growing and shrinking territories beliefs and customs we can get a more well-defined idea of how humans organize themselves through history leading to where we are today in the 21st century. In the third example we will discuss how the early human migration out of Africa directly pertains to the subfield of historical geography in order to further expand on what this subfield entails. How you apply geographic research methods to large historical events will aid in the understanding of them. Taking an interdisciplinary approach highlights the important elements of an event that otherwise might have gone unnoticed. Through this discovery we now know vital information about where our species derives from. Using geographic methods of research such as climate records speleothem analysis and weather models from the past in a historical context can help us piece together an idea of what the climate might have been like years ago. For example, speleothem record analysis suggests an ancient greening of the Sahara thus allowing northward migration of African hominids to Eurasia via vegetation belts. Through the use of these geographic methods we can conclude how and when early human beings may have been driven out of their place of origin or encouraged to move this helps us understand the past more clearly.

This interdisciplinary subfield can help aid in the further understanding of many historical events by combining geomorphological methods of research and using them in a historical context. By understanding the geological geopolitical and ancient climate of the past we can better understand major historical events and how the earth plays a major part in the shaping of our past.

# Rural Geography

Rural geography is a diverse subfield of human geography and is described as a study of people places and landscapes and rural areas and the social and economic processes that shape the rural lifestyle. The more traditional areas of emphasis in the rural geographical research are agriculture, resource management, land use planning, and settlement patterns.

The transition in the last 50 years in the field adds issues of poverty and social welfare, rural politics, culture, and experiences of social groups. In our project we focus on the rural landscape and the socioeconomic implications of land use change in agriculture, natural resource extraction, and industrialization in rural Canada. This area of study varies among different countries and our focus is not exhaustive of the research in the field. Rural lands and populations are a key part of world geography and Canada's development.

From coast to coast Canada's agriculture sector, much of which operates in rural areas, supplies a rich diversity of crops. The agriculture industry is a key source of Canadian revenue and is vital to local communities. Agriculture is a changing sector in Canada. With more technology globalization and less small scale operations farmers are needing to adapt as they feel pressured to accommodate. Farmers mental health and livelihoods are an important element of rural and social geography research in the modern day.

Farmland makes up about half of the land area of the Greater Golden Horseshoe. Canada's most populated and fastest growing region. The Greenbelt Plan protects farmland within countryside areas and Ontario's greater Golden Horseshoe from any sort of development, ensuring the future of farming in this region. Researchers have found the importance of not only the biophysical environment and rural areas of the Greater Golden Horseshoe but also that the Greenbelt Plan protects farmers livelihoods and Ontarian's health. Outside the Greenbelt and in other rural areas in Canada preserving farmland is less certain.

An additional issue that arises in world geography in Canada is the remote communities that are secluded from city centers who have limited opportunities for agriculture and face issues such as food insecurity. These remote communities economies are often based on resource extraction. Van Wegner, a professor at York University, whose research is in the field of natural resource management, describes working rural landscapes as buffer zones between industrial landscapes and protected environments. An abundance of research exists on the stressors resource dependent communities have faced, such as job loss and economic crashes since the economy restructured away from large resource extraction operations. Options such as diversifying resource-dependent economies to include things like tourism, are present in the literature.

When talking about rural development and land use in rural geography it's crucial to include impacts of land rights holders. Indigenous communities perspectives and insights are integral to rural land exchange that prioritizes environmental stewardship and sustainability. Indigenous nations are vital to growing rural communities and the Canadian economy. Investing in rural communities provides more opportunities for growth and diversification. Rural communities are essential to Canada's prosperity and the Canadian experience. Rural geography is the study of rural people lifestyles and the physical rural environment. These rural areas are what thousands of people call home.

# Population Geography

When I say geography you probably think of this, or maybe this, but it goes much deeper than that. Human geography is the flip side of physical geography and is more about the people than the landscapes. Population geography is a branch of human geography that is traditionally understood to encompass the spatial variation and analysis of the demographic components of change, which include migration, fertility and mortality.

Demography is the study of human populations, their size composition, and distribution across space and the process through which populations change. Births, deaths, and migration are the big three of demography jointly producing population stability or change. The consensus is that demographers focus more on fertility research, whereas population geographers tend to focus more on migration trends. Demography can affect all aspects of human activity. For example, economic, social, cultural and political. The study of demography plays a large role in society and in political decisions. In particular demography contributes to our understanding of things like refugee crises and changing populations. Demography has helped us with major global issues such as food insecurity.

Demographic inequalities, and uneven spatial patterns can be studied and can help contribute to finding solutions for these global issues. Significant changes have been seen in the composition of the world's population and its growth rates. These act as determinants of economic growth potential. Consumer statistics federal government agencies and business corporations are just a few examples of how population geography is heavily involved with economics to help track purchasing patterns. Having knowledge in areas such as birth and death rates, aging populations, and other demographic factors can be critical in planning or predicting an economy's potential pathway for an incline or decline in growth and profits.

Population geography and demography have been critical in the world's pandemic response. Demography studies how spatial patterns affect the population and how a population creates these spatial patterns. As an example demography has been used to highlight the uneven distribution of covid-19 on African American people in Toronto, Ontario. Through mapping softwares like ArcGIS scholars can find and showcase the spatial correlations causing the covid spikes. This allows us to be critical of the actions of policy makers and administrators during this pandemic. This is a great example of how versatile population geography is and how it can be applied to many different practices like social justice, medical geography, and politics.

Since demography is focused on humans and the patterns that come with our existence, it flows into the extensive work of cultural geography, quite often. Culture and demography have a very mutual relationship with a long history of intertwined connectedness. The cultural changes or patterns seen within different demographics have high influence on behaviors that bring population growth, migration, and social aspects of death and dying. Cultures and societies change as their demographics change and forecasting this is essential in the long-term planning of a region province or nation.



# Environmental Geography

Environmental geography is known as a meta-discipline, meaning it includes ideas from various other areas of study.

It has been proposed that environmental geography has evolved from physical and human geography.

Physical geography is the study of land formations and spatial variations on and surrounding Earth, while human geography is the study of the interrelationships between people, place, and the environment.

Due to this theory of evolution, many physical and human geographers have begun to call themselves environmental geographers as the field expands to involve both sub-categories of geography as one new sub-category.

Therefore, environmental geography, sometimes known as integrated geography, is the study of connections between physical and human geography. For example, studies involving CO<sub>2</sub> emissions caused by human activity are categorized as environmental geography.

Carl Ritter, born in 1779 and deceased 1859, was a German geography who many believe to be a key actor in the field by referring to him as the father of environmental geography as his focus was on the natural sciences.

Environmental Geography is therefore significant, because those human impacts are responsible for climate change.

It is our own capitalist society that is largely responsible for environmental degradation and destruction.

Human activities are estimated to have caused approximately 1.0°C of global warming above pre-industrial levels. This warming is likely to reach 1.5°C between 2030 and 2052 if it continues to increase at the current rate, and experts warn that we won't be able to exceed that number without suffering devastating consequences.

If we reach or exceed global warming of 1.5 than we will see increases in: mean temperature in most land and ocean regions, hot extremes in most inhabited regions, heavy precipitation as well as drought in some regions, extreme storms and significant losses in biodiversity.

Those changes will greatly impact us as humans as we can see through the study of environmental geography that we are heavily connected to and reliant on the environment.

The environment provides us with a number of irreplaceable benefits called ecosystem services. These services include our food, fibres, clean water, healthy soil, climate regulation, protection from natural hazards, erosion control, pharmaceutical ingredients and many more (some of which we don't fully understand yet).

When considering the future of environmental geography and climate change, it is important to consider what our planet will look like if nothing is done. According to the United Nations "if we don't slow global emissions, temperatures could rise to above three degrees Celsius by 2100, causing further irreversible damage to our ecosystems.". This means that as the planet's temperature rises in the next century will be about 100 times faster than what happened during the last 20,000 years

If we continue down the path we are currently going down, this is what north America will look like if the polar ice caps completely melt. However, this will not just affect north America, places like Australia and New Zealand will also be devastated. In conclusion, when we are considering the future of environmental geography, it is very important to understand the role of climate change and the tremendous effects it will have on our planet and ecosystems.

# Political Geography

Political geography is the study of both spatially uneven outcomes of political processes & ways in which political processes are affected by spatial structures. This essentially means the relationship that physical space or location has to politics, and the most prominent example of political geography would be the concept of borders.

There are three subcategories corresponding to the size of the space described: localities, states, and international or geopolitics. Going back to the borders example, each of these three levels of political geography must deal with borders, as well as the land and people they encompass.

Friedrich Ratzel, 1844 to 1904, is seen as the father of the subject and introduced the link between soil and state. A history in zoology led him to relate a nation to a living organism in need of natural resources for growth, which would then require more land and resources to sustain it, necessitating expansion. This ideology led to the German concept of *Lebensraum* or "living space" which was used as a justification for the aggressive expansion of early Germany. Contemporary political geographers are worrying less about what can be included in the field of political geography and building on the political components to gain more understanding of the link between politics, space, and power (Mountz, 2018).

After a long colonial history, Indigenous peoples in Canada are mobilizing at several geographical scales and are restlessly advocating for the reversal of geographies of dispossession, and struggle to gain rights to construct their own territories in place of areas made for them. (Castree, 2004). In terms of political geography, why do Indigenous peoples have to fight for what is inherently theirs? Bodies actually carry different intensities of power and privilege, and it's evident in society that some bodies are protected, and others are considered disposable (Mountz, 2018). The aforementioned borders are a social construct and have a lot of impacts politically, and in citizen's day-to-day lives. The borders, while not always physical, still manage to divide and create difference within society (Storey, 2017) - which is seen in the lives of Indigenous peoples across Canada.

Political geography in Canada has many different avenues for its future, but as mentioned earlier, Indigenous populations, territory, governance, and sovereignty are major issues that need to be addressed by political geographers.

The Arctic is one region that will require attention by political geographers in the near future, in relation to both Indigenous sovereignty and international relationships. The Arctic is important because of the changing terrestrial and marine landscapes due to climate change, as well as the international debate on country borders in relation to undersea continental plates. The Inuit perspective must be included in both of these discussions concerning Arctic territoriality.

Future political geographers must work to understand both Western and Indigenous knowledge systems, recognize Indigenous sovereignty and governance, and work with Indigenous populations to address their diverse goals and traditional territories.

In conclusion, political geography has a rich and troubled history, and it is a subfield of human geography that is still growing and evolving to address a multitude of issues and regions on many scales.