

Development I

Comparative Perspectives

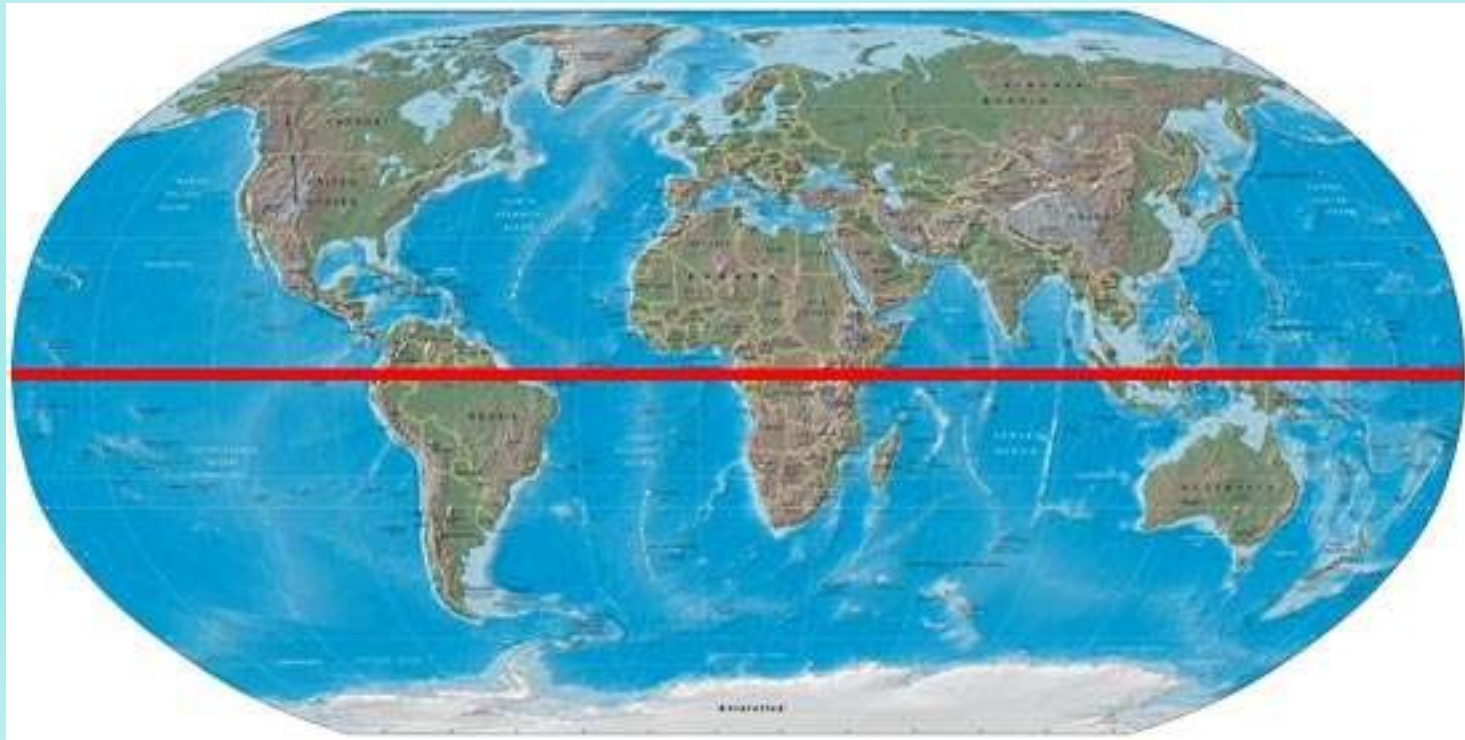
Marek Rybář, PhD.

Research Problem

- How can we explain enormous political, economic, and social differences among countries of the contemporary world?

Geographical factors

- There is a strong positive correlation between a country's distance from the Earth's equator and the quality of its institutions (Hall and Jones, 1999):

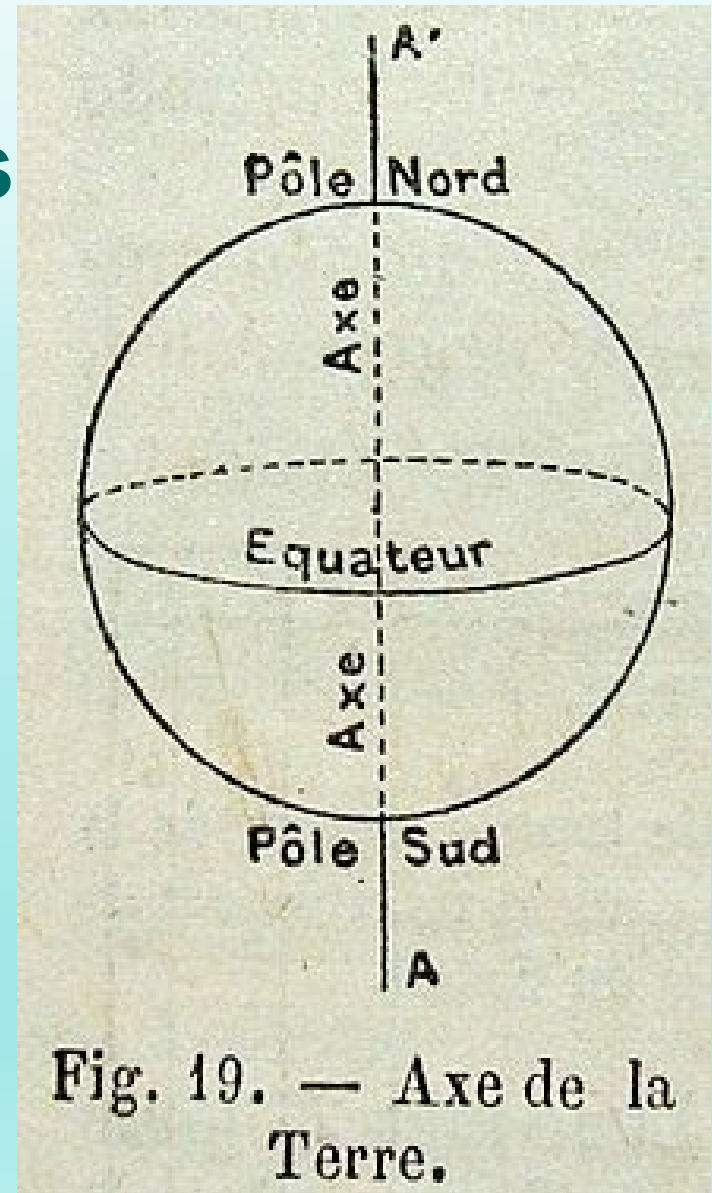


Geographical factors

- What exactly do we mean when we speak about the importance of geography for development?
- What exactly is it that is influenced by “geography”?
- What are the specific mechanisms of such an influence/impact?

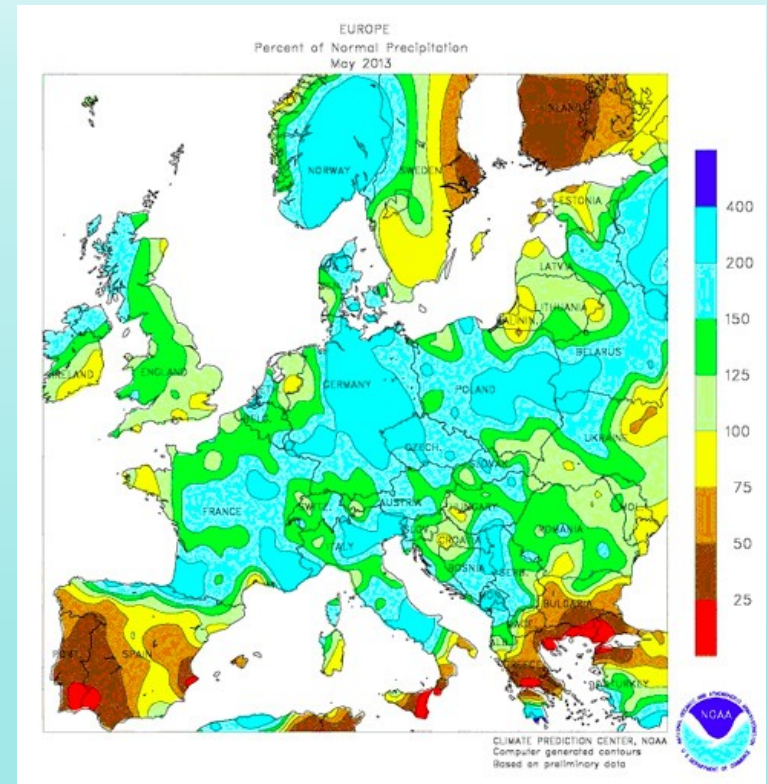
Geographical factors

- climate
- topography
- geology
- biogeography



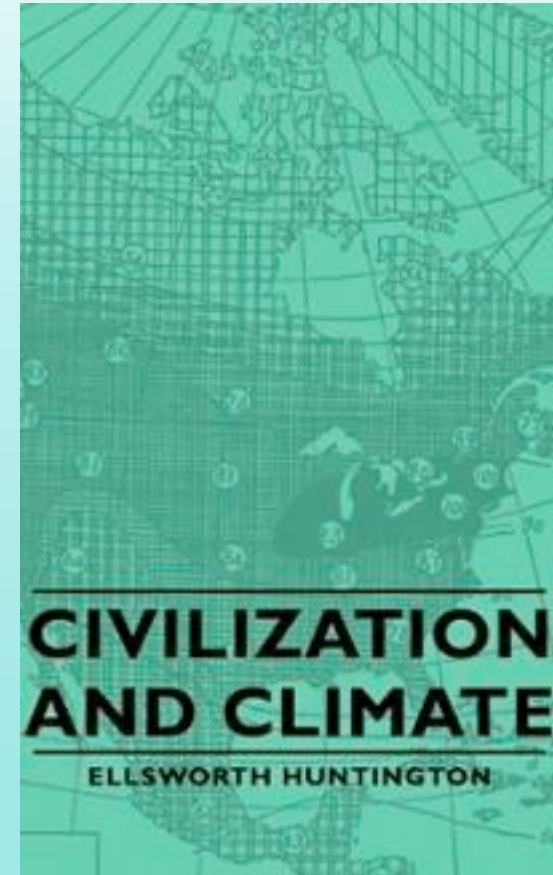
Climate

- Conditions on Earth's surface:
- temperature, precipitation, sunlight, humidity and (ocean) currents
- What matters is not just average numbers but also the absence of extremes (heat waves, heavy downpours and droughts)



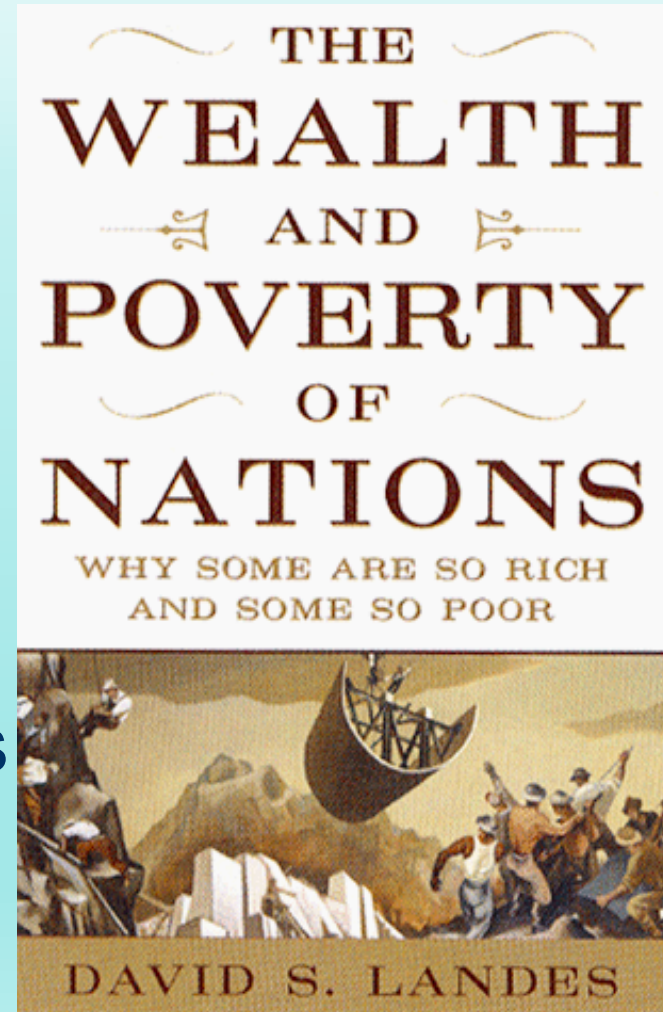
Climate

- Ellsworth Huntington (1915): temperature and humidity directly influence human institutions
- Ideal climate in the winter is between +3 and +18 (in Celsius), e.g. in London, New Zealand, North California
- people are more honest, determined, and show more initiative



Climate

- D. Landes (1998): discomfort caused by torrid weather is greater than discomfort caused by cold climate
- White people (Caucasians) would not get used to work at plantations → slavery
- precipitation: favorable streams and precipitation endowed Europe with favorable climate



Topography

- General nonbiological conditions on Earth's surface
- mountains, oceans, islands, length of rivers, their navigability and volatility during the seasons of the year

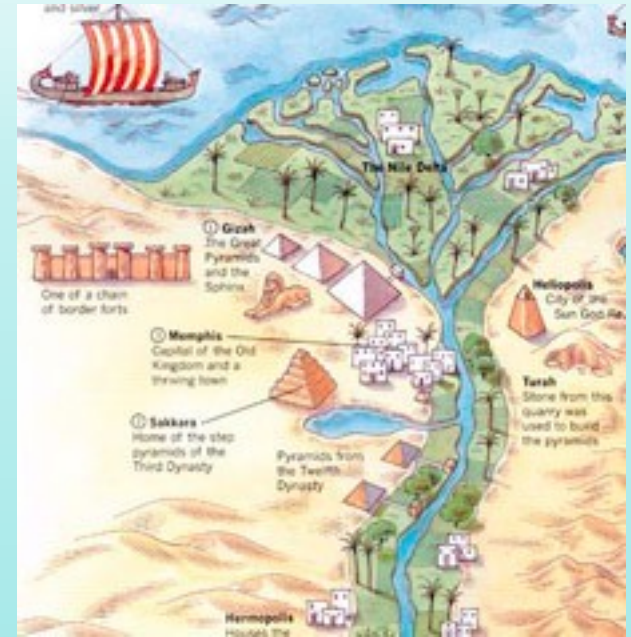


Topography

- K. Wittfogel (1957): rivers can be relatively easily controlled and regulated
- ancient civilizations formed on the banks of rivers & developed a sophisticated division of labor: a narrow ruling class controlled the mass workforce
- the forced labor was later used for other development projects: building roads, canals, irrigation systems, monuments etc.
- The rise of “the oriental despotism”:
- topography → technology → institutions

Topography

- However, a different situation had existed in Europe (Jones and Landes 1998):
- High mountains, rivers without deltas, large forests, an irregular shape of the continent, plus many islands, all prevented the rise of a single civilization
- No dependence on a despotic ruler because “farmers” had access to a number of alternative sources of water (rain)



Topography

- **Ocean Currents:** Europe in 1500 was not richer than China, India and the Arab world
- A relative proximity of rich America (silver and gold), and favorable ocean currents, gave advantage to European sailors/kings who gained resources that later helped finance the Industrial revolution
- However, there is no clear-cut explanation for the emergence of institutions in this line of explanations

Topography

- Acemoglu et al (2002): Europe after 1500 got richer thanks to its trade with America, India and East Asia
- Only countries with access to the sea would benefit
- There is a link between international trade and good institutions:
- Trade strengthened the position of traders (not the traditionally privileged gentry), who sought guarantees for their newly acquired property --> strengthening of property rights
- topography → rise of a new social group → favourable institutions

Geology

- Nonbiological conditions under Earth's surface:
- character of soil, quality and quantity of natural resources, active volcanos, earthquakes etc.



Geology

- Quality of soil differed in North and South America (Engerman and Sokoloff 2002):
- Soil in the South (Central) America suitable for production of tradeable commodities (sugar, tobacco)
- Slave labor widely used → vast social and political inequalities → the emergence of institutions that protected privileges of the powerful and prevented effective political inclusion and participation for many years

Geology

- Natural resources: oil, gas, gold, diamonds, copper
- Too much natural resources was hypothesized to lead to “resource curse”:
- From the 1970s: countries with an abundance of natural resources tend to have less economic growth, less democracy, and worse development outcomes than countries with fewer natural resources

Geology

- **direct economic effect?**
- Revenue volatility: High volatility in the prices of natural resources leads to abrupt changes to social programs, erosion of the rule of law and decline in popular support for governments (Nigeria, Venezuela, and oil prices)
- Lack of investments: Companies export their profits from the country, no investments into local development

Geology

- **Political explanations?**
- “Fast cash”: lack of long-term economic policies
- Income from natural resources is used to subsidize the underperforming sectors of the economy -> high political costs of structural changes
- Violence: ethno-political groups are more likely to resort to rebellion (rather than using non-violent means) in resource-rich countries

Geology

- The rentier state: governments do not collect taxes → are thus less accountable, do not strengthen property rights, and the general state capacities are rather low
- The relationship between oil and authoritarianism holds after the Cold War: without US or Soviet support, resource-poor authoritarian regimes democratized, while resource-rich ones managed to resist domestic pressures to democratize

Biogeography

- “geography” of living organisms (NOT humans!)
- Abundance and character of fauna and flora, type of vegetation, microorganisms (bacteria, viruses)



Biogeography

- J. Diamond: differences in biogeographical resources during Neolithic times fully developed after 1500 in different developmental trajectories of the continents
- Favorable conditions: animals suitable for domestication AND access to highly nutritious (and storable) plants/grains
- Eurasian continent (East-West orientation) favorable to easy transfer of modern technologies from the Middle East (“the Fertile Crescent) to Europe
- Technologies of South American civilizations of the time did not “travel” (South-North orientation of the Americas less favorable)

Biogeography

- Eurasia: Early departure from picking and hunting to agriculture
- resulted in a sophisticated division of labor, trade, urbanization and strong political development
- Followed by rapid technological development and,
- after 1500, gave Europeans the ability to dominate the New World (Spain vs. the Aztecs and the Incas), and not the other way round

Biogeography and institutions

- Diamond cannot explain the persistence of institutions after 1500 nor why subsequent technological changes were not used on other continents to bridge the developmental gap
- **Acemoglu, Johnson a Robinson (2001):**
- differences in European mortality rates to estimate the effect of institutions on economic performance, i.e.:
- The link between micro/biogeographical conditions and the quality of governance

Biogeography and institutions

- a great majority of European deaths in the colonies was caused by malaria and yellow fever
- malaria and yellow fever → extractive institutions → weak protection of the rule of law, personal freedom, and property → weak subsequent economic and political development
- Favorable micro/biogeographical conditions → permanent settlements → good institutions → stable economic and political development