


Chapter 6: Population Geography

Introduction to Geography

Lehman College GEH 101

Spring 2011

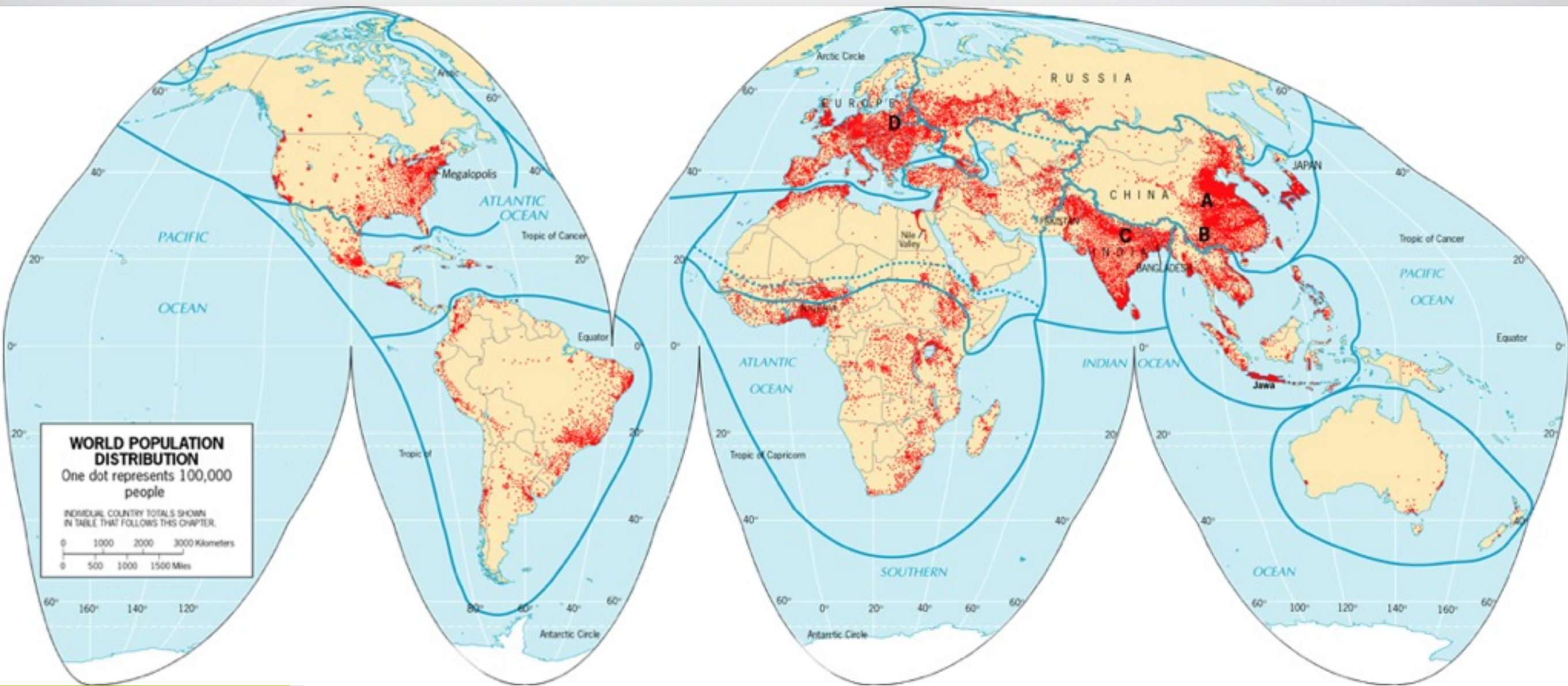
Keith Miyake

- 
- ■ Quiz next week
 - ■ Mid-term exams
 - ■ Make up for absences
 - ■ Term papers/outlines



Population Geography

- ■ Number, composition, and distributions of people
- ■ Demography: The statistical study of human populations
- ■ Spatial analysis: distributions across space
- ■ Population dynamics and migration
- ■ How does population change reflect socioeconomic conditions?



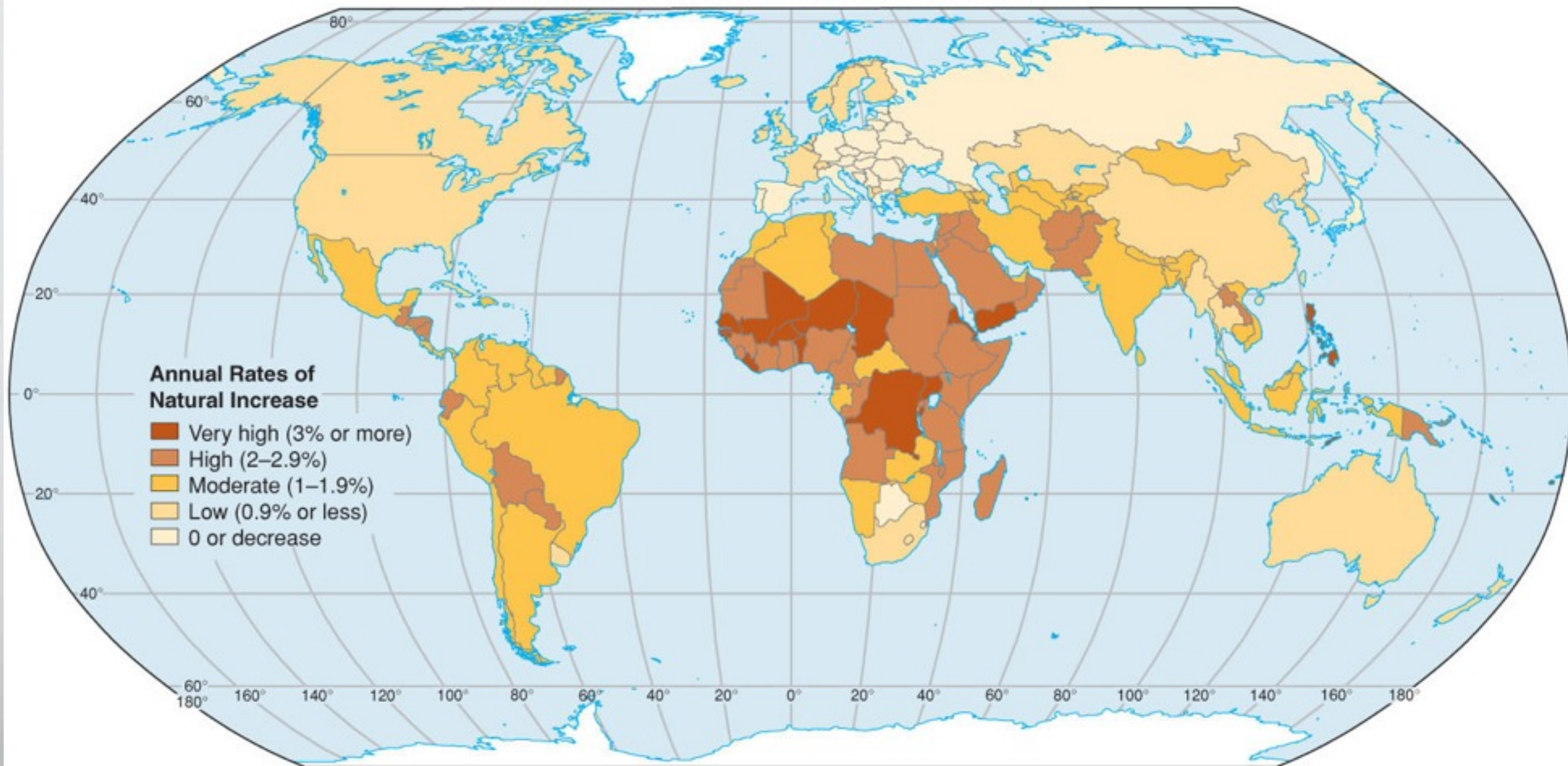
Global Population Clusters

Natural Population Change

- **Population change** = **natural change** + **net migration**
 - **Natural change** = **birth rate** – **death rate**
 - **Birth (death) rate**: number of **births (deaths)** per 1,000 people
 - These rates are actual measurements
 - 2009: **1.986%** (19.86 per 1,000), **0.837%**, **1.113%**
- **Population Growth Rate**: Rate of change in population over a year
 - e.g.: Growth rate of +1.1% means that if current pop. is 5,000, then next year there will be approx. $5,000 + 1.1\% \times 5,000 = 5,055$ people
 - World natural increase 1.1% (2% in 1975)

Rates of Natural Population Growth

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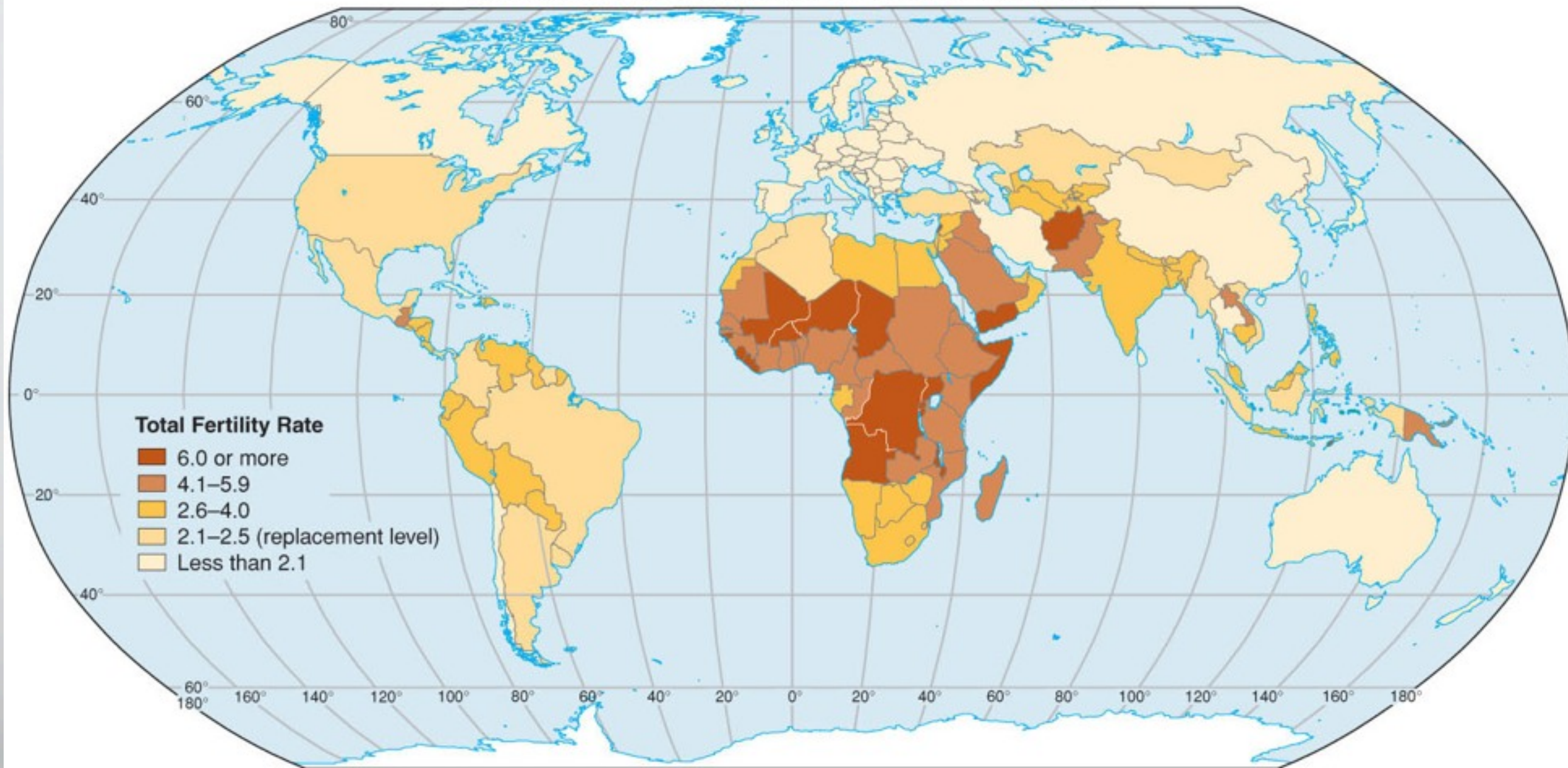


Natural Population Change

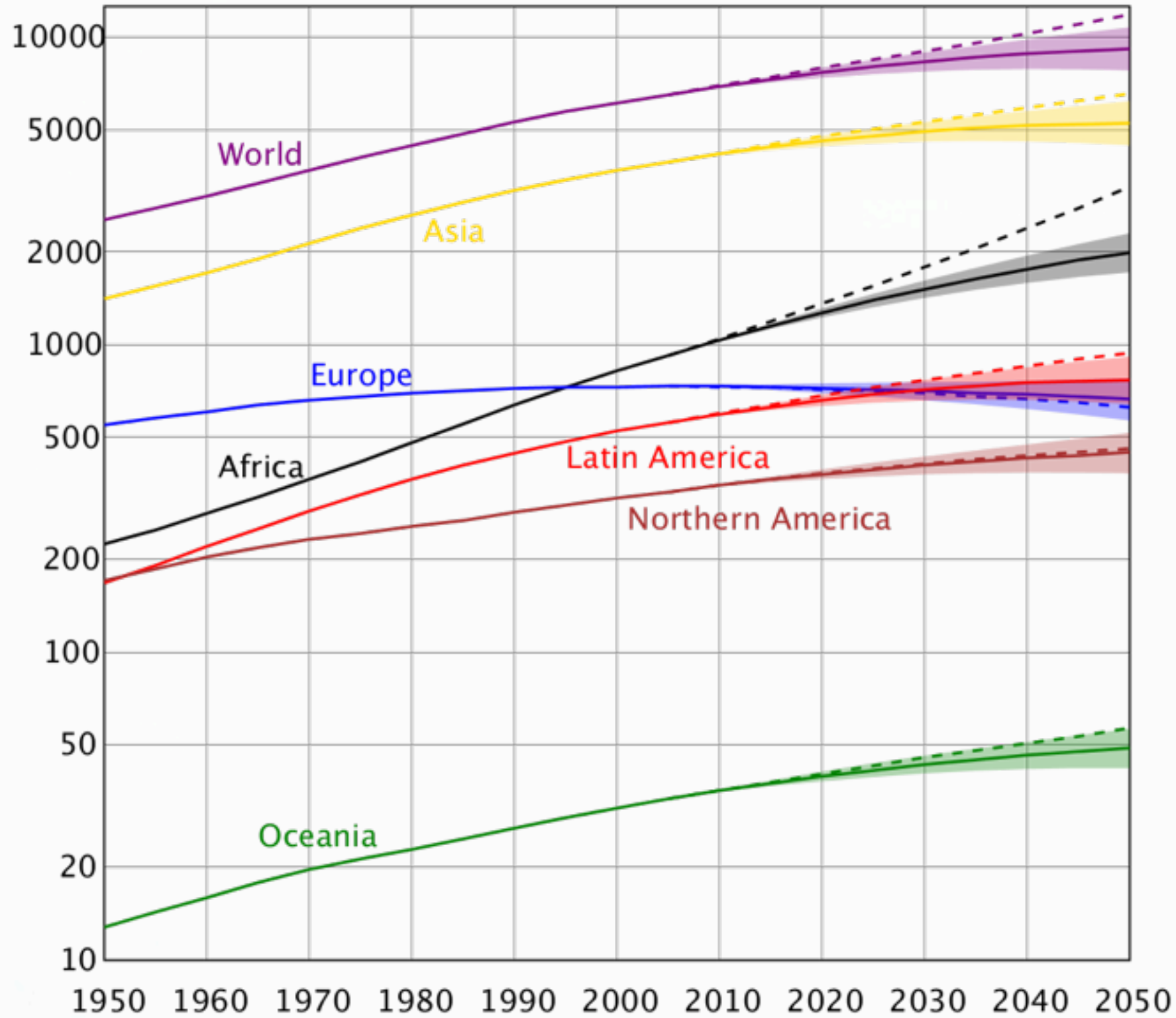
- ■ **Total fertility rate (TFR):** expected number of children born per average woman over her reproductive lifetime (~15-49 years)
 - ■ Based on the sum of the current reproductive rates for each age range
 - ■ *Different* from the **birth rate** (actual births in a year)
 - ■ Birth rate depends on population structure, TFR doesn't
- ■ Global TFR: 2.7 (2.1 - 2.3 is the replacement rate)
- ■ What does the current TFR mean for population change?

Total Fertility Rates

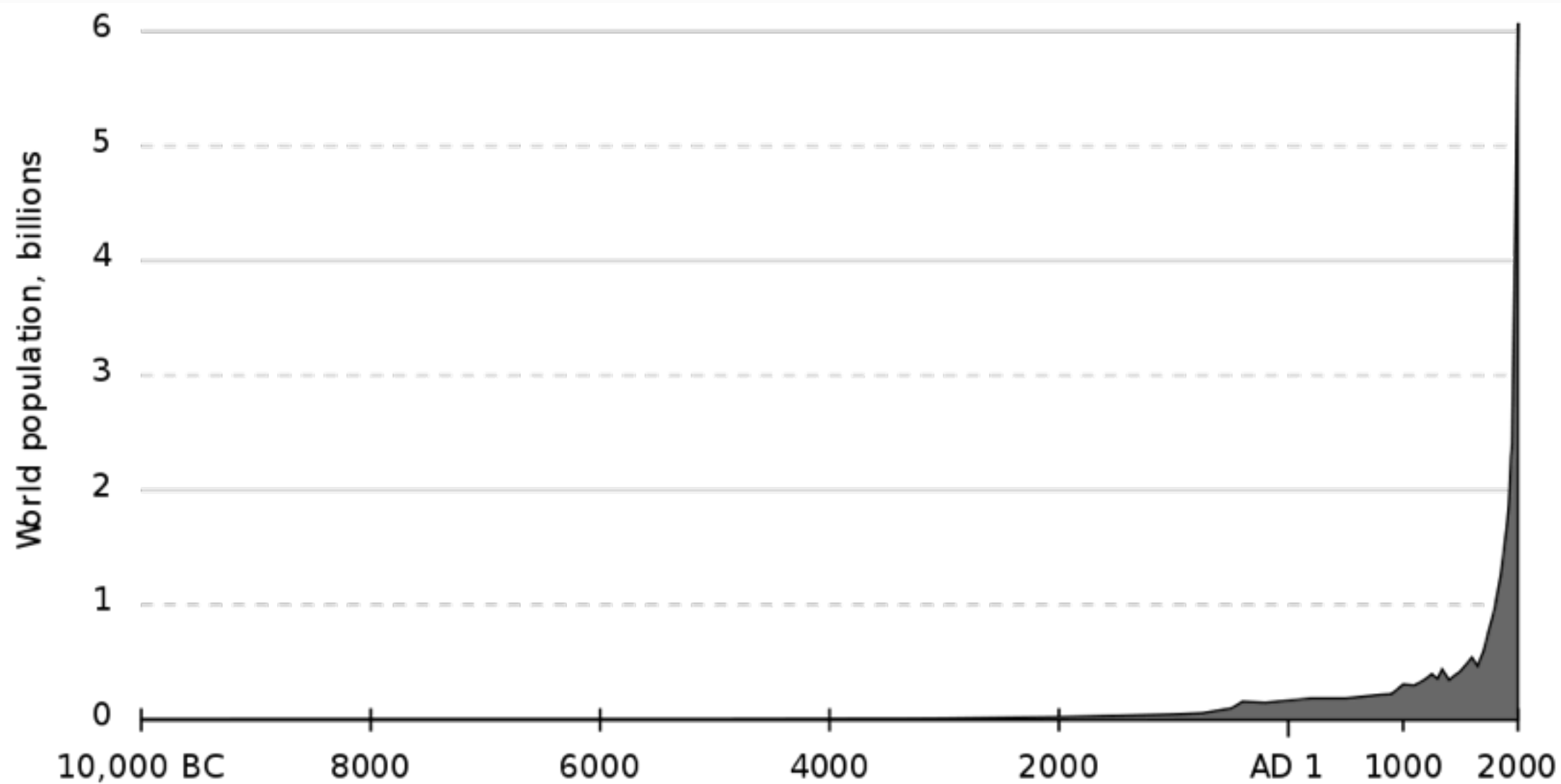
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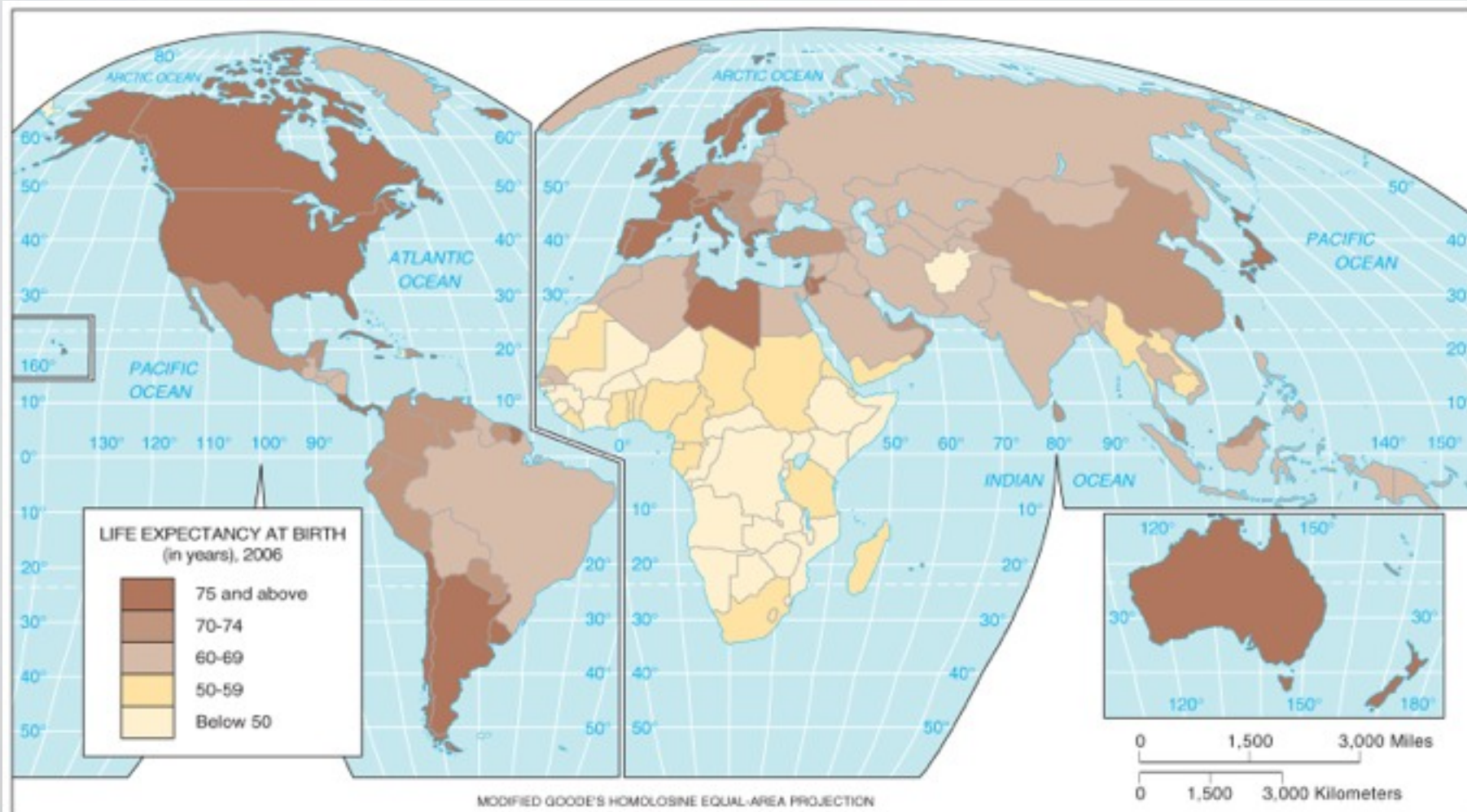
U.N. Population Projections



What Causes Population Growth?



Life Expectancy at Birth



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- Pre-Industrial Era: 30-40 yrs
- 65 yrs today
- Uneven throughout world

Demographic Transitions

- Industrialization and urbanization tend to slow population growth
- Historically, this was a long process that depended on empire

Pre-Industrial
Agricultural
Rural



Modern
Post-/Industrial
Urban

High birth and death rates



Low birth and death rates

Stages of Demographic Transition

1. High birth/high death rates - no growth

- Children as assets for (re)production
- High mortality due to **disease**, war, famine

2. High birth/**low death** rates - population boom

- Public health -> infant mortality decreases, longer life expectancy
 - *sanitation, sewage, germ theory*
- Food and resource security: increased output and production chains (colonialism/empire)

3. **Low birth**/low death rates - no growth or negative growth

- Urbanization, education, women work outside the home, birth control
- Children as liabilities/choice



Demographic Transition in Former Colonies

- ■ Arrested development (slows the transition)
 - ■ Slavery and exploitation -> premature death
 - ■ Revolution and war -> premature death
 - ■ Uneven development: Industrialization, export substitution
- ■ Population booms
 - ■ Increased Food Security: Green Revolution, international trade, import substitution
 - ■ Health Infrastructure: sanitation, sewage and clean water
- ■ Urbanization? Education? Forms of production?



Leading Causes of Death

- ■ Former colonies:

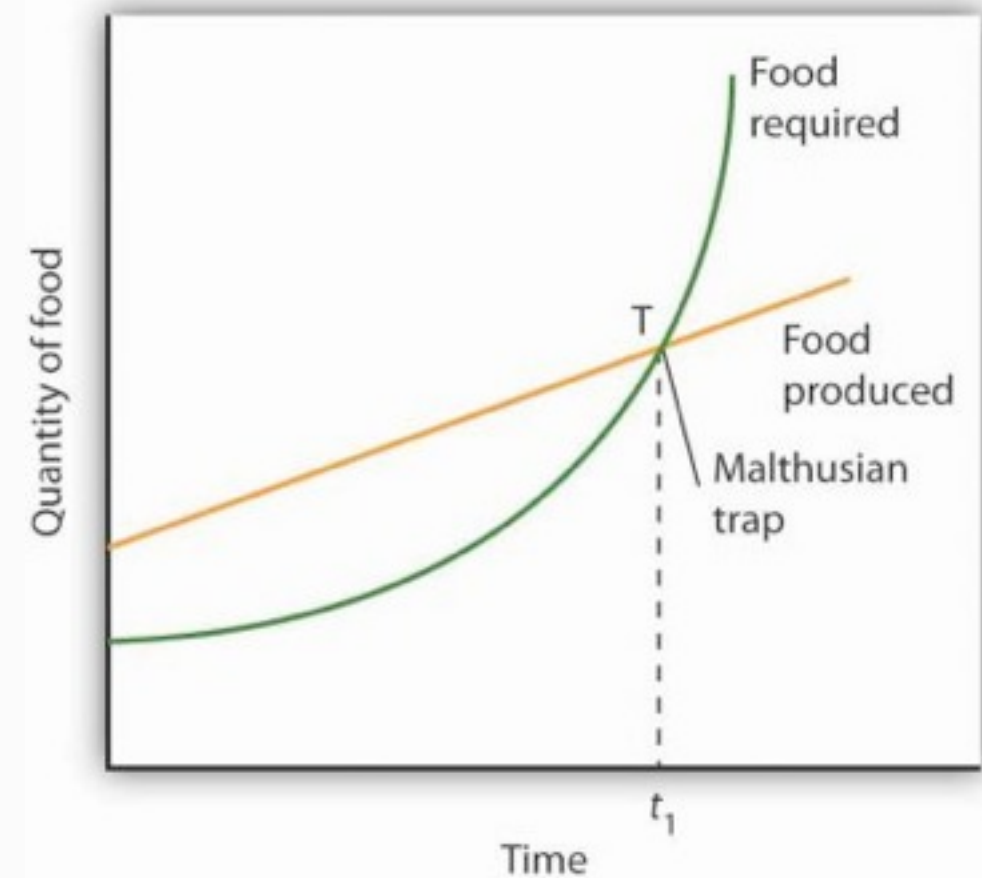
- ■ Preventable (during childbirth)
- ■ Infectious, parasitic, contagious
- ■ Food insecurity

- ■ Colonial powers:

- ■ Age-induced degenerative
- ■ Cancers
- ■ Obesity-related
 - ■ Cardio-vascular
 - ■ Diabetes

Malthusianism

- Thomas Malthus: population grows exponentially, food supply grows linearly
- “Stop helping the poor because they’re taking away resources from the rich”

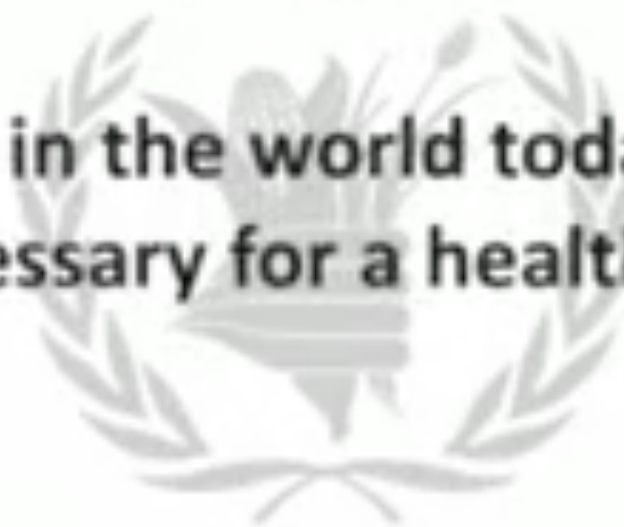




**“The world currently produces enough food for everybody,
but many people do not have access to it.”**



WFP



**“There is enough food in the world today for everyone to have
the nourishment necessary for a healthy and productive life.”**

<http://www.youtube.com/watch?v=OXrN9HhnCcM>

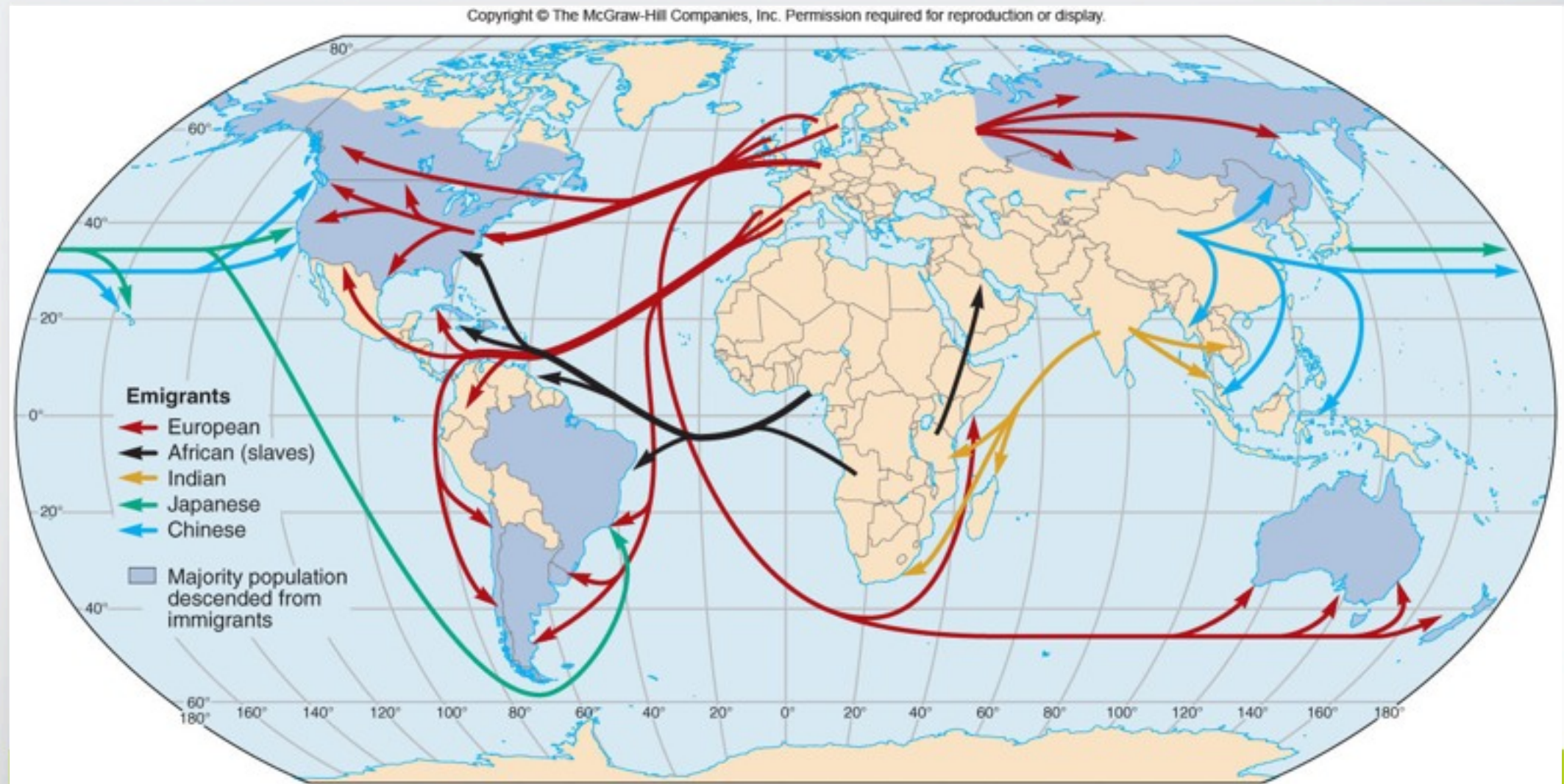
Neo-Malthusianism

- Neo-Malthusianism: since 1950s, **population control** as a cure for poverty, structural adjustment programs (SAP)
- Arable land?
- Technological innovation (e.g., green tech, agriculture)
- Social justice/political economy: **Scarcity is produced through uneven development (food prices, export substitution)**
- Reproductive: **Woman's body and choice**
- Deep ecology/sustainability: **reduce consumption**
- Anti-racist and post-colonial: **White minority vs. non-white populations**

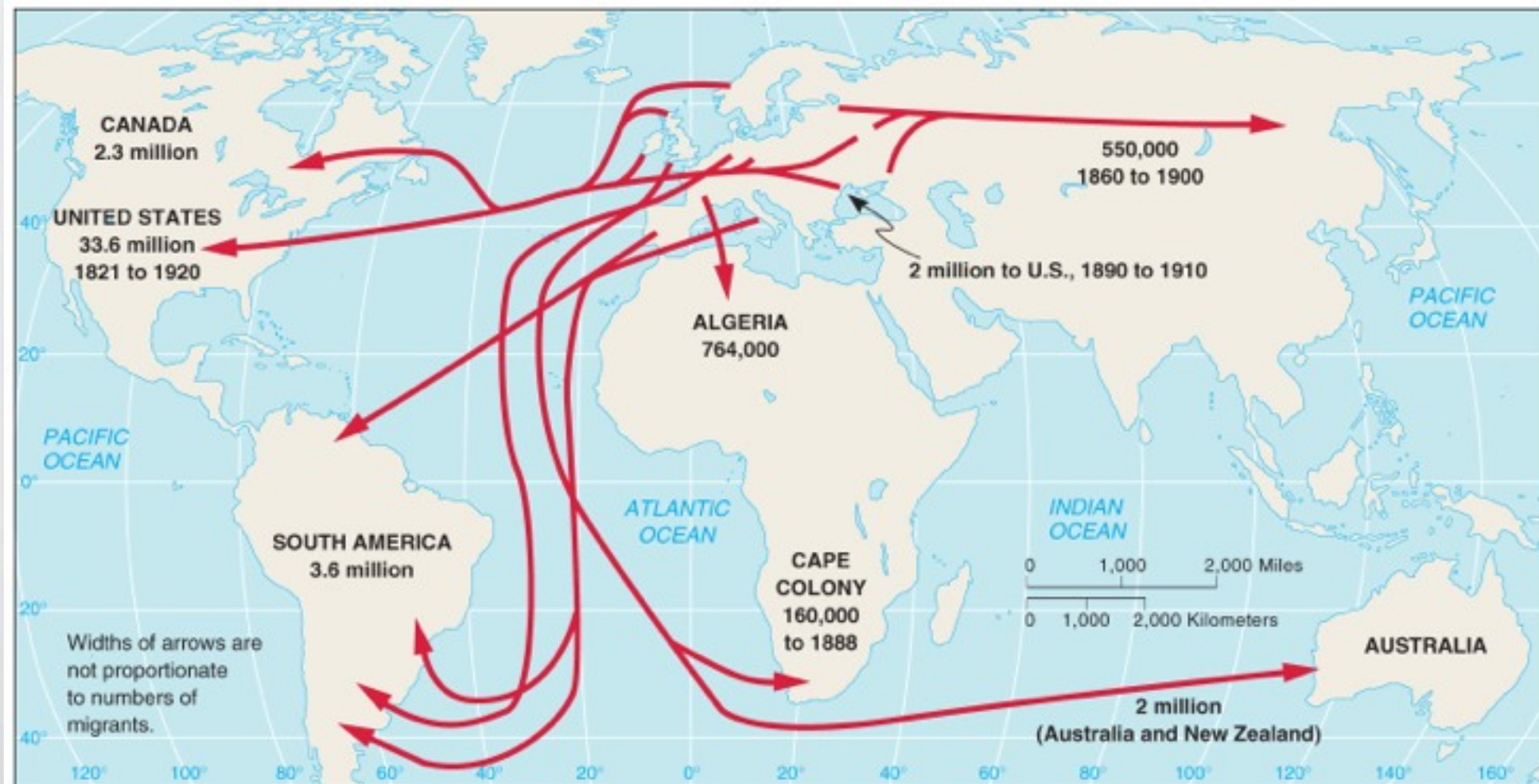
Migration

- **Population change** = **natural change** + **net migration**
- **Net migration** = in-migration (immigration) - out-migration (emigration)
- Migration: permanent or long term relocation (residence + work)

Migration since 1500

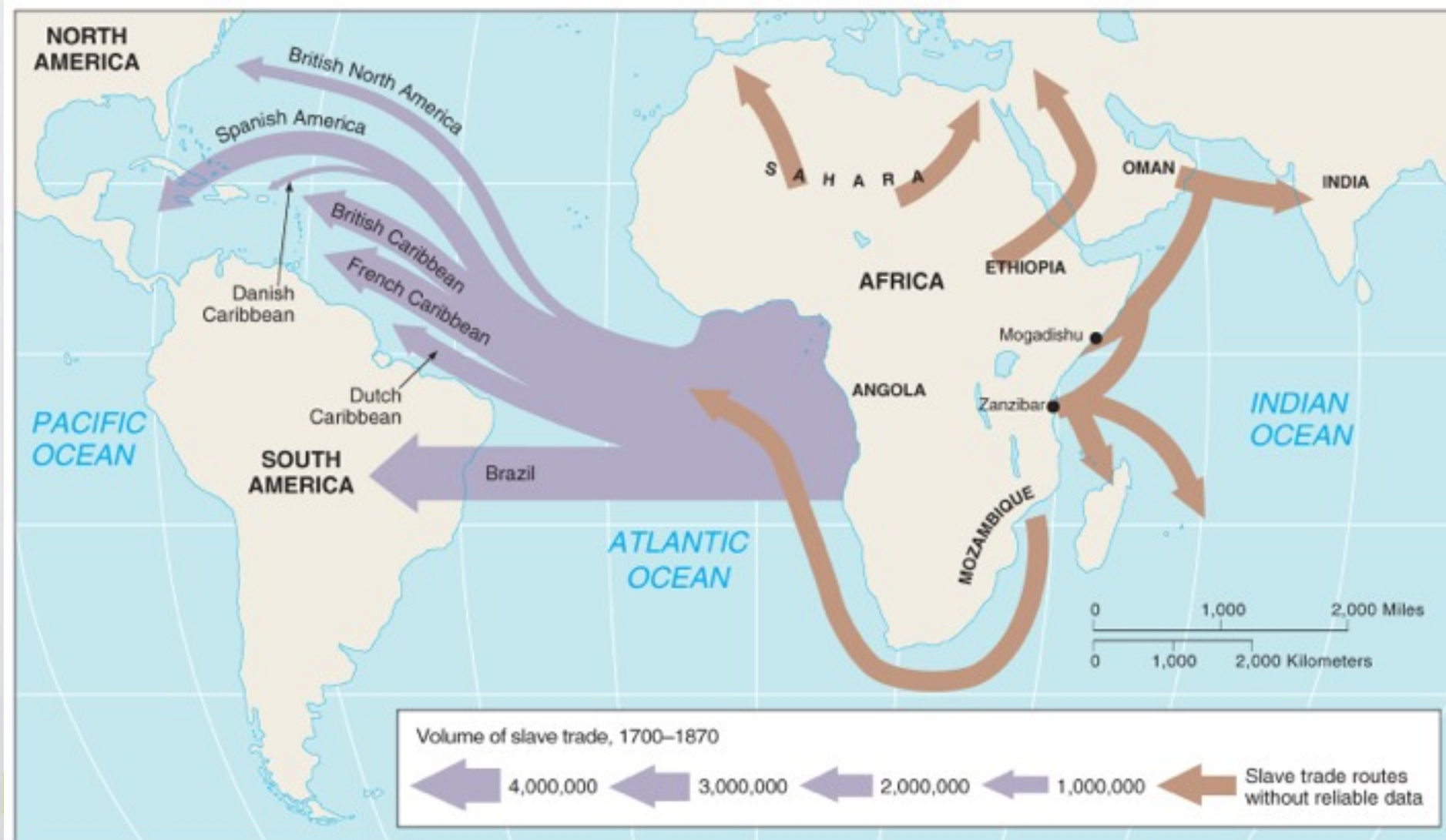


European Migration in 19th-20th Centuries



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Forced Movement of Slaves out of Africa





Spatial Scales of Migration

- ■ Within a city
- ■ Rural -> urban (urbanization)
- ■ Regional (within a country)
- ■ International

- ■ Diffusion rates influenced by:
 - ■ labor skills, languages, culture, social networks, ideas, money, etc.




Causes of Migration: Push/Pull Factors

- Economic (unemployment/opportunity)
- Social services (health care, education)
- Political (wars, ethnic and religious prosecution/democracy)
- Environmental (pollution, desertification/Sun-belt, snow-birds)
- Lifestyle (retirees, gay communities)
- Cultural (ethnic enclaves, migration chains, chances of finding courtship)



Who is Migrating?

- ■ Voluntary: Younger, risk taking, healthier, working age, 40-60% female
 - ■ Forced (slavery, refugees)
 - ■ Family reunification
 - ■ Return migration (temporary, sojourners)
 - ■ Indigenous vs. migrant populations
- 



Contemporary International Immigration

- ■ 3% of world population
- ■ 20-30 million undocumented migrants
- ■ From developing to industrialized nations
 - ■ Demand for labor
 - ■ Economic in/stability
- ■ From developing to developing nations (1/3 of migrants)
 - ■ Language, culture, religion, political refugees



Impacts of International Migration

- Economic:
 - Alleviate unemployment at home
 - Cheap labor and brain drain
 - Inequalities between rich and poor countries
 - Workers' remittances (more \$\$\$ than international aid)
- Population structure
- Political: welfare and services
- Cultural change, added diversity



White Collar Migrants

- ■ 25% of doctors trained in Africa works abroad
 - ■ working conditions, pay, political stability
- ■ Teachers and Doctors for Oil (Cuba to Venezuela)
- ■ Filipino health care workers
- ■ Professionals as political refugees



Term Paper Discussions

- ■ How does the uneven allocation and use of natural resources factor into the processes (political, economic, and socio-cultural) that shape your topic?
- ■ What are the impacts on natural resources (extractive, destructive, or otherwise)?
- ■ What is the role, if any, of sustainable planning and development?
- ■ What specific populations are affected by your topic and what are their demographic characteristics?
- ■ What is the relationship to human migration?