

Chapter 1 (Robbin's et al):

Introduction: The View from a Human-made Wilderness

Major theme:

It is now virtually impossible to study our “environment” in isolation, i.e. without taking into consideration the direct or indirect impact of human activities..

Question for you:

Where's the most “remote” place you've ever visited, i.e. with little evidence of “human activities”? Isolated?

Where is there a “pristine wilderness”, completely isolated from human impact?

Pristine? having its original “purity”, “uncorrupted” by human activities,.. unsullied”??

Major theme of Robbin's et al (there is no longer such a thing...)



Chapter 1 (Robbin's et al):

Introduction: The View from a Human-made Wilderness

In terms of basic definitions:

Environment: the whole of the aquatic, terrestrial and atmospheric world (non-human world),

- including the flora (plant life) and fauna (animal life) that inhabits it,.
- & the organic and non-organic processes that characterizes it

Society: humans, and our larger systems of **culture**, politics and economic exchange.

* **culture** -- the behaviors, beliefs, values, and symbols characterize a society, that are passed along by communication and imitation from one generation to the next.

Note: sociologists tend to use the term “culture” very broadly, to also include what is often referred to as the “material culture” of a given society, i.e. its “**technology**”

In understanding the human impact on the environment, culture (and technology) is of particular importance!!

- The relationship between humans and their environment is complex.
- Continuous interchange of influences:
 - human society -> environment
 - environment -> human society
- There are often:
 - Instances of immediate & great destruction (humans against -> environment)
 - Less obvious, subtle changes introduced by people (both intentionally, & non-intentionally) with eventual impact of major importance!

Immediate Instances of great destruction (humans against -> environment)

Examples?

E.g. Canada remains the world's largest producer of newsprint (1/4 global demand) – Canada's population is less than 0.5% of the global total



Eg. Canada's oil sands produces roughly 50% of the Canadian demand. Canada is the world's largest exporter of energy to the United States





Why the stark difference?

Both countries have populations of roughly 10 million



Haiti continues to rely upon wood in meeting its energy needs,.
The DR relies upon the import of Fossil fuels

Less obvious yet important impact (humans -> environment), sometimes with the best of intentions..



Invasive species

Four moose were introduced to the Island of Newfoundland near the town of Howley in 1904. Positive and negative, the (estimated) 150,000 descendants of these hungry herbivores have left an indelible mark on this province's identity, culture and landscape. Moose were originally introduced as part of a wider government initiative to develop the Island's interior. It was hoped that the animals would attract big game hunters – a new market for Newfoundland's new railways. The meat would also sustain workers needed in the burgeoning mining and forestry industries – a key to diversifying the country's fishing-based economy. With few natural predators and finding Newfoundland the perfect habitat, moose thrived and the rest is history. Today, moose are so numerous that they pose a hazard to drivers, and their voracious appetites are altering the native forest.



- Obviously, in terms of the relationship between humans and the environment, it works in the opposite direction as well!
- Sudden instances of great destruction
- environment -> humans



Katrina New Orleans (1999)

Costliest and most deadly storm in US history
over 1200 fatalities



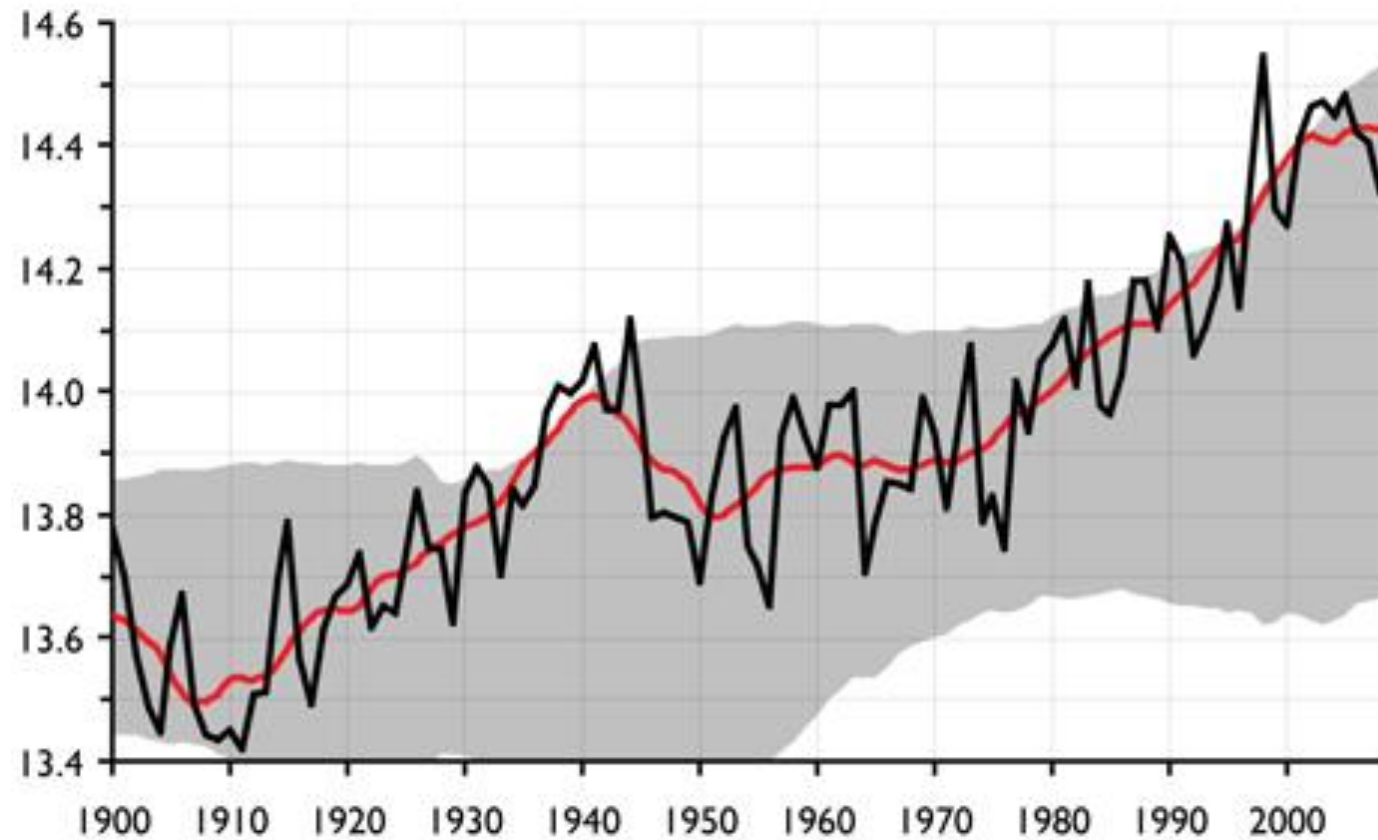
Ice Storm of 1998

7 Billion in cost, affecting
4 million people at its height
forests & power lines destroyed

Also, the less obvious, gradual yet important impact of environmental change over the longer term (environment-> humans) -> example?

Climate change

Global temperature (in °C) from 1900 to 2009. The black line is the annual global mean. The red line is the 10-year running mean.



Humans and their environments:

Long history of dramatically transforming the environment

- **A useful concept for us to use in this context:**
- **Anthropocene:** some scientists have started to use this term to describe the planet's most recent history (as a geological epoch, beginning roughly 8000 - 10000 years ago).. Note: also referred to as the Holocene
- Our current era, in which humans have a large impact on environments, but cannot control their complex ecologies
- 7.5 billion people living on the planet, which leads to the fundamental question:
- *What role should humans play in changing or maintaining certain environmental systems? (we have attempted to control, improve & live within nature, with varying levels of success).*

Video: last week, Mother: Caring for 7 Billion

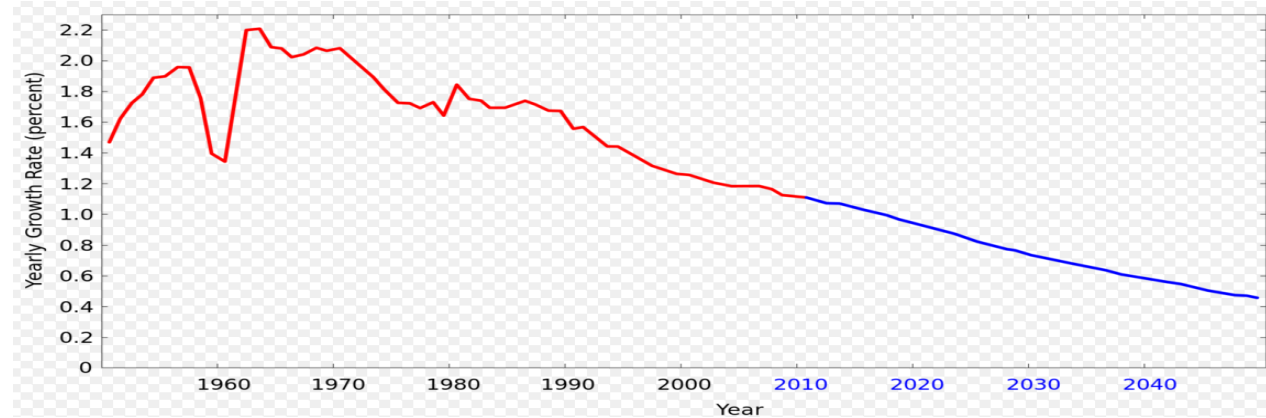
<https://www.youtube.com/watch?v=JPc9BdWVI5s>

"Neo-Malthusian" perspective on the relationship between global population growth & human welfare..

We currently face a crisis in terms of "overpopulation"..

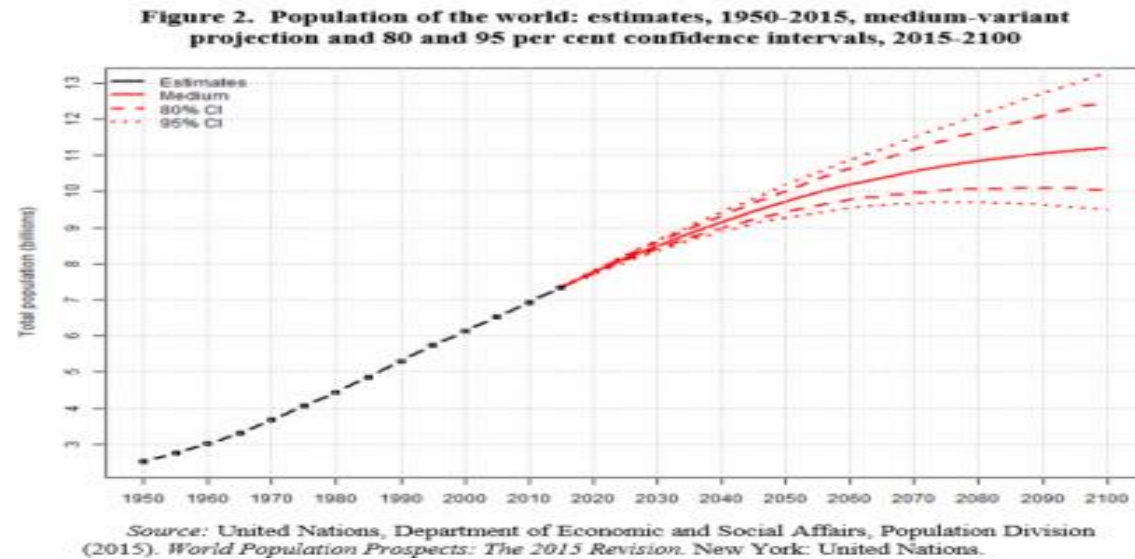
Do you agree? Do we have a problem of "overpopulation"?

Rate of Global Population Growth

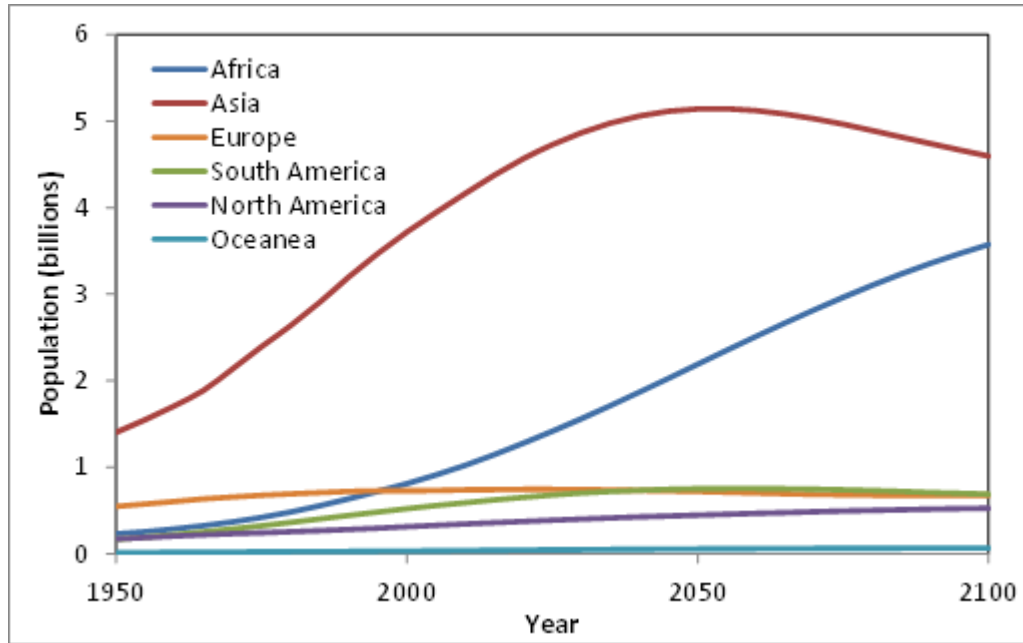


Slowing dramatically

Total Population Size (UN's most recent projections)



BUT, we can anticipate billions more!!



Note: we face somewhat of a “Population paradox”

Africa continues to experience a population “explosion” as is true of much of Asia
(exceptions China, Japan, HK, etc)

Europe will likely experience “a population implosion” (i.e. population decline and
rapidly aging populations)

N.A. (CANADA). Unknown growth, but it will likely slow, yet with major population aging..
Immigration will continue to be important in driving growth.

Particularly important in predicting “future growth” is “future fertility”!!

Two measures:

Total Fertility Rate (TFR) – actual fertility of women (Canada, at about 1.6 births per woman)

Expected fertility (intentions) – how many do you plan on having?

Canada: Expected > TFR

In most very poor countries: TFR > Expected

Why?

TWO MAJOR THEMES FROM THIS VIDEO:

1. Future “fertility projections” very important!!

Reaching “replacement fertility” (2.1 births per woman) -> stabilization of Global population at 9-10 billion

Continuation of status quo (2.5 births per woman) -> global population of greater than 12 billion by end of century..

OUR PLANET IS NOT CAPABLE OF SUSTAINING SUCH A POPULATION (10 billion, or more!!)
(note: not everyone agrees)

2. PARTICULARLY IMPORTANT FACTOR in explaining “fertility” and its “potential decline”..

“Status of women”..

Direct inverse relationship with fertility, i.e. typically the higher the relative status of women, the lower the fertility!!