

Sustainability and the Built Environment – CVEN 4838/5838
Spring 2004 – Professor Amadei
Lecture Notes – January 22, 2004
Carl Grodnik

Today:

1. Powerpoint presentation
2. Population growth movie
3. Discussion

Population growth

World growth rate currently ~ 1.68%
Limited amount of resources

Exponential growth?

How do we take care of it or slow it down?

(1st slide today) ((from previous lecture's Powerpoint presentation))

Land area of the Earth = $150 \times 10^{12} \text{ m}^2$
Initial population = 6.0×10^9
Annual percentage increase = 1.68%

$$N = \underline{N_0} e^{\lambda t}$$

Underlined characters are the changing variables...

(New Powerpoint presentation)

Title: Do we really have a problem?

3 categories of interested people: Apocalyptics, Realists and Techno-Optimists

50% of the world's population is < 25 years old

Trend: Lesser developed countries having more kids.

Emerging Trends

For most countries, being environmentally conscious is NOT a priority.

Non-Governmental Organizations (NGOs)

They're large stakeholders

~ 10,000 NGOs in the US, 100,000 in the world

Worldwatch Institute, Save the Children, Save the Planet, Save the..., etc.

Expansion of resource consumption and awareness of the consequences of rapid growth

Ex: Native Americans

Having problems with displacing sacred cultures

(There are ethical, spiritual issues that we are going to hear about sometime)

The media can have a powerful effect on these situations

Emergence of new, powerful stakeholders and a new world view.

Profit vs. non-profit

Emergence of credible alternatives to “business as usual”

Natural Capitalism – www.natcap.org

The Natural Step – www.naturalstep.org

Zero Emissions Research Institute – www.zeri.org

Comments on quote:

“Reality is what we take to be true. What we take to be true is what we believe. What we believe is based upon our perceptions. What we perceive depends upon what we look for. What we look for depends on what we think. What we think depends on what we perceive. What we perceive determines what we believe. What we believe determines what we take to be true. What we take to be true is our reality.”

-Gary Zukav

-Thoughts are already set in someone’s mind; therefore, you must get to them early if you want to work on their thinking and beliefs.

-The circular thinking makes sense, but it’s not really that hopeful.

-I agree with the statement; knowing that that is true is the only thing that allows for compassion for people with different beliefs.

-Keep in mind what your own slant is.

-Requires you to step in someone else’s shoes or take their viewpoint (along the way you might change both their and your position).

Movie Title: “World Population”

- Capacity of our environment to reproduce, use our resources, etc are all limited
- We’re increasing our population as if they were infinite
- 5 minute movie showing world population growth with dots on a map
- (interesting point: no dots in North America until 1100 A.D., but there *were* people here then)

At the present world population growth rate, the population will double in 50 years.

State of the World

1. Transportation (Karen)
2. Health and Social Issues (John)
3. Energy and Global Changes (Eric)
4. Environmental and Natural Hazards (Mike)
5. Consumption (Alicen)

6. Economy of Finance (Lindsey)

Each group:

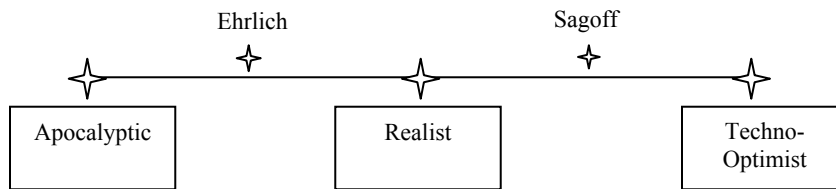
5 – 10 minute oral summary

~3 page written summary

Be ready on Thursday, Jan. 29.

Article Discussion:

Does the North exploit the South?



Class separated into groups and chose quotes from a transparency.

Each group should look at the points and counterpoints of the quote they chose for class and be ready on Tuesday, Jan. 27.