

Understanding our Environment and Environmental Ethics and Philosophy

"The more clearly we can focus our attention on the wonders and realities of the universe about us, the less taste we shall have for destruction."

-- Rachel Carson

Environmental History of the World

1 BIBLE-nature: dark + evil (viewed by Western Civilization)

2. UTILITARIAN CONSERVATION- Nature is for man's use.

~Gifford Pinchot- 1st head of Forest Service

~anthropocentric- what's in it for man?

3. BIOCENTRIC PRESERVATION- nature for nature's sake.

~ John Muir -started Sierra Club. ex. Mineral King Valley court case

4. MODERN ENVIRONMENTAL MOVEMENT-

~Rachel Carson- wrote Silent Spring (DDT softens egg shells)

~ David Brower-saved the Grand Canyon

*Population Explosion

-6.7 billion & averaging 85 million more each year. Most populated countries: China and India

-Most growth occurring in poor countries

- Theories vary on long-term population standing (up or down?)

Are there enough resources to provide for this population let alone an increase (drinkable water, food, shelter)

*Deforestation= "destruction of tropical forest, wetland, coral reefs"

-extreme lose of species abundance and diversity

If continued, how will this impact the earth's future?

*Pollution

-50% toxic waste produced by U.S.

-26% toxic air emissions by U.S.

-Growing problem in industrialized nations

- Hundreds of millions of toxic waste is produced annually

-NIMBY: "No one wants it in their backyard"= exporting to other countries

When there is no room left, where will waste go and at what cost?

~Combination of toxic waste & other environmental ills cause more destruction than infectious diseases

*Global Warming

- Fossil Fuels (FF)=80% of energy used in industrialized nations (non-renewable....yikes!)

-Burning Fossil Fuels creates CO₂ & heat absorbing gases= *GLOBAL WARMING!!!!!!!

- effects: sea level rises, drastic climate changes, & massive extinctions

Signs of Hope:

-some cities are cleaner and less polluted than in the past

-population stabilized in industrialized countries

-# of children/women decreased from 6.1 to 3.4

-Infectious diseases have been reduced, life expectancy nearly doubled

-the relative gap between the rich and poor has increased but the percentage of those living in poverty has decreased slightly.

Still Need to have:

- Clean renewable energy sources
- Process of safely disposing toxic waste
- Control birth rate & minimizing poverty

Interrelationship of society and the environment

- North/South Division of haves and have nots

Poverty rates have decreased somewhat in last 50 years, and general welfare has increased but the gap between rich and poor has greatly increased. The income ratio of poor to wealthy in 2000 = 1:1, up from 30:1 in 1960

The ten poorest countries make less than \$20/year per person. The richest 200 people in the world have a combined income of over 1/2 of the world's population.

The US has 5% of the world's population and yet we consume 1/4 of the most commercially traded commodities and produce a quarter to a half of most industrial wastes.

Economic Classification:

First World-industrialized, democratic, market economies.

Second World- previous socialist countries.

Third World- developing, non-industrialized.

Human Development:

Human Development Index (from 1 to 0) is a way to rank countries or regions based on life expectancy, literacy, years of schooling and annual income. Also infant mortality, daily food intake, child malnutrition and fresh water availability. Canada ranked the highest at .96 and Sierra Leone the lowest at .19. All of the twenty lowest rankings were in Africa except Bhutan and Haiti.

Acute Poverty- 20% world making less than \$1/day.

How can we work within the boundaries of nature and continue to improve economic status of all humanity? (Sustainable Development)

Perspectives

-Neo-Malthusian: world full of too many people fighting over too few resources (pessimistic)

-Technological optimists: human innovations and advancements will solve the earth's problems (critics refer to as Cornucopian Fallacy)

Environmental Ethics and Philosophy

morals: distinction between right and wrong

values: the ultimate worth of actions or things

Environmental Ethics~~> moral relationships between humans + the world around them

A. Other Ethics:

1) Universalists~~> the principles of ethics are universal, unchanging, and eternal

2) Relativists~~> moral rules always apply to a particular person, society, or situation

"There are no facts, only interpretations"-Nietzsche

3) Nihilists~~>there are no truths, life is hard, and dark. The world makes no sense at all!

4) Utilitarians~~>an action is right when it produces the greatest good for the greatest number of people. Pleasures on the intellect are superior to pleasures on the body.

Modern Environmentalism- Silent Spring, written by Rachel Carson, is often viewed as initiating the environmental movement. Her book documented the tragic effects of DDT on birds.

B. World views and Ethical Perspectives

"What people do about their ecology depends on what they think about themselves in relation to the things around them" - Lynn White Jr.

1.) Anthropocentric~~> "human-centered" Environmental responsibility and duties are derived from human interest.

2.) Stewardship~~> a strong sense of responsibility to manage and care for a particular place.

3.) Biocentric~~> "life-centered" All forms of life have the right to exist! Everything in this world is important.

4.) Ecocentric~~> "Earth-centered" the environment deserves moral consideration on its own, not associated with human interest.

5.) Ecofeminism~~> a philosophy that suggests how humans could reconceived themselves and their relationship to nature in non-demanding ways.

C. Environmental Justice~~> combines civil rights with environmental protection to demand a safe, healthy, beautiful environment for everyone.

ex: 3 out of 5 African-Americans and Hispanics, and nearly half of all NATIVE AMERICANS, ASIANS AND PACIFIC islanders live in communities with one or more toxic waste sites or major landfills. (LULU's Locally Unwanted Land Uses)

D. Environmental Racism~~> inequitable distribution of environmental hazards based on race. Ex: the people who have the highest lead content in their bodies are Latino, Native American, African American, and Asian children.

>>>Dumping Across Borders:

Paying a poorer country/community to allow the dumping of toxic wastes in their land.

Ex: nearly every tribe in America has been approached with proposals for some dangerous industry or waste facility

Toxic Colonialism~~> targeting poor communities of color in the 3rd or 4th world countries for waste disposal and/or experimentation with risky technologies.

This has gotten worse over the years. Millions of tons of hazardous materials have been moved (legally or illegally) from richer to poorer countries every year.

1992 - The Environmental Justice Act introduced in US.

identify areas threatened by toxic chemicals, assess health effects, ensure residents chance for public discussion concerning cleanup of industrial facilities.

>>>"Green" Organizations.

Most Environmental Activist groups seem to only care about wildlife preservation, instead of inner-city problems (which are much more pressing to people who are struggling for survival)

NIMBY- Not In My Back Yard- protests the dumping of pollution in one's own neighborhood. The protests too often end with dumping in someone ELSE's backyard.

National People of Color Environmental Leadership Summit (1991) decided to combine civil rights with Environmental justice.

====>Science as a way of knowing(!), exploring and explaining the world around us.

>>>The Scientific Process:

Inductive and Deductive Reasoning:

Deductive Reasoning~~>Deriving Testable predictions about specific cases from general principles.

Inductive Reasoning~~>Inferring general principles from specific examples.

>>>Hypothesis and Scientific Theories

Hypothesis~~> A provisional explanation that can be tested scientifically

Scientific Theory~~> An explanation supported by many tests and accepted by a general consensus of scientists.

Scientific Method~~> A systematic, precise objective study of a problem.

When asked to create your own scientific test for a phenomenon you must include:

Hypothesis

Equipment and materials needed

Description of test (control and one variable at a time)

Detailed list of procedures include time frame of test

How data collected and organized

Possible outcomes of test and how it would relate to your hypothesis

>>>Paradigms and Scientific Consensus

Paradigms~~> A model that provides framework for interpreting observations. They determine which phenomena are worth investigating.

>>>Technology and Progress

Luddites~~> opponents of rampant technology.

(They smashed power looms and other machines in the 19th century because they threatened craft guilds and cottage industries.)

Neo-Luddites~~> Like Luddites except they're the 'new wave.'" They say we should revert back to low-tech Pastoral or hunting-gathering society. Some resort to terrorism and bombings.

>>>Appropriate Technology

Appropriate Technology~~> Technology that does the least harm to human society and the environment. Cheap and easy to make.

In the TED talk by Alex Steffen: *Inspired ideas for a sustainable future* he made the following points:

If everyone lived like an American we would need 5 to 10 planets to provide the resources needed.

Every 7 days a city the size of Seattle is added to the Earth- without infrastructure.

1/3 of the people on the Earth are kids.

Sustainable ideas for the future include:

- Making cities more green- sustainable buildings, green roofs, car share clubs.
- Power cord that glows as you use too much electricity.
- Biological design- hydrogen generating algae
- Leap frogging technology- skipping land line phones and going into cell phones
- Tools that encourage collaboration- open source software, community centers for high speed internet access.
- Mobile Internet book share
- Video games that teach non-violent regime change and how to run a refuge camp
- Green power at grass root level. Solar panels on mountain tops
- Access to distance medicine from PDA
- LED lights for the poor to see at night
- Refrigerators without electricity
- Water transported on wheels
- Fog catcher (for water)
- Distilling water from sunlight
- A straw that cleans water
- Merry go round that pumps water as kids play
- Land mine detecting flower- red means don't step