STS.007 Class 9

7 October 2010

Concept of "envirotech" in history

Not just discrete events but longue duree (though discrete events could matter: e.g. Black Death)

First, environment and technology are intertwined

Three ways this happens:

1 Human labor much more productive, consuming more energy (Christian)

Benefits and costs

2 Recreation of the world – second creation – tipping point

"the first species in the history of life to become a geophysical force" –Edward O. Wilson

Age of the anthropocene

3 we begin or create natural processes ourselves

Instead of surrounding our human world with defensive wall, we act into the world – acting into nature becomes part of acting into history

Atomic energy – global warming - biotechnology

Second envirotechnical change as part of history – not just ice ages, Neolithic rev., but now too

Not "Nature" as separate from humans but intertwined

And "Nature" as changing, not the stable background of history

Production demands: energy

Rebuilding the world: have to maintain it, destruction of other species

Action: Unpredictability

Next paper: explore some aspect of current environmental reality as envirotechnical and speculate on historical significance

Another topic is OK if you clear it (e.g. review of Diamond)

Islands in history – high and low ones in South Pacific – "an island world" – New Atlantis – Treasure Island – Lord of the Flies – Madagascar – an inherent metaphor – Greenland causal comparisons 115-8 – see review by J.R. McNeill - Natural experiments of history metaphorical significance 119

Other examples in this book: Montana, Pitcairn and the Hendersons, Anasazi (SW), Mayans, Vikings, DR and Haiti, China, Australia

How things were vs how things happened – image and logic – metaphor: a significant story

The prevailing image of Easter Island: describe the statues 95-102 who are they?

Leads him to trees: What are some of the resources on the island? Chickens, fish, shellfish, trees, rocks, stone, grass, herbs, land birds, water, soil, animal power, wind, canoes, ovens (How was research done? 104-)

Results of deforestation: 108- funerals, land birds, sea creatures, wild fruits and nuts – erosion

Population crash 111

Debates 113+ - What are some of the causes of depletion? 116

Diamond's five factors analysis 11-15

Properties of environment

Climate change

Hostile neighbors

Decline in friendship

Social responses

See analogy on p. 114

Why can't we do better? (chap 14)

Failure to anticipate a problem

Failure to perceive a problem – creeping normalcy

Failure to attempt solutions

Garrett Hardin, "The tragedy of the commons" – Science 1966 – Elinor Ostrom's work later on - other forces at work – e.g. religion

Supposedly irrational behavior – Norse in Greenland – crowd psychology, denial, addiction, groupthink

What are some analogies that come to your mind? Historical comparisons?

Food for world of 9 billion (Science, 12 Feb 2010) – esp. protein from wild foods - management

Destruction of natural habitats – wetlands – deforestation in ALL of them (487) –

Genetic diversity lost - beehives

Soil depletion

Ceilings: energy, freshwater, photosynthetic capacity (490)

Harms: toxic chemicals (toxic sludge in Danube), alien species, atmospheric gases

Population and standard of living

Others: viruses (self-domestication), nuclear power

Understanding present as history - J.R. McNeill: "Something New Under the Sun"

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