I. Culture and Technology

A. Cultural Transformation in Western Society/Culture

1. Enlightenment: from Luther to Nietzsche

a. reformation 16th century to WWI

b. over long period of time

2. Revolutionary transformations of the Institutions

and world view of western society

a. economic, political, marriage and family,

education, religion

b. worldview or way of life

3. Causes

a. internal

i. Protestant reformation

ii. modern science and technology

b. external

i. wealth from colonialism

ii. ideas from encountering new people,

the Iroquois Confederacy

B. pre-Enlightenment worldview and social organization

1.

Great Chain of Being

a. Christian God created the a hierarchy of

being

b. everyone had their place and their was

little social mobility

c. worldview was supported by an unchallengeable

church doctrine

d. Catholic church was the most powerful instituion

i. priests mediated the Word of God

ii. those that differed in belief were heretics

iii. Church used forced to compel belief

iv. Inquisitions identified heresies and punished heretics

2. Technology

a. human and animals as source of power

b. plows

c. reuse land, irrigation

d. masonry

i. huge cathedrals

ii. walled cities

C. Social Institutions were legitimized by the religious

world view and the church

1. The political system was a kingship supported by

the church

a. political authority was by divine right

b. a modified theocracy

2. The economic system was feudal and a reflections

of the order of being

a. extensive agriculture

b. labor

i. subsistence

ii. tribute or taxation

c. land use was commons

3. Marriage and family

a. arranged marriages

b. nuclear family

c. kinship most important in upper class

4. Religion

5. Education

a. upper class learned how to be upper class

i. nobles

ii. priests

b. peasants learned skills

D. The Revolution of the Enlightenment

1. World view and authority of Church is challenged on

three fronts

a. Protestant Reformation

i. authority of the Catholic church

ii. role of the priest

iii. justification by faith

iv. unmediated relationship of person

to God

v. corruption of Church

b. idea of democracy

i. challenges kingship

ii. religion as the basis of power

iii. people as soveriegn

c. science and technology

i. authority of the church

ii. challenges church's interpretation

of natural world

iii. natural world functions according

to the laws of nature which are discoveable

iv. can be mathematized which allows

calculation, predictions, technological

development

v. give human beings power

vi. challenge is won by science on the

basis of the new inventions

2. Capitalism and industrialization (technology applied

to production) cause a breakdown in the feudal

economic system

E. A new ideology takes the place of the Great Chain of

Being The Ideology of Progress

1. Western culture's new sacred narrative is the

Ideology of Progress

2. Society, or more specifically western society, is

progressing because of scientific and technological

development

3. Ongoing scientific discoveries lead to technological

inventions that make society better and

a. it is irreversible

b. no culture would want to go back

4. The free market of capitalism creates the cultural

environment that motivates scientific discovery

and technological development.

a. rewards discovery and innovation

5. Western society and culture is the most advanced in

terms of progress

a. other societies are developing along the same

trajectory or

b. merely primitive doomed to pass away

6. Scientific knowledge is the model for all knowledge, if

it isn't empirically verifiable it is opinion or superstition

7. all aspects of social and cultural life can benefit from

scientific and technological insights

8. the results will be a utopian society

a. a moral and emotional and material technopia

b. Jetsons 1050s

c. if you are skeptical

i. genetic engineering will solve hunger and

disease

ii. a MDS and Star Wars system will make us

secure

iii. computers will link us together in a

global village of information, knowledge and consumption

iv. drugs will make us able to cope

F. Technology and Non-material culture

1. The Ideology of Technology is ethnocentric

a. sees all cultures as lesser reflections of

western culture, the model

b. sees world history as history of western

culture

2. The Ideology of Technology ignores:

a. relationship of technology and power

b. unintended and unanticipated and irreversible

consequences of technology

c. cultural hubris which may be self-destructive

G. Historical particularlism, cultures are different

1.. tool- using cultures

a. technological development is limited by

non-material culture, world view, beliefs

b. technology in these cultures is developed

to solve specific problems

c. or to serve symbolic culture, pyramids,

walled cities, churches in Middle Ages

d. without diffusion these cultures would not

change that much

e. no evidence that cultures are developing

in some universal trajectory of progress

2. technological diffusion is not progress but threat

to these cultures

a. Yir Yoront Austrialian Aboriginies

i. Cape York Pennisula

ii. hunter gatherers

iii. tool is polished stone axes with short

handles

iv. Europeans gave them steel axes because

they were better oops save time, improve

life

b. Stone Ax embetted in the culture and institutions

of Yir Yoront society

i. possession and skills in making reinforced

social roles and system of stratification between men and wome, young and old

ii. established trading relations with other

groups which included celebrations

iii. was a clan totem and part of the sacred creation myth

iv. introduction of steel ax undermined

social relationships, beliefs, long time

trading relationships

v. caused a breakdown in cultural life

c. Kaipo or Kaypo in Brazil

d. Yanomamo and the shot gun

3. no evidence that once a technological development is introduced that it would necessarily

be embraced

a. gun vs sword in Japan

i. no guns in Japan when USS Vincennes

arrived in 1855

ii. strange because guns had been introduced

as early as the sixteenth century and were

known throughout Japan by the middle of

the century

iii. by 1575 they were the dicisive weapon

in battle

iv. 1597 japanese agreed with Euros that

progress in weapons meant better killing

iv. resistance to guns emerged from the

samuai or warrior caste

v. samurai were armed with two swords and

depended in battle on skill and courage

vi. this was overshadowed by the gun

vii. two reasons could be kill or be killed with

very little training, a peasant could kill a samurai

viii. bravery was not a virtue

ix. from 1603 onward a gradual abolition

of guns

x. by about 1725 no guns

xi. return of guns, external threats

xii. rebellion of 1877 forty thousand Samurai

vs Japanese militaray

4. Technology and power and consequences

a. television

i. social change

ii. power

b. Fordism

i. social change

ii. power

c. technologizing health care

i. hi-tec health cure not health care

ii power

d. genetic progress

i. food

ii. disease

iii. genetic prospecting

iv. cloning

e. military weapons

i. power

ii. unintended

iii. irreversible