Sociology 200

Population and Environment,

Urbanization and development of cities

Agenda

- Population/overpopulation/carrying capacity
- Use of resources
- Urbanization/development of cities

Overpopulation

- Overpopulation is the concept that there is surplus population (i.e. that a proportion of people are unneeded)
  - Who is unneeded?
  - If the poorer are unneeded, then bias is in the term
  - To see population density map go to: http://sedac.ciesin.columbia.edu/gpw/maps/globaldens.pdf

- Population growth and environmental degradation are linked for developing countries, but . . .
  - The world's richest countries comprise 20% of the world's population yet consume 86% of private consumption
    - US has 5% of the world's population, but accounts for 30% of the world's resources and creates 30% of the pollution
    - A child from an industrialized country will add 30-50 times the consumption and pollution that a child from a lesser developed nation (UN 2001)

- Carrying capacity
  - The potential population the environment can sustain of a species
  - Human carrying capacity has two perspectives
    - Neomalthusian
      - Garrett Hardin and the “Tragedy of the Commons,”
      - Paul and Anne Erlich’s projection of scarcity of resources in the middle 1980s,
      - Club of Rome – projected limits to growth within 100 years (this was done in the 1970s) with precipitous decline in productivity and production capacity
    - Those who believe in technology and new discoveries

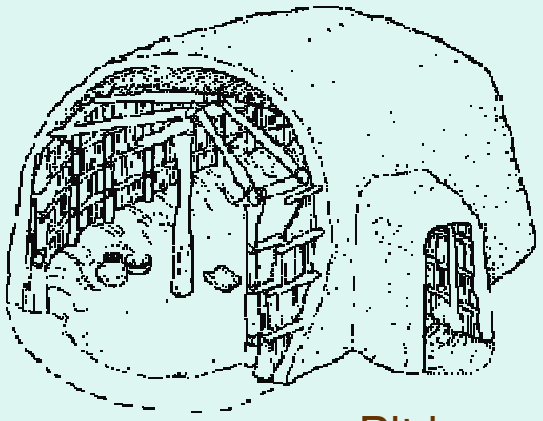
- Tischler cites the “Green Revolution” as improving harvest yields and increasing food and states “(t)he only thing holding back the revolution is poor international cooperation in planning and the production and distribution of food.”
  - This ignores the need for fertilizers based on petroleum products
  - This also ignores the desires of local peoples who choose not to plant genetically modified plants
  - This also ignores the companies trying to maintain a hold on the market that people are not allowed to save seeds for planting in successive years
  - This also ignores the fact that if local horticulture/agriculture is present, that certain species may be preferred for specific reasons related to local conditions and food preferences and that what may be commercially available may not be preferred.

- Possible sources of adjustments to the “doomsday” hypotheses:
  - Wider application of existing technologies
  - Discovery of new resources (more likely development of new resources – the baseline materials exist, just we can access them in new, innovative ways)
  - Exponential increase in knowledge
    - Provided it is channeled well and shared

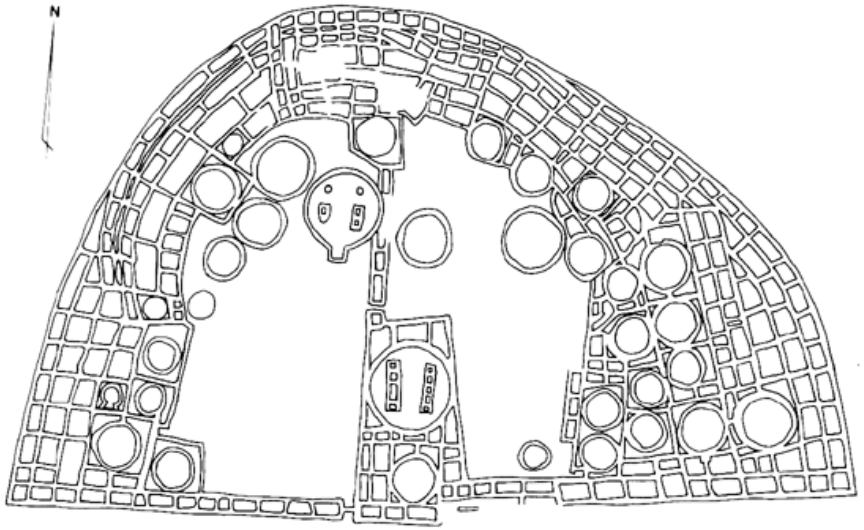
Urbanization – development of cities

- Remember that hunter-gatherer societies and pastoral societies tended to be nomadic to access appropriate food resources for themselves and their animals
- Horticultural peoples, though, began to become more settled to care for the plants, and developed additional features including villages and irrigation

- For an example of the cultural sequence, using a New World example: http://phoenix.gov/PUEBLO/dfhohoch.html
  - Note that early on hunter-gatherers started with small pit houses and seasonally occupied hamlets as they began settling
  - Look through the whole booklet on the development of the Hohokam people



Pit house



Pueblo Bonito of Chaco canyon, related to Hohokam, but otherwise SW

- Advantages of cities
  - Historically produced innovations in science and technology
  - Decreases costs of distribution of goods and services
  - Typically urban centers have lower fertility rates than rural areas
- Underlying requirements for the development of cities
  - Surplus food resources
  - Social organization beyond that of the family

- Earliest cities developed in Mesopotamia, where agriculture first began –
  - Sumerian cities clustered around temple mounds called ziggurats

Ziggurat from: http://www.oakton.edu/user/~hgraff/120Syl.htm

Pre-industrial vs Industrial cities

- Pre-industrial cities – cities established before the Industrial revolution
  - These were sites of power (religious, economic, social)
  - Housed 5-10% of the country's population, typically cities held approx. 10,000 people
  - Art and architecture often has religious dimension
- Industrial cities – cities established during or after the industrial revolution
  - Larger populations, centers of banking and manufacturing
  - Religion no longer tied to political system
  - Art and architecture are secular