Chapter 1

14th January 2003

Themes

- Old Problems in a New Context

- Adapting to New Technology

- The Global Reach of the Net

- Trade-offs and Controversy

- Differences between Personal Choices, Business Policies, and Law

- Negative and Positive Rights, or Liberties and Claim-Rights

1 Issues

- Unemployment

- Alienation and customer service

- Crime

- Loss of Privacy

- Errors

- Privacy of communications

- Freedom of speech

- Intellectual property

- General social Issues

- Professional Ethics

2 Computer Benefits

- Common Uses:

    - Games, entertainment & the arts
    - household & business management
    - customer service information retrieval

- Communication (bandwidth & multimedia +/-)

    - telephone
    - email
    - chat & instant messaging
    - newsgroups & mailgroups

- Information archiving and management

  - library

  - Web

  - issues: expert systems, medium obsolescence, ephemeral content

- Transportation

  - autos (e.g. ABS)

  - Safety

- Education

  - toys

  - distance education

  - patient, confidential, nonjudgemental

  - language training

- simulators

- reference

- Law Enforcement

  - Fingerprints & M.O.'s

  - expert systems

  - data bases

- Health Care

  - imaging

  - monitoring

  - surgery

  - prosthetics

  - records

  - diagnosis (e.g. Mycin expert sys)

- – Tele-medicine & tele-research
- – R&D

- Enablement & inclusive re-connection to society

  - – senses
  - – reading
  - – motor skills
  - – speech
  - – artificial sysesthesia

- Science, Research, Engineering & Academics

  - – Vizualization & Publishing

- Automated systems

  - – robotics

- – inventory

- paper reduction