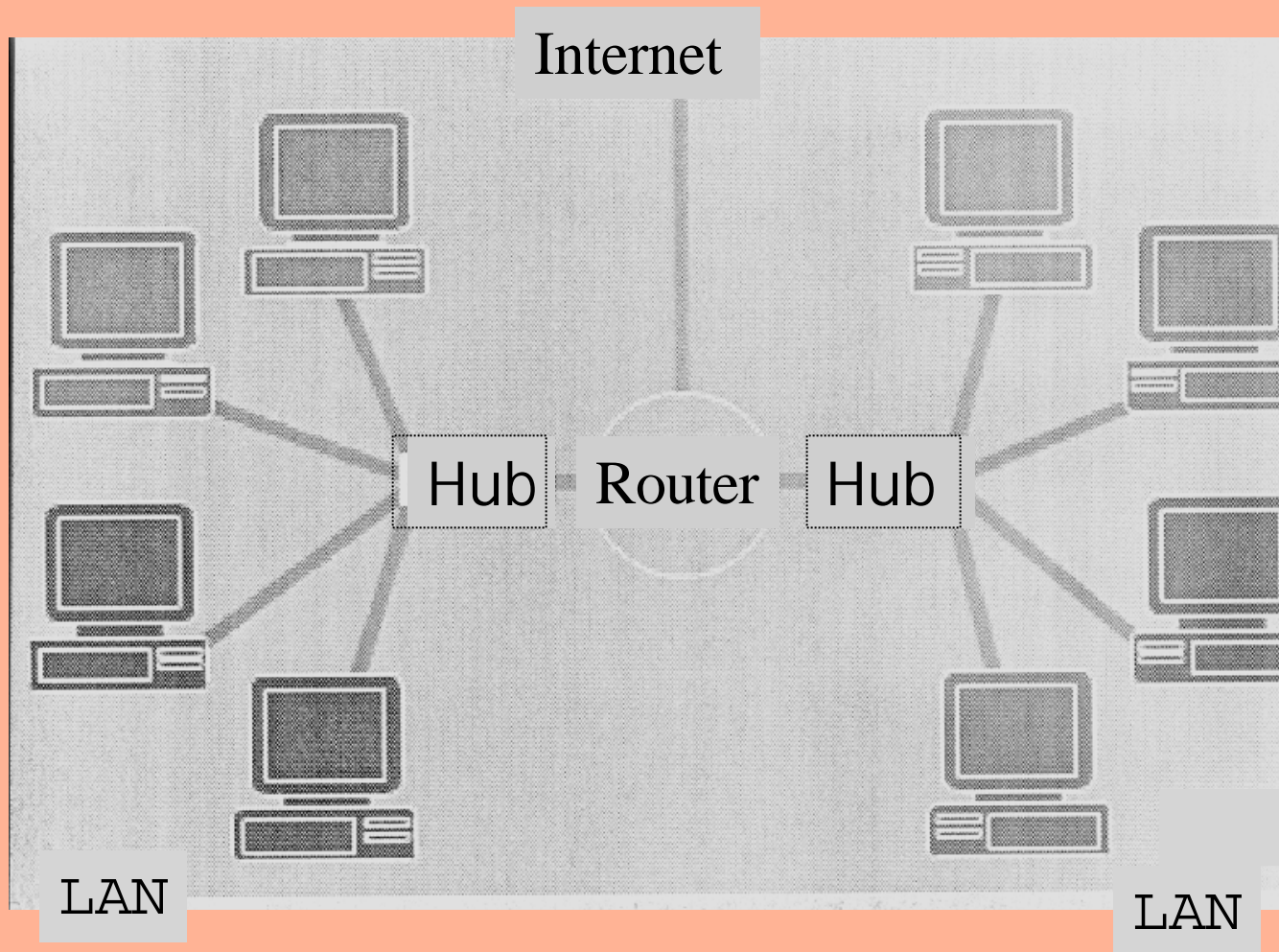# An Introduction to Cyberspace

- OK, it is overused … but what is it?
  - Tear out a piece of paper (*or use space below)*

  - Origin of the word?

- Is it another name for the Internet?
- So what *is* the **Internet**?

  – Loose association of thousands of *different* networks, run by different organizations, using different technologies, all *connected together* (worldwide).

  – Network: an infrastructure

    • allows communications & data transmissions between/among two or more points.
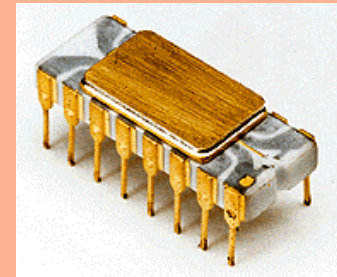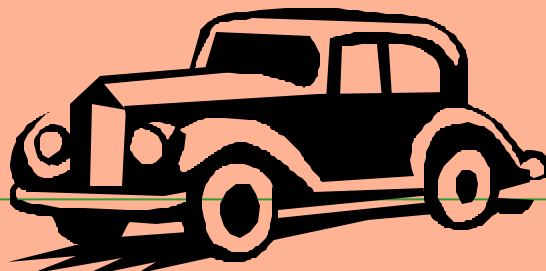
JUST FOR CULTURE

Internet

Hub   Router   Hub

LAN

LAN

For our purposes

- **Internet:** **medium** for info *access*; info *sharing*; and <u>*communication*</u>...
    - COMPUTERS connect to and communicate with other COMPUTERS.
    - PEOPLE communicate with other PEOPLE or with COMPUTERS.
    - PEOPLE interact with OBJECTS or with other PEOPLE.

- **Metaphors**? *ich.*
  - Where did that term come from?

- How do people often describe new technologies?

- Some **surveys** and tidbits …
  - **www.nua.ie/surveys/**

- Do new technologies always catch on *quickly*?
  - Examples?

- World Wide Web
  - Is it just another name for the Internet?

  - An additional set of *standards* and *protocols* (rules) used to **access information**.
    - Linear vs. hyperlink…..

  - Why don't we know exactly how many web sites exist?

What do we do while we're using the Net "in cyberspace"?

Services (information & communication)

- **Electronic mail**
  - In laymen's terms, how does it work?
  - Traditional broadcast media: 1 to many
    - E-mail?
  - Push or pull? Why?

- **Listservs**
  - What are they?   --Who provides these lists?
  - Push or pull? *Why would that matter?*
  - How do you get on such a list?
  - Official searchable catalog: CataList:
        http://www.lsoft.com/lists/listref.html

- FTP
  - Special method that provides means for files to be *transferred* between two Internet sites.
    - *Upload*
    - Download
    - Before Web browsers, users connected to ftp site through a *telnet* session.
    - Anyone use "GUI" ftp programs?

- Web access
  - Through a *browser*
    - Interface?
    - Today's browsers also *integrate* other Internet tools, such as?

Other tools/services/resources:

- ## Electronic Bulletin Boards (BBS)
    - Public and private discussion forums
        - "Electronic clubhouse"
    - Some BB terms you may have run across:
        - Newsreader
        - Post
        - Article
        - Thread
        - Moderator
            - Are all groups moderated? When do you think they should be?

    ### Private:

    - Usually, a single computer that others connect to thru phone lines. Hobbyists. Content?

Public: city, state, fed gov't agencies (public service)

– **Usenet:** world's largest collection of *public* BBs

- What were the initial motivations for creating Usenet?
- Where did it begin? How was it different from listservs that ARPAnet used?
- Find anything *useful* there?
- Find anything *strange?*
- What did you like about it?
- What did you dislike about it?

– "Respect the local population's culture"

- Don't be the skunk at the picnic.

– Lurk first.

– Read the FAQ before you ask questions.

– Much "net culture" started on <u>Usenet</u>:
- flame   and   flame war
- trolling
- **SPAM (started on Usenet!)**
  - Original definition?   Today?
  - Term come from?
  - Original infamous "spammers"?
  - What about Hormel?

  SO WHAT's the CONTROVERSY here?
  - What are the competing interests/rights?
  - Individual? ISP? The Public? The Spammer?
  - Lawsuits   --Legislation

Your turn….

http://www.ciac.org

- What can be done about spam?

- What should you do if you receive spam?

http://www.junkemail.org

http://www.junkbusters.com

– Much 'net talk' and acronyms came from Usenet

- **http://www.netlingo.com/emailsh.cfm**.

- **http://www.charm.net/~kmarsh/smiley.html**

Don't overdo!

- Chat
  - group chat   --Private chat   --love it or hate it?

- Instant Messaging

  - Be happy to accomod8   :-)

- Educational and research services

– Public documents and searchable databases. E.G.:

http://thomas.loc.gov

http://www.FirstGov.gov

http://www.lib.unc.edu   Congressional Universe

click on indexes and databases; click on C; scroll down.

- Software exchange, music exchange, & game downloads

- Other Entertainment
  – on-line games (single user; many users)
  – MUDs; MOOs

  --We'll discuss these later.

- **Electronic publishing**

  Books, journals, newspapers, magazines, …

  – Some are electronic versions of printed counterpart.

  – Some exist only in electronic form

  – E-newspapers vs. paper.

    - Advantages? Disadvantages?
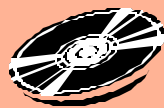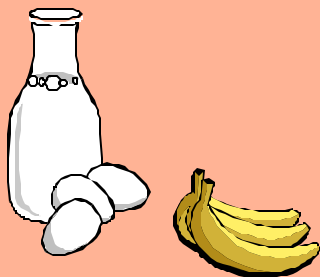
  – E-books

    - Who has recently put a book entirely on the Web?

    - Do you think one day we won't be reading paper books? Why or why not?

    - When would an e-book be better, in your opinion? Paper?

    - Putting full text copies of some *books* has actually increased sales of paper copies. WHY?

- **Commercial & community on-line DBs**
  - travel; securities; movie reviews; restaurant guides; product information; financial transfers
  - http://www.triangle.citysearch.com

- **E-commerce and e-shopping**
  - 1998: first banner year for on-line sales.
  - Where did people typically shop in the …

Your turn…

– Some say e-shopping empowers consumers. How?

  • Has it changed customer expectations? How??

– Some things you **like** about it?

– What sorts of items seem to sell well on-line?

– What would you never want to buy on-line? Why?

  • What would YOU miss in a bricks & mortar establishment that you might not get on-line?

– Problems you've encountered?

– Any risks to **consumers**?

  • http://www.tacd.org/12ptchecklist.html
  • http://www.oecd.org/dsti/sti/it/consumer/
  • http://www.netaction.org/shoppers

– E-Bay or other auction users here?

- What is *dynamic pricing?*
- Risks with using an on-line auction?
- Ways merchants have reduced that risk?
- Any *weird stuff* put up for bid in the last few years?
- Interesting story….

– What is meant by:

"The Web is not about push, it's about pull."

– What should that say to on-line vendors?

How do I get on the Internet?

- Account with an "ISP":
  - Computers capable of hosting thousands of users simultaneously.
  - Many are local, private companies.
  - Many are huge national telecom companies with their own backbone network to carry their traffic.
  - What do you do to get signed up and on line?
  - Full-service account requires appropriate "protocol" (PPP, SLIP…)--for *graphics-based* Internet tools.

- Some good sources to help you find an ISP:

Useful Links to Explore from C96 home page.

www.pcworld.com/features/article.asp?aid=18624

PC World's *BEST & WORST ISPs (Nov 2000)*

webisplist.internetlist.com/

Cnet's *Ultimate ISP list*

Broadband svcs: DSL; Cable modem; satellite:

(RH-08!)

www.zdnet.com/reviews/

PC Magazine's *reviews of hardware, software, gadgets; top 100 products and services; and more.*

- **Other service providers:**
  - Libraries, universities, cybercafés
  - "Free" e-mail services
    - www.juno.com   www.iname.com
    - yahoo.com
      - ASK about restrictions …
      - Are they completely free? What do you give up?
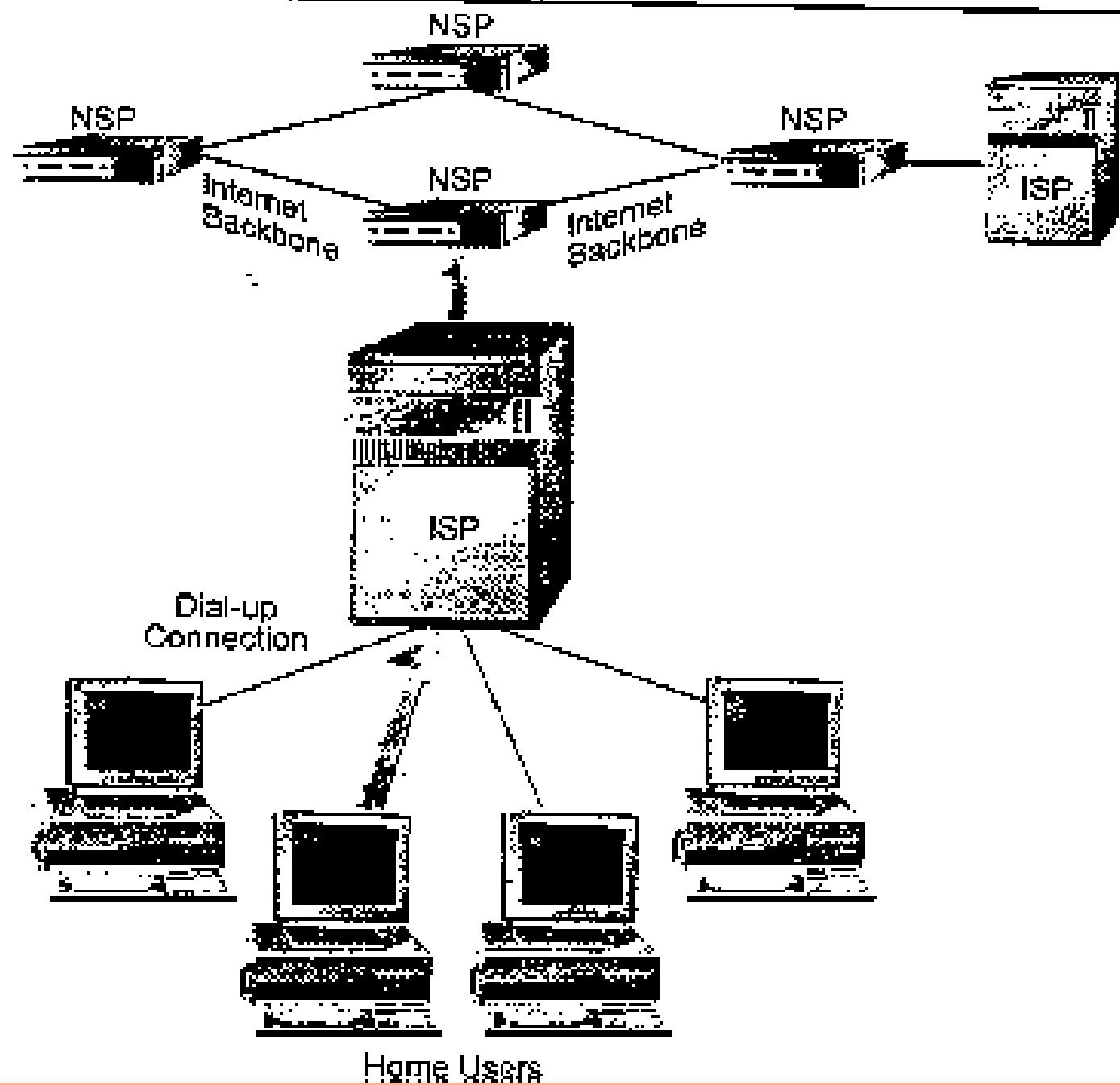
Good net behavior   (in RH-08) …

More about the Internet

*This page and next **just for culture**:*

- U.S. "backbone": central high-speed fiber optic network that regional networks connect to.
    - Formed by biggest networks owned by GTE, MCI, Sprint, UUNet, ANS…
    - By connecting to each other, they create a fast "pipeline" that crisscrosses the U.S. and extends to parts of Europe, Japan, Asia, ...
- U.S. backbone has 5 major intersecting points
    - Each uses high-speed equipment to connect to *other regional and local* providers, who in turn lease to organizations and individuals in the areas *they* serve.

Figure 8-4

Your computer establishes a dial-up connection to an ISP. The ISP connects to the Internet backbone.

People make the net alive, interesting

- – What is still the most popular activity?

- – People create programs and documents, and make them available for free.

- – Net communities have sprung up.

- – Internet users' beliefs come straight from its cultural roots and strong academic traditions:

  - • share information and ideas; freedom of speech and freedom to disagree …

  - • collegial self-governance

- – Makes for some interesting clashes …
  stay tuned!