302: basic hacking examples

- Robert Morris internet worm
- Melissa virus
- Credit card extortion
- Cyberstalking
- Flaming
- Spamming
Categorization of Scenarios

• Hacking, a “new” crime
• Use of internet to facilitate known crimes
• Netiquette
Features of Internet Communication

• Global, many to many scope
• Anonymity
• Reproducibility
Global, many to many scope

• cf face to face communication
  – internet allows us to reach out \textbf{globally}
    • quicker
    • easier than other modes

• tv and radio are \textit{one-way} modes
  – internet gives many-to-many connections (web!)
Anonymity

• crucial feature of anonymity (Wallace) - whether information about us can be linked or coordinated with other information
  – the more links, the less anonymity

• “perception” of anonymity via internet?
  – how do people act?
  – is there indeed “traceability”?
  – like a telephone? (but legally the same???)
Reproducibility

- Not a new phenomena?
- What IS new about it?
  - scale
  - speed, ease, expense, access
  - taking a copy does not “take” the original
    - what happens to the “supply-demand” curve?
Ethical Points

• “individuals can disrupt, steal, cause property damage, snoop, harass, stalk, extort, defame from greater distances and in new ways...”

• “that sense of invisibility seems to free many to engage in behavior that they might not otherwise engage in...”
Technology as Mediator

• Is technology (computing technology) a mediator that
  – increases the ethical “distance” with which I view my interactions when using it?
  • bombing by “drones”
  • “stealing” by Napster
  • where does accountability lie?
Hacking in General

• Is this a new passtime?
  – Define the general activity, is it new?
    • Phone Phreaking (Captain Crunch, early 70’s)
    • Ham operators, ...

• Hackers: Heroes or Villains?
  – or some of each?
    • cultural stuff: Robin Hood, rogue cops, ...
      – exactly what is this phenomena? new? new features?
      – any females in this?

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Hacking Issues

• Access to systems: authorization
  – private
  – public
  – destructive
  – non destructive
  – public perceptions
    • fear
    • government power
Hacker Arguments

- All info should be free
- We expose poor security
- We do no real harm, just looking and learning
- We expose abuse of power - big brother
Hacker Issues Social or Technical?

• Delineate the boundaries of social problems and solutions
• Delineate the boundaries of technical problems and solutions
• How to attack problem with dual nature?