

Inside the World of the Computer

I202
Session 7, Fall 2003
Thomas Haigh

This Session

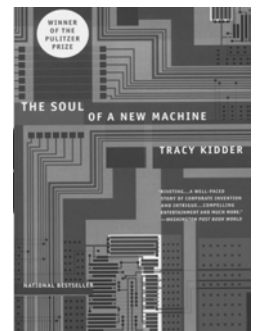
- This week is examining experiences of IT workers
 - Covering mostly through readings
- Introducing them this session
 - Background
 - Key points to look for
- Use any spare time for discussion

Readings for This Week

- Accounts of people who work with computers
- Stress two things
 - Personal experience of working with IT
 - Shared culture and group identity of technology people

Kidder Reading

- Classic account of high technology product development
 - Won Pulitzer prize
 - Still widely read in business schools, etc.
- Specific technologies now forgotten
- Human motivations very much the same
 - e.g. recent startups



Kidder: Background I

- Nonfiction – author is journalist
- Set at Data General, around 1977-1979
 - Main competitor to DEC in minicomputer market
 - Fast growing, Boston-area firm
 - Ties to MIT and to DEC itself
- At this point
 - Minicomputers are being used more for business
 - Transition from 16-bit to 32-bit designs, like DEC Vax
 - More powerful processors
 - Easier to program
 - More memory

Kidder: Background II

- Data General is beginning to struggle
 - Reputation as aggressive, low cost firm
 - Launches ambitious plan to counter VAX
 - Entirely new architecture, not backward compatible
 - Job goes to the North Carolina team
- Book follows "Eagle" project
 - Grass-roots effort by Tom West & small team
 - Produce alternative 32-bit product
 - Arrive sooner, cheaper, backward compatible
 - Not officially backed, but tolerated – own initiative
- Tom West as capable, mysterious outlaw hero

Things to Look for in Kidder

- Motivations of technology developers
 - Chapter 3 is on recruitment
 - Inherent satisfaction of job, not corporate masterplan or financial rewards
 - "signing up" concept
 - "pinball" (idea at end of book)
- How IT comes to take forms it does
 - Famous bit on seeing DEC organizational chart reflected in architecture of VAX
 - Conjunction of company politics and technology

Coupland Reading

- Coupland
 - Young & fashionable in 1980s
 - Came up with "Generation X" concept
- First chapter of a novel
 - Great at surface observation, pop culture references
 - Not so great at human depths, plot
 - Published in Wired Magazine

Wired Magazine

- Hip San Francisco magazine
 - Promotes digital technologies as key to new lifestyle "Digital Revolution"
 - Somewhat libertarian, self-consciously visionary in early issues (early 90s)
 - Odd layout, bright colors
 - Ties to
 - Stuart Brand of Whole Earth Catalog
 - And Negroponte of MIT Media Lab
 - Howard Rheingold



Coupland Background

- Microsoft circa 1993
 - Windows is taking over from DOS
 - CD-ROMs are the hot new product
 - Word and Excel are well established
- Bill Gates is already media icon
 - America's richest man
 - Reputation and-on business leader, genius programmer
- IBM was in trouble
 - Massive layoffs, biggest quarterly loss in history

Look Out For

- Skillful depiction of programmer habits, likes, dislikes
 - "Jeopardy categories" for each character
- Treatment of Microsoft corporate culture
 - Some similarities with Hacker ethic
 - Including high status given to writing code
 - Some obvious differences...
 - Presence of millionaire in house etc.
- Software company life largely unchanged
 - Some specifics dated, spirit true today

Ullman Reading

- Practicing programmer
 - Autobiographical reflections printed and broadcast on NPR
 - Best recent first hand account of programming life
 - Bisexual former Communist
- First novel just appeared

Small Scale IT Consulting

- Career as “consulting software engineer”
 - Started as corporate programmer
 - Worked for database software company
 - Went freelance as programmer
 - Now hires assistants as needed
- Working on unglamorous project
 - AIDS patient database for local govt
 - Using high-level tools for custom app
 - Database
 - Visual C++
 - Maybe some Visual Basic

Look for in Ullman

- Realistic depiction of programmer career
 - Issue of age, gender
 - Grappling with different technologies
 - Constant change in platforms, skills
 - Grappling with obsolescence, try to stay current
- Culture, politics of programmers
 - Desire to be “close to the machine”
 - Beginnings of Internet boom, lust for money