

**CS 428**  
**PEOPLEWARE: PART II**  
**(CHAPTERS 7-13)**

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# MEME OF THE DAY

```
# you may think that this function  
# is obsolete, and doesnt seem to do  
# anything. and you would be correct.  
# but when we remove this function  
# for some reason the whole program  
# crashes and we cant figure out why,  
# so here it will stay.
```

# CH 7: THE FURNITURE POLICE

- “[Those making workplace decisions] are not themselves doing the kind of work that is likely to suffer from a poor environment.”
- Goals are focused on ease and flexibility of setting up the physical workspace, not on productivity of those who work there.
- Attitude: If everyone can’t have a window, then no one can.
- “Almost without exception, the work space given to intellect workers is noisy, interruptive, un-private, and sterile.”
- Why do you think this happens? What are your options?

# CH 8: “YOU NEVER GET ANYTHING DONE AROUND HERE BETWEEN 9 AND 5”

- “...overtime is not so much a means to increase the *quantity* of work time as to improve its average *quality*.”
  - Fewer interruptions/disturbances outside of regular work hours or at home
- Individual differences (best outperform worse by 10:1)
- Productivity non-factors: language, years of experience, defects, salary
- **There is also a 10:1 difference in productivity among software organizations**
  - Cf. “Dead Sea Effect”
- Top performers’ space is quieter, more private, better protected from interruption, larger
- When are you most productive in development?

# CH 9: SAVING MONEY ON SPACE

- Cost-saving trend towards less privacy, less dedicated space, more noise
- But cost of workspace is small fraction of cost of developer – false economy
- Claims of greater productivity & interaction for open space aren't supported
- Correlations between perceived noise level and defects in work
  - Zero-defect workers: 66% reported noise level ok
  - 1-or-more defects: 8% reported noise level ok
- Noise is generally proportional to workplace density
- Worker response is often to “hide out” where it's quieter
- What have you seen in your jobs and internships?

# INTERMEZZO: PRODUCTIVITY MEASUREMENT

- So, why isn't this all obvious and followed?
  - Because of how few firms know how to or are willing to measure impact of environment on productivity
- But: "Given that there are 10:1 differences from one organization to another in productivity, you simply can't afford to remain ignorant of where you stand."
- What changes would you suggest to improve productivity?

# CHAPTER 10: BRAIN TIME VS BODY TIME

- During single-minded work time, people are ideally in “flow” state
  - Deep, nearly meditative involvement
  - Sense of euphoria
  - Unaware of passage of time
- It takes time to enter “flow” state, and interruptions force you to restart
  - Constant interruptions keep us in a state of “no-flow” and far less productive
- E-Factor: uninterrupted hours / body-present hours
  - Boss: “Can’t you do [your thinking] at home?”
- What are your experiences with “flow”?

# CHAPTER 11: THE TELEPHONE

- Chapter is a touch dated – younger generation has learned to ignore phones
- But now: various messaging feeds and apps, social media, e-mail, etc., can all interrupt our flow
- To achieve and preserve flow, we have to be willing to shut off these distractions
- To what extent do you find that social media affect your own productivity?



# CHAPTER 12: BRING BACK THE DOOR

- Like windows, doors are frequently a status symbol – and therefore, if everyone can't have no, nobody can have one
- Workers aren't inspired or made more productive because the (open) workplace has “fashionable” or “daring” or “amusing” design
- Piping music into an open workplace doesn't help either
- It's great to have “vital” space for spontaneous interaction w/others, but most IT production is solitary, flow-based intellectual work
- Have you ever had an office with a door?

# CHAPTER 13: TAKING UMBRELLA STEPS

- Christopher Alexander's *The Timeless Way of Building* and design pattern
  - Alexander on workspaces (pp. 82-83)
  - Cubicles are almost the direct opposite of what Alexander points out
- Tailored workspaces from a pattern
- Use of windows
- Indoor and outdoor space
- Public space
- “No two people have to have exactly the same work space.”
- What would be your ideal workspace for software development?