

- Wiki II feedback?
- quizzes only q¹ + q² online

CSC104 fall 2012

Why and how of computing
week 10

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Text: **Picturing Programs**

Outline

work

experiment

Notes

who's got the better deal?

201w 4-5
↙



life with, or without,
computers — which
works better?



40+ → 50

How many hours per week do you expect to work? What about your parents/grandparents? Explain labour-saving devices

previous experience

does technological change automatically improve lives?

— division of labour.
power (other than muscle power)
steam, water



land cleared of people
provides wool and hands
for emerging factories



Sheep?

Some economists report that production actually dropped for the first few decades of the Industrial Revolution. The working day certainly lengthened — to 12 or even 14 hours!

automation/computerization

what has the effect been?

- Competition between companies
- increased demand.



Ford assembly, then
and now
where'd everybody go?



In 1940s, a car "cost" 35 hours. Now it's 19 hours.

hardware effects



storing information gets
smaller, cheaper, faster
by the decade...



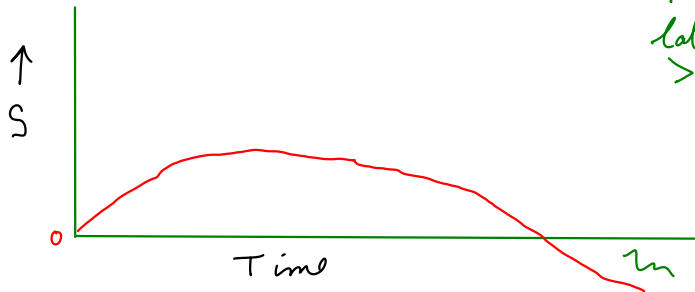
What's the effect on working lives?

do long hours matter?

... if you have an ergonomic chair and a fuzzleball table?

time to recover, look forward to leaving
Some "natural" balance to 40 hours over 5 days.

Check out **why crunch mode doesn't work**. Chart productivity/hour over a long day.



↑
established for manual labour > 100 years.

don't operate heavy machinery...

after working (too much)

→ study of artillery
36 hours.



prolonged sleeplessness affects
motor skills and
judgement



increasing working hours
increase productivity in short term

mental abilities
decline even
faster than
physical abilities
with overwork.



utopia, dystopia?



new jobs, flying cars,
or no jobs,
or retirement?



not just how long, but where

flexibility?
time + place shift -
- wasted time



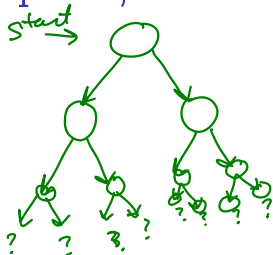
trade traffic for
flexibility and time?



→ storing screen after dark is pretty.



broken telephone, solid tree



gapped
apt
tapped
capped

mnemonic: apt, capped, gapped, tapped

AGTCTAG
CAGT
KAC
GATCTA

CBAC
CATC
CBAC
ACGTTG

GATAAAct
GACTATTAC
ATCG



Notes