

Internet

*A source of innovation and/or progress?*

Paul.nihoul@uclouvain.be





\* Selon modèle

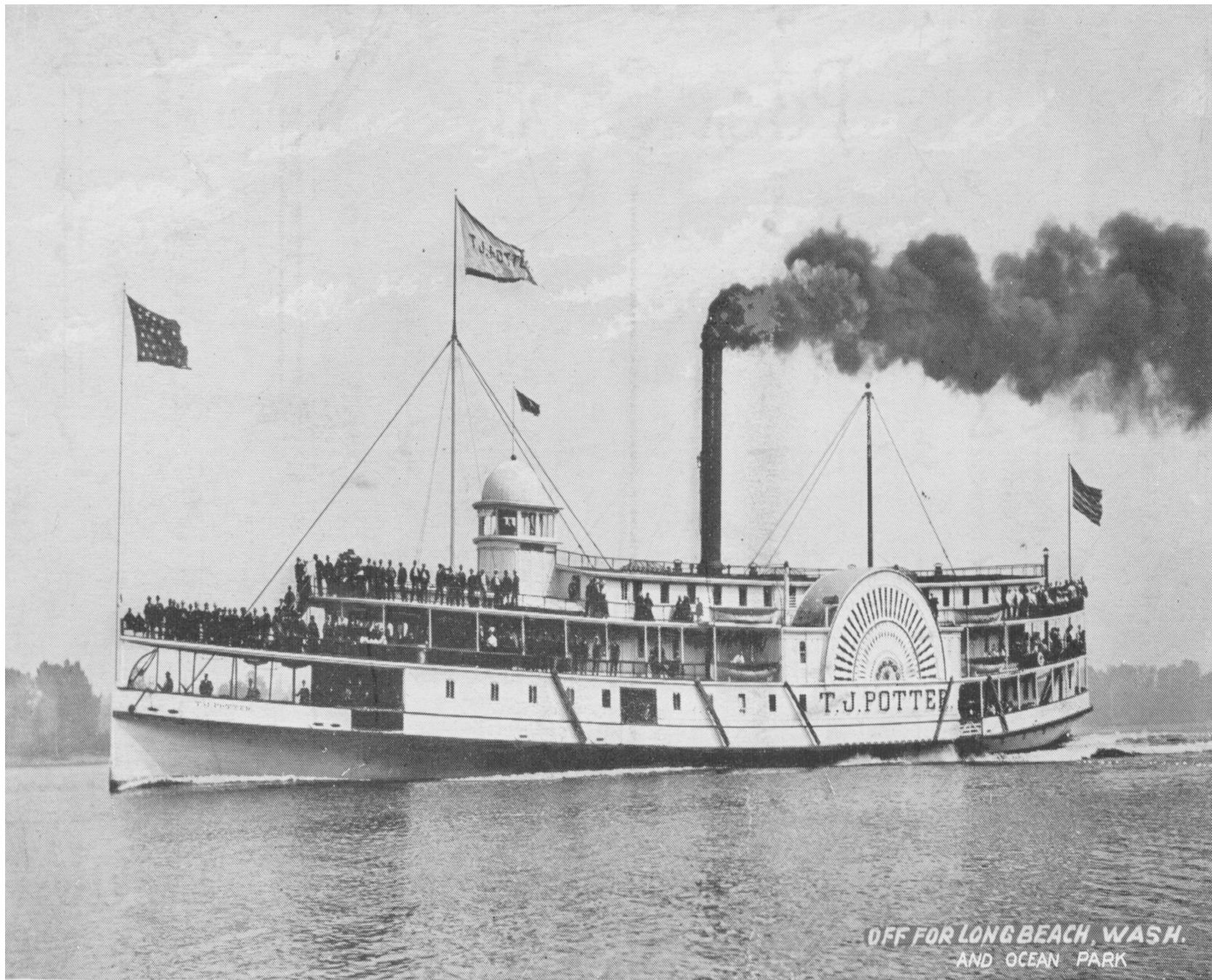


Thomsen, C. J. (1836) *Ledetraad til Nordisk Oldkundskab* (Guide to Northern Antiquity), published in English in 1848











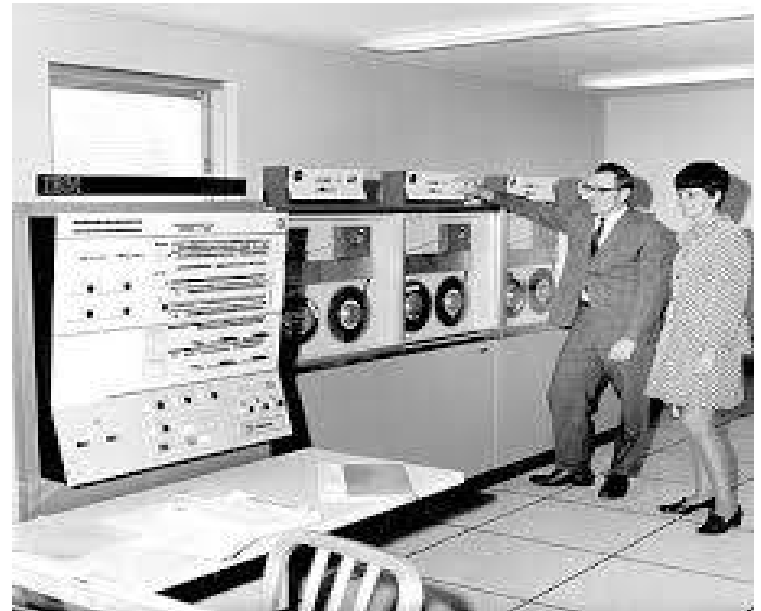
# Industrial Age

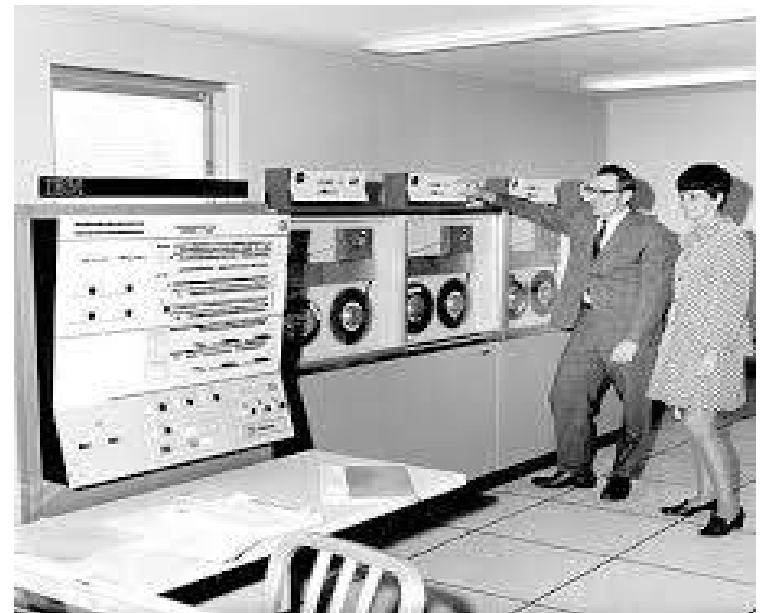
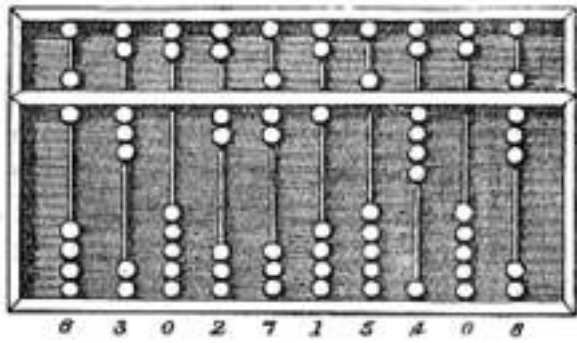
- Society of Labour
- Capacity of production
- Systematic and intense use of machines
- Examples
  - Textile workers > textile machines
  - Hammer > nail guns
  - Rowing > steam

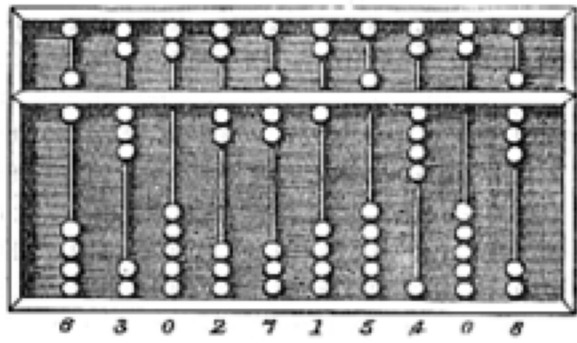
# Major Transformations

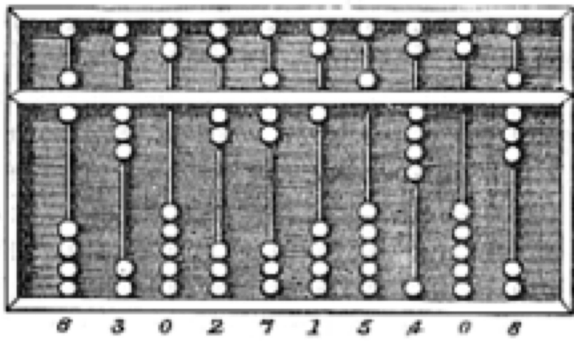
- Social Transformation ST
  - Concentration of people, social claims
- PT - political T
  - democratization
- ET - economical T.
  - Cash production
- PeT – personal T.
  - Mass consumption, free time, education
- PrT – Professional T.
  - Specialisation of professions

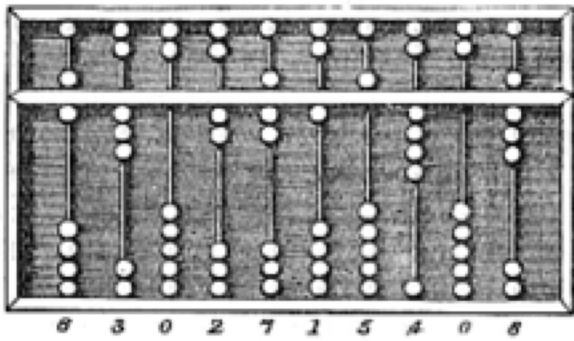
# Information Age



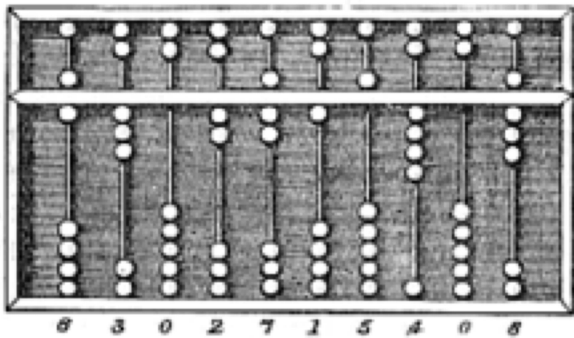








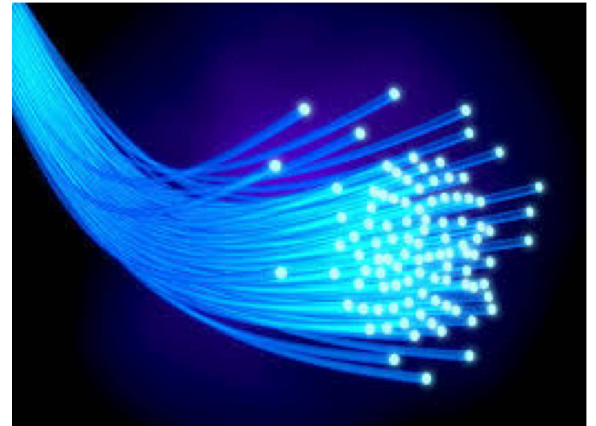


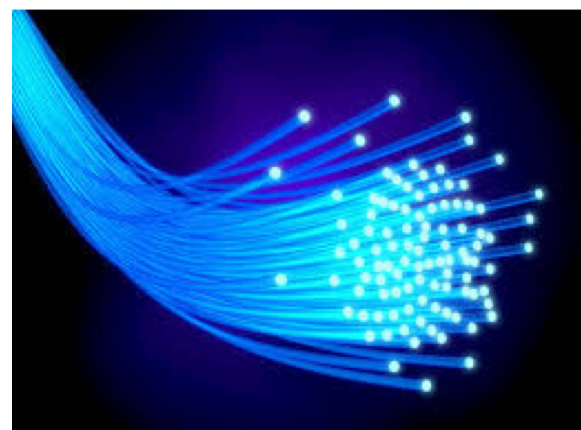


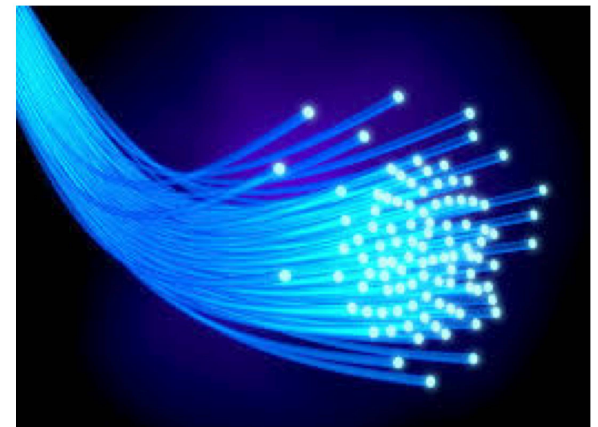
Ifrah Georges, 2001, The Universal History of Computing: from the Abacus to the Quantum Computer, NY, John Wiley and Sons

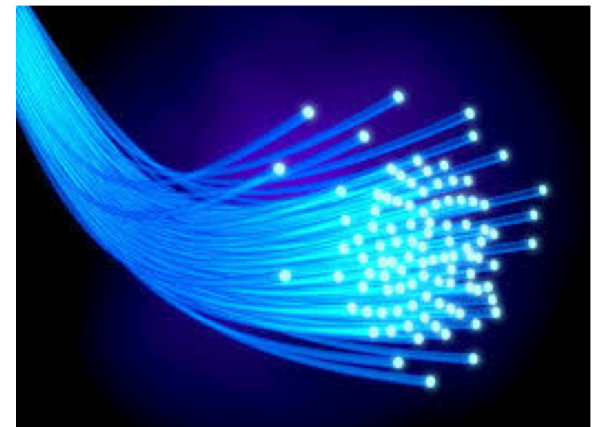


# Communication Age









# All together

- Internet = combination of a significant set of improvements as regards
  - Production capacity
  - Capacity to handle information
  - Capacity to communicate that information

# What transformations?

- ... ST
  - De-Concentration of people?
- ... PT
  - Instantaneous democracy?
- ..... PeT
  - No free time ? No privacy?
- ... PrT
  - Elimination of professions ?

# Pressure on ...

- ... Geographical allocation
- ... Economic Processes
- ... Competition
- ... Regulation

# P on Geographic Allocation

- Dis-industrialization
  - Trend
  - Companies leaving the EU and the US
  - Sell here, produce elsewhere
- Change in intensity/ubiquity
  - Role of ICT – Oxford
- Competition law problem?

...



- Legal dimension
  - Dismantling of trade regulation
- Competition dimension
  - Legal barriers
  - Cfr former monopolies
- Theory of Competition
  - Pressure, Outcome positive for all
- Manifestations
  - EU, WTO

# P on Processes

- Displacement of activity
  - Not geographically
  - But by reason of technology
- Intermediaries
  - Beforehand : Physical
  - Now : challenged by machines
    - » Some will disappear
    - » Others will specialize
- Competition law problem?

...

- Fully corresponds to competition
  - Hart of competition : substitutability
  - Choose what corresponds to one's needs
- Substance of competition policy
  - Ensure choice
  - Limit barriers to entry and expansion
    - » Legal barriers
    - » Even economic barriers, on certain markets
- Social values
  - Economic reasons
  - Political reasons
    - » Freedom to start economic activities
    - » Freedom to choose

# P On Competition

- Typical, competition law issues
- Pre-competitive markets
- 2 issues
  - Will there be competitors?
  - Will the dominant firm extend to ancillary markets?
- Example - Google
  - Neutrality issue

# P On Regulation

- Emergence of new intermediaries
- « Sharing economy »
- Lower price, lower rules
- Example - **Uber**
  - Labour protection
  - Consumer protection
  - Protection of society
  - Protection of the environment

# Conclusion

- **Progress** in
  - Freedom
    - Choose, start activities
  - Efficiency
    - Use of tools, differentiation
- Progress must be **sustainable**
  - Conditions for the system to work
  - Conditions for the system to be viable

# For the system to work

- Cost differentials
- What is a cost?
- Economic exchanges > common rules
- The scope of Competition law must be revisited
  - » And the responsibilities of competition authorities must be extended
  - » Beyond Behaviour on undertakings
  - » To : EU : internal market
  - » And : WTO : trade regulation, anti-dumping

# For the system to be viable

Shumpeter – destruction, creation

- Geographic mobility
  - Barriers
- Professional mobility
  - Education
- Social acceptability
  - Social security
- Reasonable degree of competition
  - On both ends



