

American Dream and New Technology



"The good news, Dave, is that the computer's passed the Turing test. The bad news is that you've failed. "

New technology changes human relations

- Creating relations
 - Internet dating
 - Larger selection – more choice (homophily)
 - More upfront information about others
 - Algorithmic matching
- Maintaining relations
 - Albert O. Hirschman
 - Exit – leaving
 - Voice – complaining, trying to change things
 - Loyalty – staying, accepting
 - American culture emphasizes EXIT
 - Market, geographic mobility
 - “Superficiality” of social ties
 - Conflicts are often handled through exit
- People don’t expect to have others around forever – develop ties to them accordingly
- New communication technology makes it possible to maintain a relationships
 - Through large distances
 - With more people
 - Without face-to-face engagement
- Social media allows us to
 - Manage relations -- catalogue, track, organize, exclude etc.
 - Broadcast self-expression
 - Manicure self-presentation
- Voyeurism

Machines replacing humans

- Big breakthrough – 1997 Kasparov vs. Big Blue
 - 2011 – Watson beats Ken Jennings and Brad Rutter in Jeopardy
- Turing test
 - Alan Turing (1912-1954)
 - Can you tell the difference between humans and computers?



- The “uncanny valley”

- The Moravec paradox

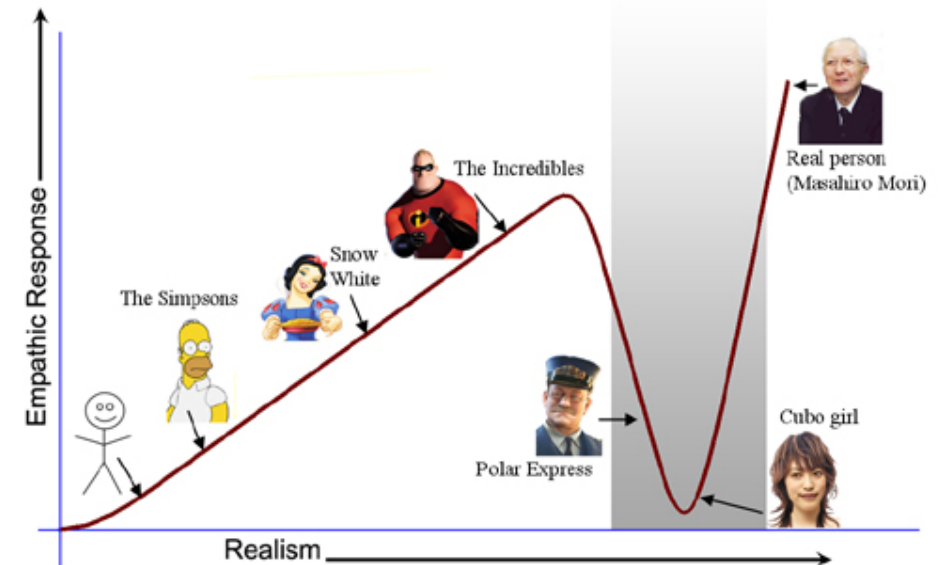
- What is easiest and most natural to humans is the hardest for machines.
- What is the hardest and least natural to humans are the easiest for machines.

Humans competitive advantage may not be abilities that are rare

How do you build an education system geared to skills humans are best at?

- Soft skills, fuzzy skills that are hard to formalize and therefore automate

- Self driving cars

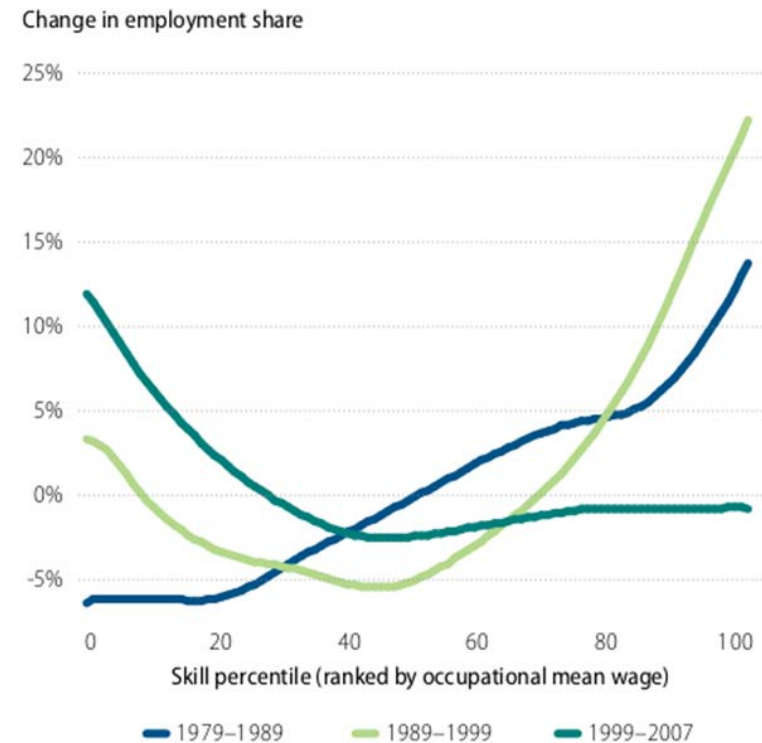


Machines taking over jobs

- Mechanizing skilled and highly skilled jobs
- Replacing humans or deeply cutting demand for them
 - Warehouse management
 - Taxi and truck drivers
 - Travel agents -- online agents (Orbitz, Kayak etc.)
 - Retail – online shopping (Amazon)
 - Food service – waiters
 - Translation -- machine translation, interpreters
 - Finance (floor traders, mortgage brokers, bookkeepers, accountants etc.)
 - Information technology – IT personnel backing up files, installing software, building web sites
 - Legal discovery
 - Medicine – radiologists, surgeons
 - Journalism – sport writers, business journalists
 - Engineering
 - Movie stars?? Audrey Hepburn
 - <https://www.youtube.com/watch?v=gx9eDoS76LM>
- U shaped relationship between automation and resilience to automation
 - Low skilled jobs – landscaping, hair stylist, homecare nurse, office cleaner etc.
 - High skilled jobs – arts, design, high-level IT, managing people, entrepreneurship, innovation

FIGURE 1

Smoothed changes in employment by occupational skill percentile, 1979–2007



Autor and Dorn 2012

Jobless future ?

- What is left:
 - Two sectors where automation so far has made only small inroads:
 - Healthcare and education
 - Medical technology – longer life, “improved humans”
- If there are fewer jobs
 - What happens to economic survival?
 - Guaranteed minimum income?
 - Mincome experiment in Canada – random assignment in Winnipeg and Manitoba county
 - Small impact – men worked a bit more and women a bit less in the workforce
 - Health improved
 - Finland (Oulu) – cash (\$1-2,000) to 2,000 randomly selected jobless people (Nokia closed down)
 - What happens to society and social order?
 - More leisure?
 - New identities?
 - What happens to the American Dream?