

# Hype vs. Reality:

AI/Robotics and Employability – 5-15 Year Horizon

USCIB

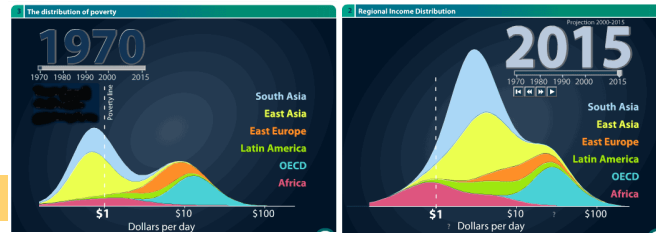
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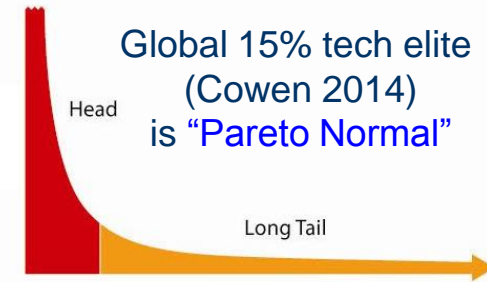




# Some Assumptions



Income is **log normalizing** (Rosling 2005)



1. We've been "unbalancing" roles of Labor & Capital (Cowan, Frey, Brynjolfsson) since 1970s in fastest-growing nations (GDP is losing to TP), but **global income is log normalizing** (Rosling) and mean income is **converging** (Milanovic).
2. Nations steer toward Plutocratic (Bimodal) or Collectivist (Fat-Middle) distributions, but these social constructions hold only temporarily. Like many social systems, natural attractor is **"Power-Law Economics"** (Pareto, Power-Law or Log-Normal), 20% of elite controlling 80% of the wealth (Clementi 2005).
3. High-capital innovations are funded **first** & wealth captured **first/preferentially** by **the elite**. Ex: Early AI (Smart 2014). But Sci-Tech-Econ **innovation** remains **out-of-control/collective**, is 80-95% **bottom-up** (indiv/small biz labor) and 5-20% **top-down** (elite) (Kelly 1995).
4. We won't get to advanced AI without:
  1. **Massively parallel** comp. devices/Internet of things (**collective labor**), and
  2. Strong understanding of **human brain (evo devo) algorithms**, ensuring trust/friendliness statistically and collectively (Smart 2008)

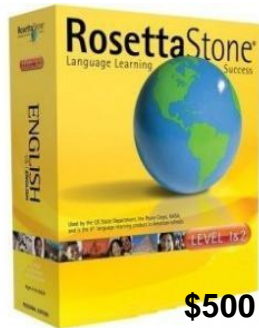
*Average is Over*, Cowen, 2013; *"The Future of Employment"*, Frey & Osborne, 2013; *The Second Machine Age*, Brynjolfsson & McAfee, 2014; *Human Development Trends*, Rosling, 2005; *"Global Income Inequality by the Numbers"*, Milanovic, 2012; *Out of Control*, Kelly, 1995; *"Pareto's Law of Income Distribution,"* Clementi 2005; *"Political-Economic Pendulum,"* Smart 2004, *"Evo Devo Universe?"*, Smart 2008, *Foresight Careers*, Smart, 2014

# Weak, Bottom-Up AI: Connective, Collaborative and Cognitive Technologies

- 2020 Conversational Interface, Wearable Web, Global English** (NLP, Collab. Filtering, Predictive Analytics, IoT/QS, SNs, Connect.com)  
**Crowdlearning, Values-Mapped Web** (Hangouts, MOOCs, iTV)
- 2025 Crowdfunding, Groupnets** (AssemblyMade, Kaggle, oDesk, LinkedIn)  
**Crowdfunding/spending/lobbying** (Kickstarter, Bitcoin, JOBS act, Avaaz)
- 2030 Avatars, Cybertwins, Worktwins, Lobbytwins** (Smart 2003; Page 2008)  
(Info Consumption, Collaboration, Purchases, Voting, Referendums)



From Moto X to Wristphone



\$500

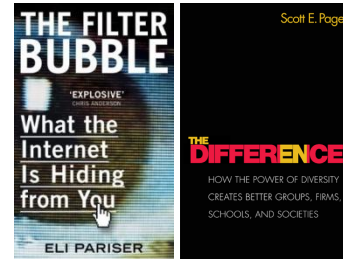
From RS to Global English



FREE



From Helpouts to Groupnets



Cognitive Diversity

## Sociopolitical Impacts:

- Political swingback from **plutocracy** (since 1970) to **democracy** (for a while)
- **Social justice** initiatives, **basic income guarantee**. Canada's Mincome experiment (Forget 2008), Switzerland and EU's 2013 referendum, US last?