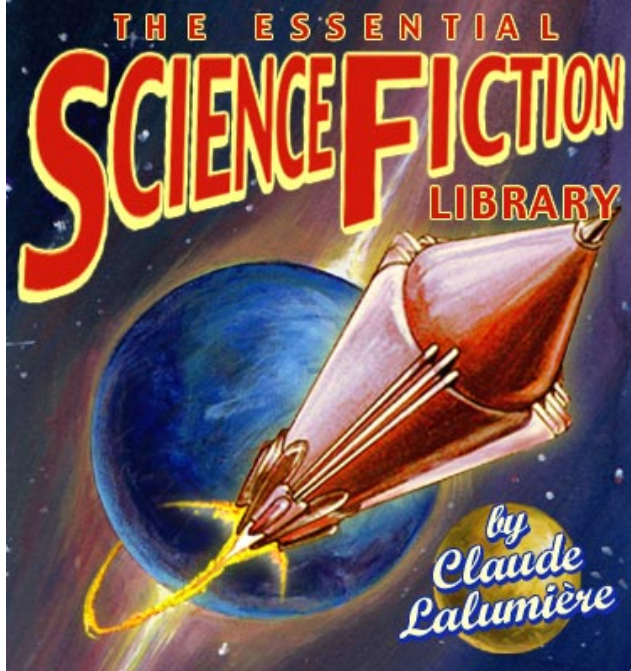


# Science Fiction: *A Tool for Foresight?*



## Food For Thought



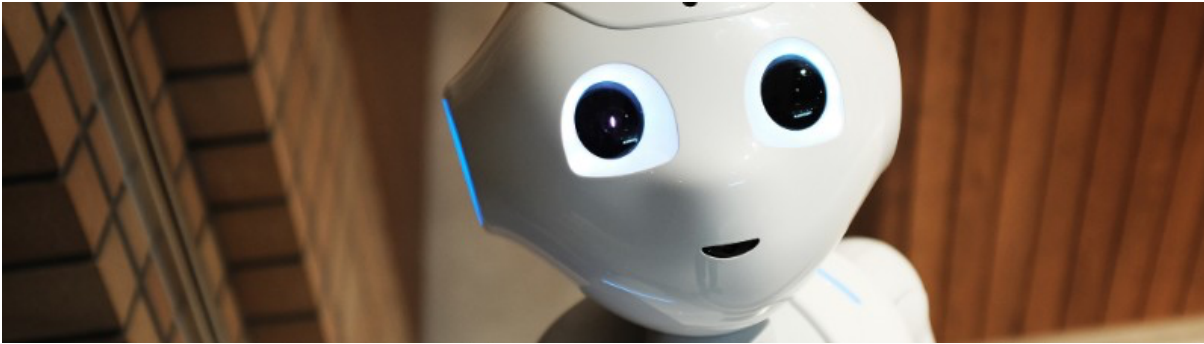
Hank Kune  
Educore/I2SI  
*4 april 2018*



[hankkune@educore.nl](mailto:hankkune@educore.nl)

## What this presentation is about:

- A personal story
- Some ideas for inspiration
- Several examples
- A little exercise for thinking
- Creative conversations and some sharing



## What I hope you will take away:

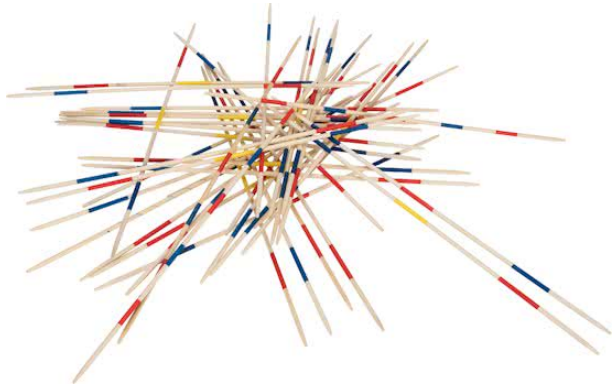
- New and/or renewed interest in science fiction as a tool for foresight
- Ideas about how it can change the conversation
- Insights about how to apply it in your work



Today: a story about looking  
(*seeing around corners*)

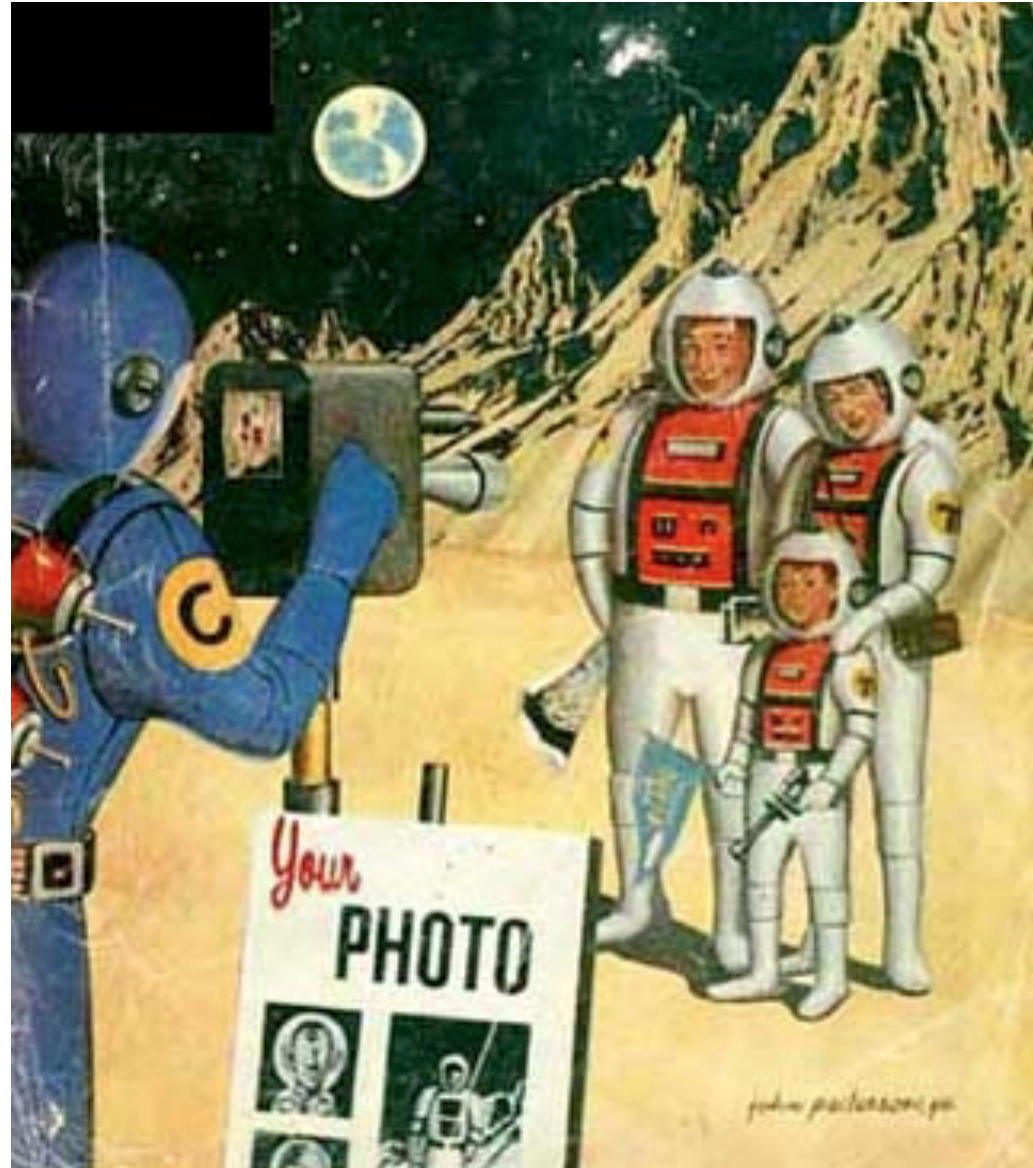


# The Science Fiction story



*What's emerging, what's converging?*  
What interests the inventors and innovators of tomorrow?



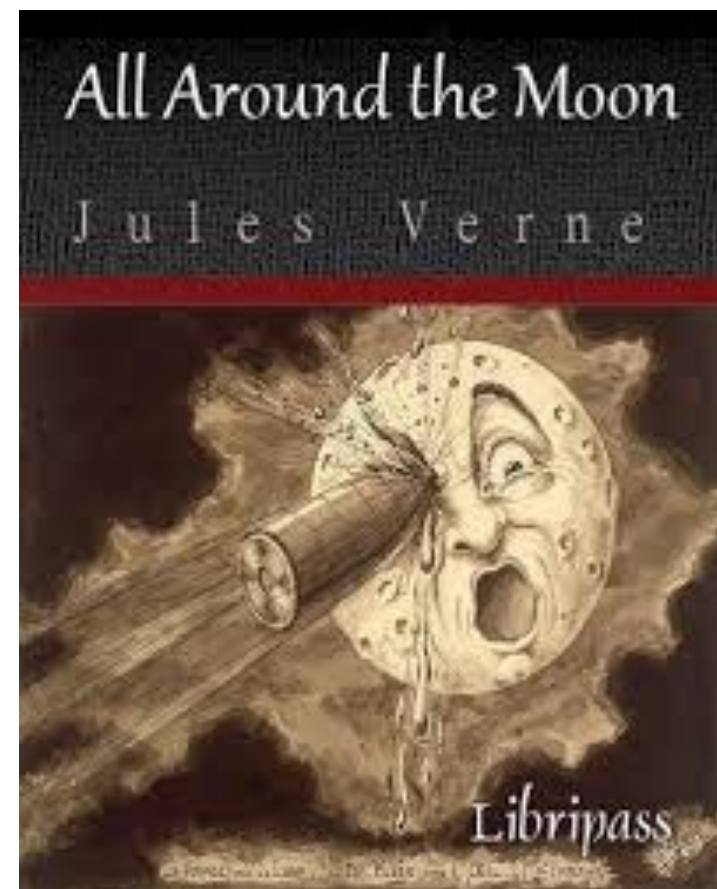
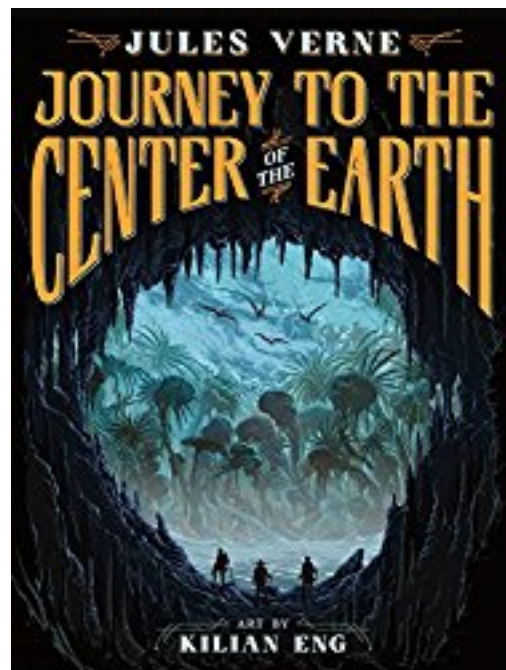




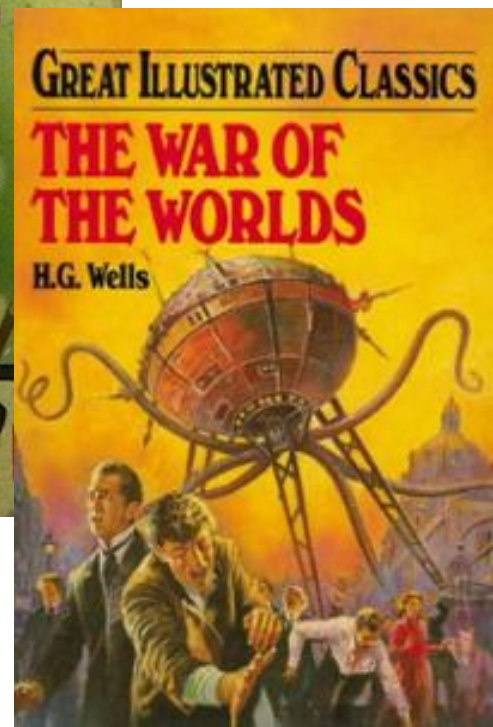
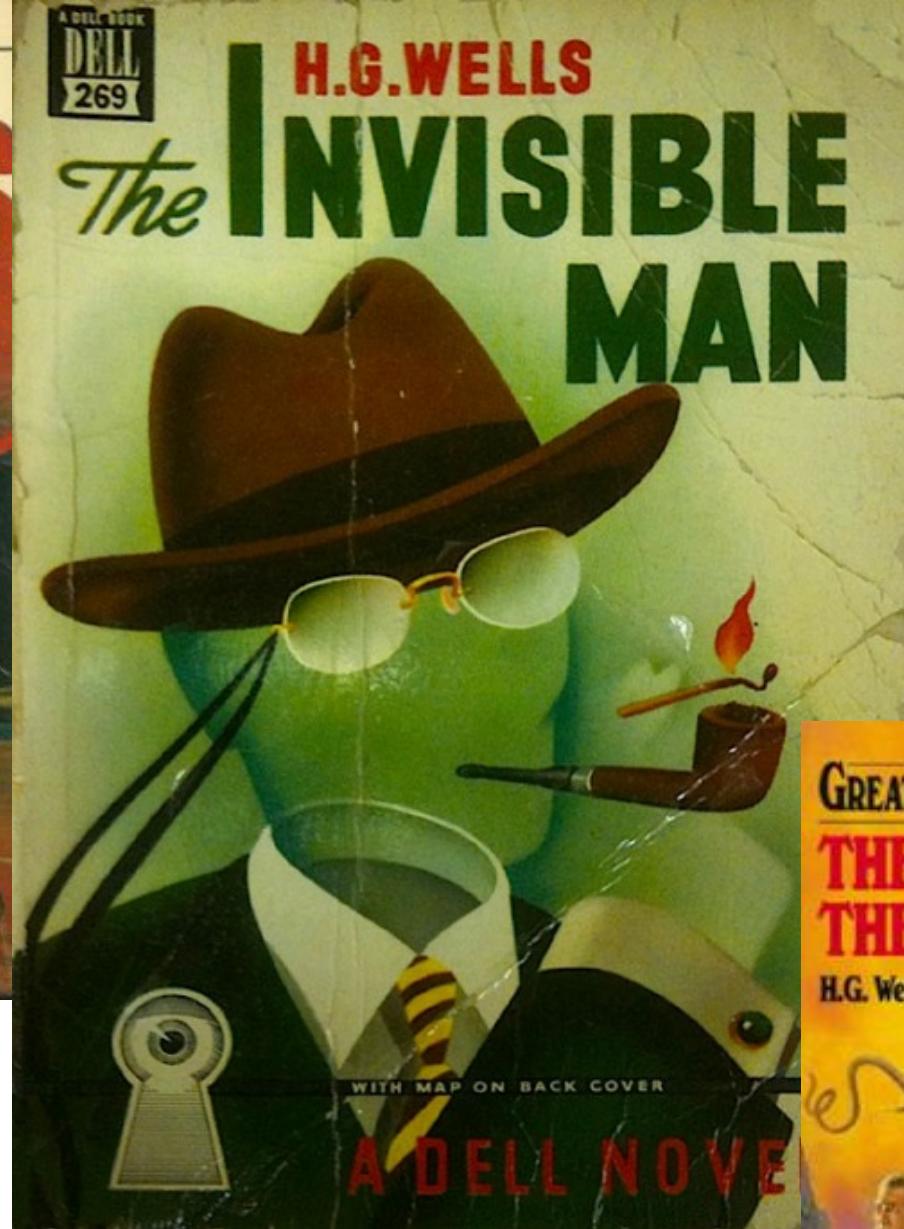
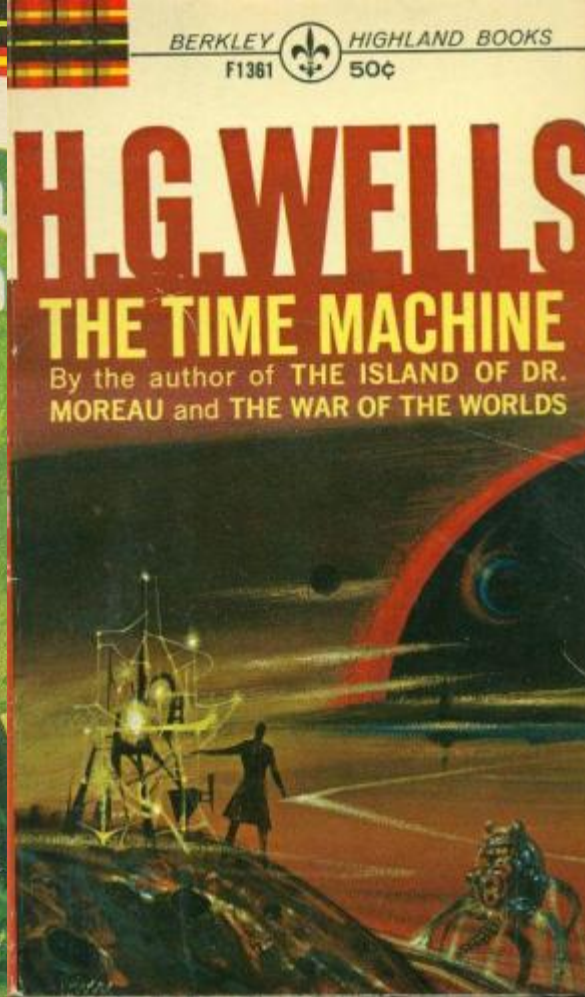
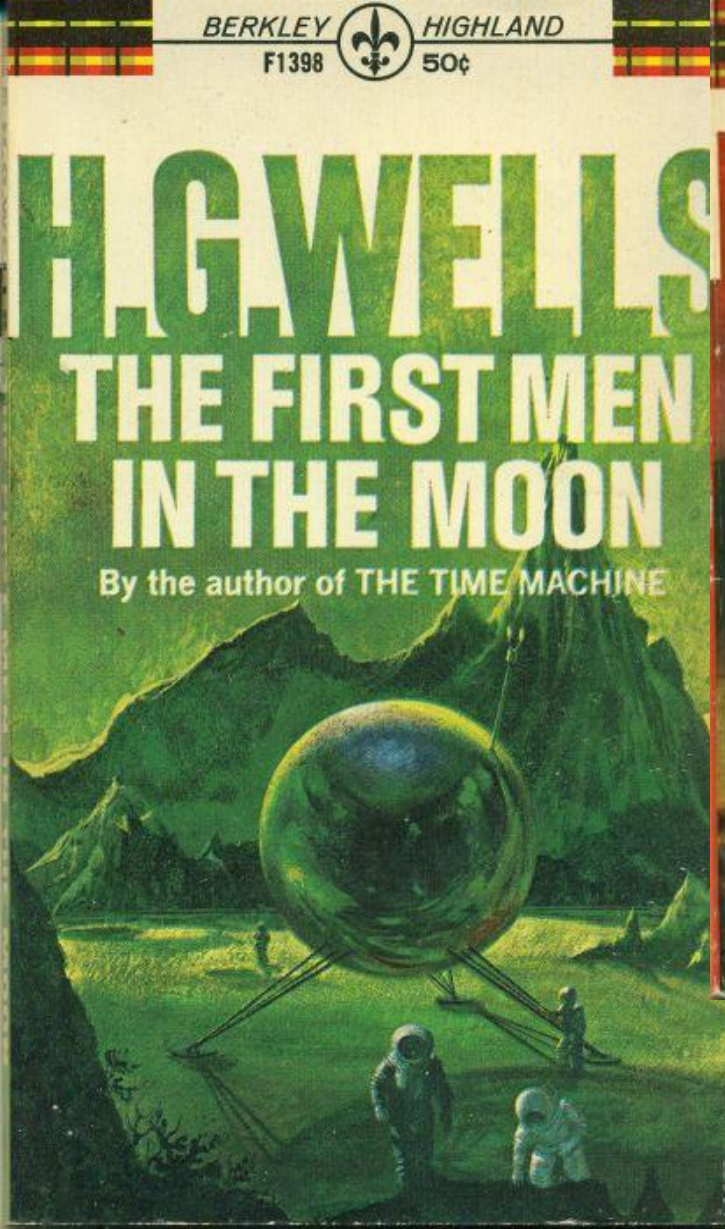
WORDSWORTH CLASSICS

# Twenty Thousand Leagues Under the Sea

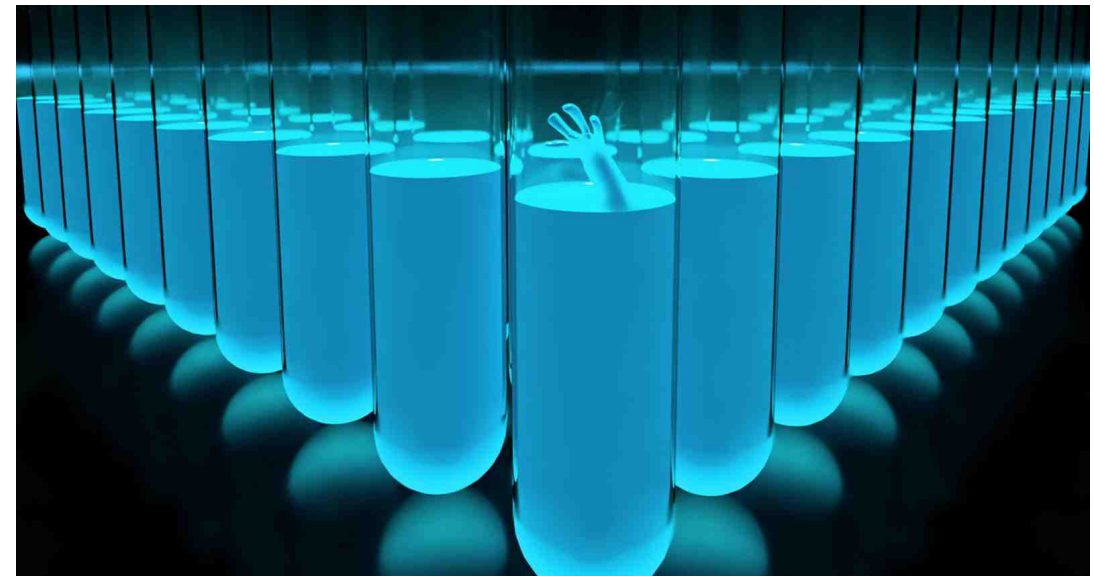
JULES VERNE











Novel Dystopian

# Brave New World

Author  
**Aldous Huxley**

Year Published  
**1932**

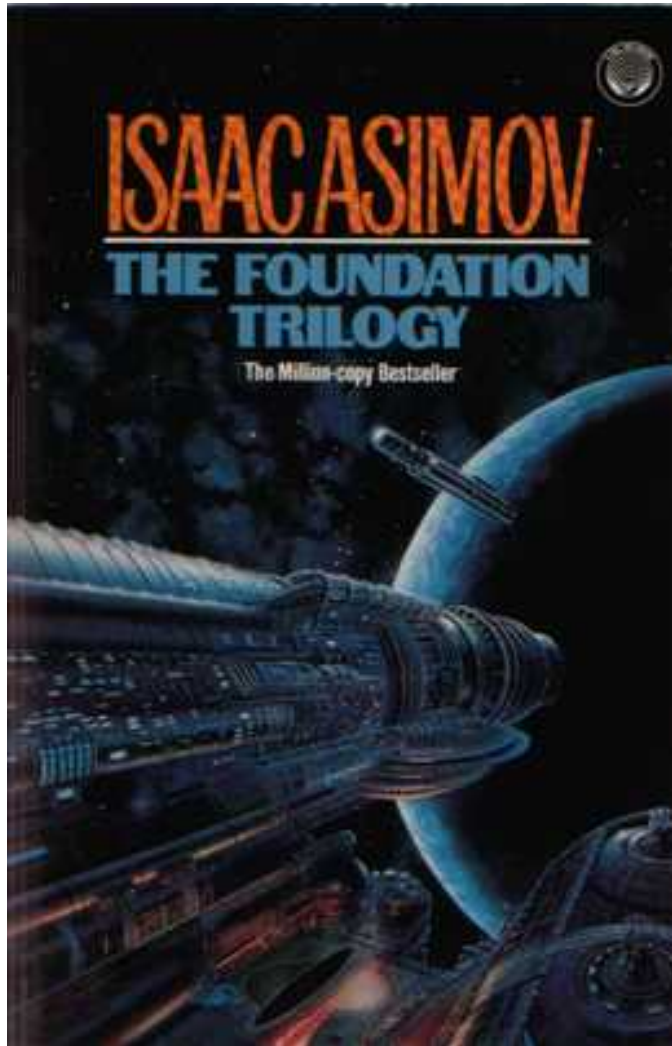
Original Language  
**English**

## THEMES

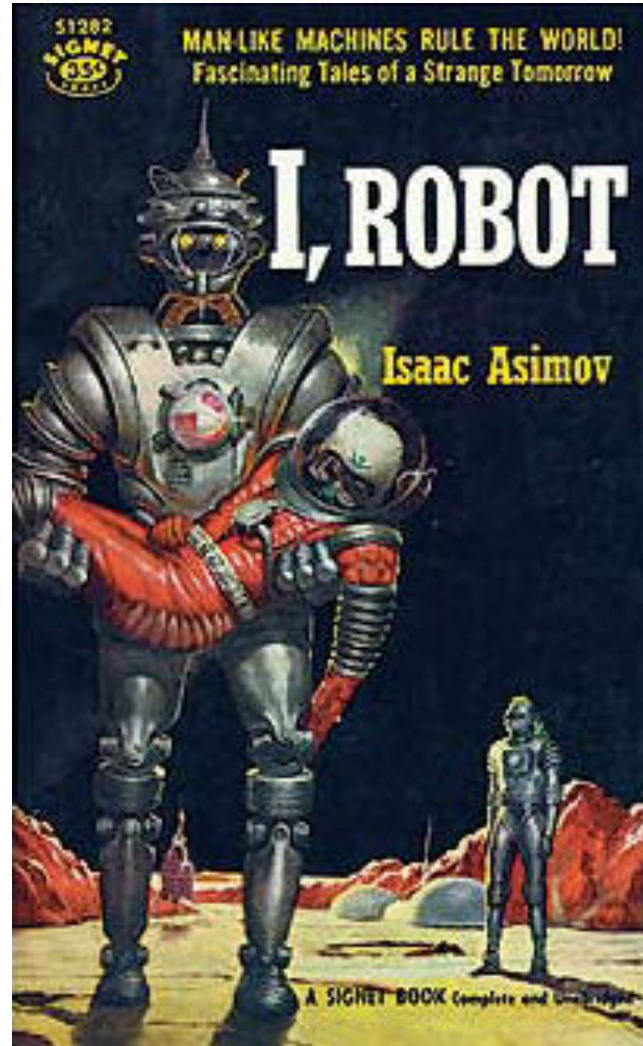
### Conditioning Social Destinies

In the dystopian, futuristic landscape of *Brave New World*, people are mass produced in test tubes. Lab technicians chemically decide each person's physical and intellectual traits, and individual thought is disdained. For outcast John Savage, the idea of emotional and intellectual conformity is unbearable and disturbing.

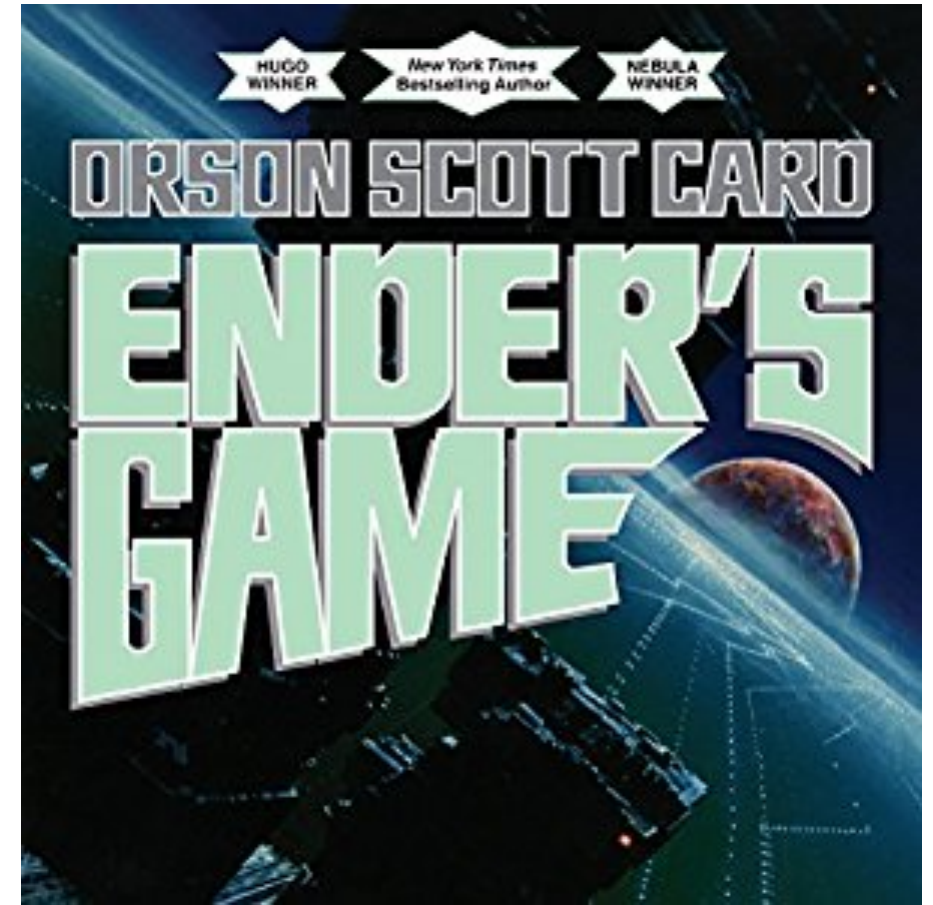




Big Data



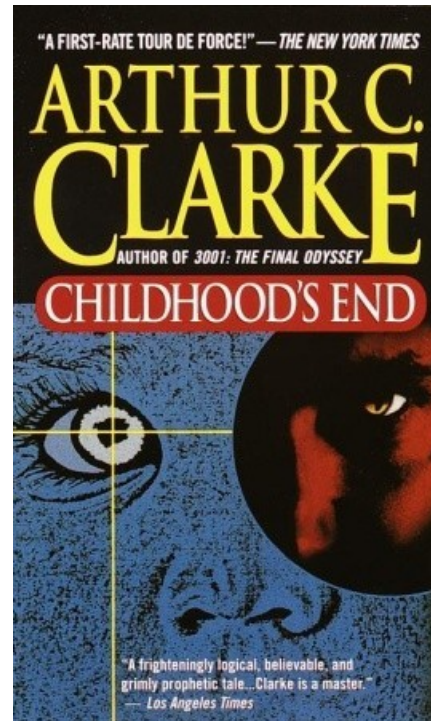
Robotics



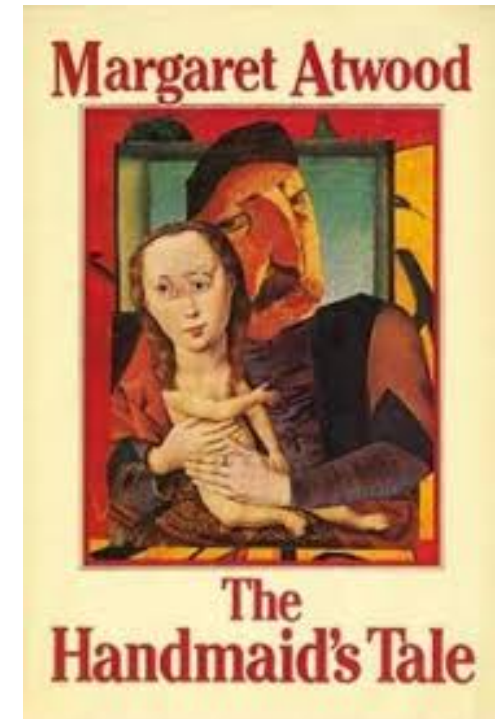
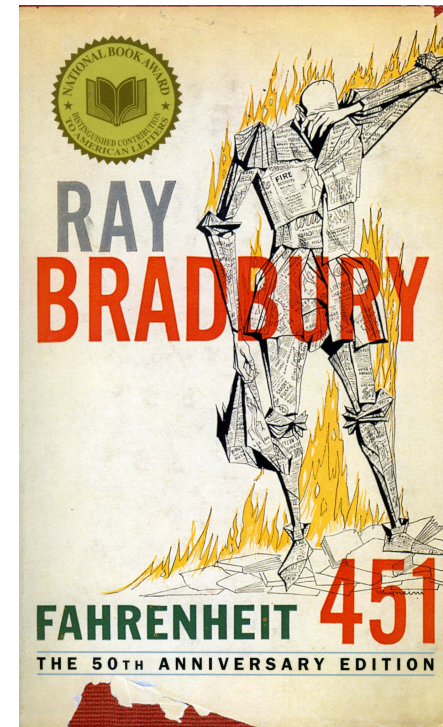
Social Media & Serious Gaming



## Societies at different stages of development



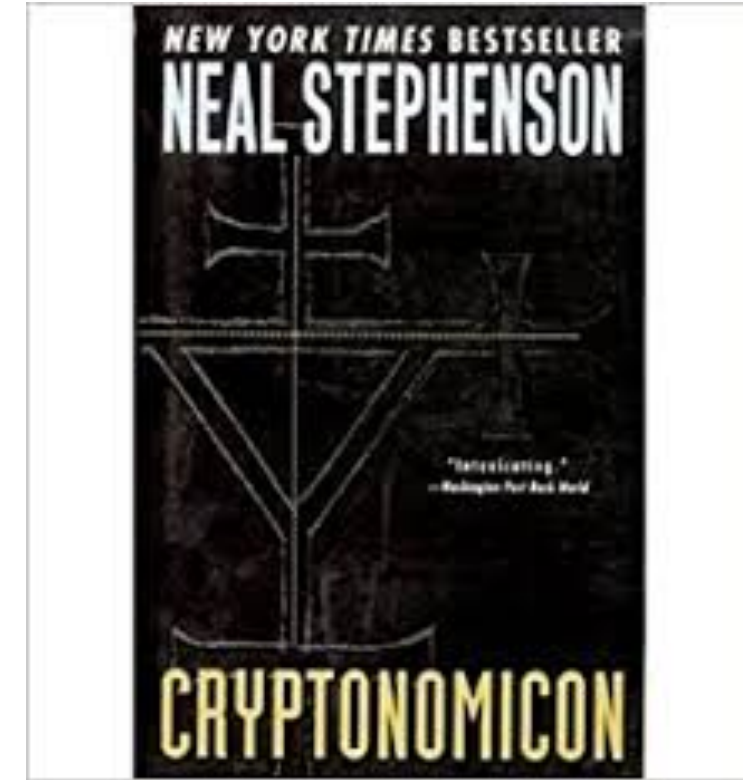
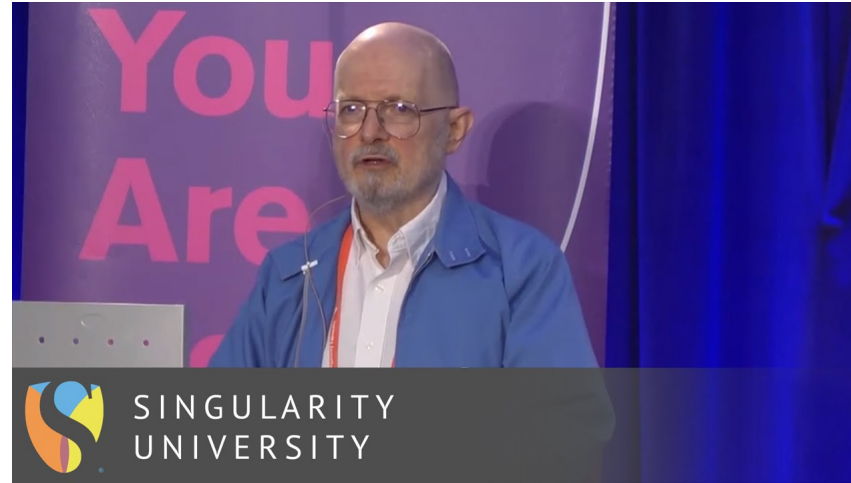
## Dystopian futures







Cyberspace  
& Hacking



Cybersecurity

**“We over-expect dramatic developments early, and under-expect them in the longer term” – Paul Saffo**

WINNER OF THE HUGO AND NEBULA AWARDS  
FOR BEST SCIENCE FICTION NOVEL OF THE YEAR

URSULA K.  
LE GUIN

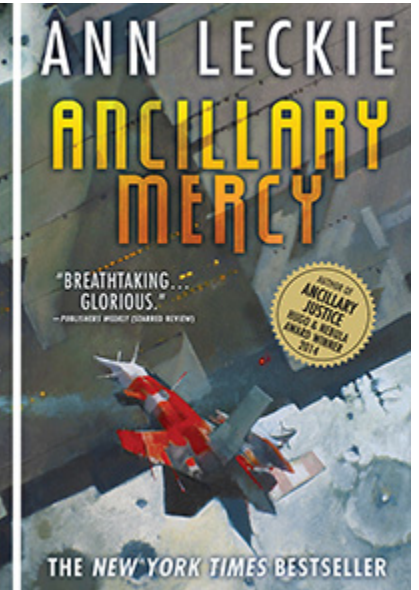
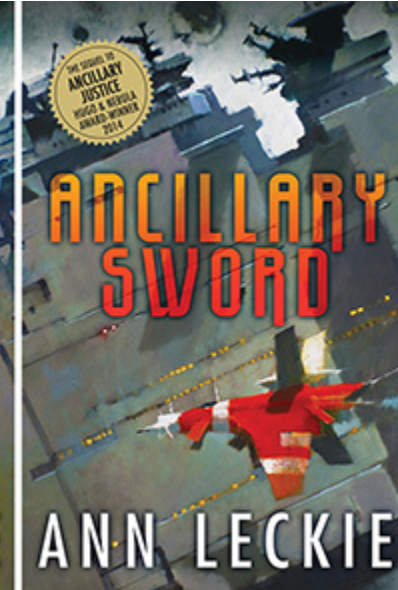
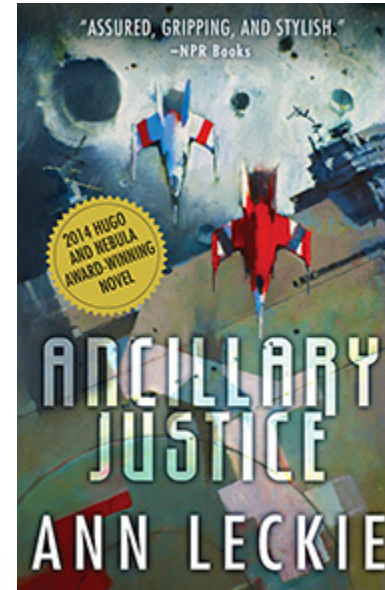


THE  
LEFT HAND  
OF DARKNESS

"[A] science fiction masterpiece."—*Newsweek*



# Gender-free worlds



As great scientists have  
said and as all children  
know, it is above all  
**by the imagination** that  
we achieve perception,  
and compassion, and hope.

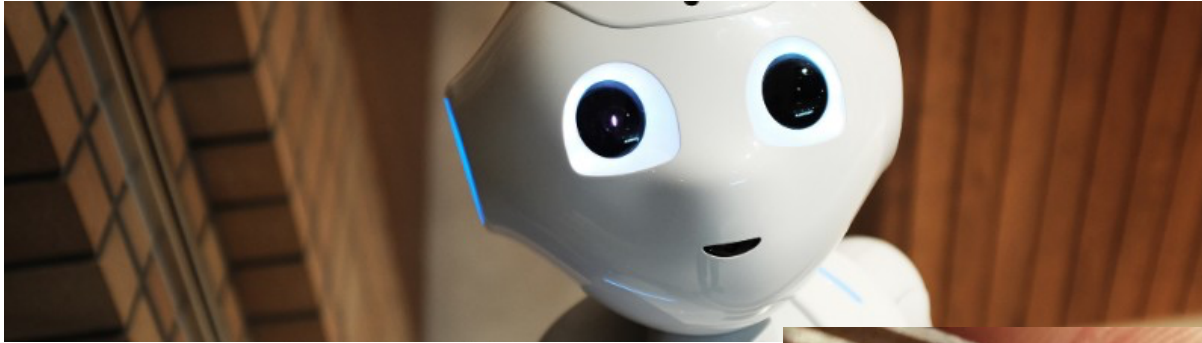
—URSULA K. LE GUIN



# What's happening now?

Upload your mind  
and live forever

Life extension



Sensors & Smart dust



Clones & Drones







# Science that looks like science fiction

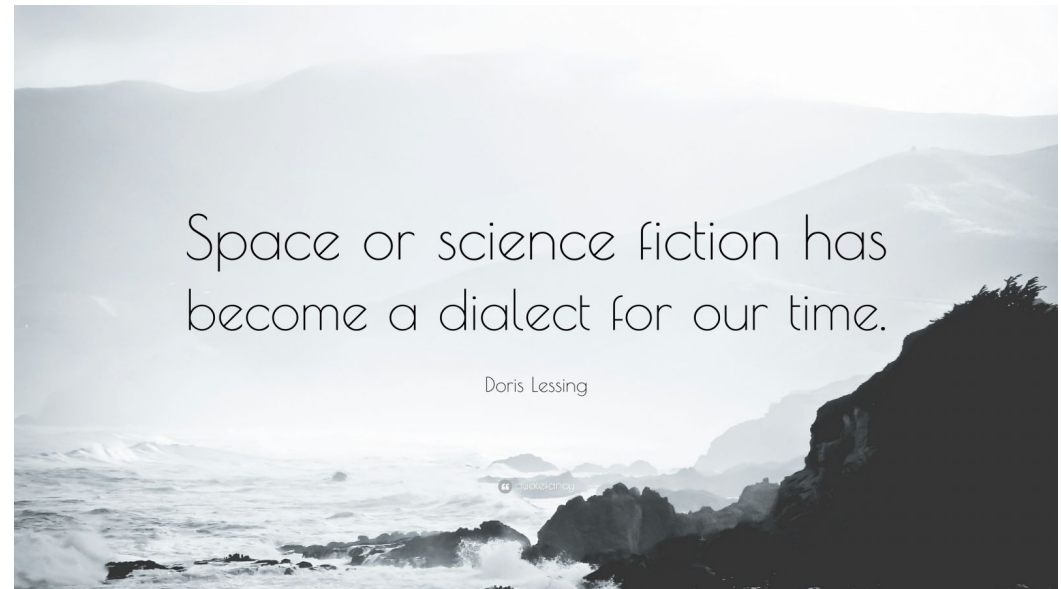




End of the world  
(as we know it)

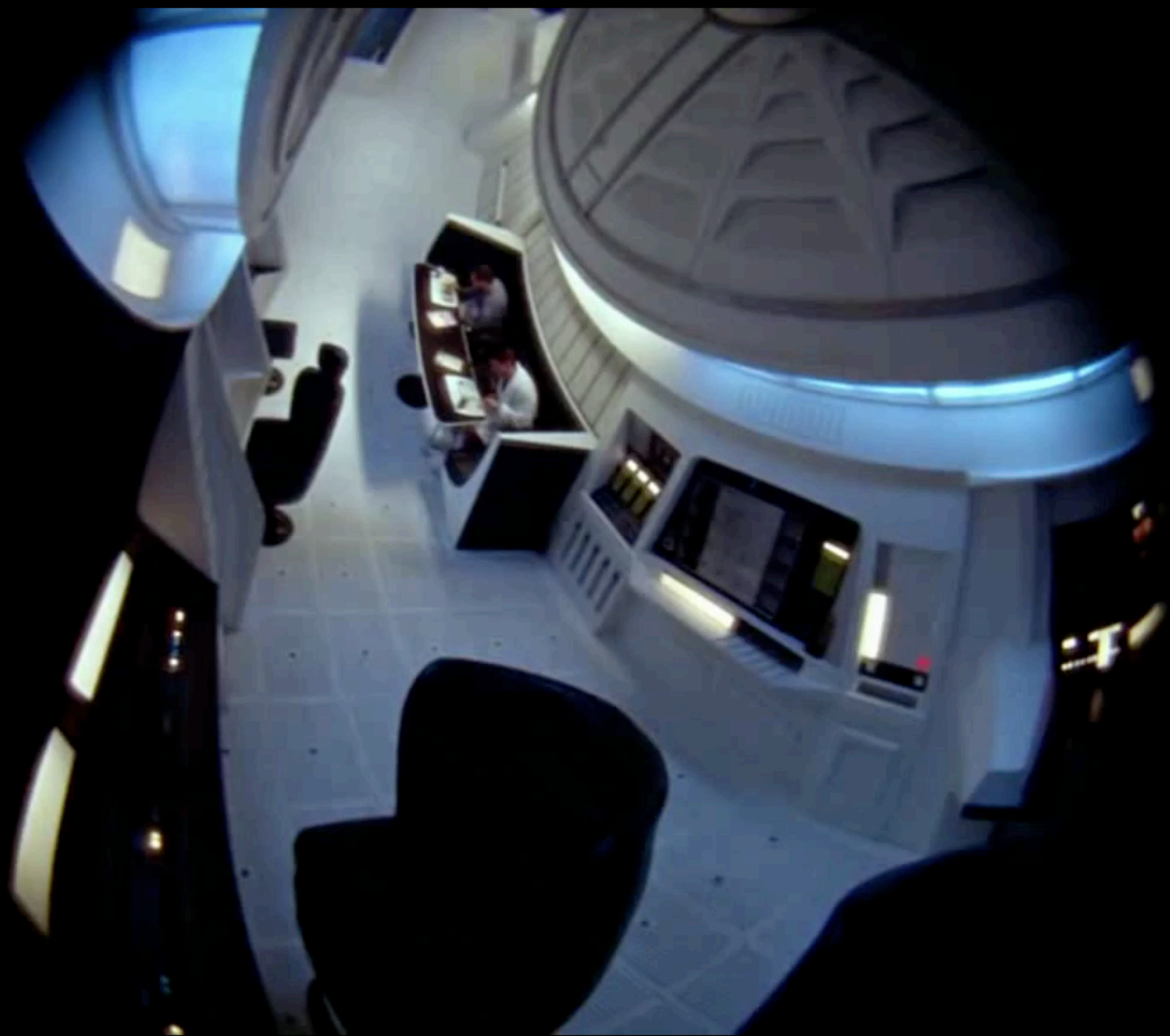
**Chinese science fiction**

Women: heroes and authors!













# Movies Based on the Work of Philip K. Dick

- Blade Runner
- Total Recall
- A Scanner Darkly
- Minority Report
- The Adjustment Bureau
- Man in the High Castle









RAJESH K. MOHANTY

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[PENDING]

00:11:09 00:15:00

// RESOLVING SNVC INDEX ALLOCATION (544 CTS) AN AG INT

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1959 - 1964



1963 →



1993 - 2002



2011 →

# 5 predictions from **Black Mirror** that are (almost) real

<https://www.nrc.nl/nieuws/2017/12/11/we-leven-bijna-in-deze-nachtmerrie-a1584537>

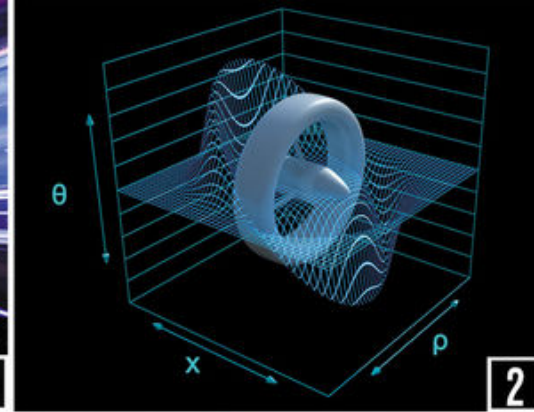


1. Murderous drone-insects
2. Google Glass, before it existed
3. Blackmail with sex photo's
4. Social credit
5. Follow your child everywhere







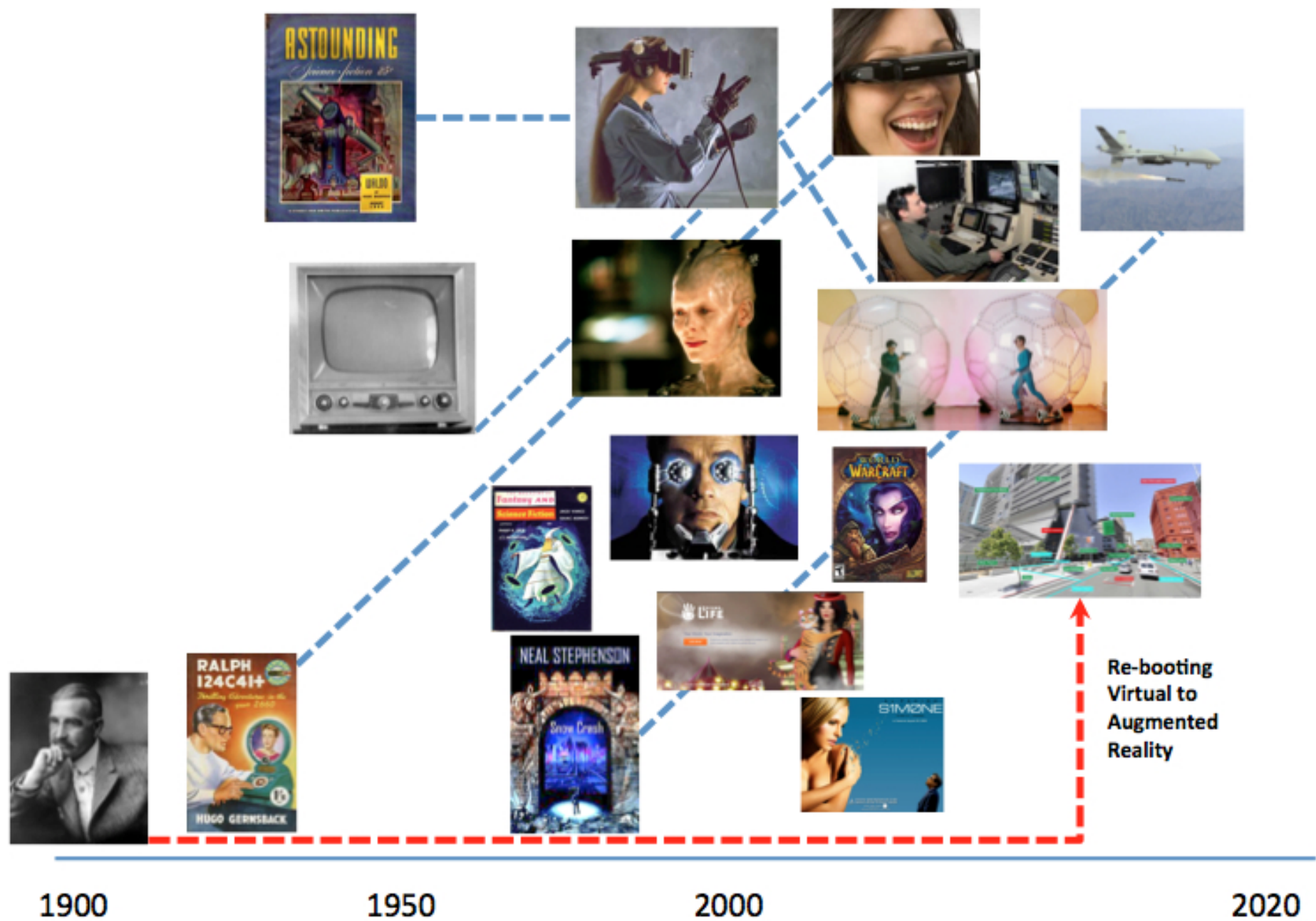


Supercomputers  
 Data mining  
 Virtual reality  
 Impulse engines  
 Androids  
 Sensors & Tricorders  
 Communicators

**IBM's Watson Goes  
 Where No Machine Has Gone Before**







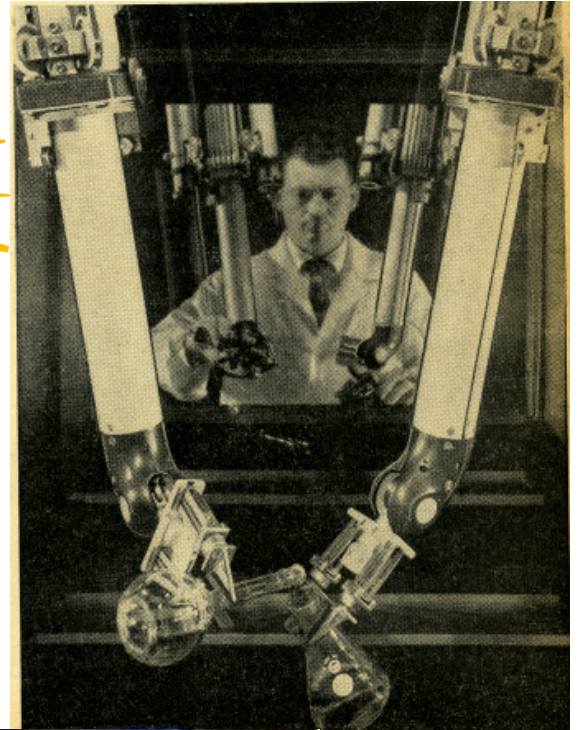
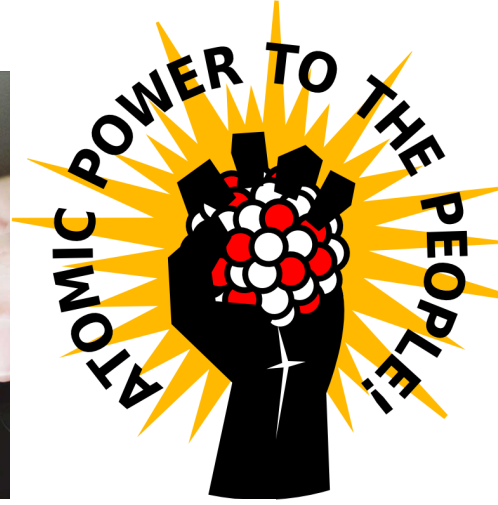
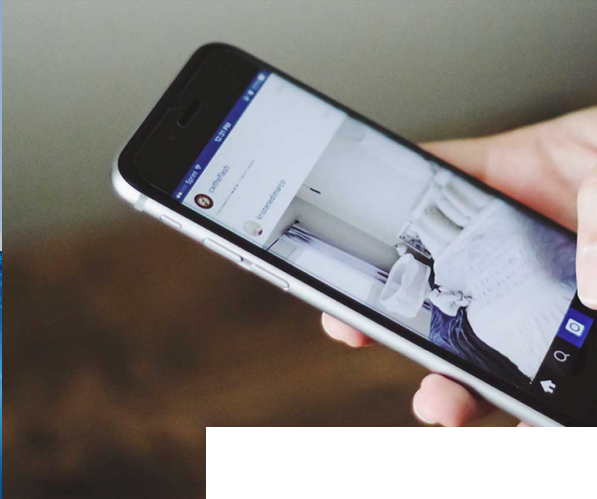
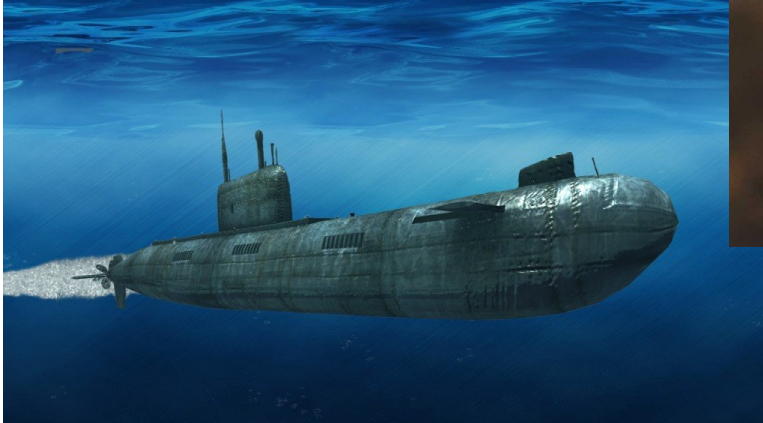








# Inventions Inspired by Science Fiction



# Inventions inspired by Science

<http://www.technovelgy.com/>

## Science Fiction Technology By Year:

[1600-1899](#)

[1900-1939](#)

[1940's](#)

[1950's](#)

[1960's](#)

[1970's](#)

[1980's](#)

[1990's](#)

[2000's](#)

[2010's](#)

## Technology By Topic

- [Blockchain Used To Verify Election Results](#)

'Any adult could punch into the phone his or her code, followed by a yes or no.' - John Brunner, 1975. (3/6/2018)

- [Positronic Motor](#)

A combination of motor and brain; an engine with a cerebellum and a carburetor.  
(From *Sally* [1953] by Isaac Asimov)

- [Robotic Lawn Mower Powered By Sun, Arduino](#)

'The mower reached the edge of the lawn, clucked to itself like a contented hen...' – (Clifford Simak, 1944.)

- [Save Your Brain's Connectome, Upload Yourself Elsewhere](#)

'You've got remote storage. How regular is the update?' - Richard Morgan, 2003. (3/15/2018)



Foreword by James Frenkel



## Science Fiction Prototyping

Designing the Future with Science Fiction

Brian David Johnson

Includes conversations with:

Cory Doctorow, Chris Warner, Sidney Perkowitz

Intel  
Microsoft  
Arup  
Capital 1 Bank

## Joint Top 3 Awards



*"Jimmy, don't do that!" shouted Lizzie. Jimmy's emotochromic skin turned red through embarrassment. "I envy people, able to hide their feelings." thought Jimmy, turning green with envy"* (Gordon Hunter, Kingston University, UK)



*"I have traced down all your respirees: infant cries, juvenile smiles, elderly sighs. Now you are (all) gone – leaving me to carry on and wonder why."* (Tiina Kymäläinen, VTT Technical Research Centre, Finland)



*"Jimmy, please write me a micro-SFP and, while you are at it, a business plan to! Jimmy says "Science Fiction does not compute!"* (Davy Preuveneers), Katholieke Universiteit, Belgium)

Creative Science Foundation,  
Shanghai 2014

# MICRO SCIENCE FICTION PROTOTYPING COMPETITION

1 Write a micro SFP using 130 characters only	2 Tweet your story using the hashtag #iLRN17_SFP
3 Your story will be retweeted in our official Twitter account @CSFoundation	4 Deadline for tweeting your story is 27th June 2017 (midnight).
5 Review the stories and 'like' those you think are the best	6 The 3 stories with the most 'likes' will receive a prize.
7 You have until 28th June 2017 (midnight) to vote for your favourite story!	8 The winners will be announced at iLRN 2017 closing session on 29th June 2017.

Pick Your Science	Scientific Inflection Point	Ramifications of Science on People	Humanistic Inflection Point	What did we Learn?
A network of smart, distributed computers manages everything	Tech-savvy criminals who hide inside the network	A man gets carjacked on the way home to his family	He has to counter-hack the system to escape	Human resourcefulness beats technological systems
Celebrities make their living through social media	A young woman has her entire profile deleted	She quits, but find that somebody else is still updating "her" profile	She finds an independent sense of self	We exist beyond our marketing categories
A man buys a new camera with an AI	The camera develops its own aesthetic judgment	It refuses to take pictures of its owner	The camera has its own gallery show	Who is the artist, the human or the machine?

## Business

- Intel, Volkswagen

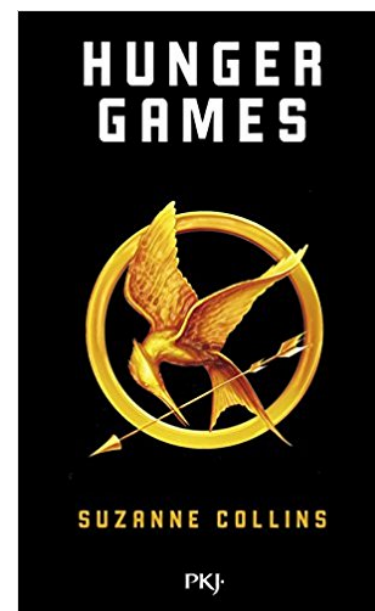
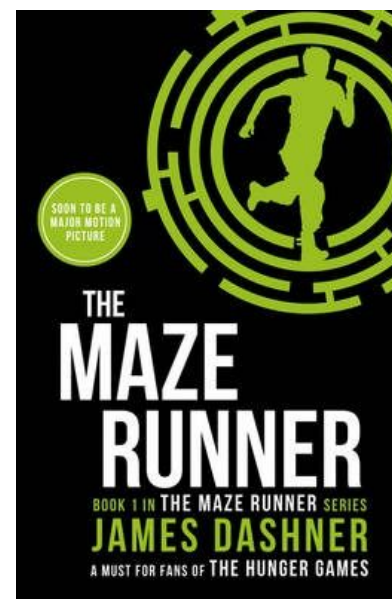
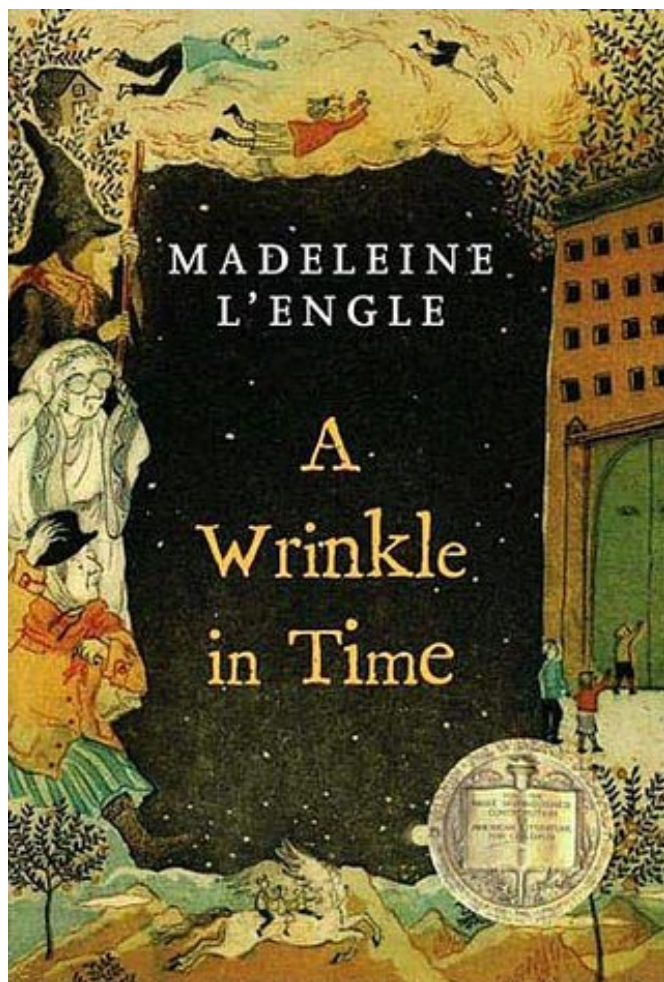
## Universities

- Business schools in USA, UK, Taiwan, China

## Military

- Futurcasting, Threatcasting









## Harry Potter series sets sales record!

The 5 Harry Potter books published up to 2003 have sold more than 250 million copies world-wide ....

*Source: de Volkskrant, November 2003*







“Imagination is more important than knowledge” – Albert Einstein



“Any sufficiently advanced technology is indistinguishable from magic”  
– Arthur C. Clarke





“The real voyage of discovery consists not in seeking new landscapes, but in looking through new eyes” –  
Marcel Proust



“Today is history, Tomorrow is mystery”  
– *my neighbour in Ireland*



# Issues for policy-makers and urban planners?

## Today & tomorrow

- **Demographics** of active healthy aging?
- **Smart Cities**: what are our blind spots?
- **Internet of Things**: *the dark side* of connecting everything?
- **Migrations**?
- Possible futures for **democracy**?
- **Block-chain**, engagement and trust?
- **Sustainable solutions** for. . .?

## Beyond tomorrow

- **Long life** for everyone?
- Broken promises of **intelligent systems**?
- **Transhumanism** – fuzzy borders of biology and digital
- Societal impact of **emerging technologies**?
- Future **unemployment**?
- **The future of. . .?**

# Questions for The Future, Now

1. What insights have you had during this presentation? What have you heard/thought that is relevant to your professional work?
2. Imagine: *an idea big enough to change your work (or: change the world)*
  - Describe what it looks like
  - How would this influence the field of your work?
3. What additional science-fiction sources/resources would you like to share with us today?