



# 2015 IAEVG International Conference



Restructuring Careers Over Unexpected Powerful Forces

September 18-21, 2015  
Tsukuba, Japan



# 2015



**Jean-Jacques Ruppert**





**Prof. Dr. Andreas Frey**

**Rector**

**University of Applied Labour Studies  
of the Federal Employment Agency**

# Counselling for

# The Future

Jean-Jacques Ruppert and Andreas Frey



IAEVG International Conference  
2015 Tsukuba, Japan



Applied Vocational Psychology and Policy  
Research Unit

**HdBA**

Hochschule der  
Bundesagentur für Arbeit

University of Applied Labour Studies



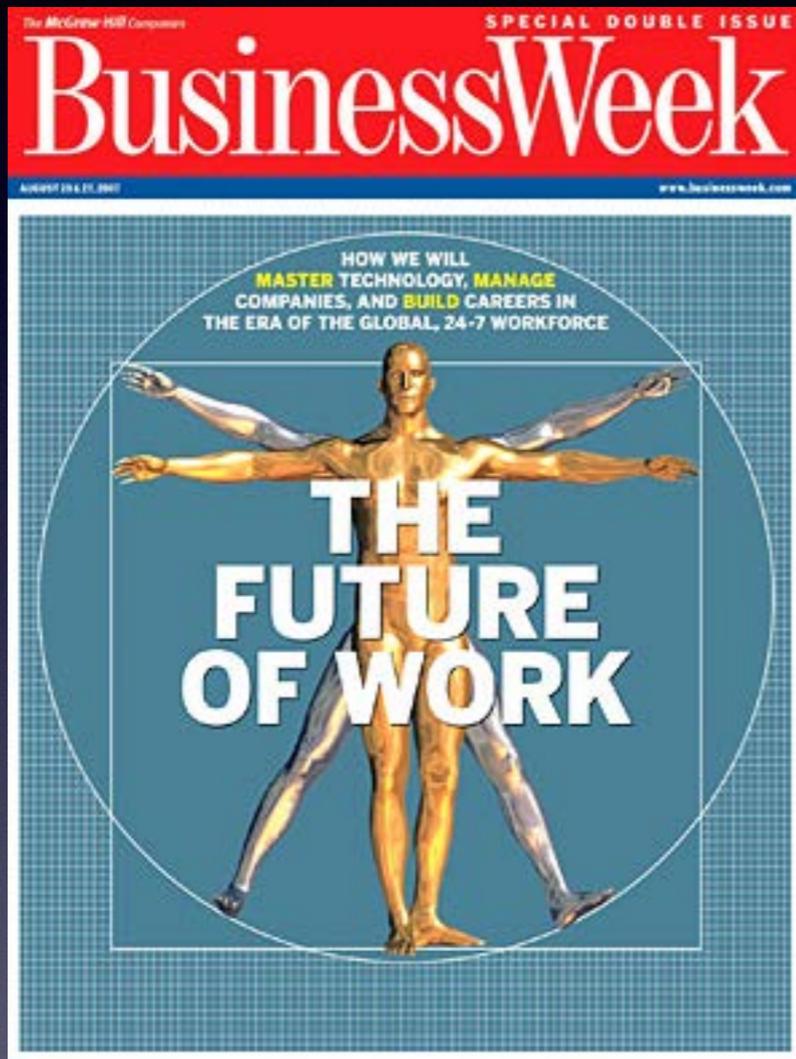
Ford Madox Brown: **Work** (1821-1893)

**What about**

A large green highway sign with rounded corners, mounted on a metal structure. The sign is empty except for the text 'The Future' written in white, bold, sans-serif font. The sign is set against a clear blue sky.

**The Future**

**of Work?**



August 19, 2007



May 25, 2009

UPDATED FOR THE 21ST CENTURY

Technology, Jobs and Your Future

# THE END OF WORK

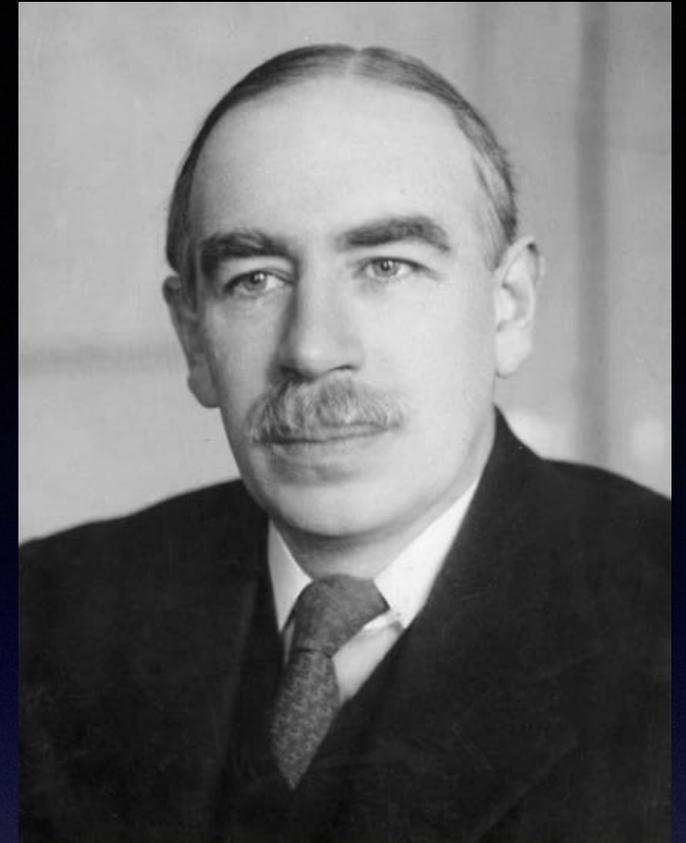
The Decline of the Global Labor Force  
and the Dawn of the Post-Market Era

JEREMY RIFKIN

"Thorough, thought-provoking and as radical as reality itself."

—*Newsday*

“new disease”:



“technological unemployment ...

due to our discovery of means of economising  
the use of labour outrunning the pace at which  
we can find new uses for labour.”

# The Economist

MARCH 29TH-APRIL 4TH 2014

Economist.com

Marine Le Pen woos France

Obama v Obamacare

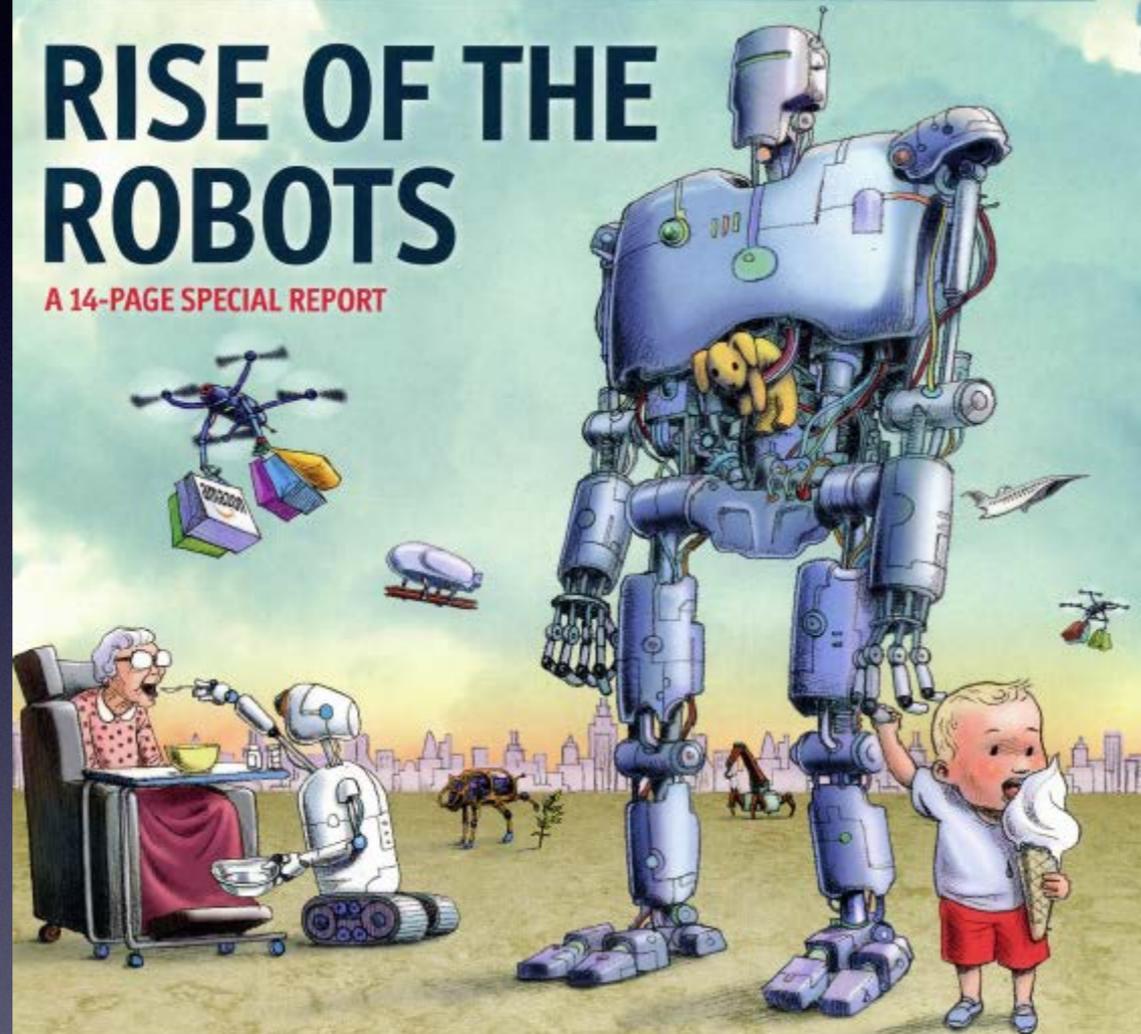
How to make a chromosome

Will Japanese women rebel?

Understanding the first world war

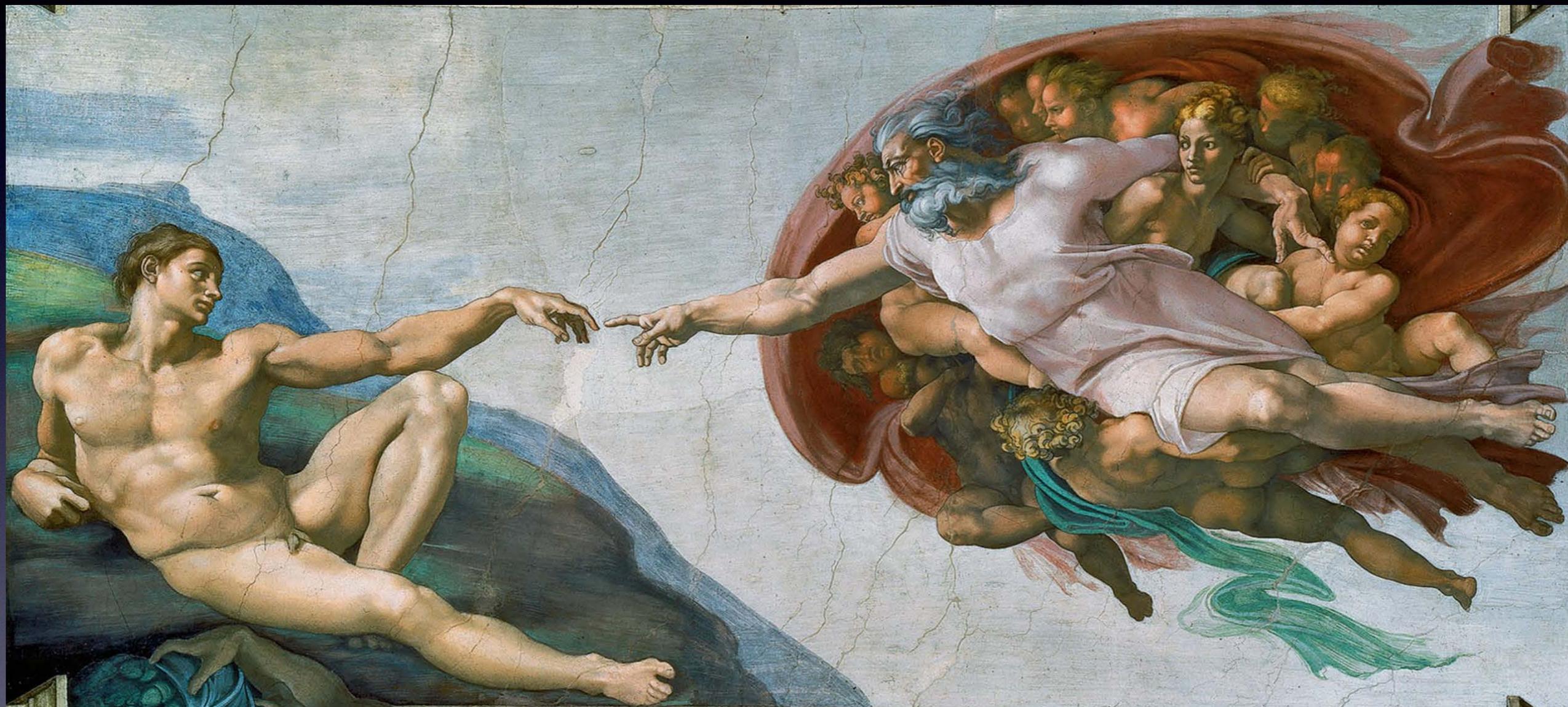
## RISE OF THE ROBOTS

A 14-PAGE SPECIAL REPORT

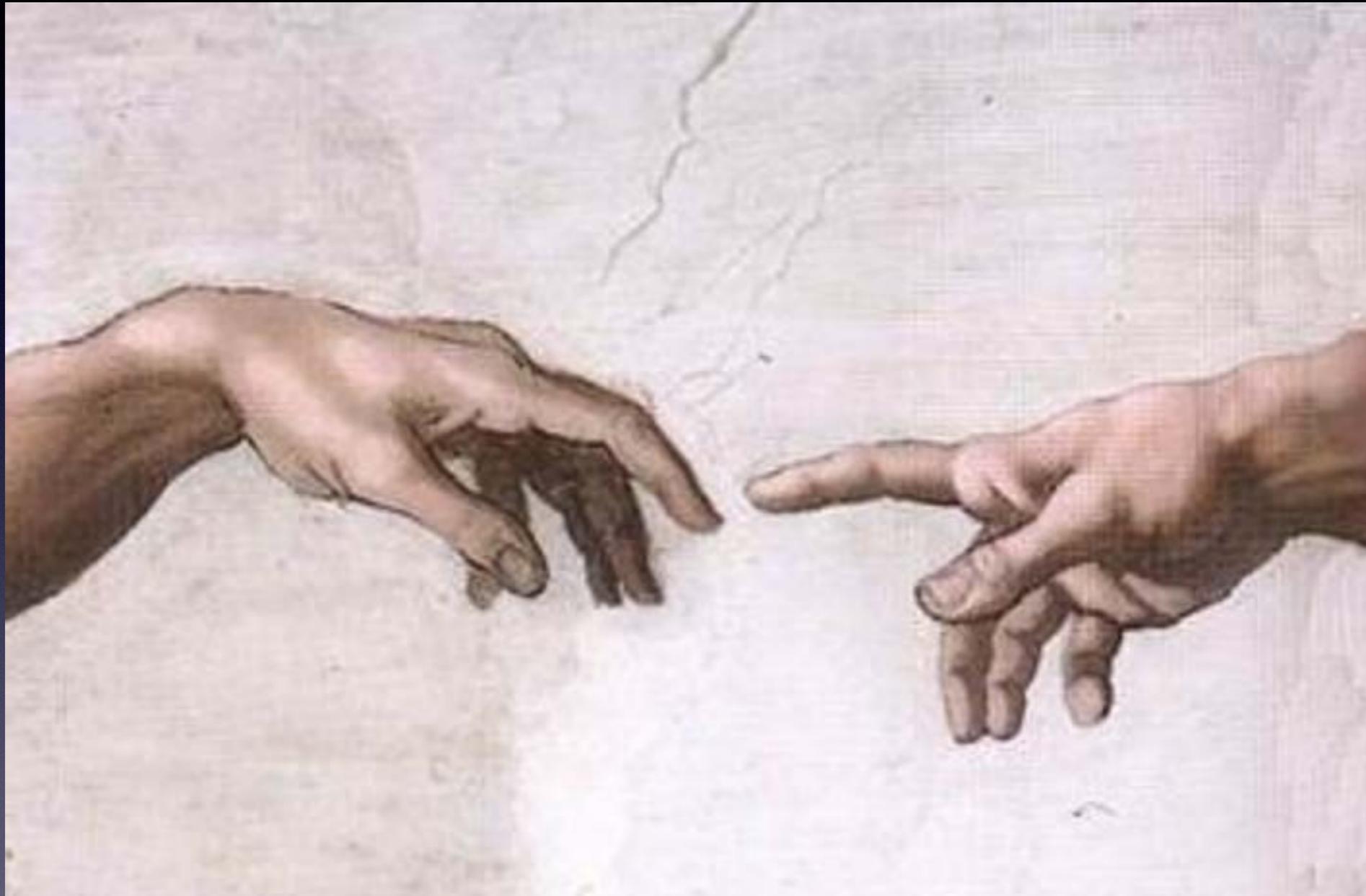


Algeria	£11.00	Croatia	HRK10	France	€6.50	Ireland	€6.50	Latvia	€6.50	Netherlands	€6.50	Romania	RON20	Spain	€6.50
Angola	€6.50	Cyprus	€6.50	Germany	€6.50	Israel	NIS11.00	Lebanon	£11.00	Nigeria	₦100	Saudi Arabia	Riyal5	Sweden	SKr11
Bahrain	BDH10	Czech Rep.	CZK100	Gibraltar	€6.50	Italy	€6.50	Lithuania	€6.50	Norway	NOK10	Serbia	RSD120	Switzerland	CHF11
Bolivia	BOB10	Denmark	DKK15	Greece	€6.50	Kazakhstan	₸100	Luxembourg	€6.50	Poland	PLN10	Slovakia	€6.50	Turkey	TL15
Brazil	R\$16	Estonia	€6.50	Hungary	HUF100	India	₹100	Malta	€6.50	Portugal cont.	€6.50	Slovenia	€6.50	UAE	Dirham10
Bulgaria	BGN11	Finland	€6.50	Iceland	ISK100	Japan	¥100	Norway cont.	€6.50	Qatar	Riyal4	South Africa	Rand10	UK	£2.00

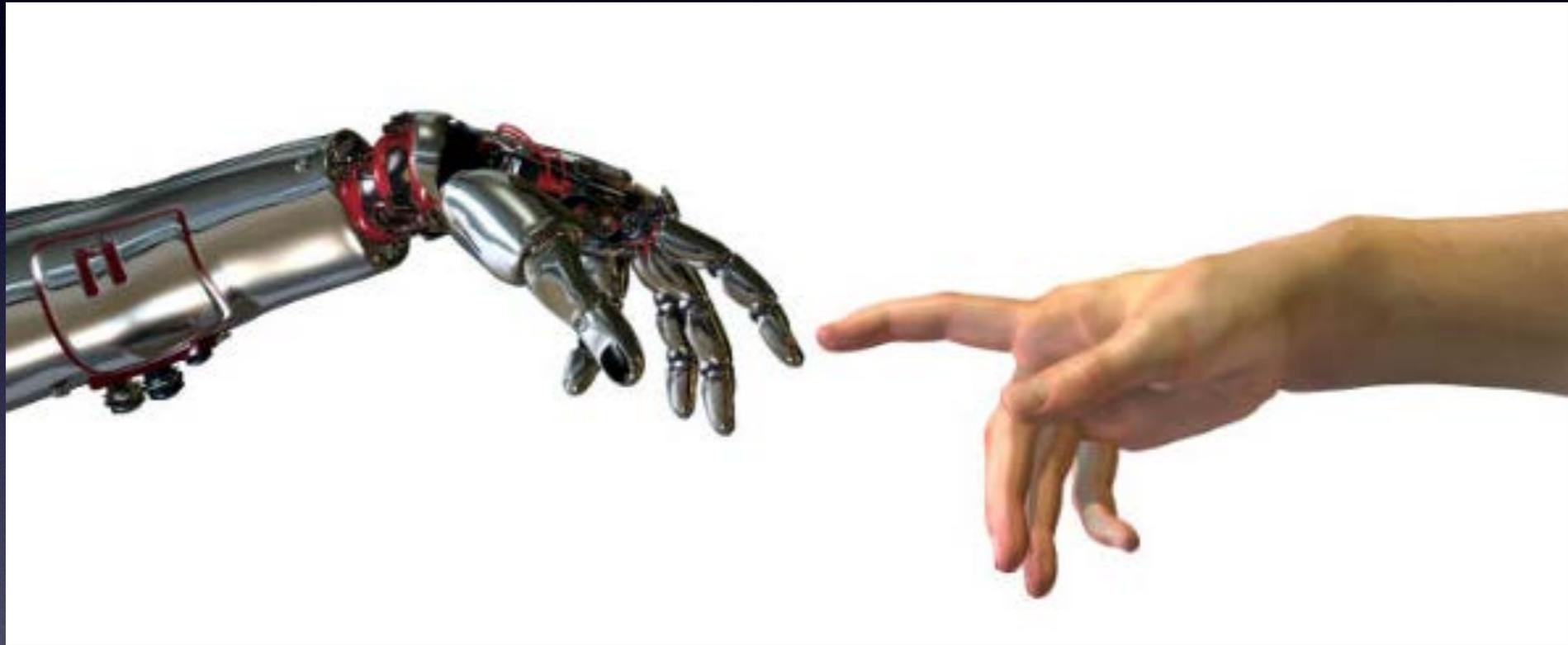
March 29-April 4, 2014



Michelangelo: **Sistine Chapel Ceiling: The Creation of Adam** (1508-1512)



Michelangelo: **Sistine Chapel Ceiling: The Creation of Adam** (1508-1512)



**Erik Brynjolfsson  
Andrew McAfee**

# **Race Against The Machine**



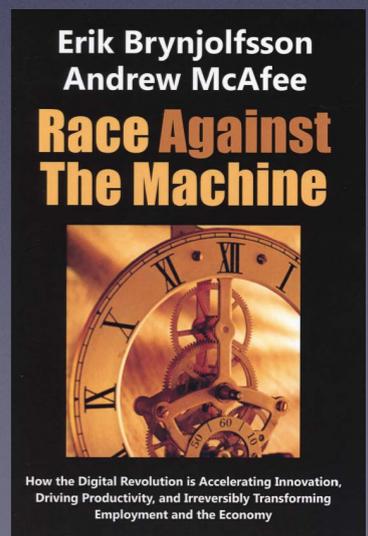
**How the Digital Revolution is Accelerating Innovation,  
Driving Productivity, and Irreversibly Transforming  
Employment and the Economy**

**“There was a type of employee at the beginning of the Industrial Revolution whose job and livelihood largely vanished at the beginning of the 20th century.**

**The population of *'this type of employee'* actually peaked long after the Industrial Revolution, in 1901, when 3.25 million were at work. (...)**

**But the arrival of the internal combustion engine in the late 19th century rapidly displaced these workers, so that by 1924 there were fewer than two million. There was always a wage at which all these *'workers'* could have been remained employed.**

**But that wage was so low ... .”**





“This was the **horse** .

(...)

There was always a wage at which all these **horses** could have been remained employed.

But that wage was so low that it did not pay for their feed .”

Erik Brynjolfsson  
Andrew McAfee

## Race Against The Machine



How the Digital Revolution is Accelerating Innovation,  
Driving Productivity, and Irreversibly Transforming  
Employment and the Economy

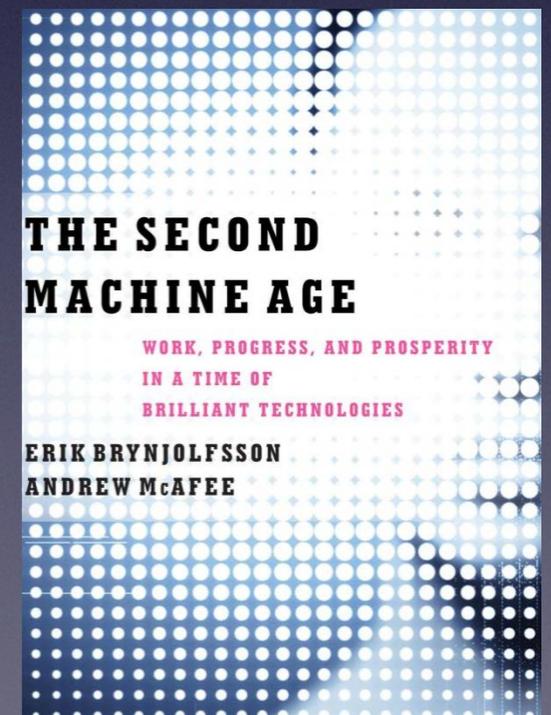


# **THE SECOND MACHINE AGE**

**WORK, PROGRESS, AND PROSPERITY  
IN A TIME OF  
BRILLIANT TECHNOLOGIES**

**ERIK BRYNJOLFSSON  
ANDREW MCAFEE**

“computers and other digital advances are doing for mental power ... what the steam engine and its descendants did for physical power.”



MARTIN FORD

RISE OF  
THE  
ROBOTS



TECHNOLOGY AND THE THREAT  
OF A JOBLESS FUTURE

Ilija Trojanow

# DER ÜBERFLÜSSIGE MENSCH

*Die meisten Menschen leben im Treib-  
sand zwischen Erfolg und Überflüssigkeit.  
Sie kämpfen darum, nützlich zu bleiben,  
wesentlich zu werden – nicht abzustürzen  
in die spätkapitalistischen Müllhalden,  
aus denen es keine Rettung gibt. Es geht  
um alles.*

Residenz Verlag

**Deloitte.**

Technology and people:  
The great job-creating machine

Ian Stewart, Debapratim De and Alex Cole

# THE FUTURE OF EMPLOYMENT: HOW SUSCEPTIBLE ARE JOBS TO COMPUTERISATION?\*

Carl Benedikt Frey<sup>†</sup> and Michael A. Osborne<sup>‡</sup>

September 17, 2013



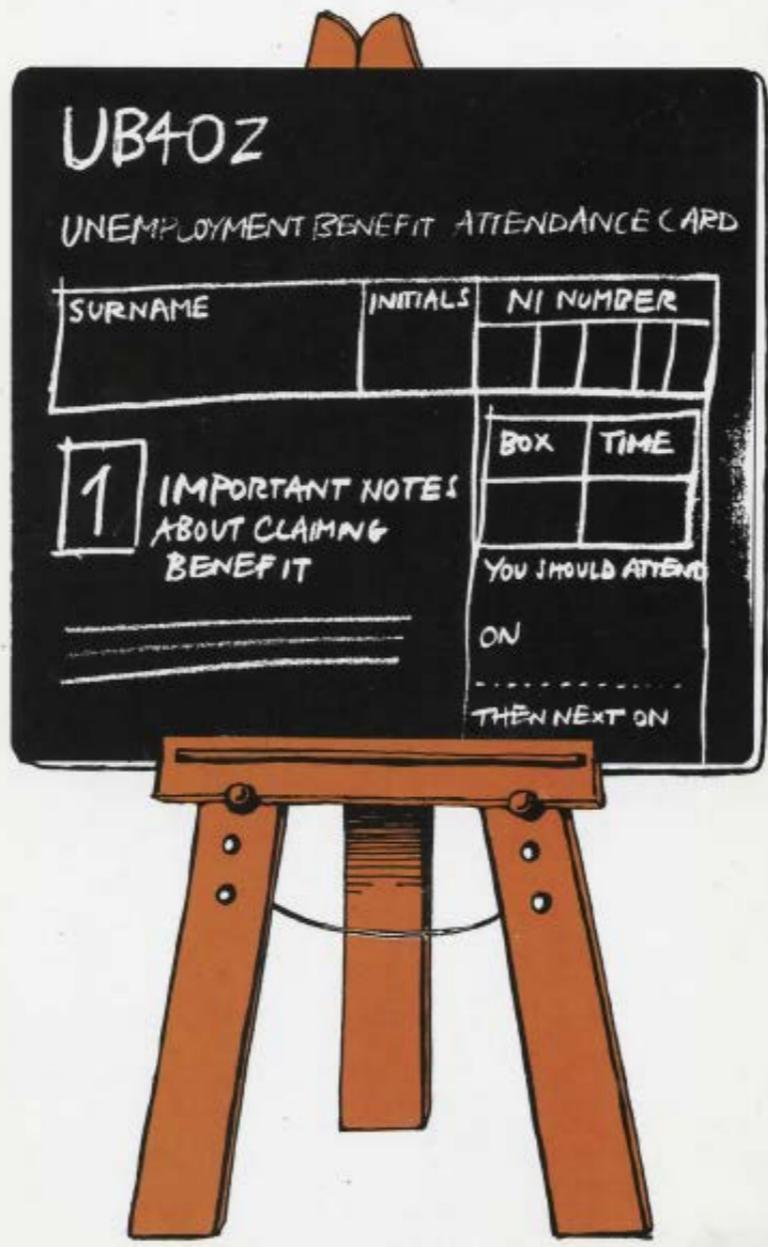
**1968: creation of the job of bridge toll collector**

**2013: introduction of electronic licence-plate recognition:  
17 employees redeployed or retired - 9 lost their jobs**

# Education, Unemployment and the Future of Work

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## A.G. Watts



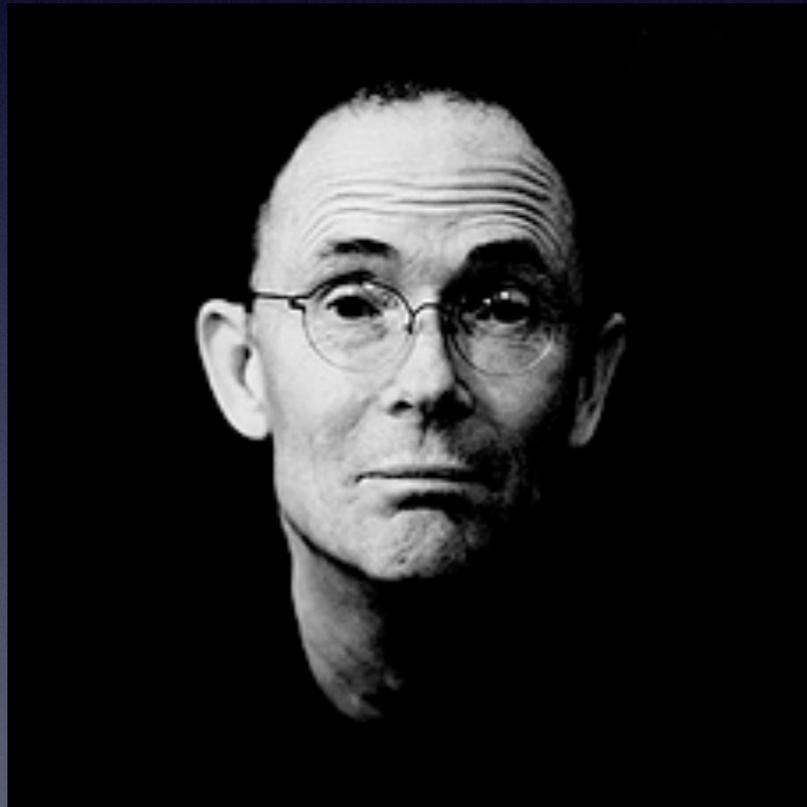
# Counselling for

# The Future?



**What should**  
**COUNSELLORS**  
**do?**

**“The future has already arrived.  
It’s just not evenly distributed yet.”**



William **GIBSON** (1992)



*"All I'm saying is now is the time to develop the technology to deflect an asteroid."*



INSIDE: A 14-PAGE SPECIAL REPORT ON TECH STARTUPS

The  
Economist

JANUARY 18TH-24TH 2014

Economist.com

If the French ran America

China cracks down on microblogs

New opportunities for organised crime

Google and the internet of things

UKIP: normal for Norfolk?

Coming to an office  
near you...

What today's  
technology will do to  
tomorrow's jobs



January 18-24, 2014

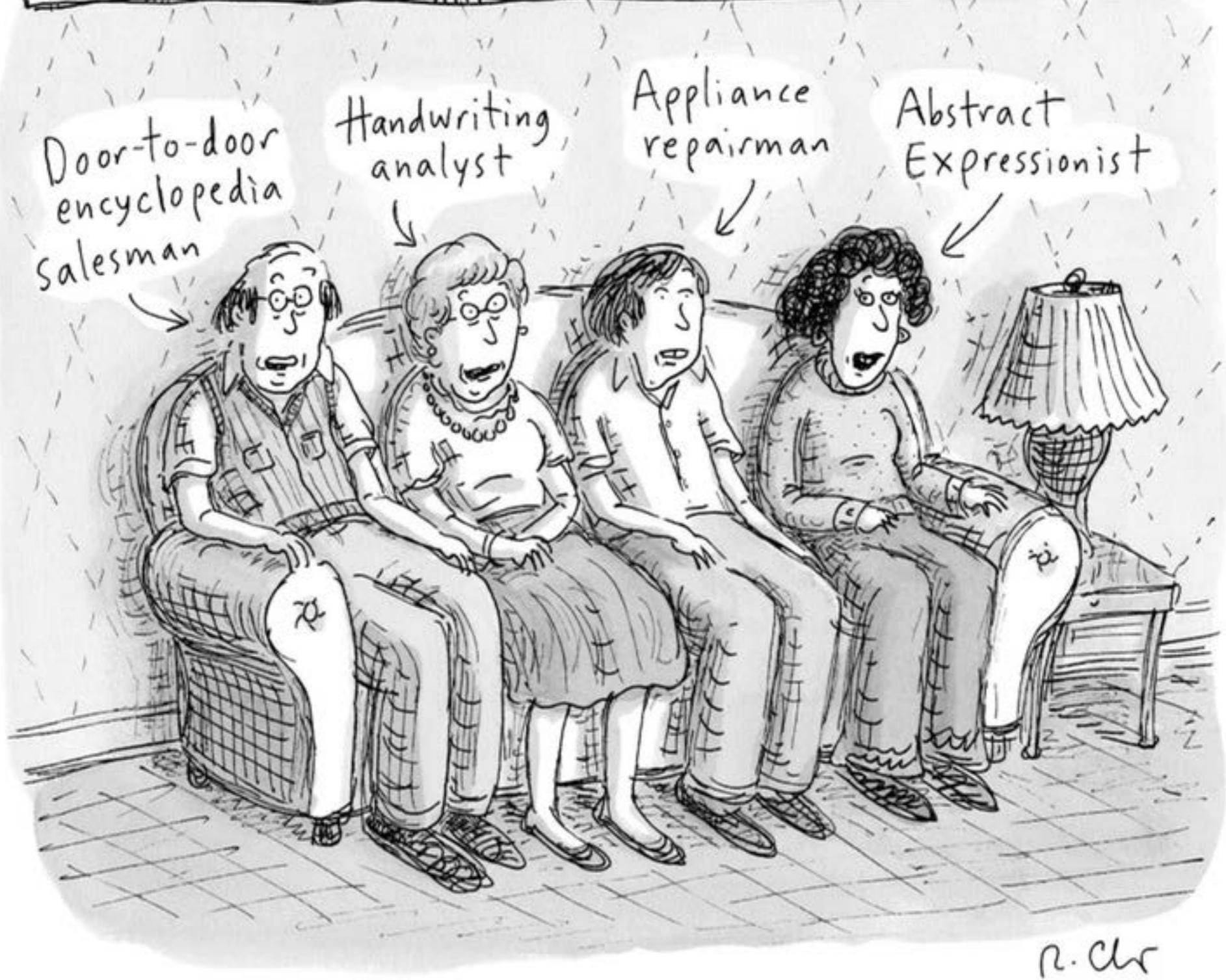


*"I think I was only invited for one reason."*



Stone Age women were less happy than men  
at the arrival of the iron age.

# THE WORLD'S MOST UNEMPLOYABLE FAMILY



*soft competences*

LEON'S AUTO SALVAGE  
AND CENTER FOR INTERPRETIVE DANCE



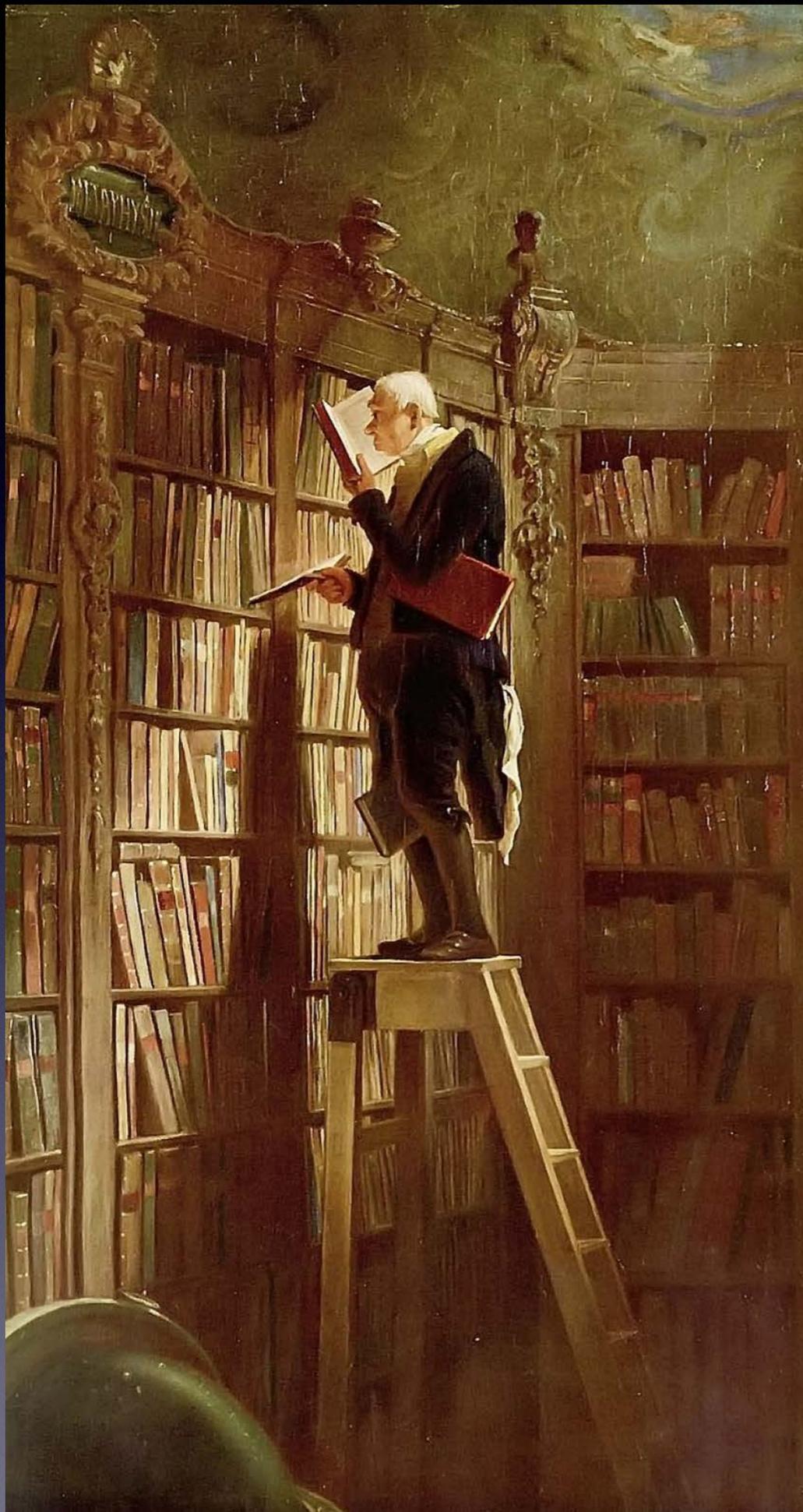


..NAF.

*"Before I give you your results, I'm going to put on some very sad music."*



**BE CURIOUS**



# STAY CURIOUS

**Der Bücherwurm**  
The Bookworm

Carl SPITZWEG  
(1980)

TYLER COWEN

NEW YORK TIMES BESTSELLING AUTHOR  
of *THE GREAT STAGNATION*

AVERAGE  
IS OVER

---

POWERING AMERICA  
BEYOND *the AGE of*  
THE GREAT STAGNATION

---

information  
management

decision-making  
strategies



"Let's hold off making a decision until  
we have even more information we don't  
really need."

**What should**  
**POLICY-MAKERS**  
**do?**

investment in **education**  
with a greater emphasis on **creativity**  
and **interpersonal skills**



**“Yes, I think I have good people skills.  
What kind of idiot question is that?”**

policies to boost **entrepreneurship**  
in order to invent **new industries**  
and create **new jobs**



**What about**

A large green highway sign with rounded corners and a white border, mounted on a metal structure. The sign is empty except for the text 'The Future' written in white. The background is a clear blue sky.

**The Future**

**of Counselling?**



**Thank you  
for your  
attention**

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[andreas.frey@hdba.de](mailto:andreas.frey@hdba.de)