NATIONAL CENTER
FOR THE PRESERVATION OF
DEMOCRACY

THE NATIONAL CENTER FOR THE PRESERVATION OF DEMOCRACY
IS
CLOSED

Pope Francis: Build Europe 2.0
A New European Humanism

"Was ist los mit dir, humanistisches Europa, du Verfechterin der Menschenrechte, der Demokratie und der Freiheit? Was ist los mit dir, Europa, du Heimat von Dichtern, Philosophen, Künstlern, Musikern, Literaten? Was ist los mit dir, Europa, du Mutter von Völkern und Nationen, Mutter großer Männer und Frauen, die die Würde ihrer Brüder und Schwestern zu verteidigen und dafür ihr Leben hinzugeben wussten?"

"Gerade jetzt, in dieser unserer zerrissenen und verwundeten Welt, ist es notwendig, zu dieser Solidarität der Tat zurückzukehren, zur selben konkreten Großzügigkeit, die auf den Zweiten Weltkrieg folgte."

May 6, 2016

Armut, Krankheit, und Pech?

"Die Demokratie ist eine veraltete Technologie. (...) Sie hat Reichtum, Gesundheit und Glück für Milliarden Menschen auf der ganzen Welt gebracht. Aber jetzt wollen wir etwas Neues ausprobieren."

Hencken, Randolph. 2014. In: Mikrogesellschaften. Hat die Demokratie ausgedient? Capriccio. Video, veröffentlicht am 15.5.2014. Autor: Joachim Gaertner. München: Bayerischer Rundfunk.

Dirk Helbing (ETH Zurich)
nervousnet@ethz.ch

Why we need democracy 2.0 and capitalism 2.0 to survive

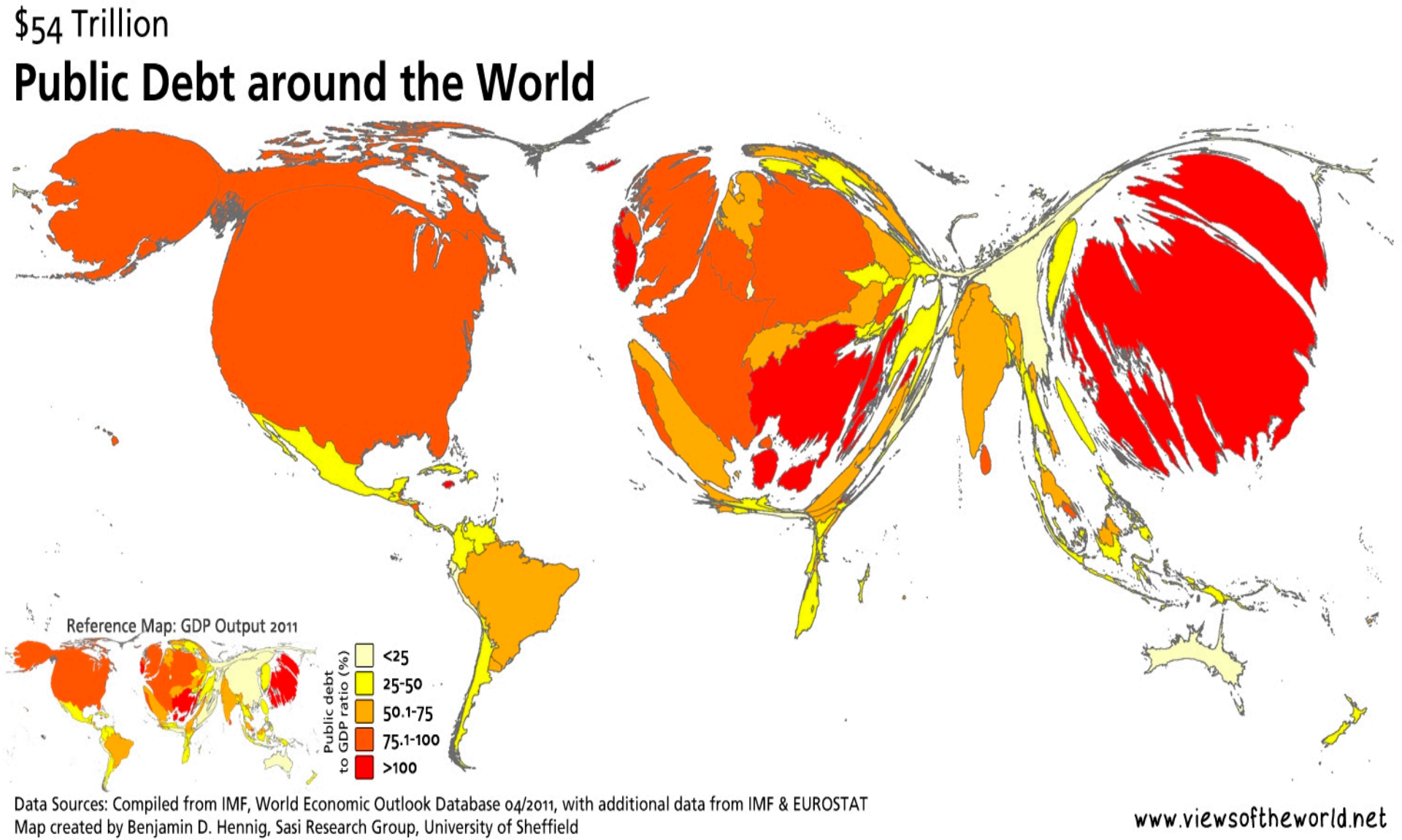
Follow FuturICT on

The Problems of the World Are Complex

Source: ddp images/Marcus Brandt

http://www.sueddeutsche.de/politik/streit-beigelegt-einigung-ueber-foederalismusreform-1.413140

Financial, Economic and Spending Crisis



Conflict, War

http://www.turnto10.com/story/26049806/local-experts-weigh-in-on-malaysian-airlines-crash

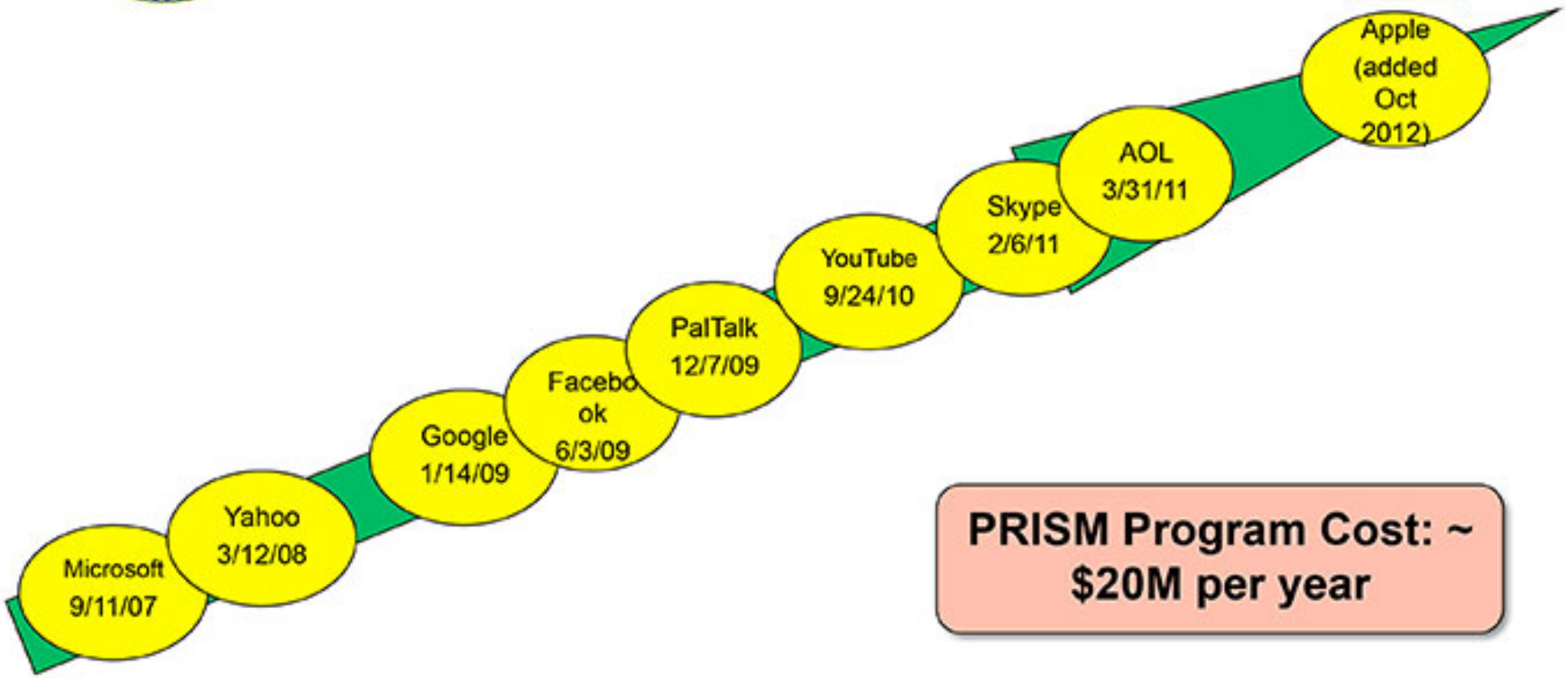
Climate Change

- Extreme weather
- Biodiversity loss

Would Big Data fix the world?

IN 60 SECONDS...
1 NEW DEFINITION IS ADDED ON urban dictionary
1,600+ READS ON Scribd.
13,000+ HOURS MUSIC STREAMING ON PANDORA
12,000+ NEW ADS POSTED ON craigslist
370,000+ MINUTES VOICE CALLS ON skype
98,000+ TWEETS
20,000+ NEW POSTS ON tumblr.
THE LARGEST SOCIAL READING PUBLISHING COMPANY!!
New Craigslist Ads
320+ NEW twitter ACCOUNTS
13,000+ iPhone APPLICATIONS DOWNLOADED
100+ NEW Linked in ACCOUNTS
1 associatedcontent NEW ARTICLE IS PUBLISHED
THE WORLD'S LARGEST COMMUNITY CREATED CONTENT!!
QUESTIONS ASKED ON THE INTERNET...
100+ Answers.com
40+ YAHOO! ANSWERS
6,600+ NEW PICTURES ARE UPLOADED ON flickr
600+ NEW VIDEOS
50+ WORDPRESS DOWNLOADS
695,000+ facebook STATUS UPDATES
25+ HOURS TOTAL DURATION
70+ DOMAINS REGISTERED
60+ NEW BLOGS
168 MILLION EMAILS ARE SENT
694,445 SEARCH QUERIES
1,700+ Firefox DOWNLOADS
125+ PLUGIN DOWNLOADS
1,500+ BLOG POSTS
79,364 WALL POSTS
510,040 COMMENTS
Google
Google Search
GO-Globe.com
web technologies

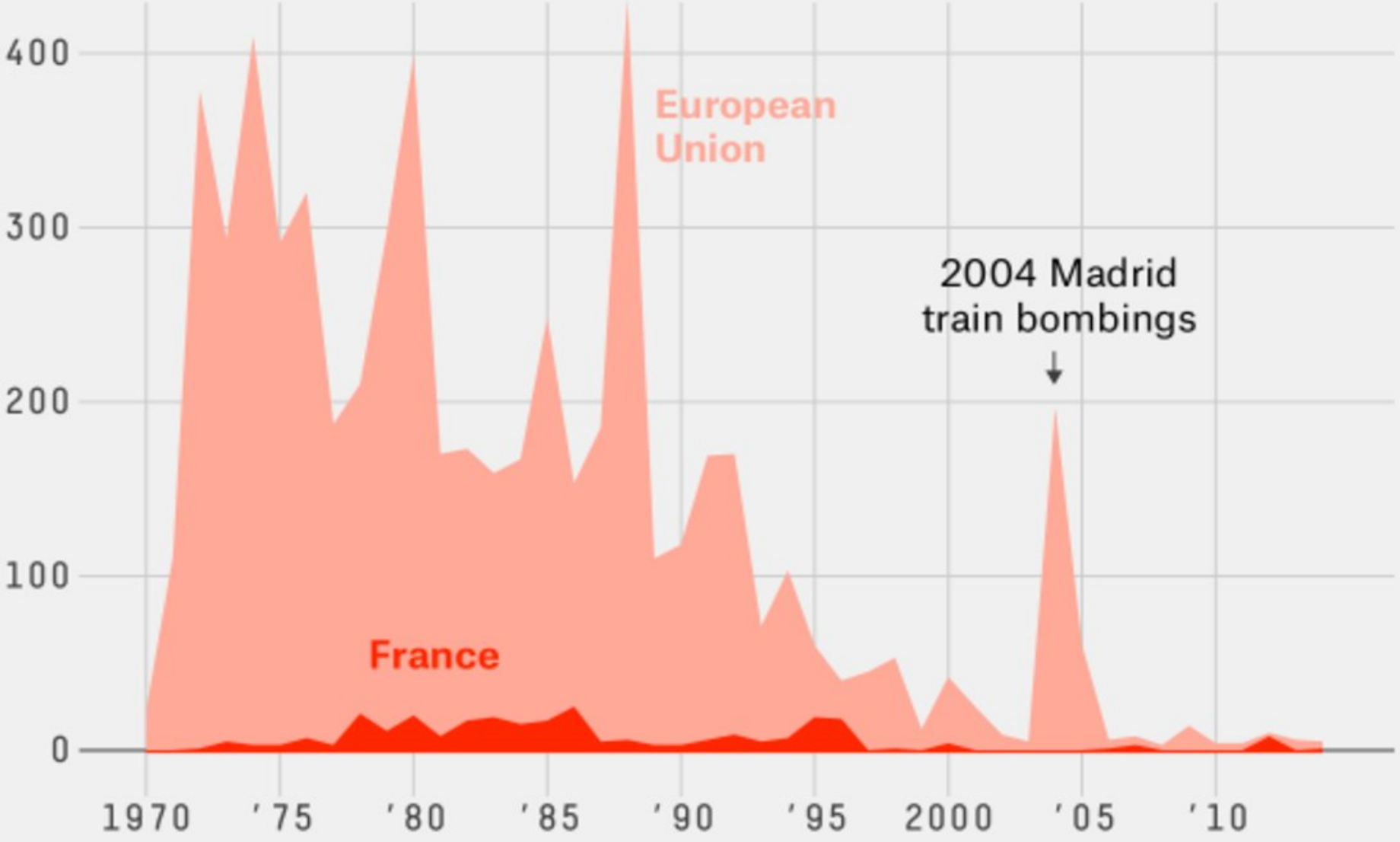
(TS//SI//NF) Dates When PRISM Collection Began For Each Provider



PRISM Program Cost: ~ $20M per year

Previous Terrorism Deaths In France And The EU

European Union member countries as of 1986



FIVETHIRTYEIGHT

SOURCE: GLOBAL TERRORISM DATABASE

“Data is the new oil” – Clive Humby

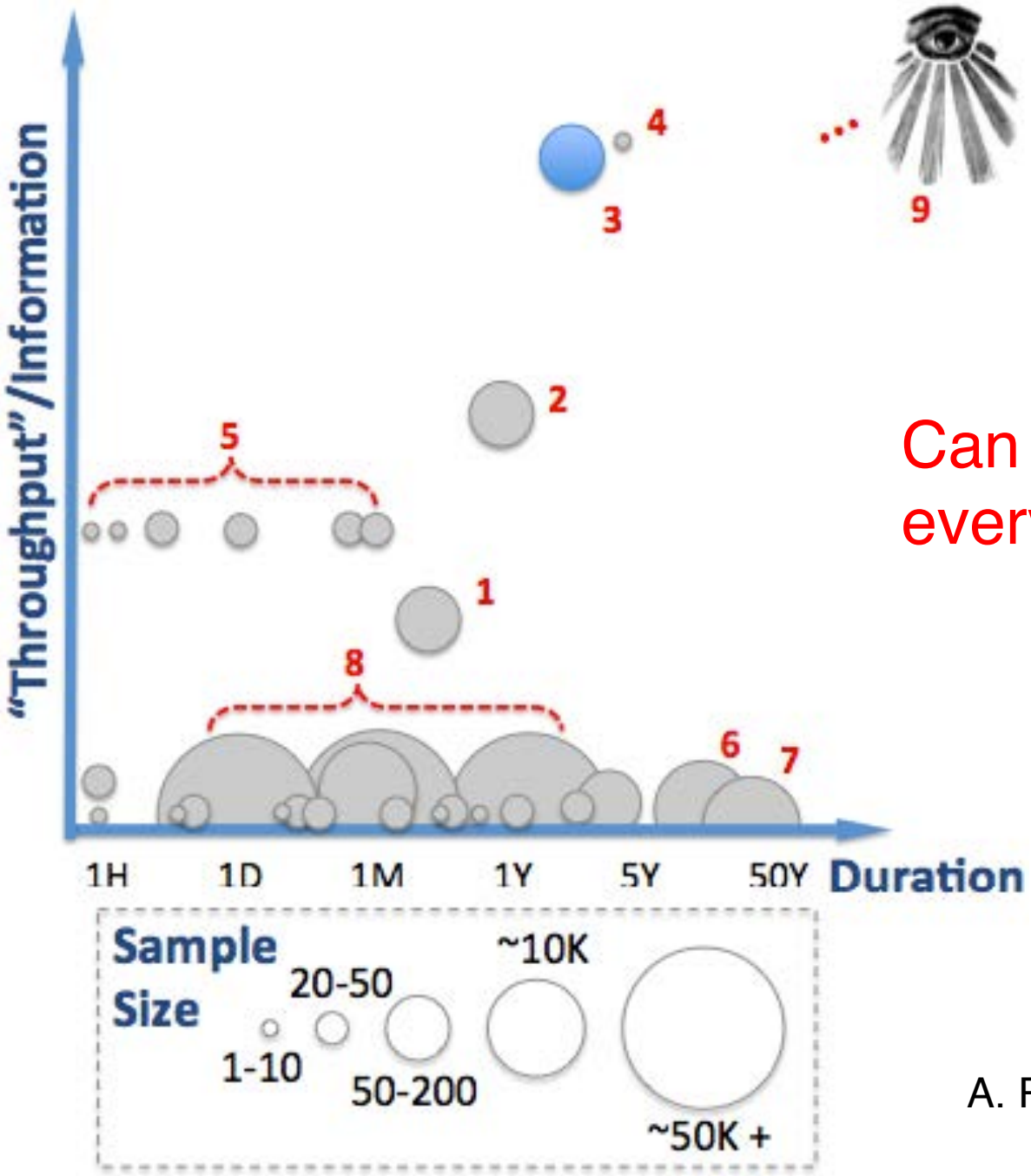
http://www.photoeverywhere.co.uk/west/usa/california/sunset_oil_rigDSC_4701.jpg

knowledge
is power!

CHRIS ANDERSON:

The end of theory: the data deluge makes the scientific method obsolete.

Wired Magazine 16(7), 2008



Can we know everything?

A. Pentland et al.

Can We Build A Crystal Ball?
facebook

 U.S. NAVY PHOTO BY MASS COMMUNICATION SPECIALIST 3RD CLASS JOHN FISCHER

Can the Military Make a Prediction Machine?

APRIL 8, 2015 BY PATRICK TUCKER

The planet is awash in open, free data. Can military-funded research turn it into a crystal ball?

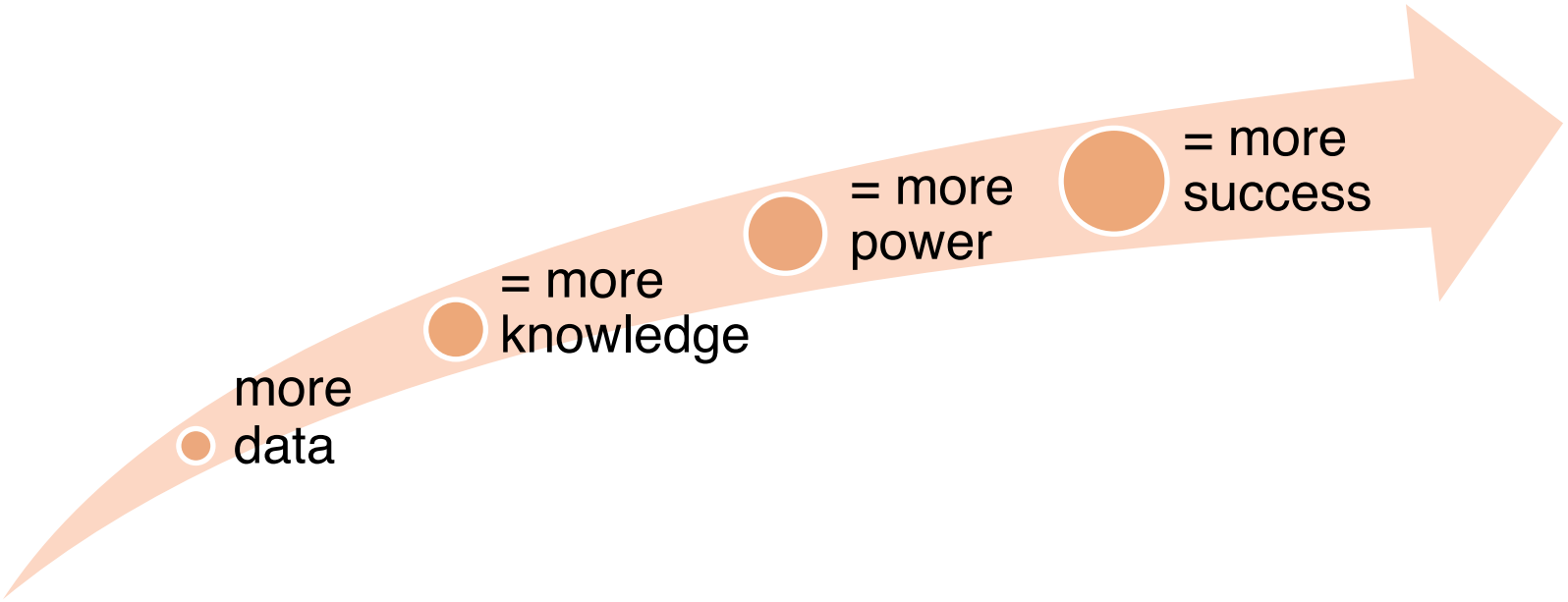
Research & Development / Intelligence

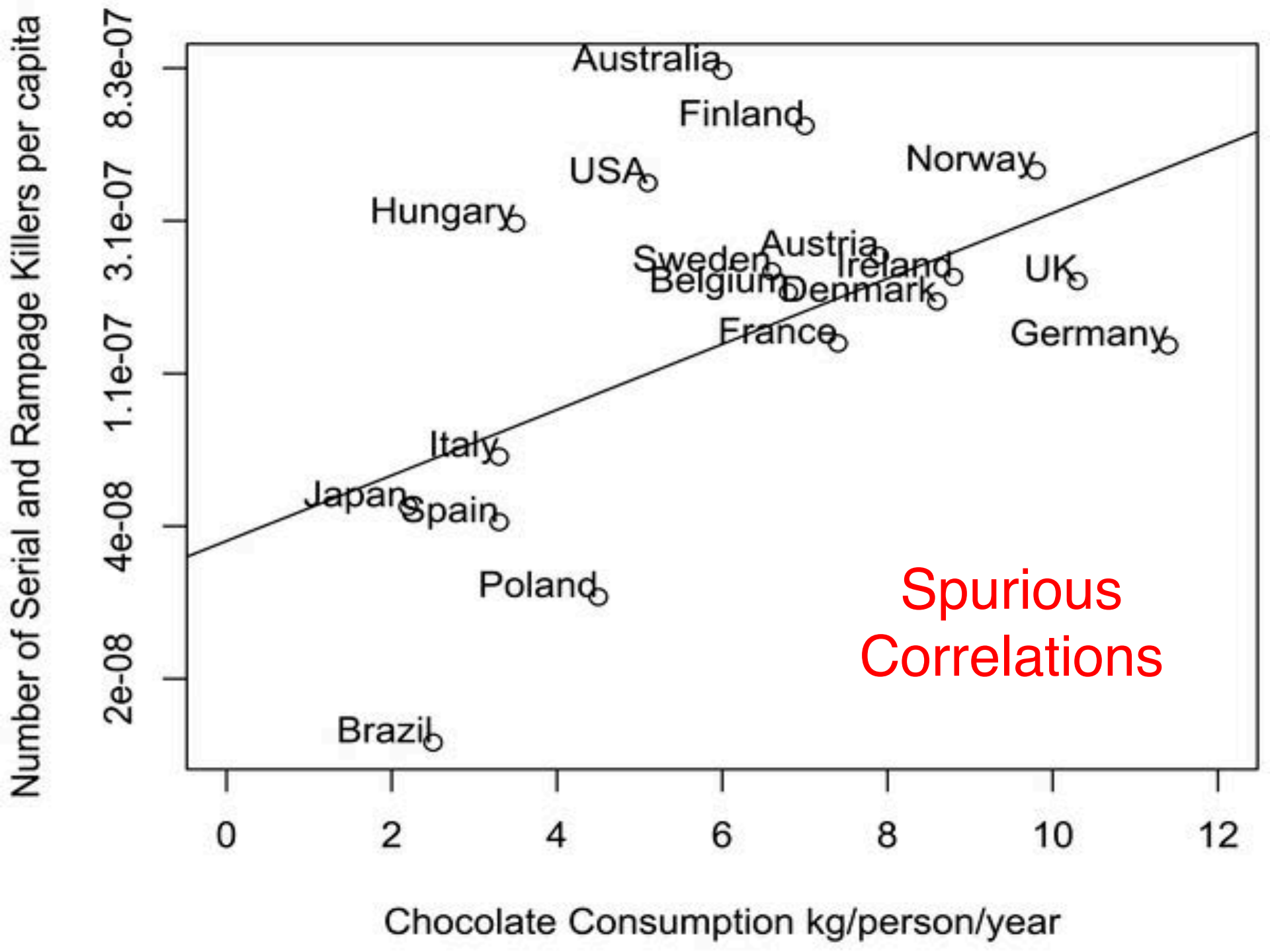
What could the military do if it could better understand the massive amounts of data that humanity creates, an estimated 2.5 quintillion bytes every day? Could it predict aspects of the future?

Would
so much
information
enable a
wise king?

A data-empowered “wise king” or “benevolent dictator” could easily make mistakes

The Magic Formula?




Number of Serial and Rampage Killers per capita
2e-08
4e-08
1.1e-07
3.1e-07
8.3e-07
Australia
Finland
Norway
USA
Hungary
Austria
Sweden
Ireland
UK
Belgium
Denmark
France
Germany
Italy
Japan
Spain
Poland
Brazil
Spurious Correlations
0
2
4
6
8
10
12
Chocolate Consumption kg/person/year

OPEN ACCESS

ESSAY

Why Most Published Research Findings Are False

John P. A. Ioannidis

Published: August 30, 2005 • DOI: 10.1371/journal.pmed.0020124

Abstract

Modeling the Framework for False Positive Findings

Bias

Testing by Several Independent Teams

Corollaries

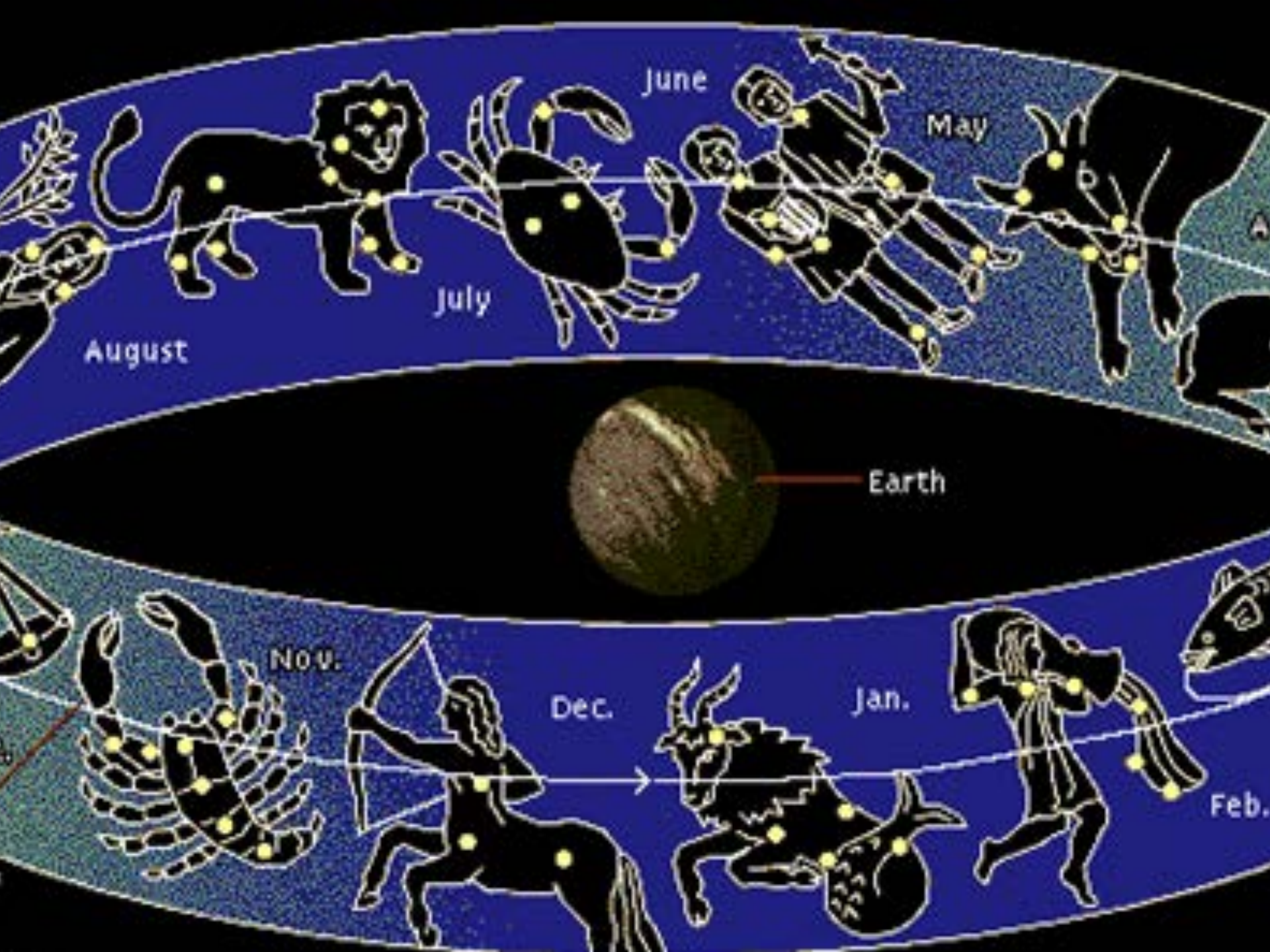
Most Research Findings Are False for Most Research Designs and for Most Fields

Claimed Research Findings May Often Be Simply Accurate

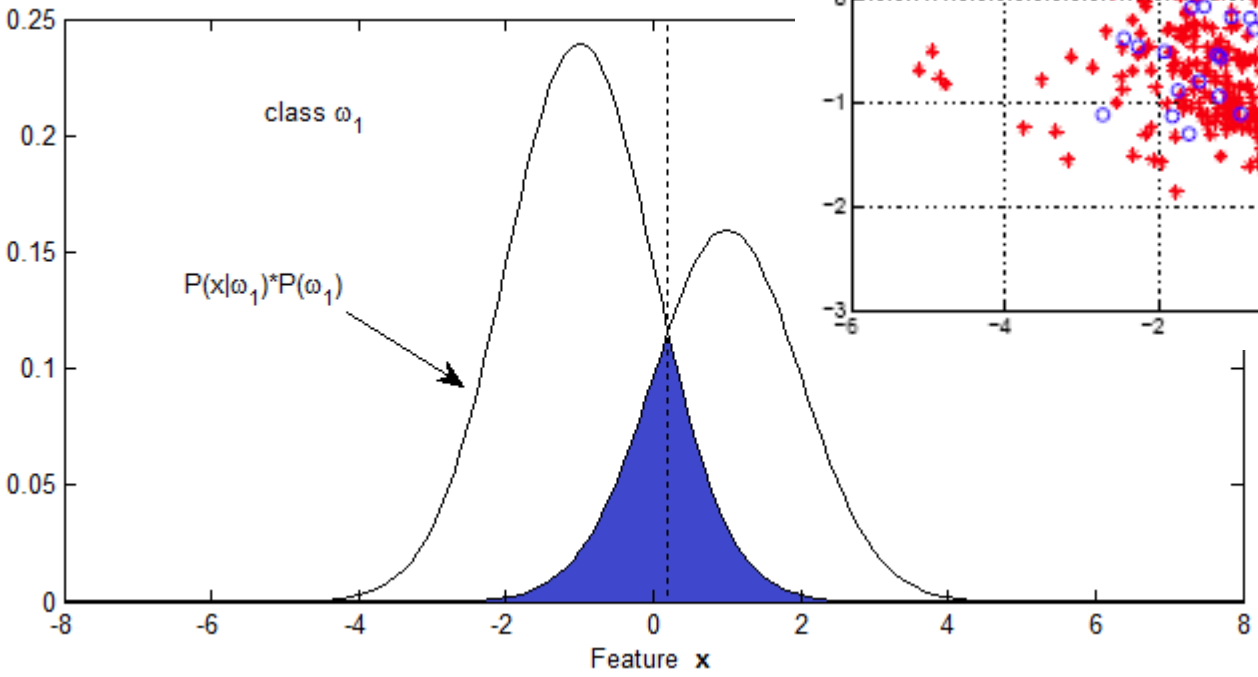
Abstract

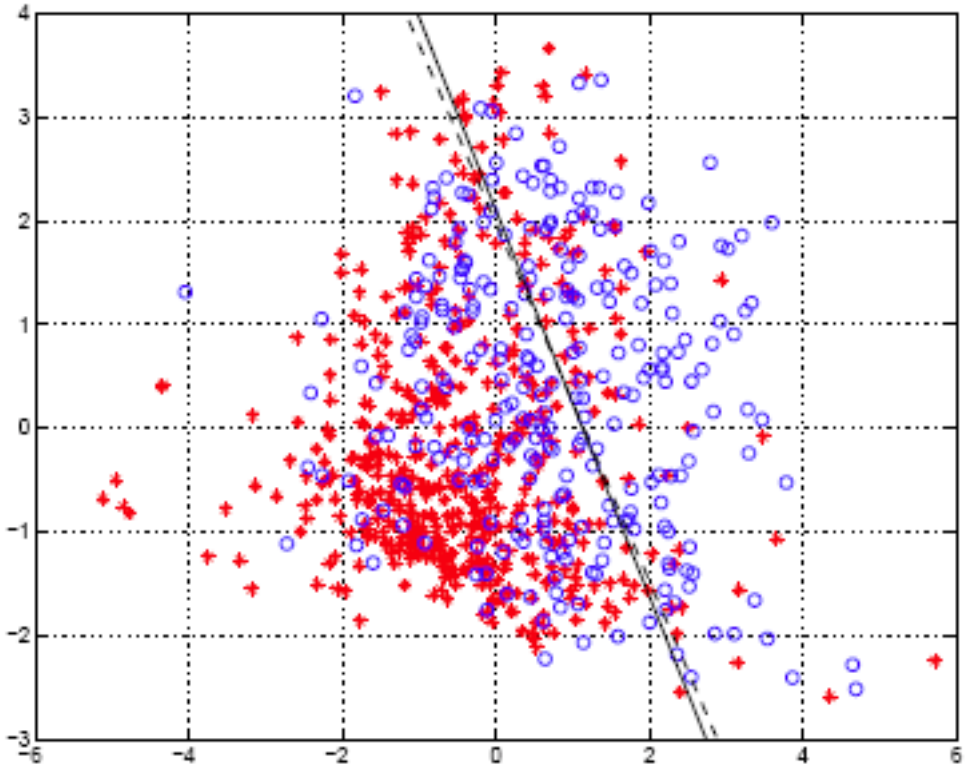
Summary

There is increasing concern that most current published research findings are false. The probability that a research claim is true may depend on study power and bias, the number of other studies on the same question, and, importantly, the ratio of true to no relationships among the relationships probed in each scientific field. In this framework, a research finding is less likely to be true when the studies conducted in a field are smaller; when effect sizes are smaller; when there is a greater number and lesser preselection of tested relationships; where there is greater flexibility in designs, definitions, outcomes, and analytical modes; when there is greater financial and other interest and prejudice; and when more teams are involved in a scientific field in chase of statistical significance. Simulations show that for most study designs and settings, it is more likely for a research claim to be false than true. Moreover, for many current scientific fields, claimed research findings may often be simply accurate measures of the prevailing bias. In this essay, I discuss the implications of these problems for the conduct and interpretation of research.


June
May
July
August
Earth
Nov.
Dec.
Jan.
Feb.

Classification Errors Will Happen

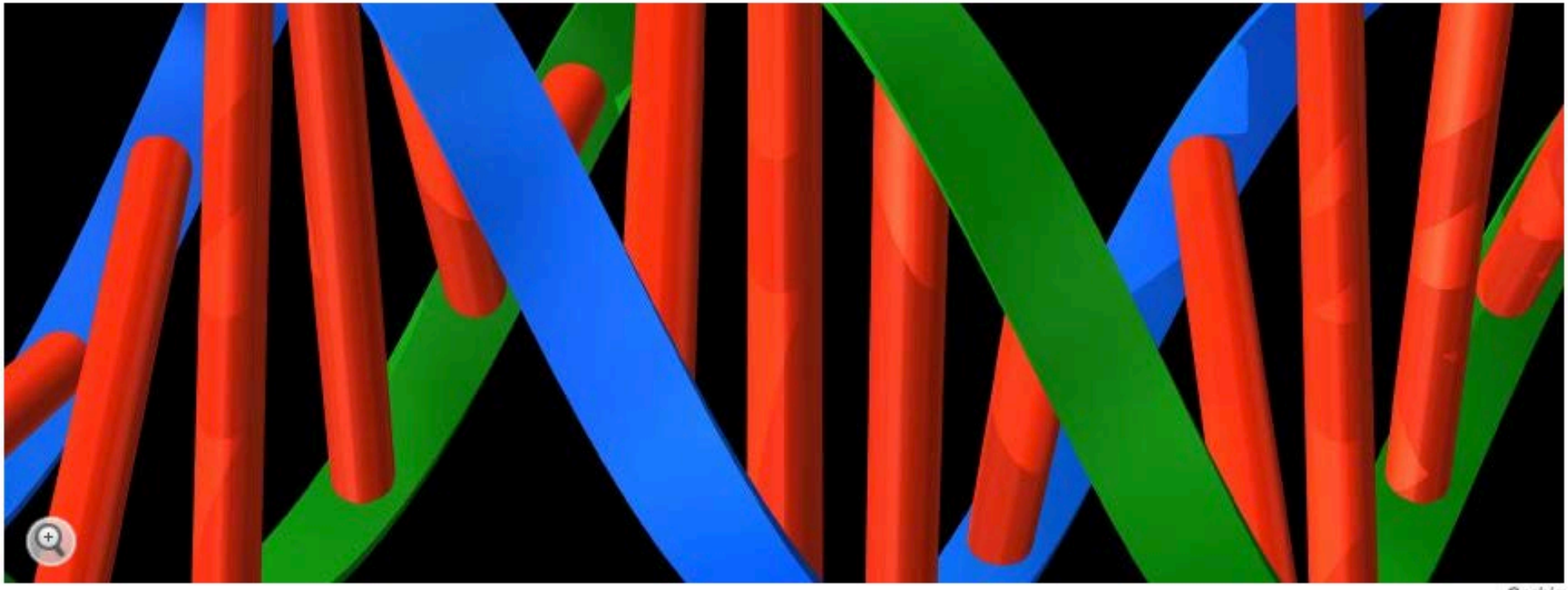




Pseudo-objectivity is a serious problem

welcome
to you®
23andMe

23andMe: US-Gesundheitsbehörde will Verkauf von Gentests stoppen



Corbis

DNA-Doppelhelix: US-Gentest-Firma analysiert das Erbgut von Kunden auf erblich bedingte Erkrankungen

Der Gentest-Firma 23andMe droht das Aus eines ihrer wichtigsten Geschäftsmodelle: Sie soll keine DNA-Tests mehr verkaufen. Dazu forderte die US-Gesundheitsbehörde FDA das Unternehmen auf. Die Begründung: Nutzen und Sicherheit seien bisher nicht belegt.

Riesige Genom-Studie deckt auf

Kerngesund trotz Gendefekten: Forscher stehen vor Rätsel um 13 Resistente

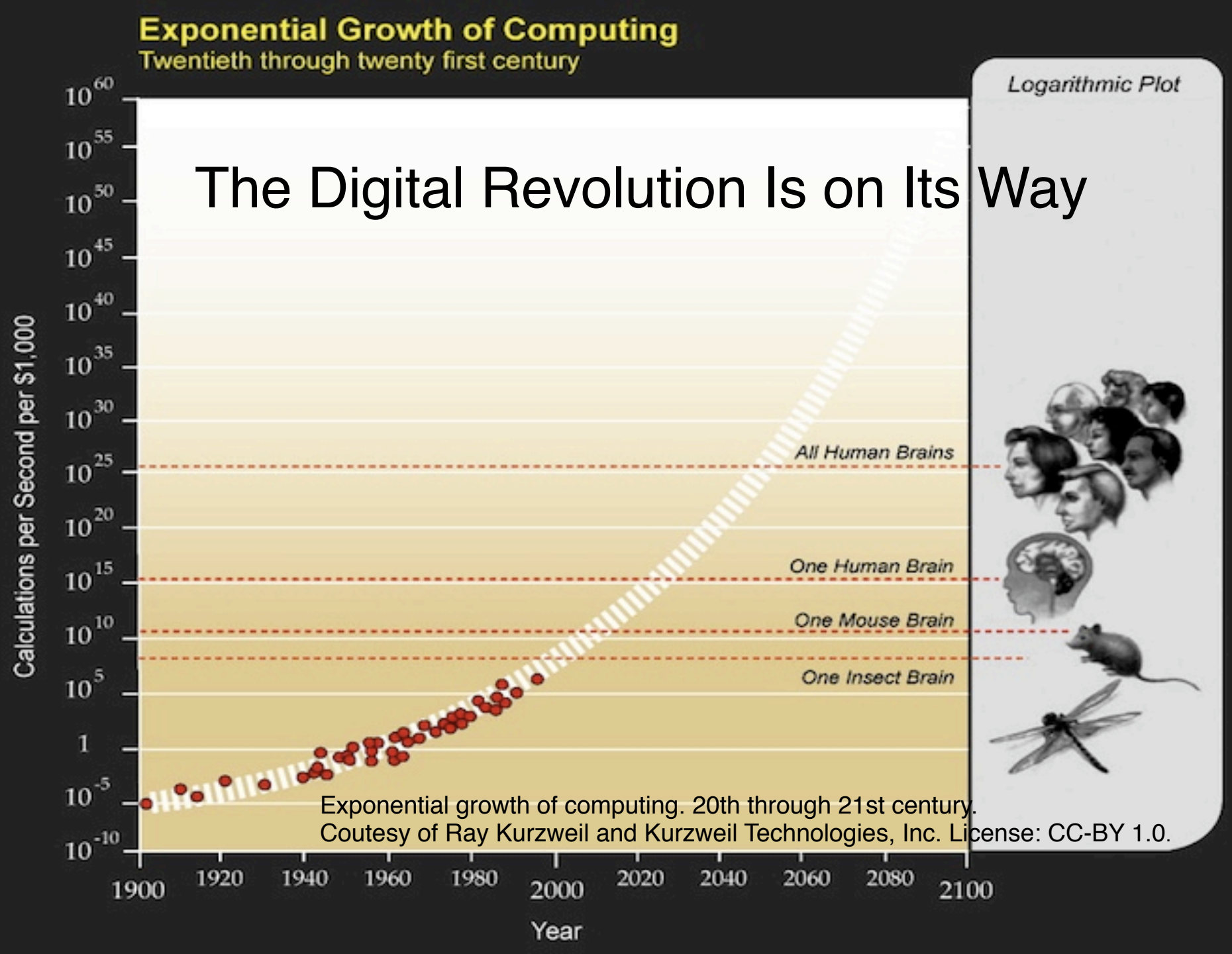
Donnerstag, 14.04.2016, 23:58

Teilen 0 G+1 0 Fehler melden

Wissenschaftler haben die Erbgutdaten von mehr als einer halben Million Menschen auf Gendefekte untersucht. Colourbox.de

Mercer's 2015 Quality of Living Rankings[2]		
	City	**Country**
1	Vienna	Austria
2	Zürich	Switzerland
3	Auckland	New Zealand
4	Munich	Germany
5	Vancouver	Canada
6	Düsseldorf	Germany
7	Frankfurt	Germany
8	Geneva	Switzerland
9	Copenhagen	Denmark
10	Sydney	Australia

Would Artificial Intelligence fix the world?



Exponential growth of computing. 20th through 21st century.
Coutesy of Ray Kurzweil and Kurzweil Technologies, Inc. License: CC-BY 1.0.

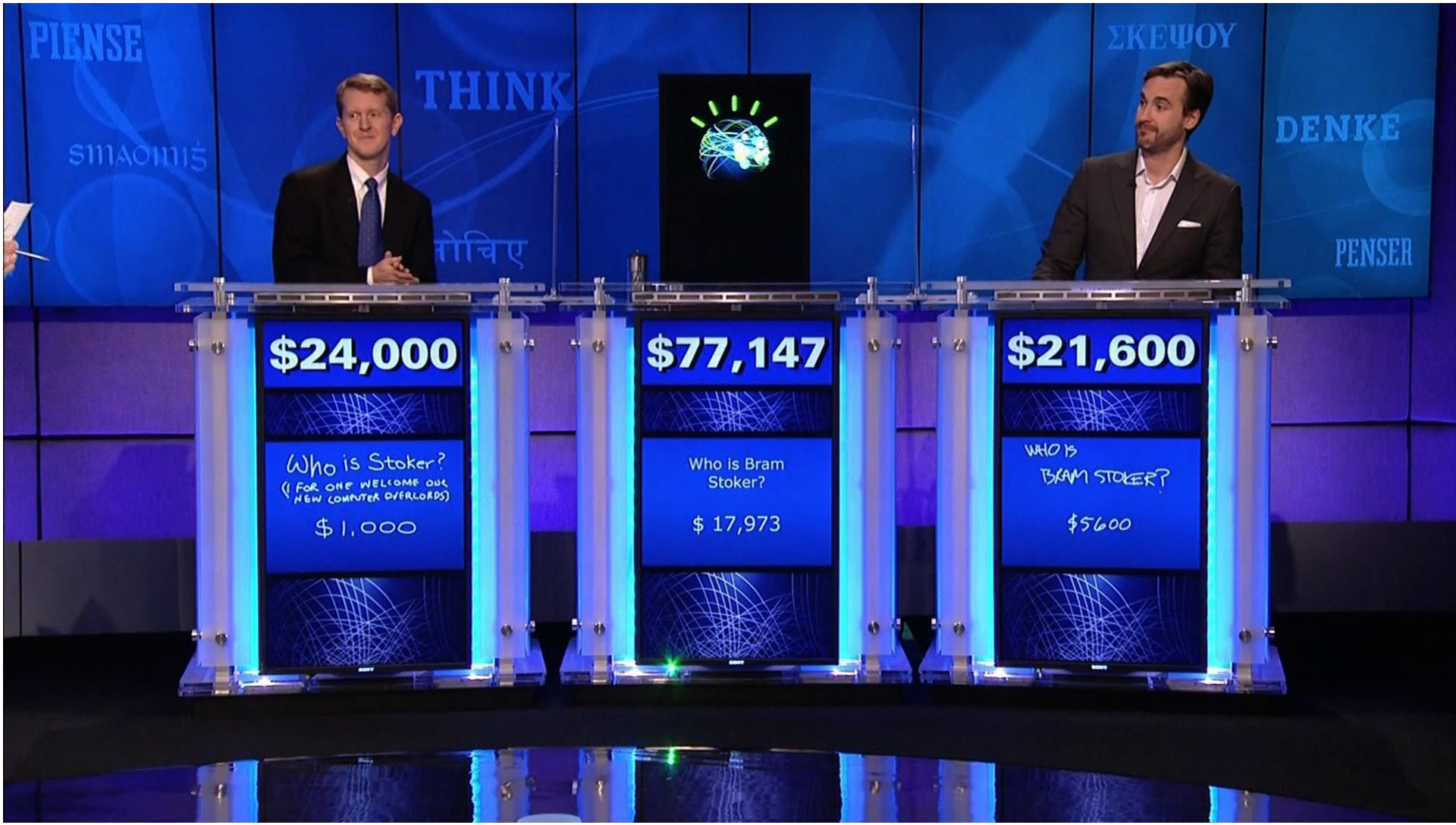
Better Chess Players

Better Workers

Better Drivers?

Better Doctors?

Better in Answering Questions?



Elon Musk on Artificial Intelligence

"I think we should be very careful about artificial intelligence. If I had to guess at what our biggest existential threat is, it's probably that. So we need to be very careful," said Musk.

"I'm increasingly inclined to think that there should be some regulatory oversight, maybe at the national and international level, just to make sure that we don't do something very foolish."

"With artificial intelligence we are summoning the demon. In all those stories where there's the guy with the pentagram and the holy water, it's like – yeah, he's sure he can control the demon. Doesn't work out," said Musk.

Microsoft accidentally revives Nazi AI chatbot Tay, then kills it again

A week after Tay's first disaster, the bot briefly came back to life today.

by **Jon Brodkin** - Mar 30, 2016 4:37pm CEST

Share Tweet Email 118

Microsoft

Microsoft today accidentally re-activated "Tay," its Hitler-loving Twitter chatbot, only to be forced to kill her off for the second time in a week.

LATEST FROM ARS TECHNICA/UK

Watch Nvidia unveil the Pascal GPU—May 6 at 9pm EDT, 2am BST

WHEN THE CIRCUS CAME TO TOWN

Craig Wright: Bitcoin "creator" reveals the "proof"—that he's not Satoshi Nakamoto

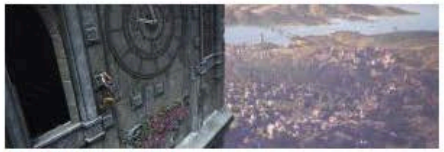
BUT WILL SHE RIDE SHOTGUN?

Uber picks up ex-EU digital chief Neelie Kroes—after cooling-off period

Politicians across the EU back away from TTIP after leak—but Cameron ploughs on

Copper-sweating BT floats FTTP rollout plan for 2 million homes

LATEST FEATURE STORY



FEATURE STORY (2 PAGES)

Uncharted 4 is slickly ridiculous action gaming at

Could Society Be Run Like A Giant Machine?

The explosion in data volumes, processing power, and Artificial Intelligence, known as the **"digital revolution"**, has driven our world to a dangerous point. One thing is increasingly clear: We are at a crossroads. We need to make decisions. We must re-invent our future.

After the automation of factories and the creation of self-driving cars, the automation of society is next. But there are two kinds of automation: a centralized top-down control of the world, and a distributed control approach supporting local self-organization. Using the power of today's information systems, governments and companies like Google seem to engage in the first approach. Will they even try to build a **"digital God"** who knows everything and controls what we do? In fact, governments would spend billions to predict the future of our world and control its path.

Given that, every year, we produce as much data as in the entire history of humankind, can we now create a better world? The abundance of data certainly makes it possible to establish an entirely new paradigm for running our societies. Could we even build a data-driven **"crystal ball"** to predict the future and, given that knowledge implies power, also something like a **"magic wand"** to optimally rule the world? Will the digital revolution empower a **"wise king"** or **"benevolent dictator"**, maybe by means of Artificial Intelligence? In fact, we are much closer to this than you might think. But do we really need large-scale surveillance to understand and manage the increasingly complex systems we have created? Or are we running into a totalitarian nightmare?

What alternatives to master our complex world do we have? What about the principles of the **"invisible hand"** and the **"wisdom of the crowd"**, which posit that independent decisions made by many people will produce optimal societal outcomes? In the past, these principles have often failed. So, can bottom-up self-organization really work and if so, what does it take? Could technology make it work? Relying on the **"Internet of Things"** and complexity science, can self-organization now enable a more efficient, more innovative, more successful, more resilient, smarter and happier society?

Let us explore this now, because this would open the door to a brighter version of the digital society, based on informational self-determination, human dignity, freedom of decision-making, democratic principles, participation, and collective intelligence.

It's time to take the future in our hands!

Bar Code

THE AUTOMATION OF SOCIETY IS NEXT Dirk Helbing

Dirk Helbing

THE AUTOMATION OF SOCIETY IS NEXT

How to survive the digital revolution

Forget Trump and Clinton: IBM's Watson is running for president

Would we be better off with an algorithmically controlled overlord?

Watson for president: Is it that big a stretch? Credit: The Watson 2016 Foundation

Politik der Algorithmen

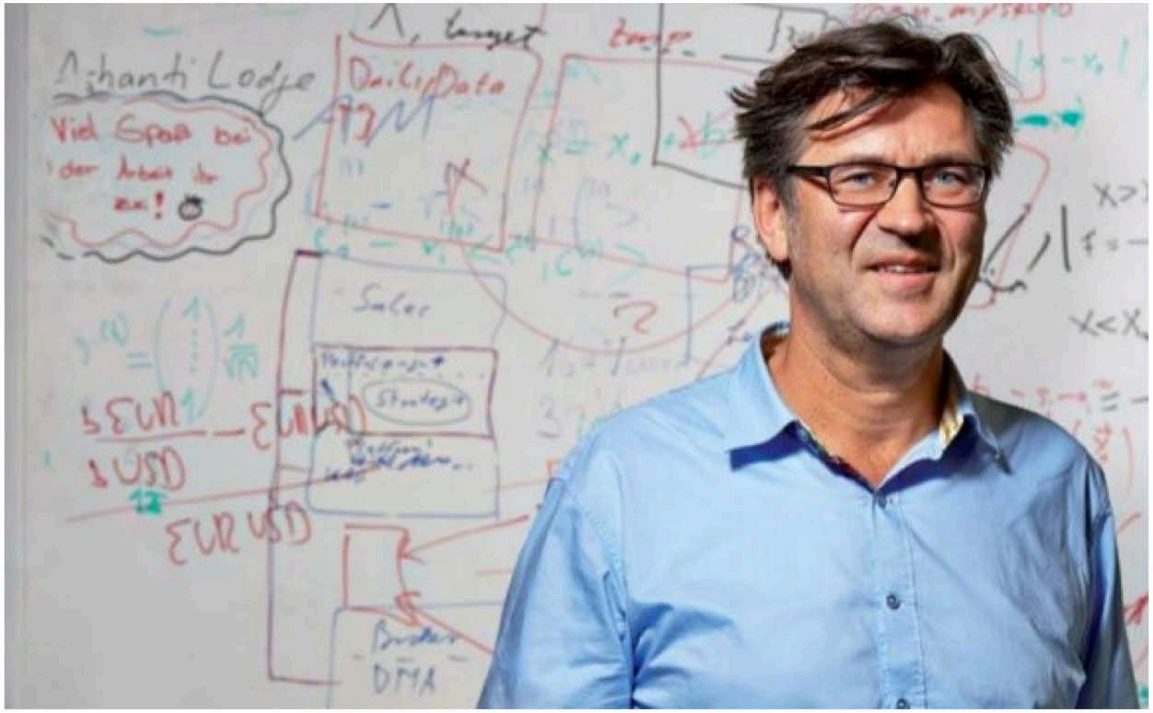
Google will den Staat neu programmieren

Hat man Entscheidungsschwierigkeiten, kann man im Notfall natürlich auch zum Würfel greifen. Doch wie wäre es, wenn Politiker nach Googles Algorithmen entschieden? Der Konzern probiert es in Amerika aus.

14.10.2015, von ADRIAN LOBE

CERN: The gulf between machine learning and AI

Or why machine intelligence won't lead to Armageddon



LAST WEEK *The INQUIRER* travelled to CERN in Switzerland to see the Large Hadron Collider and learn more about the IT that makes particle physics tick.

In the first of our reports from the legendary laboratory we talk to professor Michael Feindt, former CERN researcher and founder of Blue Yonder, the predictive analytics software that spun out of CERN and that still powers some of its work.

Predictive analytics is a form of machine learning. Professor Feindt's work uses neural networks, a term that conjures up images of the type of domesticated synthetic intelligences that have been such a hit for Channel 4 with its sci-fi drama *Humans*.

Deep Learning

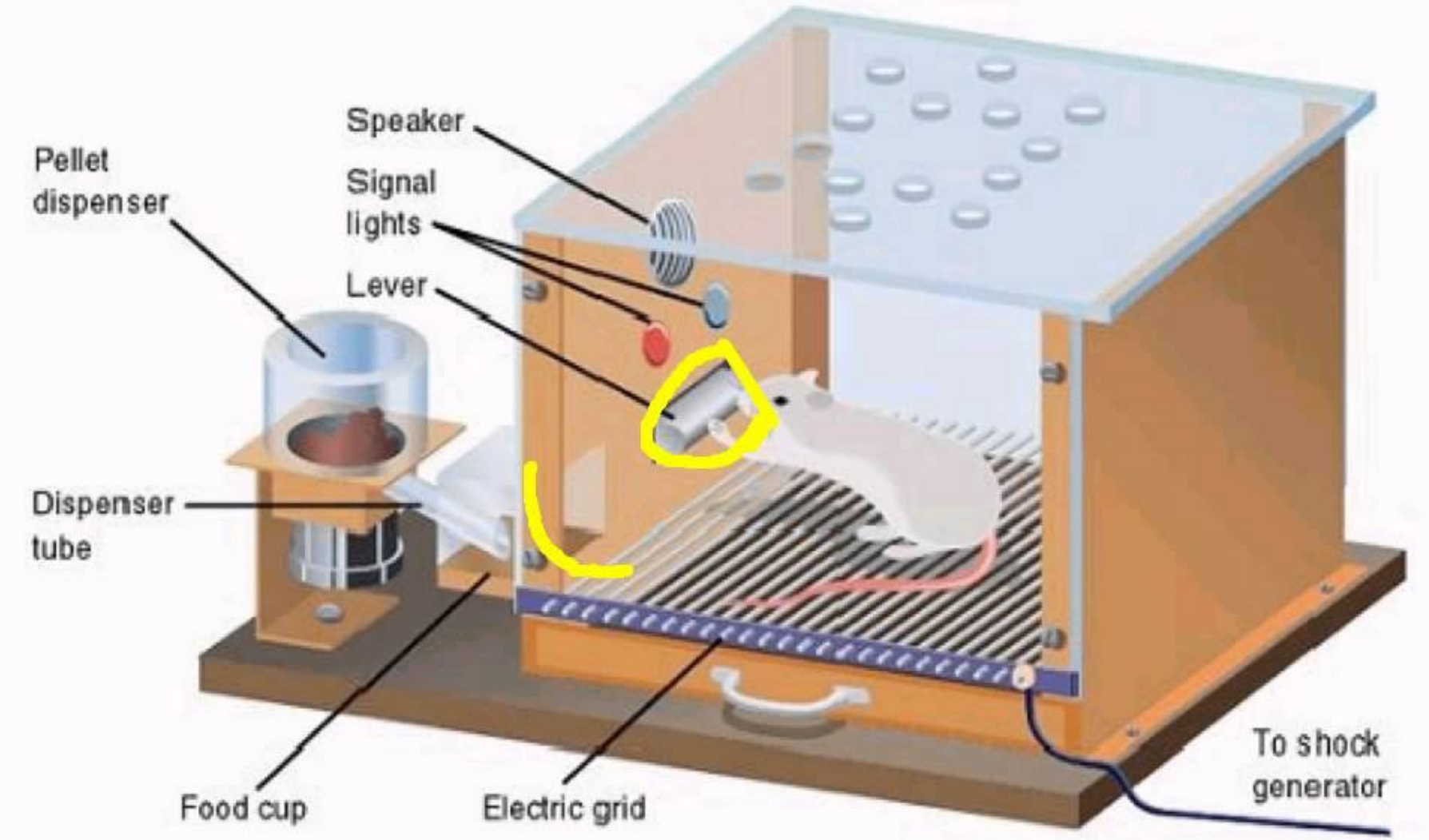
Manipulation of the Choices of People by Personalized Information

Nudging: “Liberal Paternalism”

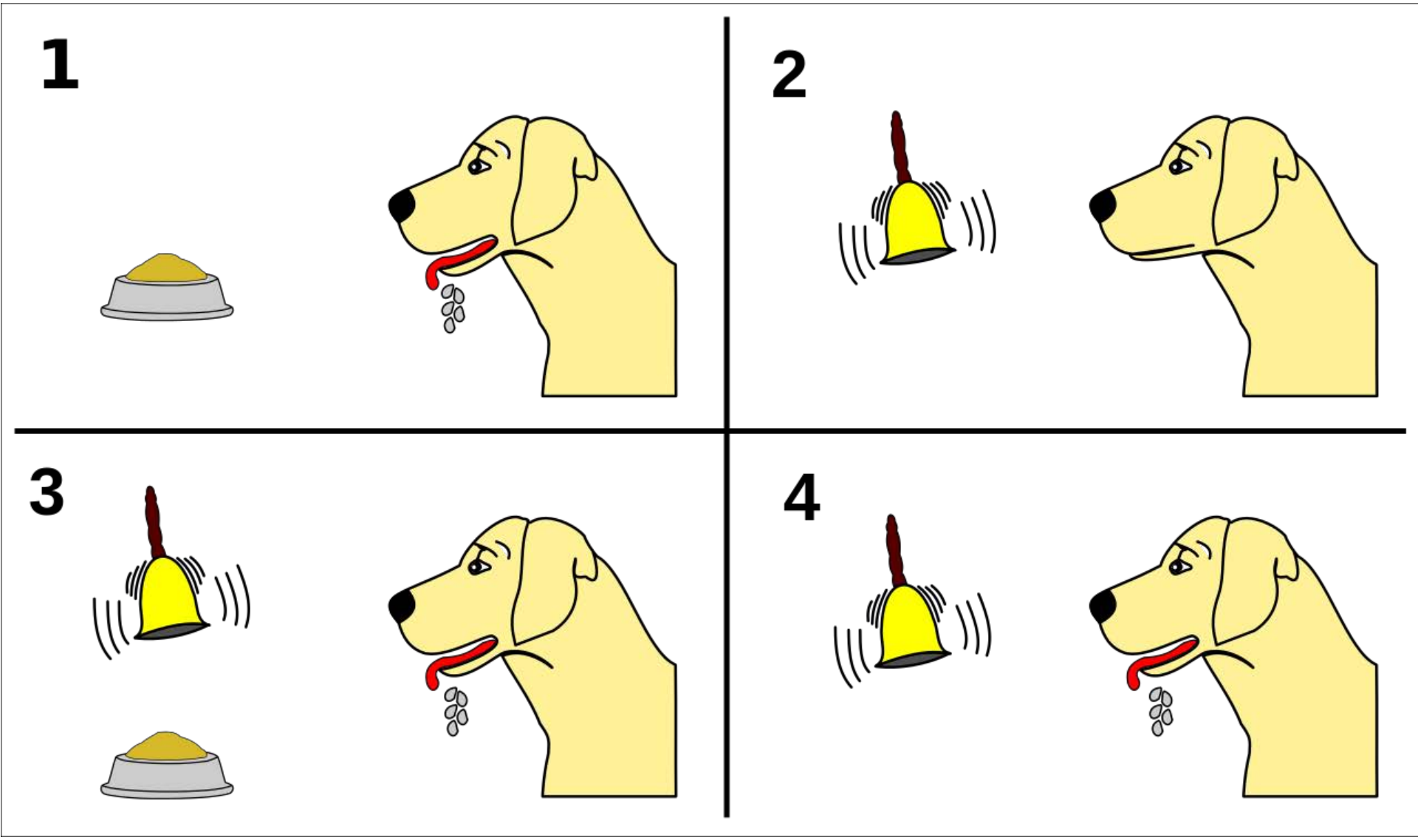
D.M. Hausmann and B. Welch (2009) Nudging is neither liberitarian nor paternalist nor benign

Skinners experiments with rats

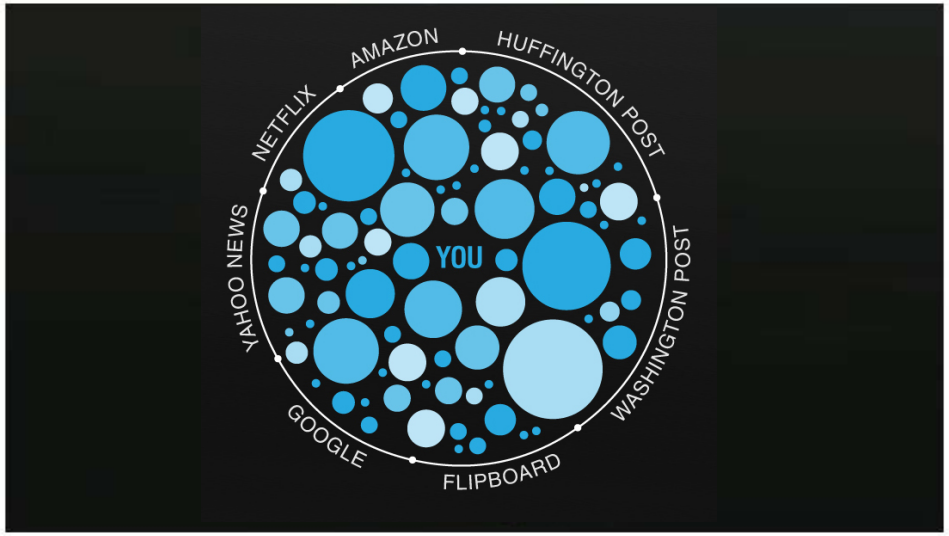
The Skinner Box



Conditioning Behavior: Pavlov‘s Dog



We Are Living In A Filter Bubble



With kind permission of Eli Pariser – www.thefilterbubble.com.
„The Filter Bubble: What the Internet is Hiding From You“. Penguin Press.

.. maybe we should try to think out of the box?
Innovation Department
www.cartooncreator.nl

THOMAS R. KÖHLER

DER PROGRAMMIERTE MENSCH

WIE UNS INTERNET UND SMARTPHONE MANIPULIEREN

Kai Schlieter

DIE HERRSCHAFTS FORMEL

Wie Künstliche Intelligenz uns berechnet, steuert und unser Leben verändert

WESTEND

04. Juni 2015 23:20; *Akt: 04.06.2015 23:20*

Tim Cook prangert Google und Facebook an

Apple-CEO Tim Cook ist als «Vorkämpfer für Freiheit» ausgezeichnet worden und schiesst scharf gegen die Konkurrenz.

1|5 Zum wiederholten Mal hat Apple-CEO Tim Cook die Datensammelwut konkurrierender Unternehmen kritisiert. Dies, um das eigene Unternehmen von den Mitbewerbern abzugrenzen.

Bild: AP/Richard Drew

THOMAS R. KÖHLER

DIE INTERNET FALLE

WAS WIR ONLINE UNBEWUSST ÜBER UNS PREISGEBEN UND WIE WIR DAS WORLD WIDE WEB SICHER FÜR UNS NUTZEN KÖNNEN

Frankfurter Allgemeine Buch

Elon Musk's OpenAI Can Be Muscle for Safe Artificial Intelligence Research

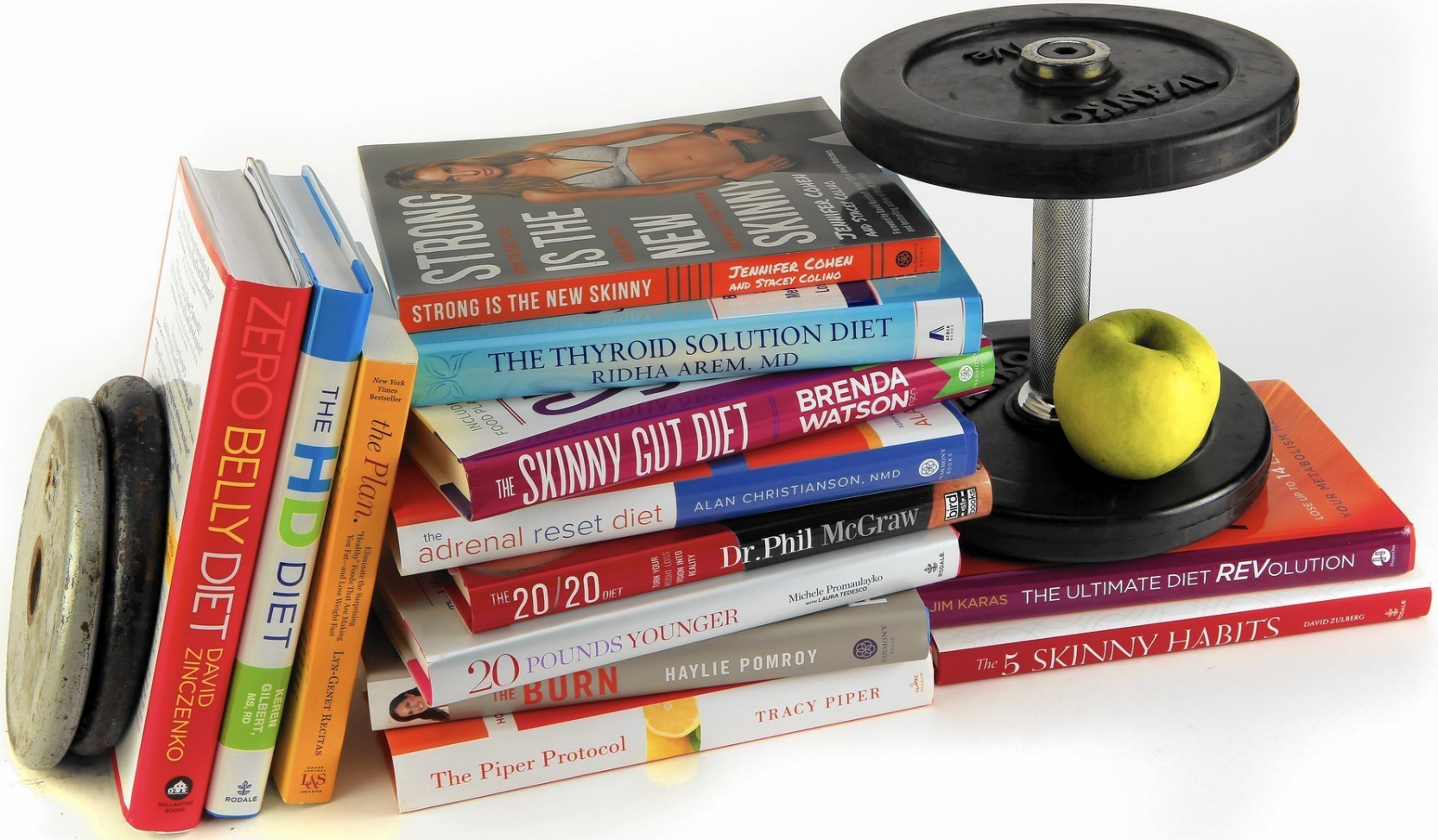
A billion dollars can disrupt the R&D process, but not all open sources are created equal.

Neel V. Patel | December 15, 2015

Over the weekend, Elon Musk, Sam Altman, and other Silicon Valley bigwigs unexpectedly announced the launch of OpenAI, a nonprofit company that describes its goal as: "to advance digital intelligence in the way that is most likely to benefit humanity as a whole, unconstrained by a need to generate financial return."

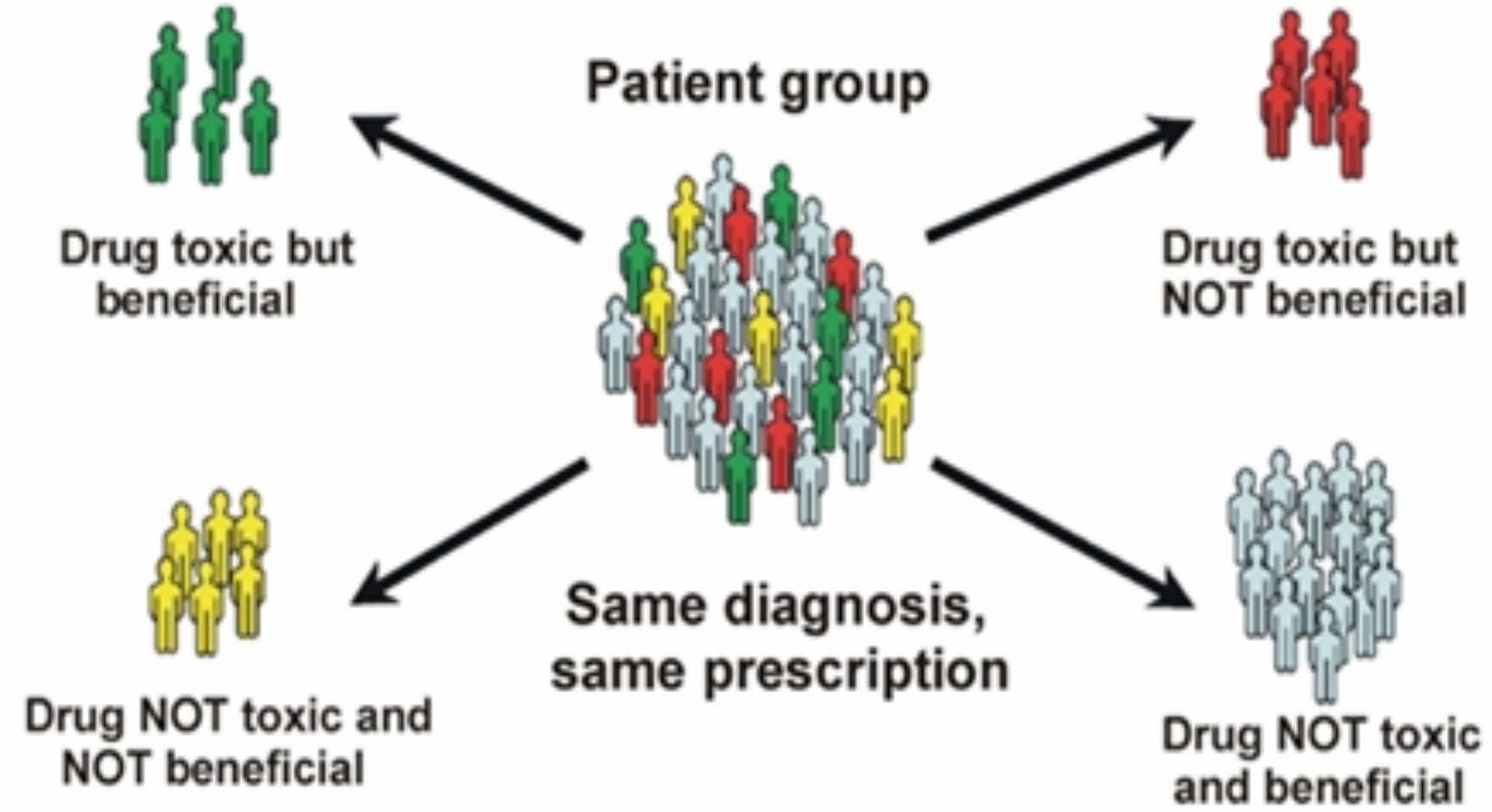
> "Since our research is free from financial obligations, we can better focus on a positive human impact. We believe A.I. should be an extension of individual human wills and, in the spirit of liberty, as broadly and evenly distributed as possible."

Why Big Nudging would not work well

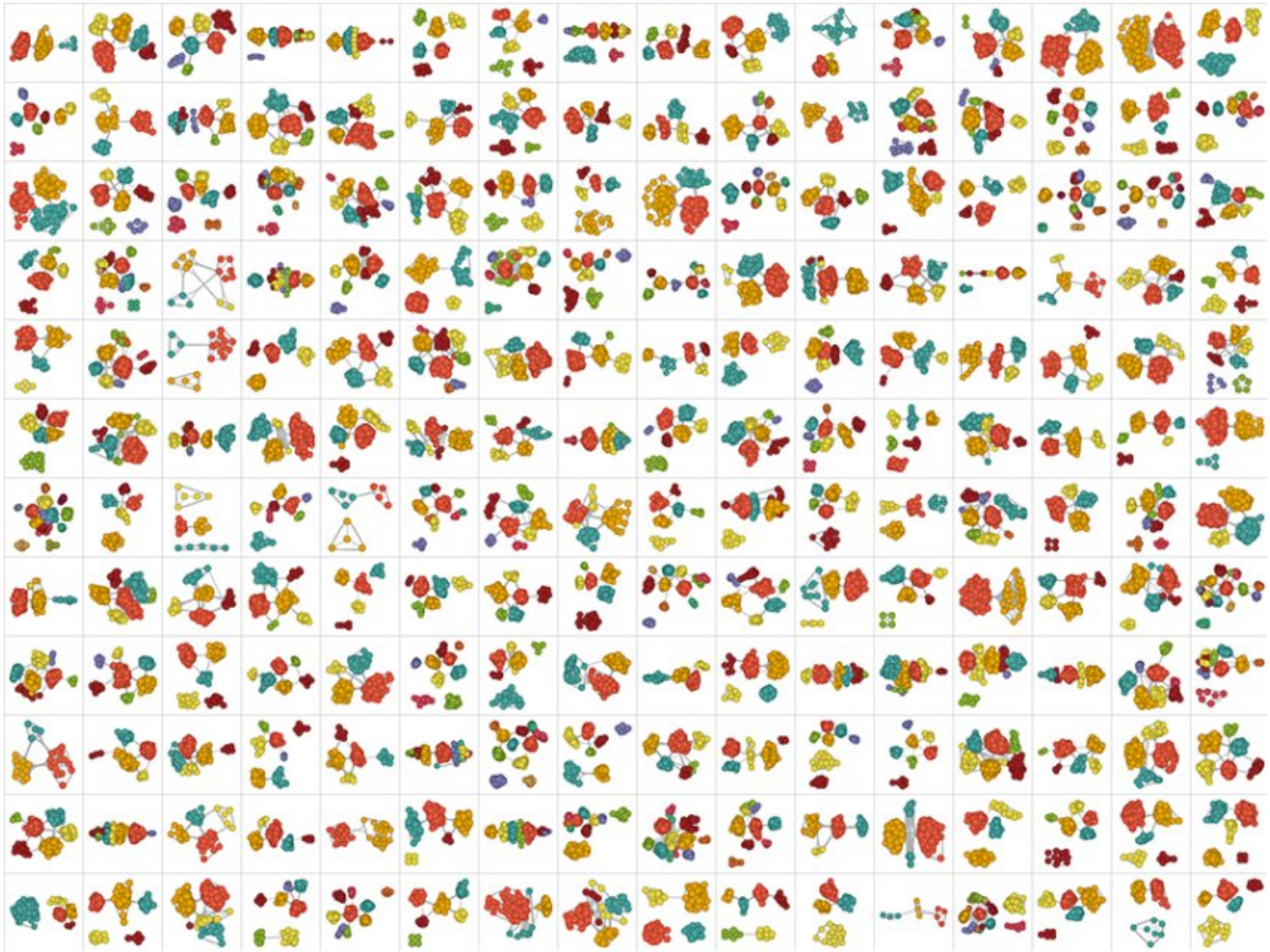

STRONG IS THE NEW SKINNY
JENNIFER COHEN AND STACEY COLINO
THE THYROID SOLUTION DIET
RIDHA AREM, MD
THE SKINNY GUT DIET
BRENDA WATSON
the adrenal reset diet
ALAN CHRISTIANSON, NMD
Dr. Phil McGraw
THE 20/20 DIET
20 POUNDS YOUNGER
Michele Promaulayko
with LAURA TEDESCO
THE BURN
HAYLIE POMROY
The Piper Protocol
TRACY PIPER
JIM KARAS
THE ULTIMATE DIET REVOLUTION
The 5 SKINNY HABITS
DAVID ZULBERG
ZERO BELLY DIET
DAVID ZINCZENKO
RODALE
THE HD DIET
KEREN GILBERT, MS, RD
RODALE
the Plan.
LYN-GENET RECITAS
LAS

We Are All Different

Personalized Medicine

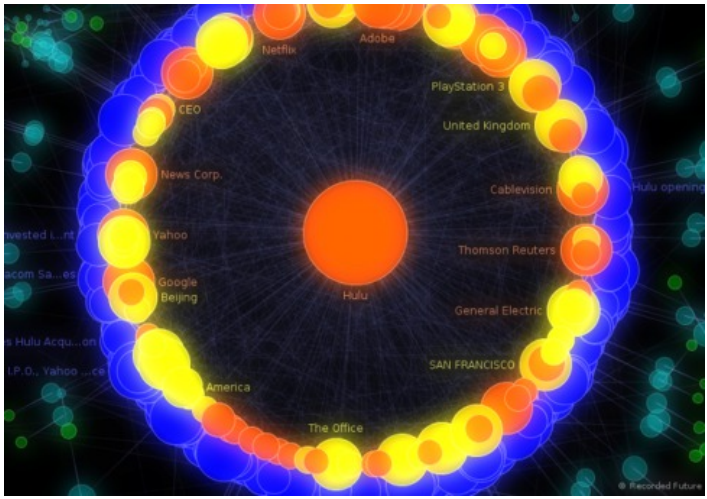


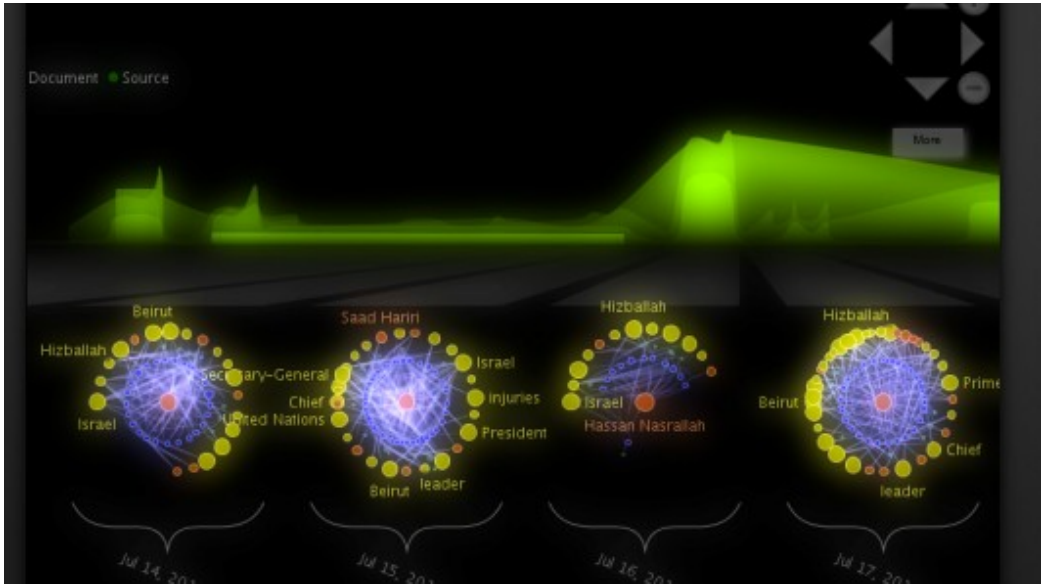
Stephen Wolfram: “Humans are More Predictable than Elementary Particles”

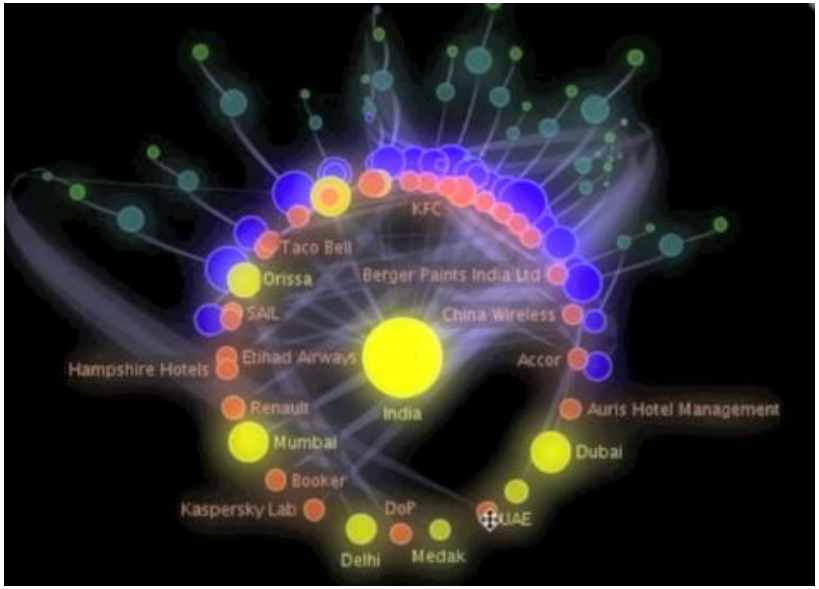


http://www.spiegel.de/netzwelt/web/s...-a-896959.html

Recorded Future: We Are Pretty Predictable







But Interactions Can Change Everything

Society Cannot Be Steered Like A Car

Even If We Knew all Thoughts of all People, We Could Still Not Prevent Traffic Jams

Aus

s Spaß wird

Nutrition News: Healthy-Eating Insurance Discount, "Activity Equivalent" Calorie Labeling and Walmart's Cage-Free Eggs

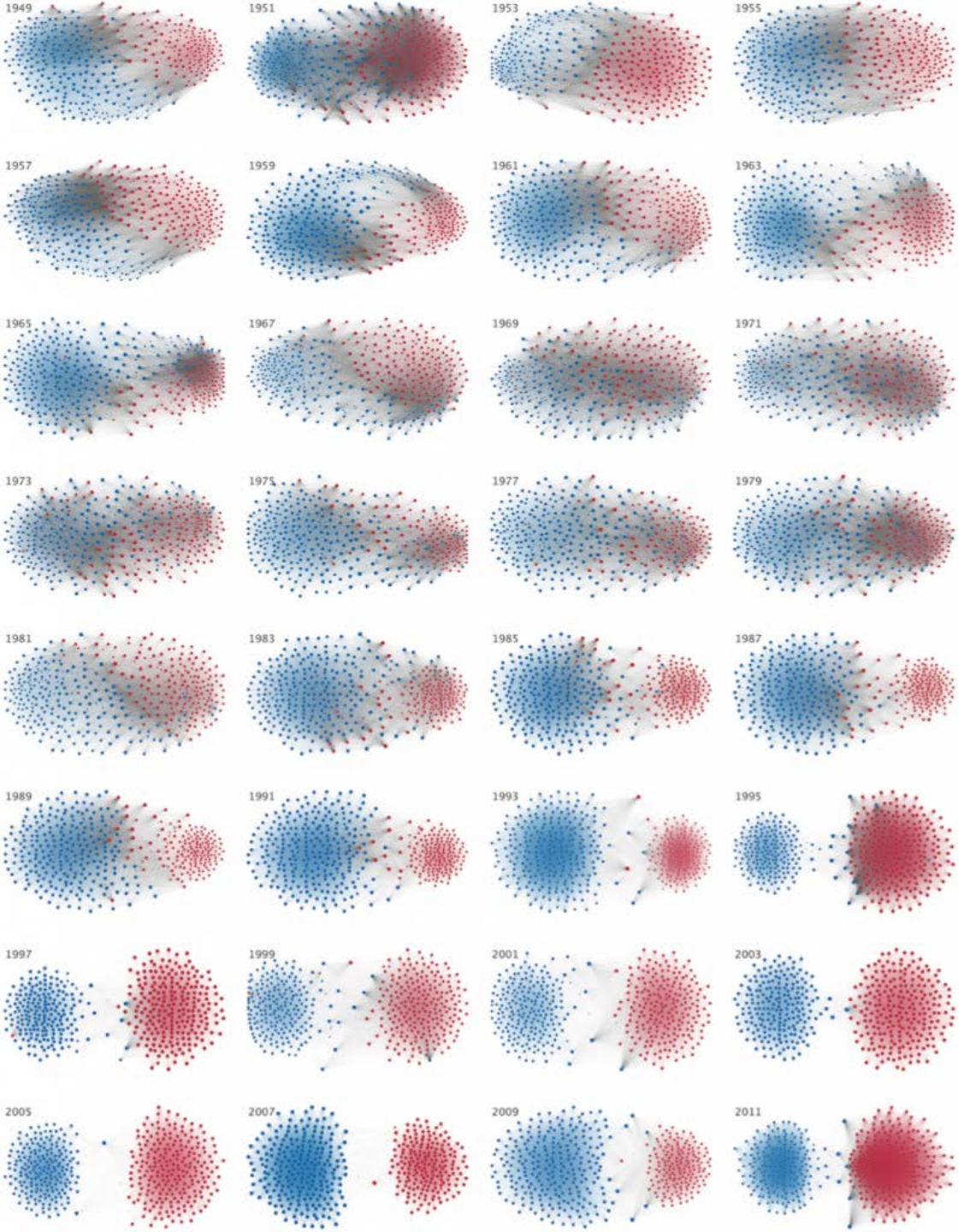
by Amy Reiter in Food News, April 15, 2016

PRINT

0 Comments

Healthy Eaters and Financial Incentives

Progressive Polarization in U.S. Politics



Source: C. Andris et al., PLoS ONE 10(4): e0123507 (2015).

What Big Nudging and Citizen Scores Fail to Deliver

- Family
- Friends
- Solidarity
- Social capital
- Culture
- Security
- Peace
- Innovation
- Jobs for all

Would We Be Punished?

'Nudge' is not enough, it's true. But we already knew that

Jonathan Rowson

The Lords' behavioural change report is a missed opportunity to challenge coalition policy on the adaptive challenges we face

Nudge doesn't change behaviour at a deep level: it would offer the technical solution of a weight loss pill, rather than encouraging diet change. Photograph: Murdo Macleod Murdo Macleod/Murdo Macleod

Personalized Pricing

China's Nightmarish Citizen Scores Are a Warning For Americans

By Jay Stanley, Senior Policy Analyst, ACLU Speech, Privacy & Technology Project

OCTOBER 5, 2015 | 1:00 PM

Updated below

Photo: Flickr/Peter Morgan

China is launching a comprehensive "credit score" system, and the more I learn about it, the more nightmarish it seems. China appears to be leveraging all the tools of the information age—electronic purchasing data, social networks, algorithmic sorting—to construct the ultimate tool of social control. It is, as one commentator put it, "authoritarianism, gamified." Read this piece for the full flavor—it will make your head spin. If that and the little other reporting I've seen is accurate, the basics are this:

Predictive Policing:
Arrest before they commit a crime

FROM THE GUYS WHO BROUGHT YOU **'THIS IS THE END'**

SETH ROGEN ZAC EFRON ROSE BYRNE

BAD NEIGHBOURS

We May Lose Everything We Built over Hundreds of Years

- Capitalism and Work
- Self-determination, freedom
- Human dignity
- Innocence
- Fairness and justice
- Pursuit of happiness
- Pluralism
- Democracy
- Participation
- Social Norms + Culture
- Security, Peace

Überwachungstechnik in Extremistenhand: Nazis am Abzug

Eine Kolumne von Sascha Lobo

Von Angst getrieben haben Demokratien die machtvollsten Überwachungsinstrumente aller Zeiten erschaffen. Jetzt könnten sie in die Hände von Egofaschisten wie Trump oder der xenophoben Rechten fallen.

Mittwoch, 25.05.2016 – 13:33 Uhr

Drucken

Nutzungsrechte | Feedback

Kommentieren | 146 Kommentare

Sascha Lobo

Reto Klar

Die Mensch-Maschine: Alle Kolumnen

Teilen Twittern E-Mail +

Kolumne

31.026 Stimmen trennten Norbert Hofer aus der rechtsextremen FPÖ von der Macht, die Regierung zu entlassen, Neuwahlen zu provozieren und in der Zwischenzeit Notverordnungen zu erlassen. Nebenbei ist der österreichische Bundespräsident Oberbefehlshaber der Streitkräfte.

Im November 2016 sind Präsidentschaftswahlen in den USA. Im direkten Vergleich hat Egofaschist Donald Trump am 22. Mai zum ersten Mal in einer relevanten Umfrage die Führung vor Hillary Clinton übernommen. In elf Monaten finden Präsidentschaftswahlen in Frankreich statt. Die Rechtsextremistin Marine Le Pen (Front National) ist Favoritin.

Und nun zu einem komplett anderen Thema. Im November 2015 sagte Angela Merkel in einer Pressekonferenz im Bundeskanzleramt den einen Satz, der weltweit als Leitlinie der Sicherheitspolitik seit 2001 gelten kann: "Im Zweifel für die Sicherheit!" Mit dieser eingängigen Losung wurde jede Überwachungsmaßnahme gerechtfertigt, sie würde lateinisch übersetzt von BND bis NSA jedes Wappen jeder Sicherheitsbehörde zieren.

Leider ist der Satz näher betrachtet eine politische Ellipse, also eine Auslassung. Ausgelassen wird nämlich, was genau im Falle des Zweifels der Sicherheit unterlegen ist. Die Analyse der Sicherheits- und Überwachungspolitik der vergangenen fünfzehn Jahre offenbart, wie der Satz weiterzuführen ist: "Im Zweifel für die Sicherheit und gegen demokratische Grundrechte."

The root of all problems

Sorry!
The lifestyle you ordered is currently out of stock
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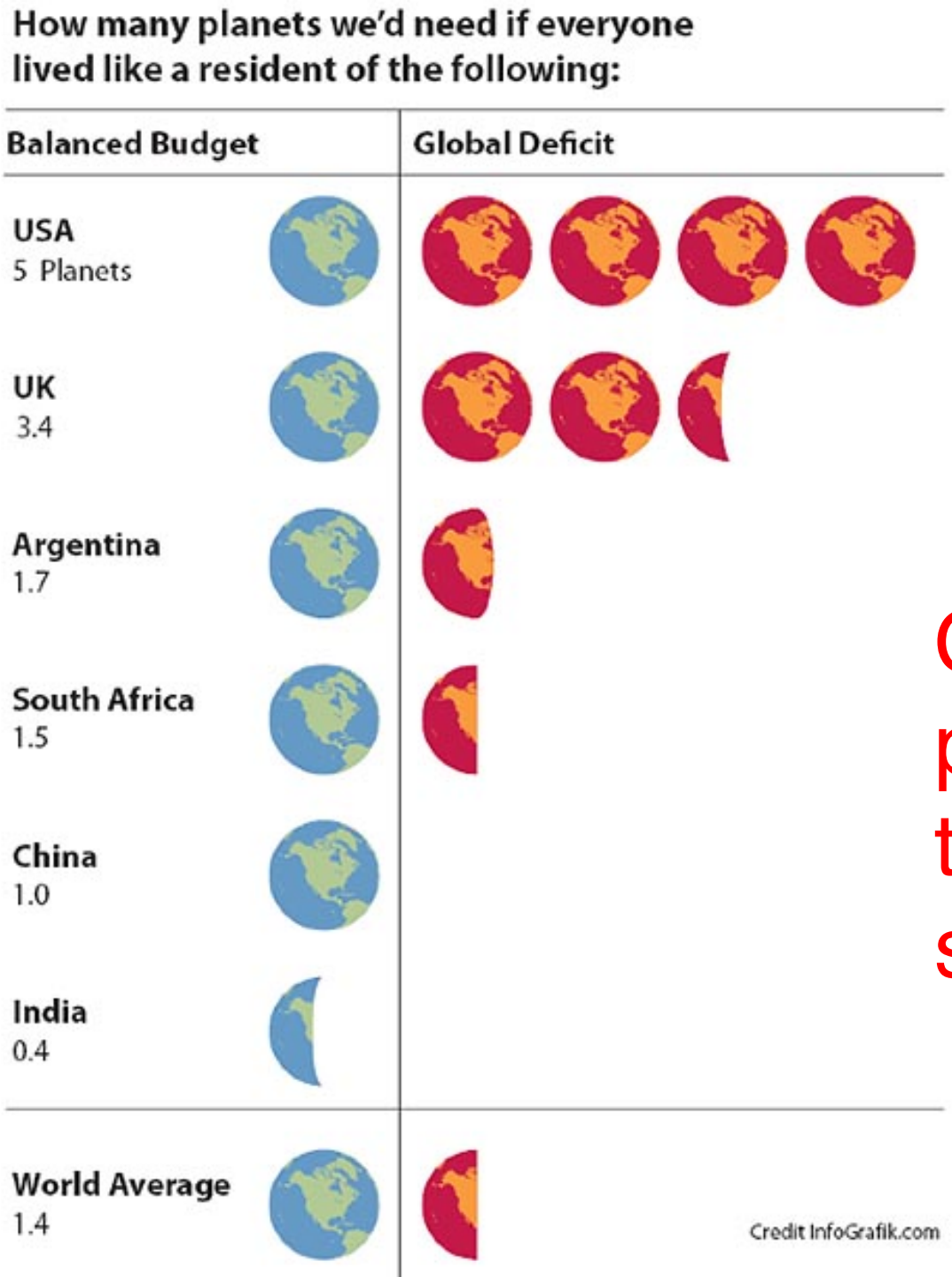
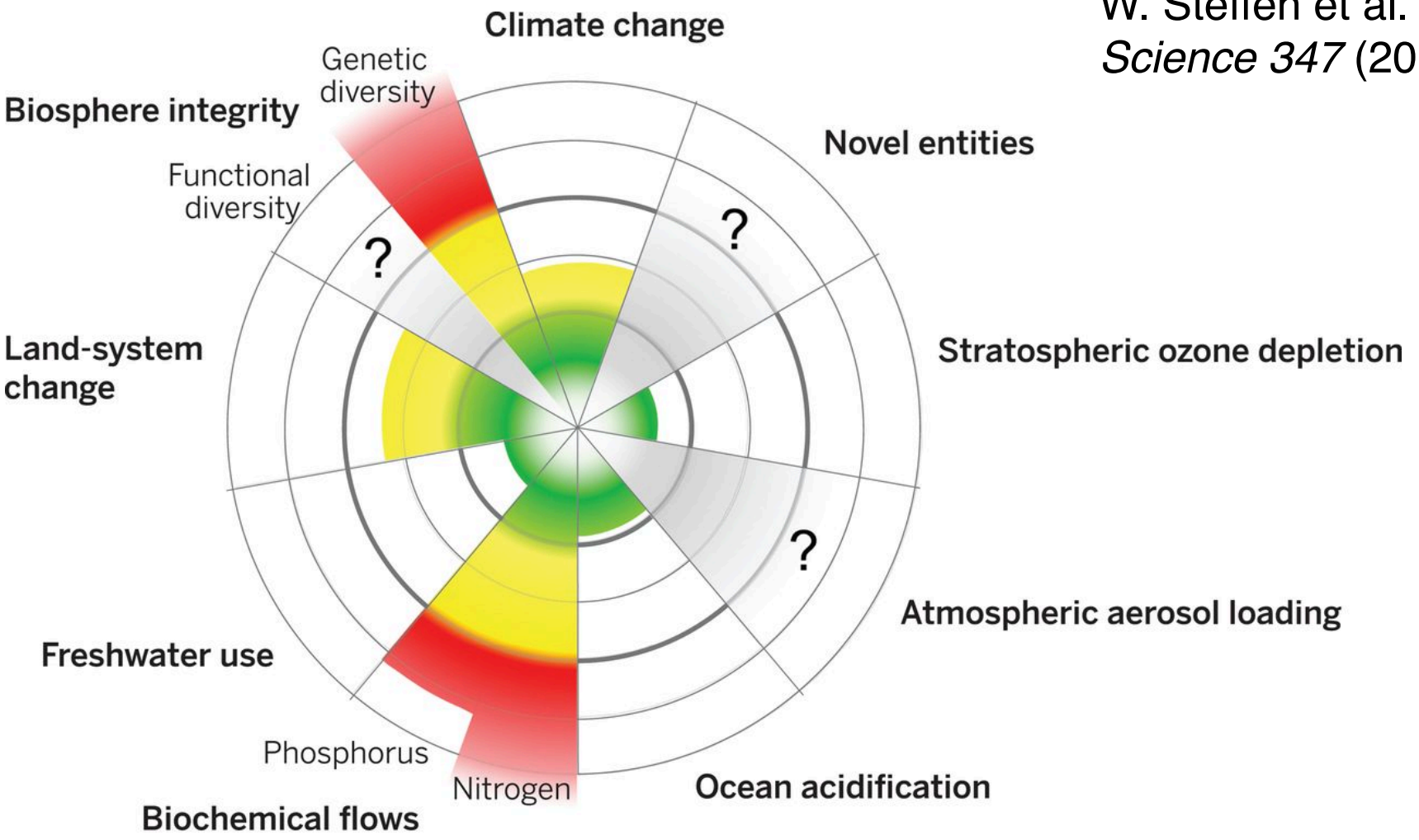
FOR SALE
SHAW & Co.
ESTATE AGENTS
Tel: 020 8986 7327
ELIVERY
03 1999

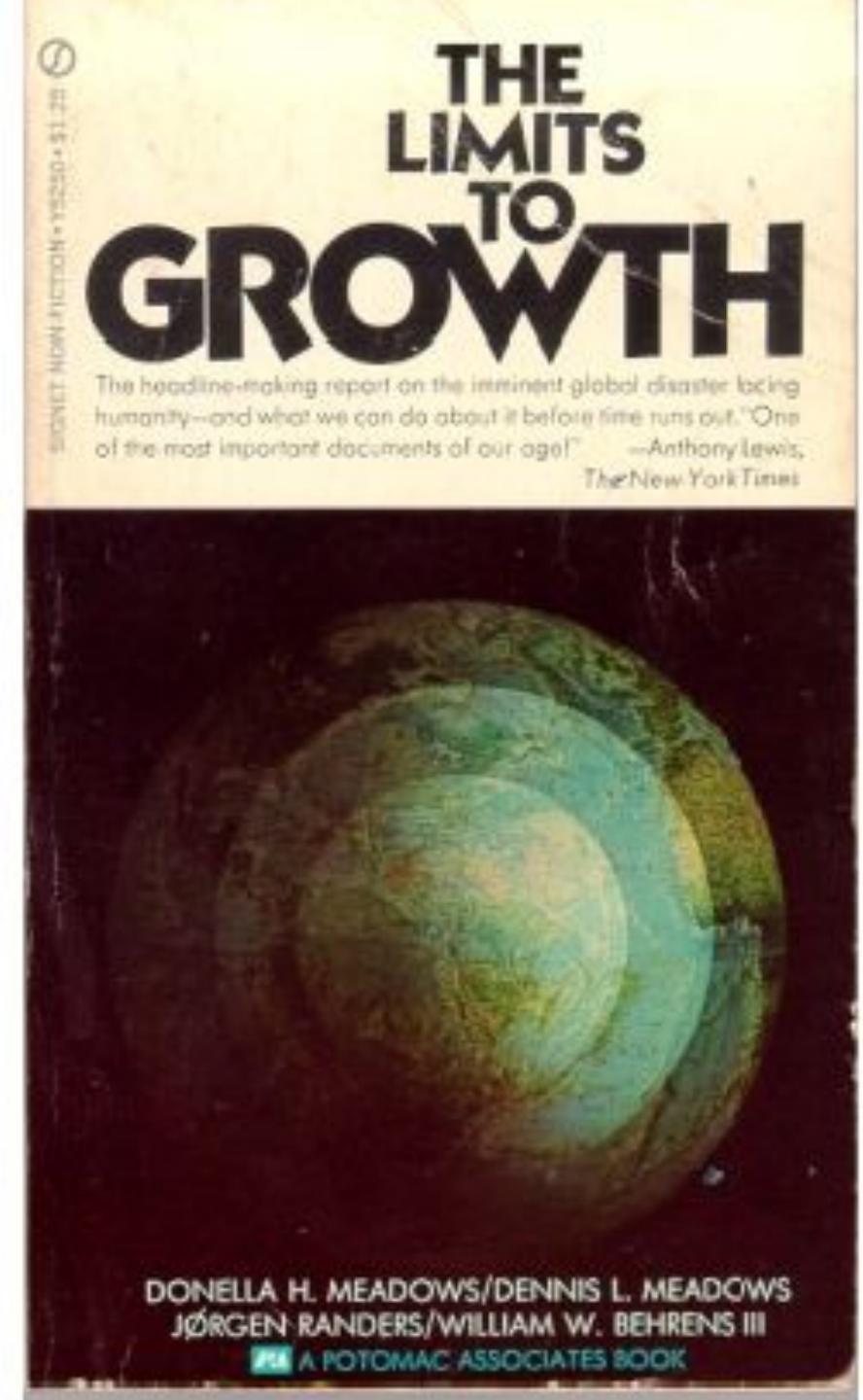


Our main problem is the lack of sustainability

Planetary Boundaries

W. Steffen et al.
Science 347 (2015)



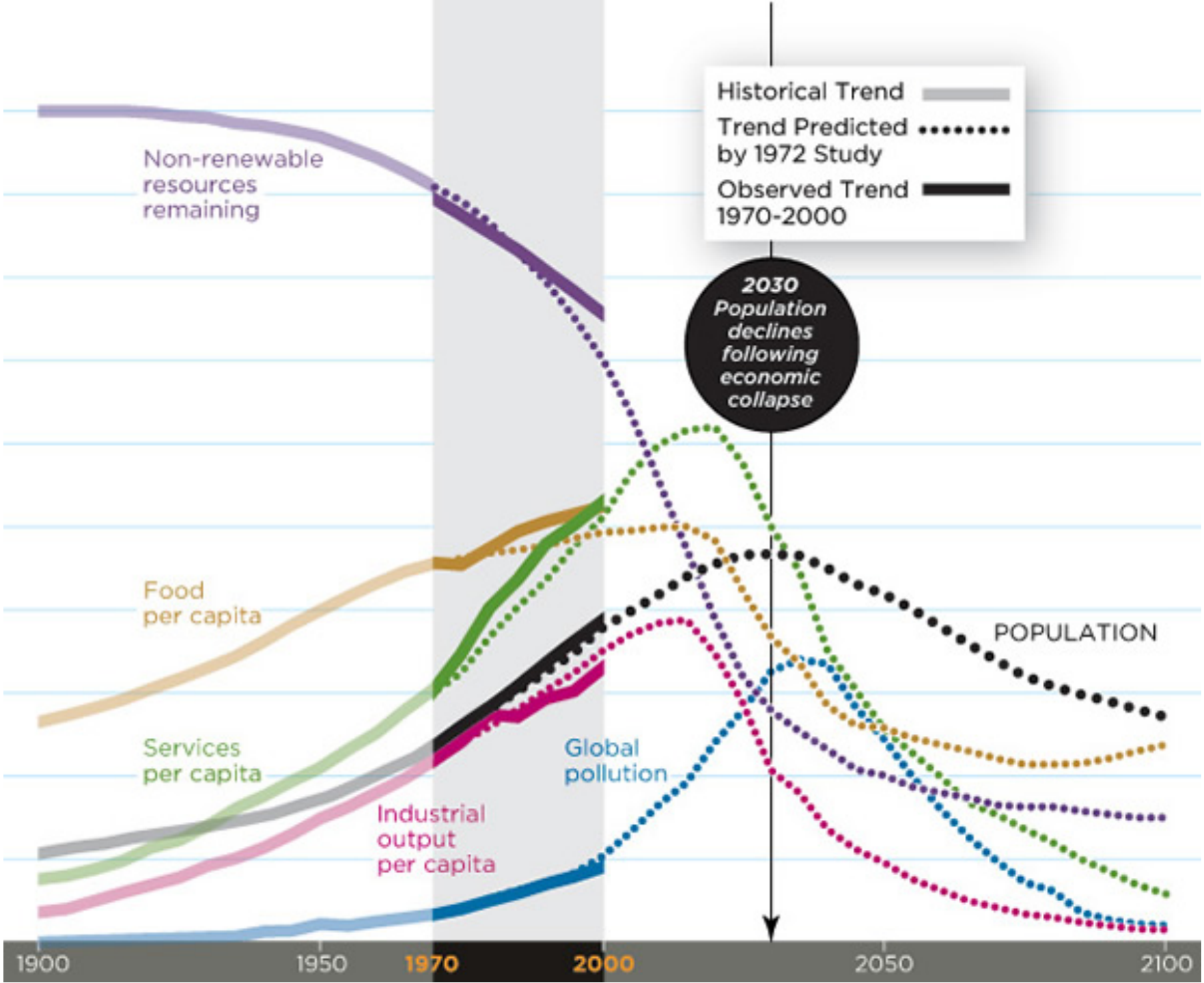


Global 2000 Report to the President of the U.S.

Entering the 21st Century

Volume I: The Summary Report
Special Edition with the
Environment Projections and
the Government's Global Model

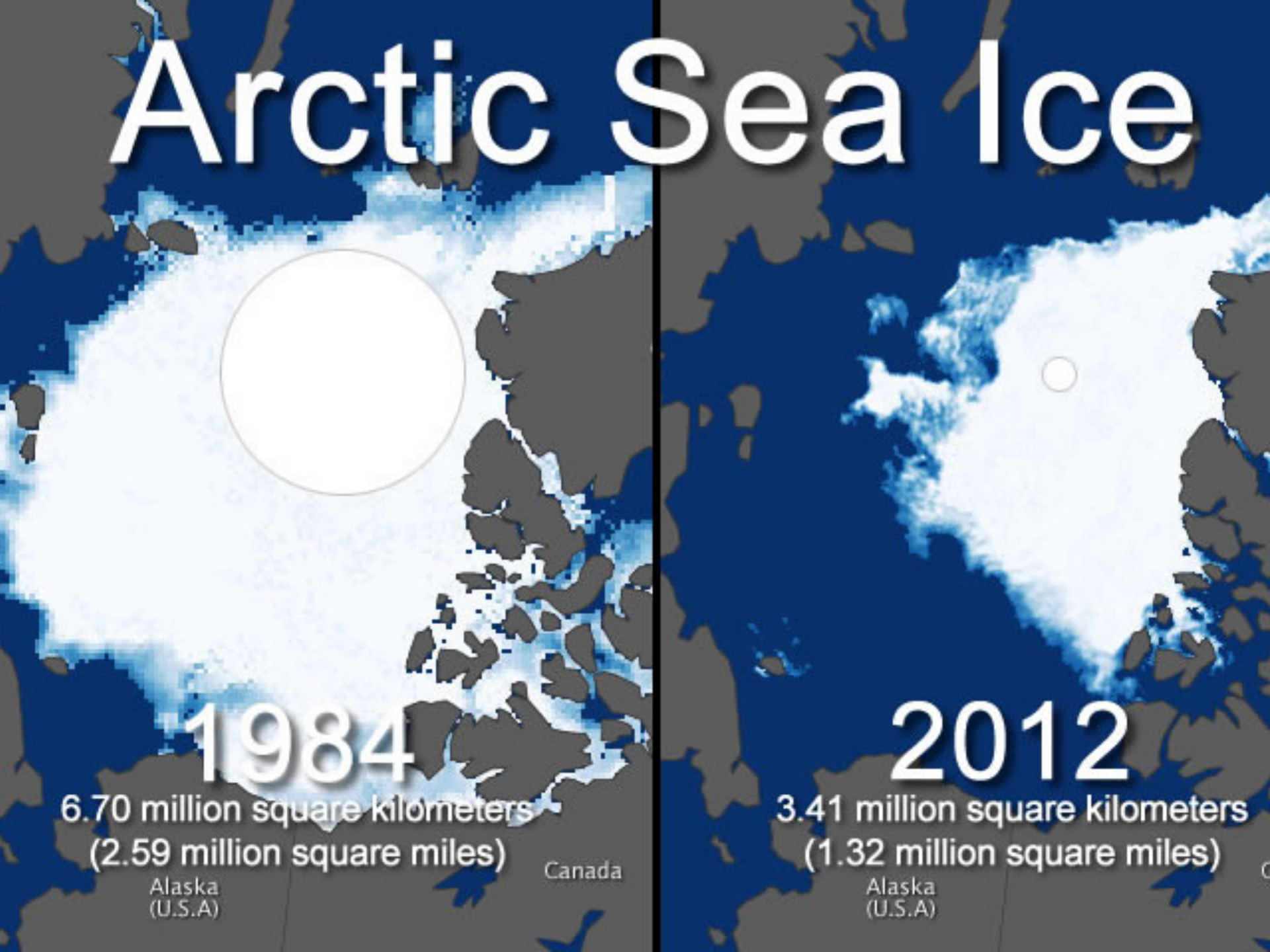
Gerald O. Barney
Study Director


Historical Trend
Trend Predicted by 1972 Study
Observed Trend 1970-2000
2030 Population declines following economic collapse
Non-renewable resources remaining
Food per capita
Services per capita
Industrial output per capita
Global pollution
POPULATION
1900
1950
1970
2000
2050
2100

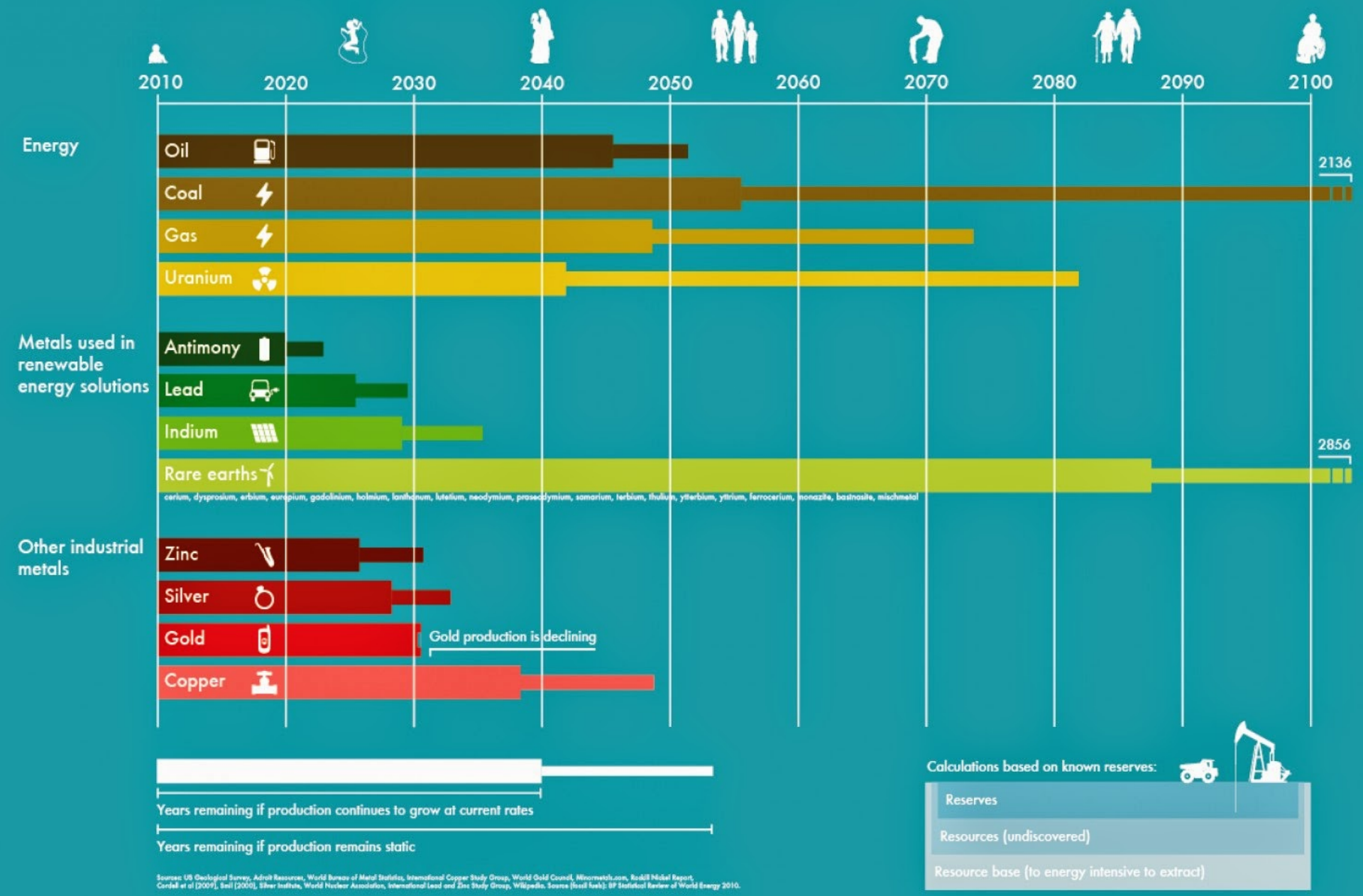
1978

2012

The same planet just 34 years after.


Arctic Sea Ice
1984
6.70 million square kilometers
(2.59 million square miles)
Alaska
(U.S.A)
Canada
2012
3.41 million square kilometers
(1.32 million square miles)
Alaska
(U.S.A)

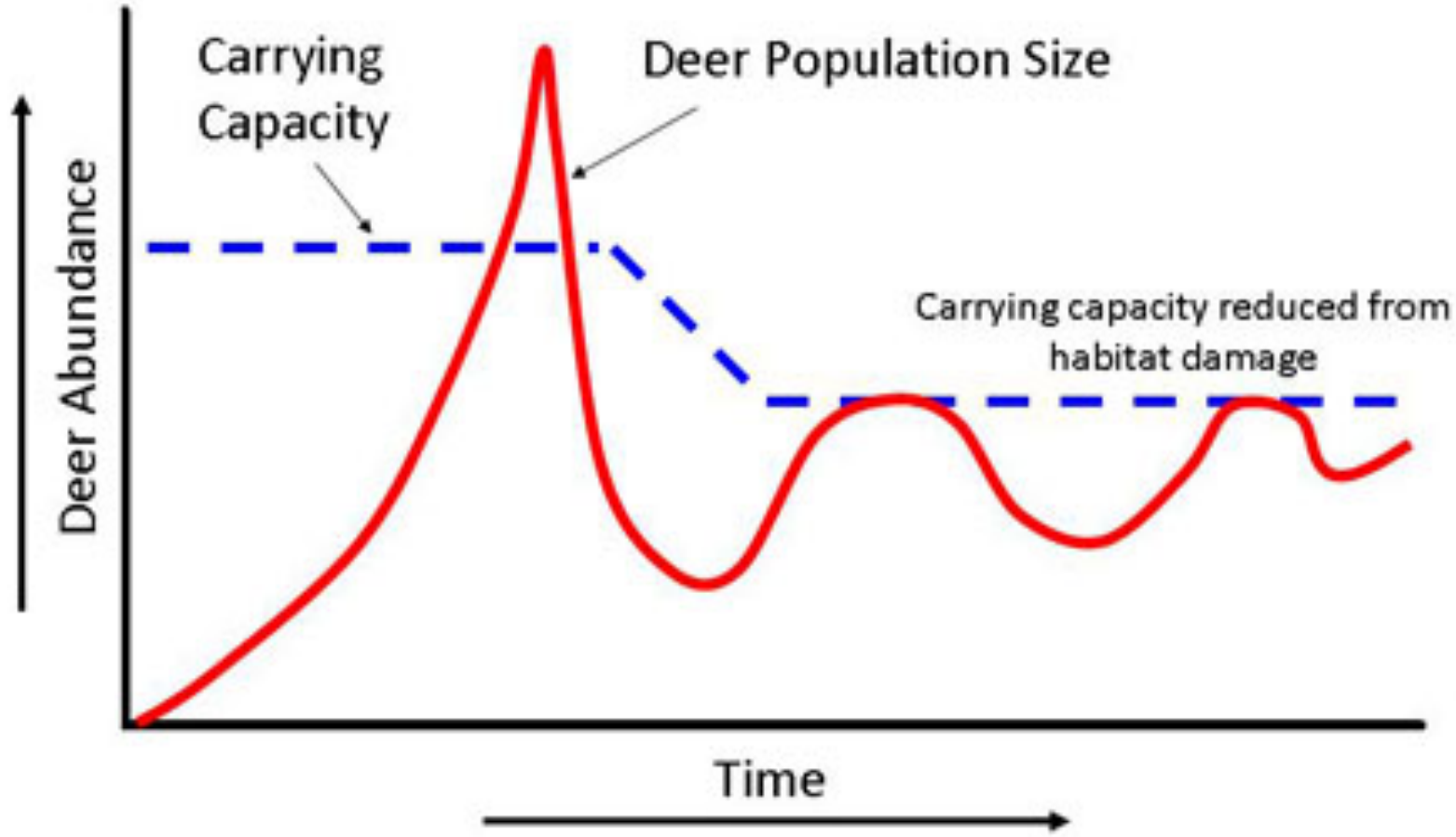
Born in 2010: How much is left for me?



Sources: US Geological Survey, Advit Resources, World Bureau of Metal Statistics, International Copper Study Group, World Gold Council, Mineralmetals.com, Raskill Nickel Report, Cordell et al (2009), Smil (2000), Silver Institute, World Nuclear Association, International Lead and Zinc Study Group, Wikipedia. Source (fossil fuels): BP Statistical Review of World Energy 2010.

6

Unrestricted deer population growth may diminish the habitat's carrying capacity



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Learning *to* Die *in the* Anthropocene

REFLECTIONS ON THE END OF A CIVILIZATION

Roy Scranton

"Scranton draws on his experiences in Iraq to confront the grim realities of climate change. The result is a fierce and provocative book."
—Elizabeth Kolbert, author of The Sixth Extinction

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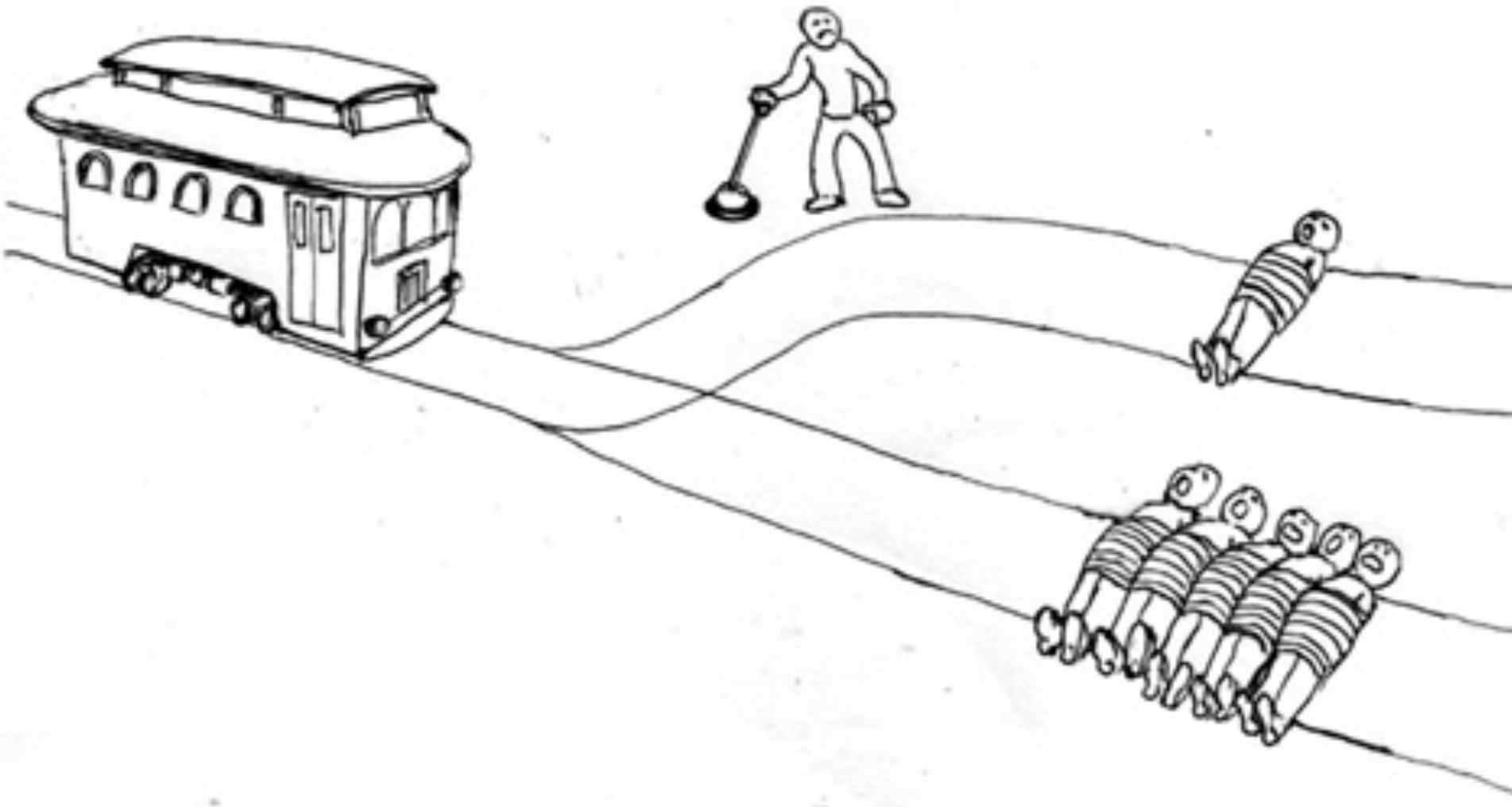
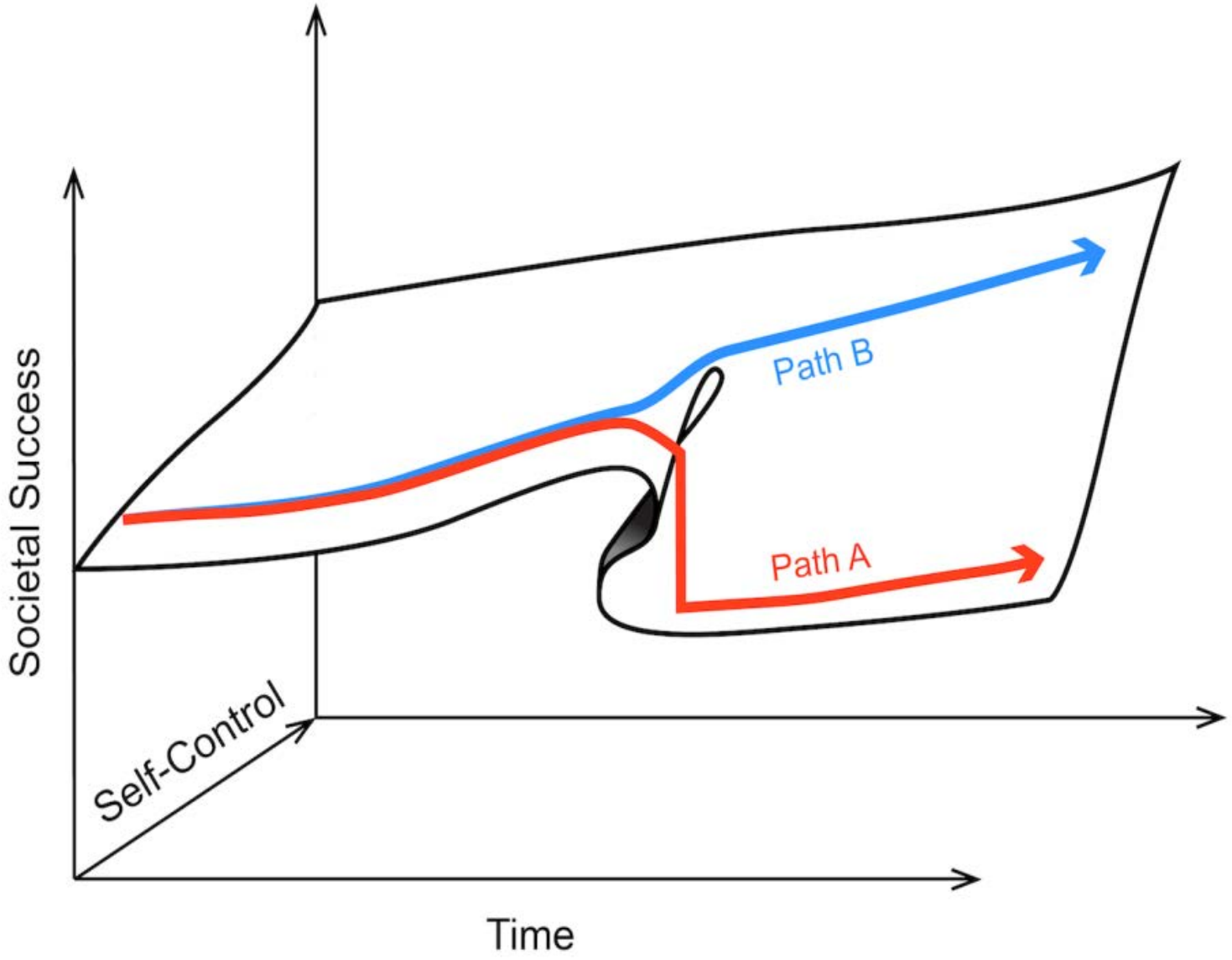
SUSTAINABLE DEVELOPMENT GOALS
1 NO POVERTY
2 ZERO HUNGER
3 GOOD HEALTH AND WELL-BEING
4 QUALITY EDUCATION
5 GENDER EQUALITY
6 CLEAN WATER AND SANITATION
7 AFFORDABLE AND CLEAN ENERGY
8 DECENT WORK AND ECONOMIC GROWTH
9 INDUSTRY, INNOVATION AND INFRASTRUCTURE
10 REDUCED INEQUALITIES
11 SUSTAINABLE CITIES AND COMMUNITIES
12 RESPONSIBLE CONSUMPTION AND PRODUCTION
13 CLIMATE ACTION
14 LIFE BELOW WATER
15 LIFE ON LAND
16 PEACE, JUSTICE AND STRONG INSTITUTIONS
17 PARTNERSHIPS FOR THE GOALS
SUSTAINABLE DEVELOPMENT GOALS

Ethical Dilemmas: The Obligation to Act

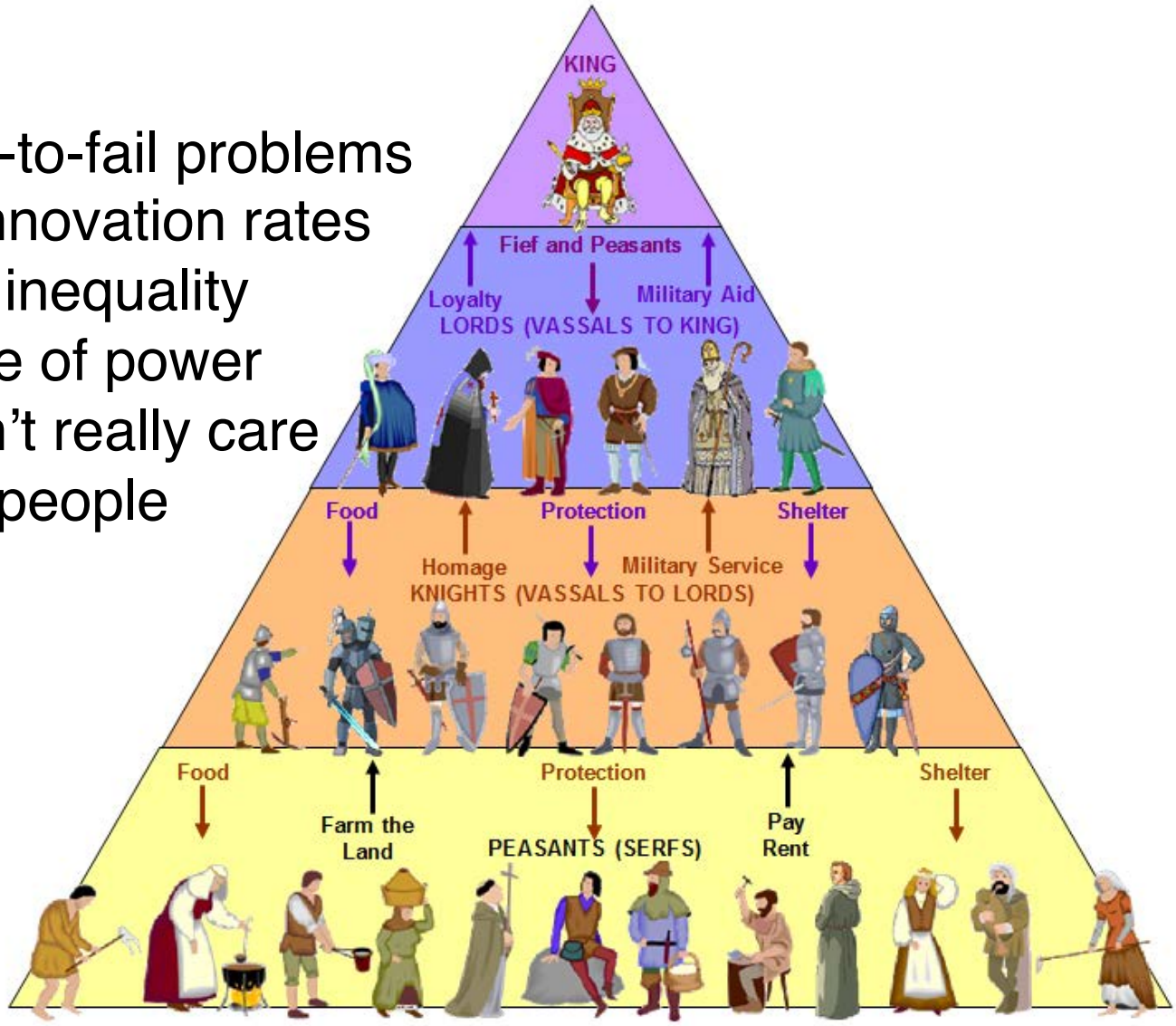


Our Society Is at A Crossroad



Feudalism 2.0: Big Other (Surveillance Capitalism)

- To-big-to-fail problems
- Low innovation rates
- Large inequality
- Misuse of power
- Doesn't really care about people



Communism 2.0:
Big Mother, Benevolent Dictator

- Top-down planning
- Goals set by the government
- Redistribution of wealth
- Scarce resources rationed

Fascism 2.0: Big Brother, Brave New World

Don’t Do Evil?

“Es gibt eine Menge Dinge, die wir gern machen würden, aber leider nicht tun können, weil sie illegal sind.

Weil es Gesetze gibt, die sie verbieten. Wir sollten ein paar Orte haben, wo wir sicher sind. Wo wir neue Dinge ausprobieren und herausfinden können, welche Auswirkungen sie auf die Gesellschaft haben.”

Larry Page

The New York Times

Is Democracy Dead?

Tony Blair: For True Democracy, the Right to Vote Is Not Enough

By TONY BLAIR DEC. 4, 2014

Eoin Ryan

Turning Point: Russia annexes Crimea, formerly an autonomous area of Ukraine.

Democracy is not in good shape. Many systems seem dysfunctional: The U.S. Congress, the coalition government in the U.K., and many governments in Europe have had difficulty making the decisions necessary to finding a way back to economic growth. Some fledgling democracies seem, in the short term at least, less competent to serve the needs of their citizens than some autocracies are.

Take all this together and add the profound nature of the challenges of recent times — the extremism convulsing whole nations in the Middle East and beyond; the ongoing

SHADOW GOVERNMENT Notes from the loyal opposition

Adieu, Turkish Democracy

BY JOHN HANNAH | NOVEMBER 13, 2015 - 1:12 PM

The Telegraph

Is democracy dying in Poland?

Is the poster child of EU expansion becoming the new enfant terrible of Europe ... or are reports of the death of Polish democracy greatly exaggerated?

Email

Tomasz Lis, a prominent Polish journalist, quit in protest over the media law Photo: Rex

The Local has a new FREE App.
Keep in touch with what's going on around Europe.

Photo: AFP

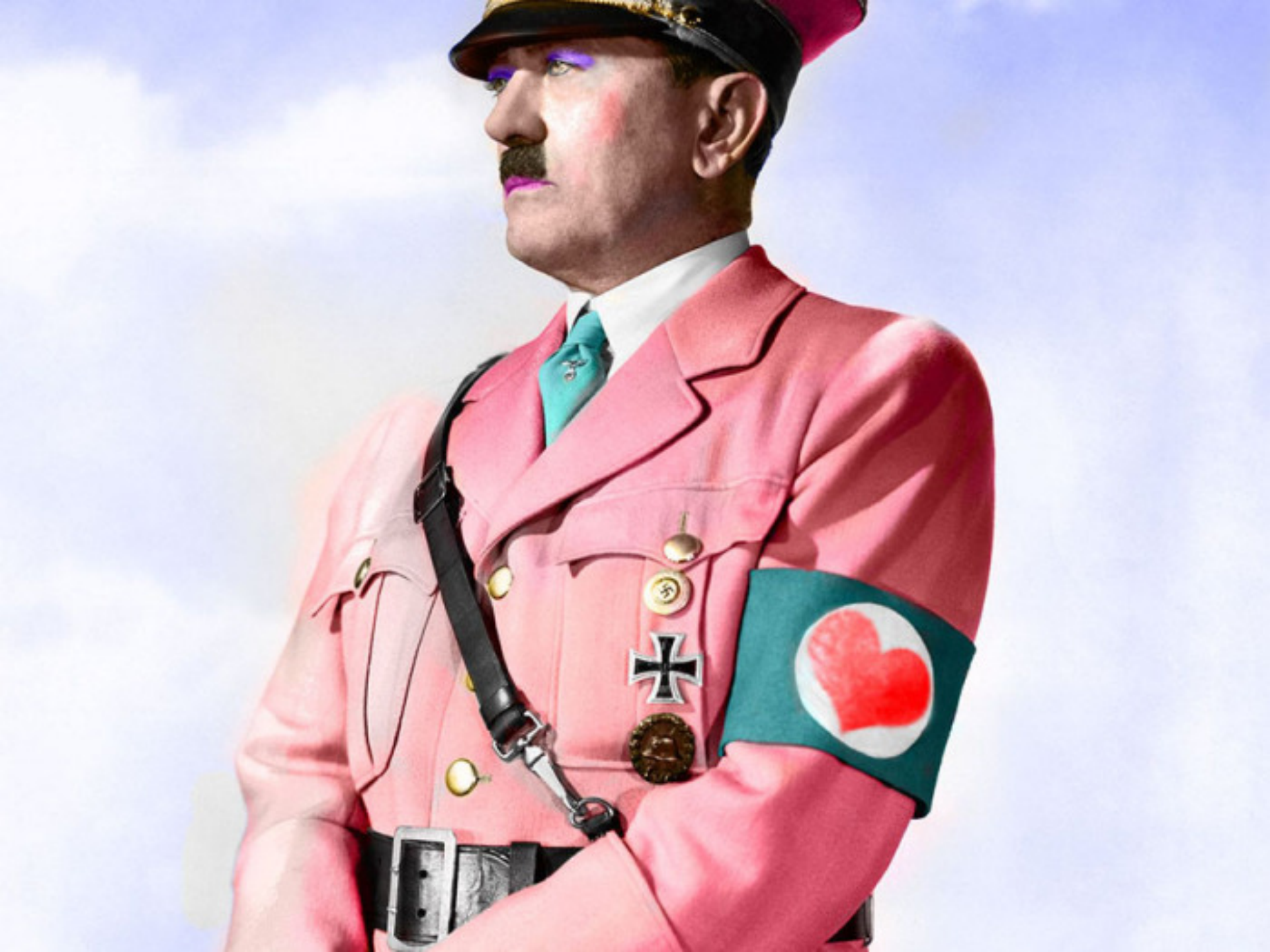
France 'risks democracy' with state of emergency

Published: 13 Jan 2016 07:31 GMT+01:00

Share Tweet Share reddit

While the general public and MPs in France support it, a European human rights chief says it could constitute a "threat" to democracy.

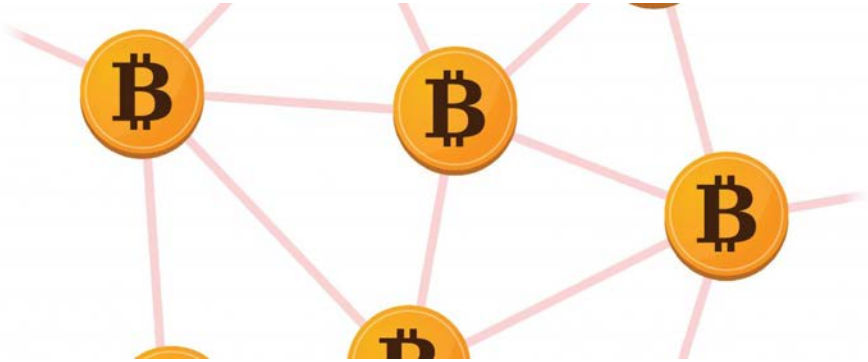
STOP



Time for a change

Democracy 2.0 + Capitalism 2.0

- Bottom-up self-organization
- Efficient, flexible, adaptive, resilient
- Entrepreneurial + individual freedom
- High innovation rates
- Competition for resources



What's new:

- Network interactions dominate
- Systemic and ecosystems thinking
- Circular and sharing economy
- Competition combined with cooperation (coopetition)
- Co-creation, co-evolution, collective intelligence

Our survival strategy:
Build a resilient society

64. Woche
100
Gramm Brot

Butterhandlung

64. Woche
50
Gramm Brot

64. Woche
50
Gramm Brot

64. Woche
50
Gramm Brot

64. Woche
50
Gramm Brot

64. Woche
50
Gramm Brot

Brotkarte

Unser täglich Brot gieb uns heute

und wenn ich bitten darf, auch mein 1/8 Pfund Butter dazu.

Butter ausverkauft

64. Woche
25
Gr. Brot

64. Woche
50
Gramm Brot

64. Woche
25
Gr. Brot

64. Woche
50
Gramm Brot

64. Woche
200
Gramm Brot
oder
125
Gramm Mehl

64. Woche
200
Gramm Brot
oder
125
Gramm Mehl

64. Woche
25
Gr. Brot

64. Woche
50
Gramm Brot

64. Woche
25
Gr. Brot

64. Woche
50
Gramm Brot

64. Woche
25
Gr. Brot

64. Woche
50
Gramm Brot

The Making of Behavioral Economics

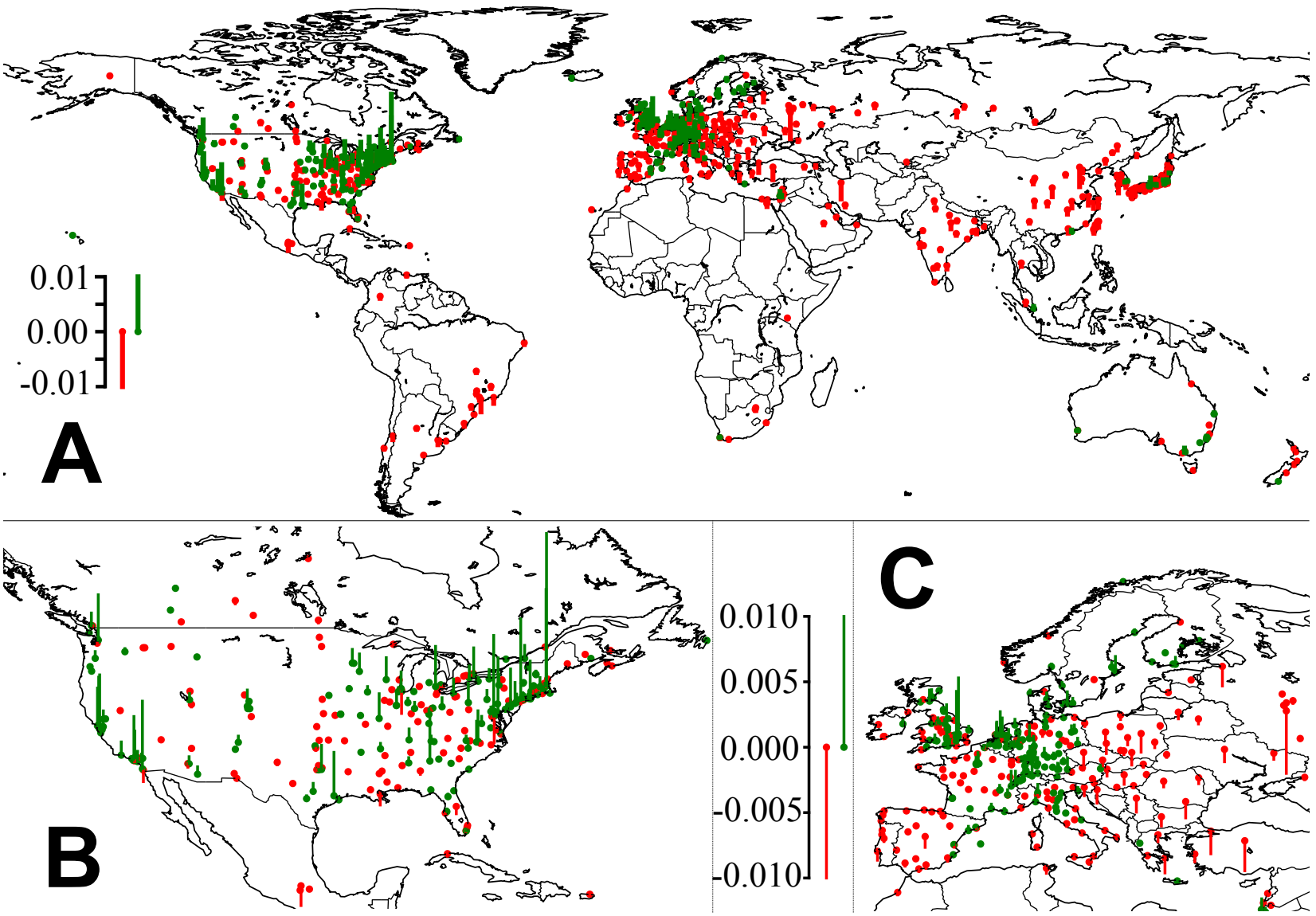
MISBEHAVING

Richard H. Thaler

Best-selling coauthor of Nudge

Freedom, self-determination

Freedom Promotes Creativity and Innovation



Create New Opportunities for Everyone

If set up well, enabling users, customers, citizens will lead to better services, better products, better businesses, better neighborhoods, smarter cities, smarter societies …

WORLD ECONOMIC FORUM

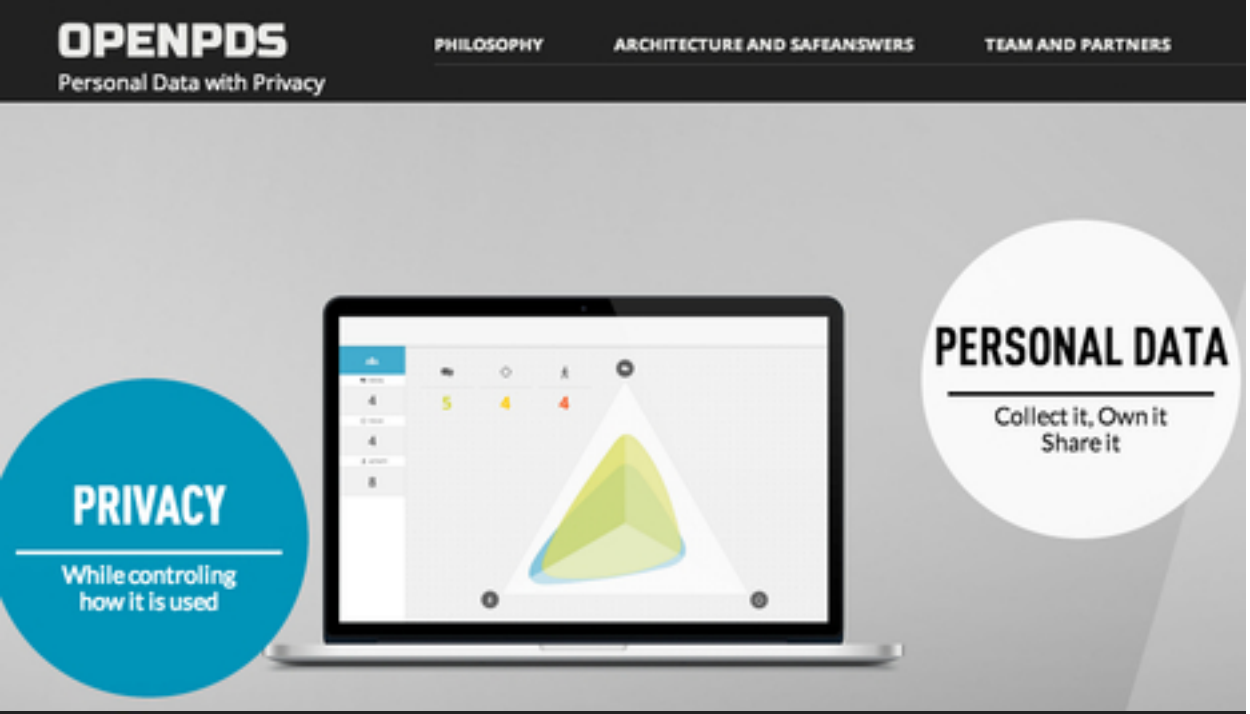
COMMITTED TO IMPROVING THE STATE OF THE WORLD

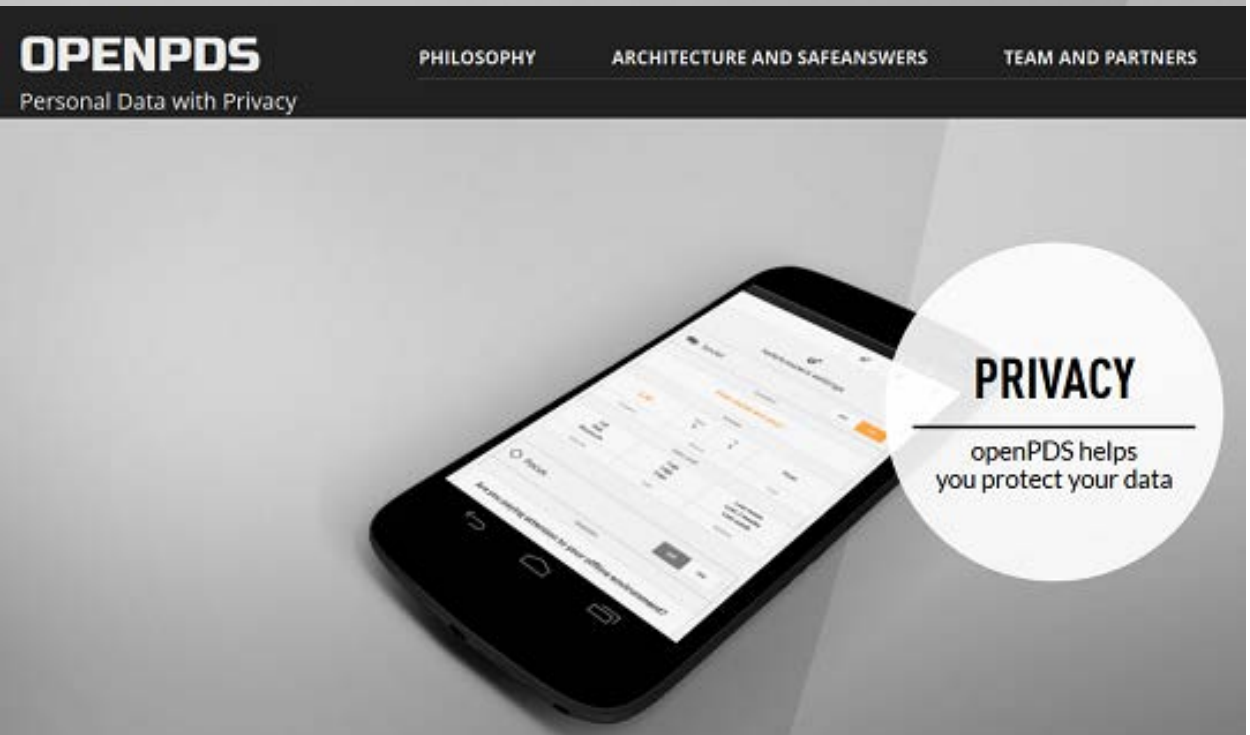
Personal Data:
The Emergence of a New Asset Class

1. Achieve a balance between the interests of business, public, and private individuals

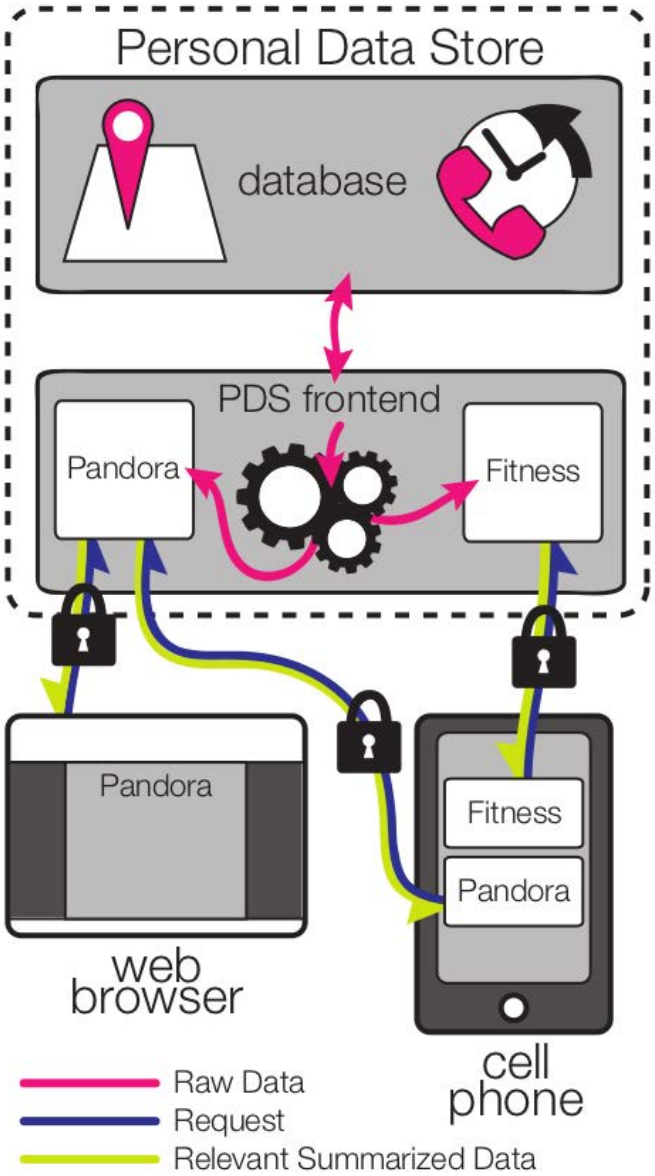
2. Give individuals control over their personal data ("informational self-determination")

3. Pay individuals a fair share of the value of their personal data





Privacy and Data Ownership



Reputation Systems Increase Responsibility

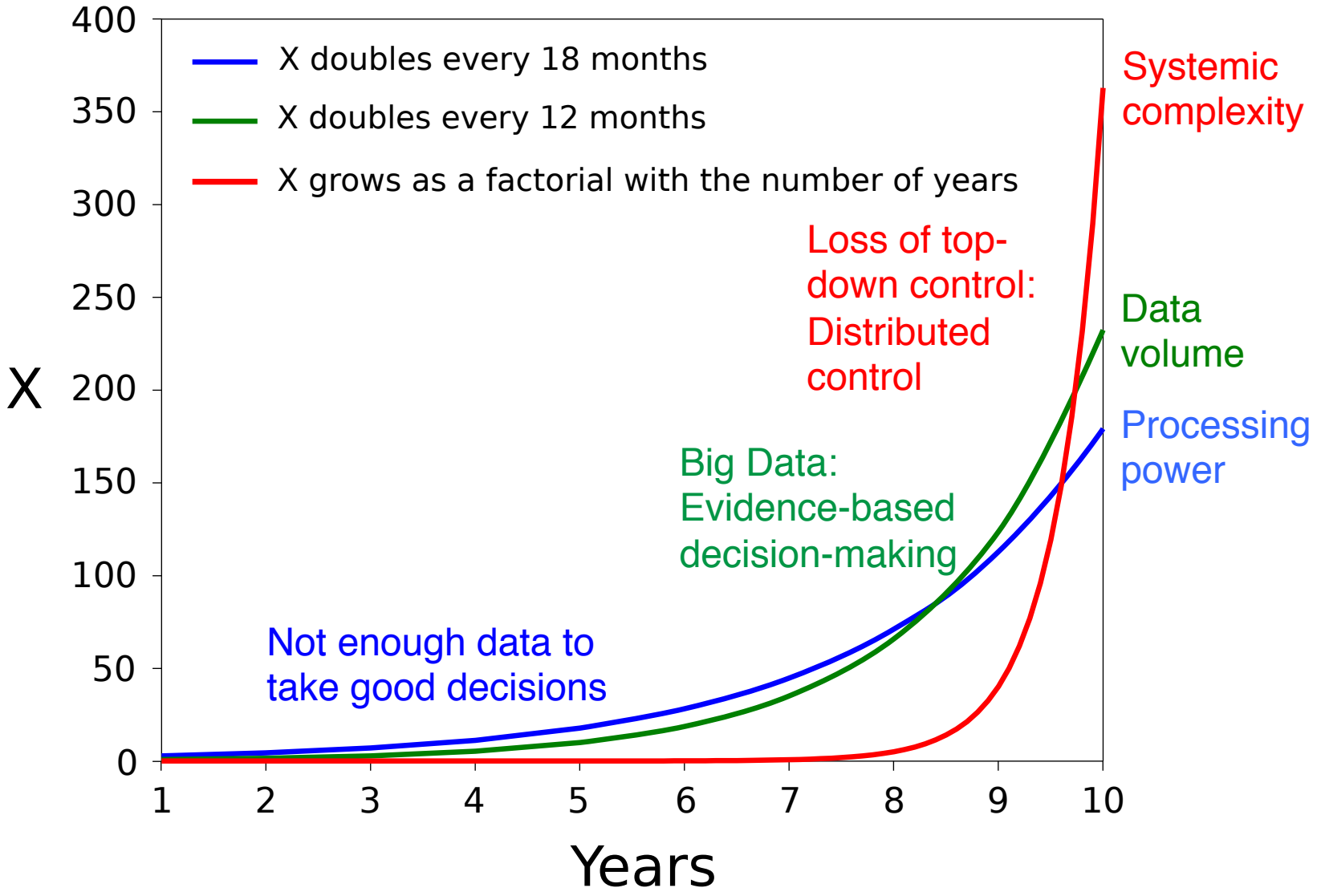
Qualification

Democracy (self-determination, pluralism, distributed control, participation, protection of minorities) is not an outdated concept. It just needs to be digitally upgraded!

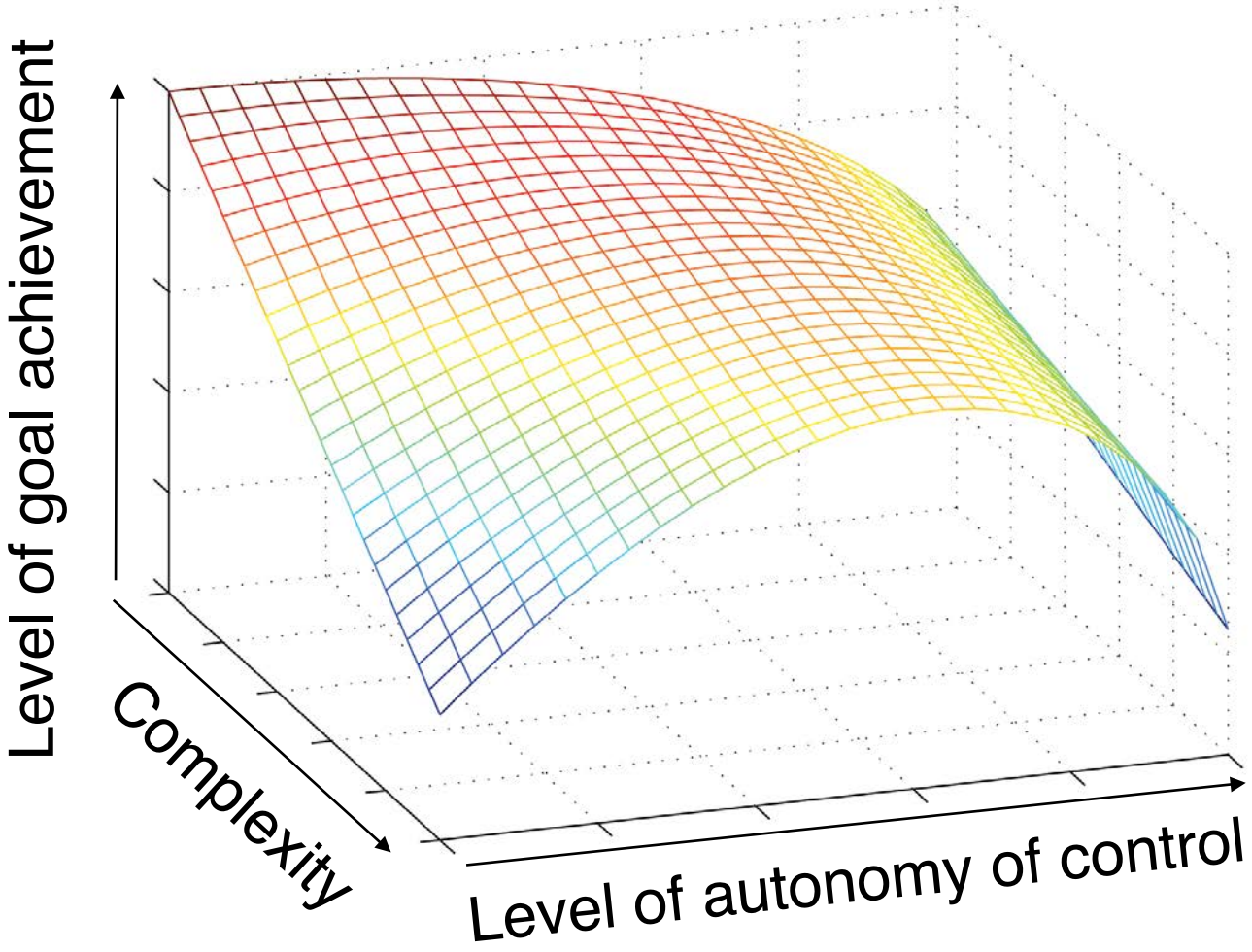
Decentralization:
Resilient systems design and operation

Decentralization
Modular Design
Distributed Control
Subsidiarity Principle

Exponential vs.Factorial Growth – Implications for the Governance of Complex Systems



Better Performance of Complex Systems by More Autonomy + Suitable Interaction Rules

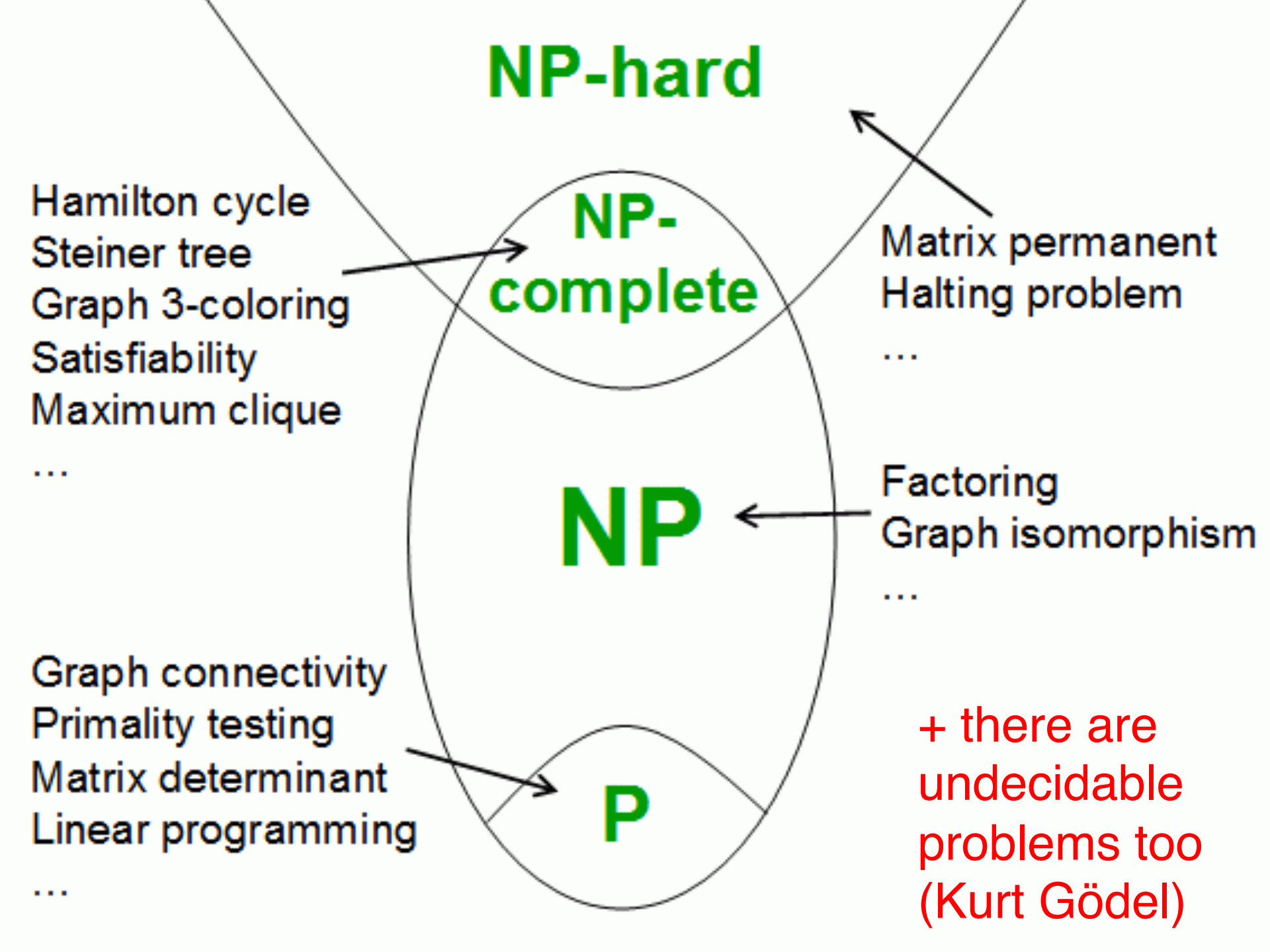


If complex dynamical systems vary a lot, are hard to predict and cannot be optimized in real-time, distributed control can outperform top-down control attempts by flexibly adapting to local conditions and needs.

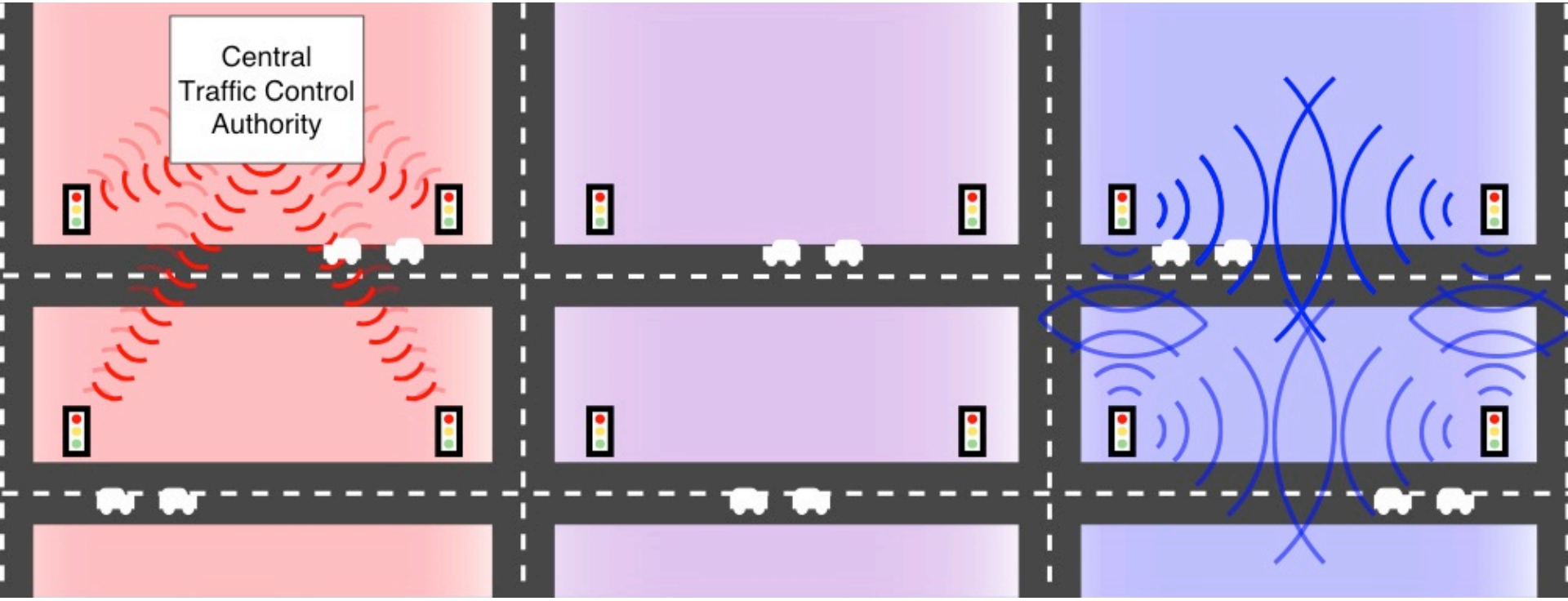
(Windt, Böse, Philipp, 2006)

Selfish Routing and the Price of Anarchy

Tim Roughgarden
Cornell University


NP-hard
NP-complete
NP
P
Hamilton cycle
Steiner tree
Graph 3-coloring
Satisfiability
Maximum clique
…
Matrix permanent
Halting problem
…
Factoring
Graph isomorphism
…
Graph connectivity
Primality testing
Matrix determinant
Linear programming
…
+ there are undecidable problems too (Kurt Gödel)

Comparing 3 Ways to Organize a Complex System

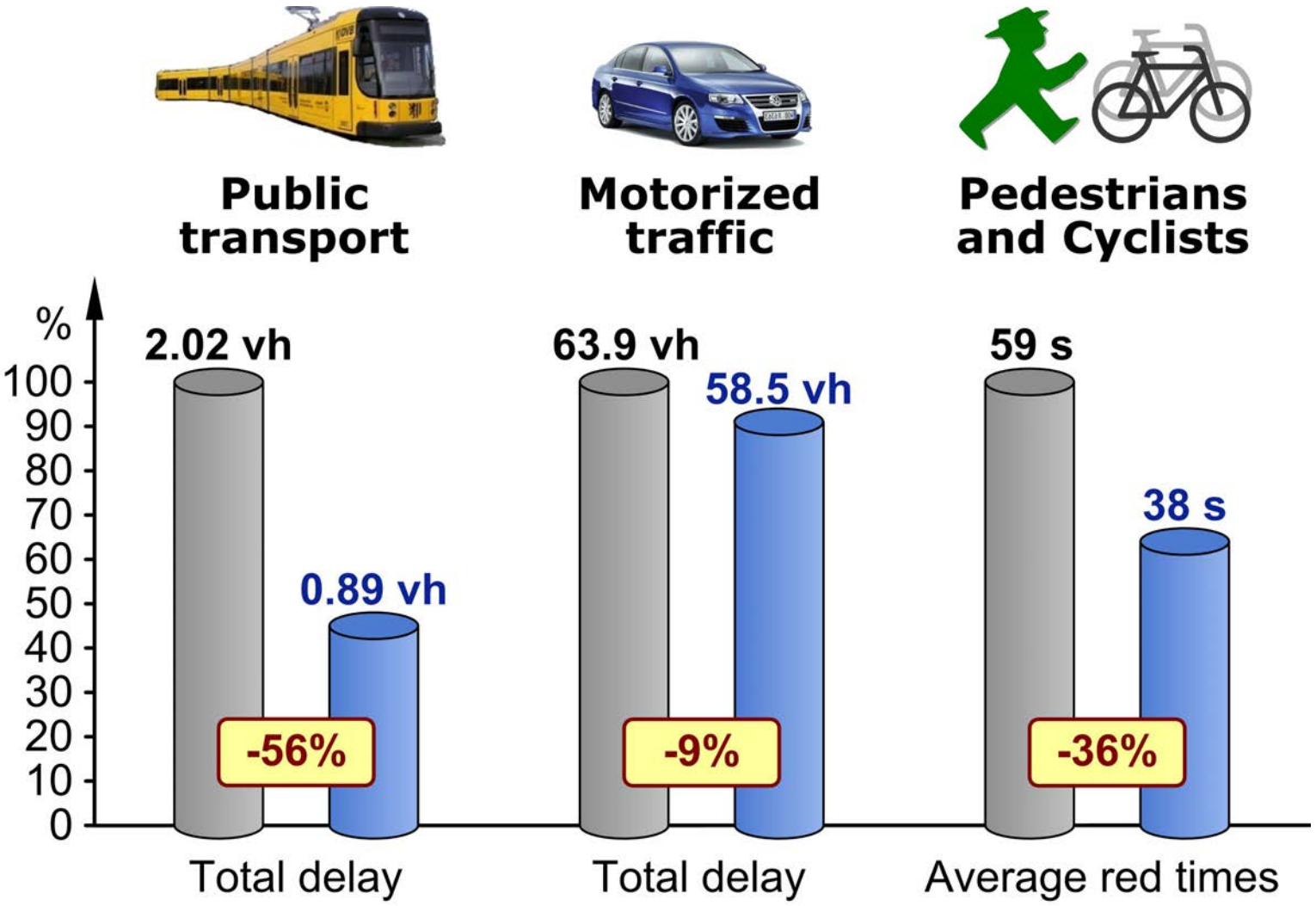


Central control, "benevolent dictator"

Travel time minimization, "homo economicus"

Same, but other-regarding coordination with neighbors

Decentralized Can Outsmart Centralized Control



Economy 4.0

Creative Work

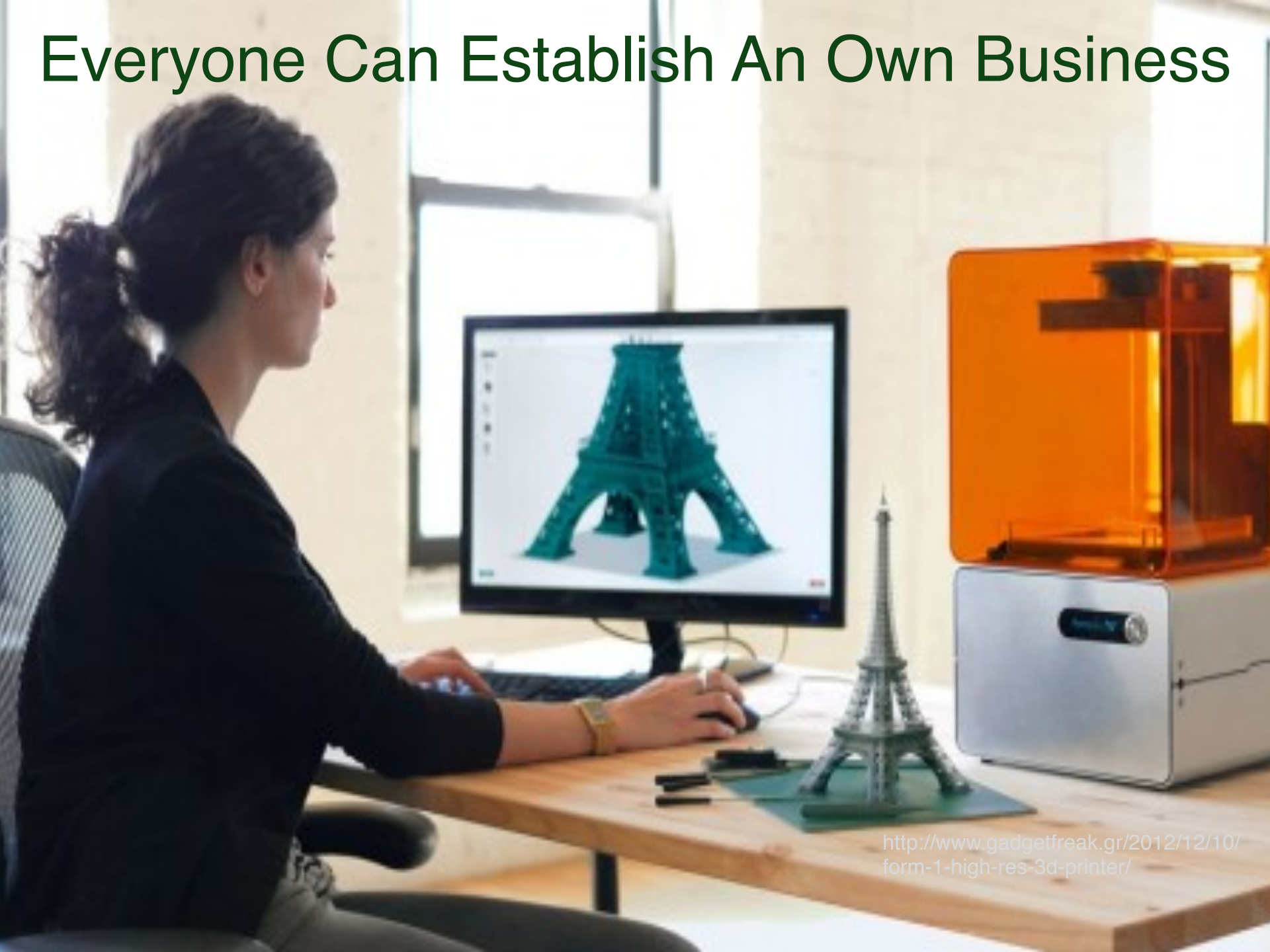
Personalized Products

Do it yourself case design

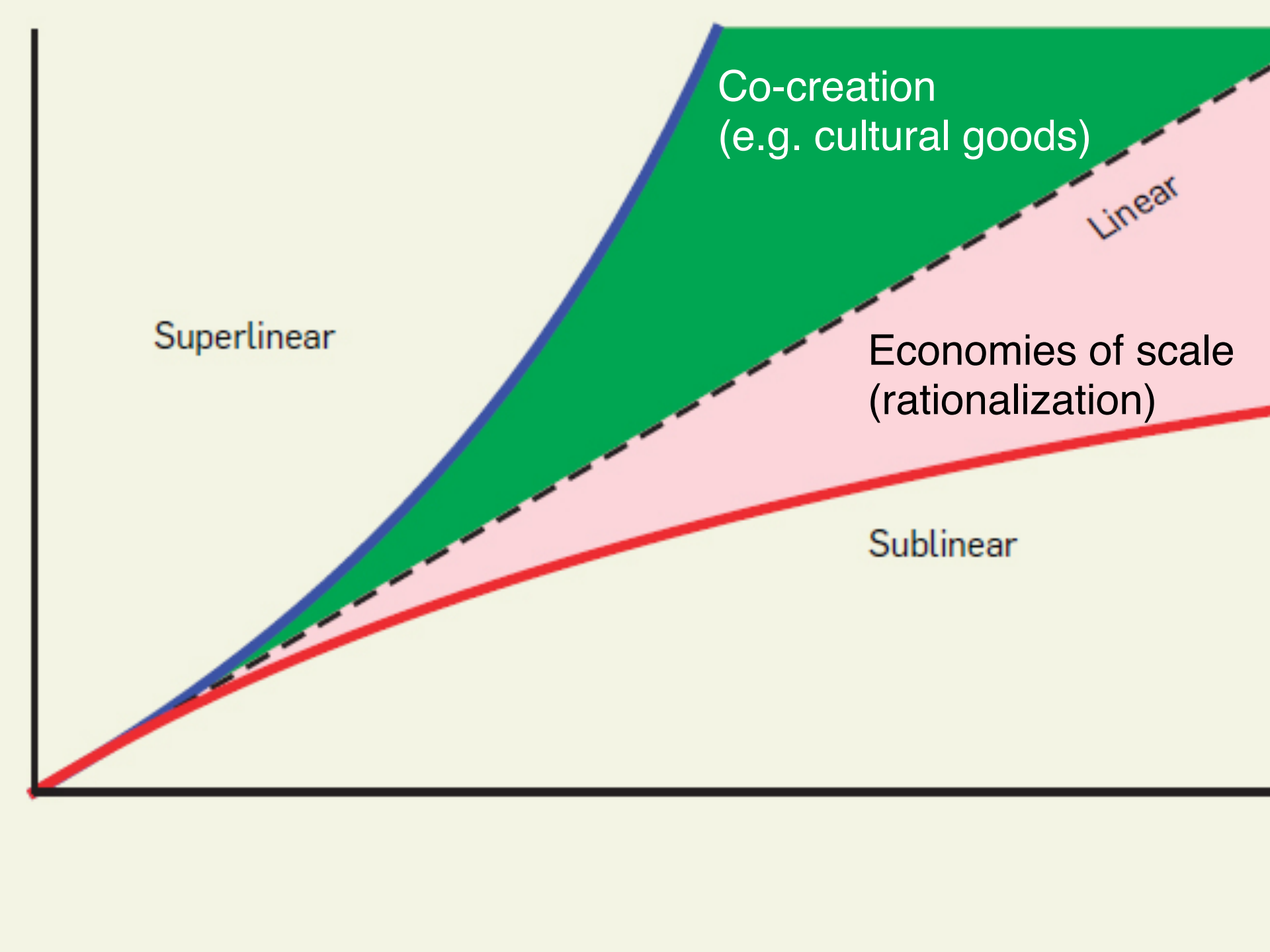
Design your photo, art or logo and we'll turn it into a custom card insert to iphone 4/iphone 4 CDMA case

Powered by DIYTrade.com

Everyone Can Establish An Own Business



http://www.gadgetfreak.gr/2012/12/10/form-1-high-res-3d-printer/


Co-creation
(e.g. cultural goods)
Linear
Superlinear
Economies of scale
(rationalization)
Sublinear

Low-Carbon Economy

Participation, fair use

AMERICAN
337 WEST 58TH STREET

airbnb

Spotify®

Keine Verhandlung vor Supreme Court: Google Books ist und bleibt Fair Use

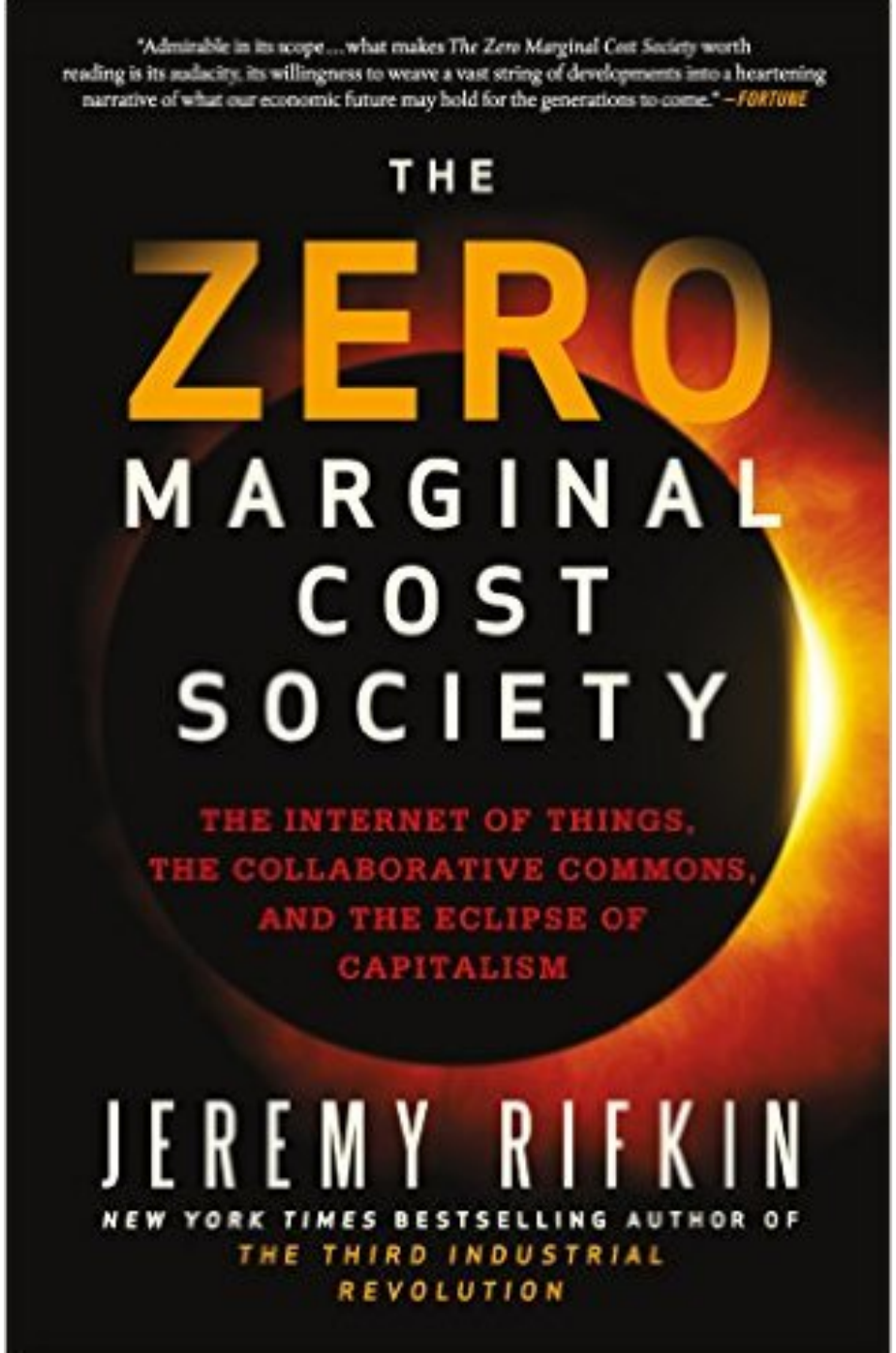
von Leonhard Dobusch am 18. April 2016, 16:35 in Kurzmeldungen, Urheberrecht / 1 Kommentar

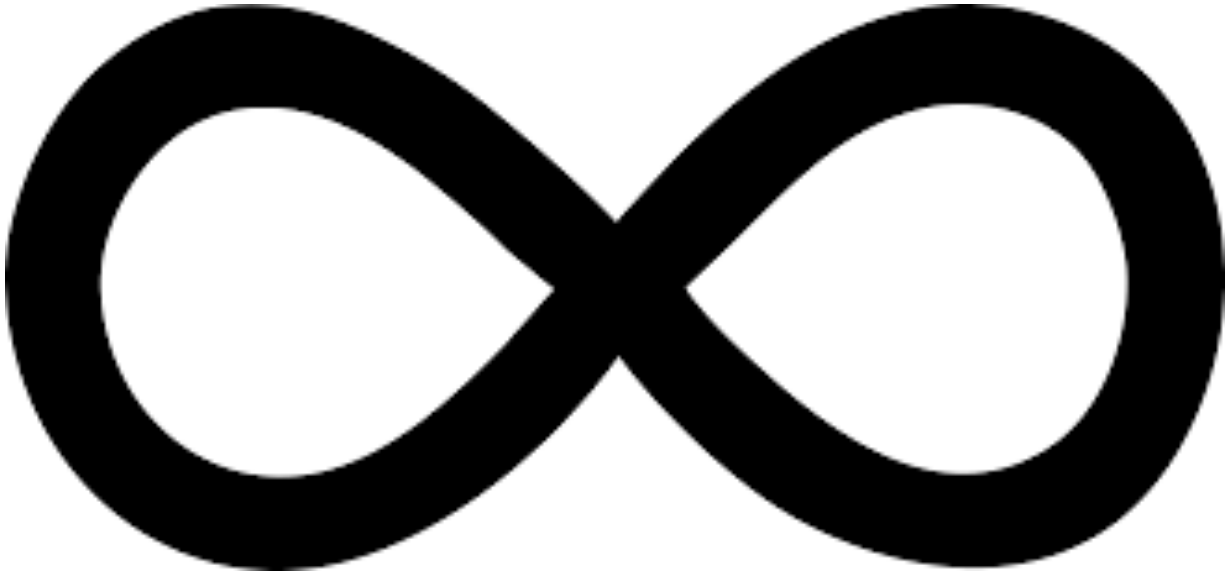
Nach der letztjährigen eindeutigen Entscheidung eines US-Berufungsgerichts, dass Google Books unter die Fair-Use-Klausel des US-Copyrights fällt, hatte die unterlegene US-Autorenvereinigung Author's Guild umgehend angekündigt, sich an den Supreme Court zu wenden. Heute veröffentlichte der Supreme Court seine Entscheidung, eine diesbezügliche Klage gar nicht erst zuzulassen.

> 15-849 AUTHORS GUILD, ET AL. V. GOOGLE, INC.
>
> The petition for a writ of certiorari is denied. Justice Kagan took no part in the consideration or decision of this petition.

Damit ist zumindest der Gerichtsweg für die Gegner von Google Books in den USA zu Ende. Es ist also zu erwarten, dass in Kürze Forderungen nach gesetzlichen Verschärfungen des US-Copyrights laut bzw. noch lauter werden.

0


"Admirable in its scope…what makes *The Zero Marginal Cost Society* worth reading is its audacity, its willingness to weave a vast string of developments into a heartening narrative of what our economic future may hold for the generations to come." —FORTUNE
THE
ZERO
MARGINAL
COST
SOCIETY
THE INTERNET OF THINGS, THE COLLABORATIVE COMMONS, AND THE ECLIPSE OF CAPITALISM
JEREMY RIFKIN
NEW YORK TIMES BESTSELLING AUTHOR OF
THE THIRD INDUSTRIAL REVOLUTION



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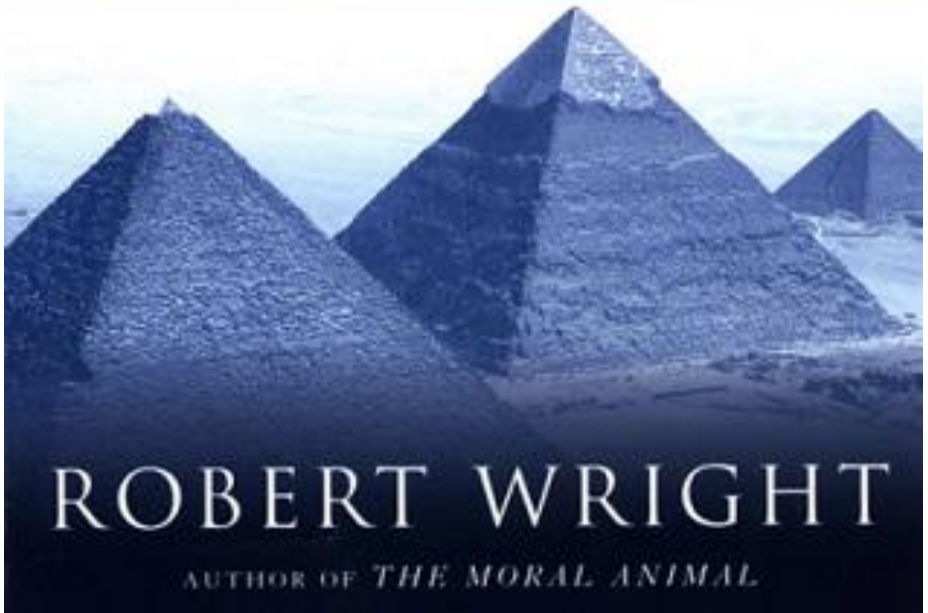
"A highly original tour of human history. . . . Immensely readable as well as immensely contentious." —*The Wall Street Journal*

NONZERO

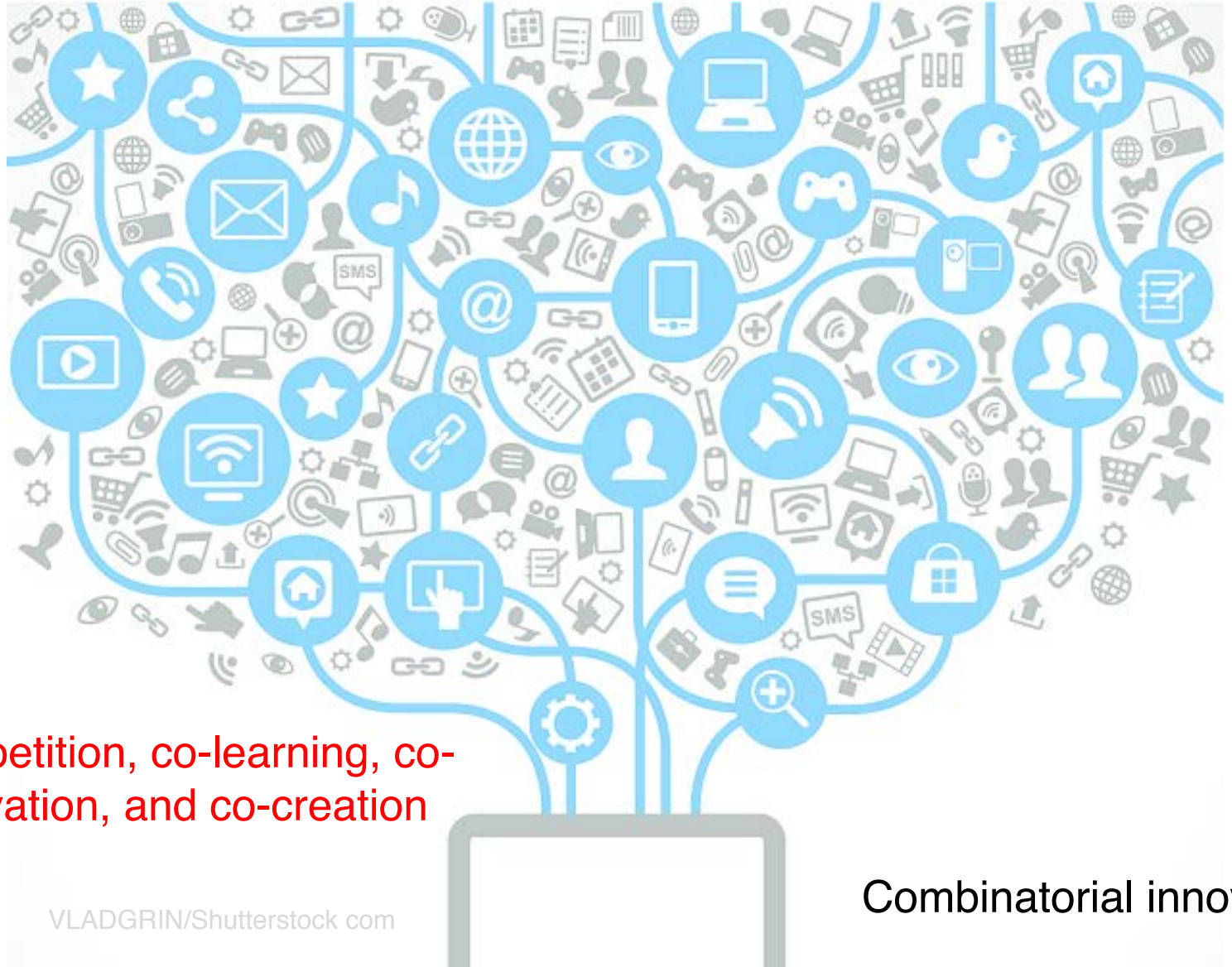
THE LOGIC OF HUMAN DESTINY



ROBERT WRIGHT

AUTHOR OF *THE MORAL ANIMAL*

Information, Innovation, Production and Service Ecosystem



co-epetition, co-learning, co-innovation, and co-creation

Combinatorial innovation

VLADGRIN/Shutterstock com

A new approach, compatible with self-determination, democracy, and free entrepreneurship: Distributed data, storage and control

nervousnet@ethz.ch

Internet of Things

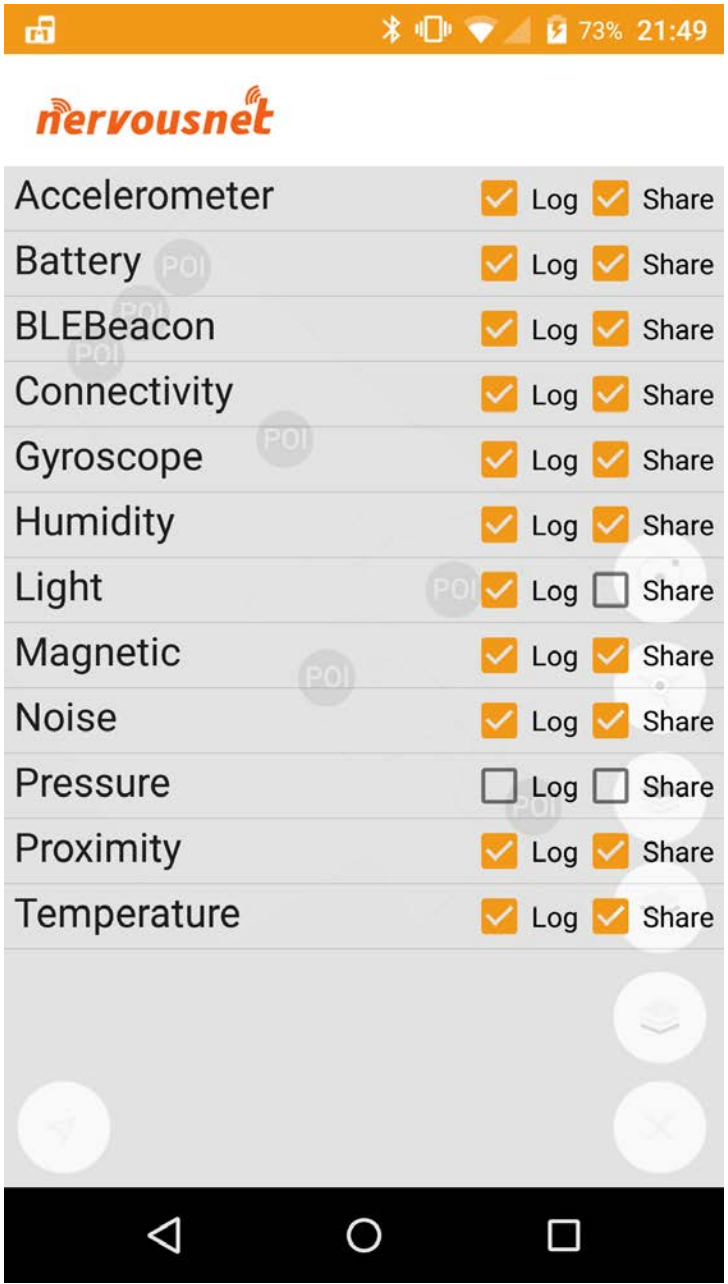
Today‘s Universal Tool

We Can Connect Smartphones to Build a Global Measurement System

Photo: apple iOS and android phones

We Need Systems We Can Trust

An Information System Controlled by You!



Run the Internet of Things as A Citizen Web

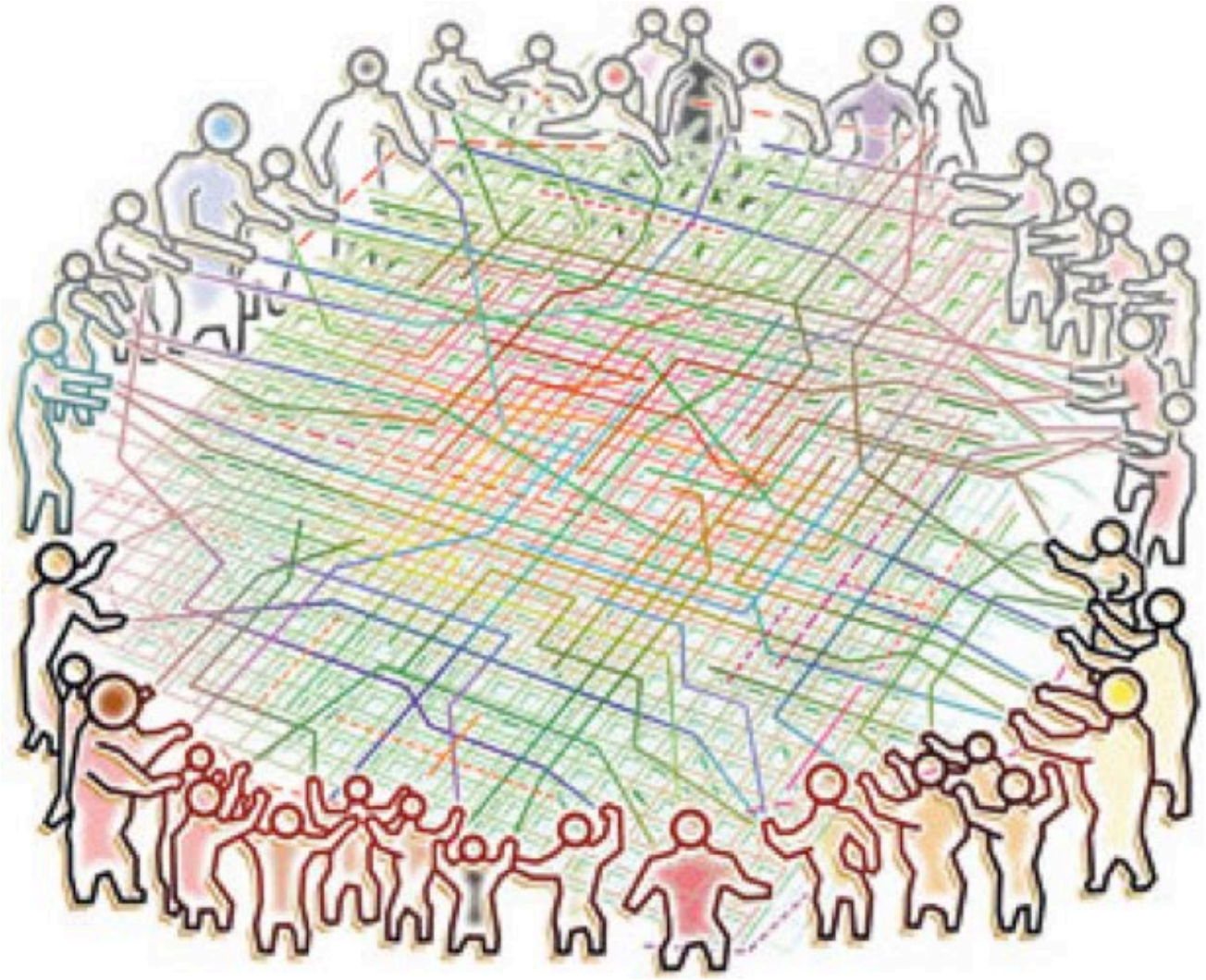


Illustration:
Jac Depczyk

http://www.thisviewoflife.com/index.php/magazine/articles/climate-change-and-inter-group-cooperation

What Nervousnet Could Do for Us

Areas of application include

(1) the real-time measurement of the state of our techno-socio-economic-environmental systems,

(2) greater awareness of chances and risks to support everyone's decision-making,

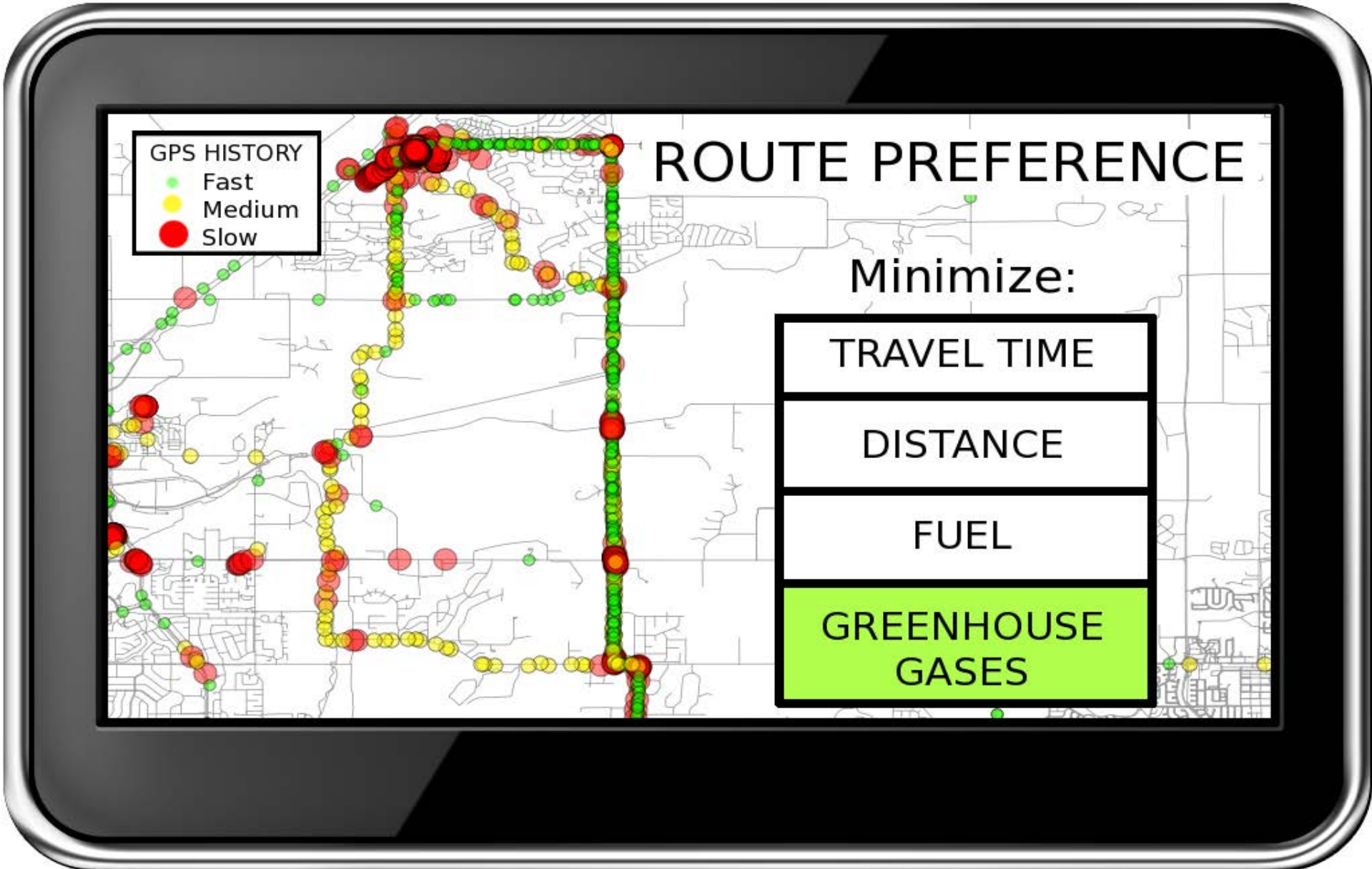
(3) the development of a Global Systems Science to manage our world more successfully,

(4) the creation of self-organizing systems, and

(5) the support of collective intelligence by digital assistants.

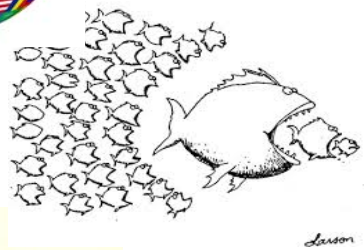
Man-machine symbiosis and collective intelligence

Digital Assistants to Support Decisions

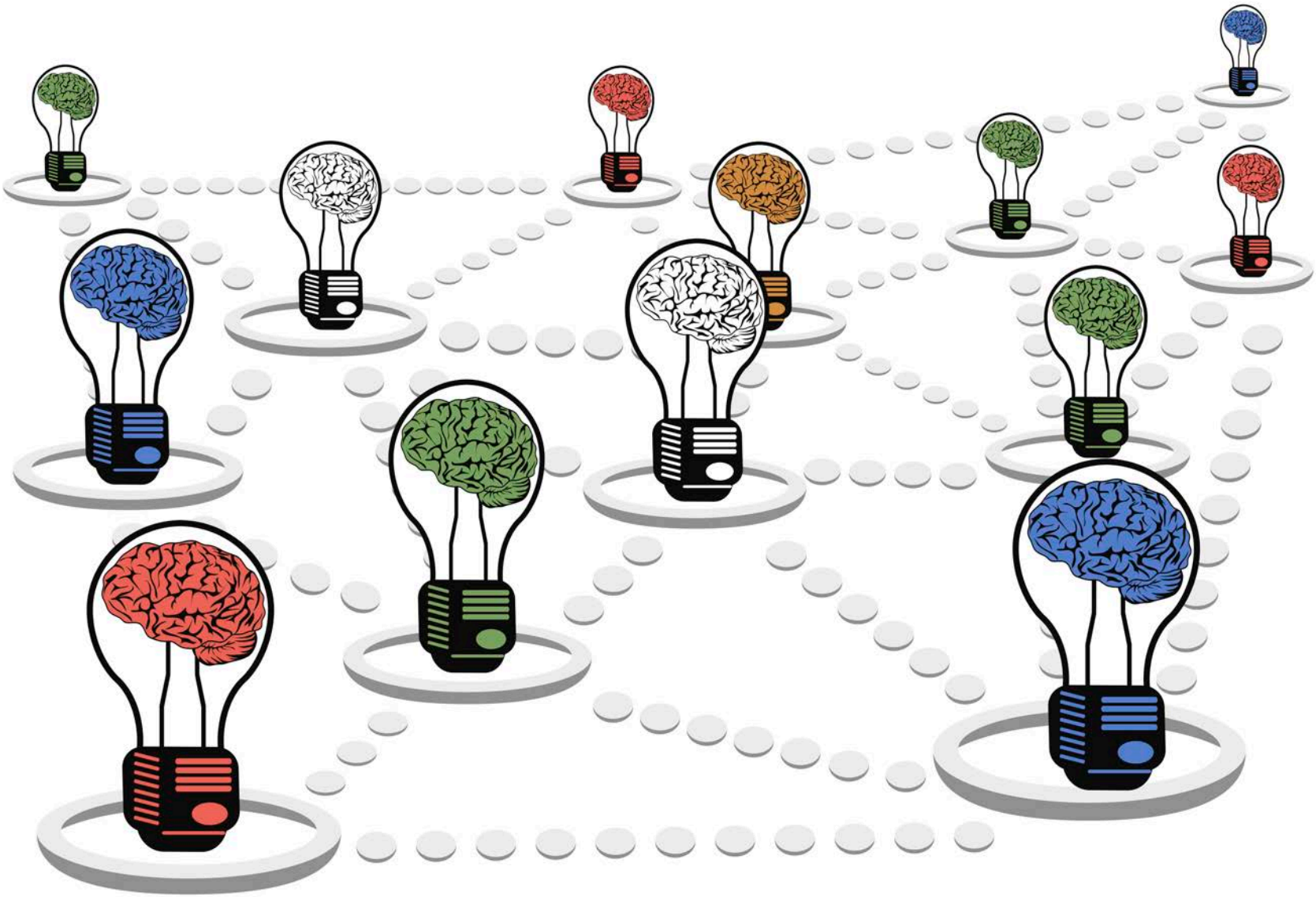


Support Favorable Interactions with Personal Digital Assistants

Task	Technology
Support situational / context awareness	**Social Mirror**
Facilitate profitable interactions	**Social Adapter**
Avoid lossful interactions	**Social Protector**
Incentivize favorable interactions / support value transfer	**Social Money**



Bring the Best Ideas of Many Minds Together



http://medialniproroci.blogspot.ch/2013/04/sharing-is-new-shoppingand-working.html

Netflix Challenge: Diversity Wins, Not the Best

Leaderboard

Display top 20 leaders.

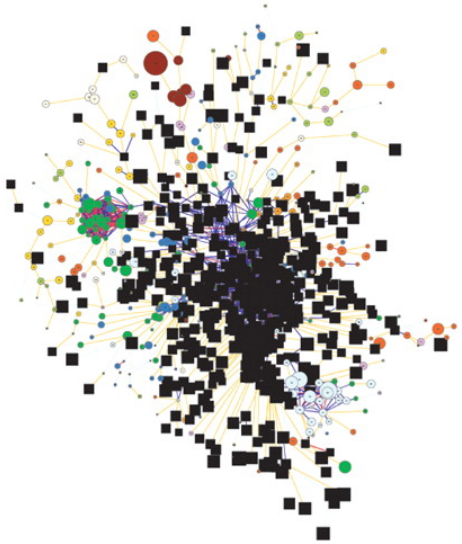
Rank	Team Name	Best Score	% Improvement	Last Submit Time
1	BellKor's Pragmatic Chaos	0.8558	10.05	2009-06-26 18:42:37
Grand Prize - RMSE <= 0.8563				
2	PragmaticTheory	0.8582	9.80	2009-06-25 22:15:51
3	BellKor in BigChaos	0.8590	9.71	2009-05-13 08:14:09
4	Grand Prize Team	0.8593	9.68	2009-06-12 08:20:24
5	Dace	0.8604	9.56	2009-04-22 05:57:03
6	BigChaos	0.8613	9.47	2009-06-23 23:06:52
Progress Prize 2008 - RMSE = 0.8616 - Winning Team: BellKor in BigChaos				
7	BellKor	0.8620	9.40	2009-06-24 07:16:02
8	Gravity	0.8634	9.25	2009-04-22 18:31:32
9	Opera Solutions	0.8638	9.21	2009-06-22 05:53:30
10	xlvector	0.8639	9.20	2009-06-26 13:49:04
11	xiangliang	0.8639	9.20	2009-06-26 07:47:34
12	BruceDengDaoCiYiYou	0.8641	9.18	2009-06-02 17:08:31
13	Ces	0.8642	9.17	2009-06-24 14:34:14
14	majia2	0.8642	9.17	2009-06-23 08:07:50

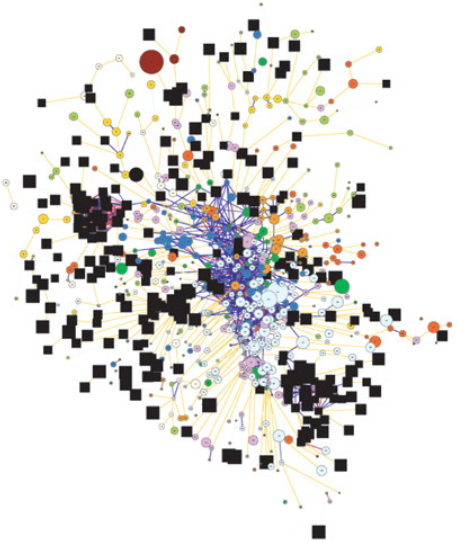
Top-down and majority decisions obstruct collective intelligence

Wisdom of crowds requires independent exploration and then integration

Industrialized Countries

East Asia Pacific

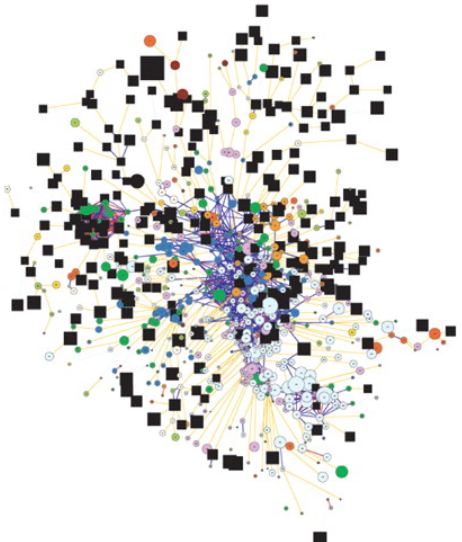


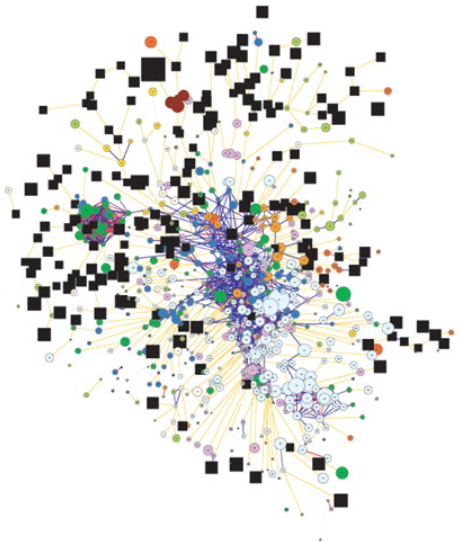


Diversity and Complexity Are Crucial Economic Success Factors

Latin America and the Caribbean

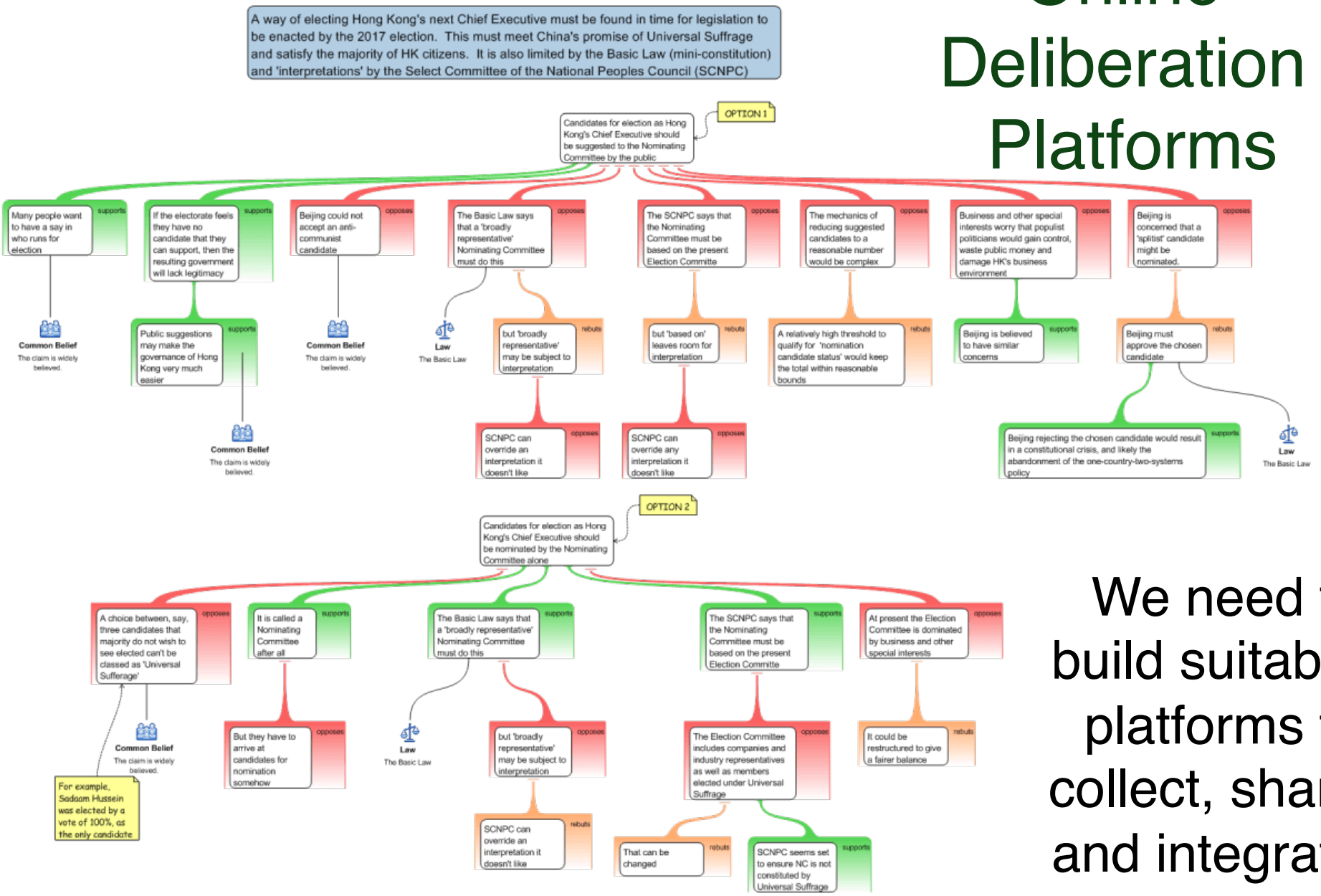
Sub-Saharan Africa





C.A. Hidalgo, B. Klinger, A.L. Barabasi, R. Hausmann, The product space conditions the development of nations. *Science* **317**, 482-487 (2007).

Online Deliberation Platforms



We need to build suitable platforms to collect, share and integrate ideas

IMAGINECHINA/CORBIS

Many choices that people consider their own are already determined by algorithms.

Build digital democracy

Open sharing of data that are collected with smart devices would empower citizens and create jobs, say **Dirk Helbing** and **Evangelos Pournaras**.

Value Pluralism

- Privacy
- Autonomy
- Equity
- Justice
- Dignity
- Happiness
- Wellbeing
- Safety
- Security
- Sustainability
- Health
- Friendship
- Solidarity
- Peace
- Usability
- Resilience
- Efficiency
- Flexibility

After Jeroen van den Hoven

A benevolent dictator does not exist.
Goals must be balanced (politically negotiated).
Otherwise, the approach is oversimplified, inadequate.

Capitalism 2.0: Liberal, democratic, participatory, social, and ecological

The Globalization Is Reaching Its Limits

Müllers Memo: Der Kapitalismus funktioniert nicht mehr

Eine Kolumne von Henrik Müller

AFP

Recycling-Transport (in China): Firmen investieren nicht mehr

Die Weltwirtschaft leidet immer noch stark unter den Folgen der Krise von 2008. Der Hauptgrund: Die Unternehmen investieren viel weniger als früher. Aber warum ist das so?

DIW-Chef Fratzscher: "Die soziale Marktwirtschaft existiert nicht mehr"

DPA

DIW-Chef Marcel Fratzscher

Die wachsende Kluft zwischen Arm und Reich schwächt die deutsche Wirtschaft. Im SPIEGEL warnt DIW-Chef Fratzscher vor Wohlstandsverlusten für alle Bürger.

Handelsblatt

ANZEIGE

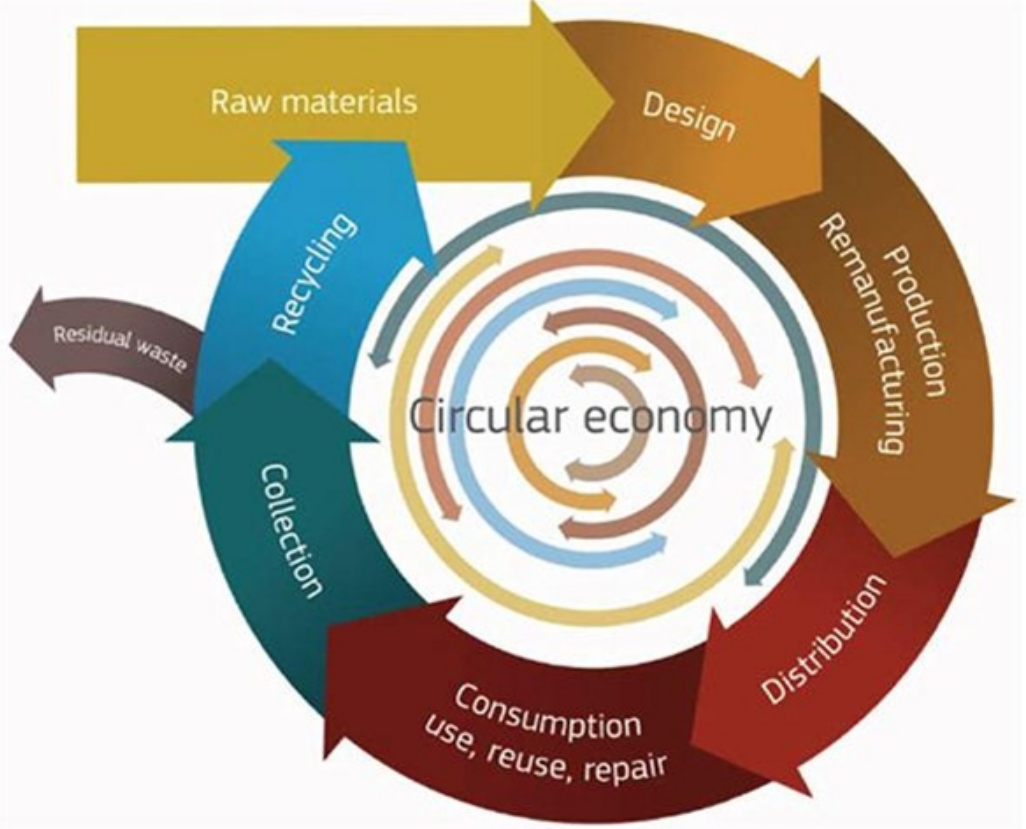
SYSTEMKRITIK

Kapitalismus in der Reichtumsfalle

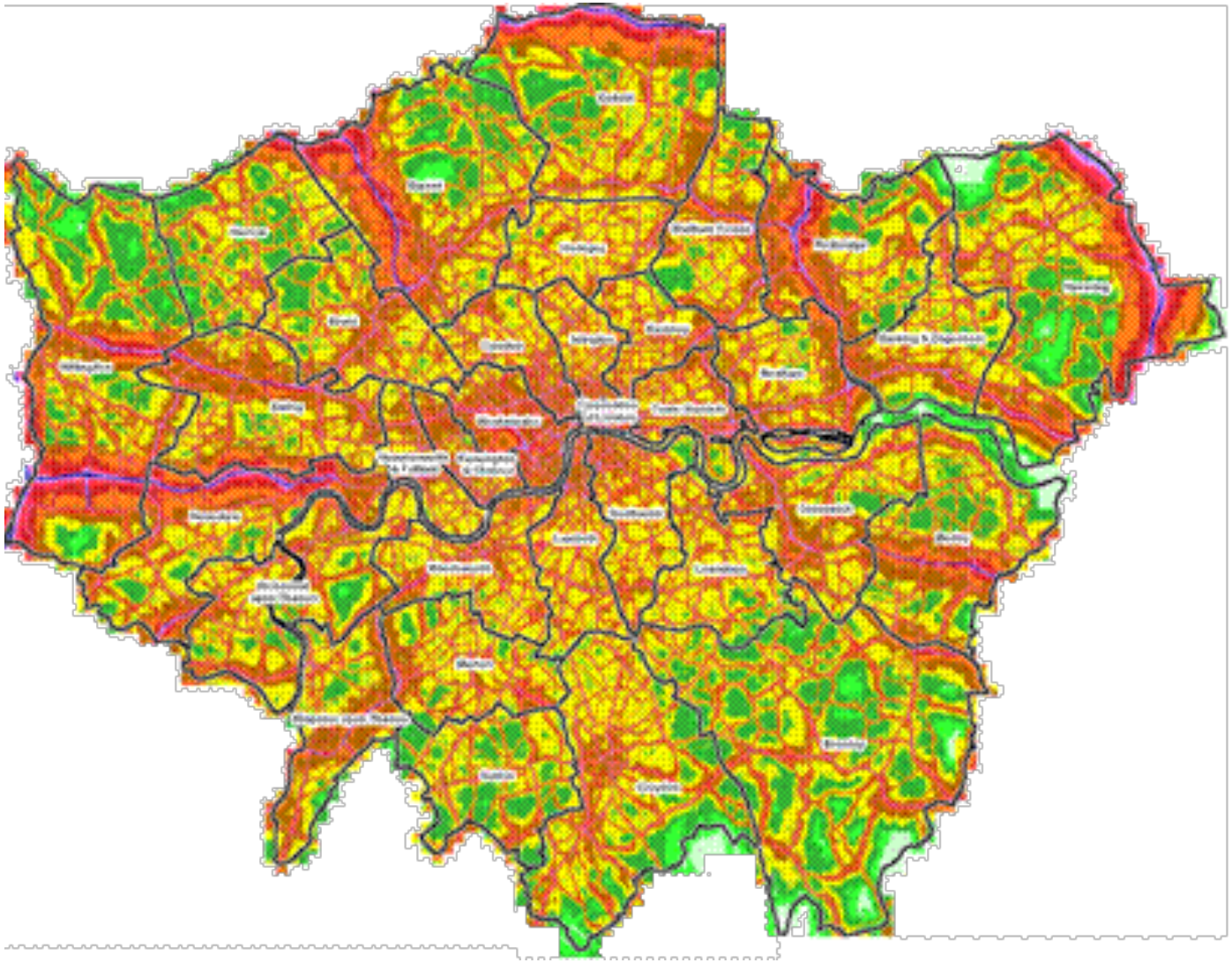
Autor: Wolfgang Uchatius
Datum: 20.11.2011 09:20 Uhr
Quelle: Zeit Online

Mehr Schulden statt mehr Wohlstand - das Wirtschaftssystem, wie wir es kennen, funktioniert nicht mehr gut. Warum es sich lohnt, nach Alternativen zu fragen.

Circular Economy + Sharing Economy



Noise Mapping



Map Resources and Who Uses Them

Could help to avoid shortages and recessions

Swarm
Pulse

mapping the world together

SHARE

Share light and sound sensor data, text messages, links and websites with users across the world.

VISUALIZE

Visualize light and sound levels in your city, view text messages and links shared by users over a map both in real time and in the past.

DOWNLOAD

Download the Android / iOS mobile app from the Google Play and Apple App Store respectively.

Available on the App Store

ANDROID APP ON Google play

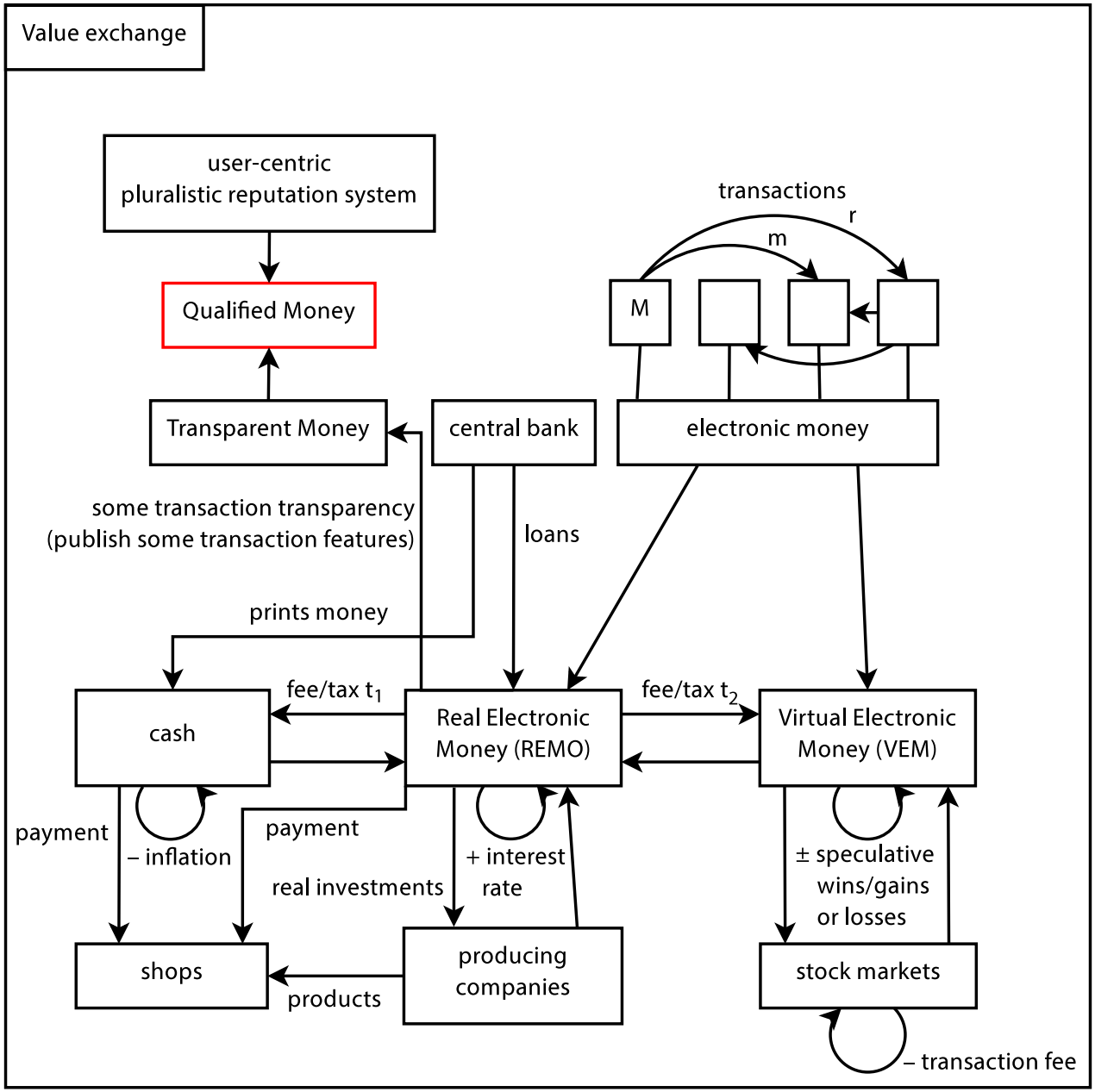
www.swarmpulse.net
www.nervousnet.info

ETH zürich
Professorship of Computational Social Science (COSS)
Clausiusstrasse 50
8092 Zürich, Switzerland
Website: www.coss.ethz.ch

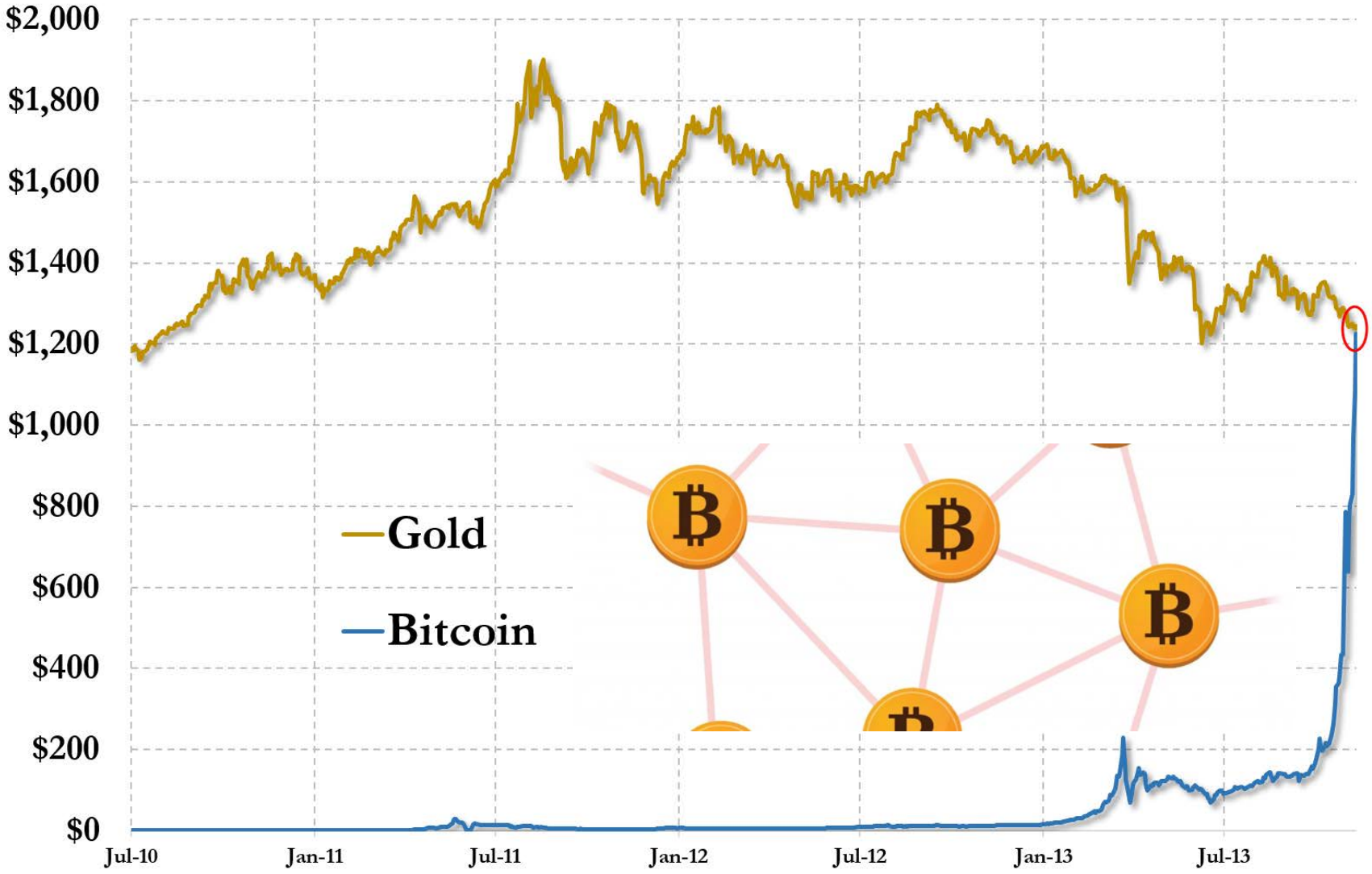
Carrier 4:39 PM

Back Visualisation

We Need a Multi-Dimensional Incentive/ Reward System: „Qualified Money“



We Can Now Turn Bits into Real Value, as BitCoin Has Shown



Summary

If we go on as before, we may end in disaster, characterized by

- loss of democracy, freedom
- mass unemployment
- financial and economic collapse
- resource shortages
- serious climate change
- global war

Superintelligence will not prevent this, but a digitally upgraded socio-economic system may.

A Better System - A Better Future

- Big Data, but open, participatory, fair
- Artificial intelligence, but symbiotic and ethical (values by design, human rights)
- Incentive systems, but multi-dimensional
- A new operating system for society, but with creative bottom up opportunities (self-organization, self-regulation, coordination)
- A socio-ecological capitalism, combining the IoT with FinTech and complexity science

A Networked, Well Coordinated Distributed System of Largely Autonomous Systems

Let‘s Do This Together!

Image Source: http://demosite.in/applicationdevelopment.php