

WHY PUBLIC POLICIES FAIL

Bernardo Mueller


Department of Economics

Universidade de Brasília

Structure of the talk

- Evidence that policies fail.
 - Why is failure so common?
 - Five pathologies of complex systems
 - What kind of approaches can work with complex systems?
 - Conclusion: new approaches may help, but we must also adjust expectations about what can be achieved when dealing with complex systems.
-

Data on policy failure

- No systematic data.
 - Not even clear what is the definition of failure.
-
- 

McConnell (2015, p. 221) “a policy fails, even if it is successful in some minimal respects, if it does not fundamentally achieve the goals that proponents set out to achieve, and opposition is great and/or support is virtually non-existent.”

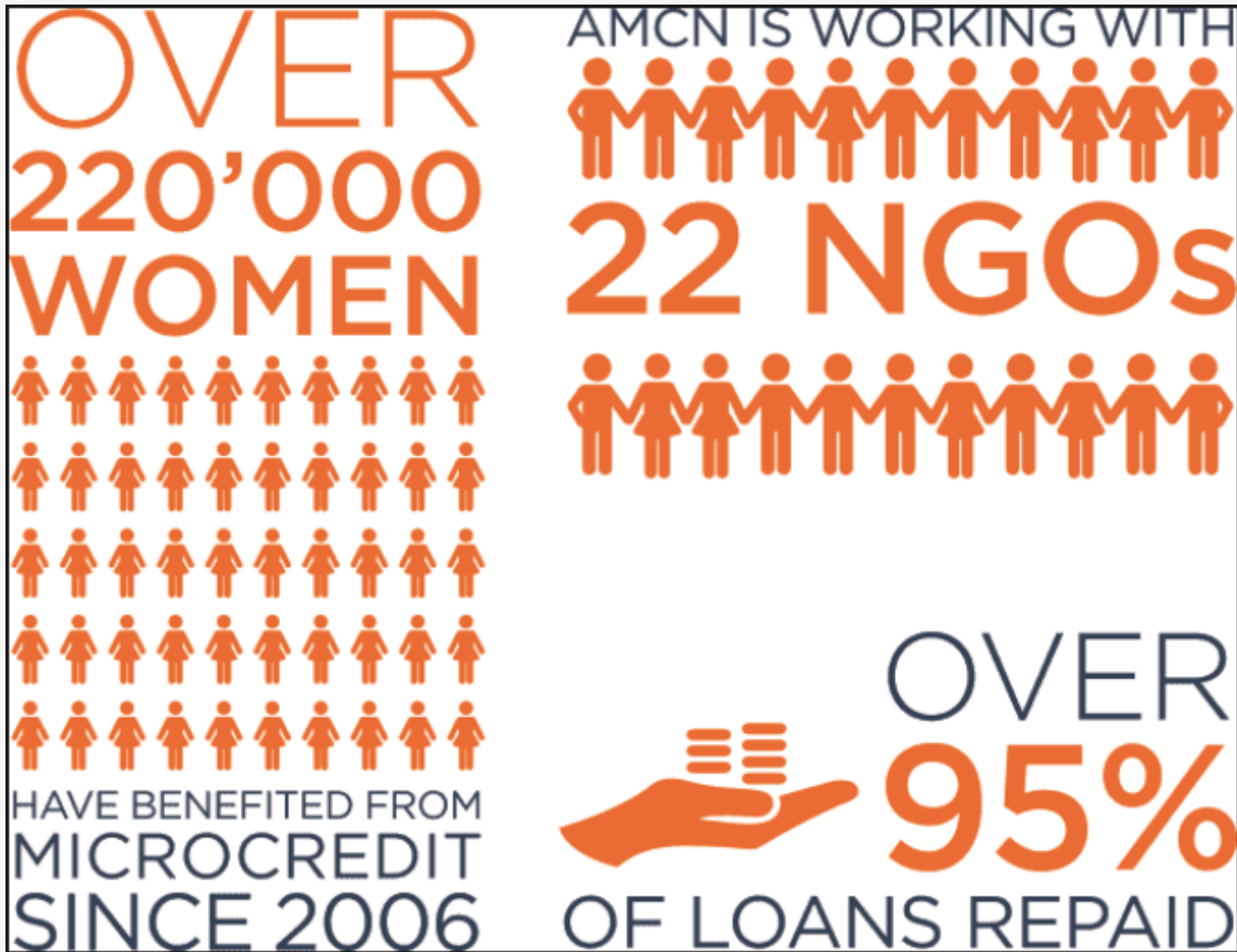


King and Ivor (2014), for example, define a policy blunder, as opposed to a simple policy mistake, as “a case of a government initiative to achieve one or more stated objectives which not only fails totally to achieve those objectives, but in addition wastes very large amounts of public money, and/or causes widespread human distress, and was eventually abandoned or reversed, and was foreseeable.”

Three examples of prominent policy failure

- Microcredit
 - Individual Transferable Quotas
 - Mega-projects
-
- 

Microcredit



Microcrédito

- Small loans to the poor (often to women)
 - Collective
 - Community
 - *Entrepreneurship*
 - United Nation: 2005 Year of Microcredit.
 - 2009 74 million people: US\$38 billion.
-

Ms. Nuong receives a small loan from
VHI



With the money, she
bought a nursing sow

With the support of **Cần Thơ University**, she learned to raise husbandry properly, using preventive care such as pig vaccination, proper feed etc...

With the help of the local **Women's Union**, she learned to manage her family activities: inventory, basic accounting family finance, culture, happiness, environmental protection.

After one year, she paid back the loan with interest. She has the option to renew her loan.

The sow produced 12 little piglets within one year. She sold a few and kept the rest.



MICROCREDIT AFRICA WORKS



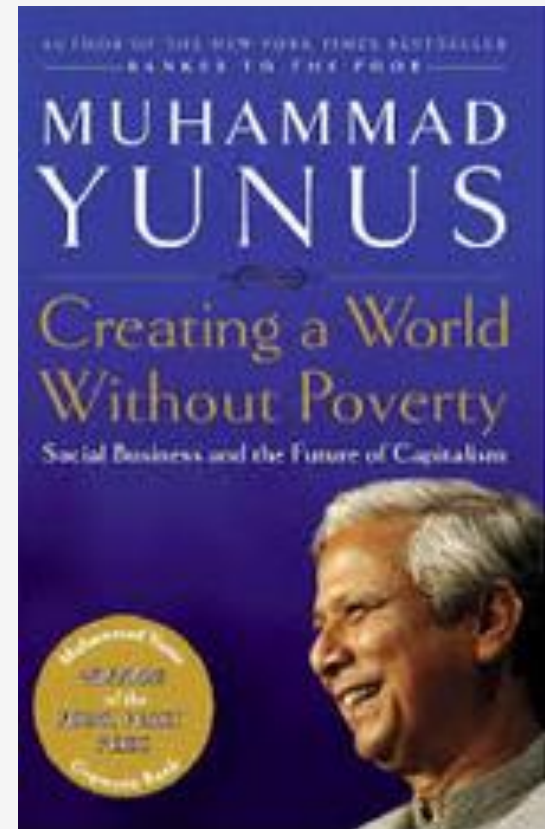
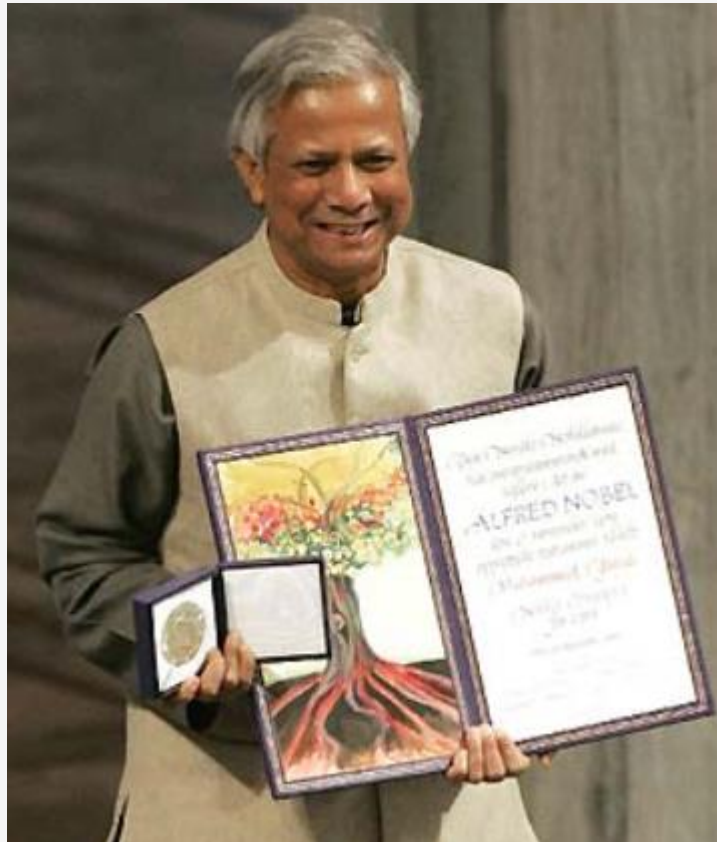
UNITED COLORS
OF BENETTON.



BENETTON

FABRICA
© Benetton Group S.p.A. 2001 - www.benetton.com

AFRICA WORKS  MICROCREDIT  AFRICA WORKS  ALLA RENEY MANE **MILLER**  MICROCREDIT  AFRICA WORKS  MICROCREDIT  PINSOUMANE KANTE **WELDER**  MICROCREDIT  AFRICA WORKS  MICROCREDIT





NIST
MICROCREDIT BANK



MICROCREDIT SUMMIT CAMPAIGN



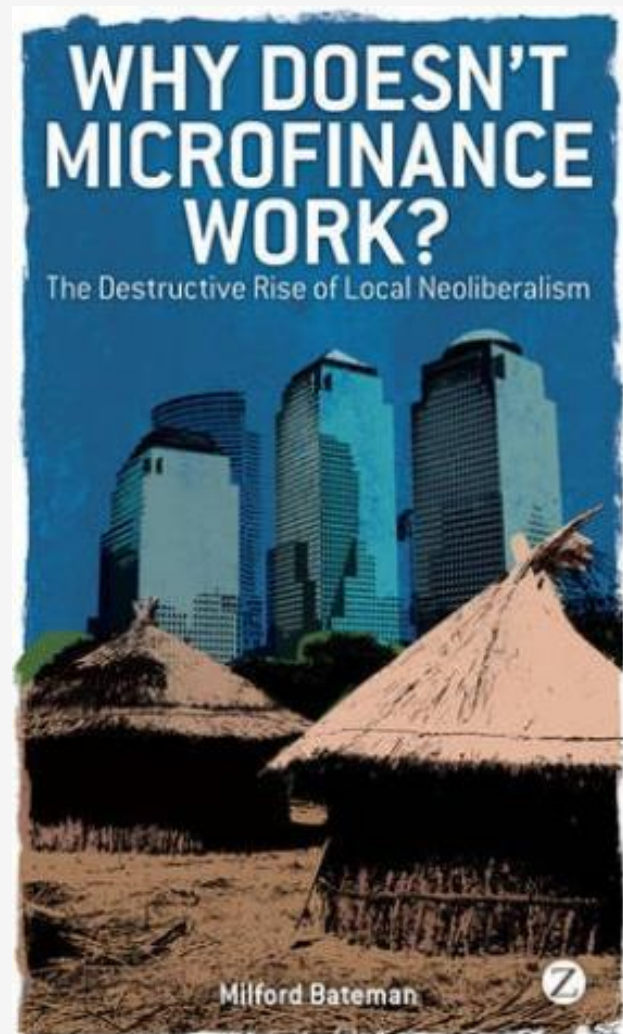
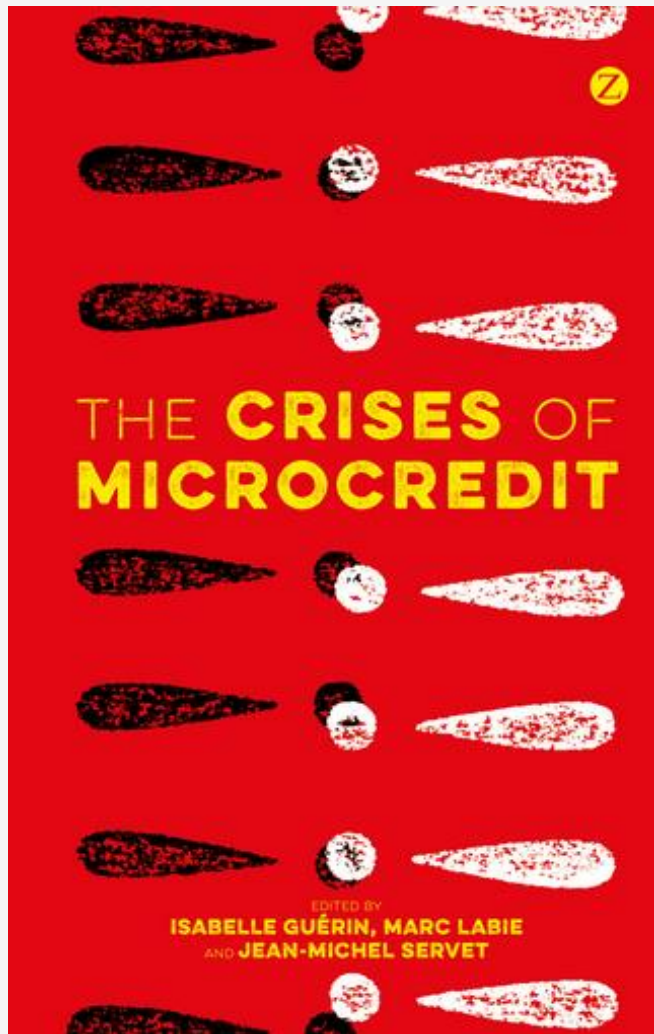
LOLC
MICRO CREDIT
(An LOLC Group Company)



micr  **credit**

E N T E R P R I S E S

Give More. Guaranteed.



Six Randomized Evaluations of Microcredit: Introduction and Further Steps[†]

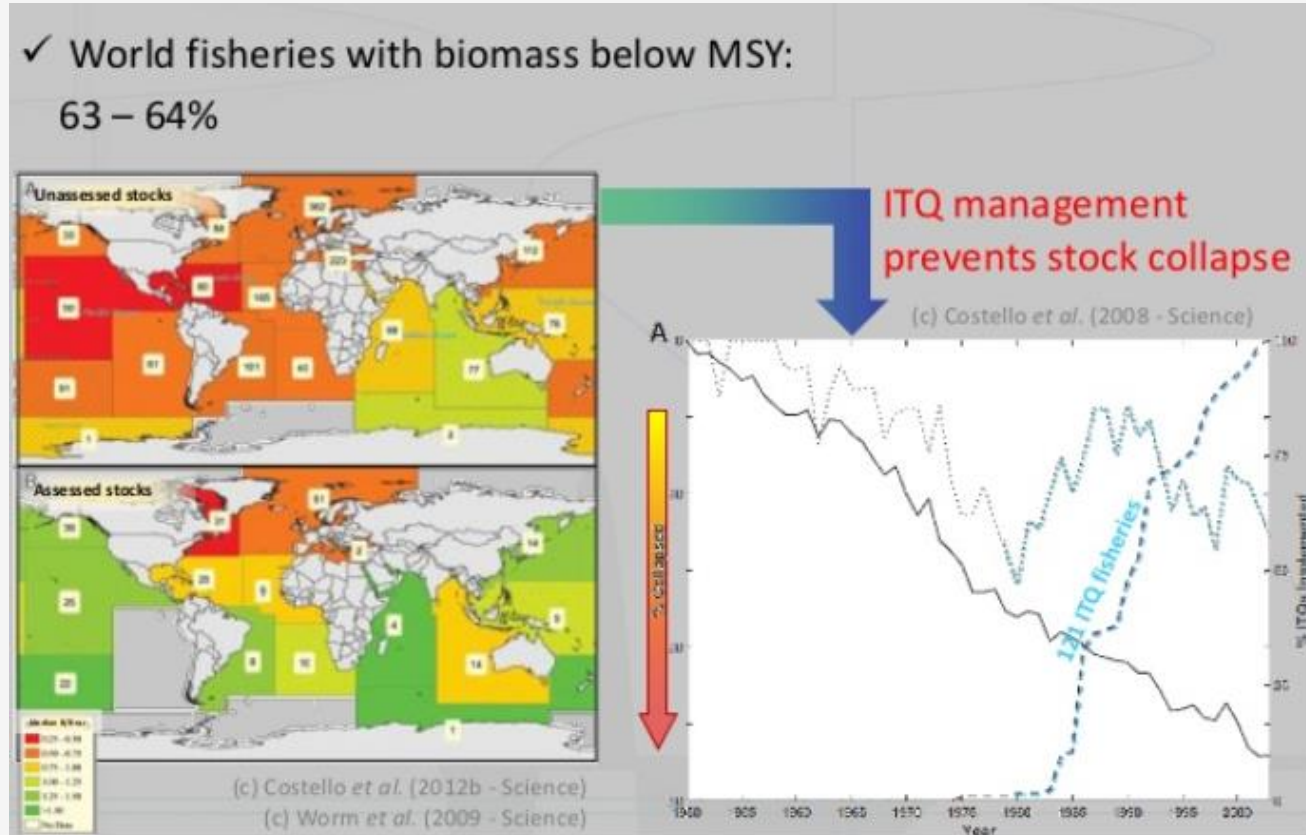
By ABHIJIT BANERJEE, DEAN KARLAN, AND JONATHAN ZINMAN*

Causal evidence on microcredit impacts informs theory, practice, and debates about its effectiveness as a development tool. The six randomized evaluations in this volume use a variety of sampling, data collection, experimental design, and econometric strategies to identify causal effects of expanded access to microcredit on borrowers and/or communities. These methods are deployed across an impressive range of locations—six countries on four continents, urban and rural areas—borrower characteristics, loan characteristics, and lender characteristics. Summarizing and interpreting results across studies, we note a consistent pattern of modestly positive, but not transformative, effects. We also discuss directions for future research. (JEL D14, G21, I38, O15, O16, P34, P36)


... there is little evidence of transformative effects. The studies do not find clear evidence, or even much in the way of suggestive evidence, of reductions in poverty or substantial improvements in living standards. Nor is there robust evidence of improvements in social indicators. (Banerjee et al., 2015, p. 13)¶

Markets for Property Rights - ITQ

- Tragedy of the Commons
- Collapse of fisheries across the world



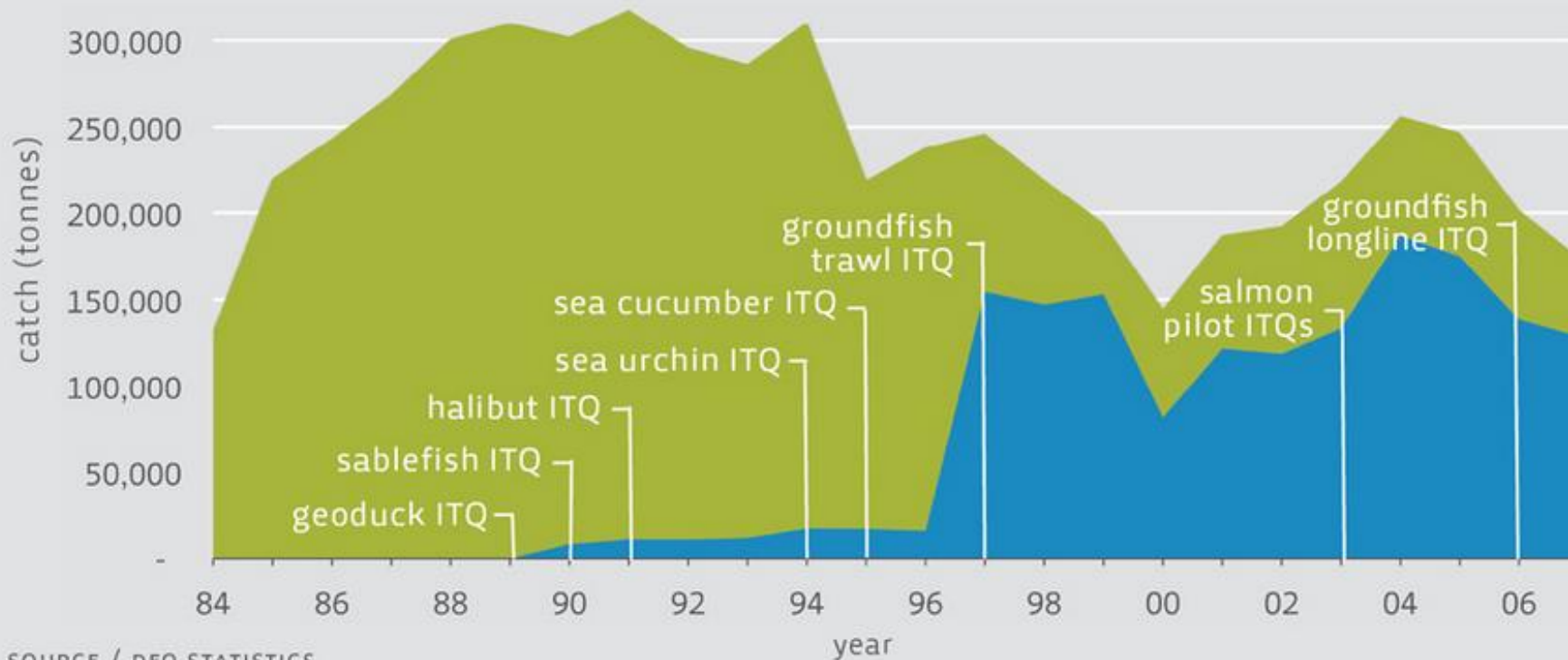
Individual Transferable Quotas

- Create a market where one doesn't exist
 - Elegant solution (Cropper and Oates, 1992)
 - The market limits extraction and allocates effort more efficiently than regulators
-
- 

A wave of ITQs in BC's commercial fisheries

The number of ITQ fisheries in BC is rising sharply. By 2007, 74 per cent of BC's commercial catch, by weight, was managed under ITQs. Since 2003, pilot ITQs have started in several BC salmon fisheries.

■ TAC (total allowable catch)
■ TAC managed under ITQs




SOURCE / DFO STATISTICS

Evaluations of ITQs

- Science (2008) ITQ use reduced probability of collapse by 13,7% (sample of 11 thousand fisheries)
 - Chu (2009): of 20 fisheries analyzed that use ITQs 12 showed some improvement.
 - Improvement in incomes but not in stocks.
 - Redistributive distortions.
-

Mega-Projects

- Mega-projects are “large-scale, complex ventures that typically cost US\$1 billion or more, take many years to develop and build, involve multiple public and private stakeholders, are transformational, and impact millions of people”(Flyvbjerg, 2014, p. 6)
-
- 



Futurism

MEGAPROJECTS

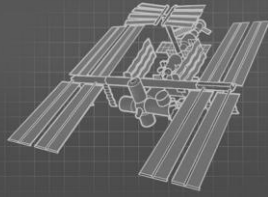
THE BIGGEST BUILDS IN THE WORLD

These enormous construction projects tip the scales on many levels—size, complexity and cost. Welcome to our roundup of the biggest, boldest and most expensive projects being built on Earth or above it.

INTERNATIONAL SPACE STATION

\$150 BILLION (AS OF 2010)

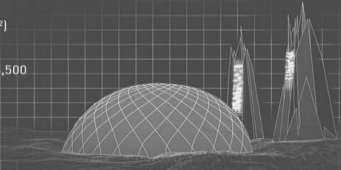
The most expensive single item ever built currently orbits the Earth at an altitude of over 300 km (186 mi). Its expansion continues with current scheduled construction estimated at \$40 billion, and additional expansions well beyond 2020 projected to reach \$1 trillion. The ISS is the human species' most sophisticated offworld outpost—a jumping off point to the alien worlds beyond.



DUBAILAND

\$64 BILLION

Another Dubai megaproject is a 278 km² (173 mi²) complex set to open in 2025. It will have theme parks, sports venues, eco-tourism, science attractions, hotels (including the biggest—with 6,500 rooms) and a 3 million square-meter mall.



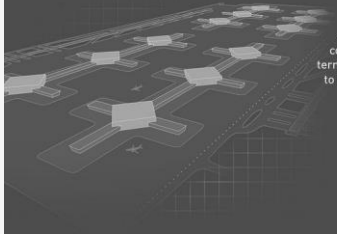
LONDON CROSSRAIL PROJECT

\$23 BILLION

AL MAKTOUM INTERNATIONAL AIRPORT

\$82 BILLION

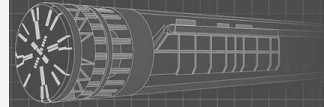
Dubai is noted for its big builds, and this airport—which opened in 2010 and will be fully completed in 2018—will be the world's largest in terms of size and passenger volume. It will be able to accommodate 200 wide-body aircraft at a time, land four jets simultaneously, and handle 160 million people per year.



LONDON CROSSRAIL PROJECT

\$23 BILLION

The world's first underground railway is undergoing expansion with the addition of 42 km (26 mi) of new tunnel connecting 40 stations. Construction began in 2009 with completion done in phases—the first new track will open in 2018 and all remaining tracks will be in service by 2020.



SOUTH-TO-NORTH WATER TRANSFER PROJECT

\$78 BILLION (AS OF 2014)

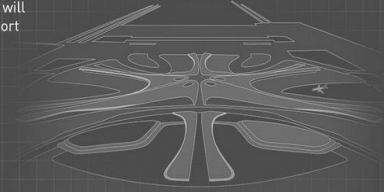
Already nearly three times as expensive as the Three Gorges Dam, the total cost of this project could go higher within the 48-year construction schedule (you read that right!). It involves building three huge canals, each over 766 km (600 mi) long, to channel up to 44.8 billion m³ from the Yangtze River and tributaries to the industrialized north, where 50% of the population reside.



BEIJING DAXING INTERNATIONAL AIRPORT

\$13 BILLION

Envisioned to ease the near-full operating capacity of Beijing Capital International Airport, this project was started in 2014 and is set to open in 2025. It will have seven runways and the world's largest airport terminal, which was designed by Zaha Hadid to handle 100 million passengers per year.



CALIFORNIA HIGH-SPEED RAIL

\$70 BILLION

A high-speed rail system spanning 1,300 km (808 mi) that will link San Francisco with Los Angeles. It will have 24 stations and use high-speed electric trains that can make the trip in less than three hours at 320 km/h. Construction commenced in 2015; the scheduled completion of stations and lines will be done in phases up to 2030.

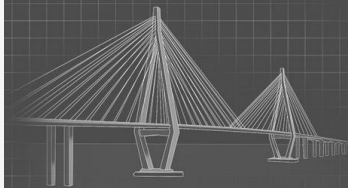


HONG KONG-ZHUHAI-MACAO BRIDGE

\$10.6 BILLION

A 50 km (31 mi) link consisting of a series of bridges and undersea tunnels that will connect three major cities on the Pearl River Delta in China. The project started in 2009 with a completion timeline of 2016.

However, construction delays have pushed the opening date to beyond 2021.



Mega-Projects

- 8% of world GDP.
 - Attraction: the four “sublimes”
 - Technological – engineers and technologists
 - Political – politicians
 - Economic – bankers and businessmen
 - Esthetic – those who like iconic design
-

Results from Flyvbjerg's (2014) analysis of all mega-projects over 70 years

- Success defined as being on budget, on time and deliver promised benefits.
 - Results:
 - 1 out 10 on time
 - 1 out of 10 on budget
 - 1 out of 10 delivered promised benefits
 - Result: 1 out of 1000 is successful
-

Causes:

- Corruption
 - Incompetence
 - Excess optimism
 - Political incentives
 - Nationalism
 - Others
-




Often proposed solutions:


- More effort
 - More information
 - Better governance
 - Better experts
 - More transparency
 - More political will
 - More public spirit
 - Better checks and balances
-



The complex nature of public policies

- More fundamental cause of policy failure:
 - Most public policies deal with complex systems
 - Complex systems cannot be closely controlled or predicted
 - More effort, information, data, etc. can help, but are usually not the solution
-
- 

Usual approach to public policies:

- There is a problem to be solved.
 - Collect information.
 - Consult experts.
 - Pre-state alternative solutions.
 - Calculate expected *payoffs* for each alternative under each pre-stated state of the world considering probabilities and risks.
 - Choose the option with the highest expected payoff.
 - Evaluate often and adjust the course.
-
- 

This often works.

But if the domain is complex ...

- Five 'pathologies' complex systems make this approach ineffective or impossible.
 - Using the traditional approach with complex systems often leads to policy failure.
-

Five Pathology of complex systems:

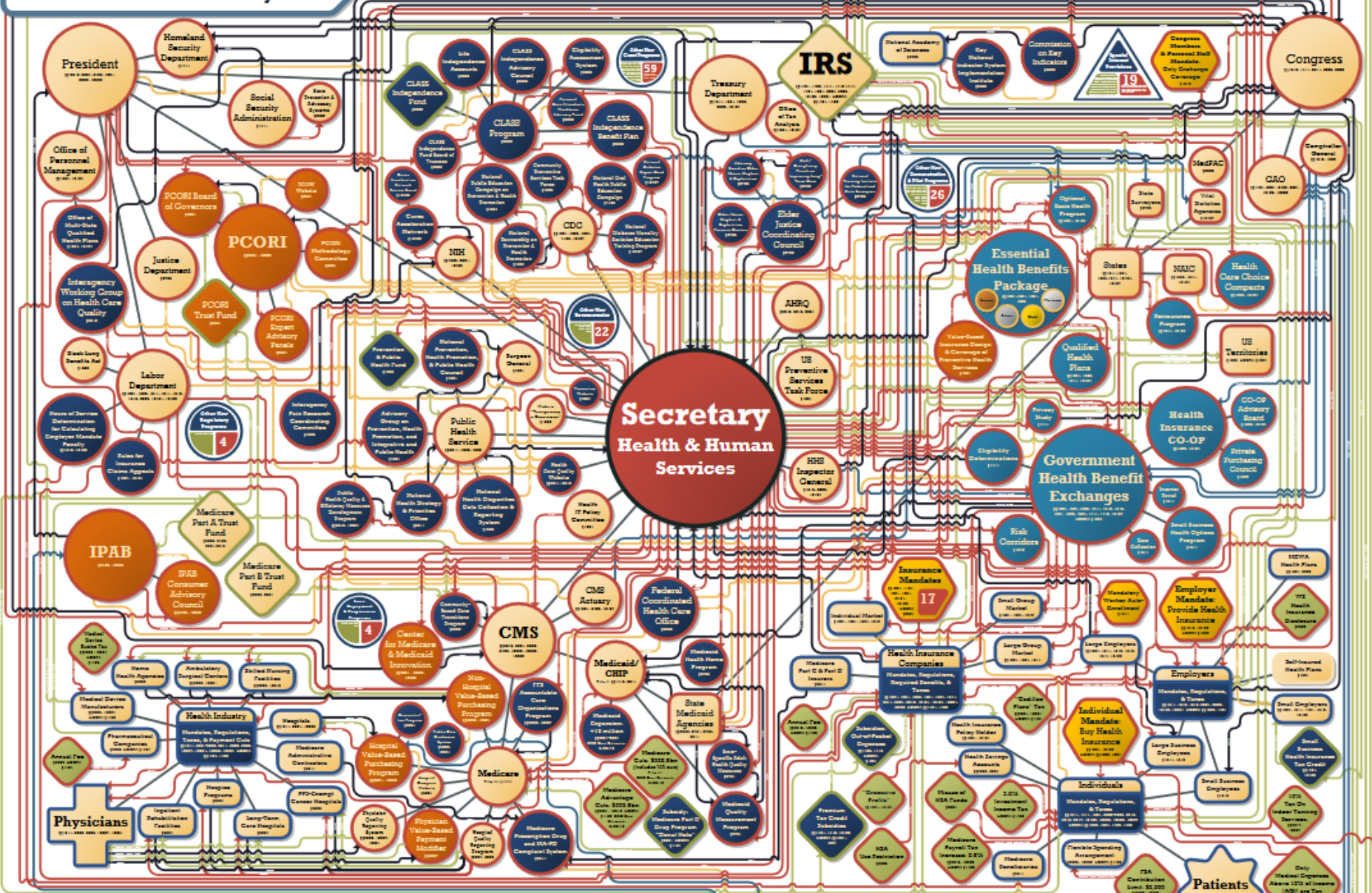
1. Public policy is non-linear and emergent
 2. Public policy does not stay in equilibrium
 3. Public policy evolves and coevolves with other domains (technology, institutions, norms, etc.)
 4. Public policy is subject to cognitive biases.
 5. Public policy is subject to the Lucas Critique and reactivity
-

How to make public policy fail less?

- Modern approaches (AI, IT, Big Data, etc.) ?
 - Some aspirations should probably simply be avoided
 - Main message: With complex systems one still must adjust expectations about what can be achieved
-



Your New Health Care System




New Government	Expanded Government	Private	New Relationships
<ul style="list-style-type: none"> ● Rationing Potential ● Involvement in Health Insurance Market ● Other Expansions ● Represents Bundles of Additional Entities 	<ul style="list-style-type: none"> ● Government with Expanded Authority/Responsibility ● Government Financial Entity with New Inflows/Outflows ● State/Territory with Expanded Authority/Responsibility 	<ul style="list-style-type: none"> ● Private Entity with New Mandates/Regulations/Responsibilities ● Unchanged Private Entity ● Special Interest Provisions 	<ul style="list-style-type: none"> → Regulations/Mandates → Reporting Requirements → Oversight → Money Flows → Consultation/Advisory/Info Sharing → Structural Connections (Includes Existing)

AIC: Adjusted Gross Income
 AHRQ: Agency for Healthcare Research and Quality
 CDC: Centers for Disease Control & Prevention
 CHIP: Children's Health Insurance Program
 CLASS: Community Living Assistance Services & Supports
 CMS: Centers for Medicare & Medicaid Services
 CO-OP: Consumer Operated & Directed Program
 FTA: Family Tax Assistance
 FTA: Family Tax Assistance
 GAO: Government Accountability Office
 HHS: Health Care & Services Reorganization Act
 IGA: Insurance Guaranty Association
 IPAB: Independent Payment Advisory Board
 IRS: Internal Revenue Service
 MAC: Medicare Administrative Contractor
 MA-PD: Medicare Advantage Prescription Drug
 MedPAR: Medicare Payment Advisory Commission
 MEDP: Medicaid Early Risk Detection
 CAUCD: Executive Advisory United States Special Systems
 NEHA: Multiple Employer Welfare Arrangement
 NAAC: National Association of Insurance Commissioners
 NIH: National Institutes of Health
 NIOSH: National Institute for Occupational Safety and Health
 PCORI: Patient-Centered Outcomes Research Institute

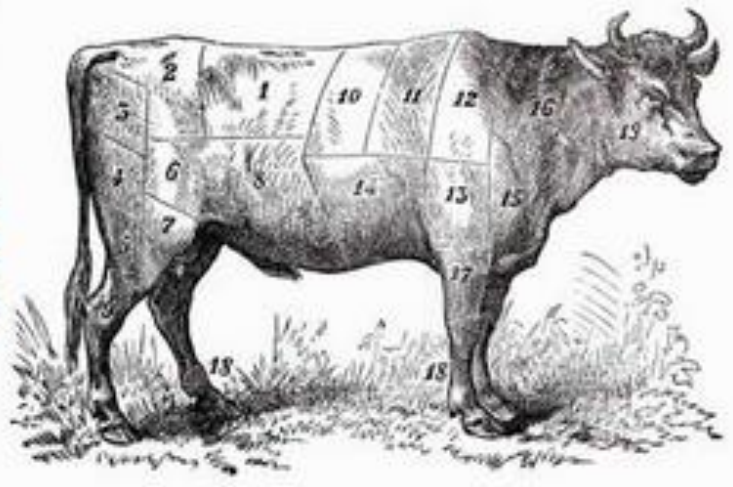
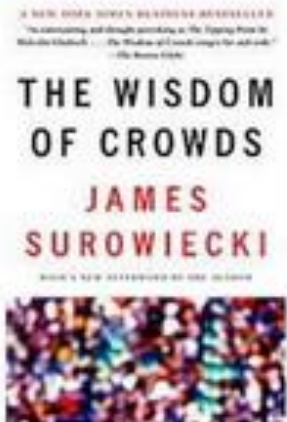
Patient Protection & Affordable Care Act, P.L. 111-148;
Health Care & Education Reconciliation Act, P.L. 111-152
 Prepared by: Joint Economic Committee, Republican Staff
 Congressman Kevin Brady, Senior House Republican
 Senator Sam Brownback, Ranking Member

Some approaches that have the
right epistemic attitude for dealing
with complex systems



Wisdom of the crowd, prediction markets, collective brain, etc.

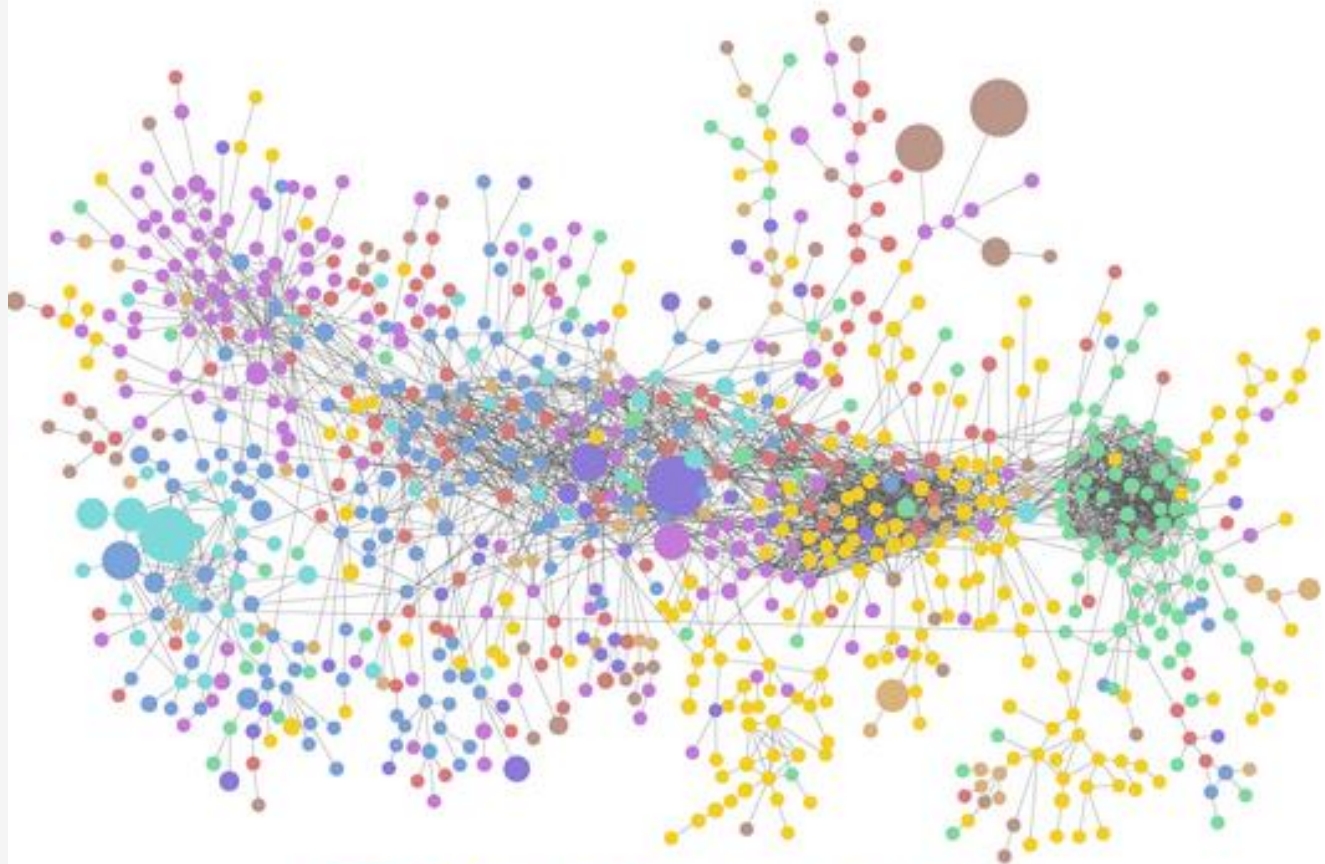
The Wisdom of Crowds



96

ATLAS

OF ECONOMIC COMPLEXITY
by the Growth Lab at Harvard University



COUNTRY x ▼

Trade Data Visualization



Complexity Visualization



Product Space

The product space depicts the connectedness between products, based on the similarities of know-how required to produce them. Hover and click on one or multiple product nodes for more information. Double click outside a node to deselect all. Product nodes are sized by world trade.

Nowcasting - “React to the present”



Mullet strategy

HUFFPOST

NEWS POLITICS ENTERTAINMENT COMMUNITY LIFE PERSONAL VIDEO SHOPPING HIGHLINE

#TRENDING AMAs Jada Calls Out T.I. NFL QB Misses Play Lindsey Graham Thanksgiving Prep Rick Perry Calls Trump 'Chosen One' Hoda Kotb Engaged

SECRET DOCS: HOW CHINA LOCKED UP MORE THAN A MILLION PEOPLE



/ FEATURED STORIES /

Trump Got His Wall, After All

A small, dedicated crew of hardliners have put up barriers that are far harder to overcome than any hunk of concrete.

Climate Change Is Threatening Our Jobs — And Most Companies Are Doing Nothing

Few companies have clear “climate leave” policies explaining what workers can expect in the face of worsening disasters.

Outnumbered And Scared, These Kurdish Americans Are Fighting Trump's Syria Policy

Two women in California are mobilizing America's small Kurdish community to fight an existential danger back home.

The Story Of Emmett Till's Murder Is Always Under Threat

Till's story is a sobering reminder of America's racist history — and some want to erase it.

/ LATEST NEWS /

AdChoices



POLITICS

Pentagon Chief Says Trump Ordered End To Disciplinary Process



POLITICS

Elizabeth Warren Accuses Billionaire Bloomberg Of Trying To 'Buy A



U.S. NEWS

Supreme Court Rejects New Trial In Adnan Syed 'Serial' Podcast Case

Shared spaces



Shared space has transformed the center of Poynton in England | Image via Ben Hamilton-Baillie

Prizes



1714 the Longitude Act in Britain

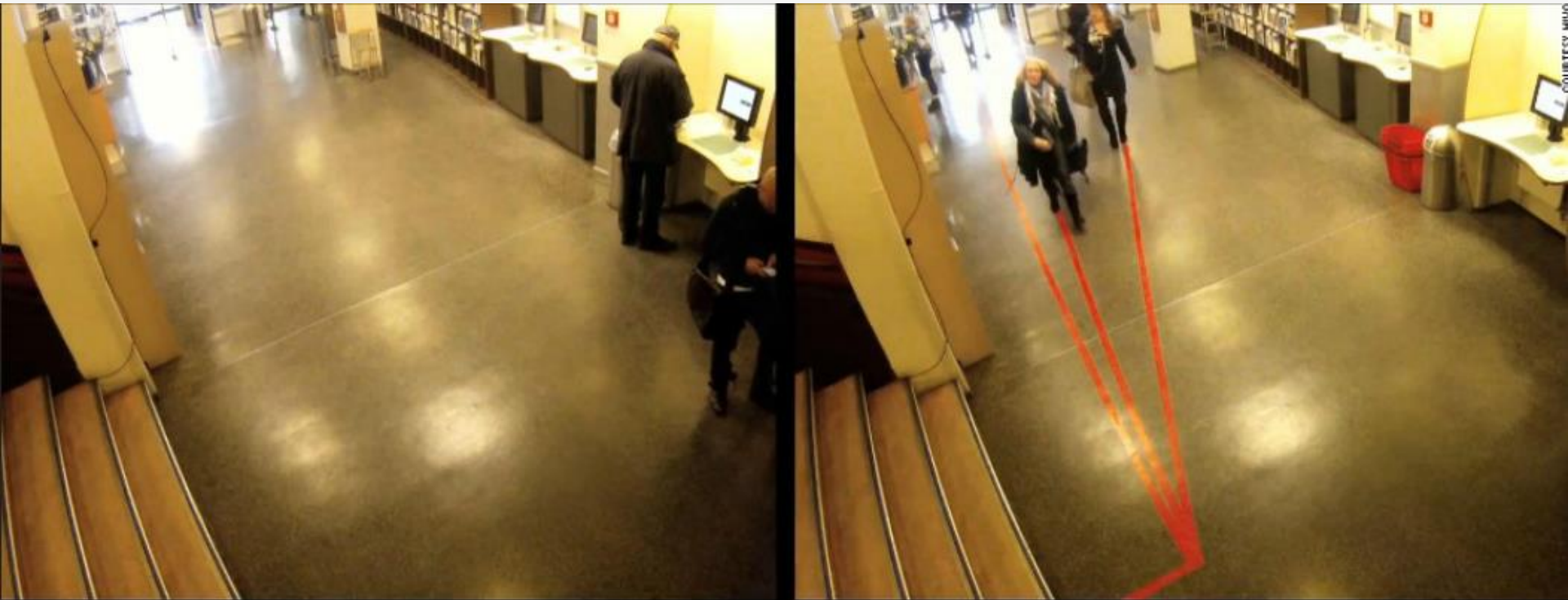


THE CHALLENGE: REDUCE THE USE OF ANTIBIOTICS

How can we prevent the rise of resistance to antibiotics?



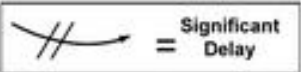
Nudge



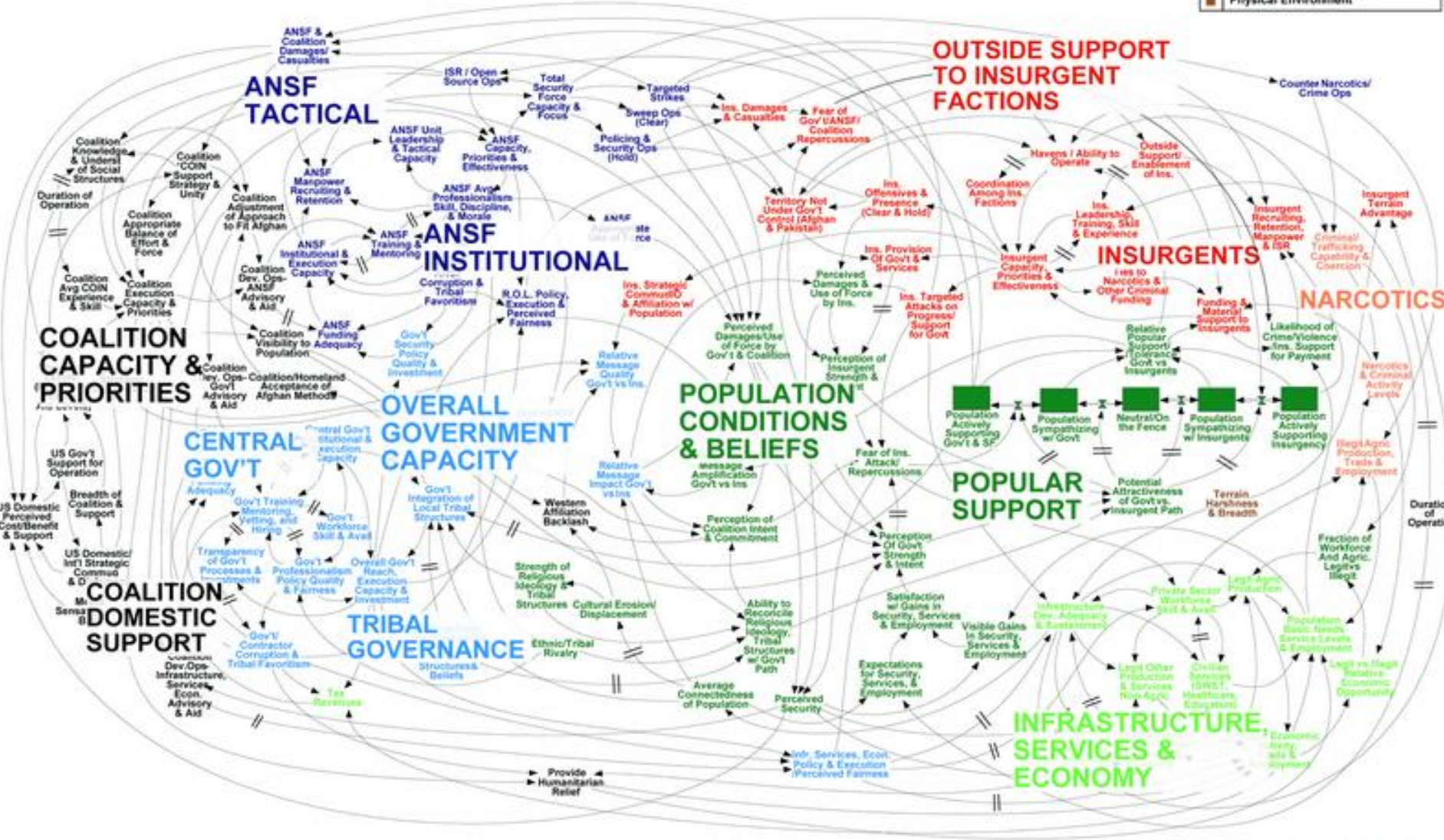
Concluding remarks

- Recognize the complex nature of most policy domains.
- New technologies may help but complex systems can still not be controlled.
- In the end we must adjust our expectations of what can be achieved.

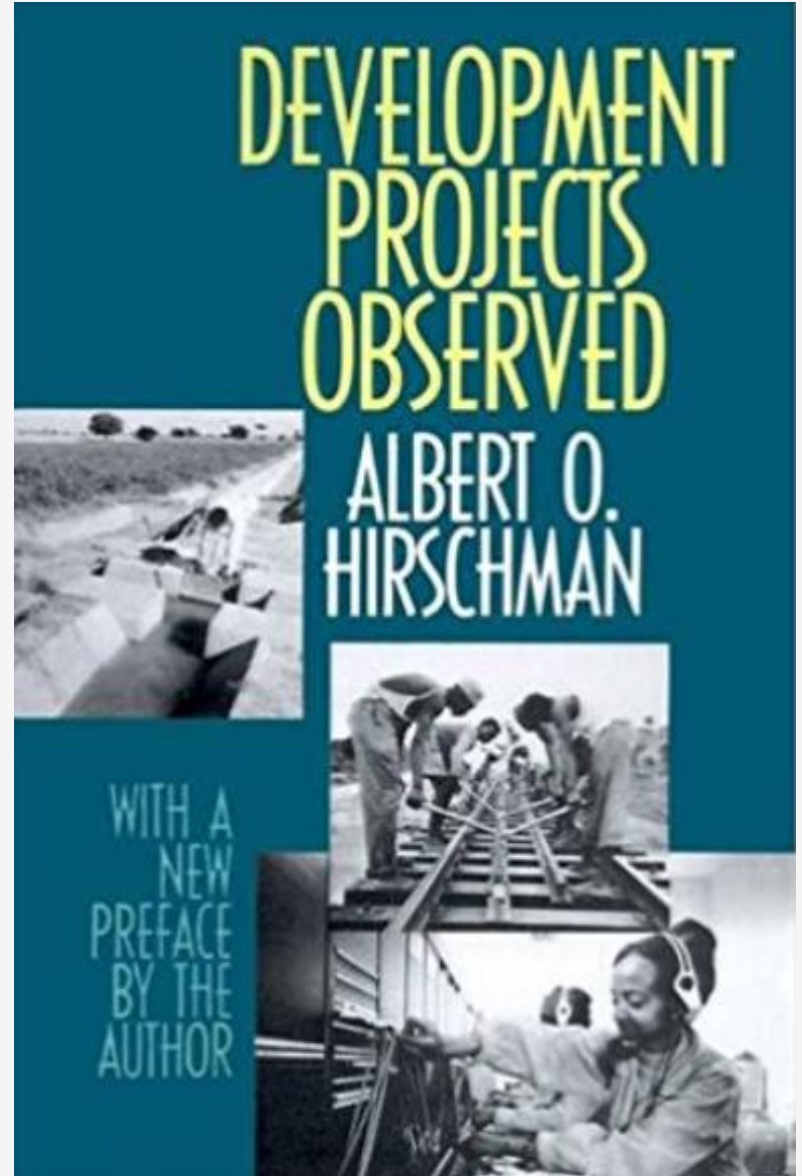
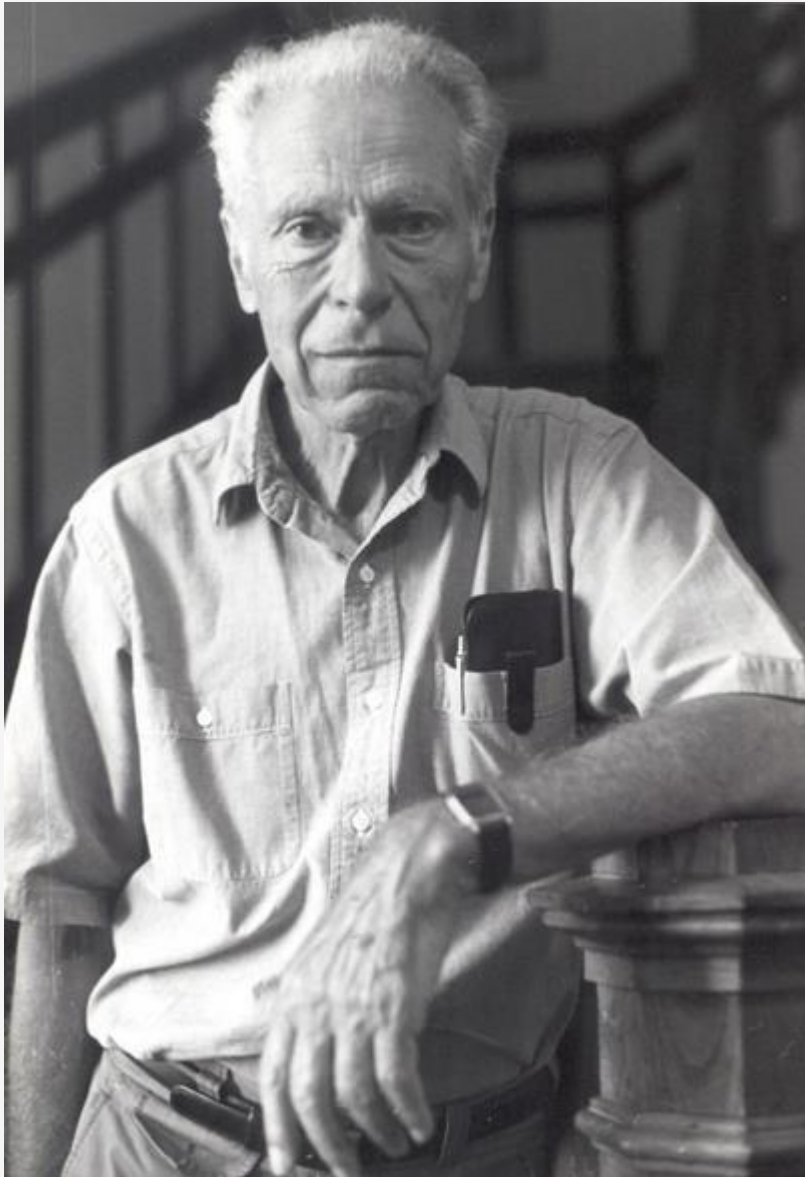
Afghanistan Stability / COIN Dynamics



- Population/Popular Support
- Infrastructure, Economy, & Services
- Government
- Afghanistan Security Forces
- Insurgents
- Crime and Narcotics
- Coalition Forces & Actions
- Physical Environment



WORKING DRAFT - V3





Hiding Hand Principle

Hirschman was a planner who saw virtue in the fact that nothing went as planned.