

ALBERTO COTTICA – EDGERYDERS

# THE BLACK BRIEFING

WHY WELL-INTENTIONED POLICIES FAIL SO BADLY, AND WHAT YOU CAN DO ABOUT IT

SALZBURG GLOBAL SEMINAR, 2018

Good morning everyone, welcome to the Black Briefing. I want to unpack a couple of ideas that have been floating around the Seminar. Many of you work with decision makers, and from what I gather, that is not always a satisfactory relationship. Sometimes you bring them evidence, but they still fail to act upon it. Sometimes they do take action on it, but they do it so badly that you cannot recognise your original idea in the action. And yet, these are smart, powerful people. I would like to attempt an explanation of why this happens; consider whether this might not be a blessing in disguise; and suggest some things you can possibly do.

2000S: "THE  
INTERNET WILL  
CHANGE  
GOVERNMENT"



In the 2000s, I became a believer in the idea of open government. I thought Internet would improve our democracies by lowering the cost of coordination across citizens. This would work across the board and make everything easier. We had cheap, effective, accessible tools for transparency, participation and collaboration.



My personal plan was, and still is, to create accountable ways to aggregate the collective intelligence of citizenry, monitoring online collaboration with network science. Then I would just *show* decision makers my result. They had democratic legitimacy. They aggregated and validated information dispersed in the citizenry. Why would policy makers not use them? This is real data by the way, a visualisation of the online community maintained by my own company, Edgeryders – I don't want to go into that, ask me later about the technicalities of how I go about that.

“DESPITE ALL THE ENTHUSIASM FOR AND WIDESPREAD RECOGNITION OF THE POTENTIAL BENEFITS OF MORE OPEN GOVERNANCE, THE OPEN GOVERNMENT MOVEMENT HAS HAD REMARKABLY LITTLE EFFECT ON HOW WE MAKE PUBLIC DECISIONS, SOLVE PROBLEMS, AND ALLOCATE PUBLIC GOODS.”

- BETH NOVECK, 2015

Now all that's gone. After a batch of early successes, our incremental strategy has stopped delivering. We pay a lot of lip service to the principles of open government, but very little transfer of power has happened. Why is that?

# CHANGE VS. CHANGE



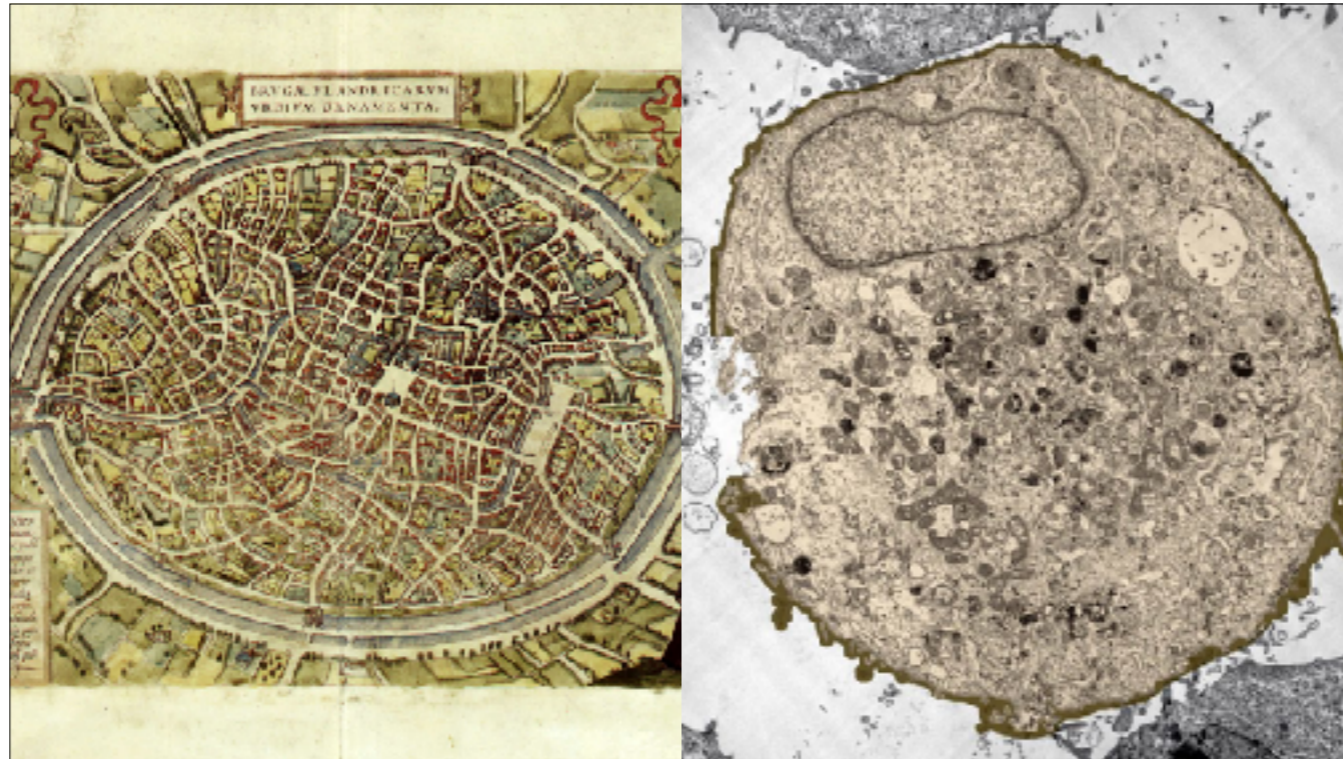
In one sentence because processes of change in government institution, even in democracies, are fundamentally different from processes of change in civil societies. In fact, they are so different as to be mutually exclusive. This makes it difficult and frustrating to harness bottom-up approaches to deliver change to government.

For a government, change is administrative ordering. They think of themselves as tools, wielded by the ruler. Change is a way to make these tools more efficient; for the king, or the president, to do whatever they want to do, better, faster, cheaper. The main instrument of change is the grid, that makes legible, and therefore manageable, the complexity of things, people, and what they do. Its goal is standardisation. I chose here to represent this concept with containers. Containers enable administrative ordering of logistics. Once objects are inside container, there is no need to think about objects anymore, you are just shipping and receiving identical containers.

For a society, change is something similar to what evolution is in nature. There is no single collective agent that wants to change: there are individual social actors that take action, pursuing each their own goals. The result of all these actions, and of their interaction, is change. I chose to represent this with a picture of Tahrir Square in Cairo during spring 2011. The Arab Spring and all its various fallouts was not caused by any one agent saying "OK, we need some innovation here. Let's make the Arab Spring and bring the government down". Its alleged initiator, Mohamed Bouzizi, was no political mastermind: he was a street vendor, all the action he took was to set fire to himself, and he was not even Egyptian. Change manifests here as increasing diversity. New species in biology, new social actors and balances of power in social science.

	GOVERNMENT: ADMINISTRATIVE ORDERING	SOCIETY: EMERGENCE OF ECOLOGICAL NICHES
GOAL	EFFICIENCY	NONE
PROCESS	TOP-DOWN	BOTTOM-UP
INSTRUMENT	GRID	"EVOLUTION"
RESULT	STANDARDISATION	DIVERSITY

Before I try to argue this point, I want to point out to you that these two ideas of change are not just different: they are divergent. Administrative ordering reduces diversity, whereas the emergence of ecological niches increases it.



That conclusion may sound provocative, but it has roots in the history of governments. Since the early days, governments are faced with the basic dilemma of statecraft: they need to support their activities (not directly productive, like fighting wars) by extracting some surplus from the directly productive classes, i.e. farmers. They need “money and men”: to levy taxes and to conscript young men into their armies. They have the advantage of military force, but their subjects have a massive informational advantage. Remember: pre-modern governments were weak and distant: a French peasant in the 15th century could live his whole life without ever meeting a minion of his king. Human institutions are shaped by countless interactions across individuals. Their shape is complex, fractal, reminiscent of the shapes produced by evolution.

Since interactions are local, institutions are local; almost all knowledge is hyperlocal and tacit. Families want to misrepresent the wealth of their crops (to pay fewer taxes) and the number of their children (to avoid conscription). And they can do that. To the nonlocal royal emissary, it is impossible to know just where my field ends and yours starts, and people can easily hide from recruiting sergeants in the wilderness or in labyrinthine medieval cities like Bruges.

“WOULD IT NOT BE A GREAT SATISFACTION TO THE KING TO KNOW AT A DESIGNATED MOMENT EVERY YEAR THE NUMBER OF HIS SUBJECTS, IN TOTAL AND BY REGION, WITH ALL THE RESOURCES, WEALTH & POVERTY OF EACH PLACE?”

– MARQUIS DE VAUBAN, PROPOSING AN ANNUAL CENSUS TO LOUIS XIV IN  
1686

The scientific revolution of the 16 hundreds gives premodern states new tools to count, measure, and compute. But there is a problem: these instruments only work on a world made of standard units, a world that follows an orderly grid. Starting from the end of the 17th century, European states strive to bring administrative ordering into human societies. This quote from the Marquis de Vauban speaks the language of evidence-based policy, and links it beautifully to statecraft: money and men.



## SOME INNOVATIONS FOR MODERN GOVERNANCE

- THE ARTIFICIAL FOREST
- LAST NAMES
- URBAN PLANNING
- EXCLUSIVE PRIVATE PROPERTY OF LAND (*FREEHOLD*)
- THE CADASTRAL MAP

These innovations do not limit themselves to describing the world as if it were made of identical entities, made to fit into an administrative grid: *they actually transform it in this direction*, or at least try to.

In Germany, forests are re-planted with trees of the same species, of the same age and arranged in straight rows. In the Philippines, the colonial government imposes (Spanish) last names to the indigenous population for taxation and public order keeping. In Paris, Baron Haussmann eviscerates poor neighbourhoods and builds boulevards that intersect at straight angles, to facilitate the deployment of Louis Napoleon's troops and prevent a rerun of the Paris Commune. Most importantly, governments throughout Europe eradicate the traditional patterns of communal use of arable land and other natural resources (described in Ostrom's *Governing the commons*), and replace them with exclusive private property (freehold), a necessary condition for pinning on someone the responsibility for paying taxes on any piece of land. Freehold enables the cadastral map, a related innovation that also enables tax collections.

## 20TH CENTURY SUCCESSES



These new techniques extend the states' sphere of influence. After some initial successes in the 19th century, the 20th sees an unprecedented expansion in the state's powers and responsibilities. A generation of reformers works out an ideology of generalised administrative ordering of society and nature. Anthropologist James Scott calls it "high modernism". It inspires heroic efforts: some benevolent, like Roosevelt's New Deal; others tragic, like Stalin's collectivisation of agriculture in the 30s. Sprawling bureaucracies are created to run these schemes and look, literally, to the stars.

They do another thing, too: they establish themselves as the *sole* entities with both permission and resources to tackle societal problems, and move to regulate strictly who can get on board. As late as the early 19th century, government was, with few exceptions, a kind of hobby. The American government, for example, was run by gentlemen farmers, who took a few years off for community service. The necessary skills were learned on the job. Public officers referred to the so-called citizen literature, which consisted of the declaration of independence, the Federal Papers and the rulings of the first chairman of the Supreme Court.

As the Federation acquires responsibilities and resources, they hire professional bureaucrats, who immediately move to exclude everybody else from government activities. Supply control and an exclusionary stance are, after all, definitional of professions. Curricula are drawn. Universities sprout political sciences departments as the training and recruitment grounds of the new bureaucratic class.

"SOCIETY IS A MACHINE"



The vision of society behind these efforts is reductionist. Society is a machine, big and complicated, but conquerable by modern science. Policy makers are social engineers, who compute exact solutions. Le Corbusier, who liked to design on the basis of precise estimates of how many square meters of space the average person needs to sleep, prepare food, entertain herself etc. always aspired to "advise wise princes and statesmen", and applied to many such jobs. He had figured out that modernist leaders long for simple, exact tools, even when they are unfit to describe reality. Let reality adjust!

No one plays this game better than economists. Keynesian state deficit, the traditional central banker's interest rate, Friedman's money supply are all perfect modernist tools. Scalar parameters, under the state's full control, ready to be tweaked to achieve some kind of social optimum. Modernist indicators are scalar too: GDP, or ROI.

The love for simplicity and the delusion of control may help explain the uncanny resilience of GDP. Everyone agrees it's unfit for purpose, but we seem unable to get rid of it.

# LEARNING FROM OUR FAILURES

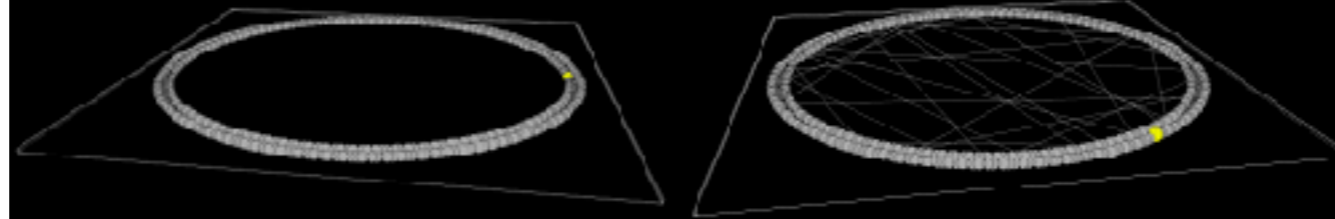


Modernist schemes do not really work. But some work really well at solving the statecraft problem, reinforcing themselves at the expenses of the underlying productive system. Stalin's collectivisation programme was terrible at growing crops. But it worked very well in appropriating crops to feed industrial cities, the base of Soviet power, and in keeping the peasantry in check. In other words, these schemes are successful parasites. Once they take hold, they are hard to kill.

A pattern emerges. A government agency starts with a simplified model of reality that justifies government intervention in it. At that point, the agency deploys a policy that (1) reduces the target group's autonomy and commodifies its skills; (2) increases the centrality of the agency itself. With a little exaggeration, a group in need of aid is aided in such a way that it becomes permanently dependent on aid.

And the government becomes very central indeed. The ratio of gov budget over GDP in USA was 6% in 1902, and 40% in 2010.

## WHY IT DOES NOT WORK



Local interaction only

1% long distance interaction

Why does the high modernist approach to government not work? Because society is a complex adaptive system. Nonlinearities arise from interaction between its component agents. Complex systems resist to the reductionist approach inherited from 17th century science.

Here's an example. Suppose we have a radical idea, like "let's all go to Tahrir Square, bring down the government", or "let's move to a different country". This idea can be modelled as an epidemics: it spreads (or not) according to how infectious it is, and how quickly people "recover" from it. It also depends on the *shape* of social relationships. Here I show you a model of identical epidemics through identical populations. There is one difference: in the population on the left, all interactions are local. In the one on the right, 1% of the interactions are long-distance – maybe 1% of the people have a telephone, or know someone in a different city. The difference is dramatic.

# IATROGENICS



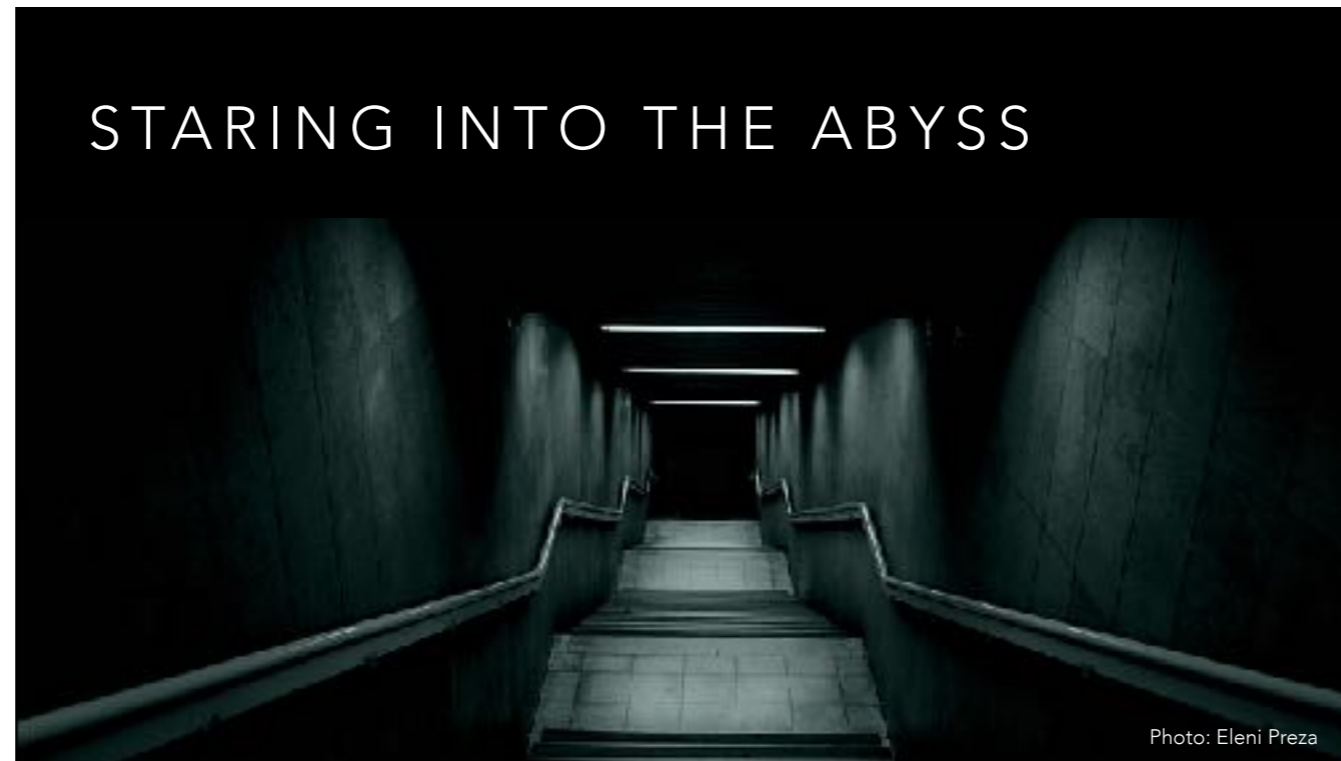
Photo: Mark Lobo

As societies become more connected, these nonlinearities become more pronounced. Our ability to predict deteriorates. The risk of iatrogenics, "harm done by the healer", skyrockets. I predict a deteriorating effectiveness in government action.

“IF YOU THINK THAT YOU ARE A STEAM BOAT AND YOU CAN GO UP THE RIVER, YOU ARE KIDDING YOURSELF. ACTUALLY, YOU ARE THE CAPTAIN OF A PAPER BOAT DRIFTING DOWN THE RIVER. IF YOU TRY TO RESIST, YOU ARE NOT GOING TO GET ANYWHERE. ON THE OTHER HAND, IF YOU QUIETLY OBSERVE THE FLOW, REALISING YOU ARE PART OF IT [...], THEN EVERY SO OFTEN YOU CAN STICK AN OAR INTO THE RIVER AND PUNT YOURSELF FROM ONE EDDY TO ANOTHER..”

– BRIAN ARTHUR

So what is to be done? I researched what complex system scientists had to say about this. Here I only want to mention two eminent scientists. George Cowan, a physicist, and Brian Arthur, an economist, both with the Santa Fe Institute. Their idea is that a wise government recognises it is part of the environment it seeks to influence. This results in a much humbler stance than that of high modernists. The government, they say, should mostly observe, monitor and experiment.



After a couple of seminars in 1989-1990, Cowan and Arthur abandoned their research on public policies, and retreated into pure science. And no wonder: all solutions proposed, including their own, suffer from second order problems.

1. They start by pointing out that government's actions do not do the right thing because they have no incentive to.
2. They suggest something else that would work better, for example "observe a lot and act little".
3. But governments also have no incentives to do this something else. So these things won't happen.

I confess that, as I think about these things, I feel like I am staring down into an abyss. I do believe in democracy, and in the potential of collective intelligence for it, but sometimes I wonder whether I will live to see this potential realised. Sometimes I think that government, born as a tool in the monarch's hand, can not really enable bottom-up dynamics. Or that it can simply not step out of itself to redesign the system it is a part of.

I don't see any elegant solution, that will solve problems, avoid unintended consequences and make you rich and powerful. Solutionism sells better than "we just don't know, and there are risks". All I can offer is rigour. Strive for the truth, even if it's bad news. Stare into its eyes, and don't flinch. Keep scanning for achievable wins, however small. If you work with policy makers, manage their expectations carefully. Try to find things you can *stop* doing rather than *start* doing – what you don't build cannot break down, and what you don't do has no iatrogenic effects. Try to stay away from fads ("smart cities", "big data", "machine learning", "blockchain"), and only embrace them when and if they become solid. You might be able to make a name for yourself as someone slightly scary and edgy. Your clients will feel they are part of a secret élite of cognoscenti.

If you don't like this, I can't blame you. Neither do I. But I can't unsee it. If you can't unsee it either, and you decide to embrace it, know that there are others like you.

You are my sisters and brothers in arms, and we will walk this path together.