

## **Innovation Memes**

A "meme" (pronounced 'meem') is the information equivalent of a gene.

A virus reproduces itself and spreads its genetic content in millions of copies by high jacking a host's DNA.

Analogously, ideas 'infect' the mind and change individual and group behavior. They cause you to want to spread the ideas by telling your friends and colleagues. Unlike a virus, which has its genetic information encoded in DNA, a meme is simply a pattern of information. A meme may be a single mutant that enters the meme pool and dies. Or, it can evolve such that many people over generations and cultures repeat it. Memes can be clichés, tunes, phrases and fashions. They can be smells and sounds too. Human culture, in the memetic view, is a string of ideas and symbols that live symbiotically in their hosts.

The Worldwide Web is a vast meme pool. In the course of my work I come across many ideas, some worth remembering, others eminently forgettable.

The following articles, however, 'deserve' to replicate. They have been selected on the basis of their value to challenge public sector innovators to think about problems in different ways. They tend to describe a trend, a discontinuity, a paradigm shift or a contrarian view.

## **Systems**

### ***Software And Slime***

Biologists have known for some time that simple organisms and creatures such as slime mold and termites can create complex organisms and societies. They do this not through top-down control, but as a consequence of all members of the group following a few simple rules.

Computers can do this too. Starting with a few simple rules and employing genetic algorithms, they can duplicate complex behaviors. This opens the possibility for developing models that can be used to test public responses to public policy initiatives.

[\[American Prospect\]](#)

## **Governance**

### ***(Real) Policy Research***

Government requires pharmaceutical companies to conduct long and extensive double blind tests to confirm the safety and effectiveness of their products. It requires automobile companies to conduct extensive crash tests. But governments will spend billions on their own programs without first checking to see if they are effective.

The Campbell Collaboration aims to change this by advancing the cause of "evidence-based" social policy. The collaboration is an international, independent, non-profit organization that brings together social scientists, statisticians and policymakers. Its aim is to assemble and evaluate the best available evidence for the effectiveness of various social interventions. In particular, that means evidence from experiments and hard data.

It could make a big difference. Randomized trials have been used to evaluate the effectiveness of driver-education programs, job-training schemes, classroom size, psychological counseling for post-traumatic-stress disorder and increased investment in public housing. And where they are carried out, they seem to have a healthy dampening effect on otherwise rosy interpretations of the observations prepared by policy advocates.

[\[Economist\]](#)

## Global Civil Society

### *The Marketing of Social Injustice*

"Which global injustices gain your sympathy, attention, and money? Rarely the most deserving. For every Tibetan monk or Central American indigenous activist you see on the evening news, countless other worthy causes languish in obscurity. The groups that reach the global limelight often do so at dear cost—by distorting their principles and alienating their constituencies for the sake of appealing to self-interested donors in rich nations."

In our highly mediated, overly informed society, everything competes for our attention. From soft drinks to government policy we are constantly reminded of where to place our money. But our sympathy? Foreign Policy looks at how the poor and oppressed have to scramble to raise awareness of their cause.

[\[Foreign Policy\]](#)

The article refers to a 2001 survey, by researchers at Leiden University in the Netherlands and the Institute for International Mediation and Conflict Resolution in Washington, D.C. They identified 126 high-intensity conflicts worldwide (defined as large-scale armed conflicts causing more than 1,000 deaths from mid-1999 to mid-2000), 78 low-intensity conflicts (100 to 1,000 deaths from mid-1999 to mid-2000), and 178 violent political conflicts (less than 100 deaths from mid-1999 to mid-2000). As a matter of perspective, their map of World Conflict shows the Israeli-Palestinian conflict as a 'mere' violent political conflict.

[\[Conflict Maps\]](#)

## Risk Assessment

### *Perception Equals Reality*

Long before September 11, public panics were widespread - on everything from GM crops to mobile phones, from global warming to foot-and-mouth. One of the key points Frank Furedi makes in his book 'Culture of Fear' is that perceptions of risk, ideas about safety and controversies over health, the environment and technology have little to do with science or empirical evidence. Rather, they are shaped by cultural assumptions about human vulnerability.

The random nature of such perceptions is an obvious difficulty in technology forecasting. But far greater difficulties are created in the public policy arena. Speculating about risk gives rise to hypothetical problems that may be just as expensive to mitigate as real problems.

[\[Spiked\]](#)

## Computation

### *Zipf's Law and Artificial Society*

The new science of artificial societies suggests that real ones are both more predictable and more surprising than we thought. Growing long-vanished civilizations and modern-day genocides on computers will probably never enable us to foresee the future in detail—but we might learn to anticipate the kinds of events that lie ahead, and where to look for interventions that might work

Mathematics has always had a way of showing up in the strangest places. Fibonacci series explain the breeding of rabbits and the patterns on sunflowers. The binomial distribution shows up everywhere. Now mathematical simulations of social interaction indicate that a relatively small number of behaviors, repeated often among many participants, can predict broad outlines of the growth of societies.

[\[Atlantic Online\]](#)

## Risk Management

### *The End of Progress*

Risk has always been a part of life, but Christopher Coker argues in *Spiked* that we are entering into a new phase in how we deal with it.

"The post-modern condition is one we all experience in a mode that is more than ever defined by risk; by the cluster of risks, insecurities and control problems that have played a crucial role in shaping our changing response to the world. Concern about risk is no longer a peripheral matter; it is built into the environment, culture and the everyday routines that guide our lives. In this sense we live in a 'risk age'. Risk has become a way of thinking about one's moment in history; it is not only inherent in the moment itself."

The implications for policy are significant. For one thing, our focus shifts away from what we want, onto what we wish to avoid. This creates a scattering of resources because our political system can easily select a few priorities but cannot simply choose among a myriad of hypothetical insecurities. Combined with a culture of victimization, governments can no longer stick to doing a few good things, but must make certain that nothing bad happens to anyone. This situation requires a new understanding of values and norms. Not everyone perceives risk in the same way. Mothers and their sons have different views about motorcycles for example.

Perhaps the most important consequence of this ethos of risk management lies in the shifting of burden of proof. In the status quo, dangers are known, and if not totally accepted are at least 'absorbed' in some way by society. But do something new, and irrespective of benefits, you are totally responsible for unanticipated dangers. A strong motivation for doing nothing.

[\[Spiked\]](#)

## Medicine

### *Self-fulfilling Prophecy - The Nocebo Effect*

The "nocebo" phenomenon, is the evil twin of the placebo effect. While the placebo effect refers to health benefits produced by a treatment that should have no effect, patients experiencing the nocebo effect experience the opposite. They presume the worst, health-wise, and that's just what they get.

This effect would explain why people are "worried sick" and how it is that a voodoo hex can bring death. But it also has an extremely important policy dimension with respect to product labeling. When patients were warned about side effects (in an aspirin study), they were three times more likely to experience the problem than those who were not warned.

The notion that information can actually create illness has major ramifications in a society inundated with product warnings, not to mention it's use as a "force multiplier" in a chemical or biological weapons scare.

[\[Washington Post\]](#)