

To bite the hand that feeds: survival

Vinay Gupta, London, August 15 2010

I'm not expecting this to be an easy thing to write. It will not be any easier to read. It's time to get down to basics: we are breaking the world, it is entirely within our collective control, but individually even the most powerful of us are unable enact effective change. Now we must think about why.

"No matter who you are, most of the smart people work for someone else."
– Bill Joy

This also applies to power. We have 200 or so nations. Even the US, with about half of the world's total military spending to its name has no effective global monopoly on force. But the scale of this problem goes beyond the relationship between nations. Even the President of the United States of America has 24 hours in a day, and many duties which go with the job. How many major initiatives can the President impose on the bureaucracy and the accumulated momentum of the State and the wider culture within this time budget? Damn few – perhaps one of any lasting significance if he or she is lucky. And that is the most powerful person in the world.

Individuals have little power relative to the other 7,000,000,000 people they share the world with. We are not quite atoms in a glass of water, but we are strangled by two effects – the “law of large numbers” in which averages rule all, and the Nash equilibria.

The Nash equilibria are the “lock ins” which keep us in the current mess. If you as an individual cut your environmental impact to the bone, reducing your quality of life as a result, you do not get a world which works in exchange. The behavior of all of the other “players” in the situation dictates your outcomes. Social sanctions up to and including law are tried, but without a simple equation between individual action and individual reward it is hard to produce the change we wish to see in the world.

Much of the shrillness of the environmental movement is an attempt to use emotional power to motivate people to move from a destructive to a creative equilibrium point; less progress, more force, more resistance, no fundamental motion.

We are stuck. Kyoto and Copenhagen simply confirmed that we have exhausted our political options in the current paradigm for the kinds of radical change necessary – quite literally – to save the world, or at least our species in its current form.

Now let me add the third factor to the trifecta of doom: competition. Human culture is shattered shards, isolated crystals of self-interest in scattered alignment, a mesh of interlocking roadblocks. Every time slack is opened up in the system, one group or another expands their island of self interest to consume the available flexibility. Everybody fights for their turf, for their shortest possible drive home, and the result is a planetary gridlock which brings even the strongest to the edge of hope. What, then, are we to do?

Let us examine the dead ends. World government, Monbiot's chosen response, has a simple, singular problem: evil. Grass-roots awareness raising environmentalism has fifty years of failure behind it, except on simple clear point source issues: stop dumping this poison into this river. The one notable success – ozone-depleting CFCs were banned outright – is a lesson most are reluctant to learn from: the stick works.

Let's get a sense of some numbers: by some estimates, the US War on Drugs costs about \$22,000,000,000 per year. That's a fair bit larger than the budget of the United Nations. It's about 10 times the EPA spend on climate research. It's less than 5% of the US DOD budget. The money spent on competition vastly exceeds the spend on even understanding the problem.

I'm painting the scary picture first, clearly, before getting into reasons for hope. The scary picture has a single source: our systems of planetary governance are so incredibly broken that we are unable to organize well enough to put out the fire – or even to feed the people. And the largest, most powerful, most consuming countries on earth are liberal democracies. The economic engines of the end of nature are democratic. There is no doubt at all that we are doing this ourselves. All of us.

Aiac is a new word which gives a somewhat more precise definition of this “Western Civilization” term which is sometimes bandied around when discussing collapse. *Aiac* stands for Agro-Industrial Auto-Catalysis. It's the process by which cheap food and machines produce more cheap food and machines. It's what keeps the lights on and our bellies full.

Aiac is a largely self-regulating system. Demand for 8mm bolts edges out demand for 10mm bolts and pretty soon 8mm bolts are what you get. There's interference from government and politicized standards bodies, but generally speaking *aiac* spins on its own axis, with the machine tool chain building out whatever is needed to make the process run better. *Aiac* has the messy vitality of living systems because it is an *evolutionary process*. Competition weeds out the weak and rewards the strong and even in command economies easier ways of doing things eventually edge out stupid ways, in most cases, given time.

The autocatalytic aspect of *aiac* is critical to understand. Cheap steel is used to build cheap components which are used to build cheap machines which are used to make more cheap steel. You need half a gram of a 99.95% pure amino acid and it is delivered next day. Economies of scale and stability have allowed incredibly efficient and competent networks of industrial (and agricultural) supply and demand to form, each supporting the web, each supporting us and our quality of life.

Aiac is what the western democracies, the engines of technocratic capitalism have produced. It's the fruit of both the industrial revolution and of personal freedom. That's not to say that *aiac* did not form in places like the Soviet Union, but the fundamental freedom to react to the conditions around you rather than the 5 year plan is the core of its efficiency. If we could reform *aiac* so that it was not extractive at one end and polluting at the other, we might have made substantial progress towards fixing the world. But we are still gridlocked.

The “Cradle to Cradle” dream is to integrate aiac into the biosphere as a set of extended systems which build on nature but are compatible with it. The idea is to close as many of the loops as possible, to turn waste into food, to take what is polluting and use it in the place of what was extracted. This is the notion of a “green machine” which continues to expand and grow, producing all that we need much as it does now, but without the extractive and polluting aspects. To get there, access to the ecosystem needs to be gated – one can neither extract nor pollute – and as this regime is imposed the pressure on industry to reform mounts, bringing it into line with sanity.

The problem is the twofold – the gridlock and the imposed costs. If the green technologies were across the board better than the “black” technologies, market forces would push aiac to the green equilibrium in a few generations max. But we are pushing up hill against a gradient. The green technologies are generally more expensive. As we push harder up the gradient at the political level, the more we tend to fragment our society into the “black collar” extractive economy workers and industries and the “green collar” – we foment a conflict between the new and the old as we attempt to accelerate progress. Caboose braking slows progress to a crawl. Progressive factions cannot push democracies faster than the body of voters is willing to go.

Into the gridlock pours new technology. Let me pull out two specific forces. The first is ultra-cheap solar panels, such as are made by NanoSolar and Konarka. Both of these companies promise solar power much, much cheaper than coal - certainly

cheap enough to fuel a global migration to a decarbonized economy. Each has hundreds of millions of dollars of investment and a technically credible management team. It’s very likely that one of these technologies, or something similar, will drag us out of the energy deficit hole within the next 10 to 20 years.

At the other extreme we have ever cheaper and easier genetic engineering. Monsanto spearheads the backwards integration of the biosphere into aiac by turning the genetic material of plants into the engineered engine of business models. It is a matter of time before casual access to genetic engineering enables terrorist groups – or careless start ups – to contaminate the germlines of species, polluting the future in unknowable ways.

At the heart of this mess we have the inability of our species to correctly use coercive force in defense of our future and biosphere. We are failing to criminalize and police actions which are destructive because the criminal elements involved are at the core of our progress to date – dirty industry is what aiac was built on. We are faced with the challenge of accurately and swiftly biting the hand that feeds, yet hoping we can continue our way of life. No wonder we are in a pickle.

We are faced with the necessity of attacking *where the money comes from* if we are going to survive. An oil well is like an ATM machine backed by the natural resources of the planet. Money pours out of it, \$4 per barrel to extract, and retail at \$100. Jets of wealth so heavy they bend the shape of our whole society.

Are you ready to bite the hand that feeds?

This is the question that the future of our planet rests on.

There are good reasons to bite the hand that feeds. Much of what we are fed is trash - two days in front of a television will drop your IQ reliably 20 points. Three hours a day of mainlined sedation is what it takes to keep people shopping. The repetitive emotional cycling, anxiety-and-release, a workout which leaves the mammal feeling like it is living while the mind zombies through its working days. Sit here and feel something. Now go shopping.

To get out of this we are going to have to criminalize large parts of the economy. We lack the political will to do it right now because our collective “response-to-crisis” genes have not kicked in yet. As the shit hits the fan environmentally – or, if we are lucky, economically and socially – there will be waves of panic and demands for action. People will turn left and right seeking answers. There will be a demand for blame, to make someone responsible, to *do something*.

So here is my advice: *draw up a list of names*.

About the only intervention point I can see in this whole system is to own the map of what is **right** and what is **wrong** so that when the time comes to make new laws, to make criminal what led us into the crisis, we get it right. Right now we are not thinking clearly about the need to generate a new legal framework to compel people to behave correctly. People

talk about world government, about international treaties, but what it actually comes down to is **new classes of crime**.

Our legal codes are two generations behind our technology – that is what permits Monsanto to exist. It’s what permits King Coal to keep warming the future, and the Amazon to be felled for McDonalds. We must unweave bad law to make good law.

The sword of justice is absent from our societies. There is a gap between the death of the old morality, mainly sexual taboos and enforced religion, and the necessary birth of a new morality, with full legal force, oriented towards what our planet and our species need today and for the future.

The democratic mechanisms that we have for making law are inadequate because our populations are asleep. The mechanisms we use to make international agreements have failed in the current crisis: Kyoto and Copenhagen are *indictments of democracy itself*. Rape is illegal everywhere, but it did not require a world government to make it so. It requires a simple human consensus on collective norms.

It is hard for the junkie to turn in their dealer. I like my hot baths as much as anyone: how can I criminalize my carbon pusher? He serves my addiction. Hence our responsibility is two-fold: to free ourselves individually, that we may know justice, and then to preach collectively what the new law must be, that others may know it, adopt it and enforce it globally.

The future of our species depends on us making new law.