

Unconventional Activism

An Important Distinction: Mischief space vs Metabolic Space

Had humans never dug up and burned fossils, there would have been an inherent limit to how much ecological trouble we could get into. Limited by the amount of exosomatic energy we could get out of burning wood and falling water, we would not have created the big experimental “rube goldberg” machine-with-no-real-purpose we now exist within. This human use of fossil energy has two qualitatively-different aspects, which we’ll introduce here as *metabolic space* and *mischief space*. The first refers to the inevitable outcome of burning fossil carbon and hydrocarbons: heat and combustion products and their downstream effects. The second refers to *what humans do* with the net energy they tap by that burning. Thus, in this formulation, CO₂ emission is a ramification of metabolic space while plastic 6-pack rings and tiger penis medical supplements are ramifications of mischief space.

Why bother to make this distinction? Primarily to note that problems and solutions can be analyzed and characterized in many ways we haven’t previously had the vocabulary for. As just one example of this, these two classes of problem are quite distinct in the nature of their impacts, and represent qualitatively different levels of difficulty when it comes to strategizing, affecting and managing the systemic outcomes.

There are near-infinite “game moves” possible in mischief space, because pretty much anything within this sphere of human impact could be done in a different way, or not done at all, without affecting the general course and functioning of society. For instance, there was no absolute reason that world fisheries need to use destructive “pelagic driftnets”. This meant that it would be feasible in principle to achieve an alternate “stable state” in which those nets were banned and replaced with less-destructive technology for catching target fish. In general, nothing in mischief space is inevitable, and some of it doesn’t even make much sense. It’s just stuff humans have decided to do out of convenience with a lot of spare net energy, and therefore somewhat malleable in terms of our ability to steer events toward alternatives. Many of the problems we face can be dealt with quite well by understanding the rules of “mischief space”, in conjunction with *the way things actually happen in the human world*.

In contrast, there are relatively few moves possible on the “metabolic space” game board, because when it comes to fossil energy there’s pretty much a binary choice: use it to provide brain services for humans (meaning burn it), or don’t. That makes the metabolic aspects of the problem a lot harder to deal with.

Basic metabolic effects on Earth’s natural systems are, as noted, inevitable from burning flammable fossils. Thus, short of simply “not burning them,” there is no way to prevent their coming into existence. Inasmuch as CO₂ excess currently poses the greatest danger to the biosphere, that’s a problem, because there may well be no way of “sucking out” the CO₂ from the air which does not require more energy than is originally gained by burning it (*IPCC scenarios currently assume that this will be done on a massive scale, based on no good reason in particular other than needing a miracle and therefore projecting one*). Work-arounds like pumping CO₂ underground forever are examples of projects which may not be impossible (in

some places), but which won't be done much, or for long, due to geological realities and human behavior as stressed societies demand more power and experience tougher times. The intractability of this situation - figuring out how to get a population of energy-hungry fire-apes to use less stuff - is daunting, though not impossible. But on first blush it might seem impossible, because all the standard advocacy tools have thus far failed at making a dent.

In contrast, the things humans do in "mischief space" are things which, strictly stated, don't need to be done at all. They are anything but inevitable, yet to date they have been the most environmentally destructive effects of the carbon pulse, and will continue to be until heatlock and acidification really do kick in in coming decades (as they are currently projected to do). The effects in mischief space are things humans *decide to do* rather than need to do, and the effects - foreseen or unforeseen - of doing them. It has been mischief-space stuff which has kicked off the 6th mass extinction. And unlike metabolic effects, mischief-space effects are subject to being entirely changed through the intervention of individuals or small groups who actually know what they're doing.

Negotiating with Fire

In contrast with fighting elephant poachers or fishing quota violators, when dealing with "metabolic" level problems such as fossil-energy addiction, we're up against amoebic tropisms on a vast scale, a situation in which individual human decisions tend to make little difference. The superorganism has been likened to an "amoeba" since it acts *in aggregate* with the behavioral simplicity of a mindless organism. The rational decisions of scattered individuals within the amoeba don't propagate to steering its gross behavior.

It's odd to think of an organism whose cells are each far more intelligent and wise than the overall organism, since what we experience is the opposite: our kidney, elbow, and toe cells don't possess any sort of individual sentience or sapience. But we evolved to function that way over millions of generations, since before kidneys, elbows and toes even existed, with our cells gradually becoming specialized to make simple decisions while our minds reacted to more complex situations at the organism level. The human superorganism of billions we see today did not. It simply emerged as our populations grew, and now contains complexity and consciousness without understanding (or using) them.

Convincing the amoeba to change its ways is akin to arguing with a forest fire.

New tools, tactics, and strategies needed...

Of course, nobody ever said you can't control a forest fire. It's done all the time, but not by appealing to the better angels of the fire's nature or seeking to convince it. Rather, forest fires obey a deep emergent behaviorism which makes their propagation predictable, and makes strategies to interdict them feasible in many cases. One can also learn to anticipate when forest fires are more likely, understand the things which restrain and propagate them, and make intelligent game moves which a fire cannot counter.

We've been talking in generalities about social activism, enlightenment, and their general

ineffectiveness against a backdrop of human mischief and metabolic space. This course has been about understanding Reality, not training you to be eco-jedi. But to understand WHY many people perceive aspects of the world's problems and are working on them but few are meeting with success is ALSO a part of understanding Reality, albeit a bit more nuanced and advanced one.

The current rough model of activism seems to be a belief that humans cause change through outstanding purity of motive, steadfastness, and costly signals of social commitment, which - if done right - cause issues to resolve in a righteous way due to the resulting rise in their social capital and corresponding enlightenment of humanity..... despite the fact that this is almost never what actually causes system change. Current activism at the macro scale seems largely about *being seen by others to strive mightily while enduring privation until maybe something happens.*

Without casting stones at those who mean well, it's simply the case that the movements, organizations, and infrastructure we now have are not all that useful in dealing with the classes of problems we're up against. What follows is in draft form only, deserving of far more work in the future and offered to students in this class as a peek into future writings, but it may help illustrate that "economists" are not the only humans who are stuck in paradigms of somewhat-mythical and counterproductive assumptions.

Modern models of 'Enlightenment' are not Working

Education is a great thing, no doubt about it. Yet as we've noted, there's a pervasive fallacy which attributes all bad decisions to "not having enough information" to make good ones, and that's just not the case. There are *many* reasons the human mind makes bad decisions, or fails to make good ones, even in possession of ample information to do better.

This fallacy causes most social activism to focus on correcting the "information deficit," because – the logic goes – having access to the best information means making the best decisions. Yet in these days of the internet, pretty much everyone has at least potential access to all the information and chooses what to ignore or believe to a degree which is nearly arbitrary. Life at the peak of fossil-fueled civilization is so protected that there are generally no immediate consequences for believing anything at all, even absurdities, and it "feels right" to believe what those in our ingroup believe. We don't turn our back on that ingroup based on abstract facts. Abstract facts bounce around in the cerebral cortex; it's the deep *associations* which move us, often unconsciously.

Yet those hoping to steer the future in a better direction have for the most part doubled down on reciting facts, assuming that if they just say them loudly enough, the beliefs of others will change. This seldom happens. We tend to have a very idealized notion of how successful activism has changed things in the past, one which doesn't take into account those who failed. So we careen toward the future doing our best to inform and educate one another, and it keeps not working.

It's seemingly not appreciated by many people that those who accomplished a lot in the past were either very lucky, or were active tacticians and strategists playing something like a 4-dimensional chess game in the real world. Gandhi and Hitler had this in common: pragmatism, and stepwise plans to move the world in a desired direction *using human nature as it actually existed, working with the "gene agenda" and the beliefs already in the heads of the populace.* Those who successfully steer the earth's future, for good or ill, will almost certainly be Machiavellian in this sense. Unfortunately, most future-oriented altruists don't "feel right" being this pragmatic, and largely abandon such effective tactics to those with no such scruples. And thus lose. *Over and over and over again.*

Why the Environmental Movement has (so far) largely Failed.

On top of using information-deficit models and social sorting mechanisms, many well-intentioned organizations fail because they are both too big and too few. Large problems "feel like" they require a large number of people to impact them, so we set about collecting large numbers of people together. While this was probably a good tribal response to repel opposing tribes throwing spears, it's simply not all that useful in many situations these days unless you can create a large minority (5-10% or so of the population) which adheres very strongly to a simple notion, which can then be intelligently leveraged into dragging the other 90% some distance toward your position *unless* the required behavior would cause them significant perceived loss of some kind (which it often will).

However, a problem arises: if the notion you hope to advance is somewhat complex, it will need to be made simple to be widely repeated and agreed with, and a lot can be lost in that translation. *So one price we pay for "large groups of people" is the oversimplification of issues.* And not just oversimplification, because in order to be well-received by large groups, the message must also "feel good" to believe *and* not be identified as a belief similar to one held by an outgroup the target audience doesn't like. This can certainly be done, but it results in a large group with very simplistic shared notions which - in order to be liked and accepted - have edited out any negative aspects to the proposition in question. This grows the support base, but at the cost of making it fairly brittle if any real-world results ever contradict the simplified narrative which the large group is organized around. To the extent it isn't resilient against real-world perturbations, it becomes an illusory - and temporary - tribe. Many such examples exist - and it wouldn't take you to long to imagine a current one.

And that's just the beginning, because "larger groups of humans" become progressively more 'amoeba-like' and over time become drawn to a plethora of attractor-states which rapidly diminish their effectiveness. These attractors are legion, far beyond what can be described here, but they include the "mainstreaming" of the founding propositions to make them uncontroversial, replacement of the original visionaries with administrators, and a phase-shift from the interests of the original proposition to the re-defined interests of the group itself, under the rubric of "increased fairness". There is also a strong tendency, based on "procedural fairness," for governing bodies to swell from tight management by passionate campaigners to large boards staffed by non-experts, drastically lowering the response speed, willingness to take risk, and level of complexity which can be parsed by the movement. At the same time, this all causes annual budgets to grow without effectiveness growing along with it.

It doesn't end there. That group then "networks" with other groups which have been similarly constituted, further watering down its core message in order to more effectively form temporary coalitions for information-sharing, and identification of points of perceived overlap. Most advocacy organizations spend increasing amounts of their time doing exactly this. And they need to, because the bulk of funders tend to do the same. Very similar dynamics create networks of funders who, lacking any sort of synthesis knowledge of the core issues, use social sorting mechanisms (the consensus of other funding entities they know) to allocate funds to those who have best networked and thus have the highest recognition, somewhat analogous to "likes" on Facebook.

So what builds the initial social capital which enables this progression to start? **High-profile, extended failure**. A group makes its name by declaring its support or opposition to a principle or proposition, and is then *seen to be striving mightily* toward that goal by others *while valiantly failing to achieve it*. It is during this "deadlocked" period - which may last years or decades - that it builds mailing lists of supporters, does networking, recruits funding, becomes secure in its "niche," and adds layers of administration. If a group - alternatively - experiences quick and complete success, it skips this step and quickly vanishes in terms of recognition, social capital, networking, and the possibility of mainstream funding. Nobody donates to a problem which is already fixed before it becomes infamous, after all. To the extent such groups form, they exist in a consensual social "blind spot" and are quickly extinguished by a process analogous to natural selection, self-regulating the overall movement away from effective intervention.

Of course, even basic human psychology long ago established that strongly advocating a position hardens existing opinions in their current proportions, so this is largely ineffective at actually accomplishing the ostensible objective of a group - and is often antithetical to it! - but it is *vital* to recruiting funding and networked ties.

One would assume, based upon the fact that they are so ubiquitous, that funding networks, coalitions and mass movements, are the gold standard of effectiveness in dealing with real-world problems. Yet if so, one would be wrong. Aside from vacuuming up a large portion of available funding, highly-networked groups with large governing boards actually get very little done for the amount of resources expended. It just "feels like" they should since it "feels fair" and large numbers of well-meaning articulate people seem to always be busy doing something (*note: this commentary is coming from a past co-founder of one of the world's largest and highest-profile organizations, who wasted no few years learning these lessons*).

However, these groups run into a paradox. The proximate goal of saving the environment or XYZ goal, is subverted to the ultimate goal of social status, funding, and the continued viability of the organization. Over time, the stuff they are busy doing is, per the nature of large groups, largely administrative, based on servicing in-group complexity growth, and also increasingly reductionist and specialized "administrivia" as more humans are added. It's the nature of, and an attractor for, large groups of cooperating humans. *Mini-amoebas trying to wrangle the Amoeba using the same tactics and unspoken assumptions they are confronting*.

This means that to the extent such groups actually do engage with real-world issues, they tend to specialize in one isolated aspect of a problem. That becomes their focus, and what started as a high-priority fast-track make-or-break crusade often becomes someone's day job with a retirement plan. Thus, one group specializing in research might point out a problem, another group specialized in PR might (eventually) come up with a slogan to popularize the problem, still another specializing in some aspect of social activism might (eventually) come up with a tactic to try dealing with the problem, while several others ultimately create mutually-incompatible strategies on what to do next, with each step potentially taking years – during which time any opportunities for actual change have long since slipped away. This might feel *fair*, but it's not a productive way to actually achieve new stable system states in the real world.

There is no inherent mechanism within networked social movements to hand off the issue based on competence or to sort from among the multiple competing strategies which evolve, and generally no consensus on what would even constitute success, even among networked groups, much less what should be put in place beforehand if some sort of success were to be suddenly achieved. The pace is glacial since the large governing bodies take a long time to make decisions, and they cannot react in real time to any short-term opportunities which present themselves.

Due to intra- and inter-group social shaming and status pressures, the “purity of process” at all levels tends to be prioritized over the attainment of satisfactory results. Since most members of networked organizations believe in some version of “enlightenment,” most broadcast all their information as soon as they hear it, making impossible much in the way of strategy. Thus, the networked aggregate of “social activism” groups becomes in many ways its own type of amoeba, with an uncomfortable degree of resemblance to the bigger one.

As part of this process and central to it, the designated opponent outgroups and individuals are identified and to some extent publicly vilified, because that “feels right” to do, adds members to the group, becomes “news,” and attracts funding. This adversarial polarization largely precludes negotiations which might actually solve many identified problems quickly and creatively.

What Price ‘Fairness’?

So just look at all the things which are sacrificed in order to have large social-activist movements as they now largely take shape:

- small, efficient governing bodies
- the ability to make decisions rapidly and take advantage of opportunities
- the ability to keep budgets modest and so not spend most time fundraising
- the ability to avoid “mediocrity attractors” like growing levels of administration
- the ability to stay focused on the original reason for the group's creation
- the ability to deal competently with a complex proposition or situation
- a willingness to take risk
- a focus on the reason for the group's existence rather than intra-group social-status jockeying
- the luxury of being able to create tactics and strategies using timing and realpolitik
- the ability to have a fairly sophisticated plan whose tactics are not pre-telegraphed to the world
- the ability to win by eschewing social capital and making the bad guys look good

- the ability to enter a negotiating situation without “wearing your agenda on your sleeve”
- the ability to stay focused, rather than modifying the goals to conform to peer and funder networking
- the ability to avoid fame and stay in the background, if that serves the main goal
- the ability to prioritize effectiveness over perceived procedural “fairness” as a parallel goal
- the ability to move an issue multiple steps to a stable state quickly rather than shooting for incremental progress and hoping someone else will take the next step
- the luxury of NOT having a legion of “allies” who are cooking up conflicting strategies and leaking crucial information at inopportune times (tragedy of the social-activism commons)
- the ability to network *only after the goal has been achieved*, to share the credit and create a narrative of enlightenment once it’s too late for others to mess up a series of intelligent game moves with cluelessness, opportunism and monkeyshines
- the option of sacrificing ongoing funding and personal status to efficiently achieve the desired outcome
- etc, etc, etc

This is just a *sample* of the reasons why we should not be surprised that social (and environmental) activism, as now comprised, seldom accomplishes much. This sample is meant to give heart to those who think everything possible has been tried, and has failed, insofar as solving the “big problems” of human existence and ecosystems. The fact is that while time is indeed terribly short, we’re still mostly doing what “feels like” it should work rather than what actually does, while those working against pro-future goals generally have no such self-hobbling compunctions.

Part of integrating Reality into our strategies is an ongoing struggle with the very notion of “how things happen” in the human world. In addition to understanding the central role of our evolved “feelings” in making decisions, we need to understand that these “feelings” also lead to belief in unexamined assumptions which continue to create ineffective movements and advocacy strategies. If we’re to deal effectively with these problems, we need to actually do what works rather than what feels like it should work.

You may surmise from this quick discussion the shape of some of the recommendations we will offer, which might have higher odds of working: looking beyond the ‘feelings’ of a strategy, keeping the numbers on the team small, maintaining tight control of information, and recognizing that the process requires as a complex learned skillset, applied with self-control and discipline.

“As the name implies, “process politics” emphasizes the adequacy and fairness of the rules governing the process of politics. If the process is fair, then, as in a trial conducted according to due process, the outcome is assumed to be just—or at least the best the system can achieve. By contrast, “systems politics” is concerned primarily with desired outcomes; means are subordinated to predetermined ends.”—William Ophuls,

From: **ECOLOGY AND THE POLITICS OF SCARCITY REVISITED**, 1992

Note from Nate: *Much of the above is really beyond the level of Reality 101 for undergraduates and more for 'Steering Reality 501' for PhD students (of life), but let's continue on with one real-life story of success in 'mischief space', shared by DJ upon my urging.*

Post Script by DJ: R201 – Adventures in Mischief Space



The subject matter of this postscript is a bit out of place for this course, more properly an essay subject for the yet-nonexistent Reality201, but is being briefly introduced here to provide some perspective, and hopefully some 'hope.' Reality201? Yes, that's a hypothetical course designed to begin the process of making some subset of R101 students – at their request - into superheroes (*for lack of a better term*) who can deal usefully on large scales with all the stuff they learned in Reality101.

It may at times seem that R101 is simply a course designed to psychologically depress the best and brightest of today's college students with near-toxic levels of reality: not so. There would be no purpose served thereby. R101 is a remedial primer, a re-introduction to the obvious which "hides in plain sight" within our cultural blind-spots. It's meant to help anyone pursue "sophisticated generalist" status with a synthesis worldview, and as a prerequisite for a self-selected portion of those students to mindfully design useful action, for of what use are clueless proto-superheroes?

We covered a lot of ground at a dead run in this course, but the main focus of R101 is the nature of human blind spots and the reasons for systematic errors in human thinking about how the world actually works, and how and why the things around us actually happen. Not all R101 graduates will choose to personally engage with the "big challenges" of human existence, but even those whose life-course is largely unaffected may still find themselves just a bit more "super" in terms of their level of awareness and planning, and this may help shape their

expectations and their future prospects, along with those of their families and their communities. Just as humanity is no longer surprised by hurricanes due to geosynchronous weather satellites, incorporating a top-down integrated view of reality can prevent unpleasant surprises in many ways. It replaces the former “anything can happen” ignorance about such storms with a probabilistic and deterministic concept of hurricanes and their behavior, at a modest cognitive cost of now having to additionally be aware of hurricanes which might miss. Now that we’re used to weather satellites, few are depressed by the ability to predict, monitor and chart hurricanes. It’s a good thing, not a depressing thing, even if it does cause us to “think about” hurricanes more often than we otherwise would and occasionally board up our windows before a near-miss.

As will be the case more often than not in R201 - should it even ever exist by that name - the terminology will be new, novel, or re-tasked, which is why you can’t yet google “mischief space” and find any of this. Of course, not everyone taking R101 is destined to be a superhero, or would even wish to be; but a more complete insight into the worlds around them - both physical and virtual - and the most-likely prospects for the future, should help inform whatever path they decide to take. And it makes “superhero” a possible career choice in a world which needs a lot of them.

Superheroes?



Wait, what? Superheroes?
COME on...

Well, as just warned, we’re re-tasking a term, because we think it’s a useful one. By “superhero” we mean a person who has a qualitatively-greater ability to affect events on all scales than most people do. We’ve also occasionally used the term eco-jedi for deep-time system-steerers. Maybe,

going forward, we’ll settle on a better term. But “superhero” is not that far afield, because *relative to the norm*, individuals can develop disciplines and skillsets which enable them to confidently take on situations which to others seem impossible, and can often succeed in changing the course of events. I’ve seen it happen many times, and can attest that we’re still novices, just scratching the surface so far in terms of what’s possible.

When is a firestorm like a fishing fleet?

As a peek into illustrating both the *general structural similarity* of some seemingly-disparate “mischief space” issues, and the paradoxical nature of “metabolic space” issues, I’ll give a very brief account of one past campaign which has elements of both. In 1991, Iraq leader Saddam Hussein had his retreating troops blow up and set fire to around 700 producing oil wells, as well as laying pipes to dump oil into the sea and setting minefields around them. This produced a petrochemical hell of smoke, flame, and unburned gushing oil, but the images of it were kept from the world. The remediation of the situation was put “on hold” until British and US firms could shut down all the fires themselves and thus reap the presumably high profits of so doing. Which would have perhaps been a reasonable plan IF the US and Britain actually had the *capacity* to do so in a reasonable period of time, which they did not; Britain didn’t have a single firm which did such work. The fires were thus projected to burn for many years. The group EarthTrust, half a world away in Hawaii, decided to see whether the techniques which had been used to shut down destructive fisheries and cetacean kills might not work equally well at breaking this deadlock. Not because we had experience in the middle east (we mostly didn’t), had funding (we didn’t), or had dealt with oilfield fires (nope), but because it was clear that nobody else was doing anything useful, and it just seemed like a shame to let it burn and pollute. If that seems like an odd decision, I’ll just note that it was a reflection of a fairly tight team which had learned that “impossible missions” often weren’t. We had some experience and insights on how intractable real-world problems could sometimes be solved – and little else.

To make a very intense epic of a story very short, it worked. ET was relatively quickly able to get through into the burning zones (which were in theory unreachable and blockaded) and escort essentially all international media – who previously had been in a holding pattern in Bahrain - into the flaming hellscape to show the world what was going on. But also - behind the scenes – the team had by that time already done private video documentation and presented it to top Kuwaiti officials (who were at the time far from Kuwait), resulting in a reversal of the “hold” and opening remediation to crews from around the world. The fires were snuffed in just a few months, saving an estimated 2+ billion barrels of oil from uncontrolled burning. There was, of course, no small amount of heroism as ET field members shut down oil pipes pumping into the sea, braved minefields and drove into walls of fire to deploy oil barriers, worked to save wildlife, provided advocacy for the families of poor foreign oilworkers whose children were coughing up black carcinogenic goo in the streets due to being made to work alongside the flames, and just generally did what needed to be done in the best traditions of human heroism, which in my experience humans want to rise to when given the chance. This story has never been widely told, as there’s no place in our current culture for such stories yet. Perhaps someday it will be dramatized with your favorite movie stars – who knows? - but at the time it was tactically necessary to have credit go to the people causing the deadlock, not those working to fix it.

There are certainly lessons to be found in this story; for instance, why was it a small group from Hawaii, largely unfunded and seemingly specialized only in marine-conservation issues, which engaged and quickly succeeded while the rest of the world stood by? The answer to that goes far beyond this essay, but it came down to a different way of seeing the world and analyzing world events, and a different toolkit for leveraging and steering alternate system outcomes in mischief space. One part of this toolkit is the willing abandonment of the increased social capital, financial capital and personal status rewards which are generally pursued by default in standard intervention and advocacy (as described in main essay above). Creating a palatable scenario which gives social benefits to those causing the problem in the first place is a tactical force-

multiplier, but its downside is that changes so achieved don't wind up encouraging others to employ such a strategy, because they may never hear about it. There are many other analytic and tactical principles which could be illustrated using this "Hell on Earth" campaign example, among them real-world granularity, effective invisibility, critical states in social systems, timing, rapid progress during the suspension of system accommodation, compartmentalized information flow, illusory obstacles, intentional obscurity, and the design and effective deployment of memetic icons, but again, we're getting ahead of ourselves. This brief essay is just about the much greater potential effectiveness of small groups and individuals, and the difference between metabolic and mischief space. And a hint that there may be ways of getting things done which you haven't yet heard about.

And the big difference is that steering systems to different outcomes in "mischief space" is a matter of skill, engagement, and flexibility. Some system destinations are easier to reach than others, but many things which seem impossibly intractable have very straightforward solutions. We humans tend to be daunted by the physical scale of a problem when the structure of the problem is what actually determines whether it's amenable to change. And we tend to deal with the obstacles we imagine to exist rather than the ones which actually do. Mischief space is a complex mix of individual human idiosyncrasy on the small scale and reliable behavioral regularities on larger scales. These may be engaged successfully simply by having a better mental model of what's actually going on than others involved do. So for instance, speeding up the snuffing of the Kuwait oilwell fires was simply a matter of taking charge of some parts of the information flow and presenting the right information to the right minds in the right context, playing the 4D chess game. Both the decision to restrict the firefighting and to de-restrict it fell within the realm of single-mind idiosyncrasy, and were thus reasonably accessible to quickly leverage into a modified narrative.

Everything's impossible until someone does it.

As noted in the main essay, classic "social activism" simply doesn't work for most situations, and would never have for this one. The entirety of the earth's social activism movement was seeing the same situation we were, and had no game moves to offer while the situation was still pliable. "Enlightenment" was just a small part of the necessary strategy, nearly a side-consideration, and only certain information was released.

Speaking as someone who did a lot of "enlightenment" type activism in my early career, I'd say that's fine as a communication strategy in special situations, but it doesn't work all that well in terms of actually steering reality, which requires time, skill, nuance, discipline and a certain amount of time and failure to master. Am I down on large groups? Not at all: there are some classes of problems they're uniquely suited to deal with. The problem is that they are quite inefficient, nearly ubiquitous, and ill-suited to *most* classes of problems. The reason they seem productive is that they're often spending enormous amounts of money, despite the rapidly-diminishing returns inherent in their structure (*I've addressed the exact same issues as the person in charge of the international campaigns of a large famous global advocacy group and then directing a small group with few resources, and the difference in effectiveness was night and day... it was easier with the smaller, poorer organization which wasn't restricted to "social activism" game moves*).

And it's *not* always the case that having a larger group of followers or allies will make achieving

a goal easier. Sometimes that's the worst possible tactic, because putting your information out prematurely to huge numbers of people eliminates most possibilities of strategy, timing, negotiation, and success. Being the only small group working on a huge issue can be an enormous advantage, as crazy as that sounds. It initially seemed crazy to me, but it has repeatedly been proven true, a corollary to the "scale versus structure" fallacy. But again I'm straying into R201 territory.

It has been said, truthfully, that nobody yet knows what to do to solve the biggest problems facing humanity and our world. *That does not imply the narrative converse: that therefore any approach by anyone is equally likely to succeed.* Metabolic-space issues are simply inherently more difficult, and so will require more exacting plans by people who deeply understand the systems needing intervention. By way of analogy, nobody had ever tried to land a jumbo jet with zero hydraulic pressure, a situation occurred due to a catastrophic engine failure at altitude in 1989. The books say it was impossible, and all aboard should have died. But the plane had an experienced captain and happened to also have a DC-10 expert onboard; between them they managed to steer the plane to an airport landing using only the throttle controls for the remaining two engines, saving most of the people onboard. Understanding the system you're trying to affect - what can and can't happen - is essential, and the fact that nobody has yet laid out a workable plan doesn't make any plan equally qualified to succeed.

Or to offer another metaphor; if a heart transplant has never been done before, it doesn't mean all persons are equally likely to succeed at doing one. Rather, you probably want a surgeon who has done a whole lot of other successful heart surgeries. In a similar way, I'd say that learning to be effective in affecting the "mischief space" issues we describe is probably the best preparation for the analysis and implementation of workable campaigns in the daunting simplicity of metabolic space – the challenge of our time (species?).

That's why we're hoping to make additional tools available to the generation which is - like it or not - stuck with being the last generation with a reasonable chance of steering to far better earth-futures and more humane transitions back to sustainable flows. This makes your generation the necessary source for 'superheroes' who study systems with the diligence and focus normally reserved for professional music, medical research, or space sciences, taking the time necessary to get good at it rather than becoming frustrated and "burning out."

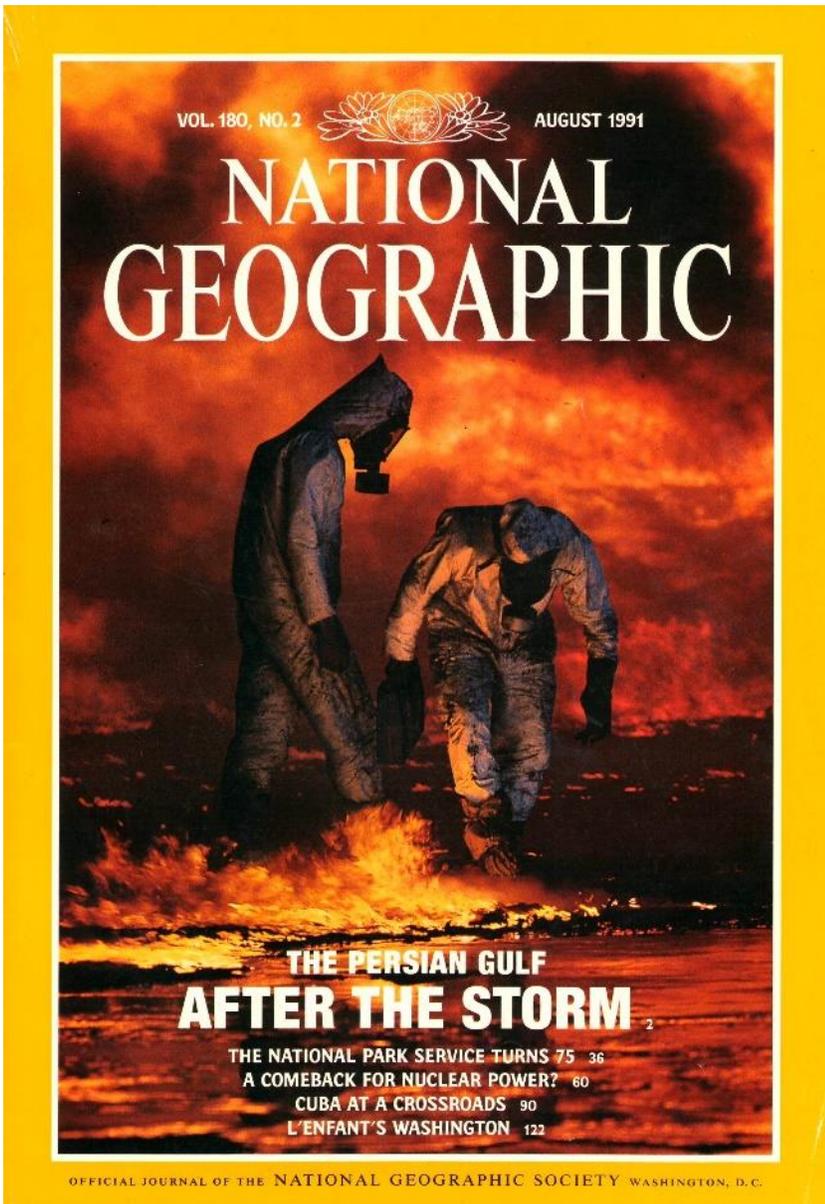
A few have pointedly asked: by bandying this term in discussion, do I mean to imply myself a superhero? I'll answer with a fairly self-aware NO. I'm a failed prototype at best, ruefully conscious of the huge gap between my aspirations and actual successes to date. But I don't think it's unrealistic to for a person to aspire – as a personal goal - to being a sort of superhero compared with what now passes for normal within our species, because - face it - that's a pretty low bar to clear. Indeed, a person can easily spend an entire life inside mental boxes which are culturally- and self-imposed, and never realize they could do extraordinary things due to simply never trying anything extraordinary. Certainly, I feel better about my path now than I would have if, say, I had stayed an oil geologist in 1974, taking a fat paycheck instead of striking out where there was no path to follow, but how I "feel" isn't the point either. The point and sole criterion, I think, must be the results. The fact is that I took a different path and because of that, the world now is slightly different than it would otherwise have been, in ways that I intended. I recommend that. My hope is that the current generation gets far better at this than my own, if for no other

reason than it will have to.

Both “mischief” and “metabolic” effects threaten our planetary future, and both need to be tackled. The metabolic effects are a lot harder to deal with, so it’s my recommendation that any

prospective “event steerers” hone your skills on mischief-space issues before tackling the more difficult challenges of metabolic space. Nobody expects you to quickly figure out a way for the human superorganism to stop doing what it’s doing, but - as we’ll describe in the next essay - you can pick an issue and engage in something that matters to you, unlearning the mental limits, incorrect assumptions, short attention spans, addictive behaviors, and blind spots which society has drummed into your really quite remarkable brain, while realizing that the metabolic issues are still “out there” once you’ve learned to successfully navigate the white-water of events and systems.

It’s hard to find a news photo of the disaster showing humans without Earthtrust field staff in it, including the ET team members with oil fires in the above National Geographic photo



(EarthTrust.org)

Aftermath: musing on metabolism & mischief

So, getting back to the difference between metabolic and mischief problems, here’s a question: quite apart from whether it succeeded, was that campaign intervention in Kuwait a *good idea*? It certainly felt worth doing at the time, but what was the net effect? The roughly 2+ billion barrels of oil which were saved from immediate burning have - in the 25 years since then - long been pumped and refined for input to human society, and burned anyway, emitting fully as much CO₂

and heat as they would have if left to burn wildly in the desert. That is, the metabolic effects were substantially unchanged. However, the “mischief space” effects, which for “burning oilfields” is essentially zero, were instead significant. That 2 billion barrels of Kuwaiti oil powered the equivalent of the entire global human superorganism for something on the order of 3 weeks, creating pleasing brain stimulation in human minds around the world, but also supporting ongoing overfishing, toxic waste creation, the pumping of depleting aquifers, the mining of coal, and a good portion of everything else humans did during that time. Inasmuch as the “stimulation” effects are far in the past, and the cars and electronics made then are now in the landfills, all that remains are the residual toxics, a huge amount of CO₂, more-depleted mines and soils, and 3 weeks’ worth of extinctions and habitat loss. Should I feel good about creating and deploying a team likely to have saved a couple billion barrels of oil from burning in the early 90’s, or instead feel responsibility for the additional mischief which would arguably have been avoided had it kept burning? A strange situation we find ourselves in, that such questions may be reasonably posed and not so easily answered.

Certainly it felt emotionally clear that letting the fires burn was *wrong*. It’s hard to be philosophical about hell on earth, and both I and the team took it personally. Yet without a plan or way to prevent that oil from being burned anyway, it cannot be said to have been a successful campaign in metabolic space. It saved some birds and some sea animals, and probably some people, made some Kuwaiti Royalty a bit richer for a bit longer, and gave me another tall story to share (but only now, on Nates suggestion). Perhaps, at best, we bought the world an extra 3 weeks of time-buffer before the easy oil runs out. If so, what a mixed bag that is, and what a short span for such a volume of oil. But perhaps it’s 3 weeks our ’91 Kuwait campaign team can offer to your generation, going forward. The clock keeps ticking. Use it well.