ecolonomics

"The Trap" – Technology, the Virtual World, and Hacking the Meanings of Society

From Hollywood movies to the development of complex on-line subcultures such as Second Life, the concepts of modern technology and their manipulation by society – or for want of a more loaded verb, hacking – have become increasingly virtual; as a result does the public's indifference towards the physical world, as they rely more and more upon virtual mediation in their everyday life, hobble their ability to change society?; specifically, as their efforts for change can only exist as a modification to "content" rather than the underlying mechanism, does virtual change "mean" anything?

Michael's Wood Services, Tuesday 25th August 2009.

The predominant view of how we radically change society is by "taking over"; revolutions – be they political, technological, intellectual, or merely the sophistry of the marketing profession – represent the succession of one dominant culture by the next, and are the means by which we take one way of viewing society can supplant it with another. Like the toddler with their tantrums or the modeller with their life-like toys, executive power is a means to control, and from the possession of such power we bend others – perhaps unconsciously, voluntarily or by coercion – to our will; and certainly one of the definitions of the state's executive power is that it has the sole right to legitimately meet out violence to others.

In the world of Hobbes or Bentham, Smith or Marx, where society was the sum of physical human interchange, that classical definition of power is probably valid; but in a society where our relations are increasingly virtual, and we put our faith into mechanistic systems to handle our lives – not through conscious understanding but by attaching abstract meaning to technologically mediated interaction – is that view of changing society still valid? More importantly, can we manipulate this reliance on the "virtual" to initiate an unconscious revolution, or a "revolution of the imagination"?; bending the nature of these technological mechanisms to simulate the virtual power of the state, and thus creating change in the real world?

I'm in a car on a long journey – a rare event, and one which I've grown to find increasingly uncomfortable. As I stare out of the window at the vectored paranoia (directed forwards down the road, not to the back or side) of a congested M5 I see a new roadside dot-matrix information sign – quite inert – pass by. What a revolution it would be to see that sign flash not, "congestion at Bristol", but rather something like, "Britain's running out of oil – slow down!" It's not just that it would be entertaining to gauge the reactions of the drivers seeing the sign, but more importantly would those reading the message attach as much meaning and authority to it as the "real" information the system is meant to convey?; would the message hold the gravitas of an official communication from the state, even though it came from and inanimate hunk of metal and electrical circuitry rather than a living human?; are the messages that these systems convey any less "real" in the minds of the public than the messages we receive from real people? If we are directed by the obedient irrational logic of programmed machines, can that unquestioning irrationality be bent to a more constructive end?

This is a long and heavy journey with much time for idle thoughts – *consequently this is going to a long and heavy essay.*

As a person who inveterately reads, and has done so since I learnt this most redemptive skill, my training as an activist-campaigner was as much theoretical as it was practical; it's the relationship between

the two that's enabled me to do many of the things that others find remarkable in my past body of work. When I was young I read mostly "books with no pictures"; the cheap, non-returned library volumes or house clearance non-fiction sold in local jumble sales. In my early teens I enjoyed Machiavelli's user manual on social reality[1], and have continued to find new meaning in its pages as I have experienced more of life; and I had read many of the books that formed the philosophical basis of environmentalism, politics and peace campaigns by the time I began helping others develop their own campaigns in my late teens. Helped by at least three excellent school teachers who saw learning as far more than just conveying a certain curriculum, I grew to learn that society is a web of meaning that stems from human experience, not just random or unconnected events, or control from above.

Of all the authors that I read I think one of the greatest influences on my practical work was Saul Alinsky[2]. He saw the ways in which communities could use the politics of pressure as something more than a blunt bludgeon of collective opinion that berates the powers-that-be over some injustice or another. For Alinsky pressure politics was about the dynamic between one group that had power (usually, the rich) whilst another group that did not (usually, the poor). It is by manipulating the publicly stated rules or norms by which this power-relationship operates that we can transfer power from those that have it to those who need it – and effect change as a result. To Alinsky, it was by using our innate capacity for creativity, through conscious problem solving and finding ways to push the those in control "beyond their experience", and perhaps most of all by our collective sharing of collective humour and joy whilst engaging in these processes, that it was possible to use public pressure in a far more efficient way to effect change – *public pressure as socio-political hacking* (I know some don't like to use the 'p' word, but of course politics has existed ever since a child played his mother off against his father in order to get what they wanted).

"Public pressure as socio-political hacking"; I can already feel the virtual gall bladder of the more techno-fetishistic hacker community tighten and squeeze bile in my general direction. The problem with the way that the on-line community attach meaning to the artefacts of the virtual environment is that it often degrades the value of our real, organic self; or as William Gibson describes it in *Neuromancer*[3], the console cowboy's rejection of "the flesh"... *"it's just the flesh talking"* (yeah, OK, so I have read some fiction too, but only on my days off). Of course, if they believe that the virtual world is all so real, just pull out the power cord and we'll come back in a day or so and see what's left; *reality is so often contingent upon and framed by your immedi-*

ate circumstances. Right now, looking at the escarpment of the Cotswold Hills that I walked and camped upon many years ago, the virtual environment of the M5 – legally and physically severed from its surrounding environment – appears equally abstract.

Just as religious groups vehemently fought in the past over the abstract interpretation of textual meaning, today the techno-enabled subcultures of The 'Net take offence at any perceived denial of the meaning they attach to their virtual world and how it relates to "the flesh" society. I've experienced this in the past[4], but I've tried to steer clear of such exchanges because it's difficult to reap progress from a debate in which one side believes that many elements of human society have no value at all.

For example, I'm reminded of a geek, probably in his early twenties, who I'd conversed with at a LUG meeting[5]; he'd made scanned copies of all the important documents that described his life (birth certificate, childhood photos, exam certificates, etc.), virtually burned the document images onto a CD and then ceremonially burned the paper copies – of course, the CD he held showed (as a change in the way light is scattered) that the amount of data stored on the disc probably amounted to less than a tenth of the disc's 640 megabyte capacity... *is that a life?* (certainly I find it difficult to believe that a life can fit onto a tenth of a CD given that my own work/background information data collection has recently passed two terabytes).

"Meaning" is the way in which we make sense of the phenomena around us by attaching rules or values to them and, as a result of these patterns of rules we can anticipate phenomena and manage the sensory loads of our existence. In conditions such as autism it's the failure to mange this sensory load that causes a person to run away inside their own "virtual" self, severing communication with the outside world as a result. Interestingly there is a relationship between autism and the obsessive behaviour that characterises certain types of technophile activity, such as Asperger's Syndrome[6].

Fifty years ago many young boys (more prone to this type of behaviour) collected train numbers or stamps, but today they play within the repetitive and simplified constructs of computer games instead (did you wonder where the train spotters had gone?). The solitary man who used to sit with a scarf and tartan flask at the end of the platforms at Crewe is now as likely to be living in virtual domains, or with sufficient training, hacking the networks to find his own meaning in the "borg"[7] (I once knew a computer administrator who's email signature was, "I like the Borg because they have cool clothes and lots of friends" – it stuck in my mind because it's perhaps the most eloquent statement of technological nihilism that I've yet come across).

A century or two ago, and in much of the develop-

ing world today, this process of finding meaning is related to the life-or-destitution decisions over where to find food, where to find shelter, or how to stop one group of humans preying your own group. In the Westernised world, where such problems have allegedly (in Keynes' terms[8]) "been solved", we instead find more esoteric but often fatuous structures to provide meaning to our lives; from Big Brother to ballet, or Top Gear to teddy-bear collecting, our lives are framed by the auto-erection of structures through which we annihilate the one universal constant that plagues us all, *time*.

Of course, removing the pressures of securing our basic needs and security can allow individuals to use their creative energies to advance our common perceptions of existence – as great thinkers, writers and artists have done throughout human history. Then again, this same material freedom can lead us into a nihilistic negation of our relationship with society, or the value of elements of it or groups within it, through the creation of meanings that are wholly divorced from an observed, or "realistic", assessment of the h phenomena of our everyday lives[9].

As abstraction is the simplest way of dealing with the reality of our surroundings, and the meaning that this would have to our own self-worth and self-image, such negation often takes the form of ideas or views that challenge the validity of certain aspects of the natural world or the commonly held values across society (e.g., conspiracy theories, where clear evidence exists to the contradict the conspiracy narrative, are an excellent example of this). Such abstractions, just as with the religious sects who experience their most profound statement of devotion through mass suicide or martyrdom, reach the perihelion of their development when they utterly decry the value of their own biological selves, and the natural environment from which our biological being spring and are sustained; and of course, this applies just as much to the economic fundamentalists of the business world as it does to religious fundamentalists or lonely people in bedsits, guiding their super-model-styled avatars through virtual beach resorts in *Second Life*.

But I digress... back to the car, which has now pulled in at Michael's Wood service station where we alight to enact the very real relief of our body's natural functions. Just as Gibson's "cyberspace" is a conceptualisation of the "non-space of the mind", a meaning within which many tech-heads find a structure to escape their complex involvement with the world, so I find that motorway service stations are an equally vacuous abstraction of the reality of travel. That's not an anti-car sentiment – I find that Birmingham New Street and many other interchanges rail stations are equally devoid of any reality outside of the need to connect trains, and service "the flesh" as part of the process. Bentham

may have said that the object of life is to secure the greatest well-being of the individual, but who really enjoys service stations? As I stare into the cafeteria, the food is being tortured – CIA-style – under hot lights, perhaps in the hope it will break and admit a terrorist offence or submit finally to some form of genetic modification; to my left slot machines provide a more technologically inspired illusion to to nullify the pangs of the flesh-world's vibration-numbed nerves and muscles, atrophied through prolonged sitting on their journey.

Car travel represents one of the most stark disconnects between the abstract concept of transport – as sold through TV and magazine car advertisements – and the objective reality that is exemplified by the soulless edifice in which I now stand. Transport planning is subject to a complex ideology: At one level there are the overriding economic justifications of cost and benefit, which are objectively a bankrupt system because of the impacts that it does not, or is incapable of, valuing; at another level there's the more abstract vision of "freedom of movement" that private transport enables, but which to me appears rather absurd when viewed from establishments such as this, where our "freedom" is impoverished by the simplistic choices available; and then there's the more literal meaning of transport, often in conflict with both its abstract vision and economic justification – such as the congestion on the motorway outside, and the low quality/high cost environment of a service station where the rational justification of the consumer society breaks down spectacularly (in the sense of *The Spectacle*[10]), crushed by what our direct experience demonstrates. If we truly wanted to improve our travelling experience we would fight the ideology that dictates the economic and physical "structure" of the motorway service station, but in reality people put the Stoics to shame by bearing the indignities of this necessitous construct and instead try and find some value to the "content" of the service station; perhaps accepting something that is far below their desires in order to secure the greater rewards promised by their journey's end.

I view the Highway's Agency screen that gives traffic information for the road ahead (which in any case turned out to be erroneous). The interface offers the opportunity to give "feedback"; as the criteria for reply are not stated I enter a short comment that excises some of the moral angst I feel standing here – *"Ban cars... save the planet"* (a little in-erudite but it's a really an intonation that's representative of a deeper change, the description of which this system's interface isn't functionally designed to accept).

My mind strays back to the dot-matrix road-side display; what if this the Highways Agency's display were to have the coastline reset, inundating the Somerset levels, and replacing the M5 with the "Climate Change Ferry" providing the link between

Clevedon and Taunton instead? *The Trap!*; *that's just playing the content game, like so much of the campaigning we see in the world today*. It would be ineffectual since even the most somnambulent driver would know from their own contrived web of meaning that such information must be false. If we're going to hack the meaning of such technologically mediated information channels then we have to hide an objective truth between the "virtual" abstractions that terminals such as this convey – we hack the deeper meaning, rather than the objective content, using criteria that redefine the information within new terms (such as Alinsky's emphasis on humour and ridicule – *no amount of political spin can withstand a good one-liner!*).

Just as people bear the absurdities of services stations as there is seemingly no alternative (which is a fallacious view – *there are always alternatives*), do people bear the absurdities of the modern state in the same way? Like service stations, modern politics (as personified by the ancestral Tory who lead the Labour Party, Tony Blair) represents the triumph of abstract content within the age-old debate on social and political structures. For example: Henry Ford originally made cars in any colour "provided it was black"; today we can support any electable political party, but in the process we must also support their commitment to the liberal free market; as a result parties will debate the content of any issue, but not how the structure of that issue relates to the concepts of the market.

Such emphasis on content, within Alinsky's terms, generates ample room for creative hacking since there will always be tensions over what is left vague or unstated in public, or due to the gaps in coherence that such selective viewpoints give rise to. For example, the absurdity of the political construct can be seen in the way that no mainstream party will derogate from the support of the free market, even though there's plenty of evidence to suggest that the past fifty years of consumer partying must now come to an end – and now we must bear the indignity of tidying up before, like the parents returning home early to their adolescent child's house party, "reality" enforces another more uncomfortable solution. Even when the system crashes, such as in the last twelve months, all that the political system can do is reboot it in an effort to once more attain the grail of "growth" – even though it's that focus on growth, within a finite environment, that's at the root of many of the ecological problems of the world today. aphorism

To hack the socio-political authority of the state using its technological mechanisms we have to, as Alinsky advocates, bend or redefine the rules in order to push that system beyond its usual operating parameters. Damn!, that sounds far too much like Morpheus' speech to Neo in that other great parable of the conflict between a techno-logically mediated reality and the human flesh, *The Matrix*[11] (I'm in perilous danger of disappearing up my own metaphors!).

Where the reality and the abstract most often collide is in the way the Government, or campaign groups, entice the public to change the way their view the world. Rather than making a justification that stems from the perspective of the person making the request, they instead refer to external values which, if we look at society in general, only a small section of the public share. Often, in making arguments from this perspective, they are addressing their own constituencies and reinforcing their own group identity rather than addressing society as a whole. *Advertising agencies don't make this mistake;* instead of applying some higher, altruistic motivations for action they inspire the collective imagination from within the "target audience's" conception of the world, *not their own* (do successful advertising personnel actually have a fixed view of the world?).

In a sense the approach of the most successful advertising and marketing campaigns represents the fully abstracted control of content over structure – any revolution that it might create is purely a "revolution of the imagination", divorced from what might be our commonly understood perceptions of real life, and consequently not a revolution of our physical circumstances. As the virtual environment of the imagination is not restricted by real-world constraints (car advertising being one of the ascending heights of this process) advertisers can use cultural and psychological cues to manufactures ideas and sensations in order to attach them to our relationship with certain commodities – even though these ideas might not be consistent with our actual everyday experience. The philosophical view of modern society as a *Spectacle* is often represented by the construction of abstract patterns of meaning *outside* of the individual; the power of marketing is that it creates meaning *within* our own psychological self-image and the perceptions of self – we are direct participants in the process.

This isn't an observation on recent trends. Such processes have been observed for some time: In his study of early consumerism, *The Theory of the Leisure Class*[12] (1899), Thorstein Veblen characterises the way that self-image, and especially the social pressures on the individual, can be used to create a psychological cues to consume and so to reinforce our internal or external image of ourselves in society; in the 1960s, in *The Harried Leisure Class*[13] (1970), Stefan Linder looked at how this process can make us, in economic terms, maximise the use of our spare time for consumption and structure our lifestyles around maximising our abilities for economic consumption – and the important role of perception and self-image in this process; and in the 1970s, in *The Consumer Society*[14] (1970), Jean

Baudrillard also characterises the involuntary nature of consumption in the modern world, and its ability to be manipulated through the development of abstract cultural meanings, often divorced from their real-world objective reality – ideas that reached their most detailed exposition in his later book, in *Simulacra and Simulation*[15] (1985), which looks at the role of abstraction and meaning in modern culture (curiously, that book was featured in *The Matrix* too).

As noted above, marketing, in stressing content over structure, represents the "revolution of the imagination" rather than physical change; functionally a car is a car, and so it doesn't matter which car we take to the shops because we're still stuck within the same structural patterns. However, that need not be the case. In order to change our lifestyles we have to have a vision, be it vague or meticulously planned, through which we can contrast our present circumstances with a perceived alternative; but to be implementable, the framework of ideas and meaning we create must have a direct link to real work phenomena – *to structures*. In contrast marketing creates a framework, linked primarily to other abstract ideas, that are separate from the real world and as such any hope of change will always be foiled by the intercession of reality; usually to our personal frustration at the failure of the goods we purchase to produced their desired "pay-off" in quality or enjoyment.

Through the principal action implicit in most marketing activity – *consumption* (be that of products, idea or political viewpoints) – radical change is a remote possibility in any case because the limited and controlled nature of consumerism reinforces the structure of the present system rather than detracting from it. It's also for this reason that tools such as green consumerism, or the media-marketed change offered by large campaign groups, cannot create a real change in the way humans impact the environment because any changes that may arise are largely cosmetic. Yes, green consumption, through it's virtual altruistic cues, can make us feel better about ourselves, but once again it represents "the trap" of changing just the "content" – *our choice of brands or products* – that define our lives rather than the root and branch review of the "structure" of consumption that would be required to significantly change our personal ecological footprint.

Perhaps more problematically for its promoters, and returning to the issue of how the impetus for change relates to the individual, as the justification for green consumerism often implies a higher or external justification to undertake change, it will only ever appeal to those who can identify with these ideas or who have the economic power to adopt them. For many people such notions, especially to those who perhaps appreciate the trappings of modern society, will be either of little value or will be rejected without question as spurious; for others,

who are at the base of the economic pyramid, such ideas are meaningless because there is simply no mechanism whereby they can be adopted – if we're going to change the world with purchasing power does that exclude anyone who can't afford to do it? (even though arguably these groups might reap the greatest benefits from a more ecological view of society).

As well as consumption being a limited means of obtaining change, what differences in trends it does create are often subject to the greater structural factors that affect how we consume. As green or ethical consumption is also subject to the more complex economic relationships that form of lifestyles, the vicarious considerations inherent in "conspicuous consumption" mean that these patterns of change can be abandoned quickly as changing economic or social forces dictate[16]. Those who will not abandon their own personal "green lifestyle" in the face of external circumstances are likely to be acting from a far deeper justification than simple "altruism"; as such they will already be supportive of green consumerism[17], but are often frustrated from achieving deeper change in their lives because the mainstream economy can only offer the shallow, "content" messages of consumption – rather than the deeper and more philosophical "structural" change that they might wish to engage in[18].

If a large part of society will not listen to the rather shallow message of most ecological campaign groups, and certainly would resist the message of the deeper ecological campaign and lifestyle groups, how do you create the space for the consideration of the issues which are antithetical to the present "consumer society"? – such as global food production, peak oil or climate change.

The professionalisation of the environment movement from the late 1980s (in the UK at least) means that it not only works in similar ways to the mainstream forces of economics and politics, but the mechanisms and options it now advocates are similar too. For example, objectively we should radically contract consumption in order to tackle climate change and resource depletion – but few within the mainstream of environmentalism put this option on their action-item list. Professor Tim Jackson of the Sustainable Development Commission makes the case[19] for why ending growth would be our best option to reduce the impacts of human consumption, but also notes that the existing approach works against this because, "...they bombard us with adverts cajoling us to insulate our homes, turn down our thermostats, drive a little less, walk a little more. The one piece of advice you will not see on a government list is 'buy less stuff'".

If the mainstream environmental movement is honest in its aspirations to forge a new, more sustainable society then it must also accept that – given

that it is such a radical departure from the present patterns of economic and social organisation – this might require a more radical mechanism than "changing brands". If December's Climate Summit in Copenhagen fails to produce an agreement (if any) commensurate with the scientific evidence on the need to cut emissions then I believe that we must consider that the present approach of mainstream environmentalism is flawed. After nearly two decades of "engagement" with politics and the business community, it is clearly not producing any meaningful results; in fact, since the UN Framework Convention on Climate Change was signed in 1992, total man-made carbon emissions since the beginning of the Industrial Revolution have increased by nearly 50%.

There is a great similarity between the way *crackers*[20] (as distinct from the more innocuous 'hacker') *infiltrate virtual systems and the way which effective campaigners manipulate public organisations and authorities:* Crackers study the target system in order to understand its configuration and the opportunities that exist for penetration – effective activists study the economic, legal or social configuration of their target in order to understand where campaign opportunities exist; crackers look for flaws in security systems or program code – activists look for legal loopholes or administrative failures that allow campaigns to be carried out; crackers also work on the opportunities for social engineering (and its exponents, such as Kevin Mitnick[21], often argue that the social aspects of hacking are as powerful as the technological) – as do the most effective campaigners, who manipulate both the media's narrative on the environment and administrative power in order to create progressive action and change. It's not so much that hackers are a kind of electronic activist, or activists are low-tech hackers; both of these groups are engaging in complex systems engineering in order to secure certain goals, and in that practice they are using broadly similar approaches.

We need to develop praxis[22] of ecological activism that moves beyond the mechanisms of the present economic system – which is of course the root of many of the problems that are the subject of these same campaigns – and instead move towards a conception of campaigning as a form of social and technological "hacktivism". Understanding the meaning and symbolism of how modern society interacts with technological systems must be key part of this strategy because, like them or not, the only way to negate the meanings attached to the technologically mediated systems that pervade our lives is to interact with them; not the positive, constructive and reinforcing engagement characterised by present mechanisms such as green consumption, but rather the negation of their ecologically destructive roles

through the assimilation of their public authority and the subversion their wider meaning.

Of course, there's been a lot of effort in this area already, especially the more artful and entertaining work of culture jammers[23], artivists[24] and other such movement who use technological media as a counter-power[25] to the dominant culture which they normally serve. Examples of this approach began in the 1960s with group who manipulated culture through performance and real-world intervention – such as the Merry Pranksters[26], or Situationist's dressed as Santa Claus giving out expensive toys for free in shops at Christmas; we see similar, but perhaps more virtual examples of this approach (unfortunately, mostly in the USA) with the work of Adbusters[27] or the Billboard Liberation Front[28]; others, such as The Institute for Applied Autonomy[29] or the Barbie Liberation Organization[30] put equal emphasis on the manipulation of technological systems themselves in order to convey their message; finally there are those, such as McSpotlight[31] or digital Zapatistas[32], who use the virtual technological mechanisms as a means of reinforcing their physical, real-world efforts for change.

However, as noted above, what this achieves is largely the manipulation of "content" rather than "structure". Many types of "hacktivist"[33] action can only affect the interpretation of messages by society through the manipulation of meaning or symbolism; rarely do they create a real, physical phenomena that people can experience directly. Whilst such manipulation can create a powerful impact in the mind of the public where it (almost subliminally) changes perceptions of the information conveyed, if the action clearly represents a form of manipulation rather than an authoritative message it will be dismissed and/or considered threatening by the public as a result. As with my idea of the manipulating the virtual coastline of Somerset above, the results would defy the conventionally accepted understanding of what's happening in the world today and would be readily rejected without deeper consideration of what the action sought to highlight. For this reason my other idea, "Britain's running out of oil – slow down", is far better because it ties in to wider ideas about fuel prices, shortages and recent industrial action; it plays to the deeper, unconscious perception of events that the mass media fails to implicitly state or relate.

Conceptions of how groups manipulate the technologically mediated world are nearly all rooted in the existing concepts of the "hacker" – someone who bends the virtual world to their will by manipulating its functions – and their exploitation of "cyberpower"[34]. Such conceptions are usually related to a specific focus, such as actions against a single virtual target, rather than the more widespread manipu-

lation of the meanings and messages that technological mediated information conveys to society as a whole. A few social or political examples of these principles do exist, such as viral marketing[35] or viral politics[36], but in most cases these activities simply reinforce existing mainstream communication channels in more nuanced ways rather than offering up a wholly new meaning of political discourse and representation to society.

What will define the success of how such a mechanism could work to influence the popular meaning and dialogue over certain aspects of society will depend upon the way that the manipulation of the virtual content is able to be parallel by real-world action. The power of this approach is that it could subvert the authority of technological systems to more forcefully convey progressive messages for change; the cost is that those involved would have to manipulate these systems very creatively, and this is likely to result in legal liabilities given the scope of present computer and property legislation. But, since many efforts to secure ecological change are now broadly classes as "domestic extremism"[37], and existing mechanisms to allow the communication of alternative messages are being subject to greater control (as happened in the early days of hacking/cracking, when individuals usurped the power of government and corporate information systems[38]), such ramifications may have to be accepted as a necessary penalty. Arguably any type of action that is able to convey an effective message – beyond the "content" of the everyday, filtered and abstract media babble that now represents "infotainment"[39] – is likely to be stamped upon by the authority in any case. In fact, it is precisely because so much of political debate is now related to the manipulation of "content" that controls over "the medium of the message" become far more important than control over the specific political views that they represent.

As noted above, to be effective the approach should not be to create a clearly manipulated message but, utilising the authority that these systems convey, to create doubt in the existing meanings that these systems convey; and, through that moment of contemplation or reflection on the manipulated content that this opens in the public's consciousness, we create a new meaning that redefines the relationship of the individual to the real world. We deliberately use (or in hacker-speak, "spoof") the implied or assumed executive power that these systems possess, negating their conventional virtual role, in order to create a greater emphasis on structural problems that exist in society. Luckily there's already a vast resource of comment and observation on the absurdities of modern society that we can use as a template to construct ideas for specific actions. For example, by emulating the format of recent success-

ful books such as *Is it Just Me or is Everything Shit?*[40] (ironically, on sale in the service station) we could define cues and ideas that are more likely to create new meanings and realisations in the public's consciousness. Even for those whose lives are already subsumed in the digital domain, there are also similar commentaries on the absurd structures that define the technologically mediated environment, from essays such as *In the Beginning was the Command Line*[41] through to the more techo-optimistic approach of *Free as in Freedom*[42], that could inspire the form of arguments to redefine people's relationship to the virtual world itself.

Of course, such an approach could easily fall into "the trap" I've sought to outline – any system that relies on virtual action only influences the content of the message, not of the real structural system that supports that content. For example, when someone hacked *Second Life* and raised the sea level by a couple of metres to simulate climate change, what real difference did that make? The best and most progressive message is one that creates new meaning within culture and invalidates the old perspective through a real, practical experience of an alternative view of society. From the redefinition of urban space at Leaf Street[43] in Manchester or in 'autonomous zones' and 'social centres' in other cities around the UK[44], to the more rural low impact communities at Brithdir Mawr[45] or Tinker's Bubble[46], to the way Cuba dealt with the collapse of its oil supply[47] or the decentralised "asambleas barreales"[48] (free assemblies) of people that created a parallel market for social exchange in Argentina following the collapse of the mainstream economic system, such examples give people the confidence to engage in new ideas because their direct experience gives them new models for how change might be possible. I believe that the simplest approach to avoiding the "the trap" would be to apply Alinsky's rules of praxis[49]; we manipulate the information conveyed through the virtual environment not for itself, but to serve a real-world evaluation of power and action.

Despite the rhetoric on the environment and climate change from our politicians, reinforced by the abstraction and isolation from reality that the media and public debate now occupy, it is clear that the trends of the last fifty years are continuing apace. Against this background it may seem pointless talking about change, especially as the issue of "content" has seemingly replaced the discussion of the more structural "ideology" of change – both within politics but increasingly within the mainstream of environmentalism. However, the feedback that I have gathered from the public over the last few years suggests otherwise; as I travel around the UK to give talks and workshops I find that people are able to make connections between the issues I con-

vey and they disconnected narrative that they see in the media – *what they lack is the means of identifying the need for change as it relates to them specifically, rather than relating change to some external, altruistic justification that can ever only apply generally.*

It is obvious that the current consumer society is not sustainable. If not because of the environmental problems it creates, then because of the more basic principle that continual growth is not possible within the finite limits of our planet. Despite the protestations of some of the environmentalists who attempt find solutions "within the system" and within the language of economic management[50], the available evidence suggests that not only are sustainable development and economic growth are not compatible, but even within the present system these measures cannot deliver the intended results[51] because they do not address the more politically controversial issue of consumption. We have to move on beyond the economic preconceptions which have their roots in the Eighteenth Century – when the population and resource constrains on the human species were not a limiting factor – to a new wholly new philosophy of human organisation which has energy, resource and environmental considerations at its core[52]. Although those who oppose this principle might obfuscate the debate by quibbling about dates, or the amount of resources that remain, the basic principle cannot be avoided that at some point change must happen because economic growth cannot continue forever.

Irrespective of how we might give meaning to the conceptual meanings that exist in virtual space, be they in our own the mind or within our technologically mediated society, *the world is all that is the case*[53]. If problems arise because we are unable to reconcile the appreciable facts of our physical existence to the notions of what we believe it is to be a "modern human", then it is our notions that must change not the nature of the real world. We face such a dilemma today, between the wish of the global community to grow and consume more and the inability of the human ecosystem to provide the necessary energy and resources. The only solution to this dilemma is the one that accords to the scientific laws that define the natural environment, not the social and psychologically defined constructs of human society; in summary, *we're going to have less, whether we like it or not, because that's what reality dictates*.

It is for this reason that the growth paradigm, the globalised economy or the neo-liberal economic consensus – *call it what you like* – will not be overthrown by revolutions or by global treaties. It will cease to be our dominant economic model when the majority of those who are governed by it believe that it no longer provides a certain future their lives. This is why I believe that the change towards a new ecological paradigm will be based upon a chain reaction of opinion, one person to another like a viral philosophy, rather than a mass movement; a revolution of our personal outlook, not simply our system of government. The meanings that people attach to the various aspects of our modern world, and the way in which they do or (in the case of motorway service stations) do not match our direct perceptions will play a large part in the individual's evaluation of whether the "conventional wisdom"[54] that politics and economics seek to convey is valid or not. The ultimate question I therefore pose is this; *which parts of the virtual mechanism might we manipulate in order to accelerate this process?*

Perhaps I should stop here... *to continue might be construed in some more litigious sense!*

References

1. See Wikipedia: 'The Prince' – http://en.wikipedia.org/wiki/The_Prince

2. See Wikipedia: 'Saul Alinksy' – http://en.wikipedia.org/wiki/Saul_Alinsky

3. See Wikipedia: 'Neuromancer' – http://en.wikipedia.org/wiki/Neuromancer

4. For example, see the *electrohippies* Occasional Paper 1 – http://www.fraw.org.uk/download/ehippies/archive/op-01.html – and the response – http://www.fraw.org.uk/download/ehippies/archive/op-01a.html – from the Cult of the Dead Cow group – http://www.cultdeadcow.com/

5. See Wikipedia: 'Linux User Group' – http://en.wikipedia.org/wiki/Linux_User_Group

6. See Wikipedia: 'Asperger Syndrome' – http://en.wikipedia.org/wiki/Asperger_syndrome; see also *Asperger's and IT: Dark secret or open secret?*, Computerworld, April 2nd 2008 – http://www.computerworld.com/s/article/9072119/Asperger_s_and_IT_Dark_secret_or_open_secret

7. See Wikipedia: 'Borg (Star Trek)' – http://en.wikipedia.org/wiki/Borg_(Star_Trek)

8. "Assuming no important wars and no important increase in population, the economic problem may be solved, or at least within sight of solution, within a hundred years"; from the essay *Economic Prospects for Our Grandchildren*, published in *Essays in Persuasion*, John Maynard Keynes, 1931; latest edition published by W. W. Norton, 2009. ISBN 9780-3930-0190-7 (paperback), £12.

9. See Wikipedia: 'Phenomenology (philosophy)' – http://en.wikipedia.org/wiki/Phenomenology_(philosophy)

10. See Wikipedia: 'Spectacle (Situationism)' – http://en.wikipedia.org/wiki/Spectacle_(Situationism)

11. See Wikipedia: 'The Matrix' – http://en.wikipedia.org/wiki/The_Matrix

12. Chapters 4 and 6, *The Theory of the Leisure Class*, Thorstein Vablen, 1899; text available on-line from *Project Gutenberg* – http://www.gutenberg.org/files/833/833-h/833-h.htm

13. *The Harried Leisure Class*, Steffan Burenstam Linder, Columbia University Press, 1970. ISBN 9780-2310-3302-2 (hardback – out of print).

14. *The Consumer Society – Myths and Structures*, Jean Baudrillard, 1970; English translation by Chris Turner, Sage Publications, 1998. ISBN 9780-7619-5692-1 (paperback), £23.99.

15. *Simulacra and Simulation – The Body in Theory: Histories of Cultural Materialism*, Jean Baudrillard, 1985; English translation by Sheila Glaser, University of Michigan Press, 1994. ISBN 9780-4720-6521-9 (paperback). £14.50.

16. See:
Recession sees shoppers switch from green to budget products: Study finds even ethically-conscious customers swapping to cheaper brands for weekly grocery shop, Rebecca Smithers, The Guardian, Monday 6th July 2009 – http://www.guardian.co.uk/business/2009/jul/06/shoppers-survey-fairtrade-green-budget
– and,
It's so last year: Vanity Fair abandons the 'green issue': The global financial crisis pushes the environment off the front cover, Rachel Shields, The Independent on Sunday, Sunday 5th April 2009 – http://www.independent.co.uk/news/media/its-so-last-year-vanity-fair-abandons-the-green-issue-1662661.html

17. See Wikipedia: 'Ethical Consumerism' – http://en.wikipedia.org/wiki/Ethical_consumerism

18. See 'The Ecological Land Coop' – http://www.ecologicalland.coop/ – see also – http://www.evnuk.org.uk/networks.html

19. *What politicians dare not say*, Tim Jackson – part of the New Scientist Special report, *How Our Economy is Killing the Earth*, New Scientist, no.2678, 18th October 2008. http://www.newscientist.com/article/mg20026786.100-special-report-why-politicians-dare-not-limit-economic-growth.html

20. See Wikipedia; 'Cracker' – http://en.wikipedia.org/wiki/Cracker

21. See Part 2, *The Art of Deception – Controlling the Human Elements of Security*, Kevin D. Mitnik, Wiley Publishing, 2002. ISBN 9780-4712-3712-9 (hardback).

22. See Wikipedia: 'Praxis (process)' – http://en.wikipedia.org/wiki/Praxis_(process)

23. See Wikipedia: 'Culture Jamming' – http://en.wikipedia.org/wiki/Culture_jamming

24. See Wikipedia: 'Artivism' – http://en.wikipedia.org/wiki/Artivism

25. See Wikipedia: 'Counter-power' – http://en.wikipedia.org/wiki/Counter-power

26. See Wikipedia: 'Merry_Pranksters' – http://en.wikipedia.org/wiki/Merry_Pranksters

27. See Wikipedia: 'Adbusters' – http://en.wikipedia.org/wiki/Adbusters

28. See Wikipedia: 'Billboard Liberation Front' – http://en.wikipedia.org/wiki/Billboard_Liberation_Front

29. See Wikipedia: 'Institute for Applied Autonomy' – http://en.wikipedia.org/wiki/Institute_for_Applied_Autonomy

30. See Wikipedia: 'Barbie Liberation Organization' – http://en.wikipedia.org/wiki/Barbie_Liberation_Organization

31. See McSpotlight – http://www.mcspotlight.org/

32. See Digital Zapatismo – http://www.thing.net/~rdom/ecd/DigZap.html

33. See Wikipedia: 'Hacktivism' – http://en.wikipedia.org/wiki/Hacktivism

34. See Chapters 1 and 7, *Cyberpower – The Culture and Politics of Cyberspace and the Internet*, Tim Jordan, Routledge, 1999. ISBN 9780-4151-7078-9 (paperback), £26.99.

35. See Wikipedia: 'Viral marketing' – http://en.wikipedia.org/wiki/Viral_marketing

36. E.g., *Viral Politics – Communicating in the New Media Era*, Anthony Painter and Ben Wardle, Politico's Publishing, 2001. ISBN 9781-8427-5022-3 (out of print)

37. *electrohippies* Paper Q2. *NETCU, WECTU and NPOIU: Britain's Secretive Police Force – Politicising the Policing of Public Expression in an Era of Economic Change*, Paul Mobbs for *the free range electrohippie collective*, April 2009 – http://www.fraw.org.uk/download/ehippies/q02/index.shtml

38. For an account of this process see *The Hacker Crackdown – Law and Disorder on the Electronic Frontier*, Bruce Sterling, Bantam Books 1992. ISBN 9780-1401-7734-3 (paperback). Available on-line from – http://www.mit.edu/hacker/hacker.html

39. See Wikipedia: 'Infotainment' – http://en.wikipedia.org/wiki/Infotainment

40. *Is it Just Me or is Everything Shit?: The Encyclopedia of Modern Life*, Alan McArthur and Steve Lowe, Time Warner Books, 2006. ISBN 9780-3167-2953-6 (hardback) £12.99.

41. *In the Beginning...Was the Command Line*, Neal Stephenson, Avon Books, 1999. ISBN 9780-3808-1593-7, £7.99.

Available on-line at – http://www.cryptonomicon.com/beginning.html

42. *Free as in Freedom – Richard Stallman's Crusade for Free Software*, Sam Williams, O'Reilly Press, 2002. ISBN ?. Also available on-line at – http://oreilly.com/openbook/freedom/

43. Leaf Street Garden, Manchester – http://manchesterpermaculturenetwork.howcreative.co.uk/Leaf_St_

44. LondonARC keep a list of social centres at – http://www.londonarc.org/social_centre_network.html – examples I'd recommend seeing are The Commonplace in Leeds – http://www.thecommonplace.org.uk/ – the Synergy Centre in south London – http://www.thesynergycentre.org/ – or for something more anarchic in the community arts line, The Star and Shadow in Byker – http://www.starandshadow.org.uk/

45. See Wikipedia: 'Brithdir Mawr' – http://en.wikipedia.org/wiki/Brithdir_Mawr

46. See Wikipedia: 'Tinker's Bubble' – http://en.wikipedia.org/wiki/Tinker%27s_Bubble

47. See Wikipedia: 'The Power of Community' – http://en.wikipedia.org/wiki/The_Power_of_Community:_How_Cuba_Survived_Peak_Oil

48. See "asambleas barreales" in *Fragments of an Anarchist Anthropology*, David Graeber, Prickly Paradigm, 2004 – http://www.deuceofclubs.com/books/249anarchist_anthropology.htm

49. See Saul Alinsky's two main books: *Rules for Radicals*, 1971, latest version Vintage Books reprint edition, 1989, ISBN 9780-6797-2113-0; and *Reveille for Radicals*, 1949, latest version Vintage Books reprint edition, 1992, ISBN 9780-6797-2112-3.

50. Chapter 16, *Capitalism As If The World Matters*, Jonathon Porritt, Earthscan, 2005. ISBN 9781-8440-7192-0 (hard-back), £35; revised paperback edition 2007, ISBN 9781-8440-7193-7, £18.99.

51. *Quality of Life Eco-Efficiency*, Roger Levett, *Energy and Environment*, vol.15 no.6 p.1015-1026, 2004.

52. See Wikipedia: 'De-Growth' – http://en.wikipedia.org/wiki/De-growth

53. Part 1, *Tractatus Logico-Philosophicus*, Ludwig Wittgenstein, 1918; Routledge Classics (2nd edition) 2001, ISBN 9780-4152-5408-3 (paperback), £8.99. On-line version available from Project Gutenberg – http://www.gutenberg.org/files/5740/5740-h/5740-h.htm

54. Chapter 2, *The Affluent Society*, John Kenneth Galbraith, Hamish Hamilton, 1958; latest edition Penguin Books, 1999. ISBN 9780-1402-8519-2 (paperback), £10.99.