We're All Hackers Now

Doing Global Democracy

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ABSTRACT

While the internet is often lauded as heralding a new phase of democracy, the global information economy, particularly since 9/11, is constituted by an interlinked set of transnational corporations and government agencies with unlimited capacities for surveillance, control and command that challenge the authority of national representative democracy and undermine the hard-won sovereignty of its citizenry. This paper argues that democracy can adapt and prosper in the 21st century only if national citizens transform their traditional rights and responsibilities into a militant, technological citizenship that creates a global democracy. A return to the Athenian model of democracy suggests that the techno-rhetorical skills and proactive ethical attributes necessary for the work of the global citizen are inherent in the "hacker" ethos. Hacking was always more than the neocriminal interference with computer systems suggested in the mainstream media. This paper argues that hacking extends to cover any militant and creative intervention into any aspect of the media flow. Thus arises the possibility of the citizen-hacker using the emerging social

networking technologies and techniques on which the global information economy rests to create new forums for open deliberation and new forms of political and social organisation.

Keywords: Democracy, Technological Skills, Rhetoric, Hacking

INTRODUCTION

More than a decade ago, Jacques Derrida (1996) pointed out that while new media are changing the ways knowledge is stored from paper archives to readily available electronic archives, this process is also transforming the nature of knowledge. In Archive Fever, he argued that there is a fundamental shift underway in how we structure human experience and shape our political relationships and realities. Many assume that this shift, driven as it is by the growing power of the global information economy, will undermine the power of national representative institutions and lead to an inexorable diminution of the democracy we presently have available. This view rests on a simple account of democracy as what goes on in and about parliament whereas even the

staunchest proponents of representative democracy like John Stuart Mill (1991) argue that representative democracy is only justified as the most efficacious way to foster and channel the real democracy which occurs in the discussion and debates between citizens, in clubs and pubs, over the back fence and on the way to vote.

But it is this real. grass-roots democracy that is most under threat from corporations and media dedicated to turning the complexities of human life into marketed moments. The corporations are taking the lead in using new technologies to restructure human experience of time and space so that our most intimate conceptions of ourselves "have been subject to skilled manipulation and construction in the interests of corporate efficiency and profit." (Carey 1995:11). Working at home via the net means not only less workplace solidarity but also longer hours, constant availability and that feeling that you can never leave work. Living in the on-line game-world where corporations sell psychical experience rather than things does produce "the free-floating individual, the subjectless subject, the person whose ego is permeable... able to decouple from a relationship, a job or a political position with proper flexibility." (Palmer 1990:99) Between work and play, it is easy to see the potential for what Jurgen Habermas (1987) calls "the colonization of the life-world" where political positions come pre-packaged, debate is pointless and democracy is just an excuse for its own absence.

This paper argues that democracy does have a future in the global information economy but only where people insist on their citizenship, create their own forums and pursue their platforms not only in cyberspace but in the real world as well. For democracy to adapt to current conditions, it requires national citizens to transform their role as an active audience into the work of citizens doing democracy in the global media flow.

The nature of this putative global democracy is, of course, vague and its future uncertain because it is yet to be constructed the only way democracy can be constructed: by the activities of its citizens. At this point it is useful to return to the Athenian model of democracy which shows the crucial role of the militant citizen in the construction of democracy and suggests the techno-rhetorical skills and pro-active ethical attributes necessary for the work of the global citizen.

MILITANT CITIZENS

While the sexist and racist nature of classical Greek democracy is evident, it is useful in the context of this paper to consider how democracy arose out of conflict between the powerful rich and the poorer *hoplites*, the self-armed and largely self-sufficient infantry that formed the backbone of Greek armies in time of war. That conflict was resolved with a mix of economic justice and constitutional power-sharing (by Solon and then Kleisthenes in sixth century BC Athens) that saw the creation of democracy as a participatory form of government (Held 1987:14). As Perry Anderson (1974:33) notes:

"The precondition of later Greek 'democracy'...
was a self-armed citizen infantry." Thus before
democracy was a theoretical construct, it was a
militant assertion of practical power by the
citizenry. Access to political forums was not
granted to citizens; rather they created it. This
militant political creativity is a key theme in the
following discussion.

Pericles' is one of the few contemporary positive accounts of Athenian democracy that remains extant and it captures the notion that democracy is produced by the citizens when they insist on access to and transparency of decision-making processes. Democracy, Pericles argues in his famous Funeral Oration, is something more than simple majority rule. The test of democracy is that "its administration favours the many instead of the few" (Thucydides 1952:s37) and it achieves this end precisely because it affords equal access and freedom to speak regardless of class or status. Even more pertinently, there was also the cultural expectation that citizens would actively participate in the exercise of free speech. As Pericles puts it: those who avoid their democratic duties are regarded "not as unambitious but as useless" (Thucydides 1952:s40) or, as another translation puts it: "we do not say that a man who takes no interest in politics is a man who minds his own business; we say he has no business here at all" (Thucydides 1972:147).

Citizenship brought both rights and responsibilities. Liberty was not just freedom from excessive restraint but also a duty to participate. The significance of this duty is

apparent in Pericles' argument for democracy's effectiveness: the *polis* was strong and the quality of life improved because the democratic system required extensive deliberation before a decision was made: "instead of looking on discussion as a stumbling block in the way of action, we think it an indispensable preliminary to any wise action at all" (Thucydides 1952:s40). Broad-based engagement in democratic deliberation by autonomous and self-sufficient citizens was the most efficient way to transform the multiplicity of interests and views in the society into effective action because full and free debate produced a wide commitment to the outcome.

Central to the Athenian model of democracy was a vigorously applied freedom of speech among citizens, particularly in the Assembly. It was more than a right; it was a responsibility required for the effective operation of the participatory democracy. I.F. Stone (1988:215-230) identifies four different Greek words for freedom of speech: isegoria and isologia encapsulate the equal right to speak in the Assembly which was the basis of equality among citizens; eleutherostomou which comes from the theatre and suggests that a freely given opinion has greater moral force than a speech that is produced with inter-personal, economic or institutional constraint and; parrhesia which might be translated as a brutally frank and direct speech that was directed to revealing the actual substance of the matter under discussion.

Unconstrained by laws of defamation or the concept of official secrets, political debate was

"candid and vituperative," marked by "a remarkable degree of outspokenness" (Bowra 1973:92). Ironic and satirical humour was accepted as an important element of debate because it was seen to reveal the complex and quirky intimations and intuitions of the citizen's mind at which more polite and formal speech could only hint and so achieved a deeper and more sincere debate that strengthened the resolve of citizens to abide by collective decisions: "A people which can laugh at itself is well armed against many catastrophes" (Bowra 1973:92).

To the Athenians, free speech was much more than a right to enunciate a position. It also concerned the citizen's rhetorical and ethical duties to conceive arguments for their position and to communicate their opinions clearly, concisely and effectively to a large audience, to overcome "stage-fright" and the fear of public speaking, to withstand personal attacks and insults, to stand up straight and speak out loud in order to communicate what he really thought and felt about an issue. It also involved a responsibility to listen, to consider the opinion of others and to moderate and adapt one's views to the flow of the argument. Having contributed to the decision-making process as best he could, the citizen was constrained to abide by the decision thus made. Militant free speech, in short, was an intellectual, emotional and physical exercise that bound the *polis* together.

Our modern representative democracies have put greater distance between citizens and government than the ancient model and this limits effective debate. This is a factor of large populations, few representatives and a media apparatus designed predominantly for profit rather than the promotion of free speech.

National democracies have been complicit in creating their own irrelevance and ushered in the transnational corporations and interlinking government agencies using the technologies of the global information economy to assume power and authority far beyond that of the national democracies.

As the national democracies decline in the face of the global information economy, the growing number of techno-savvy pressure groups and grassroots interventions is noticeable. Citizens are harnessing the power of their desk-top computers to research, strategise and prosecute campaigns about the issues that concern them. There is a certain symmetry evident where the technology of the global information economy provides the antidote to its own chilling effect on democracy. This symmetry invites consideration of where the citizenly characteristics of autonomy, self-sufficiency and militant free speech are evident in the context of contemporary media flows. When we get down to the level of data, we meet the hacker. Not the criminal defiler of computer systems vilified in the mainstream media, but those who produce "interesting software, and for whom computers are just a medium of expression, as concrete is for architects or paint for painters." (Graham 2004: 18-9). But it is not just those who write the code who are the hackers but all those who create the solutions made possible by the hardware. Below, the history of the hacker is

considered, their ethos compared to that required by a global citizen and the citizen-hacker is placed in the context of a nascent global democracy.

DEFINING THE HACKER

Hackers have a bad name. It is difficult to even talk about this issue without being regaled by stories of the last time the respondent's computer crashed because of a virus. In the compressed shorthand language of newspapers and TV news headlines, 'hacker' has become synonymous with 'computer criminal'. As David Bell (2001: 179) points out, hackers are a "prime example" of the media-created "folk devils" required to boost circulation and ratings figures through what Stanley Cohen (1972) identifies as "moral panics", the co-ordinated promotion of young people's generally mundane activities into matters of broad social concern requiring government intervention. Hackers themselves understand their function: "Chasing hackers gives the authorities the illusion that they are doing something about computer crime, of which hacking is a minor part both in incidence and financially." (Gold and Cornwall 1989: xiii)

But hacking has always been more than the neocriminal interference with computer systems as suggested in the mainstream media. This paper argues that hacking extends to cover any militant and creative intervention into any aspect of the media flow. In his seminal 1985 work *Hacker's Handbook*, Hugo Cornwall notes two other uses of 'hacker': "those involved in the recreational and educational sport of unauthorised entry into computers and, more generally, the enthusiasts

"who love working with the beasties for their own sake, as opposed to operating them in order to enrich a company..." This, says Cornwall, is "where the fun is... developing an understanding of a system and finally producing the skills and tools to defeat it." (Cornwall 1985: vii)

The word "hacking" has a number of meanings that reunite in the work of the hacker: it suggests both cutting through thick foliage (we had to hack through the undergrowth to get to our goal) and managing or coping with a difficult situation, often with an appropriate application of ingenuity or a creative practical joke (I knew she could hack the joke about her dress sense when she came back with one about mine).

"It all started in the early 60s" on university and research computers where people created unofficial areas of memory to share information and play games. (Cornwall 1985: 2). Hackers are descendants of phone phreakers who used anomalies in the phone system to make free calls. Stewart Nelson, for example, was a 60s MIT student who built a number of devices to trick the phone system before utilizing MIT's mainframe computer for "fone-hacking", generating the audio frequencies required to move through the phone system, to all appearances, legitimately. San Francisco phreaker, Captain Crunch discovered how to take rides through the phone system with the aid of a small whistle found in a cereal box. Eventually imprisoned, he joined Apple Computer after he did his time. (Roger nd)

Before writing off hacking as merely a criminal enterprise, it is worth considering that hacking was a crucial technique in the milieus that produced the first versions of the internet and developed the desktop personal computer (Taylor 1999: 23). The term 'hacker' was first used to describe computer pioneers at MIT who were also responsible for the construction of ARPAnet in the 1960s. In the 1970s the term was applied to participants in the Home Brew Club like Steve Jobs and Steve Wozniak who developed the first Apple desk-top computer with mass appeal. It was only in the 80s that the media extended hacking to include those dealing with other people's computers maliciously. Spar (2001) draws a comparison between the fine line that separated piracy and privateering in the 16th century and the similarly fine line that separates hacking and legitimate computer development now.

True hackers seek to free information and are at pains to distinguish themselves from crackers, intruders who damage or steal data whether in simple forms such as denial-of-service attacks or in systematic and clearly fraudulent ways such as credit card manipulation. In contrast, hackers since the 60s have adhered to The Hacker Ethic, a code that championed the free sharing of information and demanded that hackers never harm the data they found. Rather, hackers say, they are searching for the most elegant and concise programming solution, using simplicity and serendipity to cut through the complexity, a regard for the rules would only be a hindrance. They are anti-authoritarian, anti-bureaucratic,

anti-centralisation and really believe that information wants to be free (Taylor 1999: 25).

Hackers are both opposed to and utilise the anonymity and security weaknesses in computers. They exist because of the perennial software crisis – that gap between expectation about and actual performance of any given computer program. We are all hackers when we seek ways around bugs, through backdoors, using tricks and guesses and not quite understanding what we are doing until the program works the way we want it to work. Every time we get a bit of troublesome software to work we are taking risks, making magic, conjuring up memory and power and tinkering with inter-relations to subtly change the world.

Hacking "can signify the free-wheeling intellectual exploration of the highest and deepest potential of computer systems. Hacking can describe the determination to make access to computers as free and open as possible..." There is an attitude among hackers that "beauty can be found in computers... (and) the fine aesthetic in a perfect program can liberate the mind and spirit..." (Sterling 1993: 53) Hacking also came to mean anything either particularly clever or particularly whacky, with or without a computer, as long as the tweaking of a complex system was involved: "To members of the computer underground *hacking* still refers, in the first instance, to the imaginative and unorthodox use of any artefact."(Taylor 1999: xii)

Hackers are at work on the free speech frontier, "opposing the re-establishment of traditional

(property) rights in the newly emerging information society... they oppose the commodification of information" (Taylor 1999: 61) and spend a lot of time crunching program protection codes. Unlike the anti-technology aspects of the counter-culture, hackers don't demonise machines, they prefer to use them to their fullest advantage. But, as Taylor (1999: xiii) points out, the demonisation of hackers is a form of fear of technology and our inability to control our own curiosity, the same fear that was played out in the ancient myths of Sisyphus, Prometheus and Icarus, after the industrial revolution in Shelley's Frankenstein and Well's Morlocks and most recently in movies like Bladerunner and Terminator and most particularly in William Gibson's homage to hacking, Neuromancer. It is a strange twist that we have turned those most comfortable with the machines that dominate our lives into the enemy when perhaps they are the ones who are most prepared to counter that dominance and manage the political effects of the world that we use the machines to produce.

THE HACKER ETHOS

Himanen (2001) summarises hacker values: passionate and free work; the belief that individual imaginations can create great things together; and a commitment to existing ethical ideals, such as privacy and equality. Wark (2003) captures the sense of possibility hackers bring: "...in any process of knowledge where data can be gathered, where information can be extracted from it, and where in that information new possibilities for the world produced, there are hackers hacking the new out of the old."

Further hacking is not necessarily an elite sport. Cornwall suggests that you just need a basic knowledge plus "determination, alertness, opportunism, the ability to analyse and synthesise, the collection of relevant helpful data and luck". (Cornwall 1985: 2) As Zetter (2001:137) points out: "Computer and Internet hackers come in all ages, are both male and female and have different intentions. Some are malicious and some are just interested to see if they can do it." Reports suggest that there were 17,000 cases of corporate hacking in the United States in 2000 (Zetter, 2001). Given corporate sensitivity that number is probably low but, given the low rate of prosecutions, we may assume that the vast majority were not malicious, rather they were inspired by the desire to reveal the inadequacy of computer security and poor software, by the desire to pass through a network without a trace and by the desire to know government and corporation secrets. Consider the case of Kevin Mitnick who got into the US Air Defence System in his youth and was later imprisoned for reading a computer company's email (http://www.gulker.com/ra/hack). There is no doubt that Mitnick made himself a target and was only brought down when former colleagues joined the hunt for him, but the question remains: if he was not jailed for any malicious action, was he instead jailed for seeking to exercise his right to know?

But what is it about hackers that points to their ability to respond to the historical challenges ahead. Hackers regard computer systems not as corporate property but as part the common wealth and do not believe it is

wrong to break into systems and rifle around. They get so close to the machines that they have thought through them and surfed around their coercive contours to reveal their secret substance. The 1986 Hacker's Manifesto captures to heart of the hacker ethos: "This is our world now... the world of the electron and the switch, the beauty of the baud. We make use of a service already existing without paying for what could be dirt-cheap if it wasn't run by profiteering gluttons...We explore...We seek after knowledge..." (Blankenship 1986). In refusing to be bound by the constraints of the expanding command and control communication channels and the rule of corporations, hackers created the space for a free exchange of ideas down to the level of data. While it is difficult to grasp the fuzzy logic of complex systems, in our rapidly complexifying world that is where the knowledge is and hackers create their own rules to deal with it. To return to Derrida, as the nature of knowledge transforms, becoming electrons in particular patterns half the world away, then surely the nature of political debate shifts as well.

Hacking has developed beyond its anti-social and avant garde origins into the everyday to incorporate the tactical use of any meda that seeks to use hidden potentialities and anomalies in that media to open interpretation and debate. Thus the work of "culture-jammers" in adapting bill boards to carry anti-corporate messages is a kind of a hack just as is doing similar adaptation to a corporate web site. We may distinguish culture-jammers who work entirely in the media flow subverting and re-purposing software from "hactivists" who keep strong links to traditional street activism as well as working with both hardware and software as well.

Hacking also has grown to include what is ironically described as social engineering, gathering information or prompting actions through bogus communications (Akurei 2000). At the nuisance end of this phenomenon are prank calls and appeals to assist in the transmission of money from Nigeria but social engineering can also be a useful way to discover the real situation behind a public relations diversion.

Thinking about how broadly we might extend the notion of hacking across other media led me to a new hypothesis: For every new development in communication technology there is a period between its invention and its institutional control when it provides the opportunity for progressive, oppositional and democratic voices to hack their way to audiences through alternative channels. Considering various technological developments, this hypothesis goes some way to explain the rise and fall of alternative media exercises such as high-watt Mexican radio in the 30s and community cable and FM radio in the 70s. Some things are too cheap to institutionalise which explains the life of the CB radio and, when the advent of light weight cameras is factored in, goes some way to explain the rise of new wave cinema and the persistence of the independent film-maker.

The ethos of hacking is opening up to become a tool to create democracy within the realities of the information economy. Hacking sustains and extends the means of civic engagement within existing political structures and beyond.

Whatever their technology, hackers are imbued with the cynicism of the machine, refusing to accept the "official" story at face value, always digging and exploring to find their own truth beyond the standard explanation. Thinking like war machines, stepping around the surveillance, living behind the screen, the hackers find the space to decode machine languages, to find cracks in the media monolith, to free the information. The hacker ethos has moved beyond the original code cowboys to inform all those who are repurposing the media machine to open and extend debate beyond traditional national and social borders. These are the citizen hackers.

GLOBALISING DEMOCRACY

The internet has been a key technology in the spread of the global information economy and it relative cheapness and ubiquity mark it out as a important potential tool in the production of global democracy. While the internet is an open system with a goal of universal access, there are distinct possibilities for its democratic use but aside from the practical problems of ensuring access to the required equipment by the population of the globe (let alone the literacy required to effectively participate via this means), the rapid commercialisation of the space along with the potential to record, analyse and systematically respond to all information transmitted on the net raises the possibility that it may quickly become open to even more coercive and invasive manipulation than older forms of media.

The emerging global information economy does offer the chance for citizens to intervene as the continuing process of change in commerce, government and media occurs. The citizenhacker can harness the breaks and irregularities in power that such change produces and use new forms of media to foster democratic deliberation, at least until hegemonic control is established over those new forms. The deliberative potential of the global media, its availability to assist in the construction of global democracy rests in the willingness and ability of people to hack out a claim to global citizenship in order to pursue new debates designed to civilise national governments, international corporations and other forms of power that are not yet apparent.

In recent years MySpace, Facebook, YouTube, Wikipedia and many other social networking sites have allowed relatively uncontrolled interactions between individuals and despite the corporate take-overs and preponderance of dross, there is still a core of authentic political interaction that is the basis of a new set of global political possibilities. This new form of politics connects to its public via "viral campaigning" using music, humour, fuzzy logic, ambush promotion and interactivity to infect populations with arguments that generate political debate and take off on a life of their own. The population produces messages which it spreads around to infect other people to make them hosts and so the message moves on through networks of connection. (Painter & Wardle 2001). Others argue that greater interactivity, particularly via the internet, will produce a virtuous circle where the more citizens participate in democratic

deliberation the better the democracy gets so more citizens are enticed to participate and so on (Norris 2000).

Four prime examples of the creative citizen hack are discussed below. Jib Jab's 2004 comment on the Bush-Kerry battle for the US presidency is a parody of Woody Guthrie's song "This Land is Your Land" that satirises both the Democrat's wealth and the Republican's claim to being an average person while pointing both sides ignore Native America's prior claim to the land: http://www.jibjab.com/originals/this_land. Australian prime ministerial contender, Kevin Rudd was caricatured as Chairman Mao in this project from 2007 in a way that both satirizes his personal foibles but also celebrates his grand visions:

http://www.youtube.com/watch?v=ptccZze7VxQ. Obama Girl was ostensibly independently produced but certainly caught the independent, passionate, sexy and voluntary tenor of the Democrat's successful 2008 US presidential campaign:

http://www.youtube.com/watch?v=wKsoXHYIC qU. Finally Move.Org's Get Out the Vote campaign for Barak Obama uses humour and viral techniques to ensure supporters turned up to vote:

http://www.cnnbcvideo.com/index.html?nid=K7 315ssm9bXbRI K1OcfWTM0ODE2NTQ-&referred by=14930146-aH8stIx.

These examples are inspirational hacks that merely indicate the possibilities for marginalised and critical voices to utilise the emerging global information economy to extend the opportunities for deliberation. While all these examples connect with electoral politics, none are the product of parties and each has its own method of expanding the public sphere.

The problems of ensuring access and limiting hegemonic control mentioned above point to the dimensions of the theoretical, and practical, difficulties confronting the possibility of a system of global deliberation. To these ends, the global citizen becomes the citizen-hacker who co-opts the techniques and the strategies of the media campaign with an awareness of the ethical responsibilities inherent in the production of broad-ranging democratic exchanges.

Citizen-hackers resist these dominative tendencies and by producing alternative spaces and routes for information they open up democratic potentialities. While new communications technologies are no panacea for the creation of universal democratic deliberation, they are already playing a part in extending the opportunities for democratic deliberation by providing access to debates for a multitude of voices that could never be heard through existing mainstream, broadcast media, creating a greater quantity of available information that increases the level of transparency over political debate generally and, above all, allowing people the opportunity to fiddle, improvise and "kludge" their own communication solutions.

While the Athenian citizen could stand in the assembly to communicate a message to all interested parties, citizens of the global media must become skilled in hacking through all

available gaps that come and go in the media monolith, creating their own niches in the public sphere and producing arguments for a variety of audiences, through a variety of media, in a variety of genres and that develop and respond to counter-arguments, all over an extended time period.

Democracy can never be an end in itself. At its best it is the means to a better, fairer and more humane life for the whole society. But society is not a constant and by the time discussion and debate has achieved even the smallest democratic reform, new problems have arisen and new challenges present themselves. To confront this task which will never be completed, there is only the power of human reason and emotion communicated through

language. To create greater deliberative participation in existing representative institutions and to recreate democracy itself by extending the possibilities for deliberative participation beyond representative institutions and onto the global stage, all sectors and individuals -- be they dominant or counterpublic groups, third sector or government, citizenhackers or commercial enterprises -- must have access to contribute to the democratic environment.

Let's give the final word to Hugo Cornwall: Computers "can threaten our traditional concepts of freedom, individuality and human worth. I like to believe hacking is a curious re-assertion of some of those ideas." (Cornwall 1985: 111)

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