# Language and libertarianism: the politics of cyberculture and the culture of cyberpolitics

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## Abstract

A significant number of theories concerning the nature of cyberspace or virtuality are being constructed with little regard for the empirical realities of online life. This article sets out certain simple empirical factors related to the nature first of politics in cyberspace and second culture in cyberspace. These questions are posed as 'what is the politics of cyberculture?' and 'what is the culture of cyberpolitics?'. The politics of cyberculture revolves around issues of grossly uneven regional distribution of the Internet and a bias toward anglo-american language and culture that is based on the competitive individual. The culture of cyberpolitics revolves around informational forms of libertarian and anarchist ideologies that posit cyberspace as the realm of individual freedom. These cultures and politics can be related to each other as the structure and action of cyberspace. The assumption that cyberspace is constituted by individuals is revealed as an assumption of both, and connection between, cyberpolitics and cybercultures.

## Cyberpolitics and cybercultures

Posing questions of culture and politics in the abstract has been an important way of analysing cyberspace and the Internet for some groups of anglo-american academics and commentators. Theories of the effects of virtual worlds are sometimes spun with only marginal concern for whether the effects of their postulated virtuality actually exist or are ever likely to exist. Virilio's interest in virtual sex is perhaps the most obvious and influential recent example of such analyses but there are others (Virilio, 1997; Burrows and Featherstone, 1995). Alongside such abstract theorising, but often disconnected from it, are an increasing number of detailed empirical studies, each of which seem only able to deal with a small corner of cyberspace (Jones, 1995, 1997; Smith and Kollock, 1999). Certain online communities, events or discussion groups have been exhaustively analysed with little connection between empirical conclusions and larger theorisations, yet this connection is becoming crucial if our understanding of cyberspace and its effects is to develop. This article contributes to a closing of this gap between detailed empirical work and broad theorisations by offering an empirical and

theoretical exploration of the relationship between culture and politics in cyberspace by asking mirrored questions: 'what is the culture of cyberpolitics?' and 'what is the politics of cyberculture?'.

This article cannot by itself entirely reconcile the two just identified arms of anglo-american cyberspace research but it helps close the gap by identifying their inter-relations. Further, the viewpoint taken up here is certainly not the only possible view, in particular analysis from what can be called, in Deleuze and Guattari's sense, 'minority'[1] linguistic or cultural communities in cyberspace would undoubtedly offer a different view, though hopefully also a complementary one (Deleuze and Guattari, 1986: 16–27). The perspective explored here does not, in making its own arguments, deny other arguments are possible or could be of great value. No hegemonic or 'totalising' assumptions need be drawn from or found hidden within this decision to critically analyse certain anglo-american discourses on cyberspace for their assumptions. If anything, the opposite is the result of arguments made here, some of whose implications are that that some of the dominant analyses of cyberculture and cyberpolitics are deeply structured by assumptions made about the nature of cyberspace.

Putting the questions 'what is the culture of cyberpolitics?' and 'what is the politics of cyberculture?' together within the context of anglo-american analyses of online life allows some of the conditions for both politics and culture in cyberspace and their inter-relations to be delineated. Answering the first question shows there are conditions that structure participation in cyberculture because only certain languages and certain cultural norms of communication are embedded in cyberspace's technology. Here language is limited, cultural resources specific and the politics of cyberculture is moulded by cyberspace's technological history. Answering the second question reveals the compelling perception that people enter cyberspace, through the screen, as individuals and from this basis may then construct communities or societies. This gives rise to an optimistic view of an electronic frontier where pioneers meet beyond the interference of government and bureaucracy to found authentic communities. Here an informational libertarianism or anarchism, the culture of cyberpolitics, is founded on the experiences of those who come to cyberspace. The underlying dynamic of cyberpolitics' culture and cybercultures' politics lies in the complex relations between these two perspectives rather than the truth of either.[2] Language and libertarianism go together in cyberspace creating a complex social field.

## The politics of cyberculture: language

Who speaks?, in what language? and with which cultural resources? Answers to these questions establish the basic conditions of any culture's politics. Answers to each of these for cyberculture were for a long time anecdotal or unavailable but by the late-1990s an empirically solid foundation for the discussion of

 

virtual culture had emerged.[3] A key general parameter is the overall number of Internet users, which in early-2000 was around 250 million (Jordan, forthcoming a). A clear demographic profile also emerged from a number of surveys. By late-1998 Internet users had an average household income of $60,000 USA per year, were nearly 90% white and had an average age in the early thirties. All these trends are established over time and have varied little since the early-1990s. Gender is the only major trend to have shown significant variation, beginning in 1994 with only around 10% of World-Wide Web users being women and reaching between 30–40% women by the end of 1995. Some evidence suggests this figure has stabilised since 1995 at a 35–65% female-male division, but other surveys show the gender gap continuing to close. For example, the GVU survey collected in November 1998 found a 34–66% split (that had been stable at these proportions for several years), whereas a survey commissioned by *Wired* magazine in 1997 suggested equality had arrived finding 48% women and 52% men and a study in early 2000 of USA net users found that women were in a slight majority (50.4%) (Jordan, 1999a; Pitkow and Kehoe, 1998; Katz, 1997b; Reuters, 2000). Overall, Internet users are white, better paid than average and in their mid-thirties. Whether they are, or will remain, two-thirds male will only be known with future evidence. These figures provide only the barest outline, even if they establish some important points, and a number of other measures are needed. Numbers can be given for the world-wide distribution of Internet hosts and for the language distribution of hosts.[4]

In early-2000 the Internet was not merely dominated by Western or developed countries but more specifically by the USA, which had 65% of all hosts. This was followed by Canada with 9.5, Japan with 3.6 and the UK with 3.3% and with no other country having more than 3% (Jordan, forthcoming a). If the world is divided into regions the following picture emerges.

**Table 1** Distribution of internet hosts by region, January, 2000

| | Host numbers | Percentage |
|---|---|---|
| USA/Nafta | 54,026,041 | 75.42 |
| Europe | 11,063,376 | 15.44 |
| Japan/SE Asia | 3,987,960 | 5.57 |
| Central Asia | 51,493 | 0.07 |
| Australasia/South Pacific | 1,381,659 | 1.93 |
| Mid-East/North Africa | 186,886 | 0.26 |
| Sub-Saharan Africa | 179,602 | 0.25 |
| South America | 756,063 | 1.06 |
| Total | 71,633,080 | 100 |

*Source:* Jordan, forthcoming a

As Bourbonnais and Yergau remark 'The Internet was designed as a highly redundant and fault-tolerant mesh. However, its actual structure today, on a global scale, is much more like a US-centred star' (Bourbonnais and Yergau, 1996). Inequalities are even more marked than first appear because in January 2000 Australia and New Zealand accounted for 99.9% of Australasia/South Pacific's hosts, South Africa accounted for 99.9% of Sub-Saharan Africa's hosts and Israel accounted for 74.9% of Mid-East/North Africa's hosts (Jordan, forthcoming a). The rapid increase in the Internet's size means that some diminution of USA dominance might be expected in the future, however there is no reason to expect less growth in the USA than in other countries because, despite its number of hosts, the USA is far from a saturated market. The fundamental fact about the Internet and cyberspace is that when viewed overall it is, first, USA dominated and, second, over-developed or industrialised country dominated. These proportional results should not be used hide the fact that numbers of Internet hosts are on the rise world-wide and in most regions. When host figures are examined bi-annually from January 1997 until January 2000, there is only one instance of a region not growing in a six-month period (Sub-Saharan Africa between July 1998 and January 1999) (Jordan, forthcoming a). Internet technology allows individuals to choose where they connect and while the proportional figures reflect the growing dominance of the dominant, raw numbers of hosts reflect growing Internet availability world-wide. This point can be made again by looking at the shifts in both proportions and numbers of hosts divided according to the dominant language of a nation.

Again the message is of the dominance of an already dominant community, perhaps best broadly termed anglo-american, and despite the overall rapid growth of the Internet that dominance is, if anything, increasing. This does not mean that the more than doubling of hosts in countries with a first language other than English between 1998 and 2000 reflects no extension of virtual

**Table 2** Host numbers in nations according to English as a first language

| | Jan-98 | Jul-98 | Jan-99 | Jul-99 | Jan-00 |
|---|---|---|---|---|---|
| Total numbers of hosts | | | | | |
| English as a first language | 23,184,208 | 28,705,360 | 33,672,461 | 44,573,217 | 57,544,561 |
| English not as a first language | 6,260,054 | 7,739,549 | 9,100,775 | 11,085,031 | 14,088,519 |
| % of Hosts | | | | | |
| English as a first language | 78.74 | 78.76 | 78.72 | 80.08 | 80.33 |
| English not as a first language | 21.26 | 21.24 | 21.28 | 19.92 | 19.67 |

*Source:* Jordan, forthcoming a

capabilities to those who have a first language other than English. The Internet offers the possibility of small numbers of people using its networking and communication abilities. Recent work on communities such as highlanders on the Malaysian island of Sarawak and parts of the Philippines point to the potential for small (in Internet terms) communities to utilise Internet capabilities, whether they connect to broader Internet communities or not (Harris *et al*. 2000; Sy, 2000). The point being made here is that any such minority use of the Internet, and it can be very powerful, occurs within the overall dominance of English linguistic communities.

The question that follows from this initial spatialisation of cyberspace's material substructure concerns the language of cyberspace. Embedded in cyberspace's technology is a bias towards particularly English but more generally languages that use Roman characters. This has led to the cultural domination of cyberspace by English languages that ensures some cultures feel excluded and marginalised and can make entry to many parts of cyberspace less attractive to non-English speakers. The fundamental problem is that Internet technology has largely been designed on the assumption that the American Standard Code for Information Interchange (ASCII) is adequate for transmitting language and ASCII provides usually 128 and at maximum 256 Roman characters. This falls far short of the 7,000 characters needed for modern Japanese or the 15,000 that Taiwanese authorities have stated a preference for, even if the Han characters these languages need could be substituted for the Roman ASCII carries. ASCII does not even provide full support for all languages that use Roman characters, such as French or German, because other characters like accents are sometimes not available (Shapard, 1993: 257 and 268, Mason, 1993; Jerman-Blazic, 1996). ASCII is assumed to be standard in the protocols controlling email, meaning sending email in any language but English is complicated by the fundamental design of email (Bourbonnais and Yergau, 1996). Other Internet services fare little better, with Usenet also assuming ASCII as standard, the Web effectively being English based (not only in the language of Web pages, but in the technology needed to access or produce Web pages) and many other Internet services provide little or no support for non-ASCII languages (Bourbonnais and Yergau, 1996; Yong *et al*., 1996; Volkmer, 1997). Various solutions to these problems have been worked on. For example, an extension to the HTML language used to create web pages that would make many languages compatible with the Web's current technology has been under development for some time, without finalisation, and the use of the computer language Java to provide automated translations of Web pages has achieved limited success (Bourbonnais and Yergau, 1996; Yong *et al*., 1996).[5]

Definition of the substructure of cyberculture can be completed by noting that the dominance of anglo-american language in cyberspace is accompanied by its dominance of cultural norms for interaction. Again, the caveat needs to be kept in mind that minority communities can exist outside of the dominant cultural norms of cyberspace. However it would be equally false to focus only

 

on the political effects of such minorities and to fail to define the dominant context. As Fanon argues, 'To speak means to be in a position to use a certain syntax, to grasp the morphology of this or that language, but it means above all to assume a culture, to support the weight of a civilisation' (Fanon, 1986: 17–8) and cyberspace has so far supported essentially anglo-american civilisation. This extends not only to the fundamental ability to communicate but to the forms in which communication occurs. For example, flaming – the sending of abusive or short and intolerant replies – is an often noted result of computer mediated communication. Sproull and Keisler's experiments showed as early as 1993 that electronically mediated discussions flatten hierarchies and are more inclusive but abusive language and angry exchanges are also more common (Sproull and Keisler, 1993: 108–11). The cultural norms of the largest online discussion system, Usenet, also seem riven by competitive and sometimes abusive forms of communication. Here cultural norms for discussion are often identified as anglo-american ones that run essentially on the principle that 'if you can't take the heat, get out of the virtual kitchen' (McLaughlin, Osborne and Smith, 1995; Kollock and Smith, 1999). Trolling is another, though less obviously abusive, version of this type of interaction that involves deliberately posting a message that is false to see if someone will take it seriously and reply. Once someone replies, or is caught by the troll, others who have spotted the statement as a troll can join in to complicate matters (Tepper, 1997). For example, a troll posted on a Star Wars discussion group claimed that Jamie Lee Curtis was in the movie Star Wars and a reply took this seriously by pointing out it was actress Carrie Fisher. To this obvious and correct claim, the following further troll appeared:

> That was Carrie Fisher. Ridiculous. Carrie Fisher is much too small and slight to carry that heavy hairy suit around all day on the set (cited in Tepper, 1997: 42).

From here participants may realise that the claim that Jamie Lee Curtis was the body within the Wookie suit is not meant to be taken seriously or more discussion will occur, dividing those who get the joke from those who do not. Such competitive forms of discussion, often far less benign than in trolling, are common in net discussions and offer cultural forms opposed to many non-anglo-american cultures (Jones, 1995; Porter, 1997; Kollock and Smith, 1999). For example, Japanese cultural norms consist, in part, of slowly building a consensus behind decisions in ways that avoid any participant appearing to be obviously wrong either within the process of making the decision or about the resulting decision (Shapard, 1993; Yong, *et al*., 1996). Similarly, examination of the islands of Kiribati suggests cultural differences between the Kiribati people and the general cultures of both the net and those promoting the net, help explain the relative failure of the Internet to grow there (Sofield, 2000). This and other ways of interaction that are not similar to the individualist and competitive ethos that is part of anglo-american

 

communication often find little place on the Internet or may be 'balkanized' into separate communities.

The answers to the questions 'who speaks?, in what language? and with which cultural resources?' delineate some of the pre-conditions for cyberculture. These do not determine cyberculture in any simplistic way or remove the possibilities of opposing dominant cyberculture but provide issues and trends that all cybercultures confront and react to. The answers to these three questions reveal what might be called the 'social structures' of cyberculture, in the sense that they are the conditions that individuals take action within. Any virtual individual or group that develops a cyberculture will do so, in part, by consciously confronting or unconsciously working within the fact that cyberspace is largely populated by wealthier whites and is mainly conducted in the English language according to anglo-american norms for communication. There is no reason why these structures should entirely pre-determine any particular cyberculture or any individual's actions and many cybercultures can be found that explicitly attempt to negate some aspect of these dominant structures. For example, many discussion groups attempt to limit or control flaming by introducing moderators who examine contributions before allowing them into a discussion. But whether cybercultures swim within the currents created by social structures or react against them, cybercultures' existing structures are constituted in the late 1990s by the answers just outlined to three simple questions.

## The culture of cyberpolitics: libertarianism and anarchism[6]

Social structures are always and everywhere accompanied by individuals and groups in action. Cyberspace is no different. Social structures do not eliminate individuals but are the conditions individuals meet when they try to take action. This means that along with the social structures that have just been identified, the politics of cyberculture, there may be forms or types of action that virtual individuals commonly take; a culture of cyberpolitics. These forms can be found in the typical ways that virtual individuals and groups attempt to control and govern their particular corners of cyberspace. As noted several times above, though there is clearly a dominant culture in online life this does not mean minority, in Deleuze and Guattari's sense of transgressive, communities cannot also develop within cyberspace. However, the purpose here is to explore dominant forms of virtual structure and action. The culture of cyberpolitics can be seen as a type of informational libertarianism or anarchism that is expressed in many ways, from the editorials of *Wired* magazine to the rants of hackers, and builds not from ideological commitments but from a particular perception experienced by most who enter cyberspace.

Nearly everyone begins each journey into cyberspace as an individual. Alone in front of the computer screen people confront their singularity before building a sense of others in the electronic world. There is a double sense of

 

individuality here. First, people must simply connect to cyberspace by logging in, almost certainly involving an individual entering their online name and their secret, personal password to be rewarded with their little home in cyberspace (most likely consisting of their email, list of favourite web-sites, online documents and customised browser/interface). The first moment in cyberspace is spent by nearly everyone in their own individualised place. Second, moving from this home to other virtual spaces usually involves some moment of self-definition; choosing an online name, choosing a self-description or outlining a biography. For example, when a hacker called Par was on the run from law enforcement his communication with his lover, called Theorem, continued on a chat system (that allowed the appearance of text on both screens as soon as it was typed by physically separated individuals). Par created a user name and password for Theorem, a password that would become Theorem's passport to a virtual lover's tryst. The password was 'ParLovesMe!'. Par attempted to allay his worries at losing the lover he could no longer see by ensuring her individual moment of password entry would help construct Theorem as Par's lover. Theorem would first of all enter cyberspace and then, alone, remind herself that Par loved her just before typing to him (Dreyfus, 1997: 141–3).

These two recurring moments of individualisation provide a forceful perception to people that they are individuals in cyberspace. This is true to the extent that if someone chooses their part of cyberspace well they may be able to entirely reconstruct their individuality.[7] Communities, social structures and collectives may all appear to the virtual self as built from virtual individuals, not because of a prior political commitment to theories that posit the self-interested individual as the basis of all social life, but as a simple conclusion drawn from a recurring experience in cyberspace. From this basis it is no surprise that the political ideologies that most emphasise individual liberty and the right to self-government have been powerful on the Internet; libertarianism and anarchism. At their heart, both ideologies emphasise the ability of people to come together in free associations and create just communities; both tend to emphasise a politics whose major poles are authoritary versus liberty, rather than left versus right. Louis Rosetto, ex-editor and co-founder of *Wired* magazine, one of the homes of cyberspace libertarianism,[8] has argued;

> the question is no longer what sort of statists we should be supporting: Republicans or Democrats, communists or fascists. The question really is what sort of libertarians we should be supporting. There is no alternative to a world that's out of control. Central power not only doesn't work, it is not even possible any more (cited in Hudson, 1997: 173).

John Perry Barlow, a net ideologue and co-founder of online civil liberties organisation the Electronic Frontier Foundation (EFF), argued that cyberpolitics is small 'l' libertarian because people experience a 'genuinely functional, large-scale anarchy' online and this convinces many that government could be

 

smaller or need not exist at all (cited in Jordan, 1999b; 91). Libertarianism and anarchism have been articulated by a number of communities in cyberspace and two will be briefly examined to show how they permeate the language of cyberpolitics. These communities are online civil rights organisations and hackers. While undoubtedly important communities within cyberspace, these two are being used here to illustrate the argument and indicate some empirical support. The extensive survey of most corners of online life that would be necessary to empirically establish the claim being made is beyond this article.

Close analysis of one of the earliest and most influential online civil rights organisations, the Electronic Frontier Foundation (EFF), shows that its conception of cyberpolitics is fundamentally two-sided with, on the one hand, libertarian beliefs and, on the other, an opposition to technological determinism. EFF's interventions in cyberpolitics began in 1990 and continue to the present day. EFF had an important role in framing the Clinton administration's fabled and failed information superhighway proposal, it played an often central role in nearly all the major episodes of cyberpolitics since the 1990s (including late 1990s arguments about encryption and the USA government, the Rimm porn and Communications Decency Act attempt to censor the Internet, early 1990s hacker and civil rights cases, to widespread general education about the nature of cyberspace) and was involved in the creation of another key civil rights organisation, the Center for Democracy and Technology. Through this long (for cyberpolitics) history, EFF has developed a libertarian view rooted in the belief that a functioning free market of, in particular, ideas but also goods operates in cyberspace. One founder's libertarian beliefs have already been mentioned and here is another founder and Board member, John Gilmore, explaining the way the net's free market in ideas functions.

> People who say things that further investigation shows are bogus, just don't get listened to. People who say things that are true can build followings. People who do things that don't tend to work, don't get adopted on the net and there are very low barriers to adoption .... There's just been a very positive trend on things that bear truth in reality, things that turn out over a period of time or through a lot of discussion to be true. And I think that the politics of people on the net has tended to follow that rule (John Gilmore cited in Jordan, 1999b; 92).

Gilmore, a key figure in the history of Usenet, Sun Microsystems and the Internet Society as well as EFF, outlines the basis for claiming that larger state or government structures are not needed in cyberspace because individuals are capable of self-governance, mediated by the 'truth in reality' that a free market of ideas enables. With such beliefs it is no wonder that EFF's online activist, Stanton McCandlish, argues that EFF is fairly centrist on a left/right axis but strongly libertarian on a liberty/authority political axis (Jordan, 1999b; 91–4).

While EFF is only one online activist organisation and has been at times subject to criticism, its longevity and history mean that its libertarian convictions[9] are emblematic for cyberpolitics. Not all online activist or civil rights organisations take up libertarian beliefs but all work within them as a 'framing' culture. In contrast, the hacking or cracking[10] community tends to take up the characteristic tropes of anarchism, rather than libertarianism, to emphasise its outlaw status. Hackers are often misconceived as pathological, obsessive individuals who communicate more easily with computers than other human beings. Such populist misunderstandings consign hackers to the bin of social outcasts who commit incomprehensible crimes for unintelligible reasons. While hacker crimes can be technically complex, they typically consist of little more than exploiting well-known security loopholes or stealing passwords and their motivations are clear, if the hacker community is listened to. The main mistake when discussing hackers is to assume that they are not part of any community, but it is a rare hacker who does not hack with others or has not swapped knowledge and ideology with other hackers (Jordan and Taylor, 1998; Taylor, 1999).

When the hacking community is taken as an object a number of structures emerge that provide a greater understanding of hackers than simply as pathological individuals. Two aspects of this community are relevant here. First, hackers spend time discussing their motivations for hacking and, in doing so, provide a means by which they can recognise each other as members of the same community. A type of informational anarchism that focuses on the need to keep information free and freely available online often features prominently in these discussions as the language through which any political commitment to hacking is articulated. For example, Count Zero from the influential hacking group Cult of the Dead Cow expressed his basic principle this way, 'Freedom of expression is very important to hackers. Anything that seriously stifles that is wrong' (Count Zero, 1999; Jordan and Taylor, 1998). Second, hackers have great difficulty distinguishing themselves from the computer security industry professionals they see as their nemesis. This is for a number of reasons. First, the actions both hackers and security professionals take are remarkably similar, almost indistinguishable. For example, teams of security professionals can be hired to hack into a company, testing its security but also acting exactly as hackers would (Lohr, 1997). Second, many security professionals once were hackers and, so rumours go, vice versa. It is a common belief among hackers that they can become security professionals, even that a spectacular intrusion will lead to a job. The resulting problem for hackers is that they cannot differentiate themselves from their mortal enemies by their actions or any formal notion of membership. The means hackers have developed for establishing their community's boundaries, and solving this problem, is a series of elaborate metaphors that both explain the nature of hacking and establish its ethical meaning; typically a hacker might say hacking is an intellectual pursuit like chess, while a security professional might say it is a crime like burglary (Jordan and Taylor, 1998). One way these metaphors are

 

developed is by embedding them within different political ideologies that clearly demarcate the different groups and these are usually the same ideologies found in hackers' discussions of motivations. Hackers typically reach for anarchism as their ideology to claim that everybody has the right to cyberspace's information and that cyberspace should be self-governed. This is most simply expressed in the almost universal hacker slogan 'information wants to be free'[11] and in a virulent opposition to governments, corporations or anything that is part of an often vaguely defined 'system'.

> 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, and you call us criminals. We explore ... and you call us criminals. We seek after knowledge ... and you call us criminals. We exist without skin colour, without nationality, without religious bias ... and you call us criminals. You build atomic bombs, you wage wars, you murder, cheat and lie to us to make us believe that it's for our own good, yet we're the criminals.
>
> Yes, I'm a criminal. My crime is that of curiosity. My crime is that of judging people by what they say and think, not what they look like. (Mentor cited in Stirling, 1992: 86)

It is a rare hacker meeting place or electronic bulletin board that does not contain files or discussions about anarchy or ring with the sentiments hacker Mentor wrote down. Hackers articulate what might be called an informational anarchism that draws mainly on symbols and slogans from the Western tradition of anarchism, rather than a deep reading of its literature. We can take Count Zero again in his shouted definition of hacktivism, the term that has come to stand for politically motivated hacking, 'focusing on empowering the people in those places [he is referring to China and Iraq] with the TOOLS of hacktivism ... making the WORLD know about the injustices and human rights abuses ... in other words, getting the FLOW of INFORMATION pumpin' around the globe ... UNIMPEDED and UNCENSORED ... THAT'S hacktivism ...!' (Count Zero, 1999, '...' are included by Count Zero, see also Jordan, forthcoming b). Here Count Zero expresses at the heart of one of the most politically articulate hacking groups the central principle of free flows of information. This at times extreme emphasis on freedom ensures anarchism and libertarianism are essential ideologies within hacking. This informational anarchism at times descends into ominous but vague attacks on the enemy of governments, security forces and corporations, but it also consistently uses anarchist tropes to argue for the individual's right to explore all information in cyberspace (and elsewhere). By often using the most extreme forms of anarchist language, hackers establish a boundary between themselves and computer security professionals who work for the despised governments and corporations. Hackers use a form of individualist, informational anarchism as their political ideology.

 

It must be emphasised that not all organisations and individuals involved in cyberspace are libertarians or anarchists. The point of exploring the two examples of online civil rights organisations and hackers is to show that all will engage with libertarianism or anarchism as the culture of cyberpolitics even if someone's aim is to change that culture. For example, Barbrook and Cameron attack the proponents of cyberspace's libertarianism:

> they are passionate advocates of what appears to be an impeccably libertarian form of politics – they want information technologies to be used to create a new 'Jeffersonian democracy' where all individuals will be able to express themselves freely within cyberspace.
>
> However, by championing this seemingly admirable ideal, these techno-boosters are at the same time reproducing some of the most atavistic features of American society, especially those derived from the bitter legacy of slavery. Their utopian vision ... depends upon a wilful blindness toward the other – much less positive – features of life on the West Coast: racism, poverty and environmental degradation. ... each member of the 'virtual class' is promised the opportunity to become a successful high-tech entrepreneur. Information technologies, so the argument goes, empower the individual, enhance personal freedom, and radically reduce the power of the nation-state. Existing political and legal power structures will whither away to be replaced by unfettered interactions between autonomous individuals and their software. (Barbrook and Cameron, 1997: 45 and 53)

Barbrook and Cameron, and others, see libertarianism and its individualist basis as a smokescreen through which elites attempt to impose their will, for their advantage and in ways that repeat the inglorious US history of slavery, racism, poverty and pollution (Barbrook and Cameron, 1997; Kroker and Weinstein, 1994). This analysis of libertarianism as part of a 'Californian ideology' was distributed around the Web before it was printed and led to a vigorous online discussion, that Hudson recounts, making it clear the attack on libertarianism had resonance in online discussion because libertarianism was, for many, taken for granted (Hudson, 1997: 173–259). The point for the present analysis is not that Barbrook and Cameron, and many others, disagree with libertarianism but that libertarianism is the ideology they have to engage with in order to intervene in cyberpolitics. A further, perhaps back-handed, example is Barbrook's recent provocation in his claim that the gift economy in online life is leading, inevitably, to cyber-communism. Barbrook's central point revolves around the free exchange of information that he reads as negating capitalism's reliance on commodity-exchange. He argues 'Far from intensifying commodification, the Net is the practical vindication of the old hacker slogan: "information wants to be free"' (Barbrook, 2000, 21–2). Even within passionately anti-capitalist readings of online life we find the same presumption of free flows of information that underpin informational libertarianism and anarchism.

 

The culture of cyberpolitics has developed as libertarian or anarchist. This does not mean it cannot change or that everyone online is a libertarian or an anarchist. But to engage in cyberpolitics means engaging with an individualism that is driven not by ideology or self-interest but by the compelling perception, experienced daily by virtual selves, that people come and exist online as individuals.

## The cyberculture of cyberpolitics of cyberculture

Language and libertarianism are the structure and action of cyberspace; the former as the politics of cyberculture and the latter as the culture of cyberpolitics. The duality of structure and action has often provided the framework for analyses of society with the argument being over which dominates the other, but many sociological theorists now claim it is not a matter of the dominance of one over the other but their ongoing inter-dependence that determines social forms (Barnes, 1995). Such a claim of inter-dependence would be born out by the twins of cyberculture and cyberpolitics. The concluding point of the present analysis emerges here, for it is not a matter of identifying whether cultural conditions or political action determine each other in cyberspace but of recognising that the two flow together. This conclusion springs from notions of cyberculture and cyberpolitics that lie at the center of debate in the now thriving area of cyberstudies in anglo-american research. This has been the first limitation of this analysis. The second limitation is the impossibility of making the broad arguments that are necessary to draw out the connections of cyberculture and cyberpolitics while also providing conclusive empirical evidence. This is clear in the discussion of host distribution and language dominance on the Internet, where figures show conclusively the dominance of English but cannot explore a more fine-grained analysis that might show important uses of the Internet outside of linguistic dominations. These limitations need to be kept in mind but are worth entertaining as they allow relations of structure and agency within anglo-american cyberculture and cyberpolitics to be identified and drawn out. The concluding point is that within some of the dominant forms of cyberculture and cyberpolitics the individual is deeply embedded as the hinge around which virtual structures and virtual actions swing.

Cyberculture and cyberpolitics as conceived within anglo-american cyber-studies are deeply intertwined. They communicate with each other through the common reference point of the individual. Libertarianism and anarchism, as they are espoused in cyberspace, assume the individual as their starting point and devote most of their attention to the consequences of this assumption. The liberty of the individual and the right to self-governance are the central principles of cyberpolitical culture. The pre-conditions of cyberculture usually involve the linguistic and communication norms of anglo-american societies in which the aggressive, competitive individual is enshrined. Cybercultural

 

practices, such as flaming or trolling, negate more co-operative cultural norms of communication and privilege the right and ability of the individual to communicate how they wish and to disconnect when they wish. While the individual is the basis of cyberspace's libertarianism and anarchism, conversely the individual is the result of cyberspace's cultural pre-conditions. Across this common conception of the sovereign individual, cybercultures and cyberpolitics constantly condition each other; on the one hand predetermining cultural and political possibilities and on the other underpinning the remaking of culture and politics. Cybercultures and cyberpolitics stand in reciprocally determining and determined relations that tell us much about how some conceive the virtual life, the virtual society and the possibilities for culture and politics in cyberspace.

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## Notes

1 For Deleuze and Guattari 'minority' is not about numerical superiority but marks languages that deterritorialize, are political and are collective (Deleuze and Guattari, 1986, 16–17). This definition is appropriate for the arguments presented here as they often revolve around linguistic communities and any use of the term 'minority' in this paper should be read as meaning Deleuze and Guattari's definition.

2 For discussion of the co-existence of contradictory 'truths' of power in cyberspace, see Jordan 1999a.

3 The methodologies for the following are fully explored in Jordan, 1999a; 49–54 and Jordan, forthcoming a.

4 Technically a host is a computer with an Internet Protocol IP address. For the purposes of this paper, a host can be thought of as a computer that is connected to the Internet and therefore host counts measure the material substructure of the Internet.

5 It is also true, though not necessarily acceptable, that the use of ASCII provided a common standard that allowed the Internet to develop rapidly, when any attempt to develop an entirely inclusive linguistic basis for computer networking would have involved long periods of negotiation between nationally-based linguistic communities. This is shown by the attempt to develop a common standard for Chinese, Korean and Japanese that proposed some standardisation of characters between the languages, which both Korea and Japan rejected arguing that their languages were unique and not just subsets of the Han characters that make up Chinese (Shapard, 1993: 267–70).

6 Libertarianism and anarchism each have complicated histories and ideologies. To untangle the relationship between these separate traditions and the informational libertarianism and anarchism developed in cyberspace would take far too much space and time for present purposes. Instead of locating cyberspace's versions of these ideologies within their own traditions, I will focus on delineating libertarianism and anarchism as they appear in cyberspace and defining their virtual sources. Of course, this does not mean claims about the nature of libertarianism or anarchism in-general are being made, this being a subject for a different research project.

7 There are several places in cyberspace where you can change your race, gender, personality and even become entirely fantastic (that is, a dragon or other similar creature). MUDS (Multi-User Domains) and IRC (Internet Relay Chat), along with other possibilities, allow the construction

 

of identity entirely through text thereby allowing the wholesale reconstruction of offline identities when online. For full discussion of identity online see Turkle, 1995, Jordan, 1999a; chapter three.

8 Though this commitment may be changing since Rosetto's departure in 1999.

9 Nor should it be assumed that staff and Board members of EFF hold the same libertarian views. There is a range within the organisation from strong libertarian to views that do not see the state as entirely irrelevant. The point is that in terms of cyberpolitics nearly all staff and Board members operate within a broadly libertarian framework.

10 Hacking used to be applied to those who were innovative with computer technology, however it has become more closely associated with illicit computer intrusion (Taylor, 1999). Those who wish to retain hacking with its original meaning often use cracking to denote illicit computer intrusion. In deference to the more widespread understanding of hackers as computer criminals, hacking will be used to denote the cracking community.

11 A slogan usually credited to Stewart Brand. See Jordan, 1999a; 193–5 for an analysis of its meaning.

## References


Barbrook, R., (2000), 'Cyber-Communism: how the Americans are superseding capitalism in cyberspace', *Science as Culture*, 9 (1), 5–40.

Barbrook, R. and Cameron, A., (1997), 'The Californian Ideology', *Science as Culture*, 26: 44–72.

Barnes, B., (1995), *The Elements of Social Theory*, London: UCL Press.

Bourbonnais, J. and Yergau, F., (1996), 'Languages on the Internet', paper given at INET 96 available at http://www.isoc.org/conferences/inet96.

Burrows, R. and Featherstone, M., (eds), (1995), *Cyberspace, Cyberbodies, Cyberpunk: cultures of technological embodiment*, London: Sage.

Count Zero, (1999), 'Interview with Count Zero, member of Cult of the Dead Cow', ABCNEWS.com, available at http://www.abcnews.go.com/sections/tech/DailyNews/chat_countzero.html.

Deleuze, G. and Guattari, F., (1986), *Kafka: toward a minor literature*, Minneapolis: University of Minnesota Press.

Dowding, K., Hughes, J. and Margetts, H., (eds), *Challenges to Democracy: the PSA Yearbook 2000*, London: Macmillan.

Dreyfus, S., (1997), *Underground: tales of hacking, madness and obsession on the electronic frontier*, Kew: Mandarin.

Ess, C. and Sudweeks, F., (eds), (2000), *Cultural Attitudes Towards Technology and Communication 2000; second international conference*, Murdoch: Murdoch University

Fanon, F., (1986), *Black Skin, White Masks*, London: Pluto Press.

Find/SVP, (1995), *American Internet User Survey 1995*, available at http://www.findsvp.com.

Find/SVP, (1997), *American Internet User Survey 1997*, available at http://www.findsvp.com.

Hafner, K., (1997), 'The World's Most Influential Online Community (and it's not AOL): the epic saga of the Well', *Wired USA*, 5.05: 98–142.

Harasim, L., (ed.), (1993), *Global Networks: computers and international communication*, Cambridge: MIT Press.

Harris, R., Bala, P., Songan, P. and Khoo Guat Lien, E., (2000), 'Challenges and opportunities in introducing information and communication technologies to the Kelabit community of North Central Borneo', in Ess, C. and Sudweeks, F., (eds), (2000), *Cultural Attitudes Towards Technology and Communication 2000; second international conference*, Murdoch: Murdoch University: 27–46.

Hudson, D., (1997), *Rewired*, Indianapolis: Macmillan Technical Publishing.

Jerman-Blazic, B., (1996), 'Europe and the International Character Sets: strategy of implementation and development of networked services', paper given at INET 96, available at http://www.isoc.org//conferences/inet96.


 

Jones, S., (ed.), (1995), *Cybersociety: computer-mediated communication and community*, London: Sage.
Jordan, T., (1999a), *Cyberpower: the culture and politics of cyberspace and the Internet*, London: Routledge.
Jordan, T., (1999b), 'New Space, New Politics?: cyberpolitics and the Electronic Frontier Foundation', in Jordan, T. and Lent, A., (eds), (1999), *Storming the Millennium: the new politics of change*, London: Lawrence and Wishart: 80–107.
Jordan, T., (forthcoming a), 'Measuring the Internet: host counts versus business plans', *Information, Communication and Society*.
Jordan, T., (forthcoming b), 'Hacktivism: direction action on the electronic flows of information societies', in, Dowding, K., Hughes, J. and Margetts, H., (eds), *Challenges to Democracy: the PSA Yearbook 2000*, London: Macmillan.
Jordan, T. and Lent, A., (eds), (1999), *Storming the Millennium: the new politics of change*, London: Lawrence and Wishart.
Jordan, T. and Taylor, P., (1998), 'A Sociology of Hackers', *The Sociological Review*, 46 (4), 757–780.
Kahin, B. and Nesson, C., (eds), (1997), *Borders in Cyberspace: information policy and the global information infrastructure*, London, MIT Press.
Katz, J., (1997a), 'Birth of a Digital Nation', *Wired USA*, 5.04, 49–52 and 184–91.
Katz, J., (1997b), 'The Digital Citizen', *Wired USA*, 5.12, 68–82 and 274–5.
Kroker, A. and Weinstein, M., (1994), *Data Trash: the theory of the virtual class*, Montreal: New World Perspectives.
Lohr, S., (1997), 'Cybercops Cash in on Paranoia', *The Guardian Newspaper*, 18/3/1997, 15.
Mason, R., (1993), 'Computer Conferencing and the New Europe', in Harasim, L., (ed.), (1993), *Global Networks: computers and international communication*, Cambridge: MIT Press:199–220.
McLaughlin, M., Osborne, K. and Smith, C., (1995), 'Standards of Conduct on Usenet', in, Jones, S., (ed.), (1995), *Cybersociety: computer-mediated communication and community*, London: Sage: 90–111.
Jones, S., (ed.), (1997), *Virtual Culture: identity and communication in cyberspace*, London: Sage.
Network Wizards, 'Host Count', available at http://www.nw.com.
NUA, (1997) 'How Many Online?', *Nua Internet Review*, 12 November, 1997 available at http://www.nua./ie/surveys/how many online.html.
ORA, (1995), *Defining the Internet Opportunity: Internet user survey*, available at http://www.ora.com/research.
Pitkow, J. and Kehoe, C., (1998), *GVU's Tenth WWW User Survey*, available at http://www.cc.gatech.edu/gvu.
Porter, D., (ed.), (1997) *Internet Culture*, London: Routledge.
Quarterman, J., (1997), 'Is COM Primarily U.S. or International?', *Matrix News*, 7 (8): 8–10.
Rickard, J., (1995), 'The Internet by the Numbers: 9.1 million users can't be wrong', *Boardwatch*, 9(12), also available at *http://www.boardwatch.com*.
Reuters, (2000), 'Women Outnumber Men on the Web in US, study shows', available at http://www.cnn.com/2000/TECH/computing/08/09/women.reut/index.html.
Shapard, J., (1993), 'Islands in the (Data)Stream: language, character codes, and electronic isolation in Japan', in Harasim, L. (ed.) (1993) *Global Networks: computers and international communication*, Cambridge: MIT Press: 255–69.
Smith, M. and Kollock, P., (eds), (1999), *Communities in Cyberspace*, London: Routledge.
Sofield, T., (2000), 'Outside the Net: Kiribati and the knowledge economy', in Ess, C. and Sudweeks, F., (eds), (2000), *Cultural Attitudes Towards Technology and Communication 2000; second international conference*, Murdoch: Murdoch University: 3–26.
Sproull, L. and Keisler, S., (1993), 'Computers, Networks and Work', in Harasim, L. (ed.), (1993), *Global Networks: computers and international communication*, Cambridge: MIT Press: 105–20.
Sterling, B., (1992), *The Hacker Crackdown: law and disorder on the electronic frontier*, New York: Bantam Books.

 

Sy, P., (2000), 'Barangays of IT: Filipinizing mediated communication and digital power', in Ess, C. and Sudweeks, F., (eds), (2000), *Cultural Attitudes Towards Technology and Communication 2000; second international conference*, Murdoch: Murdoch University: 47–56.

Taylor, P., (1999), *Hackers: crime in the digital sublime*, London: Routledge.

Tepper, M., (1997), 'Usenet Communities and the Cultural Politics of Information', in Porter, D., (ed.), (1997), *Internet Culture*, London: Routledge: 39–54.

Turkle, S., (1995), *Life on the Screen*, New York: Simon and Schuster.

Virilio, P., (1997), *Open Sky*, London: Verso.

Volkmer, I., (1997), 'Universalism and Particularism: the problem of cultural sovereignty and global information flow', in, Kahin, B. and Nesson, C., (eds), (1997), *Borders in Cyberspace: information policy and the global information infrastructure*, London, MIT Press: 48–83.

Yong, K.Y., Wee, T.T., Govindasamy, N. and Chee, L.T., (1996), 'Multiple Language Support Over the World Wide Web', paper given at INET 96, available at http://www.isoc.org/conferences/inet96.

 