

[::A Ramble Around the Internet ::]

<Copyright, Security, Paranoia and Authority>



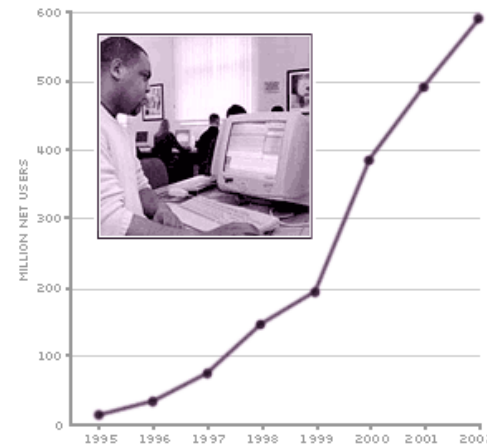
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::A Ramble Around the Internet::

<Introduction>

Today digital technology is helping to form people's day to day experience in new and radical ways. More and more people throughout the world have connected to the internet over the past decade, sending emails and surfing as part of their daily pattern of activity. A range of technologies that simply did not exist 30 years ago now play a significant part in millions of people's daily lives. All around the world people have access to mobile telephony, photo and video messaging, email, the internet, chat rooms and web cams to communicate, exchange information, and to gain understanding of the world we live in.



[http://news.bbc.co.uk/1/shared/spl/hi/pop_ups/03/technology_digital_snapshots/html/1.stm]

The democratic potential for the internet is a much debated issue – with some critics taking a sceptical view of the matter. [See for example Web.Studies: Rewiring media for the digital age, Part 4, p159] Television and other 'traditional' media have often been criticised for the way that they encourage passivity in their audience, and perpetuate paradigms of expertise and authority. The internet in contrast has opened up new channels of interactivity and creative communication, and despite its origins in US military strategy, it has fostered far greater democratic possibilities than traditional media have so far been able to achieve. With the dawning of digital media communications, individuals from all around the world are able to communicate with each other more freely than ever before.

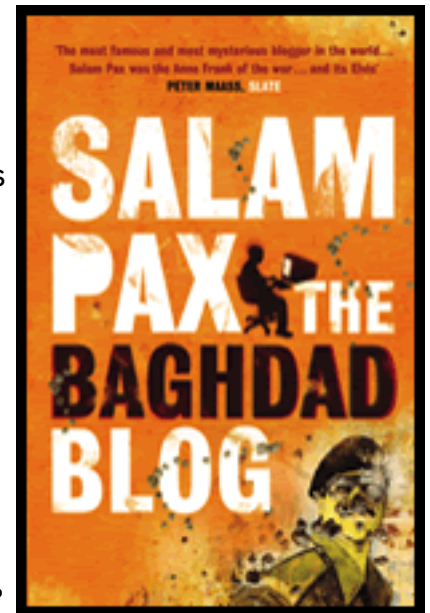
This essay is therefore simply an attempt to outline a personal overview of some of the more significant and recent internet related developments. Although questions of democracy underpin the essay, there is no attempt to prove that the internet is an inherently democratic medium, or otherwise. The essay begins with reference to the rise of **'blogging'** as a medium of increasing global significance. This discussion is followed by a brief look at the rise of **peer-to-peer** networking and the problems relating to copyright and **'cybercrime'** that surround this. It then proceeds to explore in some detail the current concern – especially in the U.S. – surrounding internet security, and **'cyberterrorism'**. This exploration also examines cultural representations of authority and their use in advertising. The essay concludes with a brief evaluation of and reflection on the issues and trends discussed in the main body of the text.

<Blogging>

'Blogging' – keeping a regularly updated online diary, or weblog – has become a popular activity over these past couple of years with people from all walks of life. One of the most striking features of blogging is that it enables individuals in countries like Iraq and Iran, where media is kept under tight control, to be able to share crucial news, views and information with a worldwide audience, where previously censorship would have prevented such exchange. The most well known of recent blogs is 'dear_raed', written by a 29 year-old Iraqi writing under the pseudonym Salam Pax, and recently published in book form.

[http://dear_raed.blogspot.com/] Worldwide media comments on his output were highly appreciative. One reviewer described Salam Pax's contribution as having "highlighted the deficiencies of embedded media," stating that Pax's blog became "required reading for anyone needing to find out what was really happening on the ground during the US-led invasion.'

[<http://www.thebaghdadblogger.com/promo/>]



The cover of Salam Pax's book 'The Baghdad Blog'.

Before the war in Iraq, blogging was generally perceived as something of a teenage activity. In an interview published on the Wired news site, the cyberculture guru [William Gibson](#), a self-proclaimed fan of Salam Pax, discussed his own approach to blogging. He described an initial exchange with his daughter: "I told my daughter I was going to do a blog, and it was as though I was going to take up skateboarding. She thought of it as a youth activity". The commencement of the war in Iraq and the increased interest in Salam Pax's very personal reports from the Iraqi warzone legitimized the medium of blogging – as Gibson put it, "Blogging went mainstream".

[<http://www.wired.com/news/culture/0,1284,58607,00.html>]



Blogging has become very popular in Iran

Blogging has also become fashionable for many people in Iran – even the vice-president has a blog, in which he posts daily reflections on life and politics. [<http://www.webnevesht.com/en/about.asp>] According to Iranian government figures, quoted on the BBC website, there were 400,000 people on the internet in Iran in 2001, and officials expect this to grow to 15m over the next three or four years. The media as a whole is rigidly proscribed by the Iranian government, who are careful to prohibit access to anything which is not permitted under Islamic law. Increasingly, access to certain internet sites containing pornography or other sensitive material is also being denied, and now thousands of web sites have been blocked by ISPs on government order. One well-known Iranian blogger,

Hossein Derakhshan, made a plea: “If there is still any reporter in Iran, covering the elections, please do a story about Internet censorship in Iran. It has apparently stepped up these days because of the elections. Internet will soon be the only medium that reformists have access to”.

[<http://news.bbc.co.uk/1/hi/sci/tech/2044802.stm>] [<http://www.hoder.com/weblog/>]

A young Iranian female blogger, speaking anonymously to the BBC, explained that her online diary had provided a unique forum to share her fears and aspirations. In Iran, she said, “Women cannot speak out frankly because of our Eastern culture and there are some taboos just for women, such as talking about sex or the right to choose your partner.” the response to her blog was largely positive. She reports having received emails, “from men who have told me that I changed their attitude towards women in Iran”. That the ‘blog’ can touch people in these ways, and help change deeply held views, must be counted as a significant development in media and communication patterns.

[<http://news.bbc.co.uk/1/hi/sci/tech/2044802.stm>]

<Peer-to-Peer>



U.S troops in Iraq

The number of people using the internet for news increased significantly during the war in Iraq. Whilst Western journalists were busy reading Middle Eastern weblogs, Western consumers tuned into the news on the web through broadband connections, and watched video reports in technicolour. The Iraq war was, according to James Bankoff, an executive at [AOL Time Warner](#), “the coming of age of the broadband news medium, just like the first Iraq war for [CNN](#).” During the war in Iraq millions of viewers flocked to news sites offering video coverage. [MSNBC.com](#) averaged about 5 million video streams a day during the war — or seven times its average in the period before conflict broke out, according to Charlene Li, analyst at Forrester Research. She remarked that, “The war is the latest — and most powerful — development in a confluence of events that have popularised broadband”. It may be an awful fact to acknowledge, but there are always some who profit immensely from war, not the least of whom are the global media conglomerates.

[http://www.usatoday.com/tech/world/iraq/2003-04-01-broadband_x.htm]

Greater availability of broadband services has also facilitated the increased use of peer-to-peer file sharing networks. From a commercial point of view this has been a highly controversial development. The Recording Industry Association of America (RIAA) says music sales have fallen by a over 30% in three years. Cary Sherman, head of the RIAA maintains that the impact of online piracy on the US music business has been “devastating”. He told a conference in London that a 31% decline in music sales between 1999 and 2002 was primarily due to piracy.

[<http://www.riaa.com/>] [<http://news.bbc.co.uk/1/hi/technology/3532891.stm>]

Music and Entertainment industry organisations around the world are fighting back with a massive legal campaigns. In the U.S., Holland and Australia there have been hundreds of court cases brought against software providers like [Kazaa](#), as a well as individual users of P2P networks. Just a month ago, according to a report by Reuters news agency, the U.S. music industry , the RIAA, sued 531 people for online copyright infringement. The report says that the RIAA, which sees digital piracy as a significant factor in a three-year fall in CD sales has filed five separate lawsuits against 531 users of undisclosed Internet Service Providers.



Peer-to-peer software companies like Kazaa are at the centre ongoing legal battles around the world.

[<http://www.reuters.com/newsArticle.jhtml?type=internetNews&storyID=4378755>]

Many of those being sued are users of peer-to-peer networks, who engage in file sharing of copyrighted material without permission from copyright owners. Such peer-to-peer networks are a major concern for the music and film industries, as they can easily facilitate copyright theft – sometimes inadvertently. Ironically the increased uptake of broadband, whilst a source of considerably increased revenue for providers like AOL, is a great source of anxiety for other branches of the same industries. In January, 2002, Jack Valenti, President of the Motion Picture Association of America, referring to the MPAA’s campaign against peer-to-peer movie downloading over the internet said, “We’re fighting our own terrorist war – the great moat that protects us, and it is only temporary, is lack of broadband access.” [<http://www.reuters.com/newsArticle.jhtml?type=internetNews&storyID=4378755>]

On student campuses in the U.S there has been much consternation over the clampdown by the music industry. For example the autumn 2003 student newsletter of California State University ran a feature on peer-to-peer file sharing. One student admitted to being “a little worried” about being caught, but he also said that the situation would not stop him adding to his collection of over 200 downloaded songs. [http://www.educause.edu/asp/doclib/subject_docs.asp?Term_ID=608] The RIAA has said they will seek to prosecute only those who have a “substantial” amount of copyrighted music, but how much that actually is has not been clarified. RIAA President Cary Sherman has said that there are “no hard and fast rules” for the number of pirated files that may incur legal proceedings. He remarked that, “any individual computer user who continues to steal music will face the very real risk of having to face the music”. [<http://chronicle.com/free/2003/08/2003082101t.htm>]

<Cybercrime>

As a consequence of the increasing growth of peer-to-peer networking, and the threat of digital piracy that this has engendered, the FBI have teamed up with the U.S Entertainment Industries in the fight against cyber crime. The FBI are taking measures to inform U.S. citizens of the dangers involved in using P2P networks. On their website [<http://www.fbi.gov>] the FBI have posted a ‘Cyber Education Letter’ addressed, ‘To Users of Peer-to-Peer Systems’, which says,

'The FBI has undertaken a new initiative to educate and warn citizens about certain risks and dangers associated with the use of Peer-to-Peer systems on the Internet. While the FBI supports and encourages the development of new technologies, we also recognize that technology can be misused for illicit and, in some cases, criminal purposes.'



The letter goes onto say that the FBI is concerned to help citizens to protect themselves, and offers a simple description of Peer-to-peer networking'

"Peer-to-Peer networks allow users connected to the Internet to link their computers with other computers around the world. These networks are established for the purpose of sharing files. Typically, users of Peer-to-Peer networks install free software on their computers which allows them (1) to find and download files located on another Peer-to-Peer user's hard drive, and (2) to share with those other users files located on their own computer. Unfortunately sometimes these information-sharing systems have been used to engage in illegal activity.'

[<http://www.fbi.gov/cyberinvest/cyberedletter.htm>]

This is a rather coy letter from the FBI, as it is widely acknowledged that most traffic on P2P networks involves copyright theft, and that users generally know that sharing licensed software and music without permission from copyright owners is an infringement of the law. At any rate the spate of prosecutions seems to be paying off: Nielsen SoundScan, a company that follows U.S. music sales, reported that U.S. album sales so far in 2004 have risen over 10% percent from the same period a year earlier.

[<http://www.reuters.com/newsArticle.jhtml?type=topNews&storyID=4378887&pageNumber=1>]

<Cyberterrorism>

Globalisation is a topic which has been debated for many years in relation to virtually every facet of contemporary life. The dual trends of global cultural convergence, and simultaneous localisation and diversification have excited much speculation. The internet exemplifies both these tendencies found in globalisation. Global media and computing giants such as AOL/Time Warner or MSN play a significant part in determining how many users experience the internet. This is contrasted with the



prominence of internet forums representing the interests of individuals and small communities around the world. A central feature of the net is that it is almost as easy for a single individual to set up a website as it is for a multinational company. This is seen by some as illustrating the point that the new communications technologies offer increased scope for democracy and for international.

[<http://www.georgetown.edu/faculty/irvinem/articles/globalculture.html>]



Sandra Bullock stars in 'The Net'

The internet has stirred people's imagination and creativity, as well as generating a great deal of paranoia and technophobia. Much of Sci-Fi and Futuristic culture over the past twenty years has been characterised by dystopian projections – tapping into people's fears and fantasies of a post-human era. Images from Mad Max, Terminator, Gattaca, or, recently, the Matrix film series, represent in dramatic form some of the potentialities that lie in imagination, beyond the boundaries of our present age. The 1995 film *The Net*, starring Sandra

Bullock, rehearses some of the paranoid fears that often arise in relation to technology. It depicts a lone and rather isolated female computer expert whose identity is electronically erased by criminals, when she discovers that a software programme used by the government is covertly designed to collect financial and other details from confidential databases.

Security fears arising from internet based threats, such as those depicted in *The Net*, have in recent years been discussed at high levels of government around the world. Only two weeks ago in the U.S. the CIA, working with the FBI and the Department of Homeland Security and the Pentagon published the first-ever classified National Intelligence Estimate (NIE) on the threat of cyberterrorism against U.S. critical infrastructures.

[<http://maccentral.macworld.com/news/2004/02/25/cia/index.php?redirect=1078650488000>]

At the same time, on February 24, 2004, U.S. senator Dianne Feinstein expressed her concerns in an address to the Senate Judiciary Subcommittee on Terrorism, Technology and Homeland Security. Making reference to recent virus attacks she said,

“You only have to look at the MyDoom virus that recently spread like wildfire across the Internet to understand the threat of cyberterrorism. MyDoom was responsible for sending 100 million infected emails in its first 36 hours, and accounted for one-third of all emails sent worldwide on one evening. The virus shut down the website of SCO Group [4] and also attacked the Microsoft website. Damages worldwide ran into hundreds of millions of dollars. A terrorist could theoretically use a computer to: open up the flood gates of a dam; disrupt the operations of an aircraft control tower; shut down the New York Stock Exchange or other important businesses or government agencies; or disrupt emergency communications of law enforcement and safety officials.” [<http://feinstein.senate.gov/04Releases/r-cyberterror.html>]

But how real are fears of cyberterrorism? Much debate has been stimulated by this question, with contrary opinions being expressed. Only a year ago experts in the field of cyber security were arguing that the threat of cyberterrorism was being exaggerated. Rainer Fahs, senior information security engineer of NATO's Air Command & Control Systems Management Agency, said last year that, "We do not see a terrorist attack on the Internet happening." The reason for this view, he



explained, was because, "Critical systems don't run on the Internet; they are based on secure networks. We have protected our systems and do not rely on the Internet."

[<http://www.computerworld.com/securitytopics/security/story/0,10801,79368,00.html>]

Reported incidents involving hacking that could cause actual physical damage are in fact few. One instance occurred on May 3, 2003, when two hackers sent an e-mail to the National Science Foundation's Network Operations Center. The email claimed that the hackers had succeeded in penetrating the NSF network that controls life-support systems for scientists at a South Pole research station. The hackers claimed they had downloaded everything on the network, threatening to sell the information to "the Russians or the media" if NSF did not pay up. The email was said to contain information found only on the NSF's computer systems, proving that the email was not a hoax. Eventually the hackers were traced to a cybercafe in Romania and arrested in June 2003.

[<http://maccentral.macworld.com/news/2004/02/25/cia/index.php?redirect=1078739295000>]



'Hacker Training': The web is filled with hacker sites.

Another story of serious hacking involved an Australian man, apparently seeking revenge for being turned down for a job application! Vitek Boden was convicted on 31/10/2001 and jailed for two years after he was found guilty of hacking into a computerised waste management system at Maroochy Shire, Queensland, causing millions of litres of raw sewage to spill out into local parks and rivers. At the time Boden was employed by the company that had installed the computer system. He

made at least 46 attempts to take control of the sewage system during March and April 2000. This is not cyberterrorism, but it does indicate what it is possible to achieve given the right knowledge and equipment. [http://www.ananova.com/news/story/sm_438245.html]

Nonetheless, the FBI's evaluation of the current level of cyberterrorism indicates that the threat to the U.S. is "rapidly expanding", according to Keith Lourdeau, current deputy assistant director of the FBI's

Cyber Division. As a consequence of government concern, substantial resources are being pumped into research around Cyberterrorism. For example in October 2002 the U.S. Department of Defense awarded Carnegie Mellon University \$35 million to fight what they perceived as the growing threat of cyberterrorism over the next five years. The FBI has also been giving the matter top priority. Its current top three objectives are wholly expressive of current U.S security concerns: 1. Protect the United States from terrorist attack; 2. Protect the United States against foreign intelligence operations and espionage; and 3. Protect the United States against cyber-based attacks and high-technology crimes. [<http://www.fbi.gov/priorities/priorities.htm>]
[<http://www.computerworld.com/securitytopics/security/story/0,10801,75137,00.html>]

Some internet analysts feel that the threat of cyberterrorism has been hyped by Government agencies and software companies. In the interview previously quoted, Rainer Fahs explained that though he could understand the U.S. government's reasons for their concern over cyberterrorism, but he feared that civil liberties could be at stake if there was a drive to fight what was actually an imaginary threat. "This is something that was created, and I think there is a big risk that the liberty of people will be sacrificed for the sake of security." Many commentators suggest that the threat of cyber crime does not primarily come from terrorist linked countries. Results from a survey by the [Symantec Corporation](#) released last year appear to support this view. Symantec found that none of the severe security problems that it detected were traced to countries linked with terrorism, and less than 1% of all attack traffic came from such countries. The general speculation around the issue suggests that the reason government agencies and software companies are exaggerating the threat is simply to increase budget allocations and revenue. [<http://www.computerworld.com/securitytopics/security/story/0,10801,79368,00.html>]

Although a strategy of exaggeration over such an important issue, for the sake of financial gain seems highly irresponsible, it is not beyond the bounds of possibility. Marita Sturken and Lisa Cartwright argue, in their book, 'Practices of Looking' that the technology industry (amongst others) regularly deploys a strategy of inducing anxiety through advertising as a means of increasing revenue. They cite an IBM advert for computer hardware



"I'll need to see some ID" IBM ad from Sturken & Cartwright 2003

– a secure server – as an instance of the manipulation of users' anxiety through the 'startling' representation of a police officer with hand outstretched, and the caption "I'll need to see some ID". [Ch. 6, p216/7 Practices of Looking, M. Sturken & L. Cartwright: Oxford 2003]

It is certainly a commonplace of advertising to represent dramatic scenarios in which anxiety is quelled, or happiness attained, usually through the purchase and 'consumption' of a particular product.

Sturken and Cartwright suggest that the image of the policeman is meant to make the viewer feel that he or she is a potential suspect, and so to induce anxiety. This seems to be too simplistic a reading. The ad does play on anxiety, but not quite in the way Sturken and Cartwright describe.

The image of the policeman is part of the stock images of our society. Here in the IBM ad this image is ultimately meant to reassure, not to disconcert and it is aimed primarily at those with a budget to spend, and a lot to lose, such as financial executives, and company IT security managers. How does this ad provide reassurance to customers and users? And how does the image of the police officer work on people's responses?



A helpful officer encourages us to step back

It is probably true that many people, innocent or guilty, feel like potential suspects when faced with authority in the form of police or security forces. So for the majority of those who view the ad, the image of the police officer will, to some degree, induce the usual sense of awe and guilt that many experience in such a situation. In responding to the ad, the viewer participates in the larger cultural phenomenon of control by proxy that images of law enforcement represent. Such images of control induce anxiety, but by so doing they paradoxically create a sense of security. We know society is under control, and we are fearful; therefore we know others are fearful, and so will refrain from criminal activity. It is by tapping into this stratum of social psychology that such advertising functions – as it were, piggy-backing on established cultural patterns.

For the executive or IT manager, then, the ad is intended to stimulate anxiety – but also reassurance; to induce the feeling that security is attainable. Put together with the product slogan 'web security', the image of the policeman's outstretched hand implies that there is a criminal out there – a cybercriminal – waiting to slip in where security is weak. The image simultaneously functions as both cause of anxiety and source of security. The general effect on the computer-using public is probably very similar, and this must also be an important element in the overall strategy of promoting IBM products. As users of ISPs with IBM technology the home user would benefit directly from the secure features of their servers, and any promotion of IBM brand name computer products would have an overall beneficial influence on company reputation and sales.

It's doubtful however whether the ad is aimed at all at those most likely to be the source of the problem that the product seeks to address. For actual criminals, a minority of hackers and potential cyber criminals, the ad may be intended to induce anxiety, and a sense of fear of being caught trying to

illegally access data. It seems unlikely though that the ad itself would perform any function with regard to actual criminal activity, except to warn criminals to be extra vigilant and well informed – perhaps by attending the free seminars offered in the right hand panel of the ad..?

<Conclusion>

The internet is a vast resource, available to all who have access to a computer and modem or network connection. One of the most important features of the internet is its capacity to link diverse people together, and to give a voice to those who for one reason or another cannot be heard through other media. Such practices as blogging, and peer-to-peer communication and exchange mark a new era in communication patterns. The freedom of the net lies in its flexibility. Attempts to restrict access to the web by totalitarian states – or by Western powers – are constantly undermined, by the very fact that net usage is so flexible, and difficult to censor. The web is a channel of communication that is difficult to silence – so that in a context like the war in Iraq blogging can provide an absolutely unique perspective on a complex and evolving situation.

Peer-to-peer sharing is a development with many conflicting issues involved. Although large scale prosecution of file-sharers has mainly been focussed in the U.S. there are threats of this happening in the UK and Australia. [<http://news.bbc.co.uk/1/hi/entertainment/music/3395161.stm>] Last year in Sweden, in line with an EU directive, strict proposals were drawn up outlawing current P2P software and networking altogether, as well as adding significant surcharges to blank media. The proposals were due to come into effect earlier this year. [<http://www.afterdawn.com/news/archive/4190.cfm>]

Despite the fact that in the U.S. the FBI have joined forces with the media industries in a crackdown on piracy, many internet users, and some in the media industries, do not support the trend towards making peer-to-peer networking illegal. In many respects the media industries and legal experts recognise that peer-to-peer sharing will survive, and it appears that some discussion is underway to develop schemes that will integrate commercial content into this type of networking. In the meantime sadly the music and film industries will no doubt continue to prosecute users who exchange copyrighted material.



[<http://www.reuters.com/newsArticle.jhtml?type=topNews&storyID=4407352&pageNumber=0>]

That the U.S. government and the FBI should focus on 'cyberterrorism' seems entirely comprehensible. After 9/11 the vulnerability of U.S. security has become apparent, and it is not surprising to find that much debate rages around the issue. At the same time it's hard not to see the peculiar irony in the fact that what was originally created as part of U.S. military security strategy, has ended up being a significant factor in U.S. security vulnerability.



Brianna LaHara: mother paid \$2000 to RIAA

If the concern with cyberterrorism is understandable, it is less easy to see why the FBI should put such resources into anti-piracy measures. On their website the reason given is that piracy is seriously damaging the economy. This can begin to seem slightly unbelievable when one examines some of those who has been prosecuted. Even children caught sharing files are finding that suits are being brought against them. The mother of 12 year-old Brianna LaHara last year paid \$2000 in an out of court settlement; and a 66-year old women received a subpoena for illegal file sharing (which turned out to be a mistake).

[http://www.wired.com/news/digiwood/0,1412,62576,00.html?tw=wn_tophead_7]

The entertainment industries frequently cite piracy statistics that are based on the assumption that people would actually buy more software, music and films if they couldn't get them free. Although this is very probably true, to some extent at least, the meting out of pecuniary punishment to minors who share their music with one another shows a rather rapacious face to the music industry. Peer-to-peer sharing raises difficult ethical questions – for players on both sides of the line. But making criminals out of children for the sake of a paltry few thousand dollars is clearly a big mistake.

Apart from being prosecuted by the music industry, probably the most serious concern for internet users is that raised by the work of hackers and virus writers. For the average user 'cyberterrorism' is not an issue. Instead, viruses are a major nuisance, and criminal scams involving hacked data are a serious liability. In reality though the line drawn between hackers and crackers on the one hand, and users on the other, is rather an artificial one. For example, many people use the work of crackers as a kind Robin Hood-style public service, to gain access to software normally available only to companies, institutions and very well-resourced individuals! In the short term at least, music, software and movie pirating must seem to be to the advantage of the average user. As someone put it on a BBCi internet discussion page: "why should I pay for music when I can download it for free?"



Moral ambiguity is also a feature of other instances of 'cybercrime'. Hackers who allegedly shut down the White House website [www.whitehouse.gov] in May 1999, by denial of service attacks, would argue that they were morally entitled to this form of protest, when Chinese nationals were killed by U.S. bombers in Kosovo. Or again in 2001 when an American spyplane crashed into a Chinese fighter, hackers from either side defaced sites associated with each others' governments. What is a legitimate democratic protest? Who or what determines that legitimacy? Such questions are difficult to resolve. But it is these questions that the internet raises for users every day – and will go on raising, as technology continues to race ahead. [<http://www.cnn.com/TECH/computing/9905/12/cyberwar.idg/>] [<http://news.bbc.co.uk/1/hi/sci/tech/1306591.stm>]

<Note on the title>

In the U.K. the 'Ramblers' Association' campaigns to keep traditional countryside rights of way open.
[<http://www.ramblers.org.uk/>]

'ramble'

1. To walk, ride, or sail, from place to place, without any determinate object in view; to roam carelessly or irregularly; to rove; to wander; as, to ramble about the city; to ramble over the world.
2. To talk or write in a discursive, aimless way.
3. To extend or grow at random. --Thomson.

Syn: To rove; roam; wander; range; stroll.

Source: Webster's Revised Unabridged Dictionary, © 1996, 1998 MICRA, Inc.

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