The early 1990s saw the development of a new concept of political activism known as electronic civil disobedience. Emerging within US activist and artist groups, electronic civil disobedience (ECD) was introduced as a radical form of online resistance based in computer hacking and mass participation. This model of online protest was initially put into practice in the late 1990s, as part of a movement supporting the Zapatista revolution, and it was further developed as online direct action during the Seattle manifestations in 1999. Directly influenced by the principles of street demonstration and occupation, the first electronic civil disobedience event required the set up of a website and the creation of software that allowed Internet users to directly participate in virtual sit-ins and denial-of-service attacks (Vlavo 136). At the time, the rationale for using the Internet as a platform for socio-political dissent was based on the assumption that the digital network was an easily accessible and decentralised system; one that could and should be used as a politicising instrument. The brief, and mostly uncharted, history of electronic civil disobedience suggests, however, that the Internet did not meet these early expectations, and while social and political activists have advocated free speech, electronic democracy and independence, governmental and corporate institutions have oppositely reorganised legislations and public policies to justify greater control and regulation of the Internet.

It could be argued that the very idea of electronic civil disobedience emerged from a series of utopian and idealised interpretations of digital technologies. In his account of the development of the US telecommunications industry, Marcus Breen suggests that “economy was always the prevalent set of interests in creating the communications system that we now know as the Internet” (141). Examining the US telecommunication policy since the 1930s, Breen argues that the policy was primarily “dedicated to emancipating telecommunications from the public interest to continue the aspirational ideal of American entrepreneurial history in new technology” (132). This context, Breen also argues, provoked the emergence of a new phenomenon corresponding to a “hysterical style of political discourse . . . where people screamed at each other through and about the media . . . [and] where claims to community and civic life matched the Internet’s mobilization of corporate interests” (139). Drawing on Breen’s articulations of “hysterias” in relation to the Internet, this article investigates the central discourses that have constructed the Internet as a democratic and public environment removed from state and corporate control. In this paper, I frame some of these views of the development of digital technologies as “hysterical discourses.”

In particular, I consider the discourses of “decentralisation,” “entrepreneurship” and “open community” as the most contradictory demands that have been formulated in relation to the
Internet. This paper will thus investigate these early interpretations and challenge widespread understandings of networked communication. The discussion will first focus on the theoretical decentralisation of the Internet. It will then question the role played by the digerati (or cyber elite) in the request for self-governance and free market. Finally, the paper will consider the emergence of two early virtual communities and their claims for free speech, online democracy and self-regulation. The aim of my analysis is to begin re-contextualising the development of digital networks within their wider social, cultural and political frameworks. The article will also form a starting point for understanding challenges to online activism and re-evaluating the potential of internet as a tool for social and political empowerment.

The Decentralisation Hysteria

In his introduction to Crypto Anarchy Cyberstates and Pirate Utopias, Peter Ludlow proposes a peculiar discussion of cyberspace governance and structure that explicitly sets aside any legal and political factors that have influenced the development of the internet. He explains:

I have studiously avoided important issues of cyberspace law such as government censorship of the Net, the right to Internet access and so on. These are important issues, but there are issues about the relation between current governance structures and the Net. Here I am more concerned about the emergence of new governance structures within the Net than with efforts to establish legal sovereignty over the Net. (Ludlow, xviii, my emphasis)

As a result, Ludlow’s analysis is an awkward commentary on citizenship and online sovereignty which deliberately ignores issues of access, management, politics and control. It is also an example of the distorted interpretations of the internet that have dominated discussions for several decades. This separation between structures within and over the network assumes that the internet originated as an independent and organic system which governments and corporations have been trying to take over. This discourse is epitomised by the writings of John Perry Barlow who officially declared the independence of cyberspace in 1996. Responding to a new US legislation designed to regulate online content, Barlow published A Declaration of Independence of Cyberspace on the internet. In his declaration, directly addressed to the US government, he explains the “true” nature of the digital network: “cyberspace does not lie within your borders. Do not think that you can build it, as though it were a public construction project. You cannot. It is an act of nature and it grows itself through our collective actions” (Barlow par. 3). Barlow further argues that cyberspace is an independent and fully functioning environment that should not be considered state property. Moreover, it does not require external legislation because self-governance has been achieved from the beginning. Despite this flagrant misreading of the history of the internet, A Declaration of Independence of Cyberspace has played a central role in the understanding of the internet in the western world (Vlavo 128).

To understand the dominance of Barlow’s vision within both public and academic discourses, it is worth discussing the main concept which has been used to discursively decentralise the internet. In a Thousand Plateaus, Gilles Deleuze and Felix Guattari introduce their ideas of rhizome and deterritorialisation by defining the rhizomatic model as a non-linear, anarchic, nomadic, smooth, deterritorialised and multiple. This model is in opposition to the arboric (or tree) model considered to be linear, hierarchic, sedentary, striated, territorialised and unitary) (9). The rhizomatic model follows several principles including connection, heterogeneity, and multiplicity, in addition to the principle of asignifying rupture which assumes that “a rhizome may be broken, shattered at a given spot, but it will start up again on one of its old lines or on new lines” (9). It is this last principle that has facilitated the representation of the Internet as an infinite and indestructible communication system structure. For Stefan Wray, the conceptualisation of the Internet as a rhizomatic and decentralised structure is not coincidental (par. 4). As he observes, the term “rhizome” began to be used outside of its botanic origin around the same time William
Gibson published *Neuromancer*. Wray attempted to locate early critical discussions of the relationship between the internet and Deleuze and Guattari’s theories of rhizome and deterritorialisation but his search was inconclusive and he noticed a “curious lack” of academic analysis of this argument (par. 3). While *A Thousand Plateaus* was often quoted and referenced, Wray argues, very few critics explicitly and critically examined, let alone challenged, the rhizomatic internet. Yet the conception of the Internet as a rhizomatic network became de facto, supporting an articulation of the hysterical discourse of decentralisation.

For example, in his essay from 1996, Robin Hamman attempts to link Deleuze and Guattari’s rhizomatic model with the Internet. He establishes that whilst a stand-alone computer cannot be considered part of a rhizome (due to its hierarchical structure), once connected to a network of networked computers the machine enters the rhizomatic system. While Hamman refers to the principle of packet switching (the distribution system by which data are transmitted on the internet) to suggest the decentralised structure of the Internet, he also identified issues with the rhizomatic model but circumvented them through a conceptual shift:

> Typically, an Internet user will only have one Internet access account, and thus one entryway on to the Internet. To resolve this problem, *I move to a theoretical level*. In theory, anyone can set up a computer or server on the Internet which would allow them to create their own access point or node as it [is] called by computer networking professionals. Similarly, anyone can sign up for Internet access with any of the companies that provide such a service. In theory, this resolves the problem of multiple access points, however things do not always work out in the same way that things on a theoretical level would make us believe. (Hamman par. 14, my emphasis)

Hamman’s decision to move from a practical to a hypothetical framework illustrates his eagerness to convince. He nevertheless concludes that the Internet does not function as a rhizome for all users, but instead for a selected few. His application of Deleuze and Guattari’s rhizomatic model to the Internet is, thus, unsustainable. The rhetorical manoeuvre that Hamman adopts and explains in a rather naïve fashion, corresponds to the hysterical discourse that insists on representing the internet as a free and accessible environment regardless of the contradictions.

Aaron Hess’s research, on the other hand, challenges the apparent rhizomatic attribute of the internet. Using the example of search engines, Hess demonstrates that early promises of open communication and access have been tempered by the commercialisation and hierarchisation of the Internet. He explains that from the point of view of the Internet user, rhizome theory does not hold. Instead, the dominant use of search engines forces users to access information and knowledge through pre-determined paths: “web searching has grown hierarchies, or ‘trees,’ that organise data in tracts of knowledge and place users in marketing niches rather than assist in the development of new knowledge” (35). Although he acknowledges the growing use of the Web for political activism and electronic civil disobedience, Hess argues that commercial search engines function as information gatekeepers and utilise “hierarchies to order knowledge and information which privileges mainstream and silences marginalized voices” (35-36).

It could be argued that the early rhizomatic interpretations of the Internet were formulated at a time when the development of the web was limited, but Hess still rejects these interpretations:

> If cyberspace had existed as a rhizome of possibility where random individuals interact and intersect with others, the use of search engines to impose an order upon the massive amount of information has constrained our desire. From the early promises of a new democratic order, the Internet has become arborified. (47)

Hess’s argument establishes the redundancy of the rhizomatic argument and certainly, today, this theoretical framework has lost currency. However, it would be a mistake to neglect this early
interpretation of the structure of the internet because I would argue that the concept of decentralisation is the dominant trope used to denunciate and oppose governmental and corporate attempts to control digital networks. Furthermore, it is based on the interpretation that online activism has developed, along with the dreams of open community and entrepreneurial success.

The Entrepreneurship Hysteria

In the same year that John Perry Barlow released his Declaration of Independence of Cyberspace on the Internet, John Brockman published his book, Digerati: Encounters with the Cyber Elite, which contains a series of one-to-one interviews with eminent Internet users (Brockman). For the title, Brockman used a relatively new term derived from the combination of the words “digital” and “literati” (intellectuals). “Digerati” refers to specific circles of individuals who, according to the book’s subtitle, formed an elite community of Internet users. The book can therefore be regarded as an early directory of “who is who” and Brockman himself introduces it as a close representation of a network of the most influential individuals in the Internet industry. At the time of writing, Brockman stated that the thirty-six interviewees did not form an exhaustive list, yet he also asserted that the respondents were representative of the cyber elite:

a critical mass of doers, thinkers and writers connected in ways they may not even appreciate, who have tremendous influence on the emerging communication revolution surrounding the growth of the Internet and the World Wide Web. Although they all happen to be Americans, their activities have a worldwide impact. (xxvi)

This publication is important for several reasons. First, it provides a database of the principle actors that acquired a powerful status during the early developments of the public Internet, that is, mostly privileged people with direct access to digital technologies. Second, the combination of interviews compiled in Digerati exemplifies some of the early hysterical and contradictory discourses articulated about the purpose of the Internet.

For example, Stewart Alsop, business entrepreneur and former Editor-in-chief of InfoWorld is introduced in the book as “the Pragmatist”: “he likes doing business. He likes making money. He likes things that people are willing to pay for” (Brockman 1). Alsop believes that “if the web is going to change our lives substantially, there are going to be plenty of ways to make money, and some will be the ways we already make money” (2). In the book, Brockman assigns a unique name to each of the respondents: Alsop is the Pragmatist, JP Barlow is the Coyote, Howard Rheingold the Citizen, Kevin Kelly the Saint, Sherry Turkle the Cyberanalyst, and so forth. One member of the cyber elite is David Bunnell, publisher and founder of PC Magazine and PC World, who explains how one can make money on the Internet: “you need multiple revenue streams. You need advertising revenue, transaction revenue and subscription revenue” (32). Later on in the interview, however, Bunnell, also known as the Seer, makes a different, if not contradictory statement:

We need a free, unfettered Internet. You can’t trust commercial online services to respect your rights. They are too susceptible to commercial pressures, too likely to cave in when their profits are on the line. The Internet is different, and it should stay that way. The future of our democracy depends upon this, because the Internet has the potential to give individuals much more say in government affairs. (Maybe this, not dirty pictures is what the government is really afraid of?). (35)

The last comment is a direct reference to the government’s attempt to censor the Internet via the 1996 Telecommunications Act, and Bunnell’s argument echoes John Perry Barlow’s seminal address to the US government.
Accordingly, Kevin Kelly, executive editor of *Wired*, recognises John Perry Barlow as “resident senator of cyberspace . . . the first politician of cyberspace” (Brockman 9). During his interview, Barlow, or the Coyote as Brockman identified him, rehearses his discourse of cyberspace independence and reaffirms the necessity of defending “the borders of cyberspace against hegemonic incursions of various power forces of the terrestrial world . . . . Cyberspace is naturally anti-sovereign” (Brockman 13). In contrast, the interview with Denise Caruso, *New York Times* columnist, illustrates her questioning of the dominance of white and privileged males in the representation of internet users. Caruso calls for an increased awareness of the social issues related to access and learning and the need for governmental support and public infrastructure in the development of Internet technology (53). In *Digerati*, the name Brockman gives to Caruso is: the Idealist.

What must become clear from the collection of interviews from *Digerati* are the many discrepancies and contradictions produced by technological entrepreneurs and “social” libertarians. To describe this phenomenon, Richard Barbrook and Andy Cameron coined the term “Californian Ideology” (Barbrook and Cameron). The critics retrace the articulations of idealised visions of digital technology to the social change movements of the 1960s. For them, the radical socio-political transformations of that period, as well as the development of information technology encouraged the emergence of new utopian ideas of freedom in America. The shifts which rose out of the legacy of the civil rights movements allowed a new breed of activists and artists from the Bay Area to see the rapidly developing communication technologies as a means to fulfil their socio-political (and economic) agenda. It is this ambiguous and paradoxical combination of social movement and libertarian capitalism that characterises the Californian Ideology:

This new faith has emerged from a bizarre fusion of the cultural bohemianism of San Francisco with the high-tech industries of Silicon Valley. Promoted in magazines, books, TV programs, websites, newsgroups, and Net conferences, the Californian ideology promiscuously combines the free-wheeling spirit of the hippies and the entrepreneurial zeal of the yuppies. (Barbrook and Cameron par. 2)

The most remarkable aspect of this technological and entrepreneurial hysteria is its attempt to establish what Breen identifies as “a public interest system that produced an ideology at odds with the tenets of capitalism” (136). What is less convincing, however, is the cyberlibertarians’ decision to position the Internet outside of state control and legislation.

In *Who Controls the Internet?*, Goldsmith and Wu recount the extended conflict against the engineers considered the “fathers of the Internet” and the US government in the 1990s. The gist of the disagreement related to the control of the root authority system that enabled computers to communicate on the Internet. For more than a decade, the US government had remained distant from the administration of the system, leaving most decisions to national agencies and, later on, to corporate companies. With the increasing commercialisation of the network, and the threat of a monopolistic control of domain name registrations, the original contributors and administrators of the internet voiced their concerns and condemned the collapse of an initially altruistic project. The conflict escalated when Jon Postel chose to redirect all of the internet server names to his own computer. Postel, often referred to as the “God of the Internet,” was the main authority for the design, administration, and control, of Internet Protocol numbers since the 1970s. In January 1998, his attempt to take command of the US Internet severs succeeded and, for a few days, all computers connected to the network recognised Postel’s workstation as the master computer. Following this incident, the question of the administrative control of the Internet root function was resolved at once. The US government reclaimed authority over the Internet and declared the unauthorised modification of root file a criminal offence (Goldsmith and Wu 46).

In many ways, the initially lenient stand of the US government could explain why the Internet
came to be viewed as autonomous and self-governed. Until the mid 1990s, the state had relinquished the administration of the Internet to subsidised agencies and universities. These bodies were not primarily seeking profit. Instead, they worked towards the harmonisation of a rapidly growing information and communication system for the benefit of all users, in other words, for the public interest. The sudden administrative change requested by the government was perceived as a significant threat by early Internet users, official administrators and cyber-enthusiasts alike. On one side, some of them invoked the not-for-profit character of the Internet and claimed independence from the state. Yet on the other side, the US government invoked another fundamental right in American society: the right of ownership against payment. Ira Magaziner, Bill Clinton’s science policy adviser at the time, clearly summarised the affair: “the United States paid for the Internet, the Net was created under its auspices. And most importantly everything Jon [Postel] and Network Solutions did were pursuant to government contracts” (Goldsmith and Wu 41).

From this stand, it is difficult to accept the view that the Internet was ever a decentralised and independent environment. The US government initially remained distant from the command of the Internet, however, it did not hesitate to reclaim it when needed. Patrice Flichy gives a convincing interpretation of the issue:

> At the very beginnings of the Internet, government funding seemed to be one of the conditions for the development of the computer republic . . . however, with the massification of the Internet and the arrival of commercial enterprises on the network, state intervention became less necessary and even futile, and the libertarian position triumphed. The California ideology consequently forgot its debt to the state.

(169)

Indeed, the retracing of the relationship between the US government and the internet challenges the representation of an independent network. It demonstrates that despite the dominance of utopian narratives, state control and economic interests have always been central to the internet. In addition, it also exposes how the cyber elite deliberately ignored specific historical developments in order to delineate the role of the digital networks.

The Open Community Hysteria

> We are as gods and might as well get good at it.
> Steward Brand 1968.

In his book *From Counterculture to Cyberculture*, Fred Turner provides a detailed account of the period that saw the emergence of the Californian Ideology as Barbrook and Cameron describe it. Turner tells the revealing story of Steward Brand, the man behind one of the first virtual communities. Brand was a Stanford graduate acquainted with San Francisco’s bohemian artists, ecologists and business entrepreneurs. He also became a central figure in the creation of the Well (Whole Earth Lectronic Link), an online project named after an American counterculture publication, the Whole Earth Catalog, set up during the late 1960s. The Well project started in the mid 1980s as an online bulletin board and ran up to the late 1990s. According to Turner, Brand created the Well to facilitate meetings, publications and digital networks amongst members. The community included well-known contributors such as John Perry Barlow, Howard Rheingold, Kevin Kelly and Esther Dyson; in other words, most of those that Brockman recognised as the digital elite (in *Digerati*, Stewart Brand was named The Scout). In addition, the Well included scientific researchers, journalists and computer hackers and through this virtual network, Steward Brand successfully brought together various social and professional groups.

The topics discussed on the online bulletin boards covered counterculture movements, homesteading ecology and mainstream consumption culture alongside predictable discussions
about science and computing. Turner suggests that this multidisciplinary and interactive environment shaped the Well as a space for professional and social networking and reflected the structural and entrepreneurial atmosphere of the Californian Bay Area in the late 1970s. In addition, these countercultural movements, stimulated by the imagery of a virtual community, encouraged ideals of social transformation through digital technologies. What is clear from Turner’s account is that the main actors of the Well belonged to a distinct class of elite technophiles who promoted the economic development of the internet. Turner refers to them as “network entrepreneurs” who seemed to combine disparate views on counterculture and economic profit. Indeed, it is no coincidence that most members of the digerati participating in the Well were also dominant players in the industries of online publication and software design, amongst others. As previously discussed in this paper, the demands of this group easily mixed utopian hippie counterculture with business entrepreneurship.

The issue becomes particularly relevant when considering the fate of another virtual community that developed just prior to the Well. In a talk given in 1993, Allucquere Rosanne Stone recounts the story of the CommuniTree, another early online community created in the late 1970s. In her presentation, Stone describes the setting up of the first computer bulletin boards (BBSs) that supported social interaction on the Internet. The CommuniTree was a project designed by a group of computer users based in California in 1978. According to Stone, the system functioned as a virtual board where anyone could post anything they wanted to share. This apparent freedom was central to the concept of the CommuniTree and enforced by the technology through programming protocols. As Stone explains:

First, the system operator was prevented from reading messages as they arrived. Second, messages were hard to remove once they were entered. Third, anything could be entered into the system, including so-called control characters, which are not part of the standard alphanumeric set and which can be used to control the operation of the host computer. (par.9)

According to Stone, the online conversations were of “a high intellectual and spiritual character. They talked about new philosophies and new religions for post-Enlightenment humanity” (par. 10). However, the open community was rapidly threatened when groups of youngsters gained internet access through the local schools. Stone describes how, in one instance, some young boys accessed the CommuniTree board and how “unimpressed with the high intellectual level of the discourse on the CommuniTree, they expressed their dissatisfaction in ways that were appropriate to their age and linguistic abilities” (par. 11). These attacks soon signalled the end of the open community as most genuine users gradually abandoned the defected site. Following the experience, the new online bulletin board systems incorporated filters and surveillance programmes that restricted access while, at the same time, attempting to provide an open environment for significant virtual interaction.

Decades later, Stone’s account of the life and death of the CommuniTree reads as a highly utopian and romanticised narration. More importantly though, it denotes a somehow naïve conception of public social interaction. It seems as if the creators of these early bulletin board systems assumed that no unwelcome interaction or intrusion could ever take place in the virtual space. As such, practices of control and surveillance required in offline settings were assumed to be unnecessary within online communities. In the case of the CommuniTree, these assumptions were quickly tested and the outcome was unsurprising. The fate of the CommuniTree clearly illustrates the problematic interpretations that idealist groups of computer users spread about the potential of the Internet.

While the Well could be considered as a more successful project, it must be stated that the digerati viewed the online community as some form of welcoming global village at a time when access to the internet was still very limited, even in the US. In the 1980s, the project operated on a
teleconferencing system whereby subscribers had to dial up a central computer line in order to post electronic messages in real time (Turner 141). In addition to these material constraints, a virtual divide also existed that precluded equal participation. In his analysis of the Well’s participation, Patrice Flichy explains that the egalitarian interaction that users claimed did not correspond to actual practices. Most of the conversations and debates were often led and dominated by the same few individuals (74). While virtual community guru Howard Rheingold suggested that sixteen percent of the users produced eighty percent of the posts, Flichy argues that one percent of the Well participants (that is around seventy people), produced half of the messages (74). Thus, the majority of users remained silent observers, as is the case in many online communities, and it seems that the Well was actually a gated community. The digerati’s vision of an open community responsible for its own politics, economy and ecology environment corresponded more to a desire to claim ownership of the internet than a genuine interest in democratic access and public interests.

What becomes clear from these stories is that the structure of digital networks allows users to take part in interactive communication but also, when necessary, to regulate and control these interactions. This occurs through the direct moderation of content as well as the use of programming protocols that monitor access. In this context, the argument that the internet is “too wide” or “decentralized” and therefore cannot be regulated is unsustainable. Issues of control and authority are dominant and, to a certain extent, the perceived intrinsic characteristics and purpose of the internet shift according to these issues.

Even after it was opened to the public in the early 1980s, the infrastructure and maintenance of the internet heavily relied upon state support (Goldsmith and Wu). The question of internet governance regularly comes up with any governmental, and more recently corporate, investment projects. As such, the assumption that the globalised and borderless attribute of digital communication limits the authority nation states have on the internet is misleading. The recent attempts by the US government to regulate access to online content under the discourse of piracy and copyright infringement are eloquent. In early 2012, two different bills, the Stop Online Piracy Act (SOPA) and the Protect Intellectual Property Act (PIPA) were proposed to sanction the streaming and downloading of copyrighted material, causing a general uproar amongst internet users and internet organisations (BBC News). This brings to mind an earlier attempt, the 1996 US Telecommunication Act, however, this time a new declaration of independence of cyberspace will not do because these controlling measures are no longer exclusive to the US. France passed the Hadopi bill in 2009 and the European Union is currently devising its own anti-piracy legislation. What is more, along with these single country and regional initiatives, transnational accords, such as the controversial Trans-Pacific Partnership Agreement (TPP) are likely to affect the regulation and legislation of the internet. The point is that governmental control of digital networks is a reality and as Laura DeNardis suggests “battles over the control of information online are increasingly fought at the level of Internet infrastructure” (271). These current and future battles will have a direct impact on digital content and markets as well as on social interactions and freedom of speech.

Conclusion

The debate regarding the politicising potential of the internet requires a wide discussion of the social, cultural and political frameworks within which digital technologies have emerged. This paper aimed to provide a starting point for understanding some of the issues. In particular, it has presented several contradictions that could explain why, despite extensive theorisation, the praxis of online activism has been limited. The analysis of the discourses of decentralisation, entrepreneurship and open community – the digital hysterias – have all converged towards a similar conclusion: the formal administration and development of the Internet have been geared towards economic gain and business entrepreneurship. The narratives attempting to build the internet as a decentralised and open system for public interests have failed to sustain close
scrutiny and in many ways, the counter-movements that have emerged to enact these utopian possibilities could be viewed as unintended consequences. What must be retained is that the dominance and persistence of these libertarian interpretations conceal a globalised objective to regulate the internet as a platform for economic markets. The implications that the new transnational initiatives may have on the development of online mobilisation is beyond the scope of this article but there is, however, a provocative statement worth making: the internet was never outside of state control, and today it should be considered as the central element of its apparatus. This is a conceptual shift that will need to be explored in order to transform digital networks into meaningful politicising instruments.

_Fidele Vlavo_ is a postdoctoral fellow in the Department of Culture, Media and Creative Industries at King’s College London. Her research focuses on digital media theory and the development of cyberculture discourses. She recently completed her PhD which examines the concept of electronic civil disobedience and the practice of online activism.

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