FSOCIETY: HACKTIVISM AND THE DISRUPTIVE INNOVATION OF THE SOCIAL MOVEMENT

Ву

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Abstract

¹Beyond the anonymity that is dear to hackers, this research aims to analyze the procedure of their entry into politics. The analysis of the individual trajectories of hackers and the spectrum of their engagements makes it possible to understand the politicization of the movement and to explore its progress, from anonymous hacktivism trying to help the populations of the Arab Revolution, to the creation of parties in Europe.

The actions of the Anonymous group are particular and interesting, to say the least. On the one hand, they are reminiscent of traditional activism by defending the principles of freedom of expression (in the web). On the other hand, most of them are done through the use of illegal means. The Anonymous group embodies a concrete example of what the scientific literature calls hacktivism: a contraction of the words "hacker" and "activism". A great defender of freedom of expression, Anonymous does not hesitate to disobey laws deemed unjust for the greater good.

An instrument of communication, medialization, transaction and protest, but also an instrument of surveillance, the internet is both a tool and a space of (counter) power, which makes any attempt to analyze its political stakes particularly complex. This paper will try to focus on a topic already vast: the "strategies of disorder" that are unfolding on and especially thanks to the world wide web.² This distinction is fundamental since it implies that certain "hacktivist" and "cybernationalist" are satisfied with their virtuality while others take their actions on the real world.

¹ Fsociety is borrowed from the television series "Mr. Robot". Fsociety is the name of a hacker group in New York. The name plays both on the derelict amusement park building in which it has its headquarters and their message: "f... society"

² Michael L. Gross and Tamar Meisels (editors) – "Soft War, The Ethics of Unarmed Conflickt", *Cambridge University Press*, 2017, p. 79

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Introduction

"...In that Empire, the Art of Cartography attained such Perfection that the map of a single Province occupied the entirety of a City, and the map of the Empire, the entirety of a Province. In time, those Unconscionable Maps no longer satisfied, and the Cartographers Guilds struck a Map of the Empire whose size was that of the Empire, and which coincided point for point with it. The following Generations, who were not so fond of the Study of Cartography as their Forebears had been, saw that that vast Map was Useless, and not without some Pitilessness was it, that they delivered it up to the Inclemencies of Sun and Winters. In the Deserts of the West, still today, there are Tattered Ruins of that Map, inhabited by Animals and Beggars; in all the Land there is no other Relic of the Disciplines of Geography." Jorge Luis Borger –"On Exactitude in Science"

The inventor of the term "cyberspace", the American science fiction author William Gibson deserves to be (re) read in the light of contemporary developments in the World Wide Web. His novels anticipate the development of the Internet, that he calls the "matrix", in which "multinational corporations control global economies, urban blight has devoured the countryside, crime and violence are inescapable events of urban life, and technology has shaped new mode of consciousness and behavior." It is in "Neuromancer", where the term cyberspace becomes dominant and has since been defined in the Oxford English Dictionary. The hero of "Neuromancer" is a young and a brilliant computer scientist, but he is also a "hard-

³ Jorge Luis Borger (Translated by Andrew Hurley)– "On Exactitude in Science – Collected Fictions" *Penguin Classics*, 1998, p.324

⁴ Yvonne Owens - "William Gibson and the World of Tomorrow: Digital Dystopias in Futurist Fiction" *International Journal of Critical Cultural Studies*, 2017, DOI: file:///C:/Users/dautan/Downloads/Owens.WilliamGibson-withimages.pdf

boiled antihero"⁵ - Case, is employed to hack the cyber-system of a major corporate dynasty, inadvertently freeing the enslaved AI at the heart of its operations – releasing the world from its onanistic, hegemonic focus and control, as a sort of bonus side-effect.⁶ Put in a cosmopolitan atmosphere, Gibson's work has deeply marked the pioneers of the internet. The critical importance of Gibson's book is explained by the fact that he initiated a conceptual revolution among the people who had been working in the field of virtual reality for years. The truly popular character of these new forms of political mobilization is nevertheless questionable.

Appearing on MIT campuses in the early 1950s, the term "hacking" has been ambivalent. Since the 1980s, the media has given a criminal connotation to the term. We talk about pirates, and "Anonymous", about asocial computer scientists, or little geniuses of the Internet, who spend their days in front of a computer and have fun infiltrating networks of multinational companies or government servers. More recently, the term "hacktivism" has emergence, which refers to the use of new technologies and hacking for social or political purposes. We were impressed by the Anonymous unleashing their digital wrath against anyone who claimed to harm Wikileaks, and Guy Fawkes' masks invading the streets. In the middle of these events it is difficult to decide what exactly is hacking, or even to understand what "hacktivism" means.

However, the specificity of these mobilizations should be noted, which are channeled and disseminated virtually, and whose purpose is the Internet. The question of "internet resistance" includes those of "hacktivism" and "cybernationalism". The first can be defined as the use of hacking techniques for political purposes and the second as the intense and multifaceted use of the Internet by contemporary identity entrepreneurs, for the purposes of media coverage, communication, financing and sometimes imitation of the state. The "cybernationalists" thus

⁵ Yvonne Owens - "William Gibson and the World of Tomorrow: Digital Dystopias in Futurist Fiction" *International Journal of Critical Cultural Studies*, 2017, DOI:

 $[\]underline{file:///C:/Users/dautan/Downloads/Owens.William Gibson-with images.pdf}$

⁶ Ibid

find support on the Internet to bypass the state authorities they fight and to give body, by word and image, to the borderless community they (re) imagine. If the development of "print capitalism" played a decisive role in the construction of national identities in the eighteenth century⁷, the development of hypertextual capitalism is accompanied by the discursive production of borderless cybernationality. While among nations, one has a home or a ground by virtue of birth and development in an offline place with real subjects, on the web, "the idiom for constructing a "home" identity is to assemble a "homepage" of virtual objects that correspond to one's interests. One constructs a homepage by composing or "pasting" on it words, images, and sounds, and by making connections between it and other sites on the Internet or the Web. Like the agents in emergent AI, one's identity emerges from whom one knows, one's associations, and connections. People link their homepage to pages about such things as music, paintings, television shows, cities, books, photographs, comic strips, and fashion models....If we take the homepage as a real estate metaphor for the self, its decor is postmodern: Its different rooms with different styles are located on computer all over the world but through one's efforts, they are brought together to be of a piece"

An instrument of communication, medialization, transaction and protest, but also an instrument of surveillance, the internet is both a tool and a space of (counter) power, which makes any attempt to analyze its political stakes particularly complex. This paper will try to focus on a topic already vast: the "strategies of disorder" that are unfolding on and especially thanks to the world wide web. This distinction is fundamental since it implies that certain "hacktivist" and "cybernationalist" are satisfied with their virtuality while others take their actions on the

⁷ Benedict Anderson – "Imagined Communities: Reflections ont he Origin and Spread of Nationalism" *Verso*, 1983, p. 49

⁸ Timothy W. Luke – "From Nationality to Nodality: How the Politics of Being Digital Transforms Globalization" American Political Science Association, 1998, DOI: https://www.cddc.vt.edu/tim/tims/Tim609.htm

¹⁰ Michael L. Gross and Tamar Meisels (editors) – "Soft War, The Ethics of Unarmed Conflickt", *Cambridge University Press*, 2017, p. 79

real world. Their common goal though, as presented by the antihero of the Mr. Robot television series and Gibson's characters, is to save the world from the big conglomerates and government control: "Sometimes I dream of saving the world, saving everyone from the invisible hand, one that brands us with an employee badge, the one that forces us to work for them, the one that controls us every day without us knowing..."

Methods

The study of the use of the Internet, whether political or not, poses a certain number of methodological problems to the researcher in social sciences. The first is of course the identification and verification of sources, with regard to hypertextual data, as well as identities, with regard to interlocutors. It is possible to cross-reference the information obtained on the net with other information obtained from traditional media, but it is much more difficult to verify the authenticity of a site. Also the anonymity makes the data collected through online chats, via e-mails or on discussion forums, particularly difficult to use.

Hence, the treatment of the proposed subject will initially be that of an analysis of the history of the hacker movement and the factors that allowed the movement to become politicized. The research will try to show how the computer could become a weapon and object of social protest. This includes an analysis of the representations and discourses of the actors involved and their evolution, as well as a study of the resources that hackers have and have implemented to mobilize. The global analysis of hacking and hacktivism will be supplemented by giving us access to the individual trajectories that constitute the basic element of hacktivism, and which provide the key to understanding the structures of hacktivism.

This study is at the intersection of three types of literature. The first part deals with the framing of hackers by the media since 1950, the second is related to the ethnographic study on the collective Anonymous and the Pirate Party, and the last one deals with the issues of identity and cyber nationalism in the web. Indeed, the construction of the image of the hacktivist in the eyes of the public, by discursive processes, addresses several aspects exposed by the three types of literature, while emphasizing the power relations generated by the tactical use of Internet in the context of political militancy. In this way, by situating the issue in a broader historical context - that of hacking history since 1950 - and by addressing a new dimension to hacking practices as well as political militancy practices - that is to say, the electronic civil disobedience,- the research aims to reflect a more global trend in the constructing of hacktivist practices.

The type of research proposal chosen to conduct this research is a qualitative study. This means to explore in depth a few case studies in order to identify results that can be attributed to the majority of problems surrounding hacktivist practices. Unfortunately due to the length of the study and the time attributed to it, this research has many limitations, that can be explored in a later research. First of all, this study would require a field study, that would allow first-hand data collection. A series of qualitative interviews and a questionnaire would make it possible to base the scientific literature on a concrete basis, and thus to explore the individual hacker's journeys in order to understand more broadly the dynamics and stakes of the hacktivist movement. Other limitations that this research has and that would be interesting for the study are: a more broad history of the hacking and the hacktivism movement, including case studies, a sociological portrait of the hacker, the study of the ethic of the hacker, and so on.

I should also stress out that I am dealing, in this study, with the positive aspects of hacktivism. It is acknowledged – however, below not discussed – that a high number of hackers and champions of an entirely unmoderated internet only pursue selfish interests for often criminal means. For instance 4chan, where Anonymous originates from, serves as a platform for not only progressive political ideas but also – and, in fact, in a great majority of the cases – to regressive opinions too. Today, 4chan is a home to not only of hacktivists but of racists, Nazis, (cyber-) sex offenders and all sorts of online behavioural patterns that might emerge in a largely unmoderated community.

CHAPTER 1: Theoretical Frame & History.bwf

"So this is what a revolution looks like, people in expensive clothing running around. Not how I pictured it." Mr. Robot¹¹

The hacker movement and hacktivism have developed mainly in Europe and the United States. Having high rates of access (over 80 %), compared to countries such as Pakistan (15%), Uganda (11%) and Ethiopia (8%)¹², the Western powers have benefited fully from the progress of information technology. The massive nature of the use of the Internet, and the fact that our lives are increasingly organized via networks, indicate that this tool has become a war territory of its own. In this context, where the notion of globalization has reached its peak by almost completely abolishing borders within cyberspace, various issues of control of personal data, privacy or surveillance, organized by governments, are emerging. The appropriation of hacking techniques or the provocative spirit of early hackers by contemporary "hacktivists" and "cybernationalists" has been accompanied by a politicization of hacking and its representations by public authorities. Britain for instance, has since 2000 recognized hacking as a form of terrorism.¹³

Cyberspace therefore involves new actors and new communities, whose basic unit is made up of Internet users, in other words citizens from all over the world who access the Network at any time and consult, receive or exchange information. States are trying to supervise and regulate this new space and the effect it might have on their territories. All of this is also part

¹¹ Mr. Robot, Season 2, Episode 2

¹² Jacob Poushter – "Internet access growing worldwide but remains higher in advanced economies." *Pew Research Center*, February 22, 2016 DOI: http://www.pewglobal.org/2016/02/22/internet-access-growing-worldwide-but-remains-higher-in-advanced-economies/

 $^{^{13}}$ Stefano Baldi, Eduardo Gelbstein, Jovan Kurbalija – "Hactivism, Cyber-terrorism and Cyberwar. The Activities of the Uncivil Society in Cyberspace" *DiploFoundation, 2003*

of the so-called "political crisis" and representativeness, meaning, a growing mistrust and hostility towards the political system, leading citizens to favour populism and the so called "liquid democracy" by the German Pirate Party¹⁴. The development of new technologies offers the hope of a more equal world, ¹⁵ since the weight of institutions is quite relative compared to the fluidity of data and the mass of users, all placed on the flat surface of the Web. It is in the context of these blurry lines that hacktivism emerges, bringing together countless different individuals, claiming to fight about individual rights in cyberspace.

Before going more deep into the subject we must define what we mean by "hackers" and therefore "hacking". The term "hack" appeared in the 1950s among computer scientists at MIT to designate a programming shortcut. ¹⁶ The most famous of these "prehistoric" hacks is undoubtedly the one that, in 1969, drove two employees of Bell Lab, Dennis Ritchie and Ken Thompson, to develop the UNIX operating system, ¹⁷that outlived the original product and became the backbone of computerized technical infrastructure. ¹⁸ Hacking is as much a technical activity as an exercise if imagination, it is the reappropriation and creative reconfiguration of technological tools. John Draper (better known by his pseudonym "Captain Crunch") describes hacking as a "state of mind that consists of controlling technology rather than being controlled by it." In the 1970s, Captain Crunch was one of the first phone "phreakers", *individuals that discovered the correct codes and tones that would result in free*

¹⁴ David Meyer – "How the German Pirate Party's Liquid Democracy' Works" *TechPresident*, May 7, 2012 DOI: http://techpresident.com/news/wegov/22154/how-german-pirate-partys-liquid-democracy-works

¹⁵ Michael Docherty and Darryl Rosin – "Create World, The Art of Serious Play. The Serious Art of Play. Curiosity, Creativity, Craft and Connectedness in the Digital Age" *Griffin University, Brisbane,* December 2008 DOI:

https://s3.amazonaws.com/academia.edu.documents/6072098/cw08 proceedings.pdf?AWSAccessKeyId=AKI AIWOWYYGZ2Y53UL3A&Expires=1540999412&Signature=StR3GVA000q%2BuDkV4o5wKVeA0fA%3D&respon se-content-disposition=inline%3B%20filename%3DSecond Life as an arts education environ.pdf#page=27

¹⁶ Umesha Nayak and Umesh Hodeghatta Rao – "The InfoSec Handbook: An Introduction to Information Security" *Apress* p.6

¹⁷ Ibid

 $^{^{18}\} Florida\ Tech-{\tt _,A}\ Brief\ History\ of\ Cyber\ Crime''\ DOI:\ \underline{https://www.floridatechonline.com/blog/information-technology/a-brief-history-of-cyber-crime/{\tt \#}}$

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long distance service. ¹⁹ Hacking can be considered a lifestyle in itself, for anyone with a certain curiosity and a big desire to improve systems (from the simplest to the most complex ones).

If, in the early days, hacking was a matter of marginal groups, as micro-informatics grew, hacking gradually emerged from the shadows and has today a certain popularity, which does not really serve it. Indeed, it was in the 1990s, with the commercialization of the Internet, that the definition of the hacker as we know it today was forged. *The hack refers to the performance of a neat programming trick, and is more widely defined as an attempt to make use of technology in an original, unorthodox and inventive way.*²⁰ Hackers with their valuable computer skills were recruited by companies that would become multinationals of new technologies - such as Microsoft or Apple - and hacking became synonymous with illegal intrusion into a computer, in the light of various scandals that occurred at the time. In a few decades, the perception of a hacker has shifted from the technological creative genius to that of a criminal acting in cyberspace.²¹ It is mainly this fact that motivates the appearance of hacktivism.

The appropriation of hacking techniques and the provocative spirit of the first hackers by the contemporary "hacktivists" and "cybernationalists" has been accompanied by a politicization of hacking. *Hacktivism is the result of three very important currents: Hacking, informational societies and modern social protest and resistance.*²² Therefore hacktivism would be a social and cultural phenomenon belonging to the virtual world, which is characterized by attempts to control cyberspace with the aim of affecting real life. To understand the term "hacktivism",

¹⁹ Ibid

²⁰ Tim Jordan and Paul Taylor – "Hactivism and Cyberwars: Rebels with a Cause" Routledge, 2004 p. 6

²¹ Ibid

²² Ibid p.2

first, activism warrants a definition as a set of actions undertaken to promote change, in opposition to the powers in place, hence as a social movement.²³

1.1 Hacking as a Social Movement.ra

A social movement can be defined as the "process of formation of crowds, groups, associations and organizations for the pursuit of a common goals". 24 According to Oberschall, "social movement or conflict is a struggle over values or claims to status, power and scarce resources, in which the aims of the conflict groups are not only to gain the desired values, but also to neutralise, injure, or eliminate rivals. Social movements, encompasses a broad range of social phenomena: class, racial, religious, and communal conflicts: riots, rebellions, revolutions, strikes and civil disorders: marches, demonstrations, protest gatherings, and the like." 25 Thus, the collective action differs from a simple grouping of individuals since it is an "intentional acting together." 126 In addition, individuals participating in a social movement must have the explicit plan to mobilize together in the defence of a cause. 27 Social movements are defined by the identification of an adversary. This means they utilize antagonism in the creation of an "us" versus "them". 28 This movement can be seen in the case of hacktivism, with the mutual antagonism of hackers and public authorities.

Can we consider that a social movement as defined above is a political matter? It depends on what we understand by politics. In this case "politics" will be the responsibility of the

²³ Joss Hands – "is for Activism: Dissent, Resistance and Rebellion in a Digital Culture" *Pluto Press*, 2011

²⁴ Anthony Oberschall – "Theories of Social Conflict" *Annual Review of Sociology Vol.4, 1978,* p. 291-315

²⁵ Ibid

²⁶ Erik Neveu (cited) Bernadette Andreosso O'Callaghan and Frederic Royall – "Economic and Political Change in Asia and Europe: Social Movement Analyses" *Springer, 2013* p. 207

²⁷ Ibic

²⁸²⁸ Manuel Hensmans and Koen van Bommel – "Social Movements" *International Centre for Innovation Technology and Education*, 2017 DOI: http://www.solvay.edu/sites/upload/files/WP024-2017.pdf

government that produces the frames of representation of social phenomena. Since the 19th century the State has taken a place increasingly larger, hence the social movements tend to politicize, perceiving the State as the recipient of the protests.²⁹ The hacker movement is experiencing a process of politicization too. The term "politicization" has many nuances, but it broadly refers to the process that brings a person or a group to politics. If we talk about a social phenomenon such as hacktivism, the political actors take charge of what has been defined as a problem. The politics defines the boundaries between social spaces. Typically, in the case of hacking, what could be a completely neutral activity vis-à-vis the government, has become a social problem. The hacking has been politicized, since the government has defined it as a criminal act of intrusion into computer systems.

As for the politicization of the individuals themselves, it depends on the magnitude of their interest and the acuity with which they understand the work of the political actors.³⁰ this definition emphasizes the possibility of indifference towards politics, which today constitutes a major phenomenon on the Western societies. The other element of politicization of the individuals is the notion of political competence, which is the scholarly and the technical knowledge of the political universe³¹ that individuals possess, and which reflect for example on their votes or their propensity to engage or not in various mobilizations. This circular relationship between political competence and politicization is one of the essential components of the entry into politics of individuals and groups.

Hacktivism is therefore a militant form that is totally conditioned by the Internet, which has rattled the balance of power between citizens and the power in place. This type of online

²⁹ Charles Tilly and Lesley J. Wood – "Social Movements 1768-2012" Paradigm Publishers, 2013

³⁰ Fabio de Nardis – "The Concept of De-Politicization" *The Open Journal of Sociopolitical Studies, Issue 10(2)* 2017:340-356, 2017, DOI: 10.1285/i20356609v10i2p340

³¹ Stephen Earl Bennett – "Knowledge of Politics and Sense of Subjective Political Competence: The Ambiguous Connection" *Sage Journals, 1997* DOI: https://doi.org/10.1177/1532673X9702500205

activism, distinctive of hackers, presents particular forms, such as forms of distanced engagement.³² Among the aspects that has allowed this awaken of this type of distance engagement, there is the mistrust of the phenomena of centralization as well as a logic of resistance to social control.³³ This kind of engagement is motivated by the construction of spaces independent of the influence of the State and the market.³⁴ The resistance that gave birth to hacktivism insists on an ethical aim and a political future, defined by a new form of militancy. One of the first moments of this resistance was the mobilization of American hackers against the Clipper microchip in 1993, which brought together a group of "cyberpunks" against this new type of surveillance organized by the State.³⁵ A more recent form of resistance was that the American hacker and dark net market operator Ross Ulbricht, knowns under the pseudonym of "Dread Pirate Roberts" (DPR). Ulbricht was the creator of Silk Road, an online black market and the first modern dark net market, best known for selling illegal drugs. Ulbricht envisioned Silk Road as a free market experiment with the most important thing being the anonymity of its users. He believed everyone should be able to buy and sell whatever they want as long as it didn't hurt anyone. Ross would see taxation and government as a creation enforced by the state's monopoly on violence. 36 He was influenced by the Austrian economist Ludwig von Mises, who argues that citizens must have the economic freedom to be politically free.³⁷ He was dreaming a post-state digital economy as a step towards a libertarian paradise.³⁸

2.

³² Elizabeth Losh – "Hacktivism and the Humanities: Programming Protest in the Era of the Digital University" *University of Minessota*, 2012

³³ Galina Mikhaylova – "The "Anonymous" Movement: Hacktivism as an Emerging Form of Political Participation" *Texas State University*, 2014

³⁴ Joshuah Bearman and Tomer Hanuka – "The Rise and Fall of Silk Road" *Wired*, 2015 DOI: https://www.wired.com/2015/04/silk-road-1/

³⁵ Steven Levy – "Battle of the Clipper Chip" *The New York Times Magazine,* 1994 DOI: https://www.nytimes.com/1994/06/12/magazine/battle-of-the-clipper-chip.html

³⁶ Joshuah Bearman and Tomer Hanuka – "The Rise and Fall of Silk Road" *Wired*, 2015 DOI: https://www.wired.com/2015/04/silk-road-1/

³⁷ Ibid

³⁸ Ibid

Another trait of hacktivism is the fact that it develops mainly in the highly developed Western countries, which indicates that these mobilizations are among populations who enjoy on average a high standard of living and whose basic material needs are met. As Inglehart argues, in a post-industrial society the demands are focused on the quality of participation, autonomy and quality of life.³⁹ However, one of the main characteristics of hacking is that, in principle, it is unlikely for these actors to be mobilized or involved in politics, because of the essentially technological nature of their activity; they refuse to take part in mobilizations or to subscribe to political demands.

1.2 The Concept of Cyberspace.ogg

"Cyberspace. A consensual hallucination experienced daily by billions of legitimate operators, in every nation, by children being taught mathematical concepts... A graphic representation of data abstracted from banks of every computer in the human system. Unthinkable complexity. Lines of light ranged in the nonspace of the mind, clusters and constellations of data." - Neuromancer, William Gibson⁴⁰

The politicization of hacking today happens mainly thanks to the particularity of it, namely its link with the technology, which has become central today, and is becoming a major political issue. Hacking is the first social movement specific to the electronic technology.⁴¹ Indeed, the exponential increase in the use of computers and especially the Internet has given rise to the creation of new territories and new regulations. With the discovery of these new frontiers arise

³⁹ Ronald Inglehart and Wayne E. Baker – "Modernization, Cultural Change, and the Persistence of Traditional Values", *American Sociological Review, Vol. 65, No.1, 2000, DOI:* 10.2307/2657288

⁴⁰ William Gibson – "Neuromancer" Mass Market Paperback, 1986

⁴¹ Alab Chong and Faizal Bin Yahya (editors) – "State, Society and Information Technology in Asia. Alterity Between Online and Offline Politics" *Routledge*

various issues that hacktivists are interested today: the first issue being the political one and the second issue being the social one. The electronic technology, and especially the Internet, create an unprecedented opportunity to bring a new dimension to the lives of individuals, because there is now a cyberspace that connects men and ideas despite the geography and time.

Borrowed from the science fiction, the term "cyberspace" needs to be explained in order to be used for scientific use. Etymologically, the cyberspace is a "navigable space", without precise boundaries. As Thomas Ploug explains:

The virtually of cyberspace refers to its independence of any specific spatiotemporal location. That is a place or space of interaction cyberspace does not require the interacting parties to be at one particular location at one particular moment n time in order to meet in this place or space... Cyberspace is dependent on the existence of an internet. More specifically, cyberspace seems to be a place, room or space that supervenes on the existence and working of interconnected networks of computers. 42

As suggested by the first works of political geography devoted to this new object of study, cyberspace is a space for action and communication that complements the traditional geographical space rather than substituting it or operating autonomously to it. However in this case, space is not geometric but relational, inasmuch as it is composed of flows.⁴³ This particular nature of cyberspace allows individuals and organizations to ⁴⁴operate more flexibly than the real-space geography, without detaching themselves completely.

⁴² Thomas Ploug – "Ethics in Cyberspace: How Cyberspace May Influence Interpersonal Interaction" *Springer Science and Business Media*, 2009, p.70

⁴³ Oliver Froheling – "The Cyberspace War of Ink and Internet, in Chiapas, Mexico" *Geographical Review, Vol* 87, No. 2, 1997, DOI: 10.2307/216010

⁴⁴ Martin Dodge and Rob Kitchin – "Mapping Cyberspace" Routledge, 2001 p. 35

Apart from being a conceptual space, cyberspace is also a virtual space, that is to say a representation, perception or construction of a space in which subjects and objects establish relations without being present simultaneously. The appearance of such virtual spaces preceding the Internet, such as the transformations of publishing and reading techniques in the eighteenth century, the development of the telegraph and the telephone in the nineteenth century and finally the appearance of radio, cinema and television in the twentieth century, were accompanied by the democratization of the virtual space. The mass media had started to create a new a-spatial world connecting closely the illusion and the reality, provoking the effect of universality of which men had dreamed for a long time. ⁴⁵ Cyberspace brings together several virtual spaces rhythms, history, functions and distinct representations, some of which existed before the Internet. This space is a cumulative model of cumulative, rather than a substitutional one. The emergence of a new media such as the Internet lead to the appearance of virtual spaces that adds to those that pre-existed rather than replacing them. As Hill and Huges claim "people use the Internet in the same ways and for the same reasons that they use traditional media. (...) In other words, the Internet does not change people, it simply allows them to do the same things in a different way."46

Despite the technical improvement of the interfaces connecting them to the real world, all these virtual spaces continue to be distinguished by their incompleteness. Hence any virtual space is partial, imitating the real but failing to reproduce it. Cybersex is an example of that. Even though it is criticized that the anonymity and the impersonality of it is problematic, discussions of the popularity of it have tended to emphasize that it represents "the ultimate safe sex for the 1990s, with no exchange of body fluids, no loud smoke-filled club, and no morning after" ⁴⁷

⁴⁵ Payal Arora – "The Leisure Commons, A Spatial History of Web 2.0" Routledge Taylor & Francis, 2014

⁴⁶ Kevin A. Hill and John E. Hughes – "Cyberpolitics: Citizen Activism in the Age of the Internet" Rowman & Littlefield, 1998 p.44

⁴⁷ David Bell and Barbara M. Kenedy (editors) – "The Cyberculture Reader" Routledge, 2000, p.391

The virtual is a world without smell, without flavor and without heat, which is in fact neither more nor less than the real one but it is simply different.

Thus, the new mode of social construction of space, is currently inventing itself online, being significantly different from the classical geographical spaces: to the extent that it can be accessed from anywhere (if equipped with the right technology), where it is based on new modes of interaction, new forms of social relations, and where they are organized around affinities and common interests rather than a location coincidence.⁴⁸

Another very important characteristic of the cyberspace is its anarchic and libertarian character. A major reference of the anarchist character of the cyberspace and its community is developed in the work of Hakim Bey: Temporary Autonomous Zones.⁴⁹ The author highlights various free networks of interconnections that he calls "pirate utopias".⁵⁰ He first evokes a global network created by pirates, consisting of distant islands where some communities retrieved and lived illegally.⁵¹ He also discusses the example of the Assassins' State, which is a form of geographically separated state community, considering all governments as enemies.⁵² This community had for its sole purpose the pursuit of knowledge.⁵³ Finally, Bruce Sterling (American cyberpunk author) elaborates the idea of "Islands in the Net" in the book with the same name, where the failed political systems leave room to diverse communities to experiment with different lifestyles.⁵⁴ Hakim Bey concludes the description of his utopian communities by the idea that with the emerging of the Internet, the utopia of autonomous areas would become possible. Later on, he tries to describe what he calls the "Temporary

⁴⁸ Martin Dodge and Rob Kitchin – "Mapping Cyberspace" Routledge, 2001 p. 17

⁴⁹ Hakim Bey – T.A.Z. "The Temporary Autonomous Zone, Ontological Anarchy, Poetic Terrorism" *Automedia*, 1958

⁵⁰ Ibid

⁵¹ Ibid

⁵² Ibid

⁵³ Ibid

⁵⁴ Bruce Sterling – "Islands in the Net" Little, Brown Book Group Limited, 1989

Autonomous Zones"(TAZ).⁵⁵ According to him, the TAZ is "like an uprising which does not engage directly with the State, a guerilla operation which liberates an area (of land, of time, of imagination) and then dissolves itself to re-form elsewhere/elsewhen, before the State can crush it."⁵⁶ A TAZ is therefore an anarchist and form, without a durable physical anchorage, who's characteristic is the opposition to the domination exercised by a state. This illustration and the literature that surrounds it, allows us to understand the direct anarchist and antiauthoritarian connection of the network. Whether it is through cyberpunk, science-fiction literature, or in the various manifestos written about it, we understand that the structure of these communities is based on this utopia and a certain dream of freedom.

The stability of a community is obtained by the evocation of common references and the use of a tool that is not ideologically neutral, but characterized by this anarchist philosophy. The Internet is therefore created for two essential purposes: the free flow of information, enabled by the neutrality of the network, and the gathering of information through its unlimited sharing. The notions of sharing and aggregating knowledge are also central to the hacker ideology. Thus, a hackerspace is the concrete application of the rules of the Internet in a space dedicated to the development of different projects and of the creation.

These examples show that the philosophy of the Internet and hackers allows the structuring of physical communities and fix them around a real place that is the hackerspace. However, according to the libertarian assumption, the commitment is relatively informal: it is easy to enter or leave the group because the membership is flexible. The members are not bind to the structure for a long time, and internally the positions are mobile too. One example of these anarchist self-organizing communities is the WELL (Whole Earth 'Lectronic Link). The

⁵⁵ Hakim Bey – T.A.Z. "The Temporary Autonomous Zone, Ontological Anarchy, Poetic Terrorism" *Automedia*, 1958

⁵⁶ Ibid

WELL began in the spring of 1985 as a "local dial-in bulletin board".⁵⁷ At the beginning it was a hidden place, with only a few dozen people, turning within 10 years into a huge online discussion forum community.⁵⁸ One of the most important rules of The Well was the lack of anonymity, people should take responsibility for what they said, hence the coined of the term YOYOW (you own your own words).⁵⁹ In the words of Ramon Sender Barayon, a San Francisco writer and musician: "It reminded me of the Open Land communes I'd been to in the 1960s. The tribal need is one our culture doesn't recognize; capitalism wants each of us to live in our own little cubicle, consuming as been to in the 1960s. The tribal need is one our culture doesn't recognize; capitalism wants each of us to live in our own little cubicle, consuming as much as possible. The Well took that need and said, 'Hey, let's see what happens if we become a disembodied tribe."⁶⁰

This seemingly erratic mode of communication allows hackers to respect individuality while guaranteeing innovation that make it possible to make progress. This is the principle of a total freedom of expression that would self-regulate, following the example of the freedom's law.⁶¹ It encourages radical freedom of expression, saying that negative opinions will be automatically eliminated by the mass of others.

⁵⁷ Katie Hafner – "The Epic Saga of the Well" Wired, 1997 DOI: https://www.wired.com/1997/05/ff-well/

⁵⁸ Steve Jones – "Encyclopedia of New Media: An Essential Reference to Communication and Technology" *Sage Publications*, 2003 p.481

⁵⁹ Katie Hafner – "The Epic Saga of the Well" Wired, 1997 DOI: https://www.wired.com/1997/05/ff-well/

⁶⁰ Ibid

⁶¹ Ronald Dworkin – "Freedom's Law. The Moral Reading of the American Constitution" *Oxford University Press*, 1996

CHAPTER 2: From Hacking to Hacktivism: Towards the Politization of the Movement.mp3

World catastrophes like this, they aren't caused by lone wolves like you. They occur because men like me allow them. You just had to stumble onto one of them. – Mr. Robot⁶²

In the period from the 1950s to the 1980s, hackers were considered as a category of individuals with a particular passion and devotion to the technology. However, a shift occurred and a new identity was attributed to the hackers: They became the bad actors of this new social reality. This new semantic associated with hackers takes a new meaning and new representations, thus justifying the use of repressive measures against them: the "hacker problem" is thus created and, with it, its solution.

These new "hackers" act in organized bands (such as the Legion of Doom – LOD – or Masters of Deception - MOD)⁶³ or alone, and their motives vary as much as the means they use. This can range from simply replacing a web page to destroying servers. For example LOD and MOD "sometimes breached criminal codes in certain jurisdiction by infiltrating systems and engaging in other activities. Their members faced prosecution for a range of offenses." Others, such as Cult of the Dead Cow (cDc) members, seek technological means to free up information. They are best known for the computer program Back Orifice, a software that lets

⁶² Mr. Robot, Season 3, Episode 8

⁶³ Jonathan Lusthaus – "Industry and Anonymity: Inside the Business of Cybercrime" *Harvard University Press*,

⁶⁴ Ibid

users gain control over any PC that runs on Windows or Unix.65 "The idea, says cDc, is to introduce the tools of online unrest to people outside the hacker fold, including real-world activists."66

The 1980s are years of repression for cyberspace and these "new" hackers. The movement started with the reform of the Copyright Software Act in 1980⁶⁷ (which provided specific copyright protection for computer programs)⁶⁸, and continued, among other things, with the new ownership rights granted to digital content on the Internet, the 1998 Digital Millennium Copyright Act (DMCA).⁶⁹ The arrests of hackers augment. From the end of the 1980s and throughout the 1990s, hackers hunt intensified: US security services targeted and infiltrated hacker networks, using the pretext of the switching system crush of AT&T's long-distance telephone network, that they posed as a "technical conspiracy against the security of the state" 70 These speculations lead to a public hacker panic, mislead by police secrecy. ⁷¹ This allowed the authorities to carry out searches, confiscate durable equipment and arrest group leaders, all under the name "Operation Sundevil". Sundevil has become the synonyme of the crackdown of 1990, even though originally was not intended "to combat hacking in the sense of computer intrusion or sophisticated raids on telco switching stations."

⁶⁵ Mike Romano – "Long Past "Setting Information Free", Hacker Whiz Kinds are Using their Skills to Bring Political Protest to the Web, But is Hactivism a New Form of Civil Disobedience, or Just an Excuse for Cyberterrorism?" Spin, 1999 DOI: https://books.google.hu/books?id=yjh OmCmm-OC&pg=PA170&dq=Cult+of+the+Dead+COW+members,+to+free+up+information.&hl=en&sa=X&ved=0ahUKE wjU59KFgtHeAhVGCSwKHcWvDWEQ6AEIJzAA#v=onepage&q=Cult%20of%20the%20Dead%20COW%20memb ers%2C%20to%20free%20up%20information.&f=false

⁶⁷ Mickey T. Mihm – "Software Piracy and the Personal Computer: Is the 1980 Software Copyright Act Effective?" The John Marshall Journal of Information Technology and Privacy Law, Vol. 4, Issue, 1983 DOI: https://repository.jmls.edu/cgi/viewcontent.cgi?article=1553&context=jitpl

⁶⁸ Michael D. Scott - "Scott on Information Technology Law" Wolters Klwer, 2007

⁶⁹ Jennifer M. Urban and Laura Quiltert – "Efficient Process or Chilling Effects? Takedown Notices Under Section 512 of the Digital Millennium Copyright Act" 22 Sant Clara Computer & High Tech. L.J. 621, 2006 ⁷⁰ "Part One: Crashing the System", 2001, DOI: http://www.mit.edu/hacker/part1.html

⁷¹ Sandeep Gupta – "Hacking in the Computer World" *Mittal Publications*, 2004 p. 142

It was how Robert Riggs ("The Prophet"), a member of the Legion of Doom, was arrested, when he was barely 23 years old (in July of 1989), and sentenced to 21 months in prison for theft of a documents that outlines how the 911 emergency phone system works, from a regional phone operator (Bell South).⁷² The document was supposed to be published in *Phrack*, a magazine for hackers which would have been used to organize attacks on the operator. Bell South claimed that the document was allegedly worth nearly \$80,000.⁷³ However during the trail it was revealed that the document was worth less than \$20.⁷⁴ Two months before the operation Sundevil, Loyd Blankenship ("The Mentor"), former member of the "Legion of Doom" group, sees his computer and disks seized, including role-playing game called GURPS Cyberpunk, which the agents interpreted as a "handbook for computer crime". ⁷⁵ The company which Blankenship was working for nearly went bankrupt as a result of the sequestration of critical resources. ⁷⁶

Through the movement of privatization and then of the repression suffered by the cyberspace and hackers, the Internet is now understood by the public authorities as a space of conflicts and struggles that generates resistance. Therefore the politicization of the movement begins because of the so called the "relative frustration"⁷⁷. The relative frustration is a state of tension caused by the refusal of the expectations of one social group by another⁷⁸ (in this case the State). The gap between socially constructed expectations and the perception of the present is

⁷² Emmanuel Goldstein – "The Best of 2600, Collector's Edition: A Hacker Odyssey" *Wiley Publishing, Inc.,* 2009 p. 509

⁷³ Joshua B. Hill and Nancy E. Marion – "Introduction to Cybercrime: Computer Crimes, Laws, and Policing in the 21st Century", *Praeger Security International*, 2016, p. 257

⁷⁴ Joshua B. Hill and Nancy E. Marion – "Introduction to Cybercrime: Computer Crimes, Laws, and Policing in the 21st Century", *Praeger Security International*, 2016, p. 257

⁷⁵ Seymour Bosworth, M.E. Kabay, Erik Whyne (editors) – "Computer Security Handbook" *John Wiley & Sons, Inc.*, 2009, p.32

⁷⁶ Ihic

⁷⁷ Joël Berger and Andreas Diekmann – "The Logic of Relative Frustration: Boudon's Competition Model and Experimental Evidence" *European Sociological Review, Vol. 31, Issue 6, 2014,*

DOI: https://doi.org/10.1093/esr/jcv071

⁷⁸ Ibid

a good fuel for social movements.⁷⁹ Thus, hackers started being politicized almost accidentally, following an attack on their environment.

The confrontations in cyberspace can take various forms, and not all of them can be described as "hacktivism". The term, coined by the Cult of the Dead Cow, refers to "the convergence of hacking with activism, where "hacking" is used here to refer to operations that exploit computers in ways that are unusual and often illegal, typically with the help of special software "80" For its actors, hacktivism is "electronic civil disobedience" and it can not be placed on the same plane as "cyberterrorism", as this last one involves damaging attacks on property and data stocks. Hacktivism takes up the idea of civil disobedience, which is a legitimate form of non-violence, of direct action used to pressure institutions engaged in criminal acts or acting unethically. Hence electronic civil disobedience is a peaceful non-violent protest form, i.e paralysing or slowing of a site for some time, but does not destroy or change any data, unlike cyberterrorism. This is to show how the hacker community is resisting the repression by the government, that they consider as a threat. These same hackers constitute a social movement and, if until then they were not involved in politics, they will make their voices heard from the 1990s.

It is at this period that the movements of political activism and the new technologies meet. The political activists saw a new medium to explore in the context of their struggles, an additional

⁷⁹ Donatella della Porta and Mario Diani – " Social Movements, an Introduction" *Blackwell Publishing*, 2006 p.

⁸⁰ Dorothy E. Denning – "Activism, Hacktivism, adn Cyberterrorism: The Internet as a Tool for Influencing Foreign Policy." *Nautilus Institute for Security and Sustainability,* 1999 DOI: https://nautilus.org/global-problem-solving/activism-hacktivism-and-cyberterrorism-the-internet-as-a-tool-for-influencing-foreign-policy-2/

⁸¹ Vasileios Karagiannopoulos – "Living with Hacktivism: From Conflict to Symbiosis" *Palgrave Macmillan*, 2018 p.17

⁸² Peter Koslowki, Christoph Hubig, Peter Fischer – "Business Ethics and the Electronic Economy" *Springer*, 2004 p.219

⁸³ Stephen Zunes, Hardy Merriman, Maria J. Stephan – "Nonviolent Struggle" *Blackwell Reference Online*, 2017 DOI: 10.1111/b.9781444336597.2010.x

⁸⁴ Peter Koslowki, Christoph Hubig, Peter Fischer – "Business Ethics and the Electronic Economy" Springer, 2004 p.219

lever for the defense of a cause. This is actually a two-way movement, since hackers, too, facing the rise of commercialization and government repression, will produce new reflections. They will even go so far as to "reconsider their methods, opinion and even their positions within the hitherto obtaining order of things" However, activists and hackers have very different principles. The former have a utilitarian vision of technology and therefore of hacking which can constitute brilliant acts of sabotage. But the hacker movement has such a diversity of political persuasions that an alignment with activism seems to be highly compromised. Hackers often see in what is called hacktivism a democratic freedom of self-expression infused by technology. For example, a denial of service attack, may deny them the freedom of expression that they advocate on a daily basis. Thus, "hacktivism" would be a hybrid form, half-way between political activism and hacking. It should therefore be clarified that the term used in this thesis only refers to the activism emanating from the hacker community and claimed by it and does not designate the use of computers (and other methods more or less related to hacking) to serve the interests of a previously constituted political activism.

2.1 Hacker Manifestos.aac

The ideas and beliefs of the hacker community happened through different manifestos. First there was Loyd Blankenship's "*Hacker Manifesto*", that brought a certain ideological base to the movement.⁸⁷ More recently, in 1996, John Perry Barlow wrote his "Declaration of Independence of Cyberspace" in response to the Telecommunications Act of 1996 American law, which "*provided major changes affecting cable TV*, *telecommunication and the Internet*,

Inc., 2009, p.32

⁸⁵ Joanne Richardson(editor) – "Anarchitexts: Voices from the Global Digital Resistence" *Automedia*, 2003 p.328

⁸⁶ Aaron Schwabach – "Internet and the Law: Technology, Society and Compromises" *ABC-CLIO* 2006 p.83 ⁸⁷ Seymour Bosworth, M.E. Kabay, Erik Whyne (editors) – "Computer Security Handbook" *John Wiley & Sons*,

with the main purpose to stimulate competition in telecommunication services." The message of the manifesto was simple: "Governments don't and can't govern the Internet." Another manifesto, launched by the Cult of the Dead Cow and entitled "The Hacktivismo Declaration" (published in 2001) is one of the founding elements of current hacktivism. The Hacktivismo Declaration states that:

"People have a right to reasonable access of otherwise lawfully published information. If our leaders aren't prepared to defend the Internet, we are". The declaration relies on Article 19 of the International Covenant on Civil and Political Rights (ICCPR) and Article 19 of the Universal Declaration of Human Rights (UDHR) which states that: "everyone has the right to freedom of opinion and expression; this right includes freedom to hold opinions without interference and to seek, receive and impart information and ideas through any media and regardless of frontiers." The declaration maintains that, "denying access to information could lead to spiritual, intellectual, and economic decline, the promotion of xenophobia and destabilization of international order" 19

These texts and many others make it possible to "give meaning to a community of action" and also to establish "a line of conduct and coherence in the action of the scene.

These different texts signal a turning point in the movement, toward greater politicization. The explosive technological advances of the 1990s have been an obstacle

⁸⁸ Margaret Rouse – "Telecommunications Act of 1996" *Search Telecom* DOI: https://searchtelecom.techtarget.com/definition/Telecommunications-Act-of-1996

⁸⁹ Andy Greenberg – "It's Been 20 Years Since this Man Declared Cyberspace Independence" *Wired*, 2016 DOI: https://www.wired.com/2016/02/its-been-20-years-since-this-man-declared-cyberspace-independence/

⁹⁰ Megan Boler – "Hacking, Cracking and Hacktivism: the many dimensions of hacker practice" *Researching Social Media, Social Movements & Technology,* 2013 DOI: https://meganboler.net/2013/03/30/hacking-cracking-and-hacktivism-the-many-dimensions-of-hacker-practice/

⁹¹ Megan Boler – "Hacking, Cracking and Hacktivism: the many dimensions of hacker practice" *Researching Social Media, Social Movements & Technology,* 2013 DOI: https://meganboler.net/2013/03/30/hacking-cracking-and-hacktivism-the-many-dimensions-of-hacker-practice/

to the stabilization and unification of the hacker community. It is therefore, through these writings, that we are able to gasp the movement.

As members of the Critical Art Ensemble suspected, the main obstacle to electronic protest strategies is the ambiguous, even hostile, relationship that hackers have with politics. 92 Thus the question of hacktivism is currently at the heart of a violent controversy within the scene. As noted before the neologism is in fact due to a member of the Cult of the Dead Cow, "Omega", who conceived it to mock online protests. The term would then have been later reused "by many journalist and script kiddies" ⁹³ Initially ironic, the term has become the norm, following a semantic reversal, to which the Electrohippies (an international group of activists based in England, whose purpose is to express disapproval of governmenta policies of mass media censorship and control the internet, in order to provide a 'safe environment for corporations to do their deals')⁹⁴ have largely contributed. The members of this group have indeed participated in the theorization and practice of techniques of "electronic civil disobedience". Electrohippies essentially operate by "denial of distributed access" (DDOS), which aims to block a site by slowing down or even crushing the system. 95 In December 1999, the British group organized an online protest against the WTO on these bases, during which it managed to slow down access to the site for several hours, following the participation of 452,000 Internet users.

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⁹² James M.Harding – "Performance, Transparency and the Cultures of Surveillance" *University of Michigan Press*, 2018 pp. 244-245

⁹³ Mike Romano – "Long Past "Setting Information Free", Hacker Whiz Kinds are Using their Skills to Bring Political Protest to the Web, But is Hactivism a New Form of Civil Disobedience, or Just an Excuse for Cyberterrorism?" *Spin*, 1999 DOI: <a href="https://books.google.hu/books?id=yjh_OmCmm-0C&pg=PA170&dq=Cult+of+the+Dead+COW+members,+to+free+up+information.&hl=en&sa=X&ved=0ahUKEwjU59KFgtHeAhVGCSwKHcWvDWEQ6AEIJzAA#v=onepage&q=Cult%20of%20the%20Dead%20COW%20members%2C%20to%20free%20up%20information.&f=false

⁹⁴ Ayhan Dolunay, Fevzi Kasap, Gokce Kececi – "Freedom of Mass Communication in the Digital Age in the Case of the Internet: "Freedom House" and the USA Example" *Sustainability* 2017 DOI: file:///C:/Users/dautan/Downloads/sustainability-09-01739.pdf

⁹⁵ Tim Jordan and Paul Taylor – "Hactivism and Cyberwars: Rebels with a Cause" Routledge, 2004 pp.77-78

"They implemented tis by writing a program that identified the targeted WTO computer and sent repeated request to it. To be run someone had to choose to go to an Electrohippes webpage, which explained that the WTO was being targeted and then click on the next link would download and begin the attacking program. The crucial distinction was that rather than one or a few individuals setting in train a mass of automated attacks, the Electrohippies method required a mass of people to set in train individualized attacks." ⁹⁶

In March 2000, they also invited their supporters to Email bomb 76 American officials in an operation called "E-Resistance is Fertile", intended to protest against the genetically modified foods, in the United States and in the rest of the world. They asked the visitors on their website to vote if they should carry on with the plan, and when only 42% voted in support, they canceled the action. If hacktivism is a technique of mass protest, it still struggles to find its audience. Among the hackers, in particular, its use remains controversial. The Cult of the Dead Cow for instance, criticized Electrohippies for rationalizing the actions of denial of access and thus violating the First Amendment of the US Constitution. The cDc differentiate in fact the Hacktivism that they practice as part of their manifesto "Hacktivismo", from the simple hacktivism: The first seeks to overcome bad conduct and restrictions on the internet and

⁹⁶ Tim Jordan and Paul Taylor – "Hactivism and Cyberwars: Rebels with a Cause" *Routledge*, 2004 pp.77-78

⁹⁷ Dorothy E. Denning – "The Ethics of Cyber Conflict" *Calhoun: The NPS Institutional Archive DSpace Repository,* 2007 DOI:

https://calhoun.nps.edu/bitstream/handle/10945/37167/Ethics of Cyber Conflict.pdf;jsessionid=7A3B5C7CC 2907A05A8A5F01A8B1DFD5A?sequence=1

⁹⁸ Dorothy E. Denning – "The Ethics of Cyber Conflict" *Calhoun: The NPS Institutional Archive DSpace Repository*, 2007

DOI: https://calhoun.nps.edu/bitstream/handle/10945/37167/Ethics of Cyber Conflict.pdf; jsessionid=7A3B5C 7CC2907A05A8A5F01A8B1DFD5A?sequence=1

⁹⁹ Dorothy E. Denning – "The Ethics of Cyber Conflict" *Calhoun: The NPS Institutional Archive DSpace Repository*, 2007

 $[\]begin{tabular}{ll} DOI: $https://calhoun.nps.edu/bitstream/handle/10945/37167/Ethics of Cyber Conflict.pdf; $jsessionid=7A3B5C$ $7CC2907A05A8A5F01A8B1DFD5A?sequence=1$ \\ \end{tabular}$

restrictions; the second one seeks to make the net an advertising medium or an agent of social transformation through various protest actions.

2.2 The Hackers and the CSI.sdy

The only causes likely to rally mass hackers are in fact the promotion of freedom of circulation of information in cyberspace and the defense of their peers, who have trouble with the justice. The arrest of Kevin Mitnick or that of Emmanuel Goldstein, editor of 2600: The Hacker Quarterly, were the most consensual causes of the scene of the late 1990s. ¹⁰⁰ These elements suggest the existence of a real "electronic community" within it, leading its members to mobilize primarily for their colleagues. This passionate attachment of hackers to the freedom of circulation of information on the network is related to the American libertarian movement and has strong traits of "technopopulism" (a discursive formation that emerges from the convergence of two preexisting discourses: populism and technolibertarianism) ¹⁰². The Electronic Frontier Foundation presents its mission:

"Imagine a world where technology can empower us all to share knowledge, ideas, thoughts, humor, music, words and art with friends, strangers and future generations. That world is here and now, made possible with the electronic network -- the Internet -- with the power to connect us all. And future developments in technology will enable us to access information and communicate with others in even more powerful ways. But governments and corporate interests worldwide are trying to prevent us from

¹⁰⁰ Wendy Grossman – "Hackers to Shake Down Takedown" *Wired* 1998 DOI: https://www.wired.com/1998/07/hackers-to-shake-down-takedown/

¹⁰¹ Oscar Garcia Agustin and Marco Briziarelli (editors) – "Podemos and the New Political Cycle: Left-Wing Populisme and Anti-Establishment Politics" *Palgrave Macmillan*, 2018 p. 214

¹⁰² Marco Deseriis – "Technopopulism: The Emergence of a Discursive Formation" *Journal for a Global Sustainable Information Society, Vol. 15, No. 2,* 2017 DOI: https://doi.org/10.31269/triplec.v15i2.770

communicating freely through new technologies, just as when those in positions of power controlled the production and distribution of -- or even burned -- books they did not want people to read in the Middle Ages. But only by fighting for our rights to speak freely whatever the medium -- whether books, telephones, or computers -- can we protect and enhance the human condition."¹⁰³

Despite this "technopopulism" of hackers and some hacktivists, the border between "gendarmes" and "thieves" is a thin line, or even non-existent one, in cyberspace. This last point is fundamental, since it suggests the uncertainty of the underground character of the scene, further limiting the potential of hacking, in terms of challenging the established order and social transformation. What characterize the hacking community is their close and antagonist relationship with the Computer Security Industry (CSI). 104 The boundaries between the two communities are very tight. Many hackers dream of being recruited by the CSI. 105 Many hacks have no other purpose than to draw the attention of the site managers to the security vulnerabilities for possible recruitment. 106 Some hackers do not hesitate to leave their email address on the pages that they hack. Highlighting the security weakness, constitutes the best resume for a young hacker looking for a job. 107 What happens very often in the cyberspace is that the old hackers become cyber security agents. Even the most famous hackers have not escaped the financial attractions of the CSI. Eric Bloodaxe (Chris Goggans), founder of the Legion of Doom (LoD), helped in founding a computer security firm, Comsec, before becoming a network security engineer for WheelGroup. 108 The members of the Cult of the

¹⁰³ Cynthia L. Selfe – "Resources in Technical Communications: Outcomes and Approches" *Baywood Publications*, 2007, p. 93

¹⁰⁴ Keith M. Dowding, James Hughes, Helen Z. Margetts (editors) – "Challenges to Democracy: Ideas, Involvement and Institutions" *Palgrave Macmillan* 2001, P. 119

¹⁰⁵ Ibid

¹⁰⁶ Ibid

¹⁰⁷ Keith M. Dowding, James Hughes, Helen Z. Margetts (editors) – "Challenges to Democracy: Ideas, Involvement and Institutions" *Palgrave Macmillan* 2001, P. 119

¹⁰⁸ Tim Jordan – "A Sociology of Hackers" *INET Conference* DOI:

https://web.archive.org/web/20160103141306/https://www.isoc.org/inet98/proceedings/2d/2d 1.htm

Dead Cow, who are the most radical hackers in the scene, admit that they work for the CSI. 109 In computer security companies, hacker skills are often valued as they can quickly identify a problem or respond to an attack. 110 So many intelligence services use the skills of their potential adversaries. All these elements suggest the ambivalence of the relations between agents of surveillance and hackers in cyberspace.

2.3 Different Forms of Mobilization – The Case of Anonymous and Wikileaks.wma

In the case of hacktivism, the first step is relatively clear: it is to oppose the control of the state and the market on the Internet. If hacktivist organizations are able to agree on the identification of a problem, it is not clear that they can agree on the cause of the problem. As a result, the proposed answers may differ. These can cause different actions within the same social movement, that is hacktivism. Whatever the type of hacktivist mobilizations, their common point is first in rhetoric. Through the discourses of Anonymous and the Pirate Party, we can see emerge a rhetoric of resistance and survival. Through the use of this discourse, the hacktivist cause establish a framework of empowerment: the group is seen as threatened, within a hostile environment, and it must therefore develop its own tools in order to survive. There is a double movement, coming both from within, asserting that they not associate itself with governmental structures, and another perceived as coming from outside, from the designated enemies, and which tends to exclude the group and endanger it. This rhetoric serves as a justification for the mobilization of individuals.

¹⁰⁹ Ibid

¹¹⁰ Ibid

This same rhetorical is the beginning of different forms of mobilization. Alexandra Samuel has developed three types of hacktivism and several specific forms: 1. Political cracking, 2. Performance hacking, 3. Political coding. 111 Political cracking has an outlaw orientation. 112 It is very difficult to draw a line between the hackers and hacktivists that belong to the political cracking. 113 Unlike other forms of hacktivist, political crackers have to have at least a minimum knowledge of codes and hacking. 114 They work in small groups or alone to reach a goal. 115 Crackers are usually young and "political hacking is all about getting attention – in other words, pursuing influence rather than a direct effect on outcome." 116

Performance hacktivist usually have an artist-activist background and deal with issues such as globalization, liberation struggles and corporate powers. Hany of these hacktions happen at the simultaneous as street protests. They usually use the *virtual sit-in tactic*, and are more theory-driven than other form of hacktivism. The best example of performance hacktivists would be Anonymous. If the majority of the hacktivist groups advocate for the freedom of the Internet and its users, Anonymous employs very different methods. Their action begins with raids against the Church of Scientology, consisting mainly of denial of service attacks, and is complemented by physical manifestations on a global scale. The difference in Anonymous's methods is mainly due their story. Anonymous was born on the 4Chan image sharing forum in

¹¹¹ Craig J. Forsyth and Heith Copes (editors) – "Encyclopedia of Social Deviance" *Sage Publications, Inc.* 2014 p.318

¹¹² Ibid

¹¹³ Peter M. Shane – "Democracy Online: The Prospects for Political Renewal Through the Internet" *Routledge* 2004, p. 128

¹¹⁴ Ibid

¹¹⁵ Ibid

¹¹⁶ Ibid

¹¹⁷ Ibid

¹¹⁸ Ibid

¹¹⁹ Ihid

¹²⁰ Patrick Barkham – "Hackers Declare War on Scientologists Amid Claims of Heavy-Handed Cruise Control" *The Guardian*, 2008, DOI: https://www.theguardian.com/technology/2008/feb/04/news

2003,¹²¹ and can be distinguished by the Guy Fawkes masks that they wear, portrayed in the novel and film V for Vendeta. The question of coordination, precisely, in a group as decentralized as Anonymous, deserves to be studied. The power is given entirely to the action or, in other words, an organization of extreme flexibility, made of disjointed initiatives but coordinated by common principles and network communication tools. It's about acting, creating and putting in place solutions to release information. The members, therefore, follow these unwritten rules modelled on those of hacking. The actions carried out are always ad hoc, without any real overview of the group, which does not have a governing body, nor a leader. As they claim:

"Anonymous is not a single person, but rather represents the collective whole of 4chan. He is a god amongst men. Anonymous invented the moon, assassinated former President David Palmer, and is also harder than the hardest metal known to man: diamond. His power level is rumoured to be over nine thousand. He currently resides with his auntie and uncle in a town called Bel-Air (however, he is West Philadelphia born and raised). He does not forgive." 122

As for their participants, the members affiliated to Anonymous are not all hackers with strong technological skills. On the contrary, experts represent only a small number of the Anonymous ranks, while most of them are individuals who are very familiar with computer technology and the Internet and who have lower technical level skills, and thus helping the mass effect. 123

¹²¹ Rose Bernard – "Anonymous and the New Face of Hacktivism: What to Look out for in 2018", *Digital Shadows*, 2018, DOI: https://www.digitalshadows.com/blog-and-research/anonymous-and-the-new-face-of-hacktivism-what-to-look-out-for-in-2018/

¹²² Neil L. Whitehead and Michael Wesch – "Human no More: Digital Subjectivities, Unhuman Subjects, and the End of Anthropology" *University Press of Colorado*, 2012, p.95

¹²³ Rose Bernard – "Anonymous and the New Face of Hacktivism: What to Look out for in 2018", *Digital Shadows*, 2018, DOI: https://www.digitalshadows.com/blog-and-research/anonymous-and-the-new-face-of-hacktivism-what-to-look-out-for-in-2018/

Another remarkable element of the movement is that "the phenomenon of Anonymous presents a scathing critique of the postmodern cult of celebrity, individualism, and identity while presenting itself as the inverted alternative – a group made up entirely of unidentified and unidentifiable members, whose presence and membership is fleeting and ephemeral"¹²⁴ One of their mocking slogans is: "With an identity you will eventually be found. The day will come when only Anonymous will walk the ground. We will stop at nothing until we've achieved our goal: Permanent destruction of the identification role." So the unconditional rule of the movement is that of anonymity, which at the same time protects the members and the entire group; first, it preserves the horizontal structure that is the basis of the movement, but also ensures security for its members who can commit illegal actions and could be investigated by governments. As they claim: "it's one voice, it's not individual voices, that's why we don't show our faces, that's why we don't give our names. We're speaking as one and it's collective."126We can therefore see that this movement issue political demands and mobilize itself in frameworks that escape the analysis of traditional categories since "they have no leader, hierarchical structure or geographical epicentre". 127 In addition, the different actions are not always carried out by the same people, which increases the vagueness around the identity of the group. However, it is remarkable that these groups with such a supple and yet unified structures so manage to initiate movements of global scale, or to be important on existing social movements, as during the Arab Spring. "Individual, young, nameless, faceless

¹²⁴ Neil L. Whitehead and Michael Wesch – "Human no More: Digital Subjectivities, Unhuman Subjects, and the End of Anthropology" *University Press of Colorado*, 2012, p.95

¹²⁵ Ibid

¹²⁶ Brian Knappenberger (director) – "We are Legion: The Story of the Hactivists", *Luminant Media*, 2012 http://wearelegionthedocumentary.com

¹²⁷ Michael Anthony C. Dizon – "A Socio-Legal Study of Hacking: Breaking and Remaking Law and Technology" *Routledge*, 2017

folks are having geo-political impact and it's both exhilarating to realize that and terrifying to realize that." ¹²⁸

Finally political coding consists of hackers applying their technical skills to show their cyberlibertarian world view. "This cyberliberterian ideology emphasizes individual rights, especially online rights, as the most important political good. This viewpoint explains why political coding has focused entirely on issues that are directly related to hacker community...They also focus on Internet censorship, as they claim that it affects democracy activists in authoritarian regimes."129 This type of hacktivism is also skill-oriented, even though not all the people involved are programmes. 130 One example of political coding is Wikileaks, in the sense that that it provides tools to promote the idea of free communication. Wikileaks is run by the highly publicized, Julian Assange. 131 Wikileaks describes itself as a non-for-profit media organization.¹³² It started in 2006 and its goal is to publish documents from unknown sources. 133 In its page it's stated "Wikileaks will accept restricted or censored material of political, ethical, diplomatic or historical significance. We do not accept rumor, opinion, other kinds of first hand accounts or material that is publicly available elsewhere." ¹³⁴ Wikileaks is so well known because in 2010 it published a huge number of diplomatic documents about the so called Collateram Murder footage from the 12 July Baghdad airstrike, in which Iraqi journalists were among those killed. 135 Other documents released include secret

¹²⁸ Brian Knappenberger (director) – "We are Legion: The Story of the Hactivists", *Luminant Media*, 2012 http://wearelegionthedocumentary.com

¹²⁹ Peter M. Shane – "Democracy Online: The Prospects for Political Renewal Through the Internet" *Routledge* 2004, p. 132

¹³⁰ Ibid

¹³¹ Tom Sorell – "Human Rights and Hacktivism: The Cases of Wikileaks and Anonymous" *Journal of Human Rights Practice, Vol. 7, Issue 3,* 2015, DOI: https://doi.org/10.1093/jhuman/huv012

¹³² Ibid

¹³³ Ibid

¹³⁴ Jonathan Zittrain and Molly Sauter "Everything You Need to Know About Wikileaks" *MIT Technology Review*, 2010, DOI: https://www.technologyreview.com/s/421949/everything-you-need-to-know-about-wikileaks/

¹³⁵ Ibid

documents about Afghan War and Iraqi War, among others, making public the mapping of 109,032 deaths in different attacks in Iraq. On 2016, during the US presidential election campaign Wikileaks launched over 30 thousand emails and other documents from Hillary Clinton's private email, when she was secretary of state. These released have contributed to harm her campaign and to her loss. Wikileaks has received criticism for its absence of releasing documents on or criticism on Russia. Wikileaks has been also criticized for violating of personal privacy of individuals by revealing their security numbers, credit cards etc.

2.4 The Pirate Party: Ultimate Sign of Politization.flac

In the typology of these structures, the Pirate Party has a particular but problematic importance. It can be considered that it is the most accomplished form in terms of politicization and also the most publicized, with several elected representatives in the European Parliament as well as at local levels in Germany. On the other hand, the idea of a political party seems to betray the ideals of autonomist and anarchist hackers, since the Pirate Party has become part of the system. Beyond the creation of a party, what is striking is also its name: "pirate", which strangely refers to the language used to condemn hackers and outlaws of the internet. There is however an element of marketing, intended to provoke the public mind, and make it interested in the party. We must go back to the history of the party and the intentions of its founders to understand what the existence of a party of hackers implies.

¹³⁶ Ihic

^{137 &}quot;Hillary Clinton Email Archive" - WikiLeaks, DOI: https://wikileaks.org/clinton-emails/

¹³⁸ Emma Grey Ellis – "WikiLeaks has Officially Lost the Moral High Ground" *Wired* 2016, DOI: https://www.wired.com/2016/07/wikileaks-officially-lost-moral-high-ground/?fbclid=lwAR1xU7xN 40FEp806gI2Se7I TCIGQByGK6A0m35e8 R2FzwwApikbZ5 OY

The Swedish Pirate Party was created in 2003, on the initiative of Rick Falkvinge, hacker who now presents himself as a politician. This organization initially took the form of a hacktivist group, which campaigned for the legalization of the file-sharing search engine "The Pirate Bay". Which is adoption of an anti-piracy law in 2005 that led the party to be born: "I've had enough, I'm launching the Pirate Party!" Said Falkvinge at the time. The Pirate party was officially created in 2006 and, in 2009 won 7.1% of the vote in the European elections. The Pirates joined the Green/European Free Alliance in the European Parliament, which includes among its members Amelia Andersdotter and Christian Engström (two hackers). And the same party was officially created in 2006 and the Green/European Free Alliance in the European Parliament, which includes among its members Amelia Andersdotter and Christian Engström (two hackers).

Branches are created all over Europe and the German Pirate Party enjoyed a rapid rise, with a score of 8.9% in the state of Berlin in 2011.¹⁴⁴ But the success of the Pirate party remains mixed at the European scale: it has more than 30,000 members in Germany, but less than 1,000 in France.¹⁴⁵ In addition, the German party is rapidly losing popularity since, at the end of 2013, the party counts less than 3% of the votes.¹⁴⁶ In Iceland for example, in the April 2013 legislative elections, the Pirate Party won 5.1% of the vote, which is just enough to enter the national Parliament.¹⁴⁷ With 3 seats out of 63¹⁴⁸, the party's position is timid: "We are not

¹³⁹ Patrick Burkart – "Pirate Politics: The New Information Policy Contests", *The Information Society Series*, 2014

¹⁴⁰ Ibid

¹⁴¹ Rick Falkvinge – "I am a Pirate", *TEDxObserver*

https://www.ted.com/talks/rick_falkvinge_i_am_a_pirate/transcript?language=en_

¹⁴² Jack Schofield – "Sweden's Pirate Party wins EU seat", *The Guardian*, 2009, DOI:

https://www.theguardian.com/technology/blog/2009/jun/08/elections-pirate-party-sweden

¹⁴³ Simon Taylor – "Swedish Pirate Party MEP Joins the Green Group", *Politico*, 2009, DOI:

https://www.politico.eu/article/swedish-pirate-party-mep-joins-the-green-group/

¹⁴⁴ Helen Pidd – "Pirate Party Leads New Breed Out to Change European Politics.", *The Guardian*, 2011, DOI: https://www.theguardian.com/world/2011/oct/28/pirate-party-european-politics

¹⁴⁵ Josh Kron – "Open Source Politics: The Radical Promise of Germany's Pirate Party", *The Atlantic*, 2012, DOI: https://www.theatlantic.com/international/archive/2012/09/open-source-politics-the-radical-promise-of-germanys-pirate-party/262646/

¹⁴⁶ Kay-Alexander Scholz

¹⁴⁷ Rick Falkvinge – "Icelandic Pirate Party Wins, Enters Parliament", *Falkvinge on Liberty*, 2013, DOI: http://falkvinge.net/2013/04/28/icelandic-pirate-party-wins-enters-parliament/
http://falkvinge.net/2013/04/28/icelandic-pirate-parliament/
<a href="http://falkvinge.net/2013/04/28/icelandic-pirate-parlia

fighting to get a place in the government. But we are ready to work with any party that will be interested in the issues we raise", declares Birgitta Jonsdottir, the party's co-founder. The Pirate Party in Iceland, is now joined by their counterparts in Czech Republic. In the 2017 elections to the lower chamber of the Parliament, the Pirate Party gained 22 seats out of 200, making them the third largest party in the country. During this election campaign the party's programme focused "on the simplification of state bureaucracy through e-government, control of political power and government spending through transparency, accountability and anticorruption measures, safeguarding of civil liberties on the internet, digital rights, a ban on internet censorship, and the introduction of elements of direct democracy by enabling law proposals by the public through petitions "151" The Pirates managed to get many votes in Prague, becoming the largerst party in several districts with results up to 18 percent, and has declined to get into coalition with the winner party of the election, ANO 2011. The Pirates are placed in an original position, in comparison with the existing partisan structures.

Falkvinge's idea of the party's battle plan consist in changing, in order: Sweden, Europe and the world.¹⁵³ Indeed, the party created in Sweden has quickly emerged in other European countries, with however mixed results. The party must also adapt to different national contexts and particularities. Falkvinge states, for example, that in the United States, "it is not possible to change things because of the different political system," while in Russia the Pirate party was not allowed to run for office, because of the name "pirate", which the authorities

¹⁴⁹ Ibio

¹⁵⁰ Paul Hill – "Pirate Party makes a breakthrough in Czech elections" *Noewin*, 2017, DOI: https://www.neowin.net/news/pirate-party-makes-a-breakthrough-in-czech-elections/

¹⁵¹ Ibid

¹⁵² Ibid

¹⁵³ Rick Falkvinge – "Swarmwise – The Tactical Manual to Chaning the World. Chapter two", *Falkvinge on Liberty*, 2013, DOI: https://falkvinge.net/2013/03/01/swarmwise-the-tactical-manual-to-changing-the-world-chapter-two/

¹⁵⁴ Ibid

considered to be referring to maritime piracy. ¹⁵⁵ Similarly, within Europe, the French political terrain seems much less welcoming to the Pirates.

There is, in the language used by party members and especially Rick Falkvinge, a particular marketing aspect. This is particularly visible in the party's few campaign spots, which use both war rhetoric, common to the hacktivist movement, and strong images. In this sense, the name of "Pirate" is justified, because it appeals to a common and attractive imagination of the character, both outlaw and hero. We find in their discourse the double aspect process, with its focus on technology, and its confrontational aspect that is used to motivate the people. 156

Falkvinge has also written a book designed as a manual for the management of hacktivist mobilizations: Swarmwise. This title refers to the ability to deal with a "swarm", a metaphor used to illustrate hacktivist formations. Always in the logic of the do-it-yourself method, Falkvinge wants to transmit a method of management which completes the process of creation of the hackerspaces. Thus, any hacker can theoretically undertake his own movement. The Pirate party bases its ideology on concepts such as the return of power to the people, the questioning of the system and the liquid democracy. Thus, the Pirates seem to want to transfer the hackers ideology and tools to the political sphere, to enact their ambitions for collaborative and transparent democracy.

¹⁵⁵ Ben Jones – "Russia Refuses to Recognize Pirate Party, Because of its Name", *Torrentfreak*, 2011, DOI: https://torrentfreak.com/russia-refuses-to-recognize-pirate-party-because-of-its-name-110323/

¹⁵⁶ Bruno Monico Chies – "Pirate Politics: Information Technologies and the Reconfiguration of Politics", *University of Gothenburg*,2012,

DOI:https://gupea.ub.gu.se/bitstream/2077/32651/1/gupea 2077 32651 1.pdf

¹⁵⁷ John Light – "Book highlights: "Swarmwise" by Rick Falkvinge" *Medium.com*, 2017, DOI: https://medium.com/@lightcoin/book-highlights-swarmwise-by-rick-falkvinge-16eee22adc7

¹⁵⁸ Heather Marsh – "The Problems with Democracy" *Medium.com*, 2017, DOI:

¹⁵⁹ Monique Morisse – "The Pirate Parties' Globality" *Gotebord University*, 2012, DOI: https://gupea.ub.gu.se/bitstream/2077/36638/1/gupea 2077 36638 1.pdf

This gradual, but growing, participation of the hacker movement into politics is proportionate with the growing influence of the private sector and government authorities on the Internet. Responding at first on their comfort zone, via online actions, the response is now organized on the ground of the enemy: meaning to infiltrate the sphere of politics to understand the mechanisms and better control them. So we see here the culmination of this curiosity in hacker ethics, who wants to understand the machine at all costs so as not to be controlled by it. With the entry into politics, hackers take a step away from the computer, and one step closer towards real life. But there is a question that remains unanswered: It seems impossible to change a system without being changed by this system. Should we then choose radicalization to preserve oneself, or choose institutionalization to try to go further?

CHAPTER 3: E-Imagined Communities: Nationalism in Cyberspace.wav

Maybe wars aren't meant to be won, maybe they're meant to be continuous. - Mr. Robot¹⁶⁰

3.1 Actors Influencing the Movement.au

In order to complete the analysis of the politicization of the movement in a dynamic approach of social movements, the construction of the relationship of forces that influence this movement needs to be studied. The study of the interactions with the media and political field is an interesting angle, since by the production of speeches and their positioning, they condition the environment of hacktivism. It is how we can understand the politicization of hacking towards hacktivism. To measure the influence of the environment on the hacker movement, it seems relevant to observe the actions, and especially the rhetoric used by the media and the governments towards them.

When it comes to the relationship of the media with hackers and hacktivists, the first observation that can be made is that of the mass media treatment of these actors and their mobilizations. The image of the hacker as it is presented in the media is that of an isolated character, acting in the shadow in front of lines of codes scrolling on a screen, all often accompanied by an anxious soundtrack that suggests the malignancy of the action. However, we note that hackers sometimes play this image by stressing their anonymity, which can be associated with a certain sense of staging. The image of hackers and hacktivists produced by the media sways between a fascination for these heroes of new technologies, and the demonization of cyberterrorists. The hackers like to maintain a certain mystery, which therefore participates in the myths relayed by the media.

¹⁶⁰ Mr. Robot, Season 2, Episode 8

These nuanced representations can be explained by the apparent difficulty of the media in capturing the multifaceted phenomena to which hackers belong. The documentary "We're legion: The Story of the Hacktivists" incorporates excerpts from a report by Fox News on the Anonymous group. The presenter claims: "They call themselves "Anonymous. They are hackers on steroids, treating the web, like a real life video game, sacking websites, invading Myspace accounts, disrupting innocent people's lives and if you fight back, watch out!" if we can see in this description all the disproportionality that can be the image of the hacker. Joshua Corman, an expert in computer security, explains in the documentary that with Anonymous "we are seeing a renaissance in hacktivism and chaotic that could be chaotic good, neutral or evil." is He highlights the fact that Anonymous was initially seen, in his actions against Scientology, as a positive form of chaos. is a something good, outside the system, but doing something good." While others saw it as something evil. "They wanna see the world burn and potentially doing irreparable damage" is a something evil. "They wanna see the world burn

This produces too risky explanations, and sometimes even misunderstandings that create misinformation. For instance, despite many announcements made by mainstream media outlets such as BBC and the New York Times about a cyberwar that could slow down the global Internet, there was in fact no decline in Internet traffic at the time.¹⁶⁷

As far as the government is concerned, at the root of its actions against the hacker movement, there is incomprehension, and a desire to control cyberspace that proves to be difficult to

¹⁶¹ Brian Knappenberger (director) – "We are Legion: The Story of the Hactivists", *Luminant Media*, 2012 http://wearelegionthedocumentary.com

¹⁶² Ibid

¹⁶³ Ibid

¹⁶⁴ Ibid

¹⁶⁵ Ibid

¹⁶⁶ Ibid

¹⁶⁷ Juanjuan Huang – Values and Symbolism in Anonymous's Brand Identity, *Duke University*, 2015, DOI: https://dukespace.lib.duke.edu/dspace/bitstream/handle/10161/10356/Values%20and%20Symbolism%20in%20Anonymous's%20Brand%20Identity.pdf

control.¹⁶⁸ Indeed, in the pirate allegory, cyberspace has a status similar to international waters, and it would be difficult to regulate.¹⁶⁹

But with hacktivism, hacking comes out of its purely technical aspect to take a stand and act according to the hackers' principles. Hacktivism is therefore a factor of concern for the Western political class¹⁷⁰, which goes further by sometimes demonizing the image of the hacker. There is also some evidence that music and film industry lobbies are pushing for stronger legislation against hacker free data exchange precepts. For example, the fact that major actors in the entertainment industry have been entrusted with studies and reports on piracy and data protection issues shows that the balance of power is not in favour of the hackers, who are not otherwise considered legitimate protagonists.

In response to these different discourses and antagonistic positions, the hacktivist movement tries to build itself as an opposition force. The arrival of the Internet and its now massive use implies a new way of the diffusion of knowledge and information, and thus a certain new way of expression of culture. From this point of view, hackers, as the main actors and proponents of the codes that structure the Internet, have a privileged position. Nevertheless beyond a few personalities in the field who have become professionals in communication, the individual posture of hackers and hacktivists in the face of the media is above all that of mistrust. ¹⁷¹

In fact, hackers cultivate a certain distant and mysterious image, while having fun sometimes to stage this image of secrecy and power, which is in fact a posture. A communication game is set up with the media, and hackers use codes that only they own the keys.

¹⁶⁸ Charles Arthur – "Internet regulation: is it Time to Rein in the Tech Giants?" *The Guardian,* 2017, DOI: https://www.theguardian.com/technology/2017/jul/02/is-it-time-to-rein-in-the-power-of-the-internet-regulation

¹⁶⁹ Ibid

¹⁷⁰ Alejandro de la Garza – "Should you be Afraid of Election Hacking? Here's What Experts say" *Time*, 2018, DOI: http://time.com/5422261/election-hacking/

¹⁷¹ Sandor Vegh – "Hacktivists or Cyberterrorists? The Changing Media Discourse on Hacking" *Peer-Reviewed Journal on the Internet, Vol.7, No. 10,* 2002, DOI: https://firstmonday.org/article/view/998/919

The perfect example is Anonymous. Anonymous use this kind of communication, particularly through videos whose function is to call for mobilization. It all started during Project Chanology against the Church of Scientology. A series of videos were published in order to trigger action against Scientology. The first of the series was a video entitled "Message to Scientology"¹⁷² and whose speech is threatening. This first message calls for the destruction of the Church of Scientology to save the people, faithful to it. 173 Anonymous is presented here as a hero to the rescue of the followers of Scientology. The robotic voice that is used in the video is part of the creation of and threat. Anonymous repeat their call in another video, this time by calling their followers to organize protests around the world in front of the churches of Scientology. This video, titled "Call to Arms" 174, is quickly followed by a third communication, called "Code of Conduct" ¹⁷⁵, which brings together twenty-two rules. For example, they advise demonstrators, among other things, to hide their faces to avoid being recognized by the supporters of Scientology, or not to bring weapons, all in order to ensure an epic victory of the movement. It was during these protests against Scientology that Guy Fawkes' mask was used for the first time. The mask occupies a special place in the Anonymous movement since it allows for both the anonymity of its members in real life as well as their unity. Anonymous complete their videos by their famous slogan: "We are Anonymous. We are Legion. We do not Forgive. We do not Forget. Expect us!"176

As far as the response to the government is concerned, hackers use various means to take to gain the support of the public opinion. There are two types of oppositions that they use: the

¹⁷² Anonymous – "Message to Scientology" Site: https://www.youtube.com/watch?v=JCbKv9yiLiQ

¹⁷³ Ibid

¹⁷⁴ Anonymous – "A Call to Arms" Site: https://www.youtube.com/watch?v=g7UDWHJafQo

¹⁷⁵ Anonymous – "Code of Conduct" Site: https://www.youtube.com/watch?v=qlaLdMqMRh8

¹⁷⁶ Text Anon – "We are Anonymous. We do not forgive. We do not forget" *Dazed,* 2013, DOI: http://www.dazeddigital.com/artsandculture/article/16308/1/we-are-anonymous-we-do-not-forgive-we-do-not-forget

confrontational one and the pacific resistance. 177 The frontal actions against the government are not the most beneficial, since they give grist to the definition of cyber terrorists often used by the States to qualify the hackers. 178 It is clear that some actions are not hacktivism, since they do not promote the principle of freedom that is dear to the hacktivists, but they are only intended to attack government bodies.

The hacktivists of the Anonymous groups made a breakthrough by contributing to the 2011 Arab revolutions.¹⁷⁹ Actually these demonstrations were not related to the domain of the hackers, but were born of social and political demands in the countries concerned. The link was made by Anonymous members - until then anonymous - who revealed to be Tunisians, or Egyptians. 180 The information spread and the hackers were moved by the situation, to finally support the revolution. They have worked to facilitate communications and even restore them, but they have also acted directly against governments considered authoritarian by blocking access to their websites. For instance, in Tunisia, Anonymous took part in the revolt, among other things, attacking the government websites. 181 One of the messages that Anonymous sent to people of Tunisia said: "This is your revolution. It will neither be Twittered nor televised or IRC'ed. You must hit the streets or you will loose the fight. Always stay safe, once you got arrested you cannot do anything for yourself or your people. Your government is watching *you.* "182 These openly anti-governmental actions during the Arab Spring, gave to Anonymous

https://www.aljazeera.com/news/middleeast/2011/05/201151917634659824.html

¹⁷⁷ Jeffrey S. Juris – "Hacking Global Justice" *Changing Politics Through Digital Networks"*, 2007, DOI: http://www.regione.toscana.it/documents/10180/23652/Juris/9904dc10-5cdb-4777-92f4-b9e2710941f5

¹⁷⁸ Sandor Vegh – "Hacktivists or Cyberterrorists? The Changing Media Discourse on Hacking" Peer-Reviewed Journal on the Internet, Vol.7, No. 10, 2002, DOI: https://firstmonday.org/article/view/998/919

¹⁷⁹ Yasmine Ryan – "Anonymous and the Arab Uprising" *Aljazeera*, 2011, DOI:

¹⁸¹ Yasmine Ryan – "Anonymous and the Arab Uprising" *Aljazeera*, 2011, DOI: https://www.aljazeera.com/news/middleeast/2011/05/201151917634659824.html

¹⁸² Quinn Norton – "2011: The Year Anonymous Took in Cops, Dictators and Existential Dread", Wired, 2012, DOI: https://www.wired.com/2012/01/anonymous-dicators-existential-dread/

an unprecedented publicity, which has pushed hacktivism onto the political agenda and made it an almost a common topic.

On the other hand, Wikileaks presents another form of action. It is certainly hacktivism, but it is not directly destructive since it is not in itself an attack, and is not intended, for example, to prevent the operation of a system or internet site. One of the key arguments of Wikileaks is that the denunciation of the crimes of the state, is not a crime. The organization has gained fame through the broadcast of a video that ran through the news, and shows the killing of several journalists and civilians in Baghdad by an air raid of the US military. The Wikileaks resistance is to fight against the occupation of the civilian space that is the Web, occupation which would result in a total surveillance of the individuals and from which it would be impossible to escape. However, considering the continuous emergence of proofs tying Wikileaks to Russia, the championed resistance movement, might, - a Mr. Robot-ian twist – just be a clever tool of a (super)power enforcing its belligerent interests through the façade of cyber-resistance.

3.2. From Hacktivism to Cybernationalism.sd2

"A nation," he heard himself say, "consists of its laws. A nation does not consist of its situation at a given time. If an individual's morals are situational, that individual is without morals. If a nation's laws are

¹⁸³ Jonathan Zittrain and Molly Sauter "Everything You Need to Know About Wikileaks" *MIT Technology Review*, 2010, DOI: https://www.technologyreview.com/s/421949/everything-you-need-to-know-about-wikileaks/

¹⁸⁴ Tom Sorell – "Human Rights and Hacktivism: The Cases of Wikileaks and Anonymous" *Journal of Human Rights Practice, Vol. 7, Issue 3,* 2015, DOI: https://doi.org/10.1093/jhuman/huv012

¹⁸⁵ Emma Grey Ellis – "Wikileaks has Officially Lost the Moral High Ground" *Wired,* 2016, DOI: https://www.wired.com/2016/07/wikileaks-officially-lost-moral-high-ground/?fbclid=lwAR2rt80s2XQmZ7tvKyUrvIJ7FFrrOQe46gw7aMbWJZGSVViRz nfzdbs2iA

situational, that nation has no laws, and soon isn't a nation."

— Spook Country, William Gibson¹⁸⁶

Contributing to the emergence of an international public space, the Internet also participates in the construction of contemporary identities, whether these originate online or offline. According to Barth the boundaries of offline communities are drawn by the "isolations which the itemized characteristics imply: racial difference, cultural difference, social separation and language barriers...We are led to imagine each group developing its cultural and social form in relative isolation, mainly in response to local ecologic factors," making the boundaries sociocultural constructions, ¹⁸⁸ and thus communities imagined: "In fact, all communities larger than primordial villages of face-to-face contact (and perhaps even these) are imagined. Communities are to be distinguished, not by their falsity/genuineness, but by the style in which they are imagined." Nations in this view are the ideological constructions of nation-states; they are the imaginary goals of nationalism rather than their primordial origins." ¹⁹⁰

These offline "imagined communities" are reinventing themselves in cyberspace, where virtual communities have emerged, with members sometimes meeting offline.¹⁹¹ Cyberspace is an ideal site for re-imagining ones homeland and concretizing the abstractions of the nationalist myth.¹⁹² The new information technologies strengthen, in particular, the links between

https://rauli.cbs.dk/index.php/cjas/article/viewFile/3430/3704

¹⁸⁶ William Gibson – "Spook Country" *Penguin Group,* 2007

¹⁸⁷ Fredrik Barth – "Ethnic Groups and Boundaries: The Social Organization of Culture Difference" *Waveland Press, Inc.* 1998, P. 11

¹⁸⁸ Tobias Boss – "Inhabiting Cyberspace and Emerging Cyberplaces: The Case of Siena, Italy" *Palgrave macmillian*, 2017 p. 26

¹⁸⁹ Benedict Anderson – "Imagined Communities: Reflections ont he Origin and Spread of Nationalism" *Verso*, 1983, p.6

¹⁹⁰ Veronica Hollinger and Joan Gordon (editors) – "Edging Into the Future: Science Fiction and Contemporary Cultural Transformation", *University of Pennsylvania Press* 2002, p.219

¹⁹¹ Tobias Boss – "Inhabiting Cyberspace and Emerging Cyberplaces: The Case of Siena, Italy" *Palgrave macmillian*, 2017 p.32

 $^{^{192}}$ Reggy Capacio Finger – "Diasporic Discourse Online: Imagining the Homeland in Cyberspace" The Copenhagen Journal of Asian Studies, 2010. DOI:

transnational migrant communities and their country of origin, and offer the opportunity for every individual with a minimum of techno-social knowledge to stay in touch with his offline "imagined community". 193 "Online communities emerge in different parts of the Internet and sometimes the same community is active in different parts of cyber- space: on bulletin board systems, Internet Relay Chat (IRA), Multi- User Dungeons (MUDs), social media such as Facebook, and websites. Almost every topic can initiate the building of an online community, just as with offline communities." 194 By extending to the cyberspace, nationalism has started a revolution. The discourse of nationalism was conceived for a Westphalian world, dominated by the modern sovereign state and bounded territories, and not for a deterritorialized network such as the wide web. 195

What forms take then the manifestations of nationalism online? Does the rise of cyberspace weakens the centrality of the state, or on the contrary does it contributes to the strengthening of state actions?

"For better or worse, the legitimacy of nation states has been undermined to an unprecedented degree by the driving institutions of the postmodern world. The Internet, global capital markets, multinational corporations, the commodification of all cultural practices in global market terms, and social movements sophisticated in communications technologies have vitiated most of the attractive energies of national identification. Although nation states still exert enormous influence on the world system, their elites and their economies increasingly depend on transnational capital flow. Diasporas, the flows of populations moving either voluntarily or by force across international borders, have

¹⁹³ Ibid

¹⁹⁴ Tobias Boss – "Inhabiting Cyberspace and Emerging Cyberplaces: The Case of Siena, Italy" *Palgrave macmillian*, 2017 p. 26

¹⁹⁵ Johan Eriksson and Giampiero Giacomello – "International Relations and Security in the Digital Age" *Routledge*, 2007, p. 104

irreversibly weakened the conception of a nation as a homogeneous population residing in a defined territory administered by the national state." ¹⁹⁶

The question of the relationship between the transformation of information systems and the construction of nationalism has been the subject of much controversy. One of the most famous ones would be the debate between Ernest Gellner and Karl Deutsch. Gellner challenges the validity of Deutsch's cybernetic model, by emphasizing that the modern media diffuse nationalism less than it is thought.¹⁹⁷ While Deutsch claims that it is the media that transits nationalism to previously non-nationalist peoples, ¹⁹⁸ Gellner insists that it is "the pervasiveness and importance of abstract, centralised, standardised, one-to-many communication, which automatically engenders the core idea of nationalism, quite irrespective of what...is being put into the specific messages transmitted ... That core message is that the language and style of the transmissions is important, that only he who can understand them, or can acquire such comprehension, is included in a moral and political community, and that he who does not and cannot, is excluded" ¹⁹⁹

The rise of the Internet, however, poses specific problems for theorists of nationalism, who are here in the presence of an interactive and multifunctional electronic media. Many diasporic communities use the internet to maintain their connections with their compatriots around the world. Many nations first conceived offline would thus reinvent themselves in cyberspace, which favors the advent of spaces for self-expression discussions, devoted to politics, to the

https://rauli.cbs.dk/index.php/cjas/article/viewFile/3430/3704

¹⁹⁶ Veronica Hollinger and Joan Gordon (editors) – "Edging Into the Future: Science Fiction and Contemporary Cultural Transformation", *University of Pennsylvania Press* 2002, p.220

¹⁹⁷ Brendan O'Leary – "Ont he Nature of Nationalism: An Appraisal of Ernest Gellner's Writings on Nationalism' *Cambridge University Press*, 1997, p. 197

¹⁹⁸ Ibid

¹⁹⁹ Ernest Gellner – "Nations and Nationalism" Cornell University Press, 1983, p. 127

 $^{^{200}}$ Reggy Capacio Finger – "Diasporic Discourse Online: Imagining the Homeland in Cyberspace" *The Copenhagen Journal of Asian Studies*, 2010. DOI:

adaptation of "traditions" to modernity, to sexuality, to music, cinema, gastronomy, etc.²⁰¹ The internet also allows the development of social relations directly oriented towards the real world, from the transfer of capital to the matrimonial alliances.²⁰² Many immigrants find in the internet a way to build friendships, to strengthen their identity and to convince themselves of the existence of compatriots with similar interests and equally eager not to give up their culture of origin.²⁰³ The internet would be a particularly attractive tool for these diasporic populations, as it contributes to the development of transnational links more immediate, freer, more intense and more effective. The internet also enables these populations to access targeted media intended for specialized and homogeneous audiences, which, for some authors, would now triumph over the mass media.²⁰⁴

The uses of the Internet by contemporary nationalist groups concretizes the social and political relationship of individuals to their homeland in the real world while blurring the strictly geographical contours of these new spatialities. In fact, the credibility of "imagined communities" in cyberspace is leading to the emergence of new real-world reference spaces, both within and beyond the territory, as suggested by the notion of "translocality" (*being an abstract space occupied by the sum of linkages and connections between places. It is a mode which pertains how peoples and cultures move through spaces, hence a form of travel.*²⁰⁵),

²⁰¹ Andrea Chester – "Presenting the Self in Cyberspace: Identity Play in Moos" *The University of Melbourne*, 2004, DOI: <a href="https://minerva-

<u>access.unimelb.edu.au/bitstream/handle/11343/38846/66015 00000534 01 chester.pdf;jsessionid=5E60412 4404055AA44475FDBAE4503BF?sequence=1</u>

²⁰² Michael J. Rosenfeld and Reuben J. Thomas – "Searching for a Mate: The Rise of the Internet as a Social Intermediary" *American Sociological Review 77(4):523-547,* 2012, DOI: https://web.stanford.edu/~mrosenfe/Rosenfeld How Couples Meet Working Paper.pdf

²⁰³ Nelly Elias and Dafna Lemish – "Spinning the Web of Identity: the Roles of the Internet in the lives of Immigrant Adolescents" *SAGE Publications*, 2009, DOI: 10.1177/1461444809102959

²⁰⁴ David Tewsbury and Jason Rittenberg – "News ont he Internet: Information and Citizenship in the 21st Century" *Oxford University Press*, 2012, p. 65

²⁰⁵ Peter G. Mandaville – "Territory and Translocality: Discrepant Idioms of Political Identity" *Millennium: Journal of International Studies Vol. 28, Issue 3,* 1999 DOI: https://doi.org/10.1177/03058298990280030201

where "similarly-minded individuals can act as translocal agents in cyberspace." ²⁰⁶

But the virtual can not operate as an autonomous: the images of oneself and others emitted and received in cyberspace derive from those of the real world and not the other way around. The electronic exchanges are not a substitute for physical contacts, they complement them.²⁰⁷ The more the identity dimension is the linking element of a group, the more there is a need to meet in the real world.²⁰⁸ The most important changes promised by the virtual world will probably not take place for the political subjects but rather for the States. The overall legitimization of cyber surveillance practices, in the post 9/11 context, indicating that the state has still the upper hand.

For some authors, the sovereignty of the nation-state and the relevance of nationalism would be threatened by the existence of cyberspace: the role of the nation-state will be dramatically troubled in the near future, and there will be no more room for nationalism.²⁰⁹ This radical approach is based on a classical definition of the state, understood as "space and place, geometry and geography", that is to say "in terms of the physical traces (...), of their boundaries or borders."²¹⁰ Everard suggests disintegrating the state and watching it redeploy itself as part of a process of cyborgisation, that is, through the development of a symbiotic relationship between the State and the global system.²¹¹ Hence the main function of the state would consists of ensuring the relationship between human beings and the networks that connect them.²¹² This

²⁰⁶ Linda M. Cadier – "Exploring translocality:noegotiating space through the language practices of migrant communitites" *University of Southampton,* 2013, DOI: https://eprints.soton.ac.uk/367079/1/Binder1.pdf
²⁰⁷ Ken Goldberg (editor) – "The Robot in the Garden: Telerobotics and Telepistemology in the Age of the Internet" *The MIT Press,* 2001, p. 279

²⁰⁸ Ken Goldberg (editor) – "The Robot in the Garden: Telerobotics and Telepistemology in the Age of the Internet" *The MIT Press*, 2001, p. 279

²⁰⁹ Henry H. Perrit Jr. – "The Internet as a Threat to Sovereignty? Thoughts on the Internet's Role in Strengthening National and Global Governance" *Indiana Journal of Global Legal Studies, Vol. 5, Issue 2,* 1998, DOI: https://www.repository.law.indiana.edu/cgi/viewcontent.cgi?article=1128&context=ijgls

²¹⁰ Jerry Everard – "Virtual States: The Internet and the Boundaries of the Nation-State" *Routledge,* 2000, p. 7 lbid. p.54

²¹² Ibid

process would lead to a Deleuzian "Rhizome-state", operating on the model of the "body without organs" and working through an abstract space.²¹³ The state would therefore reinvent itself through soft-power and world wide web, rather than through the consolidation of territory and sovereignty, on which it relied until then.²¹⁴

"Although states are indeed subject to cyberattacks, cyber security breaches and cyber protests, the Internet at the same time proves to be a medium for state power and control." ²¹⁵ According to Everard, this resilience of the state can be seen at three different levels: First it can be seen in the new role of the state actors in the global economy, particularly through their political or financial support for their national "e-business" as well as through their help to those excluded from digital world. ²¹⁶ Secondly, in the attempt to politically regulate the Internet, through the adoption of laws, aimed to combat "cybercrime", at national and international level. ²¹⁷ And thirdly, in the social construction of a so-called cyber-terrorist threat, legitimizing "cyber defense" programs that focus on securing communication infrastructures, in partnership with certain non-state actors. ²¹⁸ Parallel to this electronic "war of position", there are also real "computer wars" between states using "semantic" weapons (meaning, distributing false information to the enemy) and especially "syntactic" weapons (intended to damage the computer systems). ²¹⁹ One example of this theory is Estonia. The country was victim of a cyber-attack in 2007, blacking out government communication and crashing the online portals

²¹³ Ibid, p.55

²¹⁴ Ibid

²¹⁵ Annabelle Poelert – "From Cyber Anarchy to Network Control, How the Internet Influences State Sovereignty"

DOI:file:///C:/Users/dautan/Downloads/From%20Cyber%20Anarchy%20to%20Network%20Control.pdf

²¹⁶ Jerry Everard – "Virtual States: The Internet and the Boundaries of the Nation-State" Routledge, 2000, p.

²¹⁷ Ibid

²¹⁸ Ibid

²¹⁹ Ibid

of the country's leading banks, which resulted in riots all over the country.²²⁰ "By now Estonia has completely recovered from its online attack and is one of the leading countries in cyber security measures. The country offers most of its governance services online, including the application for virtual citizenship,"²²¹ becoming the first country to offer to any person in the world a chance to become an Estonian e-resident.²²²

"In short, the cliché of the Internet as an unregulated democratic cyberspace, where states have no influence and control, seems out-dated. States are becoming increasingly aware of the hazards of the Internet and are taking a more pro-active stance on Internet regulation." ²²³

Thus, there is currently the emergence of a "cyber state" whose main function is to act as a controller between citizens and networks of global exchange and discussion, adapting to the electronic age the modern functions of the state. Hence the growing role of information technologies in contemporary governance systems is more and more visible: the public administration uses information and communication technologies for internal organizational purposes, for its operations, for its transactions, for the development and application of public policies, for surveillance and discipline, as well as for informing politicians, citizens and social groups.²²⁴ Public administration is also concerned with information and

²²⁰ Annabelle Poelert – "From Cyber Anarchy to Network Control, How the Internet Influences State Sovereignty"

²²² Eric B. Schnurer – "E-Stonia and the Future of the Cyberstate. Virtual Governments Come Online" *Foreign Affairs*, 2015, DOI: https://www.foreignaffairs.com/articles/eastern-europe-caucasus/2015-01-28/e-stonia-and-future-cyberstate

²²³ Annabelle Poelert – "From Cyber Anarchy to Network Control, How the Internet Influences State Sovereignty"

DOI:file:///C:/Users/dautan/Downloads/From%20Cyber%20Anarchy%20to%20Network%20Control.pdf

²²⁴ Viktor Bekkers – "E-government and the Emergence of Virtual Organizations in the Public Sector" *Information Polity, Vol.8,* 2003, DOI: https://www.researchgate.net/publication/234776540 E-government and the Emergence of Virtual Organizations in the Public Sector

communication technologies as objects of regulation and policy-making. ²²⁵ Contemporary modes of governance may appear more open and fluid, than the exercise of the characteristic Westphalian government. Still, by projecting into cyberspace, the "cyber state" can also strengthen its control capacity through the use of cyber surveillance. In other words, the "disintegration" of public action often takes place in parallel with a process of invisibilisation of state security policies, which directly threatens individual liberties. And while cyber-resistance practices are not currently a "defense threat," cyber-surveillance practices have gained unprecedented legitimacy in the post-9/11 context. "Ironically enough, they are using the same infrastructure that previously threatened their state authority and control, to re-establish their power. State authorities are exploring ways to erect cyber walls and are collecting data to regain control of the Internet." ²²⁶

²²⁵ Thomas Zwahr, Piere Rossel, Matthias Finger – "Towards Electronic Governance – A Case Study of ICT in Local Government Governance" *Infoscience*, DOI: https://infoscience.epfl.ch/record/55880/files/e-gov.pdf
²²⁶ Annabelle Poelert – "From Cyber Anarchy to Network Control, How the Internet Influences State Sovereignty"

Conclusion

It would be wrong to underestimate the stakes of "Internet policies" which, through their protests, will have decisive consequences for the future of our societies. It must be recognized, however, that hacktivists and cybernationalists are currently struggling to invent action repertoires distinct from those that exist offline, and most of them insist on the complementarity of mobilizations in real space and in the virtual space. At the end of this study, while the initial hypothesis concerning the politicization of the hacker movement is confirmed, this research also led to the understanding of the nuances of this movement, and its problematic nature for its actors. While some hackers consider the passage from hacking to politics as necessary given the current issues that concern the Internet, others reject the idea of an instrumentalisation of their "art".

The historical study of the movement reveals above all that hacking presents creative diversion and insubordination to the rules, whether technical or social. This anti-authoritarian vocation at the heart of the hacker ethics leads to provisions favorable to political engagement and contestation. The politicization of the Internet is also contained in its core, since the network is located at the crossroads of different political, commercial and scientific interests. It should be noted, however, that despite these favorable provisions, the politicization of hackers was initially very weak, changing slowly with the redefinition of the stakes related to cyberspace.²²⁷

This process of politicization is triggered only by the conjunction of two factors: first, the climate of social mobilization in America in the 1960s and 1970s that contributes to the political awakening of the actors of the movement, second, the passage from a nurturing state to an enemy state of the hackers, thus triggering a territorial and semantic battle. The intrusion

²²⁷ Bruce Sterling – "Hacker Crackdown" CreateSpace Independent Publishing Platform, 2016, p. 31

of the market and state regulations diverted the network they had designed. It is, therefore, from this shock that the mobilization of hackers was progressively deployed. They were not necessarily collective, and characterized by great flexibility in participation, but in the same time structured on the basis of a common culture, centered around the computer technologies, reaching today the entry into politics. It is worth emphasizing the unprecedented nature of this movement, based not only on a specific technology, but even more so in a different space than the physical, geographical one that it was known until then: cyberspace.

One might also wonder whether the entry into the arena of politics can be considered as a maturation of the movement, or on the contrary if it goes against the ideology of the movement. Indeed, the political parties are what hackers reject a priori: organizations of very structured power, and actions carried out in a fixed territorial framework.²²⁸ This change of location questions most of the hacktivists' modes of action. The difficulty of coordination of the Pirate parties at a supranational level confirms this hypothesis of destabilization of the movement.

It was also remarkable that hackers do not have the culture or political competence that they would need to be part of the political sphere. Their commitment finds its main motivation in the hackers' ethos that they apply to politics, and as a result it is the hacker's tools that are applying to politics when it comes to hacktivism. However, not only is it difficult to imagine that free software techniques can be applied to law-making, but it is also remarkable that hacker techniques, which are supposed to promote egalitarianism, sometimes tend to reinforce an elitist tendency: favoring the "real hackers" recognized by their peers and excluding "newbies". The desire to directly apply hackers' tools to politics, it results in a relatively

²²⁸ Herbert Kitschelt – "Movement Parties" *Handbook of Party Politics, N..24,* 2006, DOI: http://dx.doi.org/10.4135/9781848608047

²²⁹ Gabriella Coleman – "Hacker, Hoaxer, Whistlebloer, Spy: The Many Faces of Anonymous" *Verso*, 2014, DOI: https://monoskop.org/images/d/d5/Coleman Gabriella Hacker Hoaxer Whistleblower Spy The Story of A nonymous.pdf

"naive" conception of politics, which consists in trying to apply a technological utopia to political processes.

The main problematic is that there can be no politicization of the movement without the politicization of its tools: the platform can not be neutral in the case of a democratic debate, and this totally questions the ideological assumptions that constitute the foundation of the Internet. The Internet, as conceived by the hackers, has fulfilled its social vocation, as it has enabled the creation of communities by multiplying the possibilities of creating links, which proves to be a facilitator of mobilizations both in cyberspace and physical space.

However, the resulting political ramifications still require adjustments. Indeed, the challenge is made extremely easy on the Internet, since anyone has access to tools to generate disruption against websites or target users. However, this ease of action runs the risk of a dilution of the responsibility of the acts, and potentially, in the long term, of what one would call a "pushbutton" democracy. This is the problem posed today by anonymity on the Internet, which turns a user into a "cable ghost". 231

The main contribution of the "pirates" is to reveal that the "cyber war" is played as much between the great world powers as inside our countries, between the states and their citizens. Thus hacking can rightly be considered "the future of digital resistance", even though it might not be the future of politics.²³²

²³⁰ Martin Hilbert – "The Maturing Concept of E-Democracy: From E-Voting and Online Consultations to Democratic Values out of Jumbled Online Chatter" *Journal of Information Technology and Politics*, 2009, DOI: 10.1080/19331680802715242

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²³² M.I. Franklin – "Digital Dilemman, Power, Resistance and the Internet" Oxford University Press, 2013, p. 62

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