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INTERNET AS A DRIVER OF POLITICAL CHANGE: CYBER-PESSIMISTS AND CYBER-OPTIMISTS

There are two schools of thought about the impact of Internet on the processes of political change. On the one hand, individuals who believe that this technology has some features that promote the spread of democracy around the world, and those who believe that this instrument consolidates authoritarianism and political repression. The purpose of this article is a descriptive analysis of the main arguments used for both to justify their positions. This work defends the argument that both views attribute a deterministic role to Internet which does not correspond to its neutral nature. In contrast, the effects of Internet on political change depend on the context and the ability of actors who use it

Internet, new information technologies, democracy, authoritarianism, political change.

1. Introduction

Some technologies have the capability of radically altering the context in which they operate. These are the so-called “disruptive technologies”: capable of displacing pre-existing innovations and of bringing about a profound change in the people who use them, in their strategies and in the effects of their actions¹. The consequences generated by these instruments, above all at the time they appear, are not always obvious, and it requires some effort to comprehend and systemise them.

The Social Sciences have devoted a notable degree of interest in studying the causality relationships that are established between the appearance of a new technical innovation and political and social change². One of the most stimulating points for reflection has been that of examining how the dissemination of information technologies affects the processes of democratisation.

Television was one of those creations that aroused most fascination from the viewpoint of its influence on these processes. Early theories considered that this medium was one that precipitated social modernisation, and, by extension, the processes of political liberalisation³. However, the initial enthusiasm was gradually replaced by a more sceptical vision, which, whilst acknowledging the exceptional nature of this new technology, considered that social and political development processes were not so lineal, and that the effects of the mass media were more complex and ambiguous⁴.

At this time, we can find a certain degree of parallelism in the way in which the debate about the political and social impact of Internet has developed. Since its origins, cyberspace has been seen as an extraordinary driving force for the dissemination of freedom. In the mid-nineties, when this technology was only at the stage of being a limited community, mostly within the academic and governmental fields, the then United States Vice-President, Al Gore, did not hesitate to attribute to it the capacity

¹ ABELSON, H; LEDEEN, K. & LEWIS, H. R. (2008): *Blown to bits: your life, liberty, and happiness after the digital explosion*, Upper Saddle River, NJ: Addison-Wesley.

² CASTELLS, M. (2001): *La Galaxia Internet. Reflexiones sobre empresa, sociedad e Internet* [“The Internet galaxy: Reflections on business, society and Internet”], Barcelona: Plaza & Janés.

³ WEAVER, D.H. (1977): “The Press and Government Restriction: A Cross-National Study over Time”, *Gazette*, Vol. 24, nº 3, pags. 152–70.

⁴ BOLLIER, D. (2003): “The Rise of Netpolitik. How the Internet Is Changing International Politics and Diplomacy”, Aspen Institute - Communications and Society Program.

to strengthen democracies, foster sustainable economic growth, resolve environmental problems and even generate a feeling of belonging to one single “human community”. According to Gore⁵, Internet does not just “spread participatory democracy, but it also forges a new era of Athenian democracy”.

This “cyber-utopian” vision was gathering pace as it became generalised and Internet access became cheaper. The rhythmical succession of a series of episodes of political liberalisation has been used to reinforce these optimistic predictions. Thus, for instance, it has been common to endow Internet with the nature of being a precipitating factor of episodes as diverse as: the so-called “Orange Revolution” in the Ukraine (2004), the “Cedar Revolution” in Lebanon (2005), the “One million voices against the FARC” movement in Colombia (2008), the protests against electoral fraud in Iran (2009), The Jasmine Revolution” in Tunisia (2010-11) and the “Arab spring” in Egypt (2011).

However, in recent years, the vision about the pro-democratic nature of Internet has been challenged by another antagonistic perspective. For “cyber-pessimists”, technology not only fails to support the democratisation process; but rather moreover it possess characteristics that lead to regression, by endowing authoritarian regimes with resources that empower social control and the effective persecution of dissidents.

The purpose of this article is to carry out a descriptive analysis of the chief arguments used by one viewpoint and the other in justifying their positions. The argument is maintained that both stances attribute a deterministic character to Internet that is not related to its neutral nature. The effects of Internet on political change and violent conflict depend on the context and on the ability of the people involved who use this tool.

2. The reasons for cyber-optimism

The vision of Internet as a form of technology with intrinsically democratic characteristics is the interpretation that enjoys most widespread popular acceptance. This axiom has been assumed by the leading mass media but also by the political class of some notable countries. At the end of the eighties, when Internet was still in its embryonic phase, President Ronald Reagan asserted that “technology will make it increasingly harder for the State to be able to control the information that its people receive.... the Goliath of totalitarianism will be overthrown by the David of the microchip”⁶. The different American administrations, regardless of their political colour, have assumed

5 GORE, A. (1995): “Forging a New Athenian Age of Democracy”, *Intermedia*, Vol. 22, Nº 2, pags. 4–6.

6 DOBRIANSKY, P. (2008): “New Media vs. New Censorship: The Assault,” remarks to Broadcasting Board of Governors, Washington D.C. (10 September).

that Internet was a natural ally of their foreign policies. The former Republican Secretary of State, Condoleezza Rice stated: “Internet is possibly one of the biggest tools for democratisation and political freedom that we have ever seen before”⁷. This vision does not differ from the one held by his successor, the Democrat Hillary Clinton, who held “Internet Freedom”⁸ to be one of the priorities of American foreign action: “We are in favour of one single Internet, where all of humanity has access to knowledge and ideas”⁹.

For cyber-optimists, Internet is a fore bearer of the establishing and reinforcing of democratic political systems. One of the most celebrated advocates of this opinion is the Egyptian executive of *Google*, Wael Ghonim, who attained certain degree of celebrity in becoming one of the most visible faces of the protest of the net users against the dictatorial regime of Hosni Mubarak. According to Wael: “If you want to liberate society, just give it Internet”¹⁰.

The main reasons used by the cyber-optimists include:

- a. Giving power to isolated individuals. The new technologies facilitate and promote the circulation of information and the participation of the subjects in political issues. Cyberspace becomes a crucial instrument for citizens being able to apply pressure so as to obtain greater transparency and responsibility in the way their governments perform their actions¹¹. The net opens up new pathways for the exercising of a fundamental right to democracy such as the freedom of expression, enabling consumers to be not just the consumers of information furnished by the mass media. Through cyberspace, individuals can express themselves freely and without the mediation of the protagonists, which represents an enriching of the political debate because a greater number of participants with different perspectives join in.
- b. Promoting inter-group relations. New connections between individuals and groups are created, both inside and outside national borders. Internet manages to produce a “densification of the public sphere”, something that is necessary in order for a social uprising to become consolidated and move on towards a

7 DOBRIANSKY, P. (2008): “New Media vs. New Censorship: The Assault,” remarks to Broadcasting Board of Governors, Washington D.C. (10 September).

8 FONTAINE, R. & ROGERS, W. (2011): *Internet Freedom. A Foreign Policy Imperative in the Digital Age*, Washington D. C.: Center for a New American Security.

9 CLINTON, H. R. (2010): “Remarks on Internet Freedom”, The Newseum, Washington DC. (January 21).

10 ORESKOVIC, A. (2011): “Egyptian Activist Creates Image Issue for Google,” Reuters, (12 February).

11 ZHENG, Y. (2007): **Technological Empowerment: The Internet, State, and Society in China**, Stanford, CA: Stanford University Press.; FRIEDMAN, T. L. (2010): “Power to the (Blogging) People”, The New York Times, (September 14).

revolution¹². This form of technology becomes a key tool for collective action taking place within those societies that are lacking in freedom. Through the net, isolated individuals can see that others share their discontent, and at the same time they find a terrain in cyberspace that is suitable for effectively coordinating their actions. The capacity to reach a potentially limited audience even makes it possible for small groups, and particularly motivated activists, to be able to endow their initiatives with a mass dimension. The transforming power of Internet has been increasing, as new people become net users¹³.

- c. Local events take on international repercussions. Internet weakens the ability of political regimes to exercise effective control over the flows of information that cross their borders. The new technologies make it possible to evade government censorship, permitting local activists to inform international public opinion, and to become involved in the domestic affairs of their countries. Unlike the traditional mass media, net users can move around with greater anonymity than journalists, and be present at events and in scenarios that government censorship bans accredited professionals from. The illustrative materials and descriptions provided by those citizen-journalists end up feeding the information that other countries have, and they decisively contribute toward the international community getting involved in the fight against oppression and against the violation of human rights. The repressive apparatus of those regimes lose part of their effectiveness, because they are constrained by the global repercussions of their acts. This relaxing of coercion facilitates the consolidation of movements demanding a political response.
- d. Promoting the economic development and social modernisation on which democracy is established. Internet has become one of the key factors in commercial globalisation and the consequent more recent economic development. The net has not only made production and management costs less expensive, but it has also increased the volume and the speed at which information flows, having huge repercussions on the scientific innovation process and on business productivity¹⁴. The way this technology penetrates countries with dictatorial regimes ends up by causing a form of social and economic transformation that provides succour to pro-democratic movements. The new middle classes, arising under the auspices of the new information economy, end up becoming one of the most critical groups of the lack of freedom. The political elite is aware of this risk. However, they have to face up to the so-called “dictators’ dilemma”: either to choose political control or opt for the economic benefits that Internet offers.

¹² SHIRKY, C. (2011): “The political power of social media”, *Foreign affairs*, Vol. 90, N° 1, pags. 28-41.

¹³ SHIRKY, C. (2009): *Here Comes Everybody. The power of organizing without organizations*, New York: Penguin Press.

¹⁴ FRIEDMAN, T. L. (2007): *The World is Flat: a Brief History of the Twenty-First Century*, New York: Farrar Straus & Giroux.

But they cannot choose both of these at the same time. Without relatively-free access to the new information technologies, the productive sectors see their capacity to innovate is restricted and so this applies to their possibilities of being competitive, and they are somewhat left behind in the global economy. The acceptance of this technology as a necessary evil ends up by becoming a “Trojan horse” that erodes the bases of social control on which these types of governments establish themselves.

3. The cyber-pessimistic revision

Within this trend, we find ourselves amongst some observers who make an antagonistic form of diagnosis, which not only casts doubts on the liberalising effects of this technology, but which also considers that the consequences of this are quite the contrary.

For authors such as the Byelorussian ex-blogger, Eugeny Morozov¹, the current optimism about the liberating role of Internet is based upon a selective and erroneous reading of the causes that brought about the collapse of the Soviet bloc during the Cold War. According to this, the role that the flow of information had, or that of certain western public diplomatic initiatives in the generation of political dissident movement has been overplayed in these countries. However, no suitable has been paid to the structural causes or to the contradictions of the Soviet system. This has led Internet to be considered as an ultra-modern and even more powerful version of the clandestine radio broadcasts that offered an alternative vision to government propaganda to the inhabitants of the communist bloc.

In the nature of the Internet, these authors offer a series of characteristics that provoke political regression; because they weaken the capacity of societies to mobilise themselves and they promote the repressive apparatus and the social control of authoritarian regimes.

The following are amongst the main arguments that they use to justify their position:

- a. Internet generates “democratic bubbles”. Public opinion tends to identify certain “mirages” about the existence of widespread pro-democracy movements as being real. However, their existence only take place within the range of perceptions of those who place irrational trust in the liberating capabilities of Internet. Some of the movements that challenge authoritarianism, located in cyberspace, have lacked a genuine social base. Thus, for example, a large part of the browsers

¹ MOROZOV, E. (2011): *The Net Delusion: the Dark Side of Internet Freedom*, New York: Public Affairs.

who were involved on the net in the protest movements against electoral fraud in Iran, far from being leaders of the revolt on the ground, arose from the extensive Iranian communities that had emigrated to the West. They encouraged the revolts in English, thousands of miles away from them. In spite of this, the mass media pointed to the Twitter social network as the sub-stratum that made the revolts possible. At the time when the 2009 elections were held in Iran, only a mere 19.000 accounts had been registered with this service (0.027 per cent of the population). Some of the busiest cyber-activists were located in the West, but they had changed their personal information regarding their locations, so as to confuse the authorities and make them believe that they were tweeting from Iran.

- b. The weakness of the groups formed via Internet. While Internet has a great capacity to accelerate and facilitate the initial process of forming social groups, based around a common objective or interest, some authors point to the weakness of the social ties that are exclusively created through cyberspace. According to Malcolm Gladwell, "The social network platforms are built on weak links... these weak links are conducive to high-risk activism"². The reduced staff cost and limited effort involved in joining these new virtual collectives have the direct consequence of not being very sound, once it is necessary to take the leap from the "virtual" to the "physical". When government repression and physical violence takes place, these groups become quickly disrupted, or their actions are barely effective. Their members are swiftly neutralised due to the fact that the "physical" activism requires certain skills for working in a group and operating in a clandestine way, which is very different from those, which these individuals deploy on Internet. This is particularly obvious in the ease with which the repressive apparatus are capable of neutralising the "virtual leaders"³. The "traditional" leaders are used to living with and being surrounded by their followers, something that provides them a certain degree of protection and immunity with respect to the established power. Conversely, the people revitalising the protests generated via Internet act in isolation from their followers, who are largely unaware of their identities. This means that they can be captured, tortured and silenced, without the net browser knowing what has happened to them. The dissident voices on Internet vanish, with the same ease with which they appeared.
- c. Only a minority use Internet for a political purpose. This reality, recorded empirically⁴, comes directly into conflict with the perception that the West holds

2 GLADWELL, M. (2010): "Why the Revolution won't be tweeted," *The New Yorker*, (4 October).

3 WATTS, C. (2011): "Decapitating Revolutionary Leaders via Twitter", *selectedwisdom.com*, (December 17).

4 IAC & JWT (2007): "IAC and JWT study reveals new means of expression for China's Tech-Savvy Youth", *PR Newswire*, (November 23)

about the nature of the activities that net users carry out in countries with a lack of freedom. Cyber-pessimists have assumed that those societies lacking freedom make extensive use of cyberspace as a tool for political activism. However, their patterns of utilisation of the net are similar to those from democratic countries. The topics of most of the contents of the blogosphere are trivial matters. The demand for truthful information has been over-estimated. Then again however, the importance of entertainment as a means of escape, or as political demobilisation promoted by those particular regimes, has been under-estimated. On the other hand, political activism does not just move in one direction. The measures aimed at demanding liberties and participation co-exist with the fans of authoritarianism, who use cyberspace in order to demonstrate support for their governments or the official ideology, promoting a toughening of their policies or assisting with the persecution of dissident net users.

- d. The defence of the importance of cyber-activism ends up becoming a self-denying prophecy. The prevailing optimism about Internet has brought about the paradox of some of the more perverse effects of this technology, taking place when its users attribute certain unreal effects to them. Net users have carried out a kind of activism that, far from producing the desired results, has put them in a position of greater vulnerability when facing the anti-democratic forces. Those regimes are extremely prone to feeling insecure and to reacting in a tough way against those who they identify as potential threats. So it is easy to understand why this type of governments have, in an acritical way, assumed the vision that is taken from the West about the power of the net users and their nature of being a “Trojan horse”. Cyber-pessimists have become a priority target of their apparatus of repression, substantially limiting the room for manoeuvre that they can operate with. The dissidents’ actions are rendered sterile in the content of a constantly alert government. In spite of the small amount of impact that their activities have, they are subject to an extreme reaction in the form of arbitrary arrests, torture and prolonged periods of imprisonment. The logic for this tough approach lies in a fear that has been nourished by the optimistic predictions that are made from the free world about the capacity of these individuals to overthrow tyrannies.
- e. There is no “dictator’s dilemma”. It is a mistake for the cyber-pessimists to believe that tyrannies cannot develop a system that enables them to control Internet, without abandoning their economic benefits to do this. There are numerous examples of how it is possible for governments that have not abandoned the integration of their economies into the global market to exercise a subtle form of control of the net⁵. The key to this lies in performing this intervention by

⁵ SCHMIDT, E. and COHEN, J. (2010): “The Digital Disruption”, *Foreign Affairs*, Vol. 89, No 6, pags. 75-85.

means that make it possible to ensure that their citizens are not aware that they are making use of an instrument that is limited in terms of their capacity to access certain contents⁶. One of the most notable of these is the Chinese case. In a sustained way, its government has been able to blend a strict form of political control of cyberspace with certain high rates of economic growth. In order to achieve this, it has made use of mechanisms such as crowdsourcing of the tasks of censorship and ideological repression in the Chinese society itself. One of the most noteworthy examples is the so-called “50-cents party”. This name makes allusion to the amount of money that the net users allegedly receive for providing their support to the Chinese regime, patrolling the net, participating in chats and in forums where politics is discussed, or simply filling up cyberspace with contents supporting the regime. According to some studies⁷, the members of this “party” could number some 280.000 Internet users, a figure that has enabled the Chinese government to exercise real control over the immensity of information and interactions that take place in cyberspace every day.

We can find another interesting example of this crowdsourcing in Iran. After the protests about the 2009 electoral fraud, the Iranians who urged these Internet demonstrations left a trail (both virtual and physical) behind them, which enabled the regime to create an authentic catalogue of political opponents. The authorities then put up a web site where over a hundred photos of the demonstrators that the police had taken were published, with the intention of getting the net users to help them to identify the dissidents.

Another reason that explains why Internet censorship in those countries is of a discreet nature is that sometimes it is not the governments that censor the net, but rather this is done by the particular companies providing the services and they are the ones responsible for performing these functions⁸. These types of governments demand that the companies accept their local guidelines about Internet use⁹, which may include a prohibition against hosting or providing access to certain web sites, to share information about the users and their browsing habits, or even a prohibition against encrypting contents. In this way, the regime has access at all times to the information that circulates within its borders. On the other hand, it is usually quite common for the responsibility for the existence of subversive contents to be extended to the platforms that host them. Under the threat of closure or the revoking of their licences, these companies

6 MACKINNON, R. (2011): “China’s “Networked Authoritarianism”, *Journal of Democracy*, Vol. 22, nº 2, pags. 32-46.

7 COOK, S. (2011): “China’s growing army of paid internet commentators”, *Freedom at Issue*, (October 10)

8 MACKINNON, R. (2012): *Consent of the Networked: The Worldwide Struggle For Internet Freedom*, New York: Basic Books.

9 BREMMER, I. (2010): “Democracy in Cyberspace”, *Foreign Affairs*, Vol. 89, Nº 6, pags. 86-92.

(including those from democratic companies) are compelled to censure themselves in terms of the materials that could cause problems with the authorities.

The deployment by the state of mechanisms for controlling Internet is subject to a continuous process of adaptation and improvement. The researchers Ronald Deibert and Rafal Rohozinski¹⁰ talk about three “generations” of techniques for controlling browsing. The first wave is focused on the “filtering” of the Internet contents and the monitoring of public spaces, such as “net cafes”, from where this technology is accessed. The second generation includes a legal environment that legitimates the control of the information, including informal requests to companies providing services to withdraw contents, the technical closing of web sites, or cyber-attacks being carried out against spaces that are beyond governmental control. The latest generation includes the legal prosecution through Internet surveillance, direct physical coercion to intimidate people and groups, and the compartmentalising of cyberspace, so that there are national “zones”. One example of this latter practice has been Iran setting up an “intranet”, cut off from the global net and “clean” of contents that are not permitted under Islamic law.

- f. *Boosting the repressive apparatus.* The network facilitates the tasks of the capture of intelligence and monitoring political dissidence. The governments, largely assisted by western companies, have developed mechanisms that enable them to process massive quantities of data about how the population uses this tool. For the first time, security organisations can simultaneously carry out effective and detailed control over the lives of hundreds of thousands of inhabitants. Spying on browsing habits enables the State to find out not only what type of information they produce and consume, but also whom they associate with. A large part of Internet access in developing countries is done via mobile telephones, a type of access that means it is easily possible to monitor this, and to identify the net user.

The information that is likely to be used in order to neutralise any inkling of dissidence can be captured, processed and filled using automated mechanisms. This technological development eliminates the human component in the processes of political repression, something that converts into something more implacable due to the fact that there is no room for empathy between censors and those they censor. The publicising of a considerable number of pieces of information, about the dissident captured through the net, causes a clear deterrence effect. Many of them decide to refrain from using Internet at all, considering that the government has made it illegitimate, under the widespread threat that their browsing could be tracked.

In the same way, autocratic governments are also Internet users and they make

¹⁰ DEIBERT, R. & ROHOZINSKI, R. (eds.) (2010): *Access Controlled: The Shaping of Power, Rights, and Rule in Cyberspace*, Cambridge: MIT Press.

use of this tool is as to virtually mobilise their followers, spread propaganda and misinformation, and infiltrating social networks so as to erode the value of the opposing discourse. Thus for example, at the start of 2011, the Mubarak regime sent messages via Internet with false information about the cancellation of the protests against the government. It equally used Facebook so as to inform citizens not to attend the protests, bemuse of the damage this would do to the economy. A much more aggressive form of misinformation is that one used by the Iranian regime in order to boycott the announcement of protests and demonstrations. Using the social networks, the Iranian intelligence service distributed information about the location of snipers, in a concealed way, and said that these would act when the demonstrators marched past.¹¹

4. Empirical evidence

Empirical research into the political effects of Internet has, for the most part, focused on its effects within consolidated democracies. This work has dealt with significant issues such as the effect of the Internet on the partisan competition¹², citizen political activism¹³, its impact on “social capital”¹⁴, or the possibility of exercising “direct democracy” via cyberspace¹⁵.

However, the amount of work that has dealt with the influence of the Internet on the democratisation processes is much less. The first ones, whilst detecting a certain degree of impact on the process of political opening-up, were unable to establish a strong relationship¹⁶. Pipa Norris¹⁷, for example, set out the existence of a significant

11 GEDMIN, J. (2010): “Democracy isn’t just a tweet away,” USA Today, (22 April).

12 BIMBER, B. (1988): “The Internet and Political Transformation: Populism, Community, and Accelerated Pluralism,” Polity, Vol. 31, nº 1, pags. 133–60; RASH, W. Jr. (1997): Politics on the Nets: Wiring the Political Process, New York: W. H. Freeman.

13 COLEMAN, S. (1999): “Can the New Media Invigorate Democracies?”, Political Quarterly, Vol. 70, nº 1, pags. 16–22; DAVIS, R. (1999): The Web of Politics, New York: Oxford University Press; NORRIS, P. (2000): A Virtuous Circle: Political Communication in Post-Industrial Democracies, New York: Cambridge University Press.

14 USLANER, E. M. (2000): “Social Capital and the Net”, Communications of the ACM, Vol. 43, nº 12, pags. 60–64.

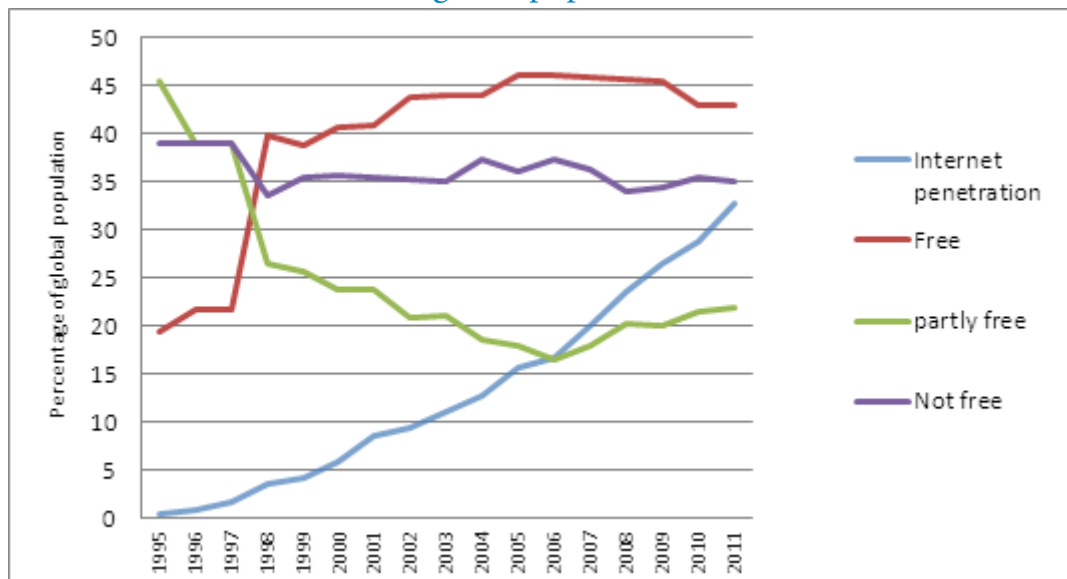
15 BUDGE, I. (1996): The New Challenge of Direct Democracy. Oxford: Polity Press; HAGUE, B. N. & LOADER, B. D. (1999): Digital Democracy: Discourse and Decision Making in the Information Age, New York: Routledge; RUBIO NUÑEZ, R. (2000): “Internet en la participación política”, Revista de Estudios Políticos, nº 109, pags. 285–302.

16 KEDZIE, C. R. (1997): Communication and Democracy: Coincident Revolutions and the Emergent Dictator’s Dilemma, Santa Monica, Calif.: RAND.

17 NORRIS, P. (2001): Digital Divide: Civic Engagement, Information Poverty and the Internet

correlation between democratisation and the number of Internet users in a country. But she also warned that it was political change that laid the ground for the spreading of this type of technology amongst the population, and not the other way around. More recently, Jacob Groshek¹⁸ did an analysis of the data from 152 countries for the period running between 1994 and 2003. Her work indicated a certain degree of correlation between democratisation and the diffusion of the Internet, although she pointed out that it was doubtful whether its effects could be deployed within countries that had not attained a minimum level of opening-up of the political process.

Figure 1: Internet penetration and the situation of political freedom* of the global population**



Notes: * According to the classification utilised by Freedom House, which catalogues countries as free, partly free and not free, depending on their levels of political freedom.

** The size of the world population has increased from 5,701 million inhabitants in 1995 to 6,967 in 2011.

Source: Own preparation based upon data from Internet World Stats and Freedom House

Despite these matters set out above, which advise making a considerable number of qualifications in the relationship between the Internet and political freedom, cyberoptimists and cyberpessimists are of the same opinion in categorically asserting that the dissemination of the Internet is an independent variable, capable by itself of explaining the expansion or the contraction of political freedom. There are few references in their documents to quantitative data, providing a disproportionate weight to the analysis of anecdotal examples, taken from a small group of countries and within a very limited time frame. However, their conclusions can be extrapolated to all of humanity.

Worldwide, New York: Cambridge University Press.

18 GROSHEK, J. (2009): "The Democratic Effects of the Internet, 1994_2003: A Cross-National Inquiry of 152 Countries", *International Communication Gazette*, Vol. 71, nº 3, pags. 115-136.

The forcefulness and simplicity of these statements should make it possible for a mere observation about the data to provide us with enough evidence to confirm the validity of one perspective or another. Nevertheless, as can be seen in figure 1, the worldwide expansion of the Internet has not had a correlation that is comparable to the global levels of political freedom.

In order to analyse how sound these visions are, we have undertaken a data compilation that cross-matches the Internet penetration variables and political freedom. Tables I, II and III have been produced on the basis of the data prepared by the *Internet World Stats*¹⁹ and the *Freedom House* Foundation²⁰. The first of these is a portal that offers annual data about the percentage of the population of a particular country that has access to the Internet. This is a reference point that enables us to measure the level of dissemination of this technology in a society. For the “political freedom” variable, we have used the index that is drawn up every year by *Freedom House*, which classifies all of the countries of the planet into three categories: free, partially free and not free. Each State is assigned a numerical value²¹ as a result of the application of a scale that comprises indicators that seek to measure aspects such as: the existence of elections and their nature; political pluralism and access to participation; the functioning of the state institutions, freedom of expression and beliefs, rights of association, the rule of law and the existence of individual rights and personal autonomy.

The selection of the countries shown in these tables is the same one as *Freedom House* follows in its 2012 report²² to highlight three types of situations of great relevance for the object of this simple exercise: the countries that record the worst situation of freedom (Table I), the countries that have undergone the best overall improvements in freedom (Table II), and the countries that undergone the biggest overall deteriorations in freedom (Table III) for the period 2008 - 2011. In order to study the evaluation over time of these variables, we have compiled data from the years 2000, 2005 and 2011. The aim of these three forms of segregation is to set out the evolution of the three variables stated at three significant times: the commencement of the slow roll-out of the Internet as a domestically-used technology, the period from which an exponential increase in access to it takes place in general terms, and the most recent time in which the highest historical levels of Internet penetration in the global population have been recorded.

This analysis has excluded those countries that obtain the highest scores in this

19 <http://www.internetworldstats.com/>

20 <http://www.freedomhouse.org/>

21 The scale covers values between 1 and 7, with 1 being the highest value of freedom and 7 the lowest. For Freedom House, the countries with scores between 1 and 2.5 are “free” countries, with scores between 3 and 5 they are “partially free” and with scores between 5.5 and 7 they are “not free”.

22 PUDDINGTON, A. (2012): “Freedom in the World 2012. The Arab Uprisings and Their Global Repercussions. Selected data from Freedom House’s annual survey of political rights and civil liberties”, Freedom House.

index of political freedom. Most of these had already attained the status of being full and consolidated democracies, a long time before this technology made its appearance. This is why it is reasonable to assert that the causes that spark off the processes of political liberation are not related to this instrument. The selection is therefore focused on those countries that start from a situation of a lack of political freedom and, where political authoritarianism is established that could be theoretically undermined or boosted as a consequence of Internet availability.

Confirming the cyber-optimistic hypothesis would generate the following expectation:

- a. As the number of Internet users in a country increases, the degree of political freedom in the same advances.

The cyber-pessimistic hypothesis, on the other hand, would be validated through the following behavioural pattern:

- b. As the number of Internet users in a country grows, a loss of political freedom takes place.

Table I: Countries with the worst situation of freedom and percentages of Internet penetration amongst their populations

COUNTRY	Free- dom Index* (2000)	Internet Penetra- tion ** (2000)	Free- dom Index* (2005)	Internet Penetra- tion ** (2005)	Free- dom Index* (2011)	Internet Penetration ** (2011)
NORTH KOREA	7	No data	7	No data	7	No data
TURKMENISTAN	7	0.1	7	0,7	7	2,2
UZBEKISTAN	6.5	0.1	7	5	7	26.8
SUDAN	7	0.1	7	1.3	7	9.3
EQUATORIAL GUINEA	7	0.1	6.5	3	7	6.3
ERITREA	6	0.1	6.5	2	7	4.8
SAUDI ARABIA	7	0.9	7	10.8	7	43.6
SYRIA	7	0.2	7	4,2	7	19.8
SOMALIA	6.5	0	6.5	0,6	7	1.1
BYELORUSSIA	6	1,8	6.5	25.3	6.5	46.3
MYANMAR (BURMA)	7	0	7	0	7	0,2
CHAD	5.5	0.1	5.5	0.5	6.5	1,8
CHINA	6.5	1.7	6.5	7.9	6.5	38.4
CUBA	7	No data	7	No data	6.5	14.5
LAOS	6.5	0.1	6.5	3	6.5	8.1
LIBYA	7	0,2	7	3	7	5.9

Notes: * Scale from 1 to 7, with 1 being the maximum degree of freedom and 7 the minimum.

** Percentages of the total number of population of a country.

Source: Own preparation, based upon data from the Internet World Stats and Freedom House

In regards to table I, it is necessary to point out that a large number of these countries, such as Eritrea, Somalia and Sudan are identified as some of the most under-developed States on the planet. This explains why only a limited part of their populations have access to the Internet, a technology whose cost is prohibitive within a subsistence context. On the contrary, in this group we also find countries in a situation of economic boom such as Saudi Arabia or China, where a significant process of spreading this technology amongst their populations has taken place. However, there are those in both groups that are States whose score has remained practically unchanged, not only during the period studied, but also in periods before the appearance of this technology. Hence, the situation of the absence of political freedom is a stable characteristic, which has not been affected by this instrument. The data from the first group do not support the cyber-optimists' argument, at least as regards its effects in the short or medium term. The cyber-pessimists' argument could only be indirectly validated if we speculate about the possibility that the Internet has been a decisive factor in the capability of those regimes to maintain the same levels of political repression during recent years. However, the example of North Korea also makes it possible to assert that perpetuating totalitarian regimes is possible without the need to use the Internet as an instrument of social control.

Table II: Countries with the biggest overall increases in freedom between 2008 and 2011 and percentages of Internet penetration within their populations (2000-2011)

COUNTRY	Freedom Index* (2000)	Internet Penetration ** (2000)	Freedom Index* (2005)	Internet Penetration ** (2005)	Freedom Index* (2011)	Internet Penetration ** (2011)
TUNISIA	5.5	1	5.5	8	3.5	33.9
MALDIVES	5.5	1.5	5.5	13.7	3.5	28.9
BANGLADESH	3.5	0.1	4	0,2	3.5	3.5
PAKISTAN	5.5	0.1	5.5	6	4.5	15.5
TOGO	5	1.5	5.5	3.5	4.5	5,3
THAILAND	2.5	3.4	3	15.4	4	27.4
M Y A N M A R (BURMA)	7	0	7	0	6.5	0,2
EGYPT	5.5	0.7	5.5	6	5.5	26.4
LIBYA	7	0.2	7	3	6.5	5,9
BHUTAN	6.5	0	5.5	2	4.5	13.9

Notes: * Scale from 1 to 7, with 1 being the maximum degree of freedom and 7 the minimum.

** Percentages of the total number of population of a country.

Source: Own preparation, based upon data from the Internet World Stats and Freedom House

A large part of the data set out in table II could be interpreted as supporting the cyber-optimistic argument. All of those are countries that have, in recent years, experienced an improvement in their indices of political freedom. This form of evolution seems to run in parallel with Internet dissemination amongst their populations. Thus, for example, while Tunisia, the Maldives or Egypt record an exponential increase in just a few years, it continues being a marginal tool in other States such as Libya, Myanmar or Bangladesh, and so we can discard the argument of this being the main influence in the processes of the increase in freedom in recent times.

Table III: Countries with the greatest overall decreases in freedom between 2008 and 2011 and percentages of Internet penetration within their populations (2000-2011)

COUNTRY	Freedom Index* (2000)	Internet Penetration ** (2000)	Freedom Index* (2005)	Internet Penetration ** (2005)	Freedom Index* (2011)	Internet Penetration ** (2011)
GAMBIA	6	0.2	4.5	4	5.5	8.8
MADAGASCAR	3	0.1	3	1.5	5	1.6
MAURITANIA	5.5	0.1	5	1.5	5.5	3.1
BAHRAIN	6.5	5.7	5	30	6	57.1
ETHIOPIA	5	0	5	0,2	6	0.7
NICARAGUA	3	1.1	3	2.2	4.5	10.6
UKRAINE	4	0.4	2.5	10	3.5	33.9
AFGHANISTAN	7	0	5	0.9	6	4.2
YEMEN	5.5	0.1	5	1.1	6	10.8
BURUNDI	6	0	4	0.5	5	1,7

Notes: * Scale from 1 to 7, with 1 being the maximum degree of freedom and 7 the minimum.

** Percentages of the total number of population of a country.

Source: Own preparation, based upon data from the Internet World Stats and Freedom House

In Table III, we find examples that apparently support one theory and the other one. The cyber-pessimists could argue that the degradation of freedom in recent years in countries such as Bahrain and the Ukraine corresponds to high levels of penetration of this technology. On the other hand, the advocates of the liberating nature of the Internet could explain the deterioration of freedom, in countries such as Madagascar or Burundi, given the impossibility of these populations being able to access this so as to promote their struggles for freedom and democracy.

In short, we find considerable mixed evidence in the different examples studied. Analysing the data does not allow us to assert that the spreading of the Internet is the explanatory cause that places conditions on the evolution of political freedom in one direction or another. The cyber-pessimists and cyber-optimists arguments describe, in theoretical terms, a strong correlation between the spreading of this technology and

the political evolution of the societies. However, the data do not support the existence of any of those determinisms. Although there is no doubt that Internet may be an important element in explaining the political development of a country it does not, by itself, constitute a factor capable of determining how events go. In this respect it becomes one more cause involved, whose strength is qualified by the particular characteristics of each situation.

5. Conclusions

Despite the fact that cyber-optimists and cyber-pessimists seem to maintain irreconcilable positions, both of these focuses possess multiple points in common.

Firstly, these positions are based on a technological determinism, consisting of attributing an inexorable link between the appearance of a new technology and the generation of wide-ranging social and political changes. While some consider that democratisation is an inevitable derivation of the Internet, others warn that this instrument is irreversibly generating a wave of political involvement and loss of freedom.

In both perspectives we can infer a certain simplification in the causes that feed the processes of political change. When cyber-optimists talk about the Internet paving the way towards the establishing of democratic systems, they over-estimate the role of freedom of expression and of information as requirements for democracy. At the same time, the fail to take sufficient account of structural factors such as the level of economic and educational development of a society, the prevailing political culture, historical experience, the international context or the quality of the political elites. The forecasts that the cyber-optimists make about the impact of the Internet on societies lacking freedom point to the short and medium term, without taking account of that historical evidence that indicates how the establishing of viable democracies has been the result of prolonged historical processes, full of ups and downs. The title of one of the articles by Jeffrey Gedmin, the former president of *Radio Free Europe/Radio Liberty*, clearly summarises the difficulty of a process culminating in success: "Democracy isn't just a tweet away"²³.

At the other end of this simplification, we find the cyber-pessimists, who attribute an inexorable character to the processes of the degradation of freedom, arising from the new information technologies. Their forecasts even extend to consolidated democracies, as they consider that the Internet will end up detracting from the liberal nature of those systems. However, they do not give consideration to the fact that technological instruments do not display their results without resistance. The people, the organisations and the institutions react to forces of change that affect their priorities and their interests. Many of these effects are neutralised by the active or passive resistance of those involved that are not immune to phenomenon that affect them.

23 GEDMIN, J. (2010): "Democracy isn't just a tweet away," *USA Today*, (22 April).

The arguments used by both positions stem from a world-view about the Internet and its effects, based upon metaphors that fail to adequately encapsulate the nature of this technology or the behaviour of those who use it. Thus, for example, they speak about the “Great Firewall of China” or the “Iron Curtain 2.0”, so as to allude to the Internet control instruments deployed by the regime. However, these mechanisms do not resemble any barrier in their natures by means of which it is intended to isolate the country from the rest of the world. Neither is it true, that the best method for overcoming them is to open up any “breaches” in a “virtual wall”. Another recurring metaphor, for instance, is referring to Internet as a “Trojan horse”. A seemingly harmless technological innovation, which once it has been inserted in a society, it is capable of generating a transformation process that it is not possible to halt. However, this supposed concealing nature of Internet could also be understood from the perspective of the regimes that promote the dissemination of this technology as increasing social control and promoting their instruments for the surveillance and monitoring of subversive activities.

In spite of the fact that these metaphors are not true to the technical nature or material requirements of the Internet, these and other mental images have played an important role when it comes to conceptualising the problem and guiding the formulation of public policies.

Both perspectives contribute elements towards properly comprehending the impact of these technologies on political change. Cyber-optimists are right when they indicate how they have facilitated the capacity of the citizens to control political power, express their opinions or increase the horizon of political participation. The pessimists, on the other hand, have understood how to connect those potentialities with the parallel development of a sophisticated system for controlling the net and monitoring its users. However, they are wrong in attributing the cause of its effects to the particular instrument. What they consider to be structural characteristic of Internet does not stop being the mere consequences of human actions. Users are the only ones in charge of the nature of the political change. Both democrats and autocrats compete to dominate this technology and place it as the service of their objectives. The tool has a neutral value, and there is nothing intrinsically pro-democratic in it or that it is used for curtailing freedoms. So, it is not the instrument itself that determines the result of this struggle, but rather the context of the political and social organisation; and above all, that factor that determines who will be the winner at any time is the skill of the people involved. As professor Larry Diamond states: “in the end, the technology is merely an instrument, open to noble and nefarious purposes. (...) it is not the technology, but rather the people, the organisations and the governments that determine who will prevail”²⁴. The Internet contributes a fresh game context, and a set of rules that can be largely taken advantage of by some and others. However, the balance sheet resulting from the struggle between freedom and authoritarianism is not determined in advance. The result is not unchangeable either, and it is logical that will be subject to on-going reviews as the political activists involved find new windows of opportunity or to develop new strategies.

24 DIAMOND, L. (2010): “Liberation Technology”, *Journal of Democracy*, Vol. 21, Nº 3, pages. 69-83.

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