

GOVERATI: E-ARISTOCRATS OR THE DELUSION OF E-DEMOCRACY

Ismael Peña-López ¹

Abstract

When disaffection on political parties and politicians is pervasive, most argue whether it could be possible, thanks to the Internet – and Information and Communication Technologies in general – forget the mainstream political system and let the citizenry express their own opinion, debate in virtual agorae and vote their representatives and policy choices directly. In other words, the claim is whether the actual intermediaries can be replaced by citizen networks or, in the limit, just be overridden.

Our aim in the following lines is to (1) explain that some dire (socioeconomic) changes are actually taking place,(2) why these socioeconomic changes are taking place and (3)infer, from this, what conditions shall take place in the future for (4) another wave of changes to happen that could eventually a much acclaimed new (e-)democracy.

1. The Democratic System in the Industrial Society

1.1. The Industrial Revolution and the Industrial Society

Over the last 250 years or so, the Industrial Revolution and its effects have defined and shaped the World as we know it [41], [42]. Around one-third of the World's population have achieved undreamed levels of prosperity. A further third are beginning to benefit from at least a basic level of welfare and the provision of services such as education, healthcare and housing. But the remaining one-third have not yet seen the benefits of the Industrial Revolution and, in the worst-case scenario, may even be a casualty of the trends that are benefitting the richest segment of society.

In a very simplified model of things, the industrial revolution tamed Nature and intensified the way things were done – the production process – by adding specific amounts (huge, on pre-industrial standards) of capital. Thus, input was transformed into output by the interaction of labour with capital, as it is shown in Figure 1.

Capital allowed for increased productivity of labour, higher production scale and, above all, worsening two big issues humankind was already facing:

- Scarcity, of resources of all kind (input, labour and capital), and
- Transaction costs, that is, the costs to move, put together and coordinate the aforementioned resources, now including the allocation of output.

¹ Internet Interdisciplinary Institute / Open University of Catalonia, Av. Tibidabo, 39-43, E-08035 Barcelona, Spain

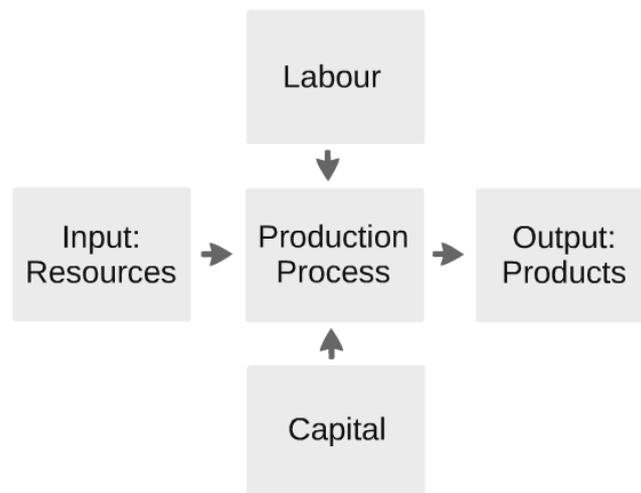


Figure 1: A basic structure of the production system

In fact, it was the industrial revolution that brought with it a renewed science to manage scarcity: Economics.

And it was the need to manage – and, over all, reduce or minimize – transaction costs that catalyzed the appearance of intermediaries [15]. In fact, Ronald H. Coase was referring to the firm, but his reflections are is easy to extrapolate to the political arena.

1.2. Political Intermediaries in the Industrial Society

Even if quite heterodox – and maybe even most inappropriate too –, let us look at the democratic system strictly from an economic point of view.

And let us outline a simple democratic process in just five steps:

- 1) Information, where the citizen gathers the information they need to initiate the process;
- 2) Deliberation or Argumentation, where the citizen shapes their own opinion and builds their arguments to back it;
- 3) Opinion Sharing and Negotiation, where all citizens share their preliminary opinions and, in some cases, bargain in order to ensure their top preferences in exchange of their less preferred ones;
- 4) Voting or Expliciting Preferences, where a collective decision is been made;
- 5) Accountability, where the goals agreed on the collective decision are tested for performance.

Under our economist approach, steps (1) and (5) are fully ruled by scarcity: information is scarce. On a pre-digital era, all the citizens need to get the necessary information to initiate an appropriate democratic process and to test its performance is usually stored in the Government’s paper archives in some basement’s building in the capital (if it is public information), or in some arcane scholarly journals in a Library (if it is some technical or scientific reports or articles). This information is difficult to be accessed and expensive to be replicated or reallocated.

Deliberation, sharing opinions and casting votes requires people physically gathering together, as long and as many times as the democratic process demands it until a specific step can be considered

complete. While voting can be relatively quick, opinion sharing is surely not. The transaction costs of bringing people together, coordinating their interactions and trying to reach some common output are certainly huge.

If we agree with Coase's theorem, it is just normal that some institutions, some intermediaries had to appear to optimize scarcity management and minimize transaction costs. These institutions were governments and political parties.

2. The Democratic System in the Information Society

2.1. The Digital Revolution and the Information Society

Now, a new revolution – the Digital Revolution – is again reshaping the World and is promising to overcome at least some of the disadvantages of place and time that marked the Industrial Revolution [60]. With the appearance of computers during the second half of the 20th century, the development of personal computers in the early 1980s, and the boom caused by the opening to the public of the Internet and mobile telephony during the last decade of the XXth century, the landscape we are living in has radically changed.

This revolution [29] has especially become a digital revolution thanks to the broad diffusion of the transistor from the mid-1970s onwards [60]. For the first time in History, information has become input, capital and output in economies based on information systems. More and more there are processes whose one and only goal is enrich information in many ways: purify raw data out of “noise”, cross it with other data so they make more sense and become information, changing the way information is presented or visualized, etc. Whether the output should be called data, information or knowledge or not is beyond the scope of this work , but the existence of a process to transform information is something quite recent and almost exclusively from this period of time. And not only is there a creation of more and better knowledge, but the same existing knowledge can now be better accessed and thus make a difference.

Our in Figure 1 now looks slightly different:

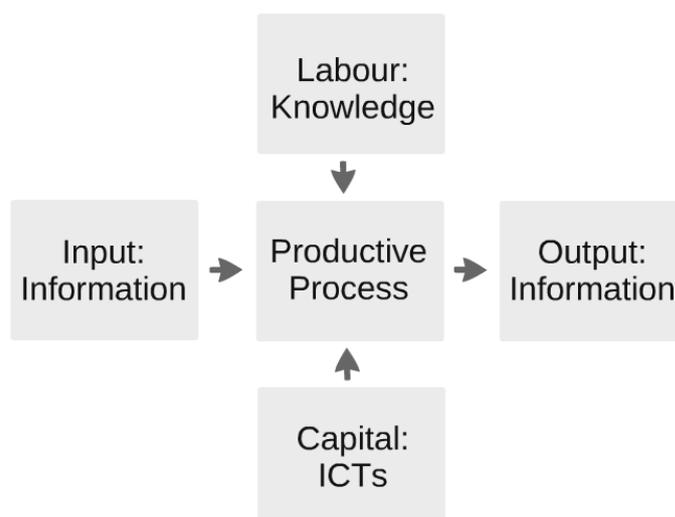


Figure 2: A basic structure of the digital production system

This new scenario is characterized by a dire change in what we considered scarcity and transaction costs due to the transformation inflicted by Information and Communication Technologies (ICT).

On the information side of ICT, scarcity can be considered a matter of the past: digital goods can be reproduced and transferred at almost no “physical” cost. On the Communication side of ICT, transaction costs are also reduced almost to null once some basic infrastructures and connectivity services are provided.

Although it is not clear what will happen to the intermediaries, it is sure that their role will definitely be transformed [3], [4].

2.2. Political Intermediaries in the Information Society

If we go back to the outline we depicted for the democratic process, and we look at the relationships of each step with scarcity and transaction costs, things have certainly changed. Access to public or technical information is, if not free, costless. It is at least feasible that all the information can be copied for every citizen or freely accessed by them in the source (a digital database). New information and in new formats can be created and distributed also at (almost) zero cost.

At the transactions level, putting the whole citizenry together and have a debate is no more a matter of economic costs. Potentially, each and everyone can concur, debate, negotiate and vote as times as necessary or wished. People can communicate with each other regardless of status or role in the society. Everyone is equally informed and there are no physical barriers to make true that every citizen has a vote.

The democracy factory can now run without bothering about input, labour or capital, and its machines can be put to work to produce each and every output imagined, from electing a new director for the town theatre to create the yearly budgets for the whole country.

If there are no barriers and there are no costs to minimize, what is then the role of intermediaries? What is the role of governments (or the greatest part of them) and, especially, political parties?

2.3. Some Examples of an Upcoming e-Democracy

Following we list some unsorted, uncategorized collection of real initiatives that perfectly highlight what is possible in democracy when there is no scarcity of the building bricks of democracy (information, communication channels, agora) and the transaction costs are near zero:

- Blogs by non-professional politicians (<http://www.xavierpeytibi.com/>)
- Maps for America (<http://www.mapsforamerica.com/>)
- Global Voices Online (<http://globalvoicesonline.org/>)
- Twitter and the Iran June 12th 2009 Presidential Election or #iranelection (<http://twitter.com/#search?q=%23iranelection>)
- June 2009 elections at the European Parliament (http://www.europarl.europa.eu/parliament/archive/elections2009/en/index_en.html)
- Fes Europa (<http://www.feseuropa.cat/>)
- Ideas para la sanidad pública on Facebook (<http://www.facebook.com/group.php?gid=35388768771>)
- Blogs by professional politicians (<http://don-aire.blogspot.com/>)

- 65 Hours? In your Dreams! (<http://www.facebook.com/group.php?gid=21135624273>)
- Por la Revocatoria del Mandato de Samuel Moreno (<http://www.facebook.com/group.php?gid=21388051320>)
- His choice (<http://www.youtube.com/watch?v=5eUz13-pmTY>)
- Read my lips (<http://www.youtube.com/watch?v=gb1GQ2ioFuc&feature=fvst>)
- Ushahidi.com - Mapping Reports of The Post-Election Crisis in Kenya (<http://legacy.ushahidi.com/>)
- Conmidinero.com - Cuestionando el gasto público en España (<http://www.conmidinero.com/>)
- They work for you (<http://www.theyworkforyou.com/>)
- Help lobby congress on s.482 (<http://blog.sunlightfoundation.com/2009/03/11/help-lobby-congress-on-s-482/>)
- Parlament de Catalunya - Parlament 2.0 (<http://www.parlament.cat/portal/page/portal/pcat/IE08>)
- VoteWatch.eu European Parliament (<http://www.votewatch.eu/>)
- Open congress (<http://www.opencongress.org>)

2.4. Potential benefits of e-democracy and democracy 2.0

Most of these examples can be framed in e-democracy and, moreover, democracy 2.0. The Web 2.0 [47], at a philosophical level, is about the spread (and enabling) of a contribution and participation culture by the society at large (and not only by institutions or organized associations); the acknowledgement that anyone could actually contribute with their knowledge and opinion (the “wisdom of crowds”); the raise of a culture of mixing, assembling and aggregating content; and the will to have rich user experiences when interacting online (vs. A passive, unidirectional, monotonous approach which had been common ground in the previous years).

At the political level we can describe Politics 2.0 as composed by the following characteristics:

- Ideas: not closed and packaged propaganda. Ideas that can be spread, shared and transformed by members of the party and partisans, sympathizers and supporter, and the society at large;
- Open data: ideas are backed by incredible amounts of data and information made openly available to the general public, and most time provided with open licenses that allow their reuse and remix;
- Participation: of all and every kind of people and institutions, blurring the edges of the “structures” and permeating the walls of institutions, making communication more horizontal and plural;
- Loss of control of the emission of the message, that now can be transferred outside of mainstream media and diffused on a peer-to-peer and many-to-many basis by means of web 2.0 tools;
- Loss of control of the creation itself of the message: being data and participation available, web 2.0 tools at anyone’s reach, and with minimum digital competences, the message can even be created and spread bottom up;
- Acknowledgement, hence, of the citizen as some who can be trusted (and used) as a one-man think-tank and a one-man communication-media;
- Reversely, possibility to reach each and every opinion, target personal individuals with customized messages, by means of rich data and web 2.0 tools, thus accessing a long tail of voters that are far from the median voter;

- Construction of an ideology, building of a discourse, setting up goals, campaigning and government become a continuum that feeds back in real time.

These issues have been said by several authors to have the following consequences. On citizens:

- The increased importance of having a well defined and managed digital identity;
- The possibility to have a first-person voice in the political agora;
- More possibilities for participation, engagement
- Community building
- A shift towards deliberative democracy
- An increased conversation on political matters
- Participation in the agenda setting
- More focus on local politics, normally forgotten from “big” politics
- All topics can now be covered, even the more marginal
- Concurrence of more people potentially enables a collective „wisdom“ to build richer debates
- Independent information as a source of democracy
- Multiple sources of information
- Monitorization is made easy and cheap, and at anyone’s reach
- Visual and multimedia information helps in understanding complex issues for the less literate
- Immediacy of events, as things are communicated as they happen, without lags and with short response times
- Virality lets messages get to all possible targets
- The message also travels crossing different media, crossmedia

For political parties:

- New institutional channels are now at reach
- Cyberpolitics and cyberactivism change the way – not only the channel of platform – that information and communication spreads
- The professional politician has a new role within the party and between the party and the citizen
- Grassroots engagement is enhanced

For governments:

- More requirements for transparency, and more tools to enforce it
- Same for accountability
- Digital data and digital acts are more traceable, meaning that not only transparency and accountability are enhanced, but also each and every single thing the government does can be put into the public’s hands
- Social control is increasingly possible, as power is more distributed
- The citizen asks for an open government, with open data and open communication channels

3. Some barriers to a new (e-)Democracy

In the previous section we have deliberately been optimistic about the possibilities and the potentials. In fact, the possibilities and the potentials are actually there. Turning them out into realities, changes and impact is another matter.

3.1. The Digital Divide

Let us define the digital divide according to the following comprehensive 360° digital framework [50], [51]:

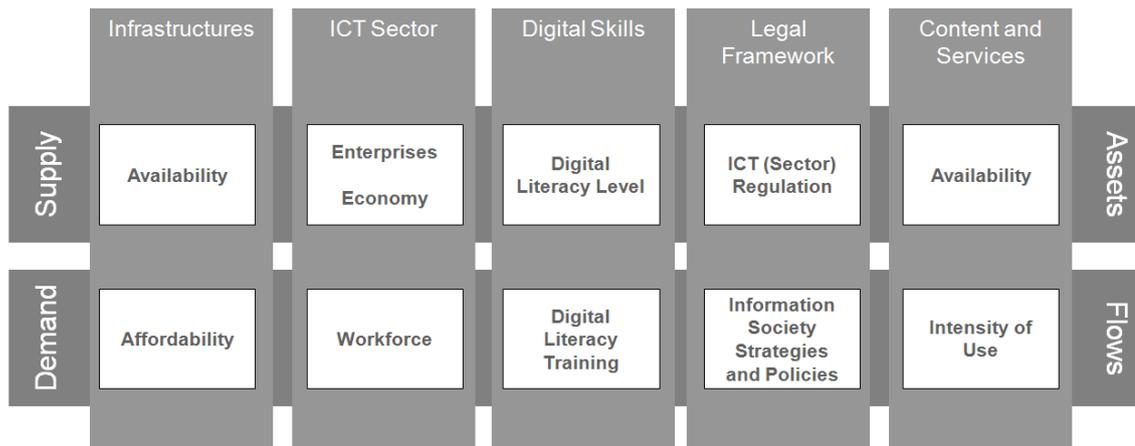


Figure 3: A comprehensive 360° digital framework to model the digital economy [50]

The definitions of the featured categories in Figure 3 are as follows:

- 1) Infrastructures: Information and Communication Technologies. They are divided into three groups: hardware, software and connectivity.
 - 1a) Infrastructures, Availability: the mere existence of these infrastructures.
 - 1b) Infrastructures, Affordability: the relationship of the cost of provision or acquisition of such infrastructures in relationship with one individual or community's economic power.
- 2) ICT Sector: Economic sector related with the provision of ICT Infrastructures
 - 2a) ICT Sector, Enterprises / Economy: Existence of firms whose activities can be comprised in the definition of the ICT sector.
 - 2b) ICT Sector, Workforce: Skilled employees that work or are related with the ICT Sector and its activities .
- 3) Digital Skills: Skills related with both the use of electronic devices and the use of information in digital format
 - 3a) Digital Skills, Digital Literacy Level: The measured levels of such skills in an individual or a community, both in number of literate people and degree of their literacy.
 - 3b) Digital Skills, Digital Literacy Training: The existence of courses, curricula or other training plans to increase the Digital Literacy Level.
- 4) Policy and Regulatory Framework: Whether there are explicit rules, laws, policies, etc. that directly affect and try to put in order the Digital Economy.
 - 4a) Policy and Regulatory Framework, ICT (Sector) Regulation: Rules created by the Legislative branch or other regulatory bodies to regulate the Digital Economy, especially the ICT Sector and its activities.

- 4b) Policy and Regulatory Framework, Information Society Strategies and Policies: Policies, strategic plans, etc. created by the Executive branch or other governments to frame their Digital Economy related policies.
- 5) Content and Services: Contents and services in digital form.
 - 5a) Content and Services, Availability: The existence of such contents and services, including the ones arising from the private sector (for or without profit) and the public sector.
 - 5b) Content and Services, Intensity of Use: The use of such content, measured both quantitatively and qualitatively.

We will not list here a collection of literature and data sources providing evidence of the long way that all societies – to different degrees, of course – have to run until overcoming all the different aspects of the digital divide we have just describe. Suffice it to say that, even within countries, many citizens still do not have full access (either physical or practical) to ICTs.

3.2. Digital Adoption

Just not to leave the reader without any facts and figures at all, we have gathered in this section some very relevant data especially related with usage, which is what might be more relevant to e-Democracy. All data come from Eurostat (date of retrieval March 31, 2010) and are related to Europe-27:

- Individuals who used Internet, in the last 3 months, for obtaining information from public authorities: 27%
- Individuals who used Internet, in the last 3 months, for advanced communication services: 38%
- Individuals who used the Internet in the last 3 months: 65%
- Individuals who have never used the Internet : 30%
- Individuals who accessed the Internet, on average, every day or almost every day in the last 3 months: 48%
- Individuals who ordered goods or services, over the Internet, for private use, in the last 3 months: 28%
- Enterprises' total turnover from e-commerce over the last calendar year: 12%
- Individuals who have carried out 5 or 6 of the Internet related activities (search information, attach a document on an e-mail, used chat applications, used phone over the internet, used P2P applications, created a website): : 8%
- Individuals who have carried out 5 or 6 of the computer related activities (launch programmes, copy files, copy/cut/paste text on word processors, used basic features of spreadsheets, compressed files, written programmes): 25%
- Individuals who have not done any of the previous computer related activities: 10%
- Individuals who judge their computer skills to be insufficient if they were to look for a job or change jobs within a year: 25%

Summing up, European citizens at large and taken aggregately, are neither proficient nor comfortable using both computers and the Internet. At least they are not on an intensive, high-skills level. Just a minority – and a tiny one in some cases – are browsing the Internet at full throttle and taking the best of it.

Who are they?

3.3. Digital Competence

We here provide a comprehensive definition of digital skills [51]:

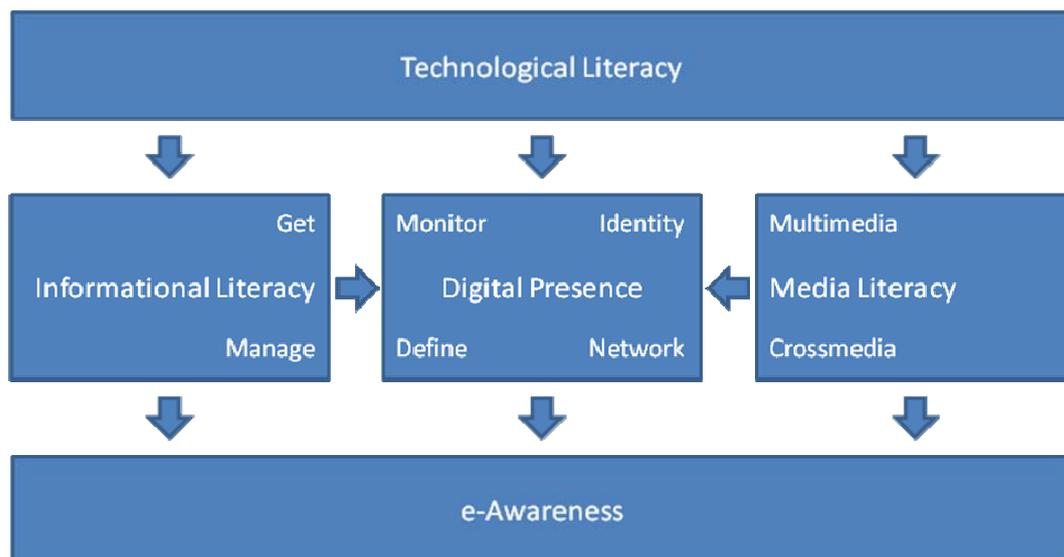


Figure 4: Towards a comprehensive definition of digital skills

Where concepts are:

- Technological Literacy: the skills to interact with hardware and software;
- Informational Literacy: the competences to deal with information, normally by means of ICTs (applying Technological Literacy). We could draw here two stages: a more instrumental one, related on how to get (relevant) information, and a more strategic one related to how to manage that information (or knowledge, if we speak of personal knowledge management);
- Media Literacy: skills and competences to deal with several media, make them interact and integrate them in a single output. It could also be drawn a lower level, multimedia, where interaction would be more mechanical, and a higher one, crossmedia, where interaction and integration would respond not to technical possibilities but to a strategic design, building an ecosystem of different media (and not a simple multimedia output);
- Digital Presence: Is centred in the person. These are the digital skills to monitor and establish a digital identity, and the skills to actively define it and use it for networking or interacting with other people digitally;

- e-Awareness: the most strategic (even philosophical) stage is the one related with being aware on how the world and our position — as a person, group, firm, institution — varies because of digital technologies

These concepts could be rephrased as:

- Technological Literacy: HOW
- Informational Literacy: WHAT
- Media Literacy: WHERE
- Digital Presence: WHO
- e-Awareness: WHY

According to the data presented in our previous section, we here state that there is only a fraction of the population that masters all these five literacies. Five literacies that, in the political arena are held by an elite of citizens that are both tech-savvy and public-affairs-savvy: the Goverati.

4.2. Goverati

Goverati are situated in the core of the emerging digital society. They master the ways and discourse of the industrial society and they master the means and channels of the upcoming Information Society. Willingly or not, they do not represent but a small part of the citizenry, though their voice is heard out loud in the digital agorae.

	School	Firm	Government	Citizen
Technological Literacy	New learning methodologies Ability to evaluate new information			
Informational Literacy	New learning methodologies Ability to evaluate new information	Life-long learning		Empowerment
Media Literacy	New learning methodologies Ability to evaluate new information		4 th & 5 th Estates Open government Goverati	Empowerment User Generated Content
Digital Presence	e-Portfolios Personal Learning Environments	Networking e-Portfolios	Transparency Accountability Participation	Identity Socialization
e-Awareness		Business models Self-programming Connected worker	Participation Connected institution	Privacy & Security Participation Connected citizen

Figure 5: Application of comprehensive digital skills in everyday life

Ignorant that the major part of the population is being left behind – because of lack of physical access to ICTs, because of lack of digital competences, because of lack of interest in politics and

public affairs in general – Goverati are creating a biased e-Democracy that might be diverging from what cyberoptimists – many of them Goverati themselves – had in mind.

4. The Delusion of e-Democracy?

A research carried on by Marta Cantijoch [8] showed that it is critical citizens the ones who use the Internet more frequently for political issues, the reason being that they find in the online agora a place (still) not controlled by political, economical or media elites. This is not a contradiction with Jensen's findings [35], but a complementary approach: citizens do not usually participate because they trust institutions, and it is the ones that do not the ones that are active on the Net. Adding to this, there is a pre-existing proclivity to use extra-representational modes of participation that is in fact reinforced by these people going online to bypass political elites – or to replace some elites by new ones.

We are also witnessing that the “knowledge gap” [58] in the political system – where where the more educated people would increase their information level on topics that where debated in relationship with their less educated peers – does not only decrease but is increased due a higher exposure to online information, becoming the Internet a gap increaser and not a knowledge leveller, as intuition might lead to think [1].

Related to blogging, the paramount practice among e-democracy defenders, if blogging has then to become a Fifth Estate [20], blogging has to be influent on the political agenda. Just after the first Internet-intensive US presidential campaign, the Institute for Politics, Democracy & the Internet [33] identified and analyzed the political “influentials” of that campaign and depicted their behaviour online. Their main findings can be summarized as follows:

- 1) Offline influentials are online influentials too; just rarely online influentials come out of the blue and pop up on the Internet;
- 2) People – non influentials – look for them and value their opinions, which is what makes of them influential;
- 3) Influentials are engaged people and are already very active within their communities;
- 4) They are at the cutting edge of events, 2 to 5 years ahead the rest of the world in terms of what is going to come;
- 5) They are deeply interested in politics and, if do not pretend to make a change, at least they want to be aware of the changes;
- 6) Poli-Influentials are people that are influential in many contexts and ways; they have usually (and significantly) reached a higher education level, being 60% of them post-graduates
- 7) The more educated citizens are, the more influential activities people engage in, but in just the same proportion (online and offline, e.g. imparting a conference and writing an article) that other people not as much engaged;
- 8) As expected, passive activities get the lion's share vs. proactive activities in the ladder of engagement or activism.

The problem with the blogosphere is, nevertheless, the mere nature of the Internet, different from face-to-face relationships. If the IPDI already depicted a strong dependency of online engagement or influence from “real life” or offline activities, Jacobson [34] lists a wide range of reasons and variables why the same message could be understood in radically different ways when communicated by online means.

Because of this, because of affinity and birds of a same feather flocking together more easily on the Net, because of a combination of both, there is a risk of people systematically flocking together to avoid misunderstandings and reinforce their own messages and points of view. Sunstein [56] thus warns against the tendency that instead of being exposed to more and more plural information about politics, people will end up choosing only the information that represents their ideological views, creating a sort of “daily me” and diffusing on and on the messages of the same kind. The addition of such individual behaviours in a friendly online community will end up creating echo chambers [37], [38] where just a few political messages will resonate: the ones with which we are comfortable and agree with.

Political campaigning is not different from political blogging. It is absolutely beyond any shade of doubt that campaigning has been reshaped because of the pervasiveness of the new digital media. In Howard’s [32] own words “established political elites use database and Internet technologies to raise money, organize volunteers, gather intelligence on voters, and do opposition research”. In this sense, parties have increasingly entered and mastered – and even conquered, many would say – online platforms to make their discourse and propaganda in both quantitative and qualitative ways: more available to more people, more focused and personalized for more specific profiles. Gomis [26], [27] also elaborated this problematic issue in a pre-Internet age.

According to Franco Álvarez & García Martul [24], and based on their research of the Spanish presidential elections in 2008 and the role of citizen networks, the promise of a digital agora where plural voices can find a place and be heard is far from being true. Far from being a place for discussion and debate, the Internet is seen by political parties as yet another place where to harvest voters. Of course, being it a new media, new(-ish) strategies are put to work so that their campaigns penetrate in each and every multimedia and online platform. But the result of it all is that the digital sphere is conquered with yet the same message, making all media converge in the same, single message.

Of course, we have here let aside matters related to filtering and censorship [43] which would be the equivalent of Gerverati gone wrong – or gone worse, or matters related with unequal access to Information and Communication Technologies, that is, how a digital divide can increase political inequality [28].

5. Concluding remarks: from e-excluded and structurally irrelevant to the system

We believe that the main aspect to address to achieve good e-Democracy is not the “e-” part, but the “Democracy” part. The differences, for instance, amongst USA and European e-politics are more related with the political system rather than the different rates of Internet adoption or digital literacy (which are not that significantly different).

Within the framework of the digital economy, it is surely indeed – and again relying on data – digital competences what really matter, especially its appropriation by citizens to empower them in their daily routines, and including democratic participation amongst these “routines”. Thus, new media literacies will be required too: as we learnt to tell true from false when watching TV or FX-intensive movies, we will have to learn to tell true from false in new political discourses spread through digital platforms, either by institutions (governments, political parties) or individuals.

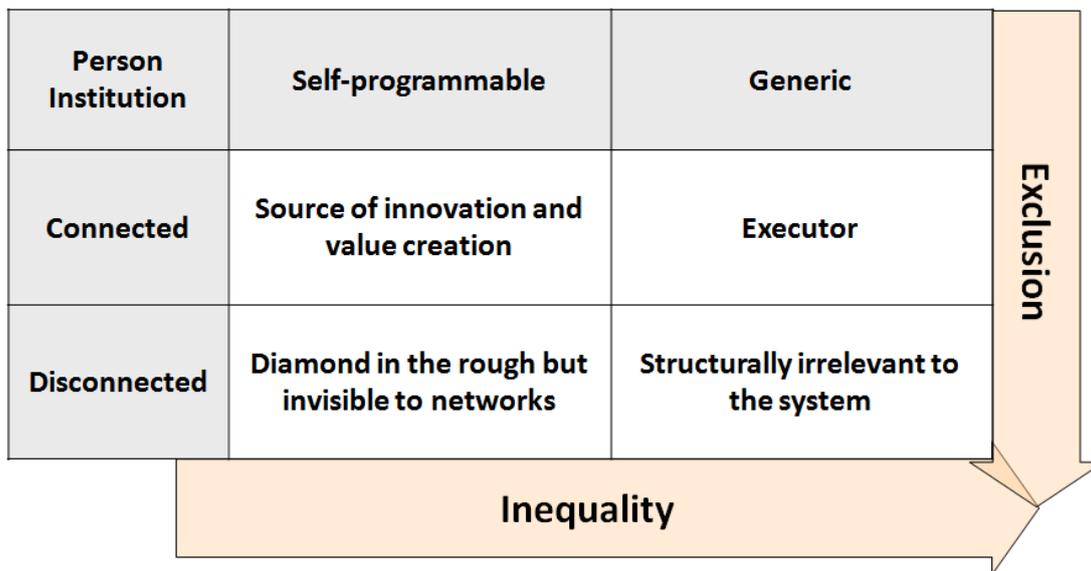


Figure 6: Factors of inequality and exclusion in the Network Society

Besides digital competences, we will sure have to be able to learn how to be self-programmable and to be connected [9], [10] not to be excluded neither from the political debate nor from the society at large.

But, even if we do our best in learning to learn, in gathering the most information and data, in being networked with our peers, there is something which its initial allocation cannot be altered: time.

Editors should be, in our opinion, a keystone in the new Information Society. In a democracy, these editors that collect, assess and filter information are governments and political parties. But their roles have definitely to change, and they have definitely to switch towards where their action is adding value, being the risk of not changing being circumvented by the rest of the democracy actors.

7. References

- [1] ANDUIZA, E., GALLEGO, A. & JORBA, L. (2009). The Political Knowledge Gap in the New Media Environment: Evidence from Spain. Prepared for the seminar Citizen Politics: Are the New Media Reshaping Political Engagement? Barcelona, May 28th-30th 2009. Barcelona: IGOP.
- [2] ARNSTEIN, S. R. (1969). A Ladder of Citizen Participation [online], in American Institute of Planners, Journal of the American Institute of Planners, *Vol. 35, No. 4, July 1969, pp. 216-224*. Boston: American Institute of Planners. Retrieved 17-02-2006 from <<http://lithgow-schmidt.dk/sherry-arnstein/ladder-of-citizen-participation.pdf>>

- [3] BENKLER, Y. (2002). Coase's Penguin, or Linux and the Nature of the Firm [online], in *The Yale Law Journal*, 112 (3), 369–446. New Haven: The Yale Law Journal Company. Retrieved 12-06-2007 from <<http://yalelawjournal.org/images/pdfs/354.pdf>>
- [4] BENKLER, Y. (2006). *The Wealth of Networks: How Social Production Transforms Markets and Freedom*. New Haven: Yale University Press.
- [5] BIMBER, B. & DAVIS, R. (2003). *Campaigning Online. The Internet in U.S. Elections*. Oxford: Oxford University Press.
- [6] BORGE, R. (2005). La participación electrónica: estado de la cuestión y aproximación a su clasificación [online], in *IDP. Revista de Internet, Derecho y Ciencia Política*, (1). Barcelona: UOC. Retrieved 17-02-2006 from <<http://www.uoc.edu/idp/1/dt/esp/borge.pdf>>
- [7] BROSIUS, H. & KEPPLINGER, H. M. (1990). The Agenda-Setting Function of Television News. *Satic and Dynamic Views*, in *Communication Research*, 17 (2), 183-211. London: SAGE Publications.
- [8] CANTIJOCH, M. (2009). Reinforcement and mobilization: the influence of the Internet on different types of political participation. Prepared for the seminar *Citizen Politics: Are the New Media Reshaping Political Engagement?* Barcelona, May 28th-30th 2009. Barcelona: IGOP.
- [9] CASTELLS, M. (2000). Materials for an exploratory theory of the network society [online], in *British Journal of Sociology*, *Jan-Mar 2000*, 51 (1), 5-24. London: Routledge. Retrieved 29-01-2007 from <<http://www.blackwell-synergy.com/links/doi/10.1111/j.1468-4446.2000.00005.x/enhancedabs/>>
- [10] CASTELLS, M. (2004). Informationalism, Networks, And The Network Society: A Theoretical Blueprint, in M. CASTELLS (Ed.), *The Network Society: A Cross-Cultural Perspective*. Northampton, MA: Edward Elgar.
- [11] CASTELLS, M. (2007). Communication, Power and Counter-power in the Network Society [online], in *International Journal of Communication*, 1, 238-266. Los Angeles: USC Annenberg Press. Retrieved 05-10-2009 from <<http://ijoc.org/ojs/index.php/ijoc/article/view/46/35>>
- [12] CHADWICK, A. & HOWARD, P. N. (2008). *Routledge Handbook of Internet Politics*. New York: Routledge.
- [13] CHADWICK, A. (2009). Web 2.0: New Challenges for the Study of E-Democracy in an Era of Informational Exuberance [online], in *I/S: A Journal of Law and Policy for the Information Society*, 5 (1), 9 - 41. Columbus: Ohio State University. Retrieved 28-05-2009 from <<http://www.is-journal.org/V05I01/Chadwick.pdf>>
- [14] COASE, R. H. (1937). The Nature of the Firm, in *Economica*, 4 (16), 386-405. Oxford: Blackwell.
- [15] COLLISTER, S. (2008). Networked Journalism or pain in the RSS?: An examination of political bloggers and media agenda-setting in the UK [online]. Paper presented at the *Politics: Web 2.0 International Conference*, April 17-18, 2008.. London: Royal Holloway, University of London. Retrieved 10-03-2010 from <<http://newpolcom.rhul.ac.uk/politics-web-20-paper-download/Simon%20Collister%20Networked%20Journalism%20or%20Pain%20in%20the%20RSS%20-%20UK%20blogs%20and%20media%20agenda%20setting%202008.pdf>>
- [16] COLLISTER, S. (2009). The role of online monitoring in influencing political behaviour: an exploratory survey of UK political parties [online]. Conference presented at the *Web metrics workshop*, September 19th, 2009, New Political Communications Unit, Royal Holloway University. [online]. Retrieved 16-02-2010 from <<http://www.slideshare.net/simcollister/the-role-of-online-monitoring-in-influencing-political-behaviour-an-exploratory-survey-of-uk-political-parties>>
- [17] CRIADO, J. I. & MARTÍNEZ FUENTES, G. (2009). ¿Hacia la conquista política de la blogosfera? Blogging electoral en la campaña de los comicios municipales del 2007 [online], in *IDP. Revista de Internet, Derecho y Ciencia Política*, (8). Barcelona: Universitat Oberta de Catalunya. Retrieved 05-10-2009 from <http://idp.uoc.edu/ojs/index.php/idp/article/viewFile/n8_criado_martinez/n8_criado_esp>

- [18] CRISTANCHO, C. & SALCEDO, J. (2009). Assessing Internet Mobilization - Integrating Web Analysis and Survey Data. Prepared for the seminar Citizen Politics: Are the New Media Reshaping Political Engagement? Barcelona, May 28th-30th 2009. Barcelona: IGOP.
- [19] DAVIES, T. & PEÑA GANGADHARAN, S. (Eds.) (2009). Online Deliberation. Design, Research, and Practice [online]. Stanford: CSLI Publications. Retrieved 12-12-2009 from <<http://odbook.stanford.edu/static/filedocument/2009/11/10/ODBook.Full.11.3.09.pdf>>
- [20] DUTTON, W. H. (2007). Through the Network (of Networks) – the Fifth Estate [online]. Inaugural Lecture, Examination Schools, University of Oxford, 15 October 2007. Oxford: Oxford Internet Institute. Retrieved 20-10-2007 from <<http://people.oii.ox.ac.uk/dutton/wp-content/uploads/2007/10/5th-estate-lecture-text.pdf>>
- [21] ELMER, G., LANGLOIS, G., DEVEREAUX, Z., RYAN, P. M., MCKELVEY, F., REDDEN, J. & CURLEW, A. B. (2009). “Blogs I Read”: Partisanship and Party Loyalty in the Canadian Political Blogosphere, in *Journal of Information Technology & Politics*, 6 (2), 156 – 165. London: Routledge.
- [22] FLEISHMAN-HILLARD. (2009). European Parliament Digital Trends [online]. Brussels: Fleishman-Hillard. Retrieved 22-05-2009 from <http://www.epdigitaltrends.eu/uploads/downloads/FH-Digital_Trends_report.pdf>
- [23] FOSSATO, F., LLOYD, J. & VERKHOVSKY, A. (2008). The Web that Failed. How opposition politics and independent initiatives are failing on the internet in Russia [online]. Oxford: Reuters Institute for the Study of Journalism. Retrieved 10-03-2010 from http://reutersinstitute.politics.ox.ac.uk/fileadmin/documents/Publications/The_Web_that_Failed.pdf
- [24] FRANCO ÁLVAREZ, G. & GARCÍA MARTUL, D. (2008). Los efectos de las redes ciudadanas en la campaña electoral del 9-M [online], in *Ámbitos*, (17), 25-36. Sevilla: Universidad de Sevilla. Retrieved 06-07-2009 from <<http://grupo.us.es/grehcco/ambitos17/02Franco.pdf>>
- [25] GIBSON, R. K. (2009). New Media and the Revitalisation of Politics, in *Representation*, 45 (3), 289 - 299. London: Routledge.
- [26] GOMIS, L. (1989). Resultados o el registro indiscutible (Un rasgo noticioso), in *Anàlisi*, (12), 127-134. Bellaterra: Servei de Publicacions de la UAB.
- [27] GOMIS, L. (1990). Los interesados producen y suministran los hechos, in *Anàlisi*, (13), 43-52. Bellaterra: Servei de Publicacions de la UAB.
- [28] GONZALEZ-BAILON, S. (2008). The inner digital divide: How the web contributes (or not) to political equality [online]. Working Paper Number 2008-02. Oxford: University of Oxford. Retrieved 30-07-2009 from <http://www.sociology.ox.ac.uk/research/workingpapers/2008-02.pdf>
- [29] GREENWOOD, J. (1999). The Third Industrial Revolution: Technology, Productivity, and Income Inequality [online], in *Economic Review*, (Q II), 2-12. Cleveland: Federal Reserve Bank of Cleveland. Retrieved 20-05-2006 from <<http://www.clevelandfed.org/Research/review99/third.pdf>>
- [30] HARA, N. (2008). Internet use for political mobilization: Voices of the participants [online], in *First Monday*, 7 July 2008, 13 (7). [online]: First Monday. Retrieved 04-07-2008 from <<http://www.uic.edu/htbin/cgiwrap/bin/ojs/index.php/fm/article/viewArticle/2123/1976>>
- [31] HILLYGUS, S. & SHIELDS, T. (2007). The Persuadable Voter: Campaign Strategy, Wedge Issues, And The Fragmentation Of American Politics. Princeton: Princeton University Press.
- [32] HOWARD, P. N. (2005). Deep Democracy, Thin Citizenship: The Impact of Digital Media in Political Campaigning Strategy, in *The ANNALS of the American Academy of Political and Social Science*, 597 (1), 153-170. London: SAGE Publications.

- [33] INSTITUTE FOR POLITICS, DEMOCRACY & THE INTERNET. (2004). Political Influentials Online in the 2004 Presidential Campaign [online]. Washington, DC: The George Washington University. Retrieved 15-10-2008 from <<http://www.ipdi.org/UploadedFiles/political%20influentials.pdf>>
- [34] JACOBSON, D. (1999). Impression Formation in Cyberspace, in *Journal of Computer-Mediated Communication*, 5 (1). Washington, DC: International Communication Association.
- [35] JENSEN, M. J. (2009). Political Participation, Alienation, and the Internet in the United States and Spain. Prepared for the seminar Citizen Politics: Are the New Media Reshaping Political Engagement? Barcelona, May 28th-30th 2009. Barcelona: IGOP.
- [36] KATZ, J. E., RICE, R. E. & ASPDEN, P. (2001). The Internet, 1995-2000: Access, Civic Involvement, and Social Interaction, in *American Behavioral Scientist*, 45 (3), 405-419. London: SAGE Publications.
- [37] KELLY, J., FISHER, D. & SMITH, M. (2005). Debate, Division, and Diversity: Political Discourse Networks in USENET Newsgroups [online]. Paper prepared for the. Palo Alto: Stanford University. Retrieved 10-07-2007 from <http://www.coi.columbia.edu/pdf/kelly_fisher_smith_ddd.pdf>
- [38] KELLY, J. (2008). Pride of Place: Mainstream Media and the Networked Public Sphere [online]. Media Re:public Side Papers. Cambridge: Berkman Center for Internet and Society at Harvard University. Retrieved 20-12-2008 from <[http://cyber.law.harvard.edu/sites/cyber.law.harvard.edu/files/Pride of Place_MR.pdf](http://cyber.law.harvard.edu/sites/cyber.law.harvard.edu/files/Pride%20of%20Place_MR.pdf)>
- [39] LILLEKER, D. G. & JACKSON, N. (2008). Politicians and Web 2.0: the current bandwagon or changing the mindset? [online]. Paper presented at the Politics: Web 2.0 International Conference, April 17-18, 2008.. London: Royal Holloway, University of London. Retrieved 21-02-2010 from <<http://newpolcom.rhul.ac.uk/politics-web-20-paper-download/Lilleker%20%20Jackson%20Web%20%20%20%202008.pdf>>
- [40] MEIJER, A., BURGER, N. & EBBERS, W. (2008). Citizens4Citizens. Mapping participatory practices on the Internet [online]. Paper presented at the Politics: Web 2.0 International Conference, April 17-18, 2008.. London: Royal Holloway, University of London. Retrieved 10-03-2010 from <[http://newpolcom.rhul.ac.uk/politics-web-20-paper-download/Citizens4Citizens%20\(Meijer%20Burgers%20Ebbers%205%20March%202008\).pdf](http://newpolcom.rhul.ac.uk/politics-web-20-paper-download/Citizens4Citizens%20(Meijer%20Burgers%20Ebbers%205%20March%202008).pdf)>
- [41] MOKYR, J. (1997). Are We Living in the Middle of an Industrial Revolution? [online], in *Economic Review*, *Second Quarter 1997*, 31-43. Federal Reserve Bank: Kansas City. Retrieved 26-10-2007 from <[http://ideas.repec.org/a/fip/fedker/y1997iqiip31-43n82\(2\).html](http://ideas.repec.org/a/fip/fedker/y1997iqiip31-43n82(2).html)>
- [42] MOKYR, J. (2000). Knowledge, Technology, and Economic Growth During the Industrial Revolution, in B. VAN ARK, K. S. KUIPERS & G. KUPER (Eds.), *Productivity, Technology and Economic Growth*, 253-292. New York: Springer.
- [43] MOROZOV, E. (2009). How dictators watch us on the web [online], in *Prospect*, *December 2009*, (165). London: Prospect Publishing Limited. Retrieved 07-12-2009 from <<http://www.prospectmagazine.co.uk/2009/11/how-dictators-watch-us-on-the-web/>>
- [44] NORRIS, P. & CURTICE, J. (2006). If You Build a Political Web Site, Will They Come? The Internet and Political Activism in Britain, in *International Journal of Electronic Government Research*, 2 (2), 1-21. Hershey: IGI Global.
- [45] NOVECK, B. S. (2005). A democracy of groups [online], in *First Monday*, 10 (11). [online]: First Monday. Retrieved 14-06-2009 from <http://firstmonday.org/issues/issue10_11/noveck/index.html>
- [46] NOVECK, B. S. (2008). Wiki-Government [online], in *Democracy*, *Winter 2008*, (7), 31-43. Washington, DC: Democracy, a Journal of Ideas, Inc.. Retrieved 29-05-2008 from <http://democracyjournal.org/article.php?ID=6570>

- [47] O'REILLY, T. (2005). What Is Web 2.0 [online]. Sebastopol: O. Retrieved 10-06-2006 from <<http://www.oreillynet.com/pub/a/oreilly/tim/news/2005/09/30/what-is-web-20.html>>
- [48] OATES, S., OWEN, D. & GIBSON, R. K. (Eds.) (2006). The Internet and Politics. Citizens, Voters and Activists. New York: Routledge.
- [49] OATES, S. (2008). Comrades Online?: How the Russian Case Challenges the Democratizing Potential of the Internet [online]. Paper presented at the Politics: Web 2.0 International Conference, April 17-18, 2008.. London: Royal Holloway, University of London. Retrieved 10-03-2010 from <<http://newpolcom.rhul.ac.uk/politics-web-20-paper-download/oates%20comrades%20online%20revised%20april%202008.pdf>>
- [50] PEÑA-LÓPEZ, I. (2009). Measuring digital development for policy-making: Models, stages, characteristics and causes [online]. PhD Thesis. [mimeo]. Retrieved 08-09-2009 from <<http://phd.ictlogy.net>>
- [51] PEÑA-LÓPEZ, I. (2010). From laptops to competences: bridging the digital divide in higher education [online], in Revista de Universidad y Sociedad del Conocimiento (RUSC), *Monograph: Framing the Digital Divide in Higher Education*, 7 (1). Barcelona: UOC. Retrieved 18-01-2010 from <http://rusc.uoc.edu/ojs/index.php/rusc/article/view/v7n1_pena/v7n1_pena>
- [52] PEYTIBÍ, F. X., RODRÍGUEZ, J. A. & GUTIÉRREZ-RUBÍ, A. (2008). La experiencia de las elecciones generales del 2008 [online], in IDP. Revista de Internet, Derecho y Ciencia Política, (7). Barcelona: Universitat Oberta de Catalunya. Retrieved 22-10-2008 from <http://www.uoc.edu/idp/7/dt/esp/peytibi_rodriguez_gutierrez.pdf>
- [53] ROBLES, J. M. (2008). Ciudadanía Digital. Un acercamiento a las causas de la ideología de los internautas españoles. Research seminar held on July, 3rd, 2008 in Barcelona, Universitat Oberta de Catalunya. [mimeo].
- [54] SMITH, A. (2008). Post-Election Voter Engagement [online]. Washington, D.C.: Pew Internet & American Life Project. Retrieved 09-01-2009 from <http://www.pewinternet.org/pdfs/PIP_Voter_Engagement_2008.pdf>
- [55] SMITH, A. & RAINIE, L. (2008). The internet and the 2008 election [online]. Washington, D.C.: Pew Internet & American Life Project. Retrieved 16-06-2008 from <http://www.pewinternet.org/pdfs/PIP_2008_election.pdf>
- [56] SUNSTEIN, C. R. (2001). Republic.com. Princeton: Princeton University Press.
- [57] THE WHITE HOUSE. (2009). Open Government Directive. Washington, DC: Executive Office of the President.
- [58] TICHENOR, P. J., DONOHUE, G. A. & OLIEN, C. N. (1970). Mass media flow and differential growth in knowledge, in *Public Opinion Quarterly*, 34 (2), 159 - 170. Oxford: Oxford University Press.
- [59] TOMASZESKI, M. S. (2006). A Baseline Examination of Political Bloggers: Who they are, their Views on the Blogosphere and their Influence in Agenda-Setting via the Two-Step Flow Hypothesis [online]. [online]: Florida State University. Retrieved 10-03-2010 from http://etd.lib.fsu.edu/theses_1/available/etd-11092006-182627/unrestricted/examinationofpoliticalbloggers.pdf
- [60] WARSCHAUER, M. (2003). Technology and Social Inclusion. Rethinking the Digital Divide. Cambridge: The MIT Press.
- [61] ZYSMAN, J. & NEWMAN, A. (Eds.) (2006). How Revolutionary Was the Digital Revolution? National Responses, Market Transitions, and Global Technology. Palo Alto: Stanford University Press.

