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TECHNO-POLITICAL TOOLS OF INQUIRY

Hot issues/questions on techno-political tools

Mayo Fuster

How could technologies introduce highlights on innovative forms of democracy and political organization? How could they improve the possibilities for, and the means of achieving, more direct, less mediated, forms of democratic organisation? How can these new social tools open forms of democratic participation beyond the logic and the limits of the representative systems? Are there limitations and negative consequences of the new technologies in the process of achieving this ideal of a more radical democracy?

How new technologies are affecting processes of mobilization and the facilitation of swarming dynamics; the development of new forms of organization, communication and internal decisional making of the movements; the emerging of communities of creation and production and different ways of knowledge management?

Which are the most inspiring experiences in the application of new ICT to processes of autonomous social mobilization, organization, communication, creation of communities?

Which limits, traps, difficulties, contradictions are emerging in the first experiences carried out along this line of search?

What does define a techno-political tool? Which principles could emerge and guide the accumulation and development (of knowledge, wisdom, ideas, reflections, decisions) of experiences of "techno-political tools"?

How do new technologies increase confidence in the possibilities of political change? How far do new technologies allow for/facilitate mass communication and development of opinion independently of elite control? How could they approach differently the dialectic between multiplicity and unity, autonomy and common?

Which is new and which is not new on the politics after the net?

FREE/OPEN SOURCED POLITICS: STARTING POINTS AND PROPOSALS

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"Every human being, every man, woman and child, has the inalienable right to access information, communication and commerce. To this end the Internet has evolved to serve mankind ... The Internet is the nervous system of this planet. We are all connected via this system. Any restrictions on the free flow of energy through this system must be viewed as an impediment to the overall health of the system and must be remedied. The Internet is an evolutionary force that must be accommodated. It will continue to revolutionize the way we communicate, do business and learn. For too long, the primitive systems of governments have sought to retain power by controlling just these same functions. Those systems are now obsolete! The Internet is Democracy in its most pure form, without awkward political processes. The power of the Internet is unlimited." HIP INC., <http://www.hippy.com>, "The Internet Manifesto"

This article contains emerging ideas and tries to show possible ways to take advantage of living within the highly-connected networks available in rich countries for the last 10 years.

1. INTRODUCTION

10 years of connected societies

Rich countries are becoming increasingly connected to the Internet. In addition, most people living in these countries have small devices that allow them to call (voice and/or video) anyone almost anywhere in the world. This has been happening for ten years.

This historical fact is dramatically changing the lives of 20% of people. Ten years is not a long time and apart from the economic digital divide¹¹⁰, we must also talk about a generational digital divide. Some over-35s are reluctant to undertake further

108 (c) Jaume Nualart. i Vilaplana. 2006. Under Creative Commons License Attribution 2.5. Made using free software: LATEX and L Y X.

109 From General Public License text (GPL) - <http://www.gnu.org/copyleft/gpl.html>

110 The digital divide is the gap between those with regular, effective access to digital technologies and those without.

steps to advance in an information society. We can expect a number of people who are technically illiterate within the coming years.

I can also see a self-exclusion when some people distance themselves from any kind of digital technology. The majority of people driving cars are not specialists in automotive technology, however, they extensively use cars, motorcycles, trucks, and so on. When we encounter something new in communication technology that we don't understand, we think we are stupid. Is this intellectual damnation of self some sort of mysterious human behavior or is it just fear of the unknown? Young people catch on quickly to new ideas and concepts; older people on the other hand, find it difficult to change their habits.

How networked groups and collectives can use tools for logical self-organization

When a tool is well-designed, people don't need to spend too much time learning how to use it. At the same time, when people are already using a tool, they easily accept small modifications to it. Now is the time for users to demand friendly interfaces and worthy software processes for publishing, editing or other basic functions. Everyday, more tools are becoming standardized. Today, an information user must be familiar with concepts such as wiki, blog, rss, podcast, audio-video stream and of course, the *older* ones such as mailing list, newsletter, chat, messengers.

Who makes optimal use of the networks?

Free software communities are a type of organization that primarily use networks to communicate, coordinate and distribute their work. On top of that these communities create, in C. Formenti's words, 'a sphere of social relationships integrated with economic, political and cultural relationships to the point that they become one body'. These communities are born and nurtured over the Internet, but consolidated outside of it – consolidated through events, conferences and presentations.

The idea is to extract several *secrets* from internet-based communities and add them to the networked politics field. After Castells's theories, we can talk about networked states as a non clear institution, as it was with simple state-nations before. States are losing sovereignty because of global economical conditions and the balance of forces. In my opinion, political organizations must confront these challenges using networked tools, in order to create references for a better organization of society in future.

What you have to learn and why. Be courageous!

Following the information revolution, we are all trying to understand the changes taking place within this partially networked society.

First of all, I would like to say that a person using communication technologies needs a good memory to remember how a device or software works. We don't necessarily need to understand everything about it.

I'm sure most of you reading this article right now are saying "of course, that's obvious!" If you agree with that, we are ready to proceed to the next step.

An information user is not a mathematician, they're just someone with a good memory. That's why pre-teenagers are able to understand everything related to computers or mobile phones faster than older people. This is called the net-generation effect.¹¹¹

2. TECHNOLOGY MEDIATES?

What do we understand by mediation? Communication technologies just simplify and, above all, multiply the ways to communicate, resulting in increased potential communication. Hopefully, more communication, well-managed and coordinated, can accelerate and improve human organizations.

Technology only manages the participation of many people. It can manage decision processes and large amounts of mailing lists. The latest technologies can also filter contents for you with incredibly high precision. Technology, as I conceive of it, doesn't mediate at all. I am in favor of transparent technology, transparent mediation and transparent representation where technology should be an intimate tool.

The development of technology and how we use it is always limited by human boundaries. Consider a tool, a hammer for example; it makes no sense if it is lost in the middle of a forest. No humans, no tools.

Good tools must mediate between humans and data to produce good representations.

Mediation is a positive term (*) but, when we talk about technologies, we interpret it as negative, as synonymous with an uncontrolled filter, a kind of censure of reality, a non-transparent medium that we are forced to cross, a non-safe environment. In the most negative point of view, some people use mediation technologies as a black box with all kinds of monsters inside.

In my opinion, this occurs for two main reasons: on the one hand, generation TV people are afraid and/or disappointed with the use of massive corporative media last years. So, we have a tendency to relate communication monopolies with communication technologies. Generation TV means that we no longer trust our screens.

111 Growing Up Digital The Rise of the Net Generation, by Don Tapscott:
<http://www.interneteconomybooks.com/Internet-Economy-Books/Growing-Up-Digital.htm>

On the other hand, mediation implies a way to influence the results, a false short cut to the expected results and not direct contact between reality and results.

I use mediation here in the positive sense. Mediation as a way to make easy the relation and the use of data (digital data) by humans. And also mediation as an added means to ensure communication flows, a means not available without any physical device, just one more way.

I don't like to use mediation of tools as a substitute for human mediation. Computers are only able to do a part of the job. Human mediation in open communities has the same role that it had throughout history.

Talking about humans I'm avoiding, especially, the word *users*, using instead *humans*, a wider concept that allows for any kind of reaction in front of a new tool. The technology is becoming more and more transparent, so let's speak about humans, people, persons.

Representation & Representation Tools

'The ability to communicate ideas, visions or arguments all depends on the ability to represent these abstract notions in a concrete and recognizable form'(*).

Reading a map is not an easy process. Reading a geographical map, for example, requires a previous abstraction by the user about the territory represented on it. It is also really useful if the user has some previous experience using representations. For mathematical or conceptual representations, the user needs still more previous experience and knowledge about representations tools.

When we talk about representation -based on real data, not only as an art creation- we are including maps, 2 and 3-axis representations, timelines, etc. Most of the good tools that I'm talking during this article are post-APIs tools. That is, most third party applications are just filters or new representations of the data itself.

One source of data allows infinite points of view of this data. In the middle: a representation tool. When we want easy representation tools, what do we really want? What can we desire? Of course, as humans, we have been engaged in representation since the beginning of the time. But in the digital era we can access amounts of data on a scale never realized before. That makes the study of representations more and more complex and interesting.

In my opinion, for a non standard representation -that's a non geographical one, or non simple maths-based one- we need to start from a very very first stage. If we want a self-explanatory way of representing, we are limited to represent simple ideas, simple concepts.

A representation is made with a language and an amount of data. The language of the representation is a list of codes, colors and/or shapes. And the dictionary is the so-called legend of the map. The limitations of the map and the legend makes us use well known criteria on the use of symbols and aesthetic components, and represent data in order to communicate, or explain specifics messages.

(...) And this, essentially is what maps give us: reality, a reality that exceeds our vision, our reach, the span of our days, a reality we achieve no other way. We are always mapping the invisible or the unattainable or the erasable, the future or the past, the what-ever-is-not-represented-to-our-senses-now and, through the gift that the map gives us, transmuting it, into everything it is not. (...) (*)

3. COMPLEX SYSTEMS - NO PANIC, NO FEAR

The size of the cellules of a mouse is the same as those of a blue whale. The neurons of a mouse are the same as the neurons of a human, the primary difference being the number of them and consequently, the number of connections.

We live in a complex system. Nature is extremely complex and we are just starting to understand how it works. Mutations and chemical reactions that occur every millisecond seem magic and, on top of that, they work. But allow me to add something about complexity: when we cannot understand something, we usually say "this is too complex". When we are not trying to understand the process but are just users, the process seems simple and useful. It's not the same to drive a bus as to be a passenger on a bus. If you want to drive a bus, you need some knowledge of basic mechanics and driving experience.

So what's happening? Sometimes we simply don't notice the complexity of the systems and tools we are using and sometimes it's too difficult to understand them. We have to use appropriate tools for each task or process.

Don't be afraid if I mention complexity - just imagine a tool that interfaces complexity, minimizing it and simplifying it according to your knowledge and needs.

From visible structures to natural complexity

From a Before-the-Net point of view, we understood the networks we were living in. In this context, visible meant simple. When we cannot access all the data in our networks, we feel a bit lost and we start to sense the chaos around us. Not enough time to process all the information equals informational stress. In my opinion, this is the right moment to take a step forward and begin to use appropriated tools, efficient ones that solve the problem.

4. NETWORKS OF... DATA, THAT'S THE QUESTION!

Network is the most widely used word in the study of networks, especially when people try to describe chaotic or comprehensible relationships between entities. We know what a network is¹¹², we have been defining it for years. We also represent these relationships in 2- or 3D graphs in the hope of producing a magic image that will reveal a lot about this highly-connected, multiple reality.

In rich countries, in the context of *networkization* of life, data can be interpreted in many ways. Data means time storage, past logs and dictionaries/encyclopedias. Data also means communication. This data communication is the real medium for social organizations of people.

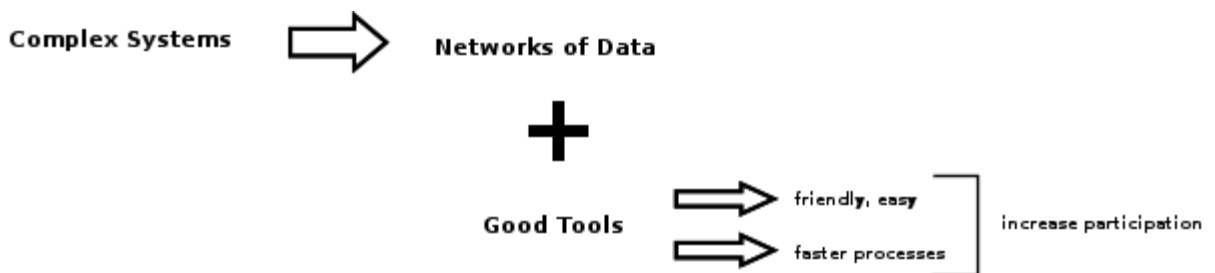
Under people and collective relationships there are networks of data -more commonly, flows of data. The tools we need to interface this amount of data must be complex in their core but at the same time they must be simple for humans. Most standard protocols for metadata date back to 1999 and 2000. Good tools can understand our needs using these protocols and can deliver it to us in nice, effective, easy ways of visualization.

A node in a data network is an important amount of data that's really well indexed, semantically linked to others nodes and easily accessible from the Internet.

Data must be indexed as efficiently as possible. The more sensible data we have, the more a tool will satisfy us and our needs.

Quality of data is the limiting step for the rest of the process.

Fig 1. Good tools



We can find two data tendencies that our tools have to manage.

112. Bo Grönlund, 'The Urban Question' and 'The Rise of the Network Society' (1999)
<http://hjem.get2net.dk/gronlund/Castells.html#anchor350760>

□ Data from crossing data

To avoid a non-accessible amount of data we need to cross, compare and filter data from several sources. With appropriate filters and managers, we can get an essence of all the available data.

□ Data about user behaviors

The tool records all our actions while using it. With this information, the tool can adapt itself to you; making its use easy and more effective. Imagine the application of this data in commercial or governmental uses. Its terrible! Nevertheless, they have been using it for some time and its use is increasing everyday. Now is the time to start using these types of techniques to our benefit.

You are the node: data point of view

Imagine a room. Imagine two people sitting opposite one another in the room. If each person draws an image of their perception of the room, the two images will be completely different. This physical example demonstrates how your point of view can vary with respect to other people's, particularly when we are not only talking in physical terms, but also ideological, cultural and political terms.

When we talk about network visualization, we try to choose between several visualization tools. In my opinion, the most important thing we must decide is which point of view we want to communicate. I'm talking about self-centered network visualization. The customization of the point of view is the first parameter to be considered when we want to represent relationships between nodes – that is, networks.

Maybe there is only one database but there is more than one possible representation of the data it contains. Tools for browsing data have to allow users to specify some parameters about how and from where they want to see the data.

rules = F(*time*)

Fig 2. Rules

5. TOO MUCH INFORMATION - THIS IS THE GOAL!

When you arrive at the point where you receive more information than you can process, this is the critical moment when the good tools start to prove themselves useful, necessary and more effective. In other words: when you manage a large-enough amount of information to make you feel stressed and irritable, you have to seriously think about the help of technology of information.

Web 2.0¹¹³ is a slightly fashionable term and I'm only using it because it seems its meaning has really extended to everyday applications. I will also use the term 2.0 to discuss tools. When I am talking about tools, I'm usually referring to them as software but also as combinations between software and hardware (servers).

I use the term tools 2.0 as the interface between users and networks of sensitive data.

A good information tool or a 2.0 tool has to be able to get good data (as sensitively as possible) from dynamic online databases. This is possible because really good data has good APIs¹¹⁴ to make it accessible. Most of the important data tanks -like google¹¹⁵, wikipedia¹¹⁶, yahoo¹¹⁷,... publicly offer their APIs to remotely access the data and open the process for their data representations.

One of the latest examples of this type of tool in free software is Amarok¹¹⁸, a music manager and jukebox. Amarok crosses data from wikipedia, music related to music databases, lyrics databases, covers databases, etc. Amarok also learns from your listening habits, so Amarok can satisfy you more everyday.

The emerging technologies I am discussing are more complex than mass sms hurricanes or some other "new" tactics that political parties and governments are beginning to try. Most of these offline groups are just using simple and sometimes useless methods. They are using 1.0 methods.

2.0 tools have to be sincere with us. They have to translate effectively to be a user-friendly, simple interface for fashion and gift searches and queries for desires etc.

113. Web 2.0 (from wikipedia): refers to a second generation of services available on the World Wide Web that let people collaborate and share information online. In contrast to the first generation, Web 2.0 gives users an experience closer to desktop applications than the traditional static Web pages. Web 2.0 applications often use a combination of techniques devised in the late 1990s, including public web service APIs (dating from 1998), Ajax (1998), and web syndication (1997).

114. An application programming interface (API) (from wikipedia) is the interface that a computer system, library or application provides in order to allow requests for services to be made of it by other computer programs, and/or to allow data to be exchanged between them.

115. Google APIs: <http://www.google.com/apis/>

116. Wikipedia, and its software, mediawiki, have a lot of APIs to make queries using a lot of software languages.

117. Yahoo! Developer Network: <http://developer.yahoo.com/>

118. Amarok, Rediscover Your Music! Amarok is a music player for Linux and Unix with an intuitive interface. Amarok makes playing the music you love easier than ever before - and looks good doing it. <http://amarok.kde.org/>

A 2.0 tool is a complex tool. It is a kind of configurable parser for human networks.

Usually these growing models of tools follow the same structure. Let's take the example of wikipedia. Everything initially starts with an application that allows you to store data in a sensitive way. The wikipedia project wrote a second generation wiki called mediawiki¹¹⁹. This platform was the starting point. Subsequently¹²⁰, people started to use wikipedia and the number of articles has quickly multiplied since 2001. The Wikipedia process had to add and assume its size several times at least. Wikipedia became a community and it had to organize and coordinate the project, choosing the best rules and decision systems.

Today, wikipedia is also a big container of good data and there are many APIs to easily access this data from other tools.

6. HIERARCHY, LEADERSHIP AND HORIZONTALITY

Warning! The following paragraphs contains forbidden words.

Can hierarchy or leadership be compatible with horizontality in free sourced communities?

I'm talking about communities, as groups of people with a sustainable size according to the goal and the work of each community. Hierarchy, leadership and horizontality systems depend a lot on the size of the communities whom decide to use and redefine those options for organization, coordinatination and advance of their project.

I will use also the Castells¹²¹ suffix *networked-* to refer to the complex and consistent network of data around us.

Networked Hierarchy

When we consider hierarchy, we used to think in military terms, with striped signs. The hierarchy I'm referring to is spontaneous and temporary, based on knowledge or responsibility/engagement hierarchies.

In a society as an space of flows -as M. Castells said-, hierarchies are responsibilities, filters about flows (movement) of the most important information related to each

119. MediaWiki is a free software wiki package originally written for Wikipedia. It is now used by several other projects of the non-profit Wikimedia Foundation and by many other wikis, including this very website, the home of MediaWiki. <http://www.mediawiki.org/>

120. History of wikipedia: http://meta.wikimedia.org/wiki/History_of_Wikipedia.

121. Ned Rossiter, 'Organised Networks: Transdisciplinarity and New Institutional Forms' (2006) <http://info.interactivist.net/article.pl?sid=06/04/22/035228>

community process or subprocess. I would talk about participation hierarchies, or "talks who works" systems.

In a free source community, most of the work is made in a voluntary way. That means people are there because they-want-to-be-there. The decision to join a project comes from outside of the community; the community is, simply, open.

Inside the free sourced communities there are a wide range of organizational philosophies and structures. The next section shows three case studies of such communities.¹²²

Using *networked* as a dynamic group of entities plus the communication flows between them, -and in the way for a networked politics hypothesis- we can use networked hierarchies, as the hierarchy rules in a network of people in the time of information technologies.

Networked Leadership

The definition of leadership according to Debian (see next section for further information about Debian) is:

"The Debian Project Leader (DPL)¹²³ is the official representative of the Debian Project. They have two main functions, one internal and one external.

In the external function, the Project Leader represents the Debian Project to others. This involves giving talks and presentations about Debian and attending trade shows, as well as building good relationships with other organizations and companies.

Internally, the Project Leader manages the project and defines its vision. They should talk to other Debian developers, especially to the delegates, to see how they can assist their work. A main task of the Project Leader therefore involves coordination and communication."

The concept of Leadership was changing a lot throughout this process. In the new digital networked society it is not different:

"As a result, a post industrial digital age style of leadership is emerging characterized by stronger horizontal linkages among elites across different sectors and even different countries, especially government leaders, private entrepreneurs and executives, researchers and civil society leaders."¹²⁴

Networked Leadership makes the person who leads the project serve the project more than the rest. Of course, human personalities are not included in this analysis.

122. The Power of Maps, Denis Wood, p5. 1992. The Guilford Press.

123. Debian Project Leader: <http://www.debian.org/devel/leader>

124. Ernest J. Wilson III, 'LEADERSHIP IN THE DIGITAL AGE' ()
http://www.cidcm.umd.edu/wilson/leadership/Leadership_in_the_Digital_Age.pdf

Leadership is just one place on the hierarchy, the most public and, usually, powerful place in the hierarchy system.

A *desirable* networked hierarchy would be based on taxonomies and on folksonomies. An example of networked hierarchy, decentralized with non-hierarchical ubiquity would be the blogosphere, where each reader has his/her own point of view and his/her intimate hierarchies in terms of trust of the information you read.

Horizontality of the network

Horizontality in terms of "you are where you want", in terms of open paths to each branch of the organizational tree is a non egalitarian term. Horizontality here is not used as an homogenization of roles and tasks of people; on the contrary, horizontality means here a way to, actually, allow heterogeneities to coexist.¹²⁵

Non concentration of power and resources is another requirement for a free source organization or project. In that sense, horizontality can also refer to the question: horizontality of power, of resources, of opportunities.

A third use of horizontality is as a homogenization of individual rights within a network. One people, one vote, ok, but also, one people, one voice.

Horizontality is wrong as an egalitarian task, knowledge or responsibility strategy. The richest quality of the networks itself is their flexibility, their diffusion, their heterogeneity of individuals.

The way that open community networks work, in part, is a consequence of the physical design of the digital networks. The internet is designed to be like it is, independent from the individual desires of control. Hierarchies, horizontalities and leaderships using networked tools could be compatible. These arguments are not talking about magical formulae for the abolition of conflicts; which is another field altogether.

7. DECISION SYSTEMS¹²⁶

Classically, decision systems are classified by:

- * Unanimity
- * Majority: requires support from more than 50% of the members of the group.

125. J. Nualart, 'About riereta' (2004) http://riereta.net/tiki/tiki-read_article.php?articleId=7

126. Very interesting post and discussion: mitchell's blog:
http://weblogs.mozillazine.org/mitchell/archives/2006/06/the_community_and_decisionmaki_1.html

* Consensus: tries to avoid "winners" and "losers". Consensus requires that a majority approve a given course of action, but that the minority agree to go along with the course of action.

* Sub-committee: involves assigning responsibility for evaluation of a decision to a sub-set of a larger group

* Plurality: simple majority

* Dictatorship or autocracy

Let's take a look at the way that open networked communities takes decisions.

I took three examples of auto-organization and auto-management of free software communities, with the examples of Debian, Drupal and Indymedia in mind:

Decision systems set rules or ways to assist the project to advance. There are numerous proposals to tackle this issue ranging from voting, using different rules to decision-maker hierarchies, all within the framework of the rules naturally.

In my experience, decision systems must be tailored as much as possible to each specific case. The size of the collective and the networks involved in a process is the main parameter when you want to find the best way to take plural decisions. **(X5)**

It seems clear that the bigger and more unlocated a community, the more rules and resources are needed for a participative decision system. From a small, localised collective, using consensus discussion methods, to an international one-hundred person chat meeting for the discussion of the first draft of a new document about the community itself, there is not so much in common. That's sure, but apart from that, the character of the community is also very important – that is, the social position that the community takes publicly. The same rules could be seen as too bureaucratic for some people and too superficial for some other people.

It seems clear that every decision system needs some rules. However, rules, like the whole system itself, must also be temporary and adapted to requirements. I have experienced a lot of hefty bureaucratic processes for small groups of people. When people spend more time reporting their work than actually doing it, system reports are not scaled and this makes people unhappy doing their work. Of course, I am talking in terms of free software communities where most of the time dedicated to a project comes from volunteers. The system chosen must be a participator-centered service, assisting and accelerating their work. Projects coming from an offline style have less options for decision systems. They are limited to decision systems derived from presential or semi-presential meetings and voting rituals.

On the other hand, we can find a wide range of decision systems management tools but the main secret of success in the case of free software projects is that the structure of these communities is based on the goal of the project. Every task or assignment is designed to help the project advance. Concretizing the goal of the project, the mission and aims of a group, makes it easy clarify decisions and, by extension, take decisions. At the same time it contributes to helping you feel part of the community and, by extension, part of the project.

Debian.org¹²⁷ (born in 1996)

'The Debian Project is an association of individuals who have made common cause to create a free operating system. This operating system that we have created is called Debian GNU/Linux, or simply Debian for short.' (About Debian, <http://www.debian.org/intro/about.en.html>)

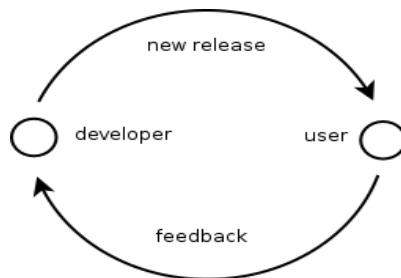
As you can see, the definition itself is the goal of the project it self.

So, Debian is the name of a linux-based operating system, that you can install for free in your computer. Linux has really advanced graphical environments, such as Gnome or KDE. Now is, at least, the moment to start using the products of our public free software market.

The Debian community is a very structured community¹²⁸ with strict rules for almost everything. I really recommend taking a look at the debian web pages, where everything is explained. Debian uses several decision systems including a decision-maker according to the rules and specialized voting systems¹²⁹.

A first view of Debian rules¹³⁰ could be a bit hard because of the number of rules and their clarity and directness. An explanation of this character could be referred to the language in the world of programming. When coding, you should be very precise; a simple colon can make a program unusable. Maybe the language of the Debian rules and, may I say, constitution texts are extremely direct and univocal. They are not in the typical legal style. They tries to find an effective and clear way to communicate some ways of organization, some behaviours in the face of certain situations. This comes from the programming code as a way of thinking.

Fig 3. Simplest Free Software scheme



127. About Debian GNU/Linux: (from Wikipedia) Debian, organized by the Debian Project, is a widely used distribution of free software developed through the collaboration of volunteers from around the world. Since its inception, the released system, Debian GNU/Linux, has been based on the Linux kernel, with many basic tools of the operating system from the GNU project.

128. <http://www.debian.org/devel/constitution>

129. The Debian Voting System: <http://seehuhn.de/comp/vote>

130. More Debian links: Debian decision-making: <http://www.us.debian.org/devel/constitution> | Debian Voting Information: <http://www.us.debian.org/vote/>

Drupal.org¹³¹ (2000)

Drupal is a growing community based around the goal of building and maintaining a content management system for free use and distribution in accordance with the GPL license.

In other words, drupal is a web site and a system to administer this web site. And again, the goal is the definition of the project. Apart from generalist goals like "make a better world", could it be possible for a political project to define such goals as clearly as we see on free sourced communities?

In Drupal, you have a leader, a core team and a lot of contributors. In terms of organizational structures, Drupal is still in the early stages and at the moment you can find debates about the democratic needs for drupal's project decisions.

Drupal mainly uses public forums for debates. There are historical threads on forums, where new modules and improvements have appeared from. The style of the discussions they use still respects the old etiquette and the final decision is made by the core team, so it doesn't seem too democratic if you forget who is who in the project. This is a case of a participation hierarchy. And, of course, everyone can contact the core people directly.

Drupal is an interesting case study, because the evolution of the organization of the project itself and the management of this fast growth makes it difficult to get any perspective about what's going on, from inside especially.

Indymedia.org Independent Media Center¹³² (1999)

'Indymedia is a collective of independent media organizations and hundreds of journalists offering grassroots, non-corporate coverage. Indymedia is a democratic media outlet for the creation of radical, accurate, and passionate tellings of truth.'
(<http://indymedia.org>)

Indymedia is one of the most important networks for independent media contents. I decided to use Indymedia as an example for two main reasons. Firstly because I was one of the founding members of Indymedia Barcelona, which started 5 years ago. I learned a lot about how to organize an off-site team with a clear goal inside an almost global network of other teams, forming a big, free sourced community.

The second reason is more related to the topic of this article. Indymedia is a very good example of how to use the techniques of free software communities and apply them to a project whose requirements go beyond a technical level. Today, the

131 Drupal website: <http://drupal.org>

132 . IMC website: <http://indymedia.org>

technical aspect of Indymedia only represents a small fraction of all the work that volunteers from around the world are contributing every minute.

Decision systems in Indymedia are mainly by consensus. The local groups can use their own means of decision-making. The global indymedia and the main indymedia site -<http://indymedia.org>- run with very well defined information processes, using normal tools: email lists, chat, wiki-editions...

It is interesting to explore how the local stability of the groups running Indymedia's various editions contribute to Indymedia as a whole. Resources are totally distributed: from technical resources to video knowledge, from edit-copying volunteers work, until translators and editors around the world. Everyone from Indymedia, commonly, has a local Indymedia as a reference, as a way to work, as a process of organization, as a handbook or a pandora's box how-to. 'Dont hate the media, be the media' is the main Indymedia slogan, which clearly describes the goal of the project. Obviously, for an independent news project, as a social project, such a goal is ambiguous and should be adapted to each news local habitat.

This autonomous-groups based-organization is a step forward in the organizational structure, when compared to the other examples. In Indymedia most of the local daily text production is not going to be reused for other editions. In Debian or Drupal, most of new good or accepted code -text-, will be used and reused until it is changed. In Indymedia no single local organization is critical. There are a number of local editions appearing and some others disappearing or been inactive. In Debian or Drupal if some part of the package maintainers stop working they will need spare people, because the project, probably, depends on their work too.

So, Indymedia looks a bit different from the other examples; different for the project goal, different for the public and social presence, different because of the use of the work it self. That's true but, at the same time, Indymedia is like Debian and Drupal in terms of freedom of knowledge, freedom of communication. In fact, in terms of freedom, they are the same.

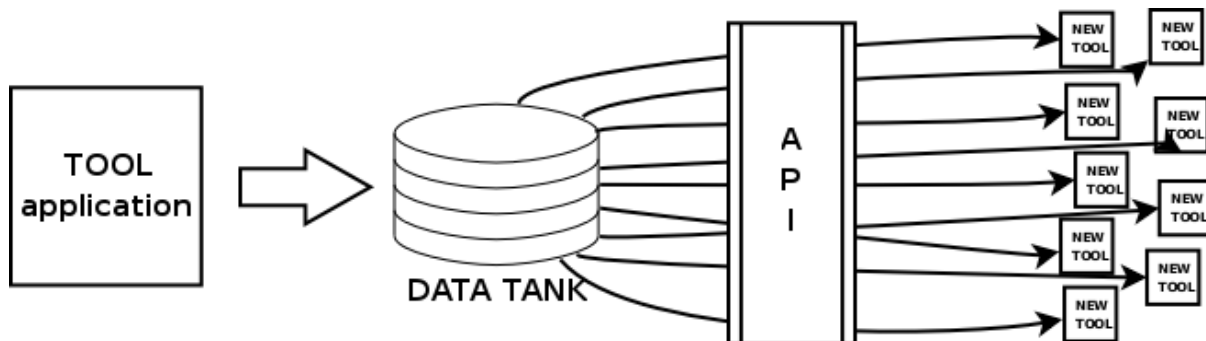


Figure 4: Main tool = data + api = lot of new tools

8. SEARCH FOR A MODEL

I would like to propose some notes for a model of how to start up a free sourced political project.

Political parties began in offline times. They need to do the opposite trip, learning from online organizations. On the other hand, a political party needs very clear rules for auto-organization.

The model would consist of elements of the Indymedia project, the Drupal project and the Debian project.

From indymedia

An offline organization needs to have good communication channels between teams and projects within the organization. It is also necessary to study the goal of the indymedia project. In comparison with the other examples, Indymedia's goal is to generate independent news and agendas. The other projects build software packages. Debian is a gnu/linux distribution and Drupal is a content management software tool.

From drupal

I'd take the naturality of the project, assuming it is growing and changing rapidly. It's a good example of a phase in the process. It demonstrates how rules must be temporary depending on the size of the project. I also recommend reading the Drupal mission and principles because they perfectly define what is public and what is to serve the people.

From Debian

I would take the most important ingredients: organization and coordination. This is my proposal: analyze the Debian rules-for-all and try to adapt them to a networked political party. Debian defines almost everything concerning rules, internal processes, quorum conditions, leadership and hierarchy. The Debian organization could be the equivalent of the first white book for a networked political project.

At this point, there's still a lot to be decided. Let's take a look at the differences between classical offline organizations of political parties and online free community projects. We need to find translations or ways to replace open and free habits with classical ones online.

Every emerging model has the challenge to appropriately define how to reinterpret concepts like:

- Volunteer-based

- Clear and open goals of the project
- Open decision systems
- Open process discussions
- Clear leadership elections and tasks
- Public access to main team members
- Open way for contributions

As Castells¹³³ pointed out in 2001, the EU is, in fact, changing the concept of the untouchability of EU states because their power of decision, and their level of autonomy, is also changing. Currently the final decision in EU is taken for a complex relationship network of institutions -national and supernational ones-. The nature and role of the state changes from the nation-state in the industrial era to what Castells calls the networked state in the informational era. That indicates that is the time for networked politics?

Accepting the Castells vision¹³⁴, we can agree about the urgency of starting to implement the use of networked technologies in any new political project. Social movements, from ecologists to womens' rights groups, most of them, were doing this from the beginning of the net.

9. APPENDIX

Sentences

- If you think that free technology can help people on a global-level, then technology must be cherished, studied and improved for your benefit also.
- The best technology is transparent technology.
- Optimizing the use of technology is not easy. We need to start addressing a new problem: excess of technology. We must also think in terms of sustainable technology.

133 . M. Castells, 'Conversations with History', Institute of International Studies, UC Berkeley (2001) <http://globetrotter.berkeley.edu/people/Castells/castells-con0.html>

134 . Manuel Castells' "The Rise of the Network society" (1996)

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- Rules can be useful, in fact, this is the point of a rule, isn't it? So, if an organization is changing, their rules must always be temporary and optimized to be as useful as possible.
- All online, open decision systems share a common factor: scheduled, clear and participative phases. Time gives sense to the decision.
- If the debian goal is to build and maintain GNU/Linux distribution and the Indymedia project aims to produce independent news, what's the goal of an free sourced politics project?
- Folksonomy is the most democratic and easiest method of classifying things.
- Web 2.0 exists but it's nothing new under the netsky.
- I prefer to talk about Good Tools instead of Tools 2.0.
- Please don't use complex tools for really simple tasks (i.e. don't use a calculator to tell me the result of $(23 + 230)/10$, for example) -
- A 1-dimesional list of millions of search results where the reason for the order of this list is unknown, is just the first step in information visualization. Therefore, Google's current concept is not the future. Oops!

CATHCART'S LIST

A brief review of current movements and trends in information politics

Jamie King

The current social/technological moment puts one in mind of the paranoid Colonel Cathcart in Joseph Heller's *Catch 22*.- Plagued by insecurities, the Colonel jots down a list of occurrences under his command that constitute, for him, a 'feather in the cap!!!' or a 'black eye!!!' The state of the list indicates the likelihood of his promotion or demotion, and thus his sense of well-being.

Unfortunately not all events in Cathcart's world can so easily be delineated. An occurrence can simultaneously be a 'feather in the cap!!!' in the eyes of one General and a 'black eye!!!' in those of another. Worse still, Cathcart himself can often not decide which is which: events appear in both the 'feather!!!' and 'black eye!!!' columns at the same time, or switch back and forth wildly between the two. The indeterminacy is a source of great distress to the Colonel. Never sure what an event portends, he is forced to analyse and discuss each in painful detail.

Like Cathcart, none of us today is quite sure in whose favour the intrigues of information technology lean. Corporate, military, capitalist, anti-capitalist: we all seem to using the same technologies, and, perplexingly, what is taken as 'radical' in one context is seen as reactionary in another. Case one: in the first weeks after September 11th, the media fixed on the advanced information technologies putatively used by al-Qaeda to manage its fighting cells: satphones, mobile data transfer, the internet and, to conceal messages as they traversed the network, strong cryptography and steganography. One report even suggested that the hijackers had checked out of a hotel before the attack because it couldn't provide them with sufficient bandwidth.

This intense, early focus on the technologies and techniques al-Qaeda used in its communications was significant. Whilst it might have been ludicrous to cast this 'terror organisation' as a band of technophiles, American military strategists had been arguing for some time that terrorist cells had something in common with the 'network society': their use of non-hierarchical, 'distributed' command structures to produce sturdy and flexible organisations. That, regardless of whether 'al-Qaeda' operatives relied on the stone-age tech of face-to-face communications, or used wireless-enabled laptops, made it a 'networked' organisation -- at least in the eyes of the American military. At a technology conference months later in Washington DC, the special assistant to the Chairman of the Joint Chiefs of Staff went so far as to call al-Qaeda 'a dispersed enemy who basically is operating on a peer-to-peer system, at a very low level.'

So 'networked' was the shape of terror. But it was also uncannily mirrored in shape of the 'post-Fordist' world economy, with its 'fluid' work in the 'factory without walls, 'just-in-time' delivery and transnational outsourcing. Likewise the network became, quite famously, the structure of the 'open' activist networks. From 'flash mobs' and 'swarm' structures produced using a combination of handheld and online information technologies, anti-capitalist activists were held to embody networkedness. So did the very force they opposed, and so did the 'terrorists'. Did the fact that the 'enemy' was also using it make the network form a 'black eye' or a 'feather' in our caps? What would Cathcart have said? Well, he would have said nothing, because he'd have known that the military for some years has been turning over the idea that a distributed, non-hierarchical communications system could give the armed forces enough of the adaptability and speed evinced by anti-globalisation and 'terror' groups to achieve what is unblinkingly called 'full spectrum dominance'. At that DC Conference, Lieutenant Colonel Robert Wardell told technologists that peer-to-peer technology could in future be of 'significant value' to the military – who, he explained, intended to enlist the architects of peer-to-peer networks like Gnutella and Morpheus in the 'War Against Terror.' -

What is of importance here is the US military's very real identification with the putative 'nature of the beast': its conviction that to defeat the enemy, you have to become like it. There is an important and constant refraction here between America and its technologies, and 'terrorists' and theirs; TCP/IP, the routing protocol at the centre of the net's operation, is a US innovation leading out of work begun during the Cold War, and it is still absolutely fundamental to all of the key communications technologies running over the network today. In 'learning lessons' from the September 11 actors' use of that network, and its principles, the US military is in fact re-reading the work it sponsored at the Advanced Research Project Agency (ARPA) in the light of the way it has been incorporated by its very own enemies.-

The radical indeterminacy doesn't end there. One might forcefully argue, as Anustup Basu did, that networked information distribution was key in bringing into 'informatic affinity' the two 'disparate propositions' -- 'Saddam the evil one, and 9/11, the horrible crime' -- that produced in key nation states public consensus for the invasion of Iraq. In this reading, the explosive propagation of productive and reproductive media technologies during the last half decade has served to radically potentiate massification, towards the fascist peak, 'extinguish[ing] pluralities, and replac[ing] them with a monologue of power that saturates space with, and only with, the immanent will of the dictator.'- This is because informatic exchanges do nothing but replicate the mega-utterances of the Dictator: 'fascism becomes a political reality when knowledge based exchanges between entities of intelligence give way to a technologism of informatics.'

We can clearly see how Basu is 'right'. All of those who have argued (myself included) for the liberatory or radical potentials of various information technologies have to contend with the fact that the production of consensus for war has continued with disturbing efficacy at the same time that producing and distributing media

technologies have been ceded more and more into the hands of the general population. The 'multitude', we might say, has got hold of these tools, but it has not yet delineated its will through that of the mass, for it is the mass, quite clearly, that allows the war machine to roll on.

But wait. Yes, the war machine grinds on, but the opposition that exists to the wars in Afghanistan or Iraq - and the speed with which this opposition has made its voice heard -- is far more intense than it was during, say, the Vietnam war -- unprecedented, in fact. - And it is quite clear that one of the major factors playing into this intensity of opposition is the availability of *information*: whether it is about torture at Abu Ghraib or Guantanamo Bay, hearing the voices of bombed-addled Lebanese civilians, or reading the blogs of disillusioned GIs in Iraq. Another is the massively augmented capacity to self-publish and reproduce information. While what Tony Blair once called 'the case for war' can still undoubtedly be propagated in the current media environment, it can also be more swiftly dismantled than ever before.

To the next item on Cathcart's List: the arguments raging over the peer-to-peer (p2p) technologies that have become such a critical force in media distribution. We find further radical indeterminacy. There are many voices in this debate, but the vexed question is roughly as follows: is p2p going to smash corporate media, or revitalise it? Will p2p destroy Hollywood, or will corporate media be able to use cheap/free networked distribution to its advantage? This delicious dilemma is currently the talking point on entertainment industry boards across the world... *and* in the private IRC channels of the pirate network operators. Some of those running trackers like The Pirate Bay, which receives approximately 2,000,000 unique visitors a day, quite reasonably look to make a living from their re-distribution activities. Those on the corporate boards wonder not just if their livelihoods will be taken away, but if they can 'make peace' with the new networks and even find ways to do business with them. There is, in other words, an uncomfortable 'coming together' of the old and the new media networks around the corner. Will the feather be swapped from one cap to another, or will it be feathers all round?

Not unconnected to this is the phantasmagoric spectacle (some would say bubble) of 'Web 2.0', a phrase coined by O'Reilly Media in 2004 to refer to a 'second-generation' of Internet-based services -- such as social networking sites, wikis and other online communication tools -- allowing people to collaborate and share information online. Web 2.0 services like Flickr and Digg are essentially enabling shells in which social activity takes place. Companies like Technorati and Blogpulse collate blog entries produced across the Web. Del.icio.us is composed entirely from bookmark-like information, essentially expressions of Web users' interests in particular items. With Web 2.0, our social activity has become a commercial product.

In this regard, Web 2.0 seems rather pernicious, a machine that commodifies human affect -- what object could be more loathed by a good autonomist? And worse still, as reported recently in the *New Scientist*, US Intelligence is funding research into the mass harvesting of the information that people post about themselves on the social networks enabled by 2.0 to build 'extensive, all-embracing personal profiles of

individuals’.-

Though anyone who has ever seen an average MySpace profile will have sympathy for poor spooks trying munge millions upon millions of the things into useable intelligence data, such reports are undeniably terrifying. And yet the forces unleashed in 2.0 services can be seen in an entirely different light. Indymedia, although by now dwindling in popularity, is an early example of a 2.0-style service. So is Wikipedia, a highly popular online encyclopedia to which any Web user can contribute. The forms of collaborative production (Yochai Benkler calls it ‘commons based peer production’) could also manifest themselves as something very dear to the autonomist heart. Indeed, in one case -- the Gnu/Linux operating system -- the form of production has been *so* powerful as to be able to compete head-on with the commercial alternatives. It is a body of software - indeed, it is not too grand to say, of work -- unparalleled in traditional cultural production models. This same power is now beginning to be harnessed in other avenues of media production. Is it necessarily the case that such social innovations will, like Flickr or del.icio.us, simply be consumed by corporate machines, or is it possible that they contain enough potency to challenge the corporate media model altogether?

* * * *

While this kind of indeterminacy might be exhilarating in a world of so many doomy certainties, anyone could be forgiven for posing again the Cathcartian dilemma: ‘feather in the cap’, or ‘black eye’? Who will benefit from the current turns in information technology? What can we do to ensure things go ‘our way’ and not ‘theirs’ -- toward more direct, less mediated, forms of democratic organisation? Toward forms of deliberation and decision-making that minimise the gulf between representatives and those represented?

Two key factors must taken into account in understanding the current (multivalent) radicalisation of communication: digital reproduction, which provides for non-finite, zero-cost multiplication of media objects, and network distribution, which allows those multiplying objects to reach potential recipients with a minimum of resistance. One major consequence of this innovation is that an idea (musical, theoretical, scientific) is no longer limited to a cumbersome physical instantiation, but may immediately take flight, in a variety of digital formats, across the network, multiplying as necessary at zero cost.- It is this that allows the copy/paste, read/write, produce-and-disseminate Web that is realising itself today in popular forms like YouTube and MySpace.

This aspect of Tim Berners-Lee’s vision for the Web was forgone when it first took off as a commercial proposition in the early 90s: what developed was a more top-down system in which those who possessed the technological know-how still dominated the production of new media content. Services like Indymedia sought to some extent to re-inscribe the Web’s intrinsic ‘write’ capacity, but, it can be seen in retrospect, still attempted to centralise too much both in terms of editorial control and infrastructural maintenance. Web 2.0 represents the return of Berners-Lee’s ‘read

write' Web: its core applications and services are designed to allow users to easily create continuous Web-based content of all kinds. An early example of this was Blogger, a 'Web logging' tool that allows users to simply keep and update an online journal. As a few commentators pointed out contemporaneously, and even more today, blogging was a much more 'natural' use of the underlying characteristics of the internet than Indymedia's 'portal' model. Each individual chooses to run her own blog, and what to say on it, and if it is updated or not. 'Aggregation', bringing together the content from disparate resources, happens later, using standards like Really Simple Syndication, and this process is again not in the hands of 'editors' or 'collectives', but in those of the individual, or multitude.

Digital reproduction and networked distribution have a further, ineluctable consequence. In today's economy, information goods have zero 'marginal cost', that is, the cost of reproducing a given information is nothing. This apparently dry economic principle has interesting consequences for the structures of domination that were built in the last century. Creating, buying and selling media goods is the basis of the media industry and, therefore, of the social apparatus that defines how mass consensus is produced. At the moment, that industry is, with the co-operation of some governments, the UN and the EU, doing its best to prop up the intellectual property regime through a combination of legal activism (strengthening IP law and making it more punitive) and technological provisions (known broadly as 'Digital Rights Management'). However, the underlying conditions cannot be legislated away or technologically tricked-out. Knowledge divorced from physical media is 'non-rivalrous' by nature. Nothing short of legislating away the internet itself, or reversing the switch to digital media will re-establish intellectual work as the subject of property. Sooner or later, given continued increases in bandwidth, disk space and processor speed, and a consequent further glut of media, the price people are willing to pay for units of media will start to tend rapidly towards zero. When this tipping point is reached, the disruption we have seen with the acceleration of information production and reproduction to this point will seem rather petty. The entire basis of the media *qua* industry will have been undermined.

What is intensely peculiar about all of this is that the social change is being forced not by activists, or activist-lawyers, or even by technologists, but by millions upon millions of people doing what they want with consumer-grade information technology -- which is, downloading and sharing media online. Some few do it because they have a bone to pick with Hollywood. Many more do it because they can, because it is free and easy, because the risks of being caught are minimal. Most are downloading the products of the very industry whose business model their activities threaten -- however much they enjoy these products, and might therefore want to see them supported, they do not stop. None of this is conceived of as 'political' activity, and activists have, by and large, had nothing to do with Peer to Peer activity. (Piratbyrån -- The Bureau of Piracy -- a Swedish organization established to support filesharing and to promote new ideas about intellectual property in this regards, has received such attention precisely because it's almost one of a kind in the activist world.) Rarely is it conceived politically, and yet its political shockwaves, it is safe to say, will be felt for a long time to come.

What can we all do (other than download!) in the face of this distinctly un-Cathcartian piece of inevitability? This is where things become fun. We all have to think creatively about what comes next. At the precise moment the media industry, faces potential bankruptcy if the genie of P2P is not put back in the bottle (and it cannot be), ordinary people find themselves, for the first time, in possession of the means of media production (cheap, high quality cameras, recording equipment, editing machines), reproduction (low cost disks, storage media) and distribution (networks of all kinds). The same combination of factors (distributed networks + digital reproduction) that seems likely to put paid to the media industry immediately suggests a new 'industry': networks of small(er) producers making their own media in their own way. It does not seem likely (despite the false feather/black eye presented earlier) that old-style media monopolies will be able to form in the face of abundant means of distribution online: like Indymedia dwindled in the context of the blogs, kings of p2p like The Pirate Bay will dwindle when the tipping point is reached and *everyone* becomes a distributor.-

Serious problems are revealed in this form of networked co-operation for traditional modes of organising the 'knowledge economy'. While those who have most to lose spend a good deal of time working out ways in which the value of an information good can be preserved,- it is becoming harder and harder to separate one particular piece of information from the 'common good', either conceptually or practically. A hypertext document (a web page, say) allows us to follow links to others' documents; it makes us aware of the ecosystem of ideas that surround any other. In this way, the network re-reveals the matrix of co-operation and collaboration hidden inside the invisible fortress of intellectual property *at the precisely the same moment* that its potentiation of reproduction and distribution make the category of information property radically unstable. As the phenomenon of massive, distributed collaborations between peers organized without markets emerges, creating any work is increasingly coming to be seen again in the context of the public resources that surround it. IP law struggles to maintain the Renaissance of human productivity not the combined ingenuity of humans working in consort, but the singular genius of an idea owner. Meanwhile, as we see how much immaterial labour, and indeed all labour, depends on that which goes before and surrounds it, quantifying work in isolation makes less and less sense.

The recognition of this new relation of the self to the social may well be muted by the series of recognitions that have gone before it.- Many commentators have celebrated the emergence of a 'collective intelligence' or 'hive mind' as a new phase of capital that will improve innovation and lead to an ultimate realisation of the free market. That formulation is -- to risk ending on a Cathcartian note -- both the problem and the challenge. The crucial question is how far what Vincente terms the 'plural, multiform constantly mutating intelligence' - unleashed by these productive and reproductive technologies can be contained or co-opted again.

Networked politics: A reader of work in progress

¹ Joseph Heller, *Catch 22* (New York: Simon & Schuster, 1961) ² Leslie Walker, 'Uncle Sam Wants Napster', *Washington Post*, November 8, 2001. (<http://www.washingtonpost.com/ac2/wp-dyn/A59099-2001Nov7>) ³ also see Kenneth H. Pritchard, 'Asymmetric Approaches to Warfare.' *Officer Review*, vol. 39, no. 1, July 1999, p. 11. For more papers on asymmetry, see (<http://www.jfsc.ndu.edu/library/bibliography/asymetric.html>) ⁴ for more material on this, see Jamie King, 'Terror Is A Network And The Network Is You', in *Mute magazine*, March 2002. (<http://www.metamute.org/en/Terror-Is-A-Network-And-The-Network-Is-You>) ⁵ Anustup Basu, 'Bombs and Bytes', in *Mute magazine*, 12 January 2004 (see <http://www.metamute.org/en/node/6346/print>) ⁶ see, e.g., Chomsky on this topic, (<http://www.zmag.org/content/showarticle.cfm?ItemID=2962>) ⁷ Paul Mark, 'Pentagon sets its sights on social networking websites', *New Scientist*, 09 June 2006. _

⁸ Or, to put it technically, digital information is 'non-excludable'. By all means let's avoid Stewart Brand's 1984 anthropomorphisation. Information does not 'want to' be anything, and is anyway everywhere in chains. ⁹ I am indebted to Rasmus Fleischer -- private IRC conversation 21 September, 2006. ¹⁰ See for example Hal Varian, 'Market Structure in the Network Age', available at www.sims.berkeley.edu/~hal/Papers/doc/doc.html ¹¹ See e.g., Joel de Rosnay's 'Cybion' or 'symbiotic man', Kevin Kelly's 'Hive Mind', the Derrick de Kerckhove's 'Collective Intelligence'. ¹² Jean-Marie Vincent, 'Les automatismes sociaux et le "general intellect."' in *Futur Antérieur* 16 (1993), p. 121 (trans. by Nick Dwyer Witherford in *Cyber-Marx: Cycles and Circuits of Struggle in High Technology Capitalism* (University of Illinois: 1999), available at <http://www.fims.uwo.ca/people/faculty/dyerwitherford/index.htm> _

THE DILEMMAS OF AN INEVITABLE RELATIONSHIP: DEMOCRATIC INNOVATION AND THE TECHNOLOGIES OF INFORMATION AND COMMUNICATION¹³⁵

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1. INTRODUCTION

In a conference on the new information society, the rector of the Open University, John Daniel, said 'Ladies and gentlemen, the new technologies are the answer. What was the question?'. The phrase is a good way of expressing the great expectations generated in many different areas of our lives by the prospect of the application of information and communication technologies (ICTs), but at the same time the prevailing disconcertion over their possible uses and impacts. The remark recalls the comment made by the one of the fathers of wireless communication, Marconi, when a collaborator, flustered by the discovery, said, 'We can talk with Florida', to which Marconi responded: 'But do we have anything to say to the people in Florida?'. Similarly, we can say that not a day goes by that we do not meet someone filled with enthusiasm for the possibilities opened by new technologies in the field of democracy and the functioning of the political system. But we should first think about the problems facing us today and in the potential and real uses of these ICTs. The present work aims to first point up the deficiencies of the current functioning of European democratic systems, to later explore to what extent ICTs can contribute to processes of innovation and improvement.

It has been said¹³⁶ that modernity can be defined politically by democratic institutions and socially and culturally by the civilization of technology. But the relations between these two components are not free of ambiguities. While some, like Jean-Jacques Rousseau, have always been hesitant before the effects scientific progress would have on privacy and on equality in political relations, others such as Karl Popper or Bertrand Russell understood that there was a close relation between the spirit of science and the success of democratic institutions. But what is ever more present is concern about how to relate the proliferation of ICTs with the processes and values of democracy¹³⁷. Simplifying somewhat, we could say that there are at least three interesting (and not necessarily exclusive) possibilities for ICTs in relation

¹³⁵ Joan Subirats, "The dilemmas of an inevitable relationship: democratic innovation and the information and communication technology", en Jordana, J. (ed.), Governing Telecommunications and the New Information Society in Europe, Edward Elgar, Cheltenham, 2002, pp.228-250

¹³⁶ Benjamin Barber, 1998, *A Passion for Democracy*, Princeton University Press.

¹³⁷ See Hoff, J.; Horrocks, I.; and Tops, P. (eds.), 2000, *Democratic Governance and New Technology*, Routledge, London;

Bellamy, C. and Taylor, J.A. (1998), *Governing in the Information Age*, Open University Press, Buckingham; and

Tsagarousianou, R.; Tambini, D.; and Bryan, C. (eds.), 1998, *Cyberdemocracy: Technology, Cities and Civic Networks*, Routledge, London.

to political democracy. They could aggravate the problems parliamentary democracy now presents, help to solve or overcome these problems, or create new problems they are not capable of resolving.

Some are of the opinion¹³⁸ that if first-generation media (radio, television) have made politics into something almost virtual, this will be enormously strengthened in second-generation media (interactive electronic networks),¹³⁹ leading to a sort of apotheosis of sharply directorial political forms. To complete this pessimistic scenario, it is predicted that ICTs will allow exhaustive control of data and sophisticated political marketing, and will offer great possibilities for manipulating information, with little margin for generating change. Other authors¹⁴⁰ consider that ICTs could favor easier access by the citizenry to the activities of the government, transforming it into a more controllable entity with fewer possibilities of exercising hierarchical control without adequate checks and balances. At the same time, the new forms of communication among citizens, parliaments and governments may come to balance or compensate for the current power of the media, pressure groups and parties, who shape the political agenda and 'format' the issues of the system. This would be a hopeful vision of democratizing and power-balancing effects in relation to institutions and elites that are now rather closed to society.

But in the sphere that interests us here, we must note that the modus operandi of ICTs and that of the political system do not seem to coincide overmuch. While democracy leads us to a scenario of deliberation, prudence and parsimonious interaction, with a great investment of time, the technological revolution is characterized by the speed it imparts to everything it touches. While the digital form of reasoning is very simple, binary, always seeking a choice between A and B, between Yes and No, political reasoning seeks to delve into complexity, bringing to light nuances and various ways to see the problem. Before the dilemma of A or B, it can look for such answers as 'both', 'neither', 'these are not answers to the problem', or even 'this is not the problem'.

We should therefore treat with a certain caution the topic of the incorporation of ICTs into the field of democratic institutions and their forms and procedural rules, since the starting points are quite different. We have no reason to cleave to a certain technological determinism that tells us it is a waste of time to worry about whether use of ICTs in democratic systems of government is appropriate or not, since it is simply inevitable.¹⁴¹ We are interested in analyzing the real difference that might be generated by the use of ICTs on what were considered problems or deficiencies of democratic systems, in order to find useful connections between the two worlds, from positions that are not free of normativism, since we are interested in what reinforces democracy and broadens its spaces of civil participation. And we will do

¹³⁸ Holmes, D. (ed.), 1997, *Virtual Politics. Identity and Community in Cyberspace*, Sage, London.

¹³⁹ Poster, M., 1995, *The Second Media Age*, Polity Press, Cambridge.

¹⁴⁰ Dutton, W. (ed.), 1999, *Society on the Line. Information Politics in the Digital Age*, Oxford University Press, Oxford.

¹⁴¹ Grossman, L.K., 1995, *The Electronic Republic. Reshaping Democracy in the Information Age*, Viking, New York.

so trying to carry the debate into the European context of parliamentary democracies, with relatively well organized, centralized parties, with a strong presence in intermediation of interests and with well established and notably hierarchical administrations.

2. DEFICIENCIES IN THE FUNCTIONING OF DEMOCRACY?

We find ourselves at a curious moment. Never in the history of humanity has the complex of rules and mechanisms of plural representation, participation and control that historically have made up the concept of democracy been so widespread. From this point of view, we would say that democracy seems to be living through halcyon days all over the world. Nonetheless, there is still a growing dissatisfaction with how it works. The foundation of this criticism can be found in what Bobbio called 'unkept promises'.¹⁴² But it is also evident that democratic decision-making mechanisms show little capacity for resolving problems. Formalism, distance between representatives and the represented, opacity, and asymmetry in theoretically equal resources are some of the criticisms in political debate which are directed at the current functioning of our democratic systems.

In recent years a strong base of empirical evidence has been gathered for this group of perceptions, which some have defined as a phenomenon of disaffection of the citizens towards the political players and institutions of each country.¹⁴³ It is not so much a distancing from democracy as a system of government (this being an aspect in which a reduction of legitimacy is not seen, just the opposite), but a marked decline in public confidence in how representative institutions operate and perform. There are no signs of preference for non-democratic or authoritarian governmental alternatives, but it is noted that public attitudes towards parties, parliaments and governments express more and more mistrust.¹⁴⁴

This tendency may be considered significant, since we are not talking about changes in popular confidence in any governments or parties in particular but in the representative institutions that have characterized the model of political governance in the contemporary history of the Western world. What could explain this tendency? Is it, as has been suggested, simple disaffection or disagreement with how the modern world is evolving? Is it a response to the perceptible inability of public powers to control an economy ever more heedless of borders and regulations? Is it a product of the growing individualization of lifestyles that weakens social bonds and community participation, and therefore decreases confidence in everything that

¹⁴² Norberto Bobbio, 1984, *Il futuro della democrazia*, Einaudi, Turin.

¹⁴³ Norris, P., (ed.) 1999, *Critical Citizens*, Oxford University Press;

Newton, K. and Norris, P., "Confidence in Public Institutions: Faith, Culture or Performance", in Pharr, S. and Putnam, R., (ed.) 2000, *Disaffected Democracies*, Princeton University Press, Princeton, pp.52-73.

¹⁴⁴ In 18 of the world's 20 best-established democracies, among them all the best-established European democracies, voter turnout has fallen an average of ten points over the past ten years. See Putnam, R.; Pharr, S.; and Dalton, R. J. 2000, *What's Troubling the Trilateral Democracies?*, in Pharr and Putnam, pp. 3-30.

representative institutions of collective action are? Or is it simply a loss of credibility and recognition of the way each government operates and the concrete actions it takes, its real ability to resolve the problems posed by living together in society?¹⁴⁵

We would therefore have a scenario in which the democratic system appears to be enjoying good health, since its legitimacy has increased everywhere, while the alternatives that historically have been set in motion have ended in resounding failures. It has even been argued that the criticisms of how it really functions from country to country are part and parcel of the mechanism of continuous perfecting that democracy sets up. According to this vision, there is at bottom no problem. The thing to do is to go on improving what exists without calling into doubt its essential parameters: representative power chosen in competitive elections among parties, participation, and channels of controlling legitimately constituted power. Yet as we have mentioned, growing dissatisfaction with the 'quality' of this democracy is observed.

The questions connected with these observations immediately arise. Does disaffection towards democratic institutions produce a decline in the mechanisms of conventional participation? Or are these mechanisms what do not satisfy citizens' expectations, leading them to use them less and less and to mistrust representative institutions? Or is it both things at once? There is abundant literature on the subject, which we will not enter into here.¹⁴⁶ But in general there are problems of dissatisfaction with the systems of selection of the representative elites; excessive ritualism in the channels of representation; the quasimonopolistic position of political parties in the scenario of political participation (facing which the voiceless can only walk away); and the difficulty of seeing reflected in electoral platforms the issues that might be of more direct interest than the debate over who the next prime minister will be, or which political force will gain a sufficient majority to form a government.

Universal suffrage has not brought us to the full realization of the ideal of popular sovereignty but to the development of more sophisticated techniques through which the elites of the parties and the administrative bureaucracies have increased their capacity to control the citizenry. It would then seem that the mixture of constitutionalism and democracy has transformed parliamentary institutions more into instruments of government than channels of representation and popular expression. If we add to this the confluence of interests and organizations brought about by the consolidation of Keynesian welfare options and the use of mass media, we can say that space for a public sphere of debate and opinion, truly autonomous from the state apparatus, has been disappearing. Our democracy, apathetic and alienated, has become more 'managerial' than anything else.¹⁴⁷

¹⁴⁵ This last hypothesis is the one that has found most statistical and empirical support in recent works on the question. See Pharr, S. and Putnam, R., (ed.) 2000, *Disaffected Democracies*, Princeton University Press, Princeton.

¹⁴⁶ See Font, J. (ed.), *Ciudadanos y Decisiones Públicas*, Ariel, Barcelona 2001, for a panoramic view of the issue.

¹⁴⁷ Luadon, K., 1977, *Communications Technology and Popular Participation*, Praeger, New York.

3. WHAT IS TO BE DONE?

The alternatives under this type of diagnosis are unclear. If one of the principal concerns is democratic regimes' lack of performance, one might think of strengthening their performance by authoritarian options following the logic of 'less participation, more efficacy'. Increasing the 'decision' capacities of the system at the cost of reducing the capacity of control and citizen action ('delegative democracy' in O'Donnell's expression), or trying to depoliticize the system through trusting in 'captains of industry' and figures who make 'common sense' their ideological banner (Perot, Berlusconi, Fujimori), and others who present themselves as 'cleaners' of the rot of 'politics as usual' (Chávez). Less traumatically for the values and rules of democracy, the idea has been taking hold that it should be isolated from institutionalized politics in certain spheres of public action considered 'sensitive matters'. The solution would be to create independent authorities, agencies and organisms to make legitimate their actions and capacity to make decisions, not according to the principles of popular representation but according to their capacity to 'solve', based on professional and technical criteria of authority and representativeness (and therefore legitimacy). It is in this line that independent authorities have been appearing in securities trading, electrical regulation, the environment, nuclear power, control of competition, and sports discipline, not to mention the increasingly important influence and independence of the authorities of the central banks.¹⁴⁸

We do not believe these alternatives are in the line of combining reinforcement of democracy with increased capacity of representation and credibility of democratic institutions. In a meliorist line attempts have been made to find new formulae in the traditional systems of representation and participation. Thus work has been done on improving the forms of candidate selection, whether through primaries, open list systems or reforms of the electoral systems (with a combination of proportional and majority formulae), which increase the capacity of choice and involvement of the electorate in the selection of candidates and accentuate the responsibility of the representative to the citizenry. Other formulae on which more emphasis has been placed recently have been those referring to improvement of communication channels between institutions and citizens and between parties and citizens. Initiatives to offer windows of institutional information from parliaments and governments at all levels continue to proliferate. At the same time, these institutions and parties use surveys and other instruments for measuring public opinion to compensate for lack of feedback on their policies and proposals between elections.

At the essentially local level, there has been enormous development of the participation of very diverse entities and associations, with essentially sectorial bases (seniors, youth, women, the environment, sports ...), but also territorial ones (neighborhood, district ...). It seems undeniable that the large expansion of public administrations' areas of action has been generating the presence of more and more players in debate over policy formulation and implementation and has also caused

¹⁴⁸ GianDomenico Majone (ed.), 1996, *Regulating Europe*, Routledge, London.

the loss of the hierarchical and *super partes* role that characterized their traditional action. Thus, it is not strange that in many of the policies pursued by governments there has been a tendency to create specific spaces for encounters and information exchange between institutions and entities. In general, these are councils or fora in which policies are agreed on, problems are anticipated and pacts are reached on implementation or even co-management, functioning with more or less formalized rules.

Little by little we have also been seeking or recovering formulae of direct participation of the citizenry in public decisions. The most traditional mechanisms of direct democracy, such as referenda or popular legislative initiatives, have been complemented with other more complex formulae of citizen involvement in public decisions such as 'citizen councils'. It seems clear that in recent years the use of this type of participatory formulae has notably increased. In the case of referenda, we have examples at the nation-state level (in France and Denmark on questions of European integration, or the habitual ones in Italy on legislative abrogation), and they also proliferate on the local scale when especially significant conflicts or decisions considered strategic are faced. Experimentation with involvement in new ways of participation and popular consultation is also increasingly frequent, especially on the local scale (citizen councils in the Basque Country and Catalonia, fora in Great Britain, participatory budgets in Latin America, deliberative mechanisms in the United States, participatory formulae linked to Agendas 21, etc.) (see Font, endnote 9). The reasons that explain this proliferation of citizen involvement and the dissemination of direct participatory experiences, whether in a classic or an innovative format, are linked to the deficiencies of the traditional ways of participation foreseen in representative democracy, especially their inability to link the global legitimacy obtained in electoral processes with the legitimacy necessary in the day-to-day, facing specific issues, freighted with meaning, for which reason extra legitimacy is sought in these new participatory forms.

4. THE COSTS AND PROBLEMS OF PARTICIPATION

Skepticism towards these new alternatives, or towards the search for a more lively democracy and the citizenry's involvement in decision-making processes, is very widespread among the political elite. The reasons alleged are very diverse. Some allude to the costs of time and resources entailed by these processes, while others refer to the dangers of 'capture' by special interests. It is usually mentioned how all this erodes the indispensable legitimacy of parties and institutions for good democratic praxis, and also mentioned is the lack of 'added value' (because of the unpreparedness of citizens for the problems posed) that many of these mechanisms end up producing. Connected with all this is the widely held and well founded opinion that we cannot confuse these 10% who are more or less intensely interested, in a manner inconsistent with the political decision-making process, with the rest of the population, who only in certain circumstances enter a world they consider foreign and the province of specialists. In this context, it is said, we wind up

confusing the citizenry with a very restricted part of the population, that which organizes, mobilizes, and says it represents the rest.

The political elite, while publicly deploring this lack of participatory enthusiasm, or declaring their concern over the increase of abstention in elections, later do not show themselves especially keen to support non-conventional openings for participation (popular legislative initiatives, autonomous referenda ...), nor to accept the legitimacy or binding force of more novel forms of citizen participation in public decision-making processes. As Flores d'Arcais has said, a sort of vicious circle of shirked responsibilities is created: citizens experience the political system as foreign, turning their backs on it (contrast with this the vitality of new social movements or campaigns based on a single issue), getting what little they can out of it, and globally criticizing something in which they do not feel involved. While politicians say they are hurt by citizens' lack of understanding and complain publicly of the lack of participatory life, they take advantage of a conception of politics that is more and more a thing for initiates and professionals.

The problem is knowing whether, in this context, the democratic system requires or can do without greater and more extensive doses of popular participation, and knowing what mechanisms can contribute to this without overloading (with time and transaction costs) the citizenry's already tired shoulders. We have taken a cursory look at the difficulty and skepticism that surround this issue. The ever greater complexity of the decisions in the public sphere and the habitual inconsistency between citizens' opinions (for example, simultaneously asking for increased social services and reduced taxes) offer new handles for old elitist conceptions. We think, however, that it is more and more difficult to maintain positions of this type. Whether because of the enormous diffusion of information and access to education that have come about in many countries in the past few decades, or because of the sophistication in scientific progress that leaves us with ever fewer unequivocal responses from the technical point of view on how to solve problems.¹⁴⁹ In many of these criticisms of more direct forms of citizen participation lie skepticism and suspicion about the very bases of democracy.¹⁵⁰

Certainly those of us who think that we should advance in looking for and experimenting with new mechanisms of participation, as a way of improving the quality of democracy and its capacity to resolve the problems generated by living together, should be able to demonstrate that participation and efficiency are not contradictory concepts but are increasingly complementary concepts, and to seek out and experiment with instruments and mechanisms of participation that avoid or at least reduce the existing risks and minimize the problems noted.

As for the presumed complementarity of participation and efficiency, we would like to point out that increasingly often we face problems that are more global and

¹⁴⁹ To cite only one reference, Lindblom, Ch., 1990, *Inquiry and Change*, Yale University Press, New Haven.

¹⁵⁰ Budge, I., 1993, "Direct Democracy: Setting Appropriate Terms of Debate", in Held, D. (ed.), *Prospects for Democracy*, Polity, Cambridge, pp.136-155.

interconnected, and therefore more difficult to segment, define, and approach from the specializations we have been constructing. In such contexts, we cannot fall into the error of confusing technical feasibility with social feasibility, and we will have to work in both directions to address problems on which there is often no consensus, not even on whether there is a problem and what kind of a problem it is. Many of the difficult decisions to be made, which affect deeply rooted social interests, can reach important consensuses in the technical sphere, but they will find it hard to advance if debate is not opened and there is discussion and comparison of costs and benefits, alternatives, and solutions with the whole of society. Since people will be increasingly able to accept and share decisions that even affect some of their interests negatively if they consider legitimate the route by which a decision was reached. From this point of view, efficiency and participation are not contradictory but absolutely complementary, and will become more and more inseparable.

How is the complexity of public decisions to be shared with as many citizens as possible? We do not pretend to give a single response to such a complex issue. We believe that the skepticism and danger that surround the world of participation have to be analyzed and treated specifically, and can be better or worse resolved according to the participatory mechanism used. There are no universal recipes or ad hoc solutions. We must clarify the dilemmas posed, the limitations that exist and the conditioning factors that make up the case, determine who the most affected parties are, and collaborate with them in trying to find the best participatory formula that broadens the debate and gives it a way out. Here, as we are trying to show in this work, the use of information and communication technologies can be very significant.

5. THE ROLE OF ICTS BEFORE THE PROBLEMS OF DEMOCRACY. THE VARIOUS STRATEGIES.

It is obvious that the possibilities of using ICTs are manifold, but it is not the same to work in them from the internal logic of the current system of representative democracy, from the prospect of constructing, with the aid of the new technologies, the old ideal of direct democracy, or trying to imagine new forms of articulation and collective governance.

We can operationalize the question attempting to relate in a table the alternatives that relate the use of ICTs with the processes of democratic innovation. A first broad option would be to try to apply ICTs in the more specific field of policies and their management or in the field of polity and relations between institutions and the citizenry. We have a second broad criterion of distinction if we consider only processes of improvement and innovation within the current constitutional and political framework characteristic of modern European parliamentary democracies, or if we are willing, in a democratic framework, to explore alternative ways of making decisions, thinking, and managing in policies that incorporate the citizenry more directly and accept the pluralism inherent in an open conception of collective responsibilities and public spaces. Crossing the criteria, we have four political

strategies or discourses on how to relate ICTs and democratic systems and their processes of decision and management.

Table 1

Processes of democratic innovation and use of information and communication technologies		<i>USE OF ICTs</i>	
		Policy	Polity
Degree of democratic innovation and acceptance of participatory and pluralistic processes	Low	1 consumerist mechanisms	2 changes in democratic elitism
	High	3 pluralist networks provision of services	4 processes of direct democracy

We will briefly explore each of the alternatives furnished by the table, understanding them not as closed models but as discourses or strategies, sometimes simultaneous, developed in the intersection between ICTs and the way democratic systems operate.

6. THE CONSUMERIST OPTION

This strategy's starting point is situated in the liberal universe, with absolutely no intention of calling into question the way constitutional and parliamentary democracy operates, with its mechanisms of participation centered essentially on parties and elections. According to this vision, what is failing are the mechanisms of information at the citizenry's disposition, so that they can exercise their possibilities of choice more completely and efficaciously and have more power in their relations with the public bureaucracies. The greater strength or influence of the people would come not so much from their greater capacity for involvement or letting their voice be heard in processes as from their greater capacity to choose, to change providers, and to express their preferences clearly. Somehow it is understood that the process of collective consumption of resources derived from public policies has no reason to be connected with 'high politics', with values, and is expressed only in efficacy and capacity to satisfy citizens' needs.

How can ICTs serve these objectives? It seems clear that the demand for more and better information jibes well with the most evident potential of ICTs. There are many varied examples of how ICTs have improved relations between citizens and administrations, and abundant literature that tries to analyze and propose improvements in this area. Not a day goes by that we do not hear of new advances in administration-citizen interfaces that allow or will allow online resolution of what are now complex and costly procedures of obtaining permits, renewing documents, settling taxes or getting information. The advances in the security of these processes through the acceptance of electronic signatures and the growing coordination among different levels of administration are a good example of this. In similar fashion, one

observes ceaseless efforts by public entities or services to put online for citizens ample information on the services they have access to or the rights they can exercise, as well as explicit presentations of who is responsible for what, and how to locate specific employees or supervisors in each process or service.

The values that implicitly or explicitly govern these processes of change and the use of ICTs are those of economy, efficiency and efficacy, which served to put in motion the processes of administrative modernization of the 1980s and 90s ('new public management'). New public managers who wished to implement in public administrations systems of management closer to those of the private sector and politicians who sought renewed forms of legitimization in an improvement of the administrations' capacity to provide service and the growing accessibility and transformative potential of ICTs coincided in time and in their expectations. The strategies of 'citizen charts' and 'total quality' are examples of this. Furthermore, the dynamics of 'flattening' structures and decentralizing management, seeking closeness and more personalized service, found in the new information systems the necessary levers for avoiding misgovernment and buck-passing, through contractual systems and establishment of management guidelines and ad hoc organizational charts. ICTs seem to offer the realization of a long-sought dream: maximum decentralization without abuse of discretion or loss of control or responsibility. In this way, we are probably witnessing the transformation of many European bureaucracies into 'infocracies'.¹⁵¹

However, the problem is that these improvements in the method of managing policies and in communication channels between the citizenry and public administrations not only do not offer new solutions to the problems of democratic disaffection but introduce certain problems in handling the large flow of information that ICTs allow us to store and process with extraordinary ease. It seems clear that we are talking about processes that are to some extent depoliticized, in which the reason for the services or to whom they are directed are not questioned or evaluated, only the best way to provide them. Nor is it a matter of redefining policies or questioning the design of their implementation. We could thus ask ourselves (obviously without disdaining the increases in effectiveness and efficiency that are achieved), whether with these new forms that incorporate ICTs into the provision of public services we are really responding to the problems of democratic disaffection mentioned at the beginning of these reflections.¹⁵²

Attention has also been drawn to the perverse effects that may be produced by large volumes of information about persons and their behavior, preferences and habits accumulated by administrations through the use of ICTs. Besides processing large

¹⁵¹ See Van de Dok, W., 2000, "Infocracy or infopolis?. Transparency, autonomy and democracy in an information age", in Hoff, Horrocks, and Tops, op. cit., pp.137-152. See also the emphasis with which the OECD is insisting on this type of vision: Focus. Public Management Newsletter, OECD Public Management Committee.

¹⁵² See Raab, Ch., 1998, "Electronic confidence: trust, information and public information", in Suellen and Van de Donk (eds.), *Public Administration in an Information Age: A Handbook*, IOS Press, Amsterdam.

quantities of administrative data, the growing use of video surveillance with the new programs for detecting suspicious persons, etc., although able to improve the efficacy of security policies, pose problems of the potential violation of the privacy of certain information. A situation is being caused in which the administrations' growing capacity to give service and the increased personalization of that service are inevitably accompanied by a large volume of information on these citizens in the hands of the administrations.

This type of link between processes of innovation via ICTs, very much linked to policies and processes of services, will definitely not change in the slightest the technocratic and top-down logic characteristic of well established democratic systems in the second half of the twentieth century. Rather than strengthening the presence and participation of the citizenry in collective affairs, the use of ICTs could end up reinforcing the control and authority of institutional elites.

7. THE IMPROVEMENT OF REPRESENTATIVE AND ELITIST DEMOCRACY

We have commented that various ways have been sought to improve communications between democratic political institutions and the citizenry. It would not be so much a matter in this case of improving efficacy in the provision of services, in the outcomes of the system, as of strengthening the legitimacy of government institutions, trying to avoid the sensation of detachment and to reduce the perception of distance between those who decide and the ones they say they represent.

We are not talking about a scenario occupied only by professional politicians. The webs of interests and players formed around politics have been creating a demoe-elitist conglomerate basically concerned with flows of information and influence between voters and representatives, between representative institutions and government, between government and external elites, and between elites and interest groups.

It is in this scenario that attempts to apply ICTs in various spheres of parliamentary democracies have been made. These initiatives have been concentrated on such questions as improvement of the internal functioning of parliaments, executives and administrations; better informing the citizenry about parliamentary and governmental activity; or improving and expanding the possibilities for interaction between parliaments, governments and citizens. In Europe, the examples are significant, within individual countries and in the institutions of European Union.¹⁵³ We do not wish to nor could we review here the multitude of initiatives of this type that are taking place in Europe. We will limit ourselves to covering their principal

¹⁵³ In relation, for example, to the use of new technologies in the functioning of representative assemblies, see Bellamy, Ch. and Raab, Ch., "Parliamentary Democracy and New Technology: Reform, Reinforcement or Replacement?", paper presented in the colloquium *Les Parlements dans la Société de l'Information*, Paris, November 1999, mimeo; also Dutton, W., 1999, *Society on the Line. Information Politics in the Digital Age*, Oxford University Press, Oxford.

characteristics and establishing certain critical elements that allow us to fit them into our analytical scheme.

In the relationship between parties and electors, numerous initiatives have been implemented for improving channels of information with party activists and contact with sympathizers and voters using ICTs. Besides the usual electronic newsletters, there have also been interesting experiences in the systems of selecting candidates (as in the Arizona primaries, where Democratic voters could exercise their right over the Internet, which has served as an example for other initiatives), of debate over program alternatives, and online advocacy, with the presence of groups and individuals who express their interests through the network.

Governments and parliaments have undertaken many projects for using the potential of ICTs essentially for facilitating the citizenry's access to institutional information. Through institutional websites, citizens' requests or complaints can almost always reach the government, or in the case of a parliament, proposals of individuals or groups, so that they can be channeled by the parliamentary groups who deem it advisable.¹⁵⁴

In general, it may be said that the parties and institutions that have taken up ICTs have done so without overly predetermined strategies. There are substantial reasons to highlight an organization or institution's symbolic values, and there is also a desire to show that it is up to date and modern. The flow of information is usually one-way, and even when the possibility of two-way flow exists, control of the medium and the decision on whether it is opportune to take outside opinions into account fall to the party apparatus rather than the directors of the institution. In this case it is not a question of giving more options to citizens-consumers, but of generating consensus towards the organization, or facilitating the work of advocacy or lobbying from the outside, but always understanding that there are 'experts' in the institution who will decide what should be borne in mind, what should be accepted and what not.

The dominant logic, not so much by design as a result, has been that of trying to use ICTs as a mechanism to allow greater adaptability of the political system to a shifting environment, without a change in the functional paradigm. The types of applications arising from the new ICTs (websites, electronic newsletters, mailing lists, information systems, small consultations, electronic voting, etc.) have been devoted to relegitimizing and reorienting political and government institutions, through sophisticated methods of information management, segmentation of the public, and marketing and political communication.

We could definitively say that this type of instruments in the service of objectives such as those described contribute to reinforce the most elitist aspects of the

¹⁵⁴ See the interesting experience in Spain of the Fundació Jaume Bofill and its www.democracyweb.com, specialized in following the activity of the Catalan Parliament. The Fundació's website offers numerous links on electronic democracy.

representative democratic system (strengthening the capacity to process and control information flows, becoming nodes of resources and information, strengthening horizontal and vertical interrelations, with non-public players and with other political institutions and organisms ...), while the more strictly democratizing aspects of the system (ability to respond and to account for themselves, transparency, channels of citizen involvement, etc.) remain in the background. Once again we wish to emphasize that we should go beyond the use (as gadgets) of ICTs in democratic systems, and before speculating about what procedural, electoral, parliamentary or control aspect we can use these new technologies in, think about what conception of democracy we are putting them in the service of.¹⁵⁵

We could say that in the two strategies of using ICTs we have mentioned, consumerist and elitist-democratic, there is no desire to go beyond a conception of democracy centered on procedural rules and a very strict vision of the principle of representation, without much willingness to experiment with forms of relation between elites and citizenry that would mean altering traditional hierarchical positions.

The two strategies we will now analyze in a necessarily schematic manner relate to ICTs from a different conception. Here it is not a matter of improving relations and communication between representative elites and the citizenry. Nor is there a concern much centered on improvement of the capacity to provide services or on expansion of choice for consumers/citizens. In the two strategies we will analyze lies concern for quality of participation and capacity of involvement of people in collective affairs at the micro political level as well as the macro. The starting hypothesis is that of an active citizenry, involved in collective affairs not only as a necessary way to defend their interests, but also as a way of understanding democracy, a relational and participatory democracy.

8. THE FABRIC OF CIVIL SOCIETY

One of the most significant characteristics of the new societies in which ICTs are gaining ground and developing is the growing opening and existence of spaces of autonomy and new relational networks, where plural communities flourish, which make difference, their micro- or macro-identities their point of reference. The explosion of communication that has come with ICTs has facilitated and now facilitates this continual emergence, and allows a reconstruction of politics from parameters different from the usual ones.

We are witnessing the birth of a society in which relationship forms an intrinsic part of communication, and is not a mere result thereof, or a communicative subproduct. The two key elements are the growing subjectivity of the players and the great ease of communication provided by ICTs. In this context, there is a great demand for

¹⁵⁵ Barber, B., "Democracy and Technology: Endless Frontier or End of Democracy?", in *A Passion for Democracy*, Princeton University Press, Princeton.

autonomy (which goes beyond the traditional freedom-control scheme of modern society),¹⁵⁶ alternative markets emerge, new social networks and groupings appear, and new cultures emerge that make difference their added value. In the traditional perspective (which covered the strategies examined above), public institutions started from a concept of freedom very much bound up with the freedom to vote, while control was related to obeying laws that emanated from the people's will and were expressed through the representative mechanism. In the new social context we are describing, freedom is based on an idea of reciprocal exchange, while control is entrusted to the rules of associative exchange themselves. These two spheres, state and social, interact with the spheres of the market and the family and other informal networks, generating multiple possibilities of relationship and communication.

In this context, ICTs are simultaneously one of the fundamental factors with which to explain this new reality and the natural framework allowing its development, autonomy and constant possibilities for innovation and articulation. Thanks to ICTs it is possible to begin to speak of reticular pluralism and the promotion of social autonomy able to generate inclusion and cohesion outside means of uniformity and the abstract rights of citizenship. The welfare mix is not, in this framework, an instrumental response to problems of sustainability of welfare policies, or a simple organizational adaptation to better implement citizenship on a state or public-institutional basis. Rather, a specific form of social citizenship is emerging that finds its values in the associative and civil fabric being woven, a communitarian citizenry, territorialized or not, which has great potential and advantages to develop in the ever better established framework of the communication society.

Politics is becoming more diffuse, acquiring different characteristics in each sphere, and can no longer be considered a state monopoly or the private preserve of public organisms. Political institutions no longer occupy the center or vertex of the conditions of citizenship and welfare but are increasingly founded on relational goods. It is precisely this autonomous and relational aspect that characterizes this new social fabric. And these same characteristics are those that, at the same time, give it its fragmentary character, of multiplication of isolated groups, in which it can be difficult to articulate or recognize a 'society' as such. In this fragmentation, full of potential and possibilities, it may be difficult to reconcile pluralism with justice, diversity with belonging, and democracy with difference.¹⁵⁷ Furthermore, it should be remembered that the weight of public and commercial organizations on the network is very significant, and generates new hierarchies. In spite of this, the civil and associational reality and weave grows ceaselessly in the shadow of ICTs, creating new real and virtual communities, developing new identities, new spaces and public spheres, and increasing political reflection and new social autonomies.¹⁵⁸ What does all this have to do with democracy and its dilemmas? It is still somewhat

¹⁵⁶ See Donati, P., 2000, *La cittadinanza societaria*, Laterza, Bari.

¹⁵⁷ See Bellamy, Ch., "Modelling electronic democracy", in Hoff, Horrocks, and Tops, op. cit., p.49.

¹⁵⁸ See Poster, M., 1997, "Cyberdemocracy: the Internet and the Public Sphere" in Holmes, D. (ed.), *Virtual Politics: Identity and Community in Cyberspace*, Sage, London; Webster, F. (ed.), 2001, *Culture and Politics in the Information Age*, Routledge, London; and Burbach, R., 2001, *Globalization and Postmodern Politics*, Pluto Press, London.

early to draw too many conclusions, but it seems indubitable that new forms of 'cyberdemocracy' are taking shape.

9. IS DIRECT DEMOCRACY A NEW ALTERNATIVE?

Another of the possible strategies in the use of ICTs before the current dilemmas of democracy is recovering the old ideal of direct democracy. This is not the time or place to survey democracy and its historical traditions,¹⁵⁹ but perhaps it should be remembered that throughout the nineteenth century, discussion of democracy, from the liberal conception of the state, developed principally from Constant's famous discourse on the freedom of ancient peoples and that of modern peoples. The former, understood as direct participation in public decisions and in the formation of laws through the political body expressed by the assembly of citizens, is understood as not only no longer possible due to expansion of the *demos*, but also perhaps even counterproductive. The freedom of modern peoples implies the recognition of fundamental political rights, with political participation understood as one more political freedom, manifested in the rights of free expression, assembly, and organization to influence a country's politics, as well as the rights to elect their institutional representatives and to be elected as such. Against Rousseau, de Tocqueville and Mill defended the idea that the only form compatible with the liberal state is representative and parliamentary democracy. The so-called democratization of the state, though it expanded the right to vote to more and more social sectors and multiplied representative organs, did not imply any essential modification of this liberal and representative conception of democracy.

Representative democracy has always been defended as a 'viable' (Mill) and 'efficient' (Dahl) alternative to direct democracy or democracy by assembly. The fundamental reasons adduced are, as we know, the size of the population called to gather and participate and the nature of the problems to be dealt with, which go beyond what small units of population can take on. In spite of this, it is recognized that representative democracy has its 'dark side',¹⁶⁰ a price to pay: the enormous discretionary power on very significant decisions that citizens delegate to their representatives. We know that the representative elite must move within the institutional and procedural limits proper to democratic regimes, but we also know that these limits are usually wide, and as the mechanisms of control and popular participation are not very robust or constant, the fact is that the elite's latitude to interpret its mandate of representation, even in decisions of strategic content or great significance, is quite notorious. Therefore once the principle of representation is accepted, the emphasis is on establishing the necessary checks and balances to control this latitude as much as possible and to fix periodic renewal of confidence and clarification of responsibilities through elections.

¹⁵⁹ See Norberto Bobbio, the entry under "democrazia" in Bobbio, Mateucci, and Pasquino, *Dizionario di Politica*, TEA-UTET, Milan, 1990, pp.287-297.

¹⁶⁰ See Dahl, R., *On Democracy*, Yale University Press, 1998, p.113.

What changes can the appearance of ICTs produce in this scenario? While it is still true that all the citizens of each country cannot meet face to face, it is now possible for them to communicate at a distance through the networks offered by ICTs. Therefore, with all the necessary caution, and conscious that the forms of deliberation in an assembly are different from those that take place by telephone or in a virtual forum, one may at least think about to what point we are beginning to see the conditions to advance towards forms of electronic democracy in which it is possible to approach the old ideals of Rousseau without the stumbling block of the size of the *demos*, and seeking efficiency in decision-making.

But what direct democracy are we talking about? We do not think it necessary to insist on the problems generated by a conception of direct democracy by referendum, based on instant decision-making, without deliberative or institutional mediation. In a provocative work, the magistrate of the Italian Constitutional Court, Gustavo Zagrebelsky,¹⁶¹ points up the discrepancy between the deliberative precepts of democracy, and the haste, not free of demagoguery, surrounding referenda of the 'Barrabas or Christ' type. The extensive literature on deliberative democracy¹⁶² shows the extreme importance deliberative and participatory processes have in a full conception of what a liberal democracy is. Following Habermas, it is said the decisions in a democracy take on value and meaning more on the basis of the transformation that follows deliberation than from the simple aggregation of preferences. All incorporation of ICTs into public decision-making processes should therefore bear in mind this profoundly deliberative character of democracy; otherwise these decisions could be notably inconsistent among themselves, or too affected by passing emotional situations. We should make it possible or imaginable to use the potential for communication and collective decision-making presented by ICTs (already tested in private or organizational contexts¹⁶³), without losing deliberative capacity and quality throughout the new decision-making process inspired by an approach to the values of a direct democracy that has always been seen as theoretically preferable, but not feasible.

If we combine the potential of ICTs to advance towards heretofore unexplored forms of direct democracy with the need for mechanisms that assure deliberation and channel opinions and debates towards pragmatic and efficient ways of making decision, we should rethink our current democratic institutions. Parliaments, governments and parties are today central elements in the democratic system. From our point of view, it is the political parties who now play the key role of mediation and control between the population and the government —with the constant

¹⁶¹ See Zagrebelsky, G., 1995, *Il «Crucifige!» e la democrazia*, Einaudi, Turin.

¹⁶² Elster, J. (ed.), *Deliberative Democracy*, Cambridge University Press, Cambridge, 1998; Bohman, J., *Public Deliberation*, MIT Press, Cambridge, Massachusetts, 1996; Nino, C. S., *The Constitution of Deliberative Democracy*, Yale University Press, New Haven, 1996.

¹⁶³ Experiences vary, but in Spain one of the closest at hand is that of the student co-operative at the Open University of Catalonia, or the election of the president of the Instituto de Ingenieros Eléctricos y Electrónicos. See "La votació electrònica: un debat necessari", Debats Aula Provença, Fundació Jaume Bofill, Barcelona, May 2000.

amplifying collaboration of the communications media— and who supply the content and are the protagonists of parliaments.

From these premises one can imagine a system¹⁶⁴ in which the government would be elected through mechanisms similar to those now in place, a system in which the decisions now made by a parliament and others considered significant enough would be subjected to direct referenda by all the citizenry with the right to vote, using those instruments offered by ICTs and their future developments. These decisions would be concentrated on certain dates, and public debate would be held in the previous periods, animated by political parties who should orient their functions toward 'brokerage' and articulation of interests and alternatives, backing off their current emphasis on occupying institutional spaces. Thus we are sketching a system in which direct voting would not take place without mediation or deliberation. We are therefore not talking about a simple plebiscitary democracy. Direct voting would have the indispensable mediation of parties, configuring a pragmatic option that would allow alliances with the current leaders of processes of intermediation and representation of the people's will.

It is important to bear in mind that heretofore-existing institutions have tended to use and model ICTs as mechanisms for reinforcing their positions of power. It is thus not surprising that political and democratic institutions have sought to apply ICTs to their routines without breaking previous paradigms of communication and power. In this strategy, there is a recomposition of the prevailing correlation of forces, with an indispensable relocation of political parties as a key element of continuity between one situation and the other.

Now it is obvious that political parties should change significantly their current *modus operandi*. Their work would become less sure, and it would probably be necessary for them to substantially modify their functions and the type of recruitment they now engage in. Parties are now organisms or entities which are relatively closed and very much caught up in the occupation of institutional spaces, their predominant vision centered on the presence in the media of their leaders, who constantly communicate messages to party members, voters, sympathizers and the citizenry in general. The kitchen work is done with little transparency, centered on the elites, the political cadres and the organization, together with the interests channeled or represented. In a scenario such as the one we were sketching, parties should network much more, with more flexible organization, with an emphasis similar to the current one on the communications media, but with a much greater capacity to articulate interests and opinion on the ground. The role of ideas, of the capacity to convince the immediate social network would be essential, and the role of party discipline and the organized activists would be reduced.

It seems clear that in this strategy, in which ICTs would play a central role in the configuration of a democratic system based on the direct vote of the citizenry

¹⁶⁴ See Budge, I., "Direct Democracy: Setting appropriate terms of debate", in Held, D. (ed.), *Prospects for Democracy*, Polity, Cambridge, 1993, pp.136-155.

without the intermediation of traditional representative institutions, there are significant problems. One of the foremost would be the role of parliaments in this new scenario, although some already speak of postparliamentary democracy.¹⁶⁵ But if we refer more concretely to the problems that can crop up in the implementation in the proposals for direct democracy we have reviewed, some of the most significant are the lack of continuity and defined strategy in the opinion of the citizenry, the lack of information and sufficient debate, without assumption of responsibilities for the effects of the decisions made, the danger of lack of participation that would permit control of the vote in certain decisions by minorities with very definite interests, excessive complexity in the policies or decisions to be made, and problems deriving from the very use of ICTs, their control, guarantees, etc.

The point that alludes to the citizenry's lack of preparation to confront the complexity of the issues that feed legislative debates is probably the most telling. Schumpeter and Sartori¹⁶⁶ have stated that the citizenry does not have enough interest to follow debates closely or to get involved in topics not very connected to their most immediate interests. They also argue that the technification of many of the debates on alternatives to concrete problems distances the citizenry from their possible involvement in decisions, which could only affect the quality of the result negatively. This argument seems difficult to maintain in moments when although the unequivocality of technical responses is ever more in doubt, one hears more talk about the social construction of risk or about technology assessment, alluding to the need to incorporate lay opinions in questions of significant technical complexity but which are difficult to resolve without the visions of non-experts.¹⁶⁷ One is left thinking that arguments against direct democracy based on citizens' lack of sufficient education for making decisions could serve just as well for arguing against democracy itself, generically defined.

The problems deriving from the form in which ICTs have been developed (very much linked to business and economics perspectives), control over the network and over software production, inequality of access; and the possible problems of control and guarantees posed by their use, are clear and are going to be with us for some time to come. Much more concretely, there are problems with the very way in which electronic voting should be developed.¹⁶⁸ None of this can be denied. However, returning to the first paragraphs of this text, it is still important, in spite of all of that, to ask ourselves what democracy we are advancing towards and what democracy we would like to approach. The picture of seemingly extending democratic disaffection argues for advancement, even if experimental, to detect strengths and weaknesses.

¹⁶⁵ See Holmes, D., 1997, *Virtual Politics, Identity and Community in Cyberspace*, Sage, London; and Tsagarousianou, R.; Tambini, D.; and Bryan, C. (1998), *Cyberdemocracy: Technology, Cities and Civic Networks*, Routledge, London.

¹⁶⁶ Schumpeter, J., *Capitalismo, Socialismo y Democracia*, FCE, Mexico; Sartori, G., 1987, *Teoría de la Democracia*, Alianza, Madrid.

¹⁶⁷ See López Cerezo, J. A. and Luján, J.L., 2000, *Ciencia y Política del riesgo*, Alianza, Madrid; and Mironesco, Ch., 1997, *Un enjeu démocratique: Le Technology Assessment*, Georg editeur, Geneva.

¹⁶⁸ See the text from the Fundació Jaume Bofill mentioned in note 28.

10. CONCLUSIONS?

At the beginning of these pages, we said that we were interested in analyzing the real difference that might be generated by the use of ICTs on what were considered problems or deficiencies of democratic systems. We also said that our reflections were not free of normativism, since from the premises set forth we are interested in what reinforces democracy and broadens its spaces of civil participation. All this has been done trying to carry the debate into the European context of parliamentary democracies, with relatively well organized, centralized parties, with a strong presence in intermediation of interests and with well established and notably hierarchical administrations.

We started from the idea that the new forms of communication and information furnished by the technologies influence and can influence still much more the current processes of restructuring and redefinition of the principal variables of European political systems. New models of democracy, of processes of innovation, or simply of the improvement of democratic systems' functioning are spoken of. In this work, we have tried to simplify the many alternatives and tendencies being sketched in relation to these issues, establishing four broad strategies or discourses of change, which in this context coexist with or counteract one another. The first criterion we have used is taking into consideration the degree of strategic ambition or ambition to modify the system in its essential parts each discourse may have. The other criterion, much more substantive, refers to willingness to use ICTs within the limits of representative democracy (improving its functioning or the relationship between the citizenry and representative institutions), or exploring new ways of understanding citizenship and democratic politics based on the potential that ICTs offer.

We have seen how, in the first two strategies analyzed, consumerist and demo-elitist, which are situated in the framework of representative democracy, the communicative elements proper to ICTs take precedence over the relational aspects also present in the new technologies. Improved communication between institutions and citizens is sought, whether to make them more loyal consumers of public services or to legitimize more intensely the representative system as a whole. In this vision, the use of ICTs does not seem to give rise to new ways of relating, of approaching the relations of hierarchy or representation, or of promoting new mechanisms of participation. Assuming that the representative mechanism is the basis of the only possible democracy, all that is sought are improved communication and reciprocal information, always making clear the responsibilities and roles of all parties.

In the other two discourses or strategies analyzed (civil and direct democracy), the components that are alternatives to the representative status quo appear as the most significant. We believe we see that in these discourses the relational elements take precedence over the strictly communicative ones when referring to the potential uses of ICTs. The relationship, the new ways of understanding the interests and responsibilities of each party, and the effects of the new technological opportunities have a value in themselves that goes beyond the communicative or informative

aspects, which obviously are also present. When we refer to these discourses or strategies, we have referred to the emergence of new communities, new forms of conducting politics, another way of understanding collective responsibilities and the construction of citizenship. We have also referred to the new demands on political parties, which would generate a situation in which mechanisms of direct democracy would function. Political parties take shape as indispensable instruments for the construction of networks, social relationships and new groupings around the issues.

It is obvious that the questions posed when we refer to these two strategies in the use of ICTs are much more abundant and profound than those that can be posed when we refer to ICTs as a potential way of improving what already exists. A no less important question is whom we are to ask to take responsibility for the decisions that will be made.

There is no doubt that a superficial examination of what is underway indicates that the greatest intensity of efforts and concrete experiences (with the growing interest of businesses and consultants) is in what we have called consumerist discourse. One also notes growing attention to aspects of improvement of the representative democratic system as a whole. Attempts to work in what we have called civil or direct democracy are much more scarce, contradictory and inconsistent. Only on the local level is it easier to find experiences and cases that allow more-horizontal or -comparative analyses. All this is normal, given the initial parameters. What is most worrisome is the apparent disconnection between the two logics. While groups, communities and individuals are increasingly disaffected and disconnected from representative democratic institutions, seen as alien to their lives and life stories, these institutions and their elites are still worried about improving and taking advantage of the old and new communications and information media. New political identities and communities emerge, outside a political system understood as traditional and ever more obsolete. But what seems less clear is that in any of the scenarios analyzed ICTs hold a central role. This could be a point of connection to keep exploring.