The enhancement of civic engagement in the information society

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Abstract
During its early years, the internet was promoted as a 'virtual community' with an open structure. But then internet was discovered as as serious place for doing business and enterprises build their services around advertising and personalisation. Due to the data policies of enterprises and governments, as well as a number of obstacles for the availability of information, internet is functioning rather as a private mall than as a public square. There is a serious lack of public oversight which should be repaired by imposing social and ethical requirements on the internet. Here is a central role for government and internation governmental institutions.
In order to make the internet a serious platform for the enhancement of civic engagement, the availability and accessibility of information should be enhanced and the role as a public square should be promoted. A number of specific lines of actions are formulated and also the possible role of libraries in this is specified.

Introduction
The main objective of this paper is to discuss to what extent civic engagement is or can be enhanced by internet and especially by increased access to information.
Let us consider first what is meant by the term "civic engagement".
A good overview of different definitions of the term, specific as well as broad, is given by Adler & Goggin (2005). This overview is concluded with a simple definition: "Civic engagement describes how an active citizen participates in the life of a community in order to improve conditions for others or to help shape the community's future" (Adler & Goggin, 2005, p. 241). Since this definition is rather broad it is helpful, for clarity's sake, to list a number of activities that are commonly referred to as "civic engagement":
- community service: participation in voluntary service to one's local community by an individual acting independently or as a participant in a group;
- collective action: action taken collectively to improve society;
- political involvement: activities that are not only collective but are also specifically political, in the sense that they involve government action;
- social change: participation in the life of a community in order to help shape its future, in the sense of social change.

The IFLA Trend Report considers it to be a major trend that more opportunities for collective action can be realised in hyper-connected societies. Also open government initiatives and access to public sector data are to lead to more transparancy and citizen-focused public services (IFLA, 2013).
Research in the US by the Pew Research Center for the period 2008 - 2012 showed a major growth in the number of social networking site users (from 33 % to 69 % of the online population) and also in the proportion of these users who post political news, friend or follow candidates and join a group organized around political or social issues. Many of them said that their activity on the sites prompts them to learn more about social or political issues and to take action around these issues. For most politically active users of social networking sites, these sites are not a seperate realm of political activity; they are frequently active in other aspects of social life (Smith, 2013).

This research shows that social networking sites are helpful in enhancing political activity. This, however, does not necessary imply that the internet, or rather the present state of the internet, provides a useful platform for engaging people in political activity or joint action towards social change.

During the early years of the internet a number of protagonists strongly promoted the concept of *virtual community*, enhancing the open structure of the internet with an emphasis on communities and shared experiences. In this *utopian internet* humans were viewed as essentially good, influenced by rational deliberation, and tending towards co-operation. In this perspective, the state and its institutions were considered to be obstacles to be overcome and to be transcended by cyberspace.

But then some promoted the internet also as a serious place for doing business and a place for *getting empowered*. It was really believed that the utopian blueprints could be realized with the help of private capital. An important aspect of this empowerment was the removal of intermediairies, through phenomena as e-zines, forums, blogs and direct online voting.

In fact we know better now. A good, and probably the only real, example of how co-operation in the name of shared goals could work, is Wikipedia (Morozov, 2011).

The first part of the paper will analyse some striking aspects of today's internet that may be related to its usefulness for civic engagement. This provides a stepping stone for an agenda directed towards the enhancement of civic engagement in the digital age and the libraries' role within this agenda.

Datasubjectivism and algorithms

Most internet enterprises build their business around advertising, in line with the general trends of that industry which includes especially personalisation. Online ads are tailored to the interests of a given user. Customers may think they enjoy free access to services, but in reality they are paying with the data about their behaviour.

More generally, we can observe a growing ambition to capture personal data of individuals, as a radicalised version of the adage 'to measure is to know', for instance in innovations in health care directed towards the quantified self. The success of this is dependent on the willingness of individuals to become data-subject and the attractive power is in the convenience.

But this is not the whole story. So-called datasubjectivism rests on the presupposition that the data subject coincides with the data it creates; the ultimate goal is the revelation of the real self. The datasubjective mind is a typical product of the neoliberal climate in society in which the market has a central position and competition prevails as a regulating principle, even on the individual level, thus suggesting that shortcomings are not a social problem but a personal failure.

Datasubjectivism creates an illusion of control which is at odds with intuition and imaginative power. But selfcontrol is shifting towards monitoring and control by others and all kinds of control are privatised. Moreover, the virtualisation of reality increasingly makes power related to control invisible (Schnitzler, 2015).

As a consequence of the personalisation aspect of datasubjectivism, the virtual reality becomes a space for solipsistic experience: filter mechanisms create invisible walls that block the view on everything that deviates from ones own perspective.

Data is analysed with the help of algorithms. An algorithm can be defined as a process or set of rules to be followed in calculations or other problem-solving operations, especially by a computer. Algorithms play a growing role in our daily lives. Well known examples are Google's search engines, Amazon's recommender systems, social networking sites highlighting news that is 'relevant' to you and dating sites matching potential life partners. Less famous examples are facial recognition and automated language translation. Algorithms are presented as being no longer the 'elite' single theory of one person, but rather a measurable, quantified, infinitely democratic, means of organizing information and society drawn from the total sum of human intelligence (Dormehl, 2014). As Chris Anderson wrote: "Correlation is enough. We can stop looking for models. We can analyze the data without hypotheses about what it might show" (Anderson, 2008).

It certainly is true that *big data* enable us to analyse phenomena, not by clarifying internal mechanisms but by deducting useful, secondary indicators. Thus we can get grip of the phenomenon involved and make predictions. But these predictions are statistical statements. What Anderson does not mention, is that data-mining, even on large data sets, is itself founded on a theory. Algorithms can often reflect the biases of their creators, based upon what it is that they deem to be important when answering a particular question. Even data is not free from human bias, from what data is collected to the manner in which it is cleaned up and made algorithm-ready.

Algorithms are also used in blocking comments on a news-site which have received a high ratio of negative comments. This may sound like a neat way of countering spam messages, but it also poses profound queries relating to the freedom of speech. Words like 'relevant' and 'newsworthy' are loaded terms that encourage (but often fail to answer) the seemingly obvious follow-up question: relevant and newsworthy to whom? (Dormehl, 2014).

As the scholar Ted Striphas (cited in Dormehl, 2014, p.254) remarks, we "might understand how they work from the point of view of mathematical principles, but that math is so complex that it is impossible for a human being to truly follow. (….) The idea that we don't know the world that we're creating makes it very difficult for us to operate ethically and mindfully within it."

Thus algorithms constitute predictions we do not control; we do not know which features determine the consequences and the formulas are too complex to understand for human beings. They also tend to replace causality by correlation, and especially in the context of datasubjectivism this is a shortcoming.

The privacy aspect of internet use is a topic that is increasingly worrying people. Recently, the Pew research Center showed that the majority of the American population believe it is important or very important that they are able to maintain privacy and confidentiality in commonplace activities in their lives. These views are especially pronounced when it comes to knowing what information about them is being collected and who is doing the collecting. However, they have little confidence that their data will remain private and secure and 50% feel that they have not much control or no control at all over the way their data is gathered and used (Madden, 2015).

Two remarks can be made here. Firstly, privacy is not the whole story. Especially datasubjectivism being used for commercial purposes is reducing human beings to merely consumers, which goes clearly beyond the problem of privacy. Secondly, it is not only commerce that trespasses individual privacy in a way that is making citizens quite uncomfortable. Governments also play a role in this, as we will see in the next paragraph.

Government and politics in the digital age

One of the presuppositions of the utopian internet was that there is no role for states and traditional institutions, which were seen as real obstacles. And until now there hardly has been any structural government intervention as a counterbalance to the developments described. On the contrary, governments are also collecting data: on other governments, on their citizens and citizens' organizations. And they often do that in a way that is hidden for public control. The Patriot Act and the role of the NSA in the US are well known examples, but there are comparable cases in other countries.

Governments have their own agencies, that are collecting data themselves or gather data from communication industries and other businesses. On the basis of the analysis of data secret services make predictions about individuals' behaviour which may lead to measures with serious restrictions of (individual) freedom. Often (national) security is providing arguments fort his policy. The Dutch sociologist Willem Schinkel (2009) calls this phenomenon "prepression", being the sum of preventon and repression. More and more citizens wonder which price in terms of privacy and freedom they are willing to pay for security or, in some cases, alleged security.

Governments also are increasingly using ICTs for their interactivity with citizens. Many countries have a program for Open Government, especially North and South Ameria, Western Europe and Australia (http://www.opengovpartnership.org). An important objective of 'Open Government' is that government is actively open for society and that citizens have the right to access the documents and proceedings of the government to allow for effective public oversight. But also empowerment of citizens is mentioned as an objective, stimulating the participation of citizens and the coproduction of policy together with citizens. In most countries, however, the actual progress made in realizing these programs, thus far, is rather disappointing.

Next to initiatives on the government level, we can also observe a role of social media in community building and in political movements. According to Tufekci (2014), social media can greatly empower social movements in three key areas: public attention, evading censorship and coordination and logistics.

Digital technologies provide a means by which many people can reach information that governments would rather deny them. The effects are weaker in societies that were already more open, but social media may play a catalyst role when starting from a very controlled public sphere. According to Cory Doctorow, the great gift of internet is in rebalancing the stakes. States have long been able to track citizens and organize armies. Today's technology lets them do this with much greater efficiency. But for citizens the change has been far greater. Every human endeavour that requires more than one person's effort has to devote a certain amount of resources to the problem of coordination. The internet has greatly simplified this problem.

Often pluralistic ignorance is a huge impediment to social change; it occurs whenever a group of people underestimate how much others around them share their attitides and beliefs. Social media certainly are a way to reduce this pluralistic ignorance (Thompson, 2014, p. 252/3). Social movements often desire a leaderless, participatory and horizontal character, which certainly is facilitated by social media. This implies, however that hardly any energy is put in the development of organization and skills that can be used to negotiate and pivot through important moments of stress and pushback from authorities. This may imply that movements originated with the help of social media, do not necessarily pose the same threat to government and power as previous protests.

Governments sometimes carry out internet censorship controlling what can be accessed or published on the internet. While most democratic countries have moderate internet censorship, other countries go as far as to limit the access of information such as news and suppress discussion among citizens websites, blogs, social media. Internet censorship also occurs in response to or in anticipation of events such as elections, protests, and riots. An example is the increased censorship due to the events of the Arab Spring. Other areas of censorship include social norms and morals (such as racism or child pornography), security concerns (for example Wikileaks) and protection of existing economic interests and copyright.

Accessibility of information

Aside from the problem of the blocking of websites, there are other serious obstacles for the availability of information through internet.
A well known obstacle is the cost of information. There is a lot of free information, but the quality of this information is often far from clear or even dubious. Citizens have the right to access information that is authentic and not strictly one-sided, through an independent intermediary. In most countries here is a role for libraries and archives.
Concerning the costs, there is a growing tendency that information that is produced with public money, should be publicly accessible with no cost for the reader. For government information this is more or less obvious. But the same goes, for instance, for the output of scientific research carried out by universities and research institutes paid with public money. When we look at scholarly communication, the communication about research results is already to a considerable extent taking place outside the publisher's sphere. There is a growing criticism on the traditional business model for scholarly journals with its central role for the transfer of copyright and subscriptions. New business models are being introduced and Open Access models, in which the reader has free rights to access and re-use the information, are gaining importance (see for instance: Suber, 2012).
The traditional business model for scholarly communication is strongly connected with the traditional copyright laws and the fact that publishers demanded (and often still demand) that researchers transfer the rights for their publication exclusively to the publisher.

As Patry (2012) argues, copyright laws arose out of eighteenth-century markets and technology, the most important characteristic of which was artificial scarcity. Artificial scarcity was created by the existence of a small number gatekeepers, by relatively high barriers to entry, and by analog limitations on copying.
Markets and technologies change, in a symbiotic way. New technologies create new demand, requiring new business models. The new markets created by the internet and digital tools are the greatest ever: barriers to entry are low, costs of production and distribution are low, the reach is global, and large sums of money can be made off of a multitude of small transactions. Along with these new technologies and markets comes the democratization of creation; digital abundance is replacing analog artificial scarcity.
The task of policymakers is to remake our copyright laws to fit our times: our copyright laws, based on the eighteenth century concept of physical copies, gatekeepers, and artificial scarcity, must be replaced with laws based on access not ownership of physical goods, creation by the masses and not by the few, and global rather than regional markets.

In order to access information it must be available. When we look at information about the past, this poses another problem which may be called "the future memory" (Floridi, 2014).

Since 2007 the world is producing many more data than can be preserved in the available storage. This will have serious implications for the knowledge that future generations can have about our present, i.e. their past.

Information may be considered as an answered question: a person has a question and has also the answer. We may speak of uncertainty when a person has a question without an answer. A person is ignorant when he or she has neither access to the question nor the answer: he or she does not even know that he/she does not know.

Uncertainty is a matter of power, power being the sociopolitical ability to control or influence people's behaviour. In liberal societies, power is exercised about which questions can be asked and what answers can be received. Power in mature information societies is not just about things (documents) or information about things, but about uncertainty. Who controls the questions, shapes the answers and who shapes the answers controls reality.

Memory is not merely storage and efficient management, but also careful curation of significant differences and hence of the stable sedimentation of the past as an ordered series of changes. With the amount of data being produced we run the risk that differences and alternatives are erased and the past is constantly rewritten, history being reduced to a perennial here and now. The job of the curator, therefore, is bound to become ever more important.

Currently, economic agents have acquired sociopolitical power by controlling the politics of uncertainty in two steps: by making their digital services free through advertisement, and by transforming advertisement from being answers without questions to being aswers that generate posthoc relevant questions.

So, national governments should guarantee the role of counterbalancing the power to control people's behaviour through uncertainty, in other words: to guarantee and facilitate the free and effective formulation of questions. Libraries and achives are natural candidates for this role.

Taking stock of the present state of affairs

Overseeing the developments just described, we can conclude that the internet is far from evolving according to the utopian view of the early protagonists. Instead of developing towards one large virtual community we are confronted with millions of internets with invisible walls blocking views that deviate from one's own present perspective. In addition, personalisation and datasubjectivism reduce citizens to consumers that pay for services with personal data and thus with their privacy. We are loosing control of our algorithmic self. The logical end of this ever-increasing personalisation is each user having his or her own online experience, fully in line with his or her own perspective: the internet as an echoing well (Schnitzler, 2014).

The internet's early visionaries never translated their aspirations for a shared cyberspace into a set of concrete principles on which online regulation could be constructed. Some fundamental questions about the communal aspects of the internet were sidestepped. Who would take care of the trash? Who would be in charge of preserving historical memorablilia? Who would deal with the problem of pollution? Who would protect the dignity of online citizens?

In the absence of strong public institutions with oversight, corporations they felt they could do what they wanted. In most cases, they just pretended these problems did not exist. While we are empowered as consumers, we are simultaneously disempowered as citizens, something that the cyber-libertarian digital prophets did not foresee. What is long overdue is a fundamental consideration of the primacy of the internet's civic and aesthetic dimensions

(Morozov, 2011). It is not the technology that is our enemy, but our refusal to set social and ethical requirements on it. As Andrew Keen says: "The internet is generally excellent for consumers. But it's much more problematic for citizens" (Keene, 2015, p. 226). It is time to decide whether we want the internet to look like a private mall or a public square.

Where do we go from here?

The early utopian vision of internet as a virtual community suggested that the internet would be a perfect means for the enhancement of civic engagement. And although it has been shown that from a technological point of view the internet certainly offers opportunities in this respect, the way the internet has actually evolved brings forward a number of serious obstacles and restrictions.
Given the present situation, we can point out a number of necessary conditions for the enhancement of civic engagement. In broad terms they can be formulated as:
- availability and accessibility of information, in such a way that the information is reliable, independent, authentic, multiform and includes information about the past;
- the internet as a public square in which people feel free to join and form communities and take part in debates; the commercial use of internet should be secondary to this public function.

To bring forward any change in this respect it is essential that there is ample public awareness about the impact of the internet on society, about the way that the digital world is reshaping it rather fast at the moment. This involves a public debate in which human values and ethics play an important role. This debate is a responsiblity of governments and intergovernmental organizations, but not solely of governments; responsible citizens should function as catalysts.

These broad demands bring forward a number of more specific lines of objectives, in which we can recognize the public square as opposed to the private mall.
- Each country should have one or more independent agencies or organizations responsible for the 'memory': collecting, preserving and disclosing information about the past and the present (the future past).
- Information about culture, science, society, politics, government should be accessible in an independent way; the responsibility for this cannot be left to the market.
- Government blocking of websites and social media should be restricted to blocking for generally accepted social norms and security concerns.
- In the sense of "Open government" government information should be easily accessible and active participation of citizens should be facilitated.
- Copyright laws should be remade for the digital age, with a strong emphasis on creation by the masses and on access instead of ownership of physical goods.
- New arrangements should be created and promoted for the distribution of information that has been generated with public money, aimed at access for and re-use by all interested individuals and parties.
- Debate and (virtual) community building should be stimulated by an open infrastructure.

To accomplish these objectives certainly a number of laws will be necessary, in national and international context. The most important issues in this respect are the following.
- Political bodies like the European Parliament or the United State Congress should control monopolistic corporations; especially when those corporations use their assets, such as their data and the abilities to exploit their data, to take control of other industries. There is a need for strong government to ascertain the accountability that is needed here. But although legislation is an effective way to make internet a fairer and better place, there

may also also be voluntary, market led solutions, voluntary efforts by the private sector complementing government efforts. A recent example are credit card companies withdrawing payments to websites that distribute stolen content (Keene 2015).
- Data collection and use by government and businesses should be regulated by laws that respect the privacy of individuals. For the government this asks for a serious debate about the tension between security and privacy.
- New copyright laws are needed which also asks for international cooperation.

Role of libraries
In the following action lines libraries certainly should play an important role:
- Setting up and managing the information infrastructure, needed for the access to information, the building of virtual communities and the facilitation of the social debate. National libraries are obvious candidates for the coordination of this infrastructure (Savenije, 2015).
- The improvement of the accessibility of information, enlarging the quantity of the content accessible as well as improving the technical facilities.
- Preventing an information divide. Here are two potential divides: between the have and the have-nots (in an economic sense) and the digital divide between those that can access online resources and those that cannot.
- An active role in the public debates about the ethics of internet, privacy matters and copyright.

This poses a serious challenge to libraries, because these taks cannot adequately be fulfilled in the way libraries have been operating traditionally.
1. It is important to realise that the concept of 'library' has three aspects; a function, an organization and a building. Of these three, the function is essential; the building and organization are secondary and support the function. The existence of an organization or building can never be more important than the library's role in society, which sometimes may better be fulfilled by other organizations, possibly under the library's coordination. This view is certainly not common practice in the library world.
2. Traditional borders should be crossed. In the first place regional borders. Libraries often are financed to deliver servises to a local or regional community. But there is a growing number of supralocal communities, that at the moment hardly are served by the public library system. Secondly, sectoral borders should be crossed. To an increasing extent the traditional borders between the different institutions in the cultural heritage sector are blocking progress. Traditional definitions concerning collections and services make it necessary to cooperate in the cultural heritage sector for services as well as back office processes.
3. Co-operation in networks is essential. An institution no longer derives the reason for its continued existence just from its mission but even more from its position in cooperative networks .
Because of the many international aspects, there certainly is a crucial role for IFLA in this agenda.

Let me conclude by citing the Dutch publicist and philosopher Maxim Februari:
"The danger does not come from machines but from the human refusal to set social requirements on technology. It is not technology that is threatening us, but the glorification of technology which leads us to consider values and social requirements as outdated. It comes down to impose human values on technology" (Februari, 2014).

Internet surely can enhance civic engagement, but then we need to rethink the internet as a public square and impose on it the values and requirements that are connected with that concept.

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