

Politics and Social Software: Recommendations for Inclusive ICTs

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Abstract

The emergence of social software and the new perception of the Internet promise to enable decentralized actions, a range of possibilities to share and exchange information open and free of charge, to collaborate equally, and to foster intercultural understanding and participation. These new possibilities have the potential to lay the foundation for a new way of political participation and social movements to emerge, but there are also limits because of existing social structures and increasing commercialisation of the Internet. In this paper we discuss theoretical concepts that we currently state as characteristics of political activism and the Internet in general, and of social software in particular: [1] the foundation for community building, [2] the interrelation of the real and the virtual space, [3] digital divide and social inequalities, and [4] the influence of globalisation. The Internet provides the foundation for communities to emerge and to shape society, for both societal benefits (e.g. empowerment of citizens, ecological conservation, democratisation and participation) as well as negative consequences (e.g. social inequalities, digital divide). Based on these four concepts we outline recommendations for inclusive Information and Communication Technologies (ICTs), i.e. possibilities social software theoretically offers for social movements, political activism and participation.

Key Words

Communities, Cooperation, Cyberspace, Information and Communication Technologies (ICTs), Social Inclusion

1. Introduction

The Internet changes politics, not only from a governmental and parliamentary perspective but also on the individual level. Social software in particular promises to enable decentralised actions, a range of possibilities to share

and exchange information open and often free of charge, to collaborate equally and to foster intercultural understanding and participation. These new possibilities have the potential to lay the foundation for new ways of political participation and social movements to emerge. “[T]he role of information and communication technologies had a significant impact on the form and function of political mobilization.”ⁱ ICTs provide the infrastructure for diverse groups or people to engage in a common cause within weak-tie networks. Some claim that a virtual public sphere emerges by political online interaction and that online communities provide opportunities for participation and engagement.ⁱⁱ

The virtual space is not only a big marketplace, it is also a space of political interaction and moreover a central resource of information.ⁱⁱⁱ “Networks include nodes and links, use many possible paths to distribute information from any link to any other, and are self-regulated through flat governance hierarchies and distributed power.”^{iv} Flat hierarchies are essential for political process since they foster grassroots activities and give civil society the opportunity to engage into political participation without guidance of institutions or organisations. Blogs, wikis and social networking sites provide a technological basis for grassroots action to coordinate and for activists to communicate. Chat rooms, email and mobile gadgets enable ad-hoc activities to emerge. The Internet can support the organisation of topic-oriented pressure groups, protest organisations and ideological movements outside the mainstream. Participation, discussion, the active role of users, organisational and social benefits by using the global infrastructure for creating networks are important elements for political participation and activism. As Bradley argues: “Our citizen’s role can be empowered with IT support in the home – there are opportunities to widen and strengthen democracy.”^v Political leaders, commercial global players and international institutions have an enormous influence on the structure and the design of the web as infrastructure, the commodification of information goods and web services, on power relations, and contents. According to Howard Rheingold social software allows for network-structured interactions that “have real potential for enabling democratic forms of decision-making and beneficial instances of collective action” but, he continues, “that doesn’t mean that the transition to networked forms of social organization will be a pleasant one [...]”^{vi}

Communities that emerge in cyberspace can lead to enhancement of political activities, but there are certain disadvantages as well, that are inherent in the technology. The

outcome, political orientation, and methods for online political activism and participation are dependent on the users, developers and producers of social software. Although the Internet can potentially connect people all over the world, limitation in Internet access, lack in computer skills and literacy make the political forum it offers less inclusive – not only, but especially in the developing world.^{vii} Cultural differences can lead to misinterpretations when political mobilisation enters a global arena through digital social networks.

In the following we discuss theoretical concepts that we currently state as characteristics of political activism and ICTs, in particular of social software: [1] the foundation for community building, [2] the interrelation of the real and the virtual space, [3] digital divide and social inequalities, and [4] the influence of globalisation.^{viii} Based on these concepts we develop guidelines to enhance political engagement and grassroots activism that lead to a more inclusive society. This requires cooperation among citizens, their willingness, and possibilities for participation. Freedom, openness and transparency, access to information and education are key principles for the emergence of an inclusive society.

2. Cybercommunities and Politics

The heterarchical, decentralised and likewise open architecture of the Internet provides the necessary precondition for virtual communities and hence for participation, new social movements and grassroots activism to emerge. Cyberspace is defined here according to Pierre Lévy's definition of a space that enables social movements, i.e. grassroots democracy, and political participation.^{ix} Common history, knowledge, and practices foster the strength of a community. The web enhances networking of people from different backgrounds, histories and experiences to share interests and aspirations.^x As Wellman argues we find community in networks, not groups since a community does not only share a common interest, but is based on interaction, communication, discussion and relationships that networks provide.^{xi} Social software has the potential to enhance political participation and grassroots activism. In *Technologies of Cooperation* Saveri et al. refer to social software as a combination of tools that makes the quick emergence of group-forming networks possible: "It includes numerous media, utilities, and applications that empower individual efforts, link individuals together into larger aggregates, interconnect groups, provide metadata about network dynamics, flows, and traffic, allowing social networks

to form, clump, become visible, and be measured, tracked, and interconnected.”^{xii}

The Internet provides space to articulate group identity, e.g. sharing a political cause.^{xiii} As Anderson argued in the context of print media, a nation can be considered an imagined political community since it is impossible for all members to meet; but they all refer to a hypothetical commonality.^{xiv} “Here (in cyberspace) will be found the common beliefs of individuals who never meet each other that will move them to fight for their cybercommunity, believe in their cybercommunity and even love their cybercommunity.”^{xv} Anderson’s *Imagined Communities* show the common ground by shared ideology or interests, a common discourse emerged, and people with different dialects understood the messages.^{xvi} In the same way as print-media helped to distribute information for an imagined community within one nation, the Internet can have this functionality on a global scale.^{xvii}

Online communities rather emerge from networks than groups. “In networked societies, boundaries are permeable, interaction with diverse others, connections switch between multiple networks, and hierarchies can be flatter and recursive.”^{xviii} Social software provides the potential for political action, although commercial structures are inherent in most websites and create hierarchies in favour of some participants and on the contrary repressive for others. If we consider that “[s]mart-mobbing is about using the Internet and mobile communications to self-organize collective action”^{xix} we have to estimate the role of the engineers who created the websites and those who want to make profit out of them and therefore do not enhance political protest in the first place. As Graham suggests the so-called *information revolution* is carried out by “literate and language related” societies and is therefore a product of an elitist part of the world’s population that does not include financially and educationally backward groups. Both, users as well as the design of social software, have an impact on defining the ideological colouring of the global outcome.^{xx} As Rheingold puts it “[t]he impacts of smart mob technology already appear to be both beneficial and destructive, used by some of its earliest adopters to support democracy and by others to coordinate terrorist attacks.”^{xxi} Hence, online communities share different ideas, political causes, symbols, imaginary, and ideologies, which are dependent on the physical actors who discuss, exchange ideas, and participate by using digital ways of political expression. The use of social software for political protest or participation

is dependent on the ideologies, cultural and political contexts of its users and developers.

3. Between Real and Virtual

Social software has already changed the way we perceive, design, and (re-)use information and communication technologies. We state that cyberspace is not a sphere of its own, distinct from real life, but an expression of social structures that are to some extent transferred to the virtual space, and vice versa. Hence cyberspace is a social space, because it is created, shaped and (re-)designed by technicians, constructors, engineers.^{xxii} Designing and structuring cyberspace is a social act and cyberspace is a product of human action and creativity. The social and the virtual sphere are closely related and interdependent. Social inequalities, power structures, and ideologies existing in real space are therefore transferred to the virtual sphere.

Already in the 1960s Marshall McLuhan referred to changes of spatial dimension due to new electronic mass media: “Today, after more than a century of electric technology, we have extended our central nervous system itself in a global embrace, abolishing both space and time as far as our planet is concerned.”^{xxiii} The *Internet Galaxy* as Castells argues, influences a similar change as McLuhan has identified with the emergence of television and technical mass media in general.^{xxiv}

The perception of time and space has changed with the emergence of ICTs. New media and globalisation processes have a major impact on the structure and organisation of so-called *Global Cities*^{xxv} as well as the individual and the social within this context: “Information technologies are yet another factor contributing to the new logic for agglomeration. These technologies make possible the geographic dispersal and simultaneous integration of many activities.”^{xxvi} According to Castells the suspension of spatial and temporal distances is the dominant social logic of the *Network Society*. Since humans are living in real physical space – the space of places – this process brings along a loss of the self of individuals.^{xxvii} The transformation of space and time has an enormous impact on identity formation, especially the possibilities of self-representation in cyberspace by social software.

The vision that “new communication technologies, decentrally employed, could just as easily lead to a cultural revolution in which the citizens take their problems into their own hands, defining and designing their needs, products and lifeworlds for themselves”^{xxviii} is still present in discussions

about political activism in the virtual space. Although the perception of space and time has changed through ICTs, there are disadvantages in societal structures that are transferred into the virtual space and influence online participation and political engagement. As Bell argues in reference to Castells' *Network Society*: "The elites of self-programmable labour live exclusive lifestyles while social exclusion and poverty escalate around them."^{xxxix}

Social structures are projected on the virtual space. This can be discussed in terms of Bourdieu's understanding of capital.^{xxx} Economic, social, symbolic, and cultural capital, such as education, are important concepts regarding the use of web technologies and (inter)actions in the virtual space. Power relations are transferred as inequalities into the virtual space: "Who owns access to your devices, either to push information at you or to pull information from you? Some of the answers will emerge from political processes, but many of them are sensitive to technical design decisions. In that regard, the designs that dominate early in the growth of a technology can have disproportionate power over the way the technology will affect power structures and social lives."^{xxxi} There are two extreme perspectives in terms of power relations: ICTs can help to increase control over users, and privacy would diminish. At the same time social software is associated with a more powerful role of users and increasing self-determination regarding content. This leads to an enforcement of collaborative democratic possibilities and influence on design. These two perspectives are based on two contrary policy making approaches. On the one hand, one can identify a top-down approach, which is characterised by mental disappropriation, loss of control, and surveillance. On the other hand a bottom-up approach enables the opportunity for self-determined life-styles, participation and protection of personal rights. Current societies are based on many contradictions, e.g. between self-determination and heteronomy, or inclusion and exclusion. ICTs foster cooperation and competition for rationalising the accumulation of economic, political, and cultural capital. In the information society, or informational capitalism, social systems and structures are increasingly shaped by knowledge, and computer-mediated communication.^{xxxii} As a result the importance of network logic and globalisation, i.e. time-space-distanciation, of social relationships increases. ICTs do not follow predictable, mechanically determined, and one-sided effects, but a set of multiple antagonistic economic, political, and cultural tendencies, and therefore cause both, opportunities and risks.

In *Technologies of Cooperation* Rheingold and his working group point out, that a “cooperative strategy does not replace competitive strategy; the two are inter-related and co-evolve. A key challenge is learning to understand the dance between the two strategies, their respective range of choices [...]”^{xxxiii} This “dance” refers to idea that the current technological infrastructure both enables and constrains cooperation, participation, and political activism. Cooperation requires public awareness and empowerment of people. Class becomes a political concept, because “[t]he task of a theory of class in this respect is to identify the existing conditions for potential collective struggle and express them as a political proposition.”^{xxxiv} Hence a theory of class refers to necessary conditions for collective political struggle to foster grassroots activism.

Conflicts and struggles of current societies, i.e. property, power, and skills, have been transformed in the information age. Information and knowledge are central forces and became a strategic economic resource. Knowledge production is inherently social, cooperative, and historical. The creation of knowledge usually requires collective efforts, hence it becomes a public good. Individual authorship is still considered as the basis of individual property rights and copyrights, although knowledge production becomes more and more networked, interlinked, and collaborative. The Internet enables reproduction and free global distribution of information with the help of technologies, e.g. peer-to-peer-networks. Information can be stored on physical carriers, it is a non-rival and intangible good. Physical property can only have one possessor, whereas information goods can be shared without loosing the possibility of re-using it.^{xxxv} With the help of intellectual property rights information is artificially transformed into a scarce resource. A monopoly for selling and licensing information is established in favour of the information-owner. Intellectual property rights do not support public goods, but private accumulation of profit. Benkler concludes that strong intellectual property rights reduce the chance of cooperation, user integration, and user-generated content. “The strength of peer production is in matching human capital to information inputs to produce new information goods. Strong intellectual property rights inefficiently shrink the universe of existing information inputs that can be subjected to this process. [...] [T]he entire universe of peer-produced information gains no benefit from strong intellectual property rights.”^{xxxvi}

Decentralized organisation of the Internet allows the emergence of direct-democratic grassroots communities that challenge the centralisation of power; hence a participatory society can be established. At the same time ICTs and social software in the global networked information space foster the rise of totalitarian forms of surveillance and control. ICTs have the potential to strengthen both, participation and surveillance. These are two tendencies that contradict each other, but both affect society. The inherent democratic potential of ICTs is often not realised because of asymmetrical distribution of power and resources in the real world.

4. Digital Inequalities

Social patterns existing in real space, including social inequalities, have an impact on cyberspace communities. We assume that political activism via social software is in many cases initiated by an elite, representing their interests, and not necessarily those of the citizens. Those excluded from cyberspace thus depend on guidance of real-space-elites. Potential of access to the Internet and disadvantages of exclusion were subsumed under the term digital divide, which was put on the agenda of political and public debate in the 1990's. The term describes the unequal access to new digital media, mainly to the Internet. Digital divide refers to two major phenomena: the gap between developed countries and developing countries and the dissimilar access to information technologies within certain societies. Although simply providing access (i.e. the technological infrastructure) will not automatically lead to global activism, participation, or social equality, access is the necessary precondition to take benefit from the positive potentials of the Internet and related technologies.^{xxxvii}

Participation, social movements, collective intelligence, collaborative knowledge production, citizen journalism, user generated content, etc. are new qualities of social software, but inequalities in social class, education, skills, and lack in capabilities influence the way technology is used and political engagement is perceived.^{xxxviii} Although the Internet provides the potential for political engagement, activism, and social movements “[e]very new form of communication both heightens ties between those who already know one another, and raises the walls of exclusion for those lacking access to the new medium of communication.”^{xxxix} Those excluded from the virtual space thus have to depend on the real-space-elite.

Due to commodification of information and increasing commercialisation of the Internet the initial hopes of creating a free cyberspace away from social power structures, traditional hierarchies, and inequalities were replaced by profit-oriented realism. “Beyond their scale, what is striking about today’s patterns of communication and cultural globalization is that they are driven by companies, not by countries.”^{xli} Increasing commercialisation of the Internet led to its control by an elite, that is able to restrict or enhance political protest and networks of critical voices across the world. The enthusiastic assumption that the Internet would lead to more profit in societal, economic, and political terms is not accurate “if viewed from the point of view of the shortfall in market growth represented by those who could afford a computer, modem, or even low cost of the local phone call that linked them to a server.”^{xlii} Purchasing power and imbalanced power relations, as well as lack in cultural, economic, and social capital can restrict access to the political potential of social software. As Schiller argues “communication technology in the twentieth century reveals at least two characteristics presented over the decades: one is the overblown promise greeting its appearance; the other is the rapid assumption by cooperate custodians of the new instrumentation and process for commercial ends, i.e., profitmaking.”^{xliii} The burst of the dot.com bubble at the turn of the millennium initiated a discussion about lack in grassroots democracy and collaboration by commodification of cyberspace. As Lessig argues the Internet was created as a global space, though controlled and regulated under the influence of commerce. The Internet itself is neither regulated nor controllable, but a combination of hardware, software, and of code, that can enhance freedom or be an instrument of control.^{xliii} “The users are guests in the house of Social Media giants.”^{xliv} Civil rights and political freedom cannot be guaranteed by a capitalist system that exclusively makes social actions possible if they are adjusted to their ideologies.

5. A global virtual sphere

The global architecture of the virtual sphere is not restricted to local, e.g. national or geographical constraints. The network character of social software provides the potential to transform local political concerns into global issues by gaining attention from people all over the world. “The conventional media are trapped in a technology of central production and mass distribution which limits their ability to allow citizens to ‘confer in an unrestricted fashion’. The internet is a technology designed for dialogic communication.

The internet is global in design.”^{xlv} As Rantanen suggests “different media are open to globalization in different ways. While old media (such as newspapers or radio) are often more national in their orientation, new media such as video or the Internet are much more global.”^{xlvi} Although global information distribution was possible by mass media as well, global visibility has increased through the Internet’s possibilities for global networking and grassroots democracy. “[N]etworks play a mediating role by connecting prospective participants to an opportunity for mobilization and enabling them to convert their political consciousness into action.”^{xlvii} Political actions, causes, and decision making processes on a local scale, or in a particular part of this world, can trespass national boundaries and rapidly acquire worldwide attention and support.

Information technologies and related to them changes in communication structures are amongst the deep drivers of globalisation. At the same time the expanding logic of capitalism and development of global market goods and services, worldwide distribution of information, new global division of labour driven by multinational corporations, the growth of migration and the movement of people foster global interconnectedness.^{xlviii} There is a difficult relationship between the “global as the principle source of domination and the local as the principal source of resistance and emancipation.”^{xlix} Local, national and global interaction is necessary for political activism and awareness by a global community. “Networked, digitized information media cut across territorial boundaries of cultural groups. They juxtapose differences in a homogeneous medium. They bring together individuals with common interests but divergent nationalities and traditions.”^l The global Diaspora and “political narratives that govern communication between elites and following different parts of the world”^{li} would need a careful translation from one context to another.

People act in local contexts, hence mobile, transboundary political practice is possible not only through institutional global spaces, but through powerful imaginaries, languages, and symbols that inspire global action. Places of political action and decision-making are linked by “rapid communications into complex networks of political interaction.”^{lii} According to Appadurai we can assume that mass media in general and especially the Internet create a new kind of nationalism, that is not restricted to national boundaries anymore.^{liii} Hence globality is a new resource for users who mix technical properties with local practices. The term *globalisation*^{liv} refers to the global outcome of a local protest,

which can only function by the use of rhetorical aptitude and a political ideology supported by traditional local media, which is biased by the government in power.

The outcome of these technical properties depends on the users and their perception of a particular political problem, worldview or ideology, and the way they are able to use the technologies.^{lv} According to Giddens local action becomes action from a distance with impacts beyond national boundaries. Globalisation is characterised by intensification of international social relationships by the specifics of network structures with interdependencies and interactions with people who are not restricted to space and time.^{lvi} The process of extension across the globe by networking is significant for modernity.^{lvii} The transformation of local social interrelationships with their traditions and values into the global sphere is what Giddens terms *embeddedness*. Globalisation therefore means disembedding from a local context and “the ‘lifting out’ of social relations from local concepts to indefinite spans of spacetime.”^{lviii} As Poster argues: “Global communication, one might say, signifies transcultural confusion. At the same time, the network creates conditions of intercultural exchange that render politically noxious any culture which cannot decode the message of others.”^{lix} Although the Internet in general and social software in particular provides possibilities to enhance political engagement on a global scale, cultural misinterpretations, social inequalities, as well as commodification of information and web services are hindering factors that need to be overcome to foster global grassroots activism.

6. Conclusion and Recommendations for inclusive ICTs

Learning from theoretical concepts we conclude that ICTs provide the foundation for communities to emerge and to shape society, for both societal benefits (e.g. empowerment of citizens, ecological conservation, democratisation and participation) as well as negative consequences (e.g. social inequalities, digital divide). Based on the four concepts mentioned above we outline recommendations for inclusive Information and Communication Technologies from a social science perspective. We emphasise on the potentials and possibilities, which social software theoretically offers for social movements, political activism, participation and grassroots democracy to emerge.

[1] Community building in cyberspace requires an open, participatory framework. Following Jenkins we can define a participatory culture by following characteristics: “relatively low barriers to artistic expression and civic engagement“, “strong support for creating and sharing one’s creations with others“, “some type of informal mentorship whereby what is known by the most experienced is passed along to novices“, “members believe that their contributions matter“, “members feel some degree of social connection with one another.”^{lx} Birdsall describes a development from “build it and they will come” to “they will come and build it” focusing on the changing role of content consumption to content production by users, what underlines the concept of a participatory culture as an individual- and society-centred communication process.^{lxi} To foster community building in cyberspace, technology design as well as social and political contexts, have to leave space for grassroots democracy, and political participation to overcome the heteronomy of contemporary politics and to move towards a more participatory virtual culture.

[2] Societal structures and political concepts are transferred from real world into the virtual space. Since cyberspace is a social space, the real and the virtual cannot be seen independently from each other. This also includes the design process. Technology design is a social act and technicians should be understood in their social role as experts, hackers, laymen, and common users that adapt to their technical needs. Constructing technology is per se a social act. Hence people have the ability to shape technologies. At the same time technologies influence society, they are both, enabling and constraining. The architecture of technology is designed by an elite and by private companies that usually do not consider grassroots activism as a desired goal. Very often people tend to arrange themselves with technologies, rather than changing or adapting them.^{lxii} By including users in the design process, users’ needs for political participation and grassroots democracy can be considered as a valuable design guideline.

Apart from a participatory technology design approach real world context has to enhance participation, the emergence of bottom-up discussion and social movements. Cultural, political and societal context have to be considered, e.g. current intellectual property rights do not enhance collaboration and participation, on contrary: “the entire universe of peer-produced information gains no benefit from strong intellectual property rights.”^{lxiii} An interrelationship

between open content, the assurance of privacy, and avoidance of surveillance technologies especially in countries with restrictive governments, are preconditions for political engagement of civil society by using social software.

[3] The so-called digital divide still excludes many people especially in the developing world to use social software for political engagement. Considering the enormous part of the population that is currently excluded from the Internet we argue that social software – if not supported by traditional media or opinion leaders – cannot be the adequate tool for grassroots democracy to emerge, especially in countries with enormous inequalities and restrictive regimes. Universal access is the precondition for using ICTs for grassroots democracy, although lack in skills, education, motivation, and capabilities lead to exclusion as well. Imbalances in economic, social, symbolic, and cultural capital require an interdisciplinary approach to overcome inequalities in using social software for political engagement.

[4] Social software provides possibilities to enhance political engagement on a global scale, although cultural misinterpretations, social inequalities, and commodification of information and web services hinder global grassroots activism. The users and producers of social software can either enhance competition, or communication and collaboration in cyberspace. The possibilities of the technologies can be used in different ways and the future direction it takes depends upon its actors. Civil rights and political freedom cannot be guaranteed by a capitalist system that makes social actions possible only if they are adjusted to their ideologies. Commodification of social software hinders grassroots activism which is not directed according the rules of the market, economic benefits and capitalist ideas. Open source based social software hence can lead to more inclusive ICTs and support grassroots democracy.

Notes

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