A critical perspective on the structural causes of digital exclusion and user (dis)empowerment: A preliminary investigation

Ilse Mariën, Jernej A. Prodnik

1. Introduction

This contribution aims to highlight the main limitations of the emancipatory potentials of digital inclusion policies and ICTs as such. Increasingly, empowerment and participation in society are put forward as the main goals of digital inclusion (Stewart et al., 2013). By applying user-centric and participatory approaches, the assumption is made that individuals will be empowered and as such, will be re-included in society (Steyn & Johanson, 2011). Moreover, the normative framework of digital inclusion policies is highly based upon individual choices and occurring wants and needs that coincide with individual digital media practices and routines (Bianchi et al., 2006). The ultimate goal of digital inclusion is claimed to be the development of capital-enhancing user practices that are based upon free and fully informed digital choices (Heeley & Damodaran, 2009). These assumptions, however, tend to a large extent disregard the social, economic, political and technical conditions within which individual choices are made and within which individuals must inevitably act. Instead of attempting to narrow the existing social gap within class divided societies, and of probing the limitations given at the macro-level by questioning the wider social structure, digital inclusion policies tend to completely individualize problems that are in fact social in their nature. To put it in the words of Adorno & Horkheimer (2002:121), they "turn the socially perpetuated wretchedness into remediable individual cases."

The paper positions itself within the political economy of communication research tradition. This approach has been influenced by critical scholarship, especially by Karl Marx, which puts it closely in line with Frankfurt school of Critical Theory (see Fuchs, 2014:52-53). Both approaches have focused on processes of commodity exchange in the capitalist accumulation process and on how the spheres of communication, culture, and information operate within capitalist societies (cf. Babe, 2009; McChesney, 2007:55-57; Meehan and Wasko, 2013; Mosco, 2009). Political economy of communication furthermore focuses on the context of communicative and cultural production, especially its economic underpinnings, thus pointing out the "objective" social circumstances within which actors and institutions are more or less bound to act (namely, the social structure, which influences or limits them). Key questions that could be asked by political economy approach include: how is production organized politically, economically, and institutionally; who produces, how and why; how to (re)distribute communicative and informational power within society; who is economically benefiting from the existing institutional arrangement within the wider social order etc. (see Babe 1993; 2009; McChesney, 2007; Mosco, 1989:49; 2009; Fuchs, 2011). Political economy thus analyses especially economic, financial and political reasons and influences on/of the media, communication, information and culture on the social totality; it consequently includes in its analysis also historical context and power relations (Ibid.;

Murdock and Golding, 2005).

Starting from these presuppositions, this contribution will aim to identify the key causes of structural (dis)empowerment and how these resonate to digital (dis)empowerment. As such, it confronts the structural consequences of social inequalities, existing social hierarchies and power structures against mechanisms of digital inequalities and against the implementation of digital inclusion policies. Hence, this article addresses the following questions: How are structural causes of social and digital inequalities intertwined in the capitalist "information society"? To what an extent are processes of structural disempowerment and class inequalities at a macro-level at odds to inclusion and empowerment policies that are being implemented at a mezzo and especially micro-level of society? Is there still an unequal distribution of participatory and communicative power when it comes to individual/group participation and influence or do, on the contrary, digital technologies such as the Internet bring about significant changes that reduced these inequalities? Also, to what extent do the realities of social stratification hamper sustainable change through digital inclusion policies? By proceeding from a critical perspective, this contribution aims to demonstrate the limitations of user-centric and micro-level approaches, while questioning their normative definitions of digital empowerment which tend to be reductionist in their essence. It thus confronts both digital exclusion and digital inclusion approaches.

2. The Internet in the wider social context and practices of (digital) exclusion

2.1. Communication technologies in capitalist societies and development of the Internet

As several new communication technologies of the past (see Czitrom 1982), the rise of the Internet was accompanied by both utopian and hyper-pessimistic discourses about the changes that will be brought upon society and social relations by the communications revolution. Mosco (2004) for example identified three key myths that were strengthened by the rise of cyberspace and digitalization: the end of history, the end of geography, and the end of politics. All three myths were closely connected to the end points, namely to a radical break with the past and an unprecedented transformation of the society and human relations within it (cf. Fisher 2010). A similar revolutionary doctrine accompanied the supposedly neutral rise of the so-called "information society" (see Dyer-Witheford 1999, 22-26) and was especially clear with the Internet itself, which was exemplified in what Fisher (2010) called the digital discourse. According to Curran (2012), it was not only the formative years of this new communications technology, but also its later development in the 2000s that prompted four sets of predictions: it was supposed to (a) bring about a radical economic transformation, namely vast prosperity and cornucopia; (b) offer a path to a global understanding between populations of the world; (c) lead to a completely new form of democracy and politics; and (d) produce a renaissance of journalism, because media moguls and long-lasting conglomerate control over media were supposedly becoming a thing of the past. But while the Net has, for example, to a large extent modified how economy operates and influenced other areas in society, it did not represent an unprecedented transformation in any of the mentioned

cases. This was especially so because, as Curran (2012:9) noted, "influence of the Internet is filtered through the structures and processes of society," and thus having much less social autonomy than anticipated.

In contrast to non-critical and overtly optimistic/pessimistic authors writing on the revolution that are ICTs, political economists have mostly argued that expansion of the Internet, like other technological breakthroughs, will not bring a radical rupture with the past. In their view the Internet has, instead, even accelerated some of the tendencies that were already present within capitalist societies, including further expansion of commodification and ever increasing inequalities (see for example D. Schiller 1999; Mosco 2004; Fisher 2010; Fuchs 2011a; 2011b; McChesney 2013). Technological changes and their influence on society should thus be seen in the context of a dialectical contradiction of both continuity and discontinuity (see Fuchs 2014; Prodnik 2014, 146-148), where the key continuity are the existing relations of production, namely the persisting presence of capitalist social relations. Already three decades ago Mosco (1982) rejected a simplistic notion of whether technological change will be good or bad for society as a false dichotomy. Rather, if we focus on ICTs, we should acknowledge that:

"Those who control the production and use of information technology will shape it in ways that are good for some and destructive for others. More concretely, some will make money, have more control over their work lives, and simply know more [...]. On the other hand, for some, the revolution in communication means degrading jobs consisting of long hours in front of constantly monitored video display terminals, or no job at all. For those unable to afford what it takes to buy information or buy privacy, the new services that information technologies provide will simply mean a loss of control over the resources and decisions that affect their lives." (Mosco, 1982: 8)

Mosco's claims seem especially striking as they were confirmed by developments in the decades later, especially after 9/11, which brought an overwhelming surveillance via new ICTs, and after the global financial crisis, with its further economic squeeze on the already marginalized parts of the society.

To have a critical understanding of the new ICTs and their development it must be noted that in capitalist societies information and communication have been overwhelmingly commodified and included in the capitalist accumulation cycle (Mosco 2004; Fuchs 2011a; Prodnik 2012; 2014). Communication systems are, likewise, constitutive parts of the commodity exchange in the current phase of capitalist development. Dan Schiller (1999) defined this as *digital capitalism*, which denotes a worldwide system of electronic information architecture, digital networks and a subjugation of this technological infrastructure to financial currents and exchange of diverging types of commodities (cf. Fisher 2010). In Schiller's (1999) opinion, digital networks are directly accelerating, generalizing and mitigating expansion of capitalism as never before in history.

One of the main reasons for such historical development is the fact that the neoliberal doctrine of the "free flow of information", which was advocated especially by the US throughout 20th century, has removed all obstacles for these areas to become economic tools for capitalist corporations. The doctrine has a long history in promotion of global free markets in media, culture, and information resources (see H. Schiller, 1976:ch.2; Mattelart, 2000:50). Its main intention was to produce favourable social and political conditions which would allow unrestricted trade (Hardt 2004, 53-54) and was instrumental in expansion of capitalism around the globe and helped to produce new international dependencies (see Thussu 1998; 2006). Since the 1980s, this doctrine has been coupled with its political-economic counterpart, neo-liberal "laissez faire" capitalism, which consolidated in the last decades (Negri and Hardt, 2000; Harvey, 2003; Thussu, 2005; Hesmondhalgh, 2008).

This wider social, political, and economic context put clear restrictions on how digital communications have developed in the past decades. From the perspective of critical political economy of communication, it is possible to identify several important processes at play on the Net that produce severe inequalities, hamper possibilities of political engagement, participation, and activism of citizens, limit equal access to information, and restrict citizens from being fully included in the public life - thus characteristics that should be of key concern in democratic societies. Amongst those processes are:

(1) <u>Privatization</u>, <u>marketization</u> and <u>concentration</u>: Even though the Internet was throughout most of its history anti-commercially oriented, it has in the last decades been transformed into a mostly privatized and marketized sphere. Most of the Internet is now controlled via very much closed and in some cases even monopolized markets (Bellamy Foster and McChesney, 2011; Freedman, 2012; McChesney, 2013). The Internet as a technical network is privatized both in the US and EU and what is especially noticeable is an intensification of concentration amongst the companies that offer (physical) access to the Internet (especially in the US). This is closely connected to the emerging battles for "net-neutrality", as there is a tendency towards changes, which would limit access to those websites that would be unable to afford to pay to the Internet Service Providers a high-speed access to their own servers (see McChesney, 2007: 181-183; McChesney, 2013:118-120). Likewise, there are high levels of concentration when it comes to the traffic on the Net as vast capitalist conglomerates attract most of the users (Winseck, 2011:36-40; Freedman, 2012). Even though the rise of the Internet brought with itself new "winners", for example Google or Facebook, this did not bring along any serious dispersal of power, like the techno-utopians expected (cf. Curran, 2012). On the contrary, power asymmetries and monopolization is in the case of highly-connected markets of the Web even more likely, while the barriers to entry to the web-market can be even higher than on other capitalist markets (cf. Hindman, 2011). Empirical studies have shown that most of the online platforms are commercially oriented (Sandoval, 2011) and because of the high levels of concentration and dominance of American-based platforms, some authors were prompted to write about so-called "platform imperialism" as a new phase of imperialism (see Yong Jin, 2013).

- (2) <u>Commodification of content:</u> There are different ways of commodifying content, but they mostly rely on restrictions made possible by intellectual property rights (IPRs) that are enforced through global legal mechanisms (mainly supranational free-trade agreements) and have been exponentially gaining in importance since the 1980s (Thussu, 2005: 52-54; 2006: ch.3; D. Schiller, 1999; Hesmondhalgh 2008). Limiting access through new enclosures (Berry, 2008; May, 2010) in digital environment through these mechanisms is creating scarcity of resources and creating what in Polanyi's (1957/2001: Ch. 6) conceptualization could be seen as fictitious commodities, meaning these commodities could not exist and be exchanged without political interventions (mainly because of simplicity of digital reproduction and a possible information cornucopia). They are thus created artificially both as scarce resources and as commodities (May, 2010). With commodification of this sphere, information is becoming one of the key strategic resources (Thussu, 2005:54; cf. Berry 2008) and is spreading commodification into completely new areas (May, 2002:129). For Yong Jin (2013:146), IPRs are "the most significant form of capital accumulation in the digital age," while McChesney (2013:80) notes these companies would in fact not even exist without IPRs as they protect "corporate monopoly rights over culture" and provide media conglomerates with profits, while simultaneously encouraging "the wholesale privatization of our common culture." One of the key contradictions apparent with the Internet is that private wealth can increase only by diminishing common, public wealth (see Bollier, 2002).
- (3) Commodification of users and their activities: The other side of the increasing commodification on the Net should not be neglected either. Dominant web-companies such as Facebook and Google use collective co-operation, participation and activities of the users and their communication as a form of free labour that is canalized in their private financial gain (see Terranova, 2004; Scholz, 2013; Fuchs and Sevignani, 2013). It is in fact the activities and content produced by the users of the most popular social networks that are the key ingredient and preliminary condition for continuing existence and financial success of these companies. The labour of audiences, that was already recognized by some political economist decades ago (e.g. Smythe 1977), is therefore needed for these companies to reproduce their influence and (financial) power. Commercial sites depend on advertising money and must thus sell information on their users and advertising space to survive on the market. This consequently means users online are put under (economic) surveillance (see Allmer, 2012; Fuchs et al, 2012).

These tendencies are producing new asymmetries and hierarchies on the Internet, thus reinforcing the already existing divides present in society. They also reinstate new monopolies over knowledge, as Innis (2008/1951) called them. He saw them as a historical constant of all human societies, the difference being these monopolies are today a result of capitalist social relations.

2.2. Social stratification and the contradictory nature of digitization

Various studies focusing on the Internet have shown that the digitization of society leads to, or reinforces, mechanisms of social exclusion (van Dijk, 2005; Helsper, 2008; Steyaert & Gould, 2009). Witte & Mannon (2010:3) refer to the paradoxical nature of the Internet, because it is "at once an emblem of a free and open society and an active reproducer and possible accelerator of social inequality." This is amongst others due to the fact that social stratification is a reality. Individuals are born within different social and cultural contexts, with different capabilities, means and opportunities. The same goes for digital exclusion: digital resources are, as noted above, distributed unevenly across the population. Without equitable access to digital media, disadvantaged individuals will become even more excluded from societal norms.

An important, if often overlooked question therefore is: what is to be understood by equitable access? Is it mere material physical access to the broadband, or is there also a need to ensure what Livingstone & Helsper (2007:6) refer to as qualitative access: "As predicted by sociological theories of stratification and inequality, as the market continues to innovate it seems that higher SES households will maintain their position of advantage, first through gaining access and then through increasing the quality of that access." And what about skills? Is the development of digital skills a task to be provided and ensured by governments or instead, something to be left up to the autonomy and agency of the individual? Can solutions for structural barriers to the use of digital media, such as a lack of skills, usage opportunities or awareness about the added value of digital media amongst disadvantaged groups be left to the market or the efforts of civil society? Various voices claim this to be impossible because of social stratification and power mechanisms within society. Steyn & Johanson (2011:54) refer to inequality as an inherent aspect of capitalist societies and state that "no distributive nor equal opportunities policies will ever be enough for promoting freedom to all individuals under the capitalist mode of production." Moreover, it is claimed that people in capitalist societies have neither equal opportunities nor do they have equal possibilities to participate in political decision-making processes, be engaged in public life at large or to influence society they are a part of via their (digital) communicative practices. As pointed out above, Internet access as such does not diminish vast inequalities within digital spaces that are part and parcel of a globally integrated capitalist political economic system (see Harvey, 2003; Negri and Hardt, 2000; 2009). Corporations dominating the Internet are enclosing informational commons, while their raison d'être is to be as profitable as possible for their shareholders and not to follow ideas of the free press, quality public information, normative accounts of democracy, ideals of social inclusivity, or social responsibility (McChesney, 2008; 2013; Fuchs, 2008; 2011b; Sandoval, 2013). As Winseck (2011:21) points out, news and information that lack commercial demand therefore cannot be produced in commercial context unless they are subsidized in some other way. Sandoval (2013) has similarly pointed out that corporate social responsibility, which the ICT companies declaratively follow, is next to impossible because of their profit-interests. Even if they have a good social responsibility reputation, "their actual practices are socially irresponsible." (Ibid.:17)

Furthermore, mechanisms of exclusion are created by the technology-centred approach of governments and industries. Currently, there is a severe push for digitization both in the private sector through supporting and striving for innovation and in the public sector by way of rationalising costs through opting for digital public services (Gilbert, 2010). Digital is considered to be the new societal norm. This approach however tends to ignore the individuals that are outside of the digital scope, and as such increases and reinforces mechanisms of exclusion (Helsper, 2011). It is often the case that the implementation of digital services (e.g. public transport, digital student portfolio platforms, e-ID based services...) is not accompanied by a well thought through and structural strategy to ensure uptake by disadvantaged groups. For example, in Flanders (cf. Belgium) applying for student scholarships can only be realized through an online platform. However, those most at need of these scholarships are also the ones that are experiencing the most difficulties with accessing and using the Internet. No structural interventions were foreseen or made to provide the necessary support for these disadvantaged groups. Hence, new mechanisms of exclusion are created and existing ones are reinforced (Mariën et al., 2010). Furthermore, the rationalisation of commercial services into digital solutions such as Internet banking has led to a situation in which responsibilities have shifted from an institutional level - that of the bank itself towards a micro level - that of the individual user. Through digitized services, the responsibilities and workload of private companies are being brought down, whereas individuals are accounted for acquiring material access (cf. home pc, secure Internet access...) and the necessary skills and awareness. In this way the ongoing and rapid digitization of society is leading to the disempowerment of a vast part of the population.

According to van Dijk (2005) it is clear that the so-called "Mattheus effect" - the rich get richer, the poor get poorer - is an inherent characteristic of digital exclusion. He emphasises that most advantaged groups in society - highly educated, high income, high job status, continuous access, high level of skills - are continuously able to gain direct benefits from the use of digital media whereas disadvantaged groups - low educated, low income, low job status, problematic access, low skills levels - are at all levels lagging behind. The "Mattheus effect" is in fact very consistent with both how the capitalist system develops and operates and also with the structure of the Web itself. Even though it has often been prophetically claimed that the Internet will offer anyone equal opportunities to be heard and new possibilities for individual production, if not bring about a complete transformation of the world and rejuvenation of democracy (cf. Curran 2013), empirical evidence tells a different story.

According to Hindman (2009), the link architecture of the Web itself, which defines what users and citizens are in fact able to see on-line, points in direction of ever increasing asymmetries and inequalities. It is therefore not only the wider social context mentioned above (re)producing social asymmetries, it is also the link structure of the Internet itself that leads to the winners-take-all patterns and niche dominance, which becomes a general rule of the online sphere. This is especially evident in Hindman's concept of "Googlearchy", which is defined by *the rule of the most heavily linked*.

Because of the rule of Googlearchy, "the number of highly visible sites is small by any measure," according to Hindman (2009, 54), while "most online content receives no links, attracts no eyeballs, and has minimum political relevance". Likewise, the most powerful and influential *individuals* online are those that are already a part of the social elite (cf. Curran, 2012:11) and this is especially so when it comes to political engagement, participation, and activism (Ibid.:13-14). Hindman's study, which focused on the democratic potentials of the Internet, contrary to the common beliefs found "powerful hierarchies shaping a medium that continues to be celebrated for its openness," while in some cases, these asymmetries are even proving to be larger than in the case of the old-fashioned mass-media. Winseck (2011:39) mentions a similar tendency in the on-line worlds as Hindman, conceptualizing it as a power law inherent to the network effects.

2.3. A conceptual and normative understanding of digital exclusion

As demonstrated by the ongoing debates on digital exclusion this novel type of exclusion is understood as the disadvantage individuals are experiencing because of their incapability to reap the benefits of the use of digital media (Steyaert & Gould, 2009; Wright & Wadhwa, 2010). Warren's (2007) conceptual understanding of digital exclusion is, similarly, highly related to that of social exclusion. He describes it as a situation in which specific groups within the population are lagging behind in their adoption and use of digital media, and this because of social circumstances that are beyond their control. The same goes for Gochenour (2006: 47) who states that the digitization of society is forced upon individuals, and that as such it threatens their individual and societal participation and development: "Being forcibly prevented from participating in a community through, for example, having one's access to the Internet denied, amounts to having an aspect of one's development as a subject denied ... if economic, social, or political forces deny me my participation in a community, then they also deny me the development of an aspect of myself." Fuchs (2008:215-216) likewise connects digital divide to social stratification and points out this is one of the basic sources through which the classes of winners and losers in societies are today produced and reproduced.

According to Brants & Frissen (2003) however, every reflection about the relation between digital and social exclusion should start from determining whether digital exclusion is the direct result of a disadvantaged societal position such as a lack of financial means or competences; or whether digital exclusion creates and reinforces existing mechanisms of social exclusion. Brants & Frissen (2003) also point out that equal opportunities can lead to unequal positions within society, or that equal wealth can coincide with an unequal sense of well being. Recent studies highlight this highly individualised experience of digital and social exclusion. Qualitative data shows that not the differences in usage patterns or skills determine whether mechanisms of social exclusion are at play, but that all depends on the individualised negative experiences with digital media in daily practices (Brotcorne et al., 2010; Schurmans & Mariën, 2013).

A significant remark in this regard is that though individuals do not experience exclusion as such, this does not imply that they are not subject to structural mechanisms of exclusion that differs them from the accepted norms in society. Research on NEETs - individuals not in education, employment or training - shows that several individuals do not experience digital exclusion because they have found alternative ways of coping with the different barriers they're encountering. For example, they use various public and private access points and were able to develop their skills through a trial-and-error approach (Schurmans & Mariën, 2013). Having quality broadband access, which is considered to be common in many Western European societies, however appeared to be a major issue for these individuals because of a lack of sustainable financial means. Hence, structural mechanisms of inequality are clearly at play. Helsper (2012:28) claims that these exceptions, these individuals who manage to deal significantly with digital media in spite of various structural barriers, might be the most interesting cases to study in order to gain insights and information about inclusion processes: "The characteristics of the unexpectedly included will aid theorization about which resources and impact mediators are the most important in breaking the rich-get-richer cycle where digital exclusion reinforces or perpetuates offline exclusion".

However, the question remains what if these individuals were given the same opportunities as their peers? Would there situation be the same, or might it have been different and more advantaged yet? Another aspect might be that many of these individuals who do not feel digitally excluded are unaware of the opportunities and social, economic or cultural advantages digital media might bring about. Again, the research by Schurmans & Mariën (2013) points out that individuals who lack the basic digital skills and show utterly simplified and uniform usage patterns, also tend to overestimate their digital skills, and ignore the level to which they are digitally and socially excluded. Hence, the same question arises: Can individual experiences of exclusion or inclusion be accounted for when considering structural mechanisms of inequality at a macro-level? Or instead, is it necessary to make a more clear-cut conceptual and theoretical understanding of exclusion mechanisms at micro, mezzo and macro level? Helsper (2012) calls for an objective consideration of structural exclusion mechanisms in which personal experiences and perceptions aren't accounted for. As such, Helsper's (2012: 19) Fields Model for Social and Digital exclusion doesn't take a normative stance on what digital inclusion resources or goals are better than others, but starts from the assumption that "inclusion exists in various forms and that their value depends on a person's offline resources but should be independent of an individual's perception. Incorporation of a full range of activities is important because even engagement with 'undesirable' digital resources, such as gaming, might have desirable effects on offline exclusion fields, such as social networks and self-confidence."

Also, not all individuals want to become fully engaged with digital media. Many, and especially those who are digitally excluded, feel the pressure to assimilate with the dominant culture of digitization (Jehoel-Gijsbers & Vrooman, 2007; Vranken et al., 2007). There is however the matter of choice. Or as van Dijk (2002) points it: "Those emphasizing the digital divide as a big social problem are most

often driven by a kind of technological determinism. Some suppose that people not using digital technology are missing many opportunities and will be totally excluded from future society. Others blame digital technologies like the computer and the Internet for inequalities that are in fact much older than these technologies. In fact, it still has to be demonstrated that people who cannot live as normal citizens in current modern society without using digital technologies." Some authors therefore make the clear distinction between digital exclusion, referring to the "obstacles imposed by the social, economic, geographical or physical situation of individuals, such as not being able to afford a computer" and digital choice, to be understood as "the personal choices of individuals shaped by an individual's cultural or social characteristics" (Dutton et al., 2009: 16).

Helsper (2011) however states that there is no such thing as a free informed choice because individual choices are partly determined by the social and cultural capital and hence, are not so free as believed to be, because they are also formed by the surrounding structures at macro and mezzo level. Citizens are constrained by these so called "objective circumstances" whether they wish so or not. This is because overcoming these constraints is not down to their own skill-set, knowledge, enthusiasm, or desires, but emanates from the wider social structure. Or to put it even more bluntly: if Internet users want to preserve their social ties and stay in touch with their colleagues and friends, there is little choice but to use the social networking site (SNS) that everyone uses, which is what Trottier and Lyon (2011:98) have defined as soft coercion. Even if users might be concerned about privacy matters for example, which is the most problematic issue connected to SNS's, overcoming the risk of being excluded takes precedence over other disadvantages (ignorance, lack of competence and awareness being other reasons) (see Taddicken, 2011). Similarly, if users want to search the Web, there are little alternatives to the dominant search engines that simultaneously sell their private data. So called free choices of individuals are in that sense always directed and limited by the contextual circumstances.

3. The paradoxical nature of digital inclusion

3.1. The digital inclusion concept: A contradictio in terminis

Whereas digital exclusion is perceived as a new form of social exclusion, the process of digital inclusion is referred to as the process of social inclusion in a knowledge society (Wright & Wadhwa, 2010). Moreover, it is seen as the process through which direct ICT-barriers (e.g. access, motivation, support, skills...) are brought down; but also as the process that enables people to regain a sense of power on their life, and increases their ability to participate in various life domains (e.g. employment, education, culture...) (Brants & Frissen, 2003; eEurope Advisory Group, 2005; Haché & Centeno, 2011). This renewed sense of empowerment and agency is claimed to be achievable through the development of so-called "capital-enhancing" uses of ICTs (Hargittai & Hinnant, 2008). Significant emphasis is also placed upon the emancipatory and participatory power of ICTs: "At its centre we

place the aspiration to build an information society that fully and systematically harnesses the potential of existing and future generations of ISTs for individual autonomy and empowerment, for the prevention of socio-economic marginalization and for the promotion of social cohesion and development." (Bianchi et al., 2006:21) Consequently, digital inclusion is conceptualized as "both inclusive ICT and the use of ICT to achieve wider inclusion objectives." (Bianchi et al., 2006; Riga Declaration, 2006; eEurope Advisory Group, 2005)

Moreover, inclusion - digital and social - is seen as a normative imperative. Voices arise to consider access to a computer and the Internet as a basic human right, as they enable individuals to participate fully in all aspects of everyday life (Mansell, 2002; Brants & Frissen, 2003; Bianchi et al., 2006; Tsatsou, 2011). This viewpoint is based upon a translation of Amartya Sen's (1993) "capabilities" approach to the field of digital inclusion and starts from the idea that individuals need to be provided with the overall competencies (i.e. capabilities) that will enable them to make free and informed choices about their (non-)use of ICTs. Various studies have tried to make digital inclusion more concrete and have shifted attention towards the need for an active consumption of ICTs, instead of the mere consumption of content (Tsatsou, 2011). They refer to digital inclusion as a process through which individuals move from being a novice user to a digital innovator (Heeley & Damodaran, 2009). The assumption is made that empowered citizens are "makers and shapers of the technologies available to them and the rest of society." Or yet, that "in a truly inclusive digital society, citizens need to be actively engaged in the creation of sociotechnical systems." (Damodaran & Olphert, 2006: 51).

These various viewpoints on digital inclusion are subject to a vast number of critiques. The idea of developing capital-enhancing usage patterns raises questions about the normative stance of digital inclusion strategies and discourses. What exactly is meant by capital-enhancing user practices and why would this be seen as an important social goal? The same goes for the notions of empowerment and inclusion. What is the concrete significance and outcomes meant by these concepts? Whose empowerment? How are atomised individual users supposed to *change* technologies they use, or even platforms available to them? Furthermore, what kind and level of inclusion? Do all individuals need to become added value seekers? And yet again, what exactly defines the added value of ICTs? And added value for whom, owners of the Web 2.0 platforms and SNS's that extract user's labour, which was mentioned above? Or an individual's experience of the inclusion and participation goals set by policy makers? For example, for an older lady, finding a new pie recipe to surprise friends and family might bring her the exact added value she was looking for. Gaming and other entertainment based ICTs are easily considered as inferior and can simultaneously be exploited as a free labour. However, these types of applications can bring added value on other, less visible, levels such as managing collaboration, strategic planning, or interactive communication (Bleumers et al., 2012). From a policy perspective, such types of engagement with ICTs are rarely seen as suitable policy goals. In most cases, reflections and strategies for digital inclusion are made in terms of economic and social benefits, such as

productivity growth, reduction of the cost of social exclusion, re-integration in the labour market or increased participation in education (Bianchi et al., 2006; Brants & Frissen, 2003; Steyn & Johanson, 2011; Wright & Wadhwa, 2010). Hence, the investment in the training of ICT-skills amongst the white collar labour force, because it is claimed that developing these skills will increase productivity, and ensure better opportunities on the job market (Steyn & Johanson, 2011).

The normative difference between an individual's freedom of choice on which ICTs to use and the policy goals defined by governments, highlight the limits of the capabilities approach. Where does the free choice of individuals and the intervention area of policy ends? Or as Brants & Frissen (2003:8) remark: "Inherent in the in/exclusion dichotomy is that being socially excluded is defined as bad and inclusion the preferred state of being, worth striving for and putting an effort into. Emphasising human agency runs the risk that inclusion will not only be seen as a right, but also as an obligation: empowerment as an opportunity to participate is propagated as a necessity to be active too." From a policy perspective, however, there are limits to free choice. Might it be a good approach to let the limits of free choice be determined by the level of societal participation of individuals? Meaning that if someone chooses not to use technologies and this does not hamper his societal participation (e.g. employment, wellbeing, education...); then, from a policy perspective there is no issue? Or if someone chooses not to use technologies, or does not wish to develop his digital skills, but this hampers his societal participation a push approach is justified? Or should free choice to not engage with ICTs be respected, no matter what?

Also, providing all individuals with the necessary capabilities to enable free and thus informed choices, sounds very nice in theory, but is much more difficult to achieve in practice. Because of the mutual influence between digital and social exclusion, achieving digital inclusion demands for a complex set of interventions and a whole range of preconditions that need to be fulfilled: "Digital inclusion is not a solution to the multi-dimensional problem of social exclusion and should be seen as a facilitator or result of the dialogue and interdependencies between socio-cultural traits of and policy and regulatory practices in the information society." (Tsatsou, 2011:326). Various barriers need to be addressed simultaneously in order to achieve sustainable results (James, 2008; Gilbert, 2010). Giving people qualitative access on the one hand, but not providing relevant user friendly content and services, the necessary training or support will lead to short term successes or instant failures (Bianchi et al., 2006; Sinclair & Bramley, 2010; IMLS et al., 2011). Moreover, developing ICT-related skills is just one step. Soft skills such as self-confidence, self-esteem, social relations capacities, self-efficacy and a minimum level of autonomy are even so important in order to enable individuals to move consciously in today's (digital) society (Communities and Local Government, 2008a; Haché & Cullen, 2010).

Realising long-term processes of inclusion at various levels are in reality much more challenging and resource-intensive than providing mere access (Heeley & Damodaran, 2009; Wright & Wadhwa,

2010). It asks for a straightforward and well thought through policy approach in which stakeholders from various backgrounds - policy, public service, private sector, civil society - jointly focus and work towards similar goals (Bianchi et al., 2006; Wright & Wadhwa, 2010; IMLS et al., 2011). This implies that the strategic goals of digital inclusion need to be embedded across policy domains such as employment, welfare, poverty, integration and education, and ideally, organised by a structural overarching entity (Bianchi et al. 2006). A sustainable digital inclusion approach should also include a structural recognition and funding of the bottom-up civil society approaches that have emerged throughout the last few years to address market failures (Boeltzig & Pilling, 2007; Steyaert & Gould, 2009; Mariën et al., 2010; Haché & Centeno, 2011). Digital inclusion also requires an open and evolutive policy planning that allows for ad hoc interventions as digital media evolve frequently and rapid, and hence, continuously create new cycles of digital exclusion mechanisms (van Dijk, 2005; Bianchi et al., 2006; Warren, 2007; Notley & Foth, 2008). Unsurprisingly, in most existing digital inclusion strategies and interventions, these various preconditions are not accounted for (Mariën et al., 2010).

Finally, the dual interpretation of digital inclusion as "inclusive ICT and ICT for inclusion" also leads to a number of critical reflections. Too often and too easily ICTs are seen as "a digital inclusion panacea", a miracle solution and an engine of change (Steyn & Johanson, 2011). ICTs are supposed to boost participation in education (e-learning), minimize individual impairments, support elderly to maintain their independence (e-health), increase cultural and social capital or enable political engagement (e-democracy, e-participation) (Bianchi et al., 2006; Communities and Local Government, 2008a; Notley & Foth, 2008; Haché & Cullen, 2010; Curran, 2012). This dual approach is paradoxical and contradictory in nature. On the one hand, it focuses on tackling the various barriers created by the emergence of ICTs, whereas on the other hand, it aims to develop approaches in which these ICTs - with all of their barriers and challenges - are used to empower and include individuals in society. Yet again, the population groups that are most in need of becoming empowered, are also the ones who are most confronted with ICT-barriers. Or as Gorski (2008:358) states: "Again, what is clear is that these technologies are not, in and of themselves, the great equalizers. In fact, as it stands, they more often seem to be tools for further embedding existing inequities—existing gaps of access to opportunity."

An important question therefore is whether ICTs are necessarily the best means to achieve empowerment? Helsper (2008:6) adds more questions: "Despite the evidence, there remains significant debate around the existence, nature and causality of these links. There are many who are digitally disengaged but socially advantaged through choice – so are the links between digital and social disengagement really significant? Is digital engagement primarily driven by one's socioeconomic status? Can ICTs help disadvantaged individuals improve their position in society? Or conversely, does exclusion from the information society hinder social mobility?"

When considering evidence on ICT for inclusion approaches, studies show, again, that a vast number of

preconditions are needed such as horizontal and transversal integration at policy level, embedding in broader social initiatives and practices, multi-stakeholder engagement and long-term commitments and funding (Bianchi et al., 2006; Mariën et al., 2010).

3.2. Misfits of access and market oriented policies within capitalism

In contrast with traditional media as landline phones or television, no universal service policy was applied to the distribution of the Internet or any new ICTs. The diffusion of these ICTs were and are still left to the market, and are as such primarily driven by commercial interests (van Dijk, 2005; Winseck, 2011; Fuchs, 2008; 2011b; Curran, 2012; McChesney, 2013). This has led to a series of perverse effects, such as the emergence of sociospatial inequalities between, but also within, rural and urban communities (Crang, Crosbie & Graham, 2006; Curran 2012). Or as Graham (2002:34) emphasizes: "The societal diffusion of ICTs remains starkly uneven at all scales. ... In cities, clusters and enclaves of 'superconnected' people, firms and institutions, with their increasingly broadband connections elsewhere (Internet, mobile phones, satellite TVs) and their intense information services, often rest cheek-by-jowel with large numbers of people with non-existent or rudimentary communications technologies and very poor access to electronic information. The social and economic cores and peripheries of the global information 'age', rather than being continents apart, now often lie geographically adjacent to each other within individual cities, in both the North and the South."

It is clear that the capitalist market is failing to address the uneven distribution of ICTs, and moreover, is creating and reinforcing a vast number of inequalities (Pena-Lopez, 2009; Fuchs 2008; 2011b). This is also reflected in the fact that private companies are cherry picking, meaning that they concentrate their investments in sociospatial regions that promise a certain return-on-investment. The lack of broadband access in rural areas for example is not caused by a lack of interest by consumers, but created by a lack of interest of private companies as the investments needed are significantly higher than the potential returns (Steyaert & Gould, 2009). A similar reflection is made by Graham (2002) who claims that the liberalised character of the telecommunication market intensifies the uneven distribution of ICTs. Thus creating a situation in which high income areas are becoming the automatic and obvious place for investments in innovative infrastructures and services, whereas the poorer and disadvantaged areas are left aside.

Consequently, initial interventions to redeem digital inequalities mainly focused on providing access based on the assumption that mere access would lead to distinct user behavior and the automatic acquirement and development of digital skills (Selwyn, 2004). For example, the city of Amsterdam (Netherlands) installed municipality operated networks across the city as a whole in order to ensure even and high-quality access to all (Graham, 2002). Several studies have however shown the limits of such access and market driven approaches (Lee, 2008; Mariën et al., 2010; Sinclair & Bramley, 2010;

van Dijk, 2005). Access is claimed to be primordial condition for the use of ICTs, but once barriers of access are diminished, inequalities regarding skills and usage patterns occur. Witte & Mannon (2010:147) refer to the fact that providing mere access is not sufficient to increase the social inequalities that derive from ICTs: "In the end, poor and rich alike might have access to the Internet, but only a privileged few are able to turn to the Internet as an asset, a lifestyle, and an incentive." Moreover, differences regarding skills, attitude and support networks lead to segmented usage patterns and have a substantial influence on an individual's ability to use ICTs to his immediate advantage (Brotcorne et al., 2010; Witte & Mannon, 2010; Mariën et al., 2011, 2013). Hence, the ability to develop capital-enhancing usage patterns is brought forward as one of the distinct features of digital inequalities (DiMaggio et al., 2004; Zillien & Hargittai, 2009; van Deursen & van Dijk, 2013); along side with the reflection how these usage patterns limit or stimulate the social, economic, political and cultural position of individuals within society (Gilbert, 2010; Hargittai, 2010; Witte & Mannon, 2010). This however, suggests that a universal service access policy would not be sufficient to guarantee the uptake and strategic use of ICTs: "Universal Internet access may do more harm than good. Without training on how to develop Internet competencies, without some mechanism to reduce forms of Internet exclusion, and without some restructuring to make Internet content more relevant, universal access is akin to allowing poor people to walk the halls of an upscale shopping mall ... At best, the Internet's marginalized will be used by the Internet for the purpose of commercial profit. Thus, in addition to Internet access, we need to start talking about Internet use and Internet structure. Given the decentralized and unregulated nature of digital technology, the latter issue is a complex one that we do not have sufficient space to explore." (Witte & Mannon, 2010:148-149)

In other words, digital inclusion policies should consist of addressing the current market failures by ensuring high quality access to all, but should in addition also focus on providing the necessary training opportunities and support infrastructures (Steyn & Johanson, 2011). A similar reflection is made by Hargittai (2008) who states that additional investment and interventions at the level of training and social support are needed in order to enable individuals to reap the benefits of ICTs. Several studies therefore suggest policy makers to move away from dominant market interest and invest in the development of digital competences across the overall population; and simultaneously, put pressure on private companies to invest in user-driven and user-friendly ICTs (Mansell, 2002; Communities and Local Government, 2008a; Tsatsou, 2011). Future-oriented studies however, reflect a rather pessimistic view on the future development of digital inclusion policies. It is feared that, in spite of the more severe levels of inequalities due to the recent economic crisis, investments in digital inclusion initiatives will be diminished because of the ongoing shift to a right-winged and hence, more liberal, political environment in which accessing and learning how to deal with ICTs will be left to the agency and responsibility of the individual (Mariën et al., 2013).

3.3. The limits of user-centric approaches for digital inclusion

Alongside the failures of market-driven approaches, more user-centric approaches to digital inclusion emerged. These user-centric strategies were highly driven by the fact that many of the previous digital initiatives failed to generate the necessary engagement of individuals (Sinclair & Bramley, 2010). Domestication research shows that individuals develop highly personalised ICTs user practices that are driven by their daily practices and routines (Selwyn et al., 2005). This means that not everyone develops the same user practices nor that everyone engages with ICTs in the same way. The adoption and domestication of ICTs is highly determined by the structural wants and needs of individuals, but also by the ICT-related character of the various social contexts in which individuals need to function on a regular basis (Bianchi et al., 2006; Verdegem, 2009; Mariën et al., 2010). As such, more user-centric approaches became the focal point of digital inclusion practices: "Ofcom (2009) concluded that for any options to work among those who are currently not interested in the Internet, awakening personal interest is a prerequisite. One way of generating interest among Internet resistors is to take a more personal approach, by demonstrating the potential relevance of the Internet in a person's life." (Wright & Wadhwa, 2010:149)

A similar reflection is made by participatory and action-oriented approaches in order to ensure that social changes within an individuals' life are sustainable: "The main goal is allowing those communities and individuals to re-appropriate discourses, practices, contents, equipments and networks constitutive of the 'digital inclusion' process by themselves. Participatory approaches stress the importance that communities must be able to transform these elements for the benefit of their own needs, with actual autonomy." (Steyn & Johanson, 2011:60). By actively engaging with individuals, or their community, it is assumed that the provided solutions will be much more in line with day-to-day reality and particular circumstances and needs instead of being driven by top-down policy goals, and hence, lower barriers for short and long term change (Warren, 2007; Sinclair & Bramley, 2010; Haché & Centeno, 2011; Steyn & Johanson, 2011).

An important consequence of this need to respect individual choices and preferences, is that there is no "one size fits all solution" for digital inclusion: "The dismissive attitude toward ICT is a key barrier that needs to be overcome in order to motivate those currently excluded. It is important to note that neither the needs of the different disadvantaged groups, nor the respective benefits for each group, are necessarily the same. What is crucial, and most successful, is that programmes focus on the individual needs of participants; the actual applications and their benefits rather than the ICTs. Focus must lie on specific targeted benefits, rather than a 'one solution for all' approach." (Communities and Local Government, 2008b:38) The lack of an overarching strategic and theoretical framework for digital inclusion hampers the development of a sustainable and structural policy approach (Helsper, 2012). In most cases, digital inclusion interventions, especially user-driven initiatives, happen ad-hoc and are highly project-based, depending on the focus of project calls and policy priorities (Mariën et al., 2010). This makes that knowledge and insights

gathered on digital inclusion are mainly based upon case studies, success stories translated and best practices. In many cases however, these best practices are difficult to transfer to other populations groups or different social contexts. Or insufficient background information is available on the preconditions and contextual factors needed to ensure transferability and scalability.

The emphasis on user-centric approaches is accompanied by a number of risks. Where a large number of studies focuses on specific aspects of digital inclusion and are based upon well defined case studies, the majority shows to be largely descriptive and fails to provide an in-depth understanding of the exclusion mechanisms at play (Helsper, 2012). Hence, the recent move away from a case-by-case approach and reliability on best practices, especially at European level, towards evidence-based policies. This evolution however, is also subject to a number of questions related to the inability to measure processes of inclusion and empowerment. How and to what extent have digital inclusion initiatives led to the improvement of participants' social position? Currently, civil society organisations believe they have an impact because of noticeable changes in the daily lives of their at-risk participants. However, organisations state that quantifying or measuring such progress is difficult. Digital inclusion is never the sole cause of social inclusion. It is difficult to make abstraction of the impact of digital inclusion. A representative from an NGO working with youth-at-risk states it as follows: If someone is now making websites for a living, and you can say that once that person got his first Windows lessons in an organisation, so they are partly responsible for this evolution, but the question remains for what percentage?

Also, at the level of organisations fear exists that, at the end, impact assessment will lead to financing mechanisms based on output, which will put pressure on organisations to justify their social return of investment and the need to implement a *cost and benefit* approach. Which individual is worth investing in, because easier to get digitally and socially included, and which one is not? Needless to say that in this case, the weakest individuals, who are the ones that are the most difficult to engage in learning and to get socially included, will be the first victims (Mariën & Van Audenhove, 2010; Mariën et al., 2013).

Moreover, citizen-centred assumptions tend to ignore the social, economic, political and technical conditions within which individual choices are made and within which individuals must inevitably act. It is the wider social context that in many ways limits the possibilities that individuals have in digital environments. This is especially so when taking into account vast social inequalities and power asymmetries. From a policy perspective, there is too much emphasis on human agency, and too little on the macro-level at which structural inequalities inherent in a capitalist society are captured (Brants & Frissen, 2003).

4. Conclusion

This article questioned to what an extent processes of structural (dis)empowerment and class inequalities are at odds with strategies of digital inclusion and empowerment policies. It shows that the emergence of ICTs has been contradictory in nature, as it simultaneously led to structural mechanisms of empowerment and of disempowerment, for which (digital) skills, or the lack of it, are key determinants. High skilled and highly autonomous individuals and groups (eg. open source movement, piracy movements, app developers) are increasingly becoming empowered, as they - more than governments and policy makers - are able to question and undermine traditional and new power institutions in place. The experiences of the low and less skilled users however are quite the opposite. The ongoing and widespread digitization of Western capitalist societies, often led by a market driven reasoning of cutting down costs, is creating - and in many cases reinforcing - existing social inequalities. As such, it has even increased a sense of disempowerment amongst low and unskilled individuals as they have no power or influence on this process of digitization. It also remains difficult for most of the users to influence platforms they use in the way these operate, be fully included in the public life via the Internet or be empowered in the sphere of politics. It remains especially difficult to practically counter "objective" obstacles within which the Internet has become embedded in the recent decades. These processes include commodification of content, user surveillance and user commodification, commercially driven practices on the Internet, monopolies of knowledge, corporate control over most of the Internet and so on.

The article also shows that digital inequalities are an inherent aspect of Western capitalist societies, and moreover, clearly are a structural issue that asks for fundamental and structural changes and interventions. Policy strategies, however, tend to and continue to be mostly market driven. Hence, leaving solutions for market failures such as alternative places of qualitative access and informal training and social support, up to the initiative of civil society organisations without providing the necessary structural and financial support. These bottom-up approaches, with their focus on providing support at an micro level to ensure that individuals become empowered enough to deal with ICTs in a capital-enhancing way, are only providing solutions on a case-by-case basis. They do not, and cannot, lead to sustainable changes at the level of the social and digital inequality structures created and caused by the Western capitalist system. Instead, a situation has emerged in which too much emphasis is placed upon these micro-level solutions, in which digital inclusion is upon individual cases that need to be solved without intervening at a mezzo or macro level. Hence, individuals are forced to become the main actors for their own inclusion and empowerment, which individualises problems that are social in nature. Such a rational, autonomous and highly agency-driven strategy only works for people with significant levels of social, economic and cultural capital. Even in these cases, however, the "objective" social circumstances and social structures remain intact. This can be seen as one of many contradictions connected to digital exclusion/inclusion debates: even if particular individual cases are therefore solved, the inequalities continue to be reproduced at a wider social level (which again leads to individual exclusions). The question therefore remains: is a system where everyone has a truly all-encompassing access to digital environments that are not based on exploitation and surveillance of their users possible within

capitalism?

All the questions and reflections raised above, add to the fact that there is a stringent need to move towards more balanced digital inclusion strategies. Namely, towards interventions at various levels through which large-scale mechanisms of digital and social exclusion inherent in capitalist society are addressed, that go beyond access and market-driven strategies and move away from processes of disempowerment that emerge at a macro level. Even so important is the necessity to go beyond the ad-hoc character of bottom-up approaches and the enablement of structural interventions at a micro level. Overall, digital inclusion policies should consist of an overarching and simultaneous strategy that aims to address digital and social exclusion barriers. This implies that a sincere questioning of the capitalist system is even so important, along with the various normative viewpoints it entails. The article shows that the vast majority of current digital inclusion policies are first and foremost subordinated to one underlying goal - so the capitalist system and the labour market function better.

References

Adorno, T. W. & Horkheimer M. (2002). Dialectic of Enlightenment: Philosophical Fragments. Stanford (CA): Stanford University Press.

Allmer, T. (2012). Towards a Critical Theory of Surveillance in Informational Capitalism. Frankfurt am Main, Germany: Peter Lang.

Babe, R.E. (2009). Cultural Studies and Political Economy: Toward a New Integration. Lanham, Boulder, New York: Lexington Books.

Babe, R. E. (1993). Communication: Blindspot of Western Economics. In: Wasko, J., Mosco, V. & Pendakur, M. (1993) Illuminating the Blindspots: Essays Honoring Dallas W. Smythe, 15-39. New Jersey (US): Ablex.

Bellamy Foster, J., McChesney, R. W. (2011). The Internet's Unholy Marriage to Capitalism. MRZine, 62 (10). http://monthlyreview.org/2011/03/01/the-Internets-unholy-marriage-to-capitalism.

Berry, D. (2008). Copy, Rip, Burn: The Politics of Copyleft and Open Source. London, UK: Pluto Press.

Bianchi, A., Barrios, S., Cabrera, M., Cachia, R., Compano, R., Malanowski, N., Punie, Y., Turlea, G., Zinnbauer, D. & Centeno, C. (2006). Revisiting eInclusion: From vision to action. Sevilla, Spain: European Commission, Joint Research Center (JRC), Institute for Prospective Technological Studies (IPTS).

Bleumers, L., All, A., Mariën, I., Schurmans, D., Van Looy, J., Jacobs, A., Willaert, K., & De Grove, F. (2012). Final Report for the State of Play of Digital Games for Empowerment and Inclusion: Opportunities and Challenges. In J. Stewart (Ed.), Technical Note commissioned by IPTS-JRC (European Commission) and prepared by IBBT-Digital Society as part of the Digital Games for Empowerment and Inclusion (DGEI) Project.

Boeltzig, H., & Pilling, D. (2007) Bridging the digital divide for hard-to-reach groups. e-Government Series, IBM Center for The Business of Government.

Bollier, D. (2002). Silent Theft: The Private Plunder of Our Common Wealth. New York (US), London (UK): Routledge.

Brants, K., & Frissen, V. (2003). Inclusion and exclusion in the information society. Final deliverable, The European Media and Technology in Everyday Life Network, 2000-2003.

Brotcorne, P., Damhuis, L., Lauren, V., Valenduc, G. & Vendramin, P. (2010). La fracture numérique au second degré. Namen: Fondation Travail-Université ASBL.

Communities and Local Government. (2008a). An analysis of international digital inclusion strategies: why develop a digital inclusion strategy and what should be the focus? London, UK: Tech4i2, Department for Communities and Local Government.

Communities and Local Government. (2008b). Understanding digital exclusion. Research Report. London, UK: FreshMinds, Department for Communities and Local Government.

Crang, M., Crosbie, T., & Graham, S. (2006). Variable geometries of connection: Urban digital divides and the uses of information technology. Urban Studies, 43(13), 2551-2570.

Curran, J. (2012). Reinterpreting the Internet. In: Curran, J., Fenton, N. & Freedman, D. (2012) Misunderstanding the Internet: 3-33. New York (US), Oxon (UK): Routledge.

Czitrom, D. J. (1982). Media and the American Mind: From Morse to McLuhan. Chapel Hill, US: University of Carolina Press.

Damodaran, L, & Olphert, W. (2006). Informing digital futures: Strategies for citizen engagement. Dordrecht: Springer.

DiMaggio, P., Hargittai, E., Celeste, C., & Shafer, S. (2004). Digital Inequality: From Unequal Access to Differentiated Use. In: Neckerman, K. (2004) Social Inequality: 355-400.

Dutton, W. H., Helsper, E. J., & Gerber, M. M. (2009). The Internet in Britain, 2009. Oxford, UK: Oxford Internet Institute (OII), University of Oxford.

Dyer-Witheford, N. (1999). Cyber-Marx: Cycles and Circuits of Struggle in High-Technology Capitalism. Urbana, Chicago (US): University of Illinois Press.

eEurope Advisory Group (coordinated by Kaplan, D.). (2005). e-Inclusion: New challenges and policy recommendations.

Fisher, E. (2010). Media and New Capitalism in the Digital Age: The Spirit of Networks. New York (US): Palgrave Macmillan.

Freedman, D. (2012). Web 2.0 and the death of the blockbuster economy. In: Curran, J., Fenton, N. & Freedman, D. (2012) Misunderstanding the Internet: 69-94. New York (US), Oxon (UK): Routledge.

Fuchs, C. (2008). Internet and Society: Social Theory in the Information Age. New York (US), London (UK): Routledge.

Fuchs, C. (2011a). Foundations of Critical Media and Information Studies. New York (US), London (UK): Routledge.

Fuchs, C. (2011b). The Contemporary World Wide Web: Social Medium or New Space of Accumulation? In: Winseck D. R. & Yong Jin, D. (2011) The Political Economies of Media: The Transformations of the Global Media Industries: 201-220. London (UK), New York (US): Bloomsbury Academic.

Fuchs, C. (2014). Critique of the Political Economy of Informational Capitalism and Social Media. In: Fuchs, C. & Sandoval M. (Ed.) Critique, Social Media and the Information Society: 51-65. New York, US: Routledge.

Fuchs, C. & Sevignani, S. (2013). What is Digital Labour? What is Digital Work? What's their Difference? And why do these Questions Matter for Understanding Social Media? TripleC - Cognition, Communication, Co-operation, 11(2): 237-293

Gilbert, M. (2010). Theorizing digital and urban inequalities. Information, Communication and Society, 13(7): 1000-1018.

Gochenour, P. H. (2006) Distributed communities and nodal subjects. New Media and Society, 8(1): 33-51.

Gorski, C. (2008). Insisting on Digital Equity: Reframing the dominant discourse on multicultural education and technology. Urban Education, 44(3), 348-364.

Graham, S. (2002). Bridging urban digital divides? Urban polarisation and Information and Communications Technologies (ICTs). Urban studies, 39(1), 33-56.

Haché, A., & Centeno, C. (2011). Under the radar: The contribution of civil society and third sector organisations to elnclusion. Sevilla, Spain: European Commission, Joint Research Center (JRC), Institute for Prospective Technological Studies (IPTS).

Haché, A., & Cullen, J. (2010). ICT and Youth at Risk: How ICT-driven initiatives can contribute to their socio-economic inclusion and how to measure it. Sevilla, Spain: European Commission, Joint Research Center (JRC), Institute for Prospective Technological Studies (IPTS).

Hardt. H. (2004). Myths for the Masses: An Essay on Mass Communication. Malden, Oxford (UK): Blackwell Publishing.

Hargittai, E. (2008). Second-level digital divide: Differences in people's online skills. First Monday, 7(4).

Hargittai, E. (2010). Digital Na(t)ives? Variation in Internet skills and uses among members of the "Net Generation". Sociological Inquiry, 80(1), 92-113.

Hargittai, E., & Hinnant, A. (2008). Digital inequality: Differences in young adults' use of the Internet. *Communication Research*, 35, 602-621.

Harvey, D. (2003). The New Imperialism. Oxford (UK), New York (US): Oxford University Press.

Heeley, M. & Damodaran, L. (2009). Digital inclusion: A review of international policy and practice. Loughborough University.

Helsper, E. (2008). Digital inclusion: An analysis of social disadvantage and the Information Society. London, UK: Department for Communities and Local Government.

Helsper, Ellen (2011) The emergence of a digital underclass: digital policies in the UK and evidence for inclusion. Media policy

brief, 3. Department of Media and Communications, London School of Economics and Political Science, London, UK.

Helsper, E. (2012). A corresponding fields model for the links between social and digital exclusion. Communication theory, 22 (4): 403-426.

Hesmondhalgh, D. (2008). Neoliberalism, Imperialism and the Media. In: Hesmondhalgh, D. & Toynbee, J. (Ed.) The Media and Social Theory: 95-111. Abingdon in New York: Routledge.

Hindman, M. (2009). The Myth of Digital Democracy. Princeton, Oxford (UK): Princeton Press.

Innis, H. A. (2008/1951). The Bias of Communication. 2nd ed. Toronto, Canada: University of Toronto Press.

Institute of Museum and Library Services (IMLS), University of Washington Technology & Social Change Group (TASCHA) & International City/ County Management Association (ICMA). (2011). Proposed Framework for Digitally Inclusive Communities: Final Report. Washington, DC: Institute of Museum and Library Services.

James, J. (2008). Re-estimating the difficulty of closing the digital divide. *Journal of the American Society for Information Science and Technology*, 59(12), 2024-2032.

Jehoel-Gijsbers, G., & Vrooman, C. (2007). Explaining social exclusion. A theoretical model tested in the Netherlands. The Hague: The Netherlands Institute for Social Research (SCP).

Lee, L. (2008). The impact of young people's Internet use on class boundaries and life trajectories. Sociology, 421, 137-153.

Livingstone, S. and Helsper, E. (2007). Gradations in digital inclusion: children, young people and the digital divide. New media & society, 9 (4): 671-696.

Mansell, R. (2002). From digital divides to digital entitlements in knowledge societies. Current sociology 50(3): 407-426.

Mariën, I., Van Audenhove, L., Vleugels, C., Bannier, S., & Pierson, J. (2010). Digitale kloof van de tweede graad in Vlaanderen. Brussel: Onderzoeksrapport voor het Instituut Samenleving & Technologie (IST).

Mariën, I., Van Audenhove, L. (2010) Reaching & teaching youth at risk: Dilemmas and challenges of measuring the impact of e-inclusion initiatives, IPTS Workshop The Paradoxes of ICTs and Social Inclusion: Do ICTs Increase Opportunities for Young People at Risk?, 1-2 December 2010, Brussels.

Mariën, I., & Van Audenhove, L. (2011). Mediageletterdheid en digitale vaardigheden: naar een multidimensioneel model van digitale exclusie. In M.A., Moreas & J. Pickery (Ed.), Mediageletterdheid in een digitale wereld (p. 99-137). Brussel: Studiedienst Vlaamse Regering.

Mariën, I., Baelden, D., Bens, J., Schurmans, D., Van Audenhove, L., Smukste, K., Pierson, J., Lemal, M., Goubin, E. (2013) Van digitale naar maatschappelijke participatie: Opportuniteiten en uitdagingen. In Callens, M., Noppe, J. & Vanderleyden, L. (eds.) De sociale staat van Vlaanderen 2013.

Mattelart, A. (2000). Networking the World, 1794–2000. Minneapolis (US), London (UK): University of Minnesota Press.

May, C. (2002). The Information Society: a sceptical view. Malden, Cambridge (UK): Polity Press.

May, C. (2010). The Global Political Economy of Intellectual Property Rights: The New Enclosures. 2nd ed. New York, US: Routledge.

McChesney, R. W. (2007). Communication Revolution: Critical Junctures and the Future of Media. New York (US), London (UK): The New Press.

McChesney, R. W. (2008). The Political Economy of Media: Enduring Issues, Emerging Dilemmas. New York, US: Monthly Review Press.

McChesney, R. W. (2013). Digital Disconnect: How Capitalism is Turning the Internet Against Democracy. New York (US): The New Press.

Meehan, E. R. & Wasko, J. (2013). In Defense of a Political Economy of the Media. Javnost - The Public, 1(20), 39-54.

Mosco, V. (1982). Pushbutton Fantasies: Critical Perspectives on Videotext and Information Technology. Norwood, New Jersey: Ablex.

Mosco, V. (1989). The Pay-Per Society: Computers & Communication in the Information Age. Toronto (CA): Garamond Press.

Mosco, V. (2004). The Digital Sublime: Myth, Power, and Cyberspace. Cambridge, London (UK): The MIT Press.

Mosco, V. (2009). The Political Economy of Communication. Los Angeles (US), London (UK): Sage.

Murdock, G. & Golding, P. (2005). Culture, Communications and Political Economy. In: Curran, J. & Gurevitch, M. (Ed.) Mass Media and Society (4th edition): 60–83. London: Hodder Arnold Press.

Negri, A. & Hardt, M. (2000). Empire. London, UK: Harvard University Press.

Negri, A. & Hardt, M. (2009). Commonwealth. Cambridge: The Belknap Press of Harvard University Press.

Notley, T.M., & Foth, M. (2008). Extending Australia's digital divide policy: an examination of the value of social inclusion and social capital policy frameworks. Australian Government Department of Families, Housing, Community Services and Indigenous Affairs.

Ofcom. (2009). Citizens' digital participation - Executive summary. London, 20 March 2009. http://www.ofcom.org.uk/advice/media literacy/medlitpub/medlitpubrss/cdp/.

Pena-Lopez, I. (2009). Measuring digital development for policy-making: Models, stages, characteristics and causes. Unpublished Doctoral Dissertation, Information and Knowledge Society Doctoral Programme, Internet Interdisciplinary Institute, Universitat Oberta de Catalunya.

Polanyi, K. (2001/1944). The Great Transformation: The Political and Economic Origins of Our Times. Boston, US: Beacon Press

Prodnik, J. A. (2014). A Seeping Commodification: The Long Revolution in the Proliferation of Communication Commodities. TripleC - Communication, Capitalism & Critique, 12 (1), 142-168. http://www.triple-c.at/index.php/tripleC/article/view/485.

Prodnik, J. A. (2012). A Note on the Ongoing Processes of Commodification: From the Audience Commodity to the Social Factory. TripleC - Cognition, Communication, Co-operation (Special Issue Edited by Christian Fuchs and Vincent Mosco), 10 (2), 274-301. http://triple-c.at/index.php/tripleC/article/view/409.

Sandoval, M. (2011). Consumer Surveillance on Web 2.0. In: Fuchs, C., Boersma, K., Albrechtslund, A. & Sandoval M. (Eds.), Internet and Surveillance: 147–169. New York: Routledge.

Sandoval, M. (2013). Corporate Social (Ir)Responsibility in Media and Communication Industries. Javnost - The Public, 20(3), 5-23.

Schiller, D. (1999). Digital Capitalism: Networking the Global Market System. Cambridge, London (UK): The MIT Press.

Schiller, H. I. (1976). Communication and Cultural Domination. New York (US): International Arts and Sciences Press.

Scholz, T. (Ed.) (2013). Digital labour: The Internet as Playground and Factory. New York (US), Oxon (UK): Routledge.

Schurmans, D. & Mariën, I. (2013). Naar gebruikersprofielen van kwetsbare jongeren: Over digitale media, sociale context en digitale ongelijkheden. Onderzoeksrapport in opdracht van Mediawijs.be, het Vlaams Kenniscentrum voor Mediawijsheid, Speerpuntproject 1:Toolkit Mediawijsheid: Methodieken en goede praktijken in samenwerking met Maks vzw.

Selwyn, N. (2004). Reconsidering political and popular understandings of the digital divide. New Media & Society, 6, 341-362.

Selwyn, N., Gorard, S., & Furlong, J. (2005). Whose Internet is it anyway? Exploring adults' (non) use of the Internet in everyday life. European Journal of Communication, 20, 5-26.

Sen, A. (1993). Capability and Well-Being. In M. Nussbaum & A. Sen (eds.), The Quality of Life, 30–53. New York: Oxford Clarendon Press.

Sinclair, S., & Bramley, G. (2010). Beyond virtual inclusion. Communications inclusion and digital divisions. Social Policy & Society, 10(1), 1-11.

Steyn, J., & Johanson, G. (2011). ICTs and sustainable solutions for the digital divide: Theory and Perspectives. Hershey: Information Science Reference, IGI Global.

Steyaert, J. & Gould, N. (2009). Social work and the changing face of the digital divide. In: British Journal of Social Work, 39: 740-753.

Stewart, J., Bleumers, L., All, A., Mariën, I., Schurmans, D., Van Looy, J., Jacobs, A., Willaert, K., De Grove, F., Misuraca, G., & Centeno, C. (2013). The Potential of Digital Games for Empowerment and Social Inclusion of Groups at Risk of Social and Economic Exclusion: Evidence and Opportunity for Policy. JRC Scientific and Policy Report.

Taddicken, M. (2011). Privacy, Surveillance, and Self-Disclosure in the Social Web: Exploring the User's Perspective via Focus Groups. In: Fuchs, C., Boersma, K., Albrechtslund, A. & Sandoval M. (Eds.), Internet and Surveillance: 255–272. New York: Routledge.

Terranova, T. (2000). Free Labor: Producing Culture for the Digital Economy. Social Text 18 (2): 33-58.

Thussu, D. K. (Ed.) (1998). Electronic Empires: Global Media and Local Resistance. London (UK), New York (US): Arnold Publ.

Thussu, D. K. (2005). From MacBride to Murdoch: The Marketisation of Global Communication. Javnost - The Public, 12(3): 47-60.

Trottier, D. & Lyon, D. (2011). Key Features of Social Media Surveillance. In: Fuchs, C., Boersma, K., Albrechtslund, A. & Sandoval M. (Eds.), Internet and Surveillance: 89-105. New York: Routledge.

Tsatsou, P. (2011) Digital divides revisited: What is new about divides and their research? Media, Culture & Society, 33(2): 317-331.

Van Deursen, A.J.A.M. & Van Dijk, J.A.G.M. (2013). The Digital Divide Shifts to Differences in Usage. New Media & Society, first published on June 7, 2013.

van Dijk, J. A. G. M. (2002). A framework for digital divide research: The pitfalls of a metaphor. The Electronic Journal of Communication, 12 (1-2).

van Dijk, J. A. G. M. (2005). The deepening divide. Inequality in the information society. Thousand Oaks, London, New Delhi: Sage.

Verdegem, P. (2009) De digitale kloof en/in e-government: Uitdagingen voor de overheid in de informatiemaatschappij. Doctoraat, Faculteit Politieke en Sociale Wetenschappen, Universiteit Gent.

Vranken, J., & Vandebosch, H. (2007). Aan de onderkant van de technologische samenleving. Armoede en technologie. Een onderzoek naar de relatie tussen armoede en technologie. Brussel: Instituut voor Samenleving en Technologie (IST - viWTA).

Warren, M. (2007). The digital vicious cycle: Links between social disadvantage and digital exclusion in rural areas. Telecommunications Policy, 31: 374-388.

Winseck, D. R. (2011). The Political Economies of Media and the Transformation of the Global Media Industries. In: Winseck D. R. & Yong Jin, D. (2011) The Political Economies of Media: The Transformations of the Global Media Industries: 3-48. London (UK), New York (US): Bloomsbury Academic.

Witte, J.C., & Mannon, S.E. (2010). The Internet and social inequalities. New York, London: Routledge, Taylor & Francis Group.

Wright, D. & Wadhwa, K. (2010). Mainstreaming the e-excluded in Europe: strategies, good practices and some ethical issues. In: Ethics Information Technology, 12: 139-156.

Yong Jin, D. (2013). The Construction of Platform Imperialism in the Globalization Era. TripleC 11(1): 145-172.

Zillien, N., & Hargittai, E. (2009). Digital distinction: Status-specific types of Internet usage. Social Science Quarterly, 90(2), 274-291.