Social Networks and Participation: A Critical Literature Review

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Abstract

This paper explores the controversial concept of participation in contemporary commercial social networking media. It begins by investigating a number of contemporary theories related to social networking media in order to bring forth the assumptions that underline the usage of the concept of participation. Regardless of the epistemological and the ontological assumptions of the research surveyed, participation is generally accepted as the necessary pre-condition for the sustainability of social networking media. Specifically, studies from economic, social, cultural, and political perspectives make use of the concept of participation to make sense of the current usage of social networks. However, there is no agreed upon understanding of participation across such studies, and in some among the most notable cases, the definitions are either unsubstantiated, reductionist, and/or deterministic. This presents an impediment in furthering the understanding of the role of social networking media in contemporary societies and further fragments the analysis of the phenomenon. By critically analysing a multitude of perspectives on participation in social media studies, this critical survey attempts to develop a comprehensive overview of the understanding of participation that can be used as a basis for further research across different disciplines. The paper further argues that participation is a concept that cannot be studied without a multi-disciplinary approach that takes into consideration both micro and macro level of communication.

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Introduction

In light of the commercialisation of online collaborative platforms in the 1990s, the concept of participation gained a renewed interest within academic literature particularly in the field of communication and media studies. Terms such as "network nation" (Hiltz and Turoff 1978) and "collective intelligence" (Levy 1997) emerged amid a first wave of cyber-optimism. As Barry Wellman noted, these views "extolled the internet as egalitarian and globe-spanning, and ignored the way in which differences in power and status might affect interactions both online and offline" (2004, 124). With the rise of commercial social networking media such as Facebook and Twitter, a new optimistic trend exploded, following the dominant idea set forth by Jenkins (2006) and represented by the concept of convergence culture. Once again, the concept and imaginary of participation became central. In spite of Wellman's addressing critique, a leading group of cultural theorists and media scholars hailed the connective power and liberating potential of social networking media (Henceforth SNM). Business analysts celebrated the new opportunities for marketers. As Kaplan and Haenlein stated, "(i)t's all about participation, sharing, and collaboration, rather than straightforward advertising and selling" (Kaplan and Haenlein 2010, 65). Internet analysts welcomed user-generated content as a "shared global resource" (Shirky 2011, 27). "Everywhere you look, people are coming together to share with one another, work together, or take some kind of public action. For the first time in history, we have tools that truly allow for this" (Shirky 2008, cover page).

This article reviews the three main perspectives of participatory culture, summarizing the contributions of the positivist, interpretive, and critical approaches in order to weight contribution to the academic debate, and also pointing out shortcomings. Highlighting how these approaches consider the role of technology in society, the article aims to shed light on the controversial nature of the concept of participation and how literature needs to integrate the role of democratic theory, power, and political economy in the development of a solid theory of participation on social media.

Positivist Perspectives on Social Media and Participation

In general terms, positivist perspectives on social media tend to see technology as an instrument, stressing the quantitative effects of technology on organizations, and focusing on the quantifiable economic benefits resulting from usage (adapted from Orlikowski and Iacono 2001). Positivist approaches can be mainly found in economics, management, marketing, organizational communications, and information systems research. Within the positivist perspectives, the most common ones are the "computational" and the "tool" view. Social media companies are concerned primarily with constructing algorithms and models to represent, manipulate, store, retrieve and transmit information, thereby supporting, processing, modelling, or simulating aspects of the world (ibid 2001). On the other hand, single businesses and organizations think of social media in terms of a means to an end, as a labour substitution tool, a productivity tool, an information-processing tool, or a social relation tool. Here levels of access, interaction, and participation are assessed using a wide range of terms such as brand awareness (Kim and Ko 2012), brand engagement (Brown et al. 2007; Trusov et al. 2009), customer relationship performance (Nielsen 2002), organizational connectivity (Chivee et al. 2008), and word of mouth (Hoffman and Fodor 2010).

The ontology of the positivist approach sees objective reality and the social world as existing independent of humans. Human action is defined as user- or, in the case of more business-related research, customer-behaviour. This is considered as rational and purposive. According to Garretson (2008, 12), "consumers increasingly use digital media not just to research products and services, but to engage the companies they buy from, as well as other consumers who may have valuable insights". Moreover, the approach acknowledges an alleged shift of power from companies to customers, inasmuch as "consumers are dictating the nature, extent, and context of marketing exchanges" (Hanna, Rohm, and Crittenden 2011, 265). With these preconditions analysts seem to have precise predictions for a future when businesses embrace openness, peering, sharing, and global thinking. Participation and collaboration become the key factors of a future of increased wealth creation. "A power shift is underway, and a tough new business rule is emerging; harness the new collaboration or perish. Those who fail to grasp this will find themselves ever more isolated—cut off from the networks that are sharing, adapting, and updating knowledge to create value" (Tapscott and Williams 2006, 12).

Access is a fundamental aspect of positivist approaches to participation in social media. From single businesses' perspectives, promoting access entails increasing brand awareness. From the perspective of social media companies, this means opening new markets which were previously not easily accessible. The problematic aspect of access for business-related purposes is that, when driven by particular private companies, it could be limited to those information resources that the same companies can monetize at the expense of fair and open competition.

Interaction is another essential dimension of SNM under this perspective. According to Bertot et al. (2010, 266), social media "is defined by social interaction". Interaction generate both connectedness and connectivity (Van Dijck 2013). "Directing users to share information with other users through purposefully designed interfaces" (Van Dijck 2013, 46), social media promote connectedness, or, in other words, the creation and maintenance of new and preexisting relationships, group formation, and circulation of information (Boyd and Ellison 2007; Shirky 2008; Boyd 2010). These characteristics are particularly heightened on Facebook. On the other hand, connectivity is the leading principle behind the Facebook business model. In Van Dijck's formulation, connectivity regards the sharing of users' data between Facebook and third parties (Van Dijck 2013). Connectivity takes place through three coding features that have been designed by Facebook developers, namely Beacon (now disabled after a fierce struggle focusing on privacy issues), Open Graph, and the Like Button (ibid 2013). The common purpose of the three features consists in the aggregation and processing of user data and their sharing with third parties, such as businesses and advertisers. These features operate on top of the more traditional display advertising that allows businesses to target market segments on Facebook with extreme precision. In fact, whereas with television advertising it is not possible to know exactly who is going to be exposed to the commercial message, with Facebook advertising, companies know in advance the peculiar characteristics of the receiver, such as their gender, provenance, and even purchasing habits.

Hoffman and Fodor (2010, 46) define participation as user-generated content likely to increase "commitment on the part of the consumer", "loyalty to the brand," and make "the customer more likely to commit additional effort to support the brand in the future". Customer participation in social media became a crucial node in the "pull" marketing mix. As Garretson (2008, 12) points out, "Consumers increasingly use digital media not just to research products and services, but to engage the companies they buy from, as well as other consumers who may have valuable insights". From this perspective, participation in social media needs to be precisely gauged, measured, and turned into ROI-oriented metrics. The authors also enumerate a series of strict categories of key performance indicators (KPIs) for brand engagement (as distinct from brand awareness and word of mouth) such as number of followers and number of @replies, for what concerns Twitter; number of comments, active users, "likes" on friends' feeds, user-generated items (photos, threads, replies), usage metrics of applications/widgets, impressions-to-interactions ratio, and rate of activity (how often members personalize profiles, bios, links, etc.) for what concerns Facebook (Hoffman and Fodor 2010, 45). A second instrumental role of social media participation is manipulation and control, in order to, internally, optimize the business' social media presence, and externally, improve customer-relationship management (CRM) at large. It follows that, internally, the objective is to quantitatively increase KPIs and enhance quality of customer engagement, such as tone of comments (de Vries, Gensler, and Leeflang 2012). Externally, the aim is "to engage in timely and direct endconsumer contact at relatively low cost and higher levels of efficiency than can be achieved with more traditional communication tools" (Kaplan and Haenlein 2010, 67). More specifically, the issue of control is central in the interface design of Facebook Pages, where communication flows are centralized and vertical, in order to offer Page administrators the power to monitor and govern flows of user-generated content¹.

A first problem with the positivist school is that it disregards qualitative approaches to social media participation. Doing so, this perspective overlooks contextual factors, such as conflict and

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¹ An example of this is the introduction, in 2011, of Timeline, a new graphical layout in which the algorithm EdgeRank decides what content is to appear on top of a page's newsfeed according to relevance rather than chronologically. The new Page design marginalizes posts updated by users in a little window with narrow prominence. This decision by Facebook decreases visibility for personal expression on its pages in order to maximize the efficiency of branding (Coretti 2014).

political economy, oversimplifying the complexities of power relationships among actors. Moreover, this approach focuses merely on the utilitarian objectives of presence and interaction: from a business perspective, profit; from a management perspective, efficiency; from a political marketing perspective, consensus. Furthermore, an emphasis on control ensures that any conceptualization of participation is limited to its more minimalistic expressions, whereby user's expression is allowed and encouraged only insomuch as it will be functional to these three goals.

Interpretive Perspectives on Social Media and Participation

The ontology of interpretive approaches rejects the positivist value of objectivity typical of positivist analysts, deeming reality as subjective and constructed by actors. Reality is thus a social construction that can be interpreted rather than merely discovered. Epistemologically, the interpretive researcher abandons the neutrality of positivism becoming part of the process of analysis, in which the participants' experience is emphasized. This perspective is dominated by the fields of sociology, socio-economics, media studies, political science and cultural theory, which, instead of focusing on the strictly quantitative predictions of positivism, prioritize qualitative approximations of micro-contexts of interaction and participation. The interpretive researcher sees technology as a human activity, stressing on socio-political issues resulting from usage. They tone down the tool view in order to incorporate considerations of organizational arrangements in which IT is developed and used. This implies that in order to understand technology one has to understand the context of use, and the interplay between the social and the technical. In this view IT is seen as a development project (e.g. a social process of design in a specific organization in which power moves and and symbolic acts become a paramount concern for the researcher), as a production network, as in Latour's Actor-Network Theory (2005), as an embedded system (with a stress on socio-historical, cultural and political accounts), and as a structure, drawing on Giddens' Structuration Theory (1984). In some cases, technology is seen as a "proxy", where the crucial aspects of IT can be understood through some set of substitutes (e.g. individuals' perception, and diffusion rates and costs), or, even, as nominal. This view does not conceptualize IT, or at least any specific technology, in favour of issues surrounding technology. Doing so, the interpretive approach attempts to overcome deterministic accounts seeing technology and society as inseparable and constantly feeding on each other. Consequently, technology starts losing its idealistic potentials and starts showing drifts (Ciborra et al. 2000). Participation in social media has been dubbed in various terms as convergence culture (Jenkins 2006), remix culture (Lessig 2008), and produsage/prosumption (Toffler 1980; Bruns 2008; Ritzer and Jurgenson 2010).

In his account over convergence culture, Jenkins equates social media to participatory culture and argues that spreadable media is the direct outcome of it (Jenkins, Li, Krauskopf and Green 2009, 7) as consumers "are grassroots advocates for materials which are personally and socially meaningful to them." In fact, Jenkins et al. (2009) considers platforms such as Youtube and Facebook as a clear manifestation of a gift economy. Spreadable media is then a tool for empowerment and thus a participatory artefact (Jenkins et al. 2013). Participation, within his understanding, democratizes products and services by increasing the input customers can have and in turn the emotional attachment. Jenkins (2009, 331) defines participatory culture mostly from the point of view of fans and customers focusing on their active contributions in terms of the creation and circulation of content, and in terms of their reciprocal interactions. He states that participatory culture is characterized by "relatively low barriers to artistic expression and civic engagement, strong support for creating and sharing one's creations, and some type of information mentorship whereby what is known by the most experienced is passed along to novices" (2009, 7). A participatory culture "is also one in which members believe that their contributions matter, and feel some degree of social connectedness with one another (at least they care what other people think about what they have created" (Jenkins, Purushotma, Weigel, Clinton and Robison 2009, 5f). The interactions amongst users create the collective intelligence, as advocated by Levy (1997), which can be considered a new source of media power (Jenkins 2009).

The mechanisms described by Jenkins (2009), especially drawing on his studies on fandom, make way to a meaningful public culture, where fans can speak back to TV networks and even lobby in favours of endangered shows (Jenkins 1992). By virtue of this argument, Jenkins assumes a natural link between fandom and political activities and assumes they have

the same characteristic in terms of involvement and nature of the struggle. Thus, the focus is on the involvement of a community with particular institutional contents. Successful changes to institutional content is seen as consumer empowerment as it involves the inputs from a variety of consumers. In turn, prosumption is seen as participatory regardless of the nature of content. Within this argument, Jenkins (2008, 137; 268) concludes that the web "has become a site of consumer participation (...) which further advances cultural diversity." Bruns (2008) draws a similar optimistic account picturing a produsage-based participatory culture which brings along new models for democracy. Likewise, according to Tapscott and Williams, social media result in the emergence of "a new economic democracy (...) in which we all have a lead role" (2007, 15).

However, not all interpretive accounts on social media participation share such positive outlook. Evgeny Morozov (2009), a media analyst that in other accounts relies on more critical approaches, describes slacktivism as the tendency to limit individual engagement to "political activities that have no impact on real–life political outcomes, but only serve to increase the feel–good factor of the participants" (Christensen 2011, introduction). Liking Pages on Facebook, signing online petitions, re-tweeting posts: these are just some of the examples of slacktivist practices. "When the marginal cost of joining yet another Facebook group are low, we click "yes" without even blinking, but the truth is that it may distract us from participating in more productive ways. Paradoxically, it often means that the very act of joining a Facebook group is often the end – rather than the beginning – of our engagement with a cause, which undermines much of online participation" (Morozov 2009, par. 6).

To conclude, the definition of participation within this approach stresses the interpretation of the role of the actor involved with the manipulation of cultural symbols. There are two main limitations within the interpretive outlook. First of all, as positivist approaches, interpretive accounts tend to oversimplify the role of power as a central defining issue of participation. This is due to the fact that interpretive approaches strongly focus on the micro levels of interaction without relating them to structural issues. Consequently, these accounts do not consider (or minimize) issues such as concentration of ownership, control, surveillance, and power law distributions. Secondly, cyber-utopian approaches such as Jenkins' convergence culture imply an automatic translation of interaction into participation that has yet to be demonstrated.

Critical Perspectives on Social Media and Participation

The ontology of critical approaches rejects both the idea that an objective reality exists and the view that reality is purely socially constructed. According to critical theory, reality is the product of history as a continuous struggle amongst classes wherein power is the central feature of analysis. The elements of analysis are always connected to a totality (e.g. society), whereby an emphasis is provided to institutional and historical situations. Epistemologically, critical approaches criticize interpretive frameworks for they do not stress structures as fundamental objects of study. Promoting emancipation and criticizing the status quo become imperative aims for the critical researcher.

Critical theorists consider technology at two different levels, firstly identifying its specific affordances, and then contextualizing them within the surrounding social environment (Feenberg 1991). Affordances (Gibson 1979; Hutchby 2001; Wellman 2003) constitute an interchange between the essential properties of technologies and the use that is made of them in terms of the interpretation of "the possibilities that they offer for action" (Hutchby 2001, 447). As Fuchs (2008, 2-3) states, such analysis is a two-stepped procedure, "consisting of (1) a process in which human actors design ICTs and in which it is analyzed how society shapes ICTs, and (2) a process in which it is assessed how the usage of ICTs transforms society". The position of technology and society on different levels does not imply a clear separation of the two. As within the interpretive approach, technology is considered as an immanent part of society (Williams 1961; Feenberg 1991, 2005; Winston 1998; Fuchs 2008, 2011). Furthermore, technologies are built in a social milieu with a design that is favorable to the power holders in society (Feenberg 1991, 2005). Hence, critical perspectives on social media participation focus on the political economy of digital technologies (Fenton and Barassi 2011; Fuchs 2009, 2014), and, drawing upon Foucault (1978), on power as an ever-present factor in communications (Carpentier 2011, 2016).

From a critical perspective, any account on social media participation must highlight the values that drive technological design, in the case of social media platforms such as Facebook, namely commercial interests and capitalist ideology (Feenberg 2005). Communication protocols

of commercial social media, decreasing possibilities of action for users to a narrow range of choices, reinforce different power positions among those who create and control information and those who simply react to and interact with information (Coretti and Pica, 2015). As a corollary, interaction becomes an instrument of marketing in the social media attention economy. Whereas in the traditional media economy information was a scarce resource, in the context of social media, user attention becomes the scarce resource. In the attention economy users accept to receive generally free services in exchange for their attention to both content and advertising. Content acts as a vehicle towards advertising and the maximization of profits deriving from advertising. The issue of surveillance is directly linked to user attention. Hence the agreement between users and media producers does not involve attention only, but also the provision of personal information by the user. Through cookies, media producers access a wide array of user information, from their browsing history to their individual tastes and attitudes in exchange of highly targeted advertisements. This way interaction might be facilitated, but participation is curbed by surveillance and commodification of personal information (Fuchs 2014).

As Fuchs states, "The entire planet is today a capitalist factory. Internet user commodification is part of the tendency of the commodification of everything that has resulted in the generalization of the factory and of exploitation. Neoliberal capitalism has largely widened the boundaries of what is treated as a commodity" (Fuchs 2014, 118). The higher attention time is given to advertisements, the higher the profit will be. It follows that the more popular a certain content is, the more profitable it is, hence the prominence of mainstream entertainment at expense of more complex and informative content. The supremacy of entertainment curbs participation through a process that Putnam (1995) calls "time displacement hypothesis". Putnam attributed to television viewing the decline of participation in the American political system and social activities. The same argument can be applied to online media, with various empirical studies which prove that users spending more time with online entertainment spend less time participating (Nie 2001; Bugeja 2004). It follows that in spite of interaction being a precondition to participation, there is an inverse correlation between interaction and participation when interaction regards entertainment rather than political content.

According to this perspective, a typical practical expression of participation takes place in alternative and community-driven media, such as Wikipedia and Diaspora, free from alienation, exploitation, and corporate control. Sandoval defines community media as "media that serve a specific geographic community or a community of interest, and allow non-professionals to actively engage in media production, organization and management" (Sandoval 2014). Alternative media "emphasize the organization of media to enable wider social participation in their creation, production, and dissemination than is possible in the mass media" (Atton 2002, 25). However, the idea of alternative media as fully participatory is not free from controversy. To start with, whereas it is true that participation is considered to be central in order to promote social capital and communal spirit, it can also be exclusionary, in terms of who has the right to participate, and divisive, in terms of the values that drive collective involvement. Countless examples could be cited here, from the explicit self-destructive behaviour of pro-anorexia online communities such as "pro-ana" (Norris et al. 2006), to neo-Nazi groups (Linden and Klandermans 2007). Second, alternative media are subject to power laws of distribution as much as commercial media. It is known that information distribution on a commercial platform such as Twitter is dominated by a small elite of 20 thousand users, amounting for less than 0.05 per cent of the whole Twitter population, which attracts half of all attention within the popular SNM (Wu et al. 2011). In 2008, 90% of the content shared on Twitter came from 10 per cent of the users only (Oreskovic 2009). Similar patterns are present on Wikipedia, where only 2 per cent of users ever contribute material (Shirky 2010). Although the Internet is an open network, most of the traffic is concentrated in few sites, replicating the mass-media model. Moreover, offline power relations are seldom challenged online. "While the Internet may increase the circle of participants in the public sphere, access to its tools is skewed in favour of those who already are well-off in society-in terms of wealth, race and skills" (Benkler 2006, 236). Fenton and Barassi stress attention on the importance of "being in the media" in order to transmit a message efficiently. "The more powerful and influential individuals are, the better placed they are to get their message across" (Fenton and Barassi 2011, 193). This phenomenon, on a longterm basis could have a disruptive impact on the participatory potential of the Internet.

In a nutshell, the view of participation by critical scholars is holistic and it involves the equal sharing of symbolic, political, organizational, and economic decision-making between grassroots and corporate power. Limitations of the critical approach include varying degrees of determinism of the struggle upon classes and economic considerations, too much stress on contradiction as endemic to human condition, and an overstatement of maximalist forms of participation. Critical theorists seldom acknowledge the expansion of the political sphere minimizing the role of the cultural sphere highlighted by new social movement theorists. Moreover, in their extreme versions, they tend to drift towards the populist aim of total equality. As Carpentier (2011, 26) states, "(m)odels that support stronger forms of participation (even the most maximalist versions) do not aim for the (symbolic) annihilation of elite roles, but try to transform these roles in order to allow for power-sharing between privileged and non-privileged (or elite and non-elite) actors." 'Old' questions that have been at the core of the direct democracy debate, such as whether voters are competent or not, and whether direct democracy benefits the few or the many, apply even to a hypothetical situation of a truly participatory media landscape (Lupia and Matsusaka 2004).

The Matrix of Social Media Participation

By reviewing the main analytical perspectives of social media participation, and highlighting contributions and shortcomings, this article stresses the need for a vision of the term that overcomes the tiresome binary outlook of technology proposed by cyber-utopians and cyberpessimists that see technology as either inherently enabling or oppressing potentials for a more participatory culture. As Dencik and Leistert (2015, 2) comment, abstracting "social media technologies from the social, political, economic and cultural processes that embed their development and uses leads, otherwise, too frequently to a strategically driven interpretation of events." Acknowledging the fact that overlaps among analytical perspectives are present (see, for instance, Jenkins 2013, and Jenkins and Carpentier 2013), the article proposes a more holistic understanding of participation by developing a matrix comprehensive of all views.

A first dimension of analysis in social media participation draws upon classical social theory and media studies. It concerns the degrees of sociality held by the media as techno-social systems, "in which information and communication technologies enable and constrain human activities that create knowledge that is produced, distributed and consumed with the help of technologies in a dynamic and reflexive process that connects technological structures and human agency" (Fuchs 2014, 37). According to Hofkirchner (2002, 2013) and Fuchs (2014), media hold three levels of sociality, namely, information and cognition at the first level; communication at the second one; community, collaboration, and co-operation at the third level. Access is the key to the first level of sociality, which is typical of mass media and the World Wide Web of the 1990's, the so-called web 1.0. This level involves limited agency at an individual level, whereby knowledge produced in society is objectified, "applied and used in social systems" (Fuchs 2014, 38). Information enters the realm of knowledge as a social fact (Durkheim 1982), constraining because independent of individual behaviour, enabling because it acts as a precondition of higher levels of sociality. Communication acts as a second stage in Hofkirchner's model of social activity (2002, 2013). This level is based upon the Weberian concepts of social action and social relations (Fuchs, 2014). According to Weber (1978, 4), "(a)ction is 'social' insofar as its subjective meaning takes account of the behaviour of others and is thereby oriented in its course". Here the separation between the individual nature of access and the symbolic and communicative nature of interaction becomes manifest. This level is typical of the telephone, the telegraph, and Internet applications such as Instant Messaging software. The interpretation of participation put forward in this paper is directly related to the concepts of community, cooperation and collaboration as highest levels in the model of human sociality. Through mutual relationships, individuals build a sense of belonging and mutual dependence, establishing the collective identity of a given community. At a higher level, individuals can cooperate with "hands, organs of speech, and brain, not only in each individual, but also in society, human beings became capable of executing more and more complicated operations, and of setting themselves, and achieving, higher and higher aims" (Engels 1886, 288). The highest degrees of sociality are expressed by SNM.

It is possible to draw a parallel between the three stages of Hofkirchner's model of sociality and the three levels of Carpentier's Access-Interaction-Participation (AIP) model (2011, 2016a). Each stage of sociality is equivalent to each of the technological affordances as theorised by Carpentier in his negative-relational model; at the first level, information and cognition match access; at the second level, communication corresponds to interaction; at the highest level, community and co-operation correspond to participation. The notion of access is strictly

intertwined with the concept of presence, "whether this is the presence of objects and people, the presence of information (and ideas and knowledge), presence in specific spaces or presence in specific institutions (or organizations)" (Carpentier 2016a, 10). When looking at digital media, access can be assessed along two dimensions, the social and the cognitive (Newhagen and Bucy 2004). The social dimension of access concerns issues of digital inclusion. According to the World Bank's report "World Development Report 2016: Digital Dividends", the number of people connected to the internet has more than tripled between 2005 and 2015, from 1 billion to an estimated 3.5 billion. However, this means that still more than 50% of the world population is excluded from online information, with a significant disadvantage in educational and economic terms. Mobile technology may help bridge this gap. Over the next ten years, up to 3 billion additional people will connect to the Internet through mobile technology (Manyika et al. 2013). The cognitive dimension of access relates to the issue of knowledge divide. Having physical access to Internet-ready devices does not necessarily imply that the user knows how to use them proficiently. Whereas digital divide is the domain of technology, knowledge divide is the domain of culture and education. According to Deepak Mishra (2015, 1-2), "(e)vidence suggests that digital technologies are in fact helping to expand knowledge, but are not succeeding in democratizing it. That is, digital technologies are helping to bridge the digital divide (narrowly defined), but are insufficient to close the knowledge divide. Democratizing knowledge is more than a matter of connectivity and access to digital devices. It requires strengthening the analog foundations of the digital revolution - competition, education (skills), and institutions – that directly affect the ability of businesses, people, and governments to take full advantage of their digital investments". The concepts of information, cognition, access, and presence are central within the utilitarian focus typical of the positivist approach, where participation is intended as consumption towards the aims of either profit, efficiency, or consensus. On the other hand, they act as pre-conditions of participation within the interpretive and critical approaches.

The second stage in Carpentier's AIP model is interaction. This term, which finds its equivalent in the second stage of Hofkirchner's sociality model, has been defined in various ways in social science. Giddens's definition encapsulates the main common characteristics of interaction, whereby interaction includes "any form of social encounter between individuals" (Giddens 2006, 1034). First of all, as Merrill and Eldredge (1957) point out, such encounter has to be meaningful. This caveat if far from being unproblematic. This issue concerns both nature, scope and effects of communication. Drawing upon Malinowski (1923) and Schneider (1988), we rely on the dichotomy between phatic and instrumental communication. Phatic communication is "purposeless" (Malinowski, 1923), as it aims at establishing a social presence rather than at transmitting meaningful information (ibid, 1923). On the other hand, instrumental communication is "purpose oriented" (Schneider, 1988). As various studies prove, online media culture is becoming increasingly dominated by phatic forms of communication (Miller 2008; Coretti and Pica 2015). Secondly, interaction implies various degrees of "reciprocity and bidirectionality" (Carpentier 2016, 14). However, considering that online conversations in SNM often involve considerable numbers of participants, the idea of trialogic interaction makes more sense than simple dialogic interaction. A trialogue is in place when interaction in a network is multi-directed and reciprocal among a significant number of nodes. However, due to the structure of SNM's communication protocols, the nature of online group conversations often resembles unbalanced flows of information in favour of stronger nodes (i.e. Facebook page administrators over users in page posts) (Coretti and Pica 2015). In all definitions of interaction, communication is central. Conflating the two together could bring to an impasse such as the one in place regarding slacktivism. In fact, Morozov's hypothesis on slacktivism creates a false dialectical relationship between slacktivist participation and 'real' participation. Actually, what Morozov calls slacktivism, rather than being a downturn of participation, represents a set of interactions, either user-to-user or user-to-document, that, in certain contexts, might even act as preconditions towards participation (Christensen 2011). Whereas there is no empirical evidence that acts of slacktivism displace attention from offline participation, it has been proved that using social technologies for private entertainment might have a negative effect on participation levels (McLeod, Scheufele, and Moy 1999; Norris 2000; Prior 2007; Shah 1998; Wellman, Haase, Witte, and Hampton 2001; Zhang and Chia 2006). As Gil de Zuniga et al. (2012, 321) remark, "it is not the media per se that can affect individuals' social capital and engagement, but the specific ways in which individuals use media."

Carpentier (2011, 2016a) criticizes a wide range of definitions of participation because they conflate characteristics of different terms in one vague concept. For example, Melucci defines participation as "both taking part, that is, acting so as to promote the interests and the needs of an actor as well as belonging to a system, identifying with the 'general interests' of the community" (Melucci 1989, 174). Gottlieb defines participation as community engagement, as a "process of building relationships with community members who will work side-by-side with you as an ongoing partner, in any and every way imaginable, building an army of support for your mission, with the end goal of making the community a better place to live" (Gottlieb 2006, 130). Del Bono et al. define social participation as the "advantages that come with developing and maintaining a variety of social relationships and involvement in the community. Aspects of social participation include contact with a partner, adult children or other family members, interactions with neighbours and friends, as well as engagement in voluntary work and local leisure and social activities" (Del Bono et al. 2007, 55). In all these definitions, as in Jenkins' definition (provided in the previous section), the undifferentiated application of access, interaction, and participation as if they were a single concept is apparent. Melucci includes characteristics typical of access such as belonging. Gottlieb focuses instead on the communicative aspects of interaction. The same can be said about Del Bono et al.'s account, which also emphasizes aspects of social capital.

Understanding and applying democratic theory is key to illuminate the conceptual vagueness around participation Democratic theory (Carpentier 2011, 2016b). Democratic theory helps categorizing participation according to two closely intertwined dimensions, namely decision-making processes and intensity of participatory practices. The key concept in this perspective is power, as an ever-present feature in social relations. In any context, an assessment of participation must consider the localities, power positions of the actors involved, and the intensity of their participatory practices. Participation is itself part of the power struggles in society for how political process should be defined and arranged. In terms of decision-making processes, Pateman (1970) distinguishes two categories of participation, partial and full. Partial participation sees a decision-making process among parties where decisional power is distributed unequally. On the other hand, full participation is characterized by equal deciding power among parties (ibid 1970, 70-71).

The second dimension follows as a corollary, whereby decision-making processes shape the intensity of participatory practices. Carpentier (2011) points out a primary distinction between minimalist and maximalist forms of participation. Minimalist participation is typical of classical liberalism, whereby it encompasses the right of the citizenry to elect the rulers and to stand for the election (Schumpeter 1976; Marshall 1992). The minimalist model is characterized by centralized decision-making processes, delegation, and limited citizen participation. On the other hand, the maximalist model is typical of Marxism and anarchism. Characterized by decentralized decision-making processes, this model is expressed in a variety of different articulations, all of which highlight a close connection between mass participation, individual autonomy, and direct democracy (Jennings 1999). Somewhere in the middle lies the New Left framework, which combines elements of direct democracy at a local level and representative democracy at a national level (Pateman 1970). Along the two dimensions of decision-making processes and intensity of participatory practices, Arnstein (1969) develops a "ladder" of participation that spans from non-participation, tokenism, to citizen power. Within this model, consumption of information might be a precondition to participation but also a tool for manipulation. Likewise, interaction might inform and stimulate participation without necessarily questioning power imbalances that hinder full participation (see Carpentier 2016b for further information).

Participation does not take place in a vacuum; only appreciating the contextual surrounding facilitates a better understanding of the concept. Following the three main analytical perspectives, a practical definition of participation needs to take into account the following dimensions: in the first place, the central nature of an expanding political sphere from the perspective of democratic theory (Carpentier 2011); secondly, the different nature of participation in respect to access and interaction (Carpentier 2011, 2016a); finally, from a critical political economy approach, the affordances emerging from the widespread use of commercial social technologies (Fuchs 2008, 2011; Coretti and Pica 2015).

The above discussion brought to fore the following differentiating characteristics in the view of social media participation. Firstly, the focus of research. From the dominant perspectives, participation can be seen as either consumption, manipulation and sharing, or codeciding and co-owning. These three conceptualizations entail different ontological and

methodological apparatuses, as previously discussed in this article. Secondly, Arnstein's (1969) 'ladder of participation' frames the discussion within the realm of democratic theory, excluding the more culturalistic interpretations of participation typical of the interpretive approach. Thirdly, differentiating between access, interaction, and participation is a crucial dimension in order to move beyond traditional appreciations of participation that, due to extremely diverse usages, tend to remain vague and often essentialist (Carpentier 2011). Drawing on Carpentier's (2011, 2016a) AIP model, the social media participation matrix considers these three dimensions as technological affordances of media according to their potential in terms of sociality (Hofkirchner 2002, 2013; Fuchs 2014). These six dimensions represent the main point of difference and contention amongst the literature surveyed. Following, the proposed Social Media Participation Matrix is introduced (Fig. 1).

Degrees of Sociality	Technological Affordances	Degrees and Types of Participation		Ontological Approach	Epistemological Approach	Elements of Focus
Social Media as Social Facts (Durkheim, 1982)	Information / Access	Nonparticipation	Manipulation / Therapy / Informing*	Positivist	Quantitative (e.g. Big- Data Statistics, Surveys, etc.)	Utilitarian; User Access / Presence as instrumental towards profit, efficiency, or consensus. Participation as consumption.
Social Media as Social Relations (Weber, 1978)	Communication /Interaction	Partial Participation	Consultation / Placation	Interpretive	Qualitative (Interviews, Observation, etc.)	Focuses on Micro-context; Emphasis on the interpretation of the role of the actor involved. Participation as manipulation and sharing of cultural symbols.
Social Media as Community (Tonnies, 1988) Social Media as Co-Operation (Marx, 1867)	Community/ Co- Operation /Participation	Full Participation	Partnership / Delegated Power / Citizen Control	Critical	Qualitative + Quantitative	Focuses on power struggles. Focuses on macro and structural characteristics. Participation as equal sharing of decisions and ownership.
Adapted from Hofkirchner (2002, 2013), and		Adapted from Arnstein (1969, in Carpentier, 2016b)				

Figure 1. Social Media Participation Matrix.

To conclude, a holistic view of social media participation is one that considers and analyses both the enabling structures of communication platforms (e.g. Coretti and Piga 2015) and the individual behaviours (e.g. Miller et al. 2016). Hence, the understanding of participation put forth by this paper suggests a multi-methodological epistemological stance, that advocates the use of both quantitative and qualitative methods and a focus on both micro- and macro-levels of interaction. It also strongly suggests an emphasis on the architecture of SNM, on the affordances of technology, and the individual role and power relations amongst actors.

Conclusions

An increased awareness of the controversial utilization of user data by commercial SNM such as Facebook and Google, and the intrusive levels of surveillance by government agencies such as the NSA in the United States and GCHQ in the United Kingdom, gave rise to more critical approaches towards online participation. As Carpentier (2011, 2016a) points out, cyber-utopian accounts on participation lack of insight into democratic theory and a conceptual apparatus regarding participation. Sandoval (2014) further adds that there is a systematic neglect of the political economy of the platforms where participation takes place.

This paper tries to make sense of the various views of participation. Participation has to present an active component and a shared outcome. It is clear that positivist approaches neglect the constitution of participation following a hyper rationalistic and economically deterministic view of social connections. On the contrary, interpretivist views concentrate on micro systems of connections and explode the concept of participation to all sorts of social realm, relying on hyper relativist, and cyber utopian accounts of fan groups to justify claims of increased democratization. Finally, the critical school tries to bridge the gaps of the former views by uncovering intentionality, systemic power relations and comparing ideal political economies of participation. In these terms the critical school addresses the gaps and shortcomings of previous literature. However, it still presents a problem of over focus on social struggle and capital accumulation.

The paper proposes taking into consideration all three views of participation, in order to put forth a holistic understanding of participation. Further research is needed to develop the proposed matrix into a sensitizing device for future research on participation in social networks. Further research is also needed in order to evaluate the shortcoming of all three schools so that a full framework can be devised to guide future empirical endeavours that understands participation as a controversial and multi-facet phenomenon that needs both macro and micro understanding to be appropriately framed into every context.

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