

REPRESENTATION OR PARTICIPATION?

TWITTER USE DURING THE 2011 DANISH ELECTION CAMPAIGN

ANDERS OLOF LARSSON
HALLVARD MOE

Abstract

The uses of the popular microblogging service Twitter for political purposes have been discussed by scholars and political pundits alike. While suggestions have been made that the conversational aspects of the microblog could serve to instigate online deliberation between equals, rather few studies have investigated such claims empirically. This paper presents such an empirical study, based on a large-scale data set of tweets concerning the 2011 Danish parliamentary election. By combining state-of-the-art data collection and analysis techniques with theoretically informed matters for discussion, we provide an assessment of political Twitter activity among high-end users of the microblog during a one-month period leading up to the election. Identifying a series of user types, findings indicate that while the bulk of the studied activity bares characteristics of a representative public sphere, traces of a participatory public sphere were also discerned.

Anders Olof Larsson is Postdoctoral Fellow at the Department of Media and Communication, University of Oslo; e-mail: a.o.larsson@media.uio.no.

Hallvard Moe is Associate Professor of Media Studies at the Department of Information Science and Media Studies, University of Bergen; e-mail: Hallvard.Moe@infomedia.uib.no.

Introduction

Studies of political communication in online media tend to portray something novel, explicitly or implicitly invoking the idea of new medium impacting societal structures. Yet, the World Wide Web has existed for nearly two decades, slowly making its way into the mainstream of media use. Blogs – often thought of as online, personal journals – have been around for almost as long (Larsson and Hrastinski 2011; Rettberg 2010). Web 2.0, a “buzzword” conceived to signal a second generation of web services geared towards audience participation and content co-creation, first became popular in 2004 (O’Reilly 2005; Mjøs et al. 2010). Related, so-called social media, like Facebook or Twitter, have been gaining interest in academia as well as in broader society for the past five years or so.

Taking this into account, we should consider ourselves past the pioneering phase of studies dominated by speculation and fragmentation, and be well into a follow-up phase of knowledge- and paradigm-building based on large-scale empirical studies undertaken in different social, cultural and political contexts. Furthermore, such studies need to engage with democratic theory on a substantial and operationalised level. As suggested by Karakaya Polat, to advance our understanding of online political activity as performed both by politicians and citizens, researchers should look into “established theories of political participation” (Polat 2005, 441).

This article presents a study that seeks to do exactly this. It provides insights into the uses of the microblogging service Twitter for mediated public political communication during the 2011 Danish parliamentary election. Utilising large-scale data collection of 28 695 messages sent by 3192 users, the analysis is focused on how high-end users of the Twitter service communicate about politics. Not only are we interested in mapping and categorising those who most frequently used Twitter for political communication – we are also interested in testing the explanatory power of different democratic theories’ notion of participation in the public sphere. We are not aiming at some “universal diagnosis” on how digital media contributes to the construction of a public sphere. Rather than applying public sphere theories normatively, we mobilise different strands of democratic theory in order to critically assess the workings of Twitter and to answer the research question: is political communication on Twitter best understood as representation or participation? When seeking to understand who communicates, we argue, scholars are well served by a certain theoretical eclecticism, or willingness to consider different theoretical perspectives.

Two Phases of Online Political Communication

The spread of the Internet throughout western societies during the mid-1990s gave rise to a number of claims regarding the potential of the new medium for invigorating political debate and participation (i.e. Hirzalla 2007; Lilleker and Malagón 2010, 25). As noted by Kleis Nielsen, “the Internet’s potential for political mobilisation has been highlighted for more than a decade” (2010, 755). Indeed, while concepts and ideas like “e-democracy” (Chadwick 2008) “informational democracy” (Castells 1996), “postmodern political campaigning” (Norris 2000) or “conversational democracy” (Coleman 2005) were plentiful during what could be labeled a first phase of online political communication, empirical research endeavors

have mostly provided “somber assessments” (Vaccari 2008, 2) regarding the use of the Internet for political purposes. In the context of US presidential elections, Foot and Schneider (2006) examined web sites hosted by a range of political actors during the 2000, 2002 and 2004 elections. They found that while some political actors employed features with the purpose to mobilise citizens, the overarching tendency were to offer a variety of informing features (e.g. Vaccari 2008, 6). Such features mostly replicate an archetypal offline sender-receiver model of political communication. Similar results, indicating hesitant approaches to the new medium on behalf of both parts have been reported from a variety of European elections (e.g. Lilleker et al. 2011), including Germany (Schweitzer 2008); United Kingdom (Jackson and Lilleker 2009); France (Vaccari 2008; Lilleker and Malagón 2010); Italy (Calenda and Meijer 2009) Finland (Carlson and Strandberg 2008; Strandberg 2009); Norway (Kalnes 2009; Karlsen 2010) and Sweden (Bergström 2007; Larsson 2011).

Altogether then, the claim made by Stromer-Galley (2000) over a decade ago that “time and energy” are apparently better spent on “tried and true campaign strategies” still appear valid. Indeed, this first phase of research into online political communication can be summed up as having proceeded “from early enthusiasm to pessimistic reaction [...] to the recent, more balanced and empirically driven approaches” (Chadwick 2008, 11-12)

This is not to say that what we are witnessing is a *status quo*. Indeed, recent years have seen interest in the potential of the Internet for political purposes on the rise yet again, despite the somewhat downtrodden results of previous research efforts. Emphasis has been placed on the activities of politicians as well as citizens within the realms of various social networking services (e.g. Boyd and Ellison 2007). As such, we can discern what can be labeled a second phase of online political communication, focusing on the uses of services like Facebook and Twitter for political purposes. While such platforms have been discussed in the context of uprisings in totalitarian states (i.e. Gaffney 2010; Morozov 2011), research has also been undertaken in more stable political contexts.

Scholars have pointed to the 2008 Obama US presidential campaign, with its “savvy use of the Internet” (Wattal et al. 2010, 670), as a prime example of the roles social networking services can play during parliamentary elections. However, the realities of everyday campaigning appear to tell a somewhat different story. Utilising an ethnographic approach, Kleis Nielsen (2010) observed the day-to-day routines during two 2008 US congressional campaigns, finding that *mundane internet tools* (like mass emails and various other informing functionalities) were used more than *emerging tools* (such as social networking services) by campaign staffers. Kleis Nielsen concluded that “the mobilising potential of the Internet will remain potential” (758), even in the much-debated, rhetoric-laden age of web 2.0. As the majority of voters appear pleased with remaining mostly on the receiving end in their political mediated behaviour, and as most politicians appear to remain steadfast in more traditional modes of campaigning, Kalnes suggests that developments in digital political campaigning and engagement should not be “overemphasised [...] at the expense of continuity” (2009, 251). If we want to scrutinise how such developments (or the lack thereof) relate to political participation in a wider sense – beyond the political apparatuses and prior to us entering the election booths – we need to turn to public sphere theory.

Theoretical Approach: Representation or Participation?

The theoretical links between political communication and democracy is “as old as the idea of democracy itself” (Skogerbø 1996, 11). The term *öffentlichkeit* is over two hundred years old, and the ideas pertaining to it have been central for a wide variety of political theories, as well as more general social science theories. The history of public sphere theory can be constructed as a dialogue between pessimists or cynics on the one hand, and optimists or utopians on the other (see Gripsrud et al. 2010). One of the more famous instances of such a dialogue is the 1920s “phantom conflict” (Jansen 2009) involving exchanges between Dewey and Lippmann (e.g. Schudson 2008; Nyre 2011). Indeed, the optimist/pessimist division also holds valid for the discussion regarding the supposed impact of online media on the public sphere. Widely read authors such as Sunstein (2007) and Benkler (2006), as well as more popular commentators like Morozov (2011) and Shirky (2008), can be described as belonging to pessimistic and optimistic camps respectively.

How one perceives of the workings of the mediated public sphere in general, and its online parts in particular, depends on which conceptualisation of the public sphere one operates with. Ferree et al (2002, 295ff) provide a useful categorisation of concepts of the public sphere in different democratic theories. The authors distinguish between four traditions. The first, labelled *representative liberal theory* points out Schumpeter (1942) as a classic work and Downs (1957) as a key contributor. In essence, this tradition argues that “a public sphere designed to produce wise decisions by accountable representatives organised in political parties best serves the needs of democracy” (Ferree et al. 2002, 295). Second, *participatory liberal theory* (with its roots in Rousseau) favours the widest possible empowerment and inclusion, and is doubtful about any criteria that would restrict popular participation. The third variety identified is *discursive theory*, with Habermas (2006, for recent discussion) as the most well known contributor, and with important strands found in the writings of Mills (1959 [1969]) as well as by Guttman and Thompson (1996). Discursive theory is more commonly referred to as deliberative theory. It shares the aim of popular inclusion in the public sphere with the participatory liberal strand, but sees such inclusion as a means to a more deliberative public sphere, not an end. Deliberation, described as “discussion that involves judicious argument, critical listening, and earnest decision making” (Gastil 2000, 22), is at the centre here. This focus on deliberation held forth by the third tradition is questioned by the fourth and final tradition identified by Ferree and colleagues. Labelled *constructivist theory* (indebted to Foucault), this particular take on the idea of the public sphere questions the boundaries of what counts as relevant in the public sphere, and in what form, thus opposing a focus on closure of democratic processes.

Of these four strands, the third has emerged as the dominant in recent decades. In fact, the term “deliberation” has come to label a group of theories (see Bohman 1998 for an overview of the “deliberative turn” in democratic theory). Some even argue that “deliberative democratic theory is unabashedly a social movement as well as a theory [...] Its advocates promote it not only as a pet theory but also as a social cause” (Mutz 2008, 529). Recent key contributions to democratic theory tend to either build on, to refine, deliberative theories (e.g. Benhabib 2002) or position themselves in clear opposition to deliberation as an ideal (e.g. Mouffe 2000), with more or less success (Karppinen et al. 2008).

The body of work looking for deliberation in different settings is impressive (see Carpini et al. 2004 for an overview). Much of this work is directly or indirectly related to some conceptualisation of the public sphere, though far from every contribution makes such claims (e.g. Goodin 2000, on deliberation “within the head of each individual”). Work on public online deliberation alone makes up a considerable part of this scholarly tradition. In these works, the analytical gaze is often directed towards online discussion forums. Studies tend to focus on how deliberative the discussions are (e.g. Graham and Witschge 2003; Albrecht 2006; Zhou et al. 2008), or on how other forms of communication can matter (e.g. Black 2009). Others have studied forum designs, considering features that may heighten deliberative performance (e.g. Jensen 2003; Wright and Street 2007). While such contributions concern the form or content of online communication in the public sphere, they do not necessarily gauge how the structure of the public sphere is influenced by communicative practices. Discussions of these aspects seem to be found first and foremost in theoretical and conceptual contributions (e.g. Friedland et al. 2006; Dahlberg 2011), while empirical studies are few and far between.

Hargittai et al. (2008) offer one sound example of such an empirical inquiry. Assessing the fragmenting potential of online media, the authors studied linking practices of popular liberal and republican US blogs. Their findings show that bloggers are more likely to link to bloggers that match their ideological persuasions, thus suggesting a more pessimistic outlook (e.g. Garrett 2009; Roodhouse 2009). Similarly, Hindman (2009) argues that the Internet is highly reminiscent of the offline media world: audiences are no less concentrated, and it is still extremely hard to “get heard” for non-elites. Moreover, Wei (2009) argues that bloggers with higher socio-economic status contribute more to so-called filter blogs – topical and objective with a focus on political knowledge – than lower-status segments of the populace. Although they relate implicitly or explicitly to a deliberative democratic ideal, few such studies explicitly deal with public sphere theory in a detailed way (one example would be Schmidt 2006).¹

Our aim here is not to test the normative potential of deliberative democratic theory. Rather, we aim to study one aspect of the public sphere (“who communicates”) in one arena for mediated communication (Twitter). For this purpose, we mobilise operationalised parts of different strands of public sphere theory. As explicated by Ferree et al. (2002), deliberative theory as well as constructivist theory builds on the idea of participation found in participatory liberal theory, namely the greatest possible popular inclusion. What separates these three, rather, is the issue of the outcome, and the form participation should ideally take – i.e. the kind of communication deemed as appropriate. Indeed, all three schools of thought would laud wide-ranging, popular participation. In contrast, a fundamentally different idea of participation in the public sphere is found in the first category identified by Ferree et al.: representative liberal theory.

On this basis, we can describe two different sets of criteria regarding the veritable “who” of political communication in the public sphere. Following a representative ideal, participation is limited to specific actors: *the media* (since they should encourage citizens to vote, and provide information about the parties and candidates to allow citizens to make informed choices), *political parties* (since they should communicate their positions fully and accurately), and *experts* (since they can help informing the people’s representatives in making wise decisions)

(Ferree et al. 2002). The citizens, of course, have a role to play in democratic rule, but not in the public sphere. Rather, citizens privately express their preferences in the election booth (Coleman and Blumler 2009 for further discussion). For the three other theoretical strands, although the prescribed aim as well as form of the communication differ, the question of who communicates is answered by striving to maximise *popular participation*.²

Our focus, then, is on the explanatory force of theoretical notions of the public sphere – one describing political communication as fundamentally about representation, the other describing it as participation – rather than on empirically testing dimensions of one normative ideal. With this tool, we seek to understand who communicates on novel arenas for public communication, here exemplified by Twitter. A scrutiny of the workings of Twitter in this regard should contribute to our understanding of actually existing democracies by helping us conceptualising the workings of a novel arena for public debate.

Data and Method

Research on Twitter is arguably at a very early stage. As such, a number of different approaches have been suggested by researchers interested in the uses of the platform. One approach involves large-scale data collection and social network analyses of Twitter users employing specific hashtags (e.g. Bastian et al. 2009; Bruns 2011; Larsson and Moe 2012). In the following, we detail the rationales employed for data collection and data analysis respectively.

Data Collection

In order to indicate specific themes pertaining to their messages, Twitter users can include so-called hashtags in their tweets. The presence of relevant hashtags in tweets can be regarded as a suitable delimitory rationale for data collection. For example, Larsson and Moe (2012) studied the use of Twitter during the 2010 Swedish election, utilising tweets hashtagged so as to indicate electoral content. Similarly, Bruns and Burgess (2011) studied the 2010 Australian election by focusing on the #ausvotes hashtag. Indeed, Gaffney (2010, 2) stated that hashtags allow scholars to “identify exact communication transmissions [...] of interest.”

With the 2011 Danish election taking place on September 15th, 2011, data collection by means of yourTwapperKeeper was started a month before, on August 15th yourTwapperKeeper, “the preferred tool for capturing #hashtag or keyword tweets in recent times” (Bruns, 2011, 10; see also Bruns and Liang 2012), is an open source software package that allows for large-scale archiving of tweets and their metadata guided e.g. by hashtags (TwapperKeeper, 2010). By employing a month long time span in the data collection process, the “obvious impact” (Golbeck et al. 2010, 1618) of the political calendar would perhaps become more visible in our data. Using the same reasoning, archiving continued until September 20th so as to catch some of the post-election tweets.

Hashtags are often created for particular events (e.g. Golbeck et al. 2010, 1618). In the weeks leading up to the election, the hashtag #fv11 (abbreviation for “parliamentary election 11” in Danish) emerged as the most commonly used to indicate electoral content. Hence, data collection was performed accordingly, meaning that tweets tagged as such and transmitted during the previously mentioned time

period were archived and made subject to initial screenings (See Moe and Larsson 2012, for a lengthier discussion on these data collection practices). In total, 28 695 tweets from 3192 senders were collected. Of the collected tweets, 1870 (6,5 percent of the total sample) were identified as spam, sent by a total of six spam accounts. Following the removal of these tweets and users, the final sample to be analysed consisted of 26 825 tweets sent by 3186 users.

Data Analysis

We can broadly discern between three practices for Twitter users: sending singletons (undirected messages), @ replies (directed messages) and retweeting (i.e. redistributing) messages originally sent by others. In order to examine the uses of these practices in the case at hand, two modes of analysis were utilised. First, the spread of the total number of tweets sent was assessed by means of a time line graph covering the specified time period. In order to pinpoint the top users of undirected messages, descriptive statistics were produced using the SPSS software package. Second, the practices of sending @ replies and retweets were gauged utilising social network maps created with the graphing software Gephi. Guided by the approach suggested by previous research (e.g. Larsson and Moe 2012), such visualisations are helpful in identifying high-end, key users for the specified practices.

Results

Figure 1 provides an overview of the data used in the study at hand. Specifically, it provides a time line graph that features the distribution of tweets during the time period for data collection – August 15th to September 20th.

The timeline is characterised by a number of protuberances or “spikes,” indicating surges in Twitter activity. These spikes are largely dependent on a variety of offline events, such as televised political debates. Election day itself, September 15th, features the largest spike during the examined period.

The graph further reveals that as election day draws ever closer, so increases the frequency of messages. Closer inspection of tweets sent during the identified “spikes” tend to correspond with televised political debates and interviews. As such, the users employed Twitter to disseminate opinions on the political situation – an activity that continued throughout election night.

While the timeline presented above provides us with insights as to the temporal aspects of tweeting, it says little about what types of tweets were being sent. When analysing the data in this regard, results indicate that Singletons tally up to 17 142 of the total number of tweets sent (63.9 percent), followed by retweets with a share of 6864 tweets (or 25.6 percent of the total). Finally, @ replies, signaling the conversational potential of Twitter, accounted for 2819 tweets in the data set (or 10.5 percent of the total number of tweets). As such, with close to two thirds of the tweets collected being singletons, most of the communication taking place using the specific hashtag was undirected and not conducive to deliberation.

Given our focus on high-end users, Table 1 identifies the ten most active users of Singleton messages.

The table consists of four columns, where the first two provide information on the Twitter username and the number of tweets sent by each identified user. The third column, labeled *Description*, features summaries of the narratives each user

Figure 1: Longitudinal Distribution of Tweets (N=26,825)

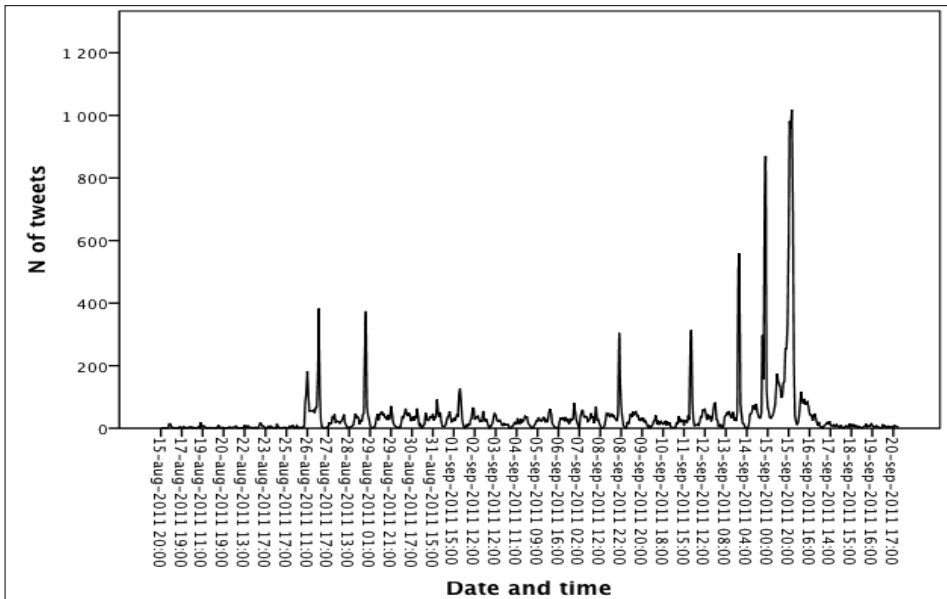


Table 1: Ten Most Active Singleton Tweeters

Twitter username	N	Description	Type of actor
ebvalg	491	Official account for Tabloid newspaper	Media
Leoparddregen	464	Anonymous, political-satirical content	Citizen
thomasfrovin	390	Missionary	Citizen
LineHolmNielsen	349	Journalist	Media
minkonto	342	IT professional	Expert
bripet	307	PhD Student	Expert
grevlindgren	250	PR consultant	Expert
ftvalg11	240	Anonymous, reporting on danish election	Expert
maidavalelover	221	Musician	Citizen
MartinHjort	189	Journalist	Media

provided on their respective Twitter profile pages (available at twitter.com/USERNAME). Based on these self-reported accounts, we classify each user as belonging to one of the four categorisations of actors in the public sphere, as based on previous discussions. As such, while representatives of the media and citizens are present in the subsample discussed here, as well as experts of different sorts (understood here as users who describe themselves first and foremost as professionals in some regard), one specific group of users remain absent from the top ten distribution presented in table one. No established politicians appear to have employed undirected messages to such a degree that they would be featured here. Also, while the fact that the most frequent singleton user (ebvalg) was the official account of a leading

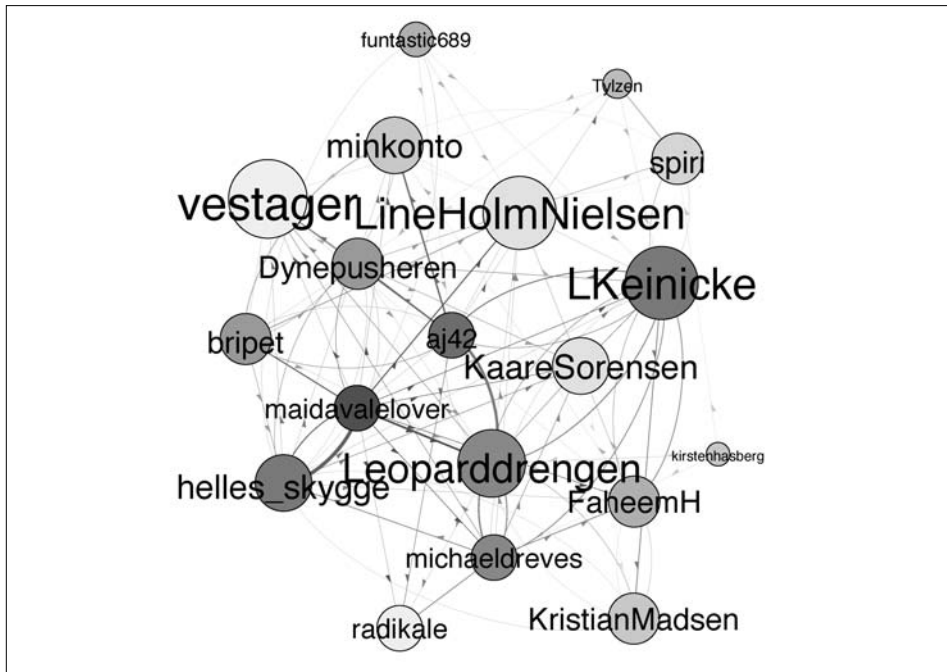
danish tabloid newspaper might not be unexpected, the fact that the second most active singleton user appears to be an anonymous comedian (Leoparddrenge) might be less expected. Aside from a missionary (thomasfrovin), an IT professional (minkonto) and two users who do not provide any information regarding political preferences or professional activities (bripet and maidavalelover), the remainder of the identified accounts belong to journalists and PR consultants (LineHolmNielsen, MartinHjort, grevlindgren) and what might be considered a “citizen journalist,” providing reports from the ongoing election (ftvalg11).

In sum, while six out of ten of the most active singleton users could be classified as experts or media actors, these results indicate a slight overweight of representation as discussed previously. However, as the remaining four users identified here were better understood as citizens, we should be careful not to overemphasise this alleged representativeness.

Jansen et al. (2009, 2173) suggests the practices of sending @ replies and of redistributing Twitter messages sent by other users facilitate interaction in the Twittersphere. Figure 2 presents a social network graph gauging the top @ conversation networks.

Each node in Figure 2 represents an individual Twitter user, identifiable by the individual Twitter handle. Node colour signals the number of @ replies sent – the darker the node, the more active that specific user was in sending @ replies. Conversely, node size is dependent on the number of @ replies received. The more messages a specific user received, the bigger the corresponding node. A straight

Figure 2: Top @ Networks; Degree Range: >20.
(Graph constructed using the Force Atlas layout in Gephi)



line between nodes indicate unidirectional communication, whereas curved lines indicate mutuality between users in the exchange of @ replies.

Utilising these node characteristics, the users identified in the social network graph presented above can be categorised into three different user categories. First, the category of *Senders* are categorised by darker, smaller nodes, indicating a user who sends more @ replies than he or she receives. Conversely, *Receivers* are identified by larger, lighter coloured nodes – the characteristics of a user who receives an ample amount of @ replies, but who does not send out as many such tweets. Finally, the users labeled *Sender-Receivers* are identified in the graph above as darker, larger nodes and thus appear as more reciprocal in their usage patterns.

Table 2 presents examples of identified users in each category, in combination with their respective self-reported descriptions and our categorisations of type of actor as shown previously.

Table 2: Categorisations of Top @ Message Users

	<i>Examples of identified users</i>		
User Category	Username(s)	Description	Type of actor
Senders	aj42, funtastic689, michaeldreves	IT professionals	Expert
Receivers	LineHolmNielsen, KaareSorensen, KristianMadsen	Journalists	Media
	Radikale, vestager	Politicians	Political party
	spiri	IT professional	Expert
Sender-Receivers	FaheemH, minkonto, Dynepusheren	IT professional	Expert
	Bripet	PhD Student	Expert
	helles_skygge	Anonymouss	Citizen
	Leoparddrenge	Anonymous, political-satirical content	Citizen

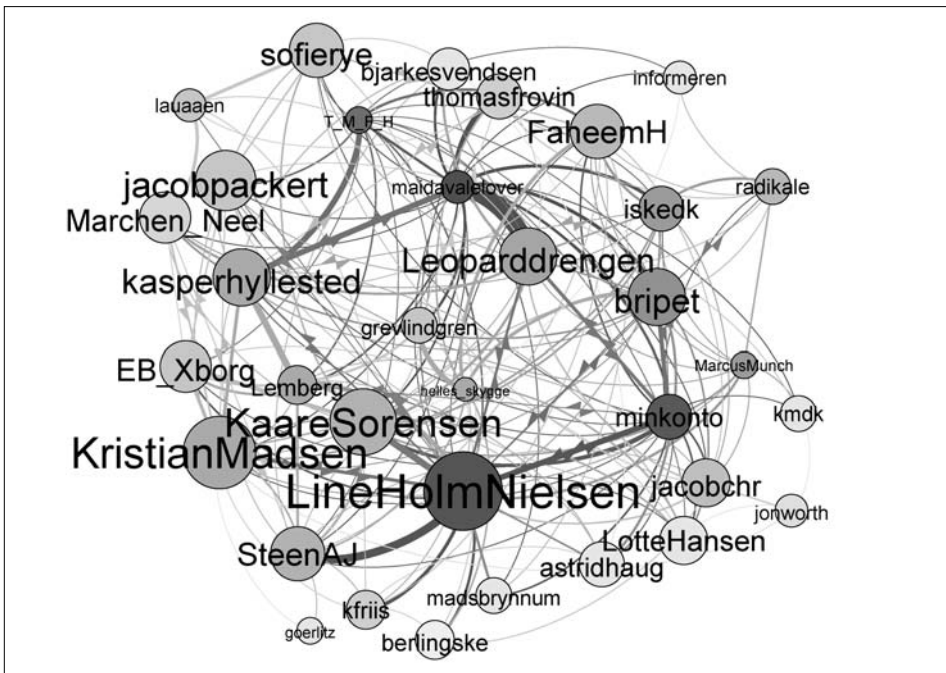
The dividing of the top @ message users into three broad categories is arguably not without its limitations. However, heuristically, it helps us distinguish the specific societal roles of users based on their individual approaches to Twitter through the use of the @ message format.

With the division between the three user types in place, some findings made clear in the above results can be commented on. First, for the *Sender* user category, three of the six users are identified as IT professionals (categorised as experts according to our theoretical rationale). Quite possibly tech-savvy and up to par with the latest trends in online communication, these individuals make good use of the @ sign in sending messages – but they do not tend to receive as many. Second, journalists and politicians appear to dominate the category of *Receivers*. As mentioned above, these media and political actors appear to be very popular in that they receive many @ replies from other Twitter users. However, the relatively lighter colour of the *Receiver's* corresponding nodes suggests that these are, for the most part, one-way communicative relationships. Third, the final category of *Sender-Receivers* appears

as rather diverse. At least in comparison with the previous categorisations, no clear trend can be discerned regarding the societal roles of these users. While this final category of @ users contain both experts and citizens, the results presented here indicate that neither media representatives nor politicians utilised the deliberative potential of Twitter and the #fv11 hashtag to any larger degree.

As suggested by Kwak et al., “the retweet mechanism empowers users to spread information of their choice beyond the reach of the original tweet’s followers” (2010). In order to examine the practice of retweeting in the context of the 2011 Danish election, we employed a similar mode of analysis to the one used for mapping @ messaging networks. Figure 3 shows a social network graph depicting the top retweeting networks.

Figure 3: Top RT Network; Degree Range: >20.
(Graph constructed using the Force Atlas layout in Gephi)



Similar to Figure 2, each node in Figure 3 represents an individual Twitter user. The size of each node represents the degree to which each user was retweeted during the time period under scrutiny – a bigger nodes indicates larger popularity in this regard. The colour of the node denotes the degree of retweet activity of each user – the darker the node, the more retweets were sent by that particular user.

Applying the same analytical rationale for retweets as for @ replies, the users identified in Figure 3 can be classified into three broad user categories, based on the apparent use patterns mapped out in the figure. First, the category of *Retweeters* are represented in the graph above as smaller, darker nodes, representative of high activity with regards to redistributing the messages of other users. Second, users labeled *Elites* appear in the graph as relatively larger, lighter coloured nodes, as their

messages tend to be retweeted frequently, while they do not engage in retweeting the messages of others to any larger extent. Third, users classified as *Networkers* are more reciprocal in their use of the retweet function. Thus, they are represented in Figure 3 above as larger, darker nodes. Table 3 presents examples of identified users in each category in a similar fashion as for @ replies.

Table 3: Categorisations of Top Retweet Users

	<i>Examples of identified users</i>		
User Category	Username(s)	Description	Type of actor
Retweeters	T_M_F_H, maidavalelover, Marcus-Munch, helles_skygge	Citizens	Citizen
	minkonto	IT professional	Expert
Elites	kfriis, informeren, LotteHansen, astridhaug, berlingske	Journalists	Media
	kmdk, jonworth	IT professionals	Expert
	Madsbrynnum	Comedian	Expert
	bjarkesvendsen, goerlitz	Citizens	Citizen
Networkers	LineHolmNielsen, KaareSorensen, KristianMadsen, sofierye	Journalists	Media
	jacobpackert, kasperhyllested	Politicians	Political party
	FaheemH	IT professional	Expert
	bripet	PhD Student	Expert
	Leoparddrenge	Anonymous, political-satirical content	Citizen

The same condition placed for the categorisation of @ message users is valid also here – the labelling of users as belonging to different categories and societal roles is not meant as a final, static division, but allows us to approach the relationships mapped out in figure 3 in a more coherent manner. A couple of clear trends regarding user patterns of the retweet functionality are made visible in Figure 3. First, we can discern five rather clear *Retweeters* (T_M_F_H, maidavalelover, MarcusMunch and minkonto, helles_skygge). These users, none of which were classified as affiliated with media or political actors, make frequent use of the retweet functionality.

Second, while some of the nodes classified as representing *Elites* with regards to their retweeting behaviour appear comparably smaller to certain other users, the lighter colour of these Elite nodes suggest a fairly one-sided behaviour on behalf of the identified users. Elites tend to be retweeted by other users frequently, and as such, it is expected that this category appears to be dominated by users classified as expert or media actors - users who could be considered well known also outside of the Twittersphere.

Third, as Figure 3 is dominated by comparably larger, somewhat darker nodes, many users demonstrate the characteristics of *Networkers* as specified above. Again, we see media, expert and political actors making up the bulk of users for this par-

ticular category, revealing a more mutual approach to the retweeting functionality than the previously mentioned user types.

Discussion

The points raised by our results can also be more directly related to the ideas of “who communicates” as prescribed in the two strands of theories identified previously. According to the first, communication in the public sphere takes the form of *representation*. Rather than being a task for each and any interested citizen, it is the designated job of the media, politicians and experts. In contrast, the other strand of thought we identified calls for maximum popular *participation*, regardless of social standing or professional status.

The list of top singleton users can serve as an arguably crude measure of representation, as it shows those who most frequently communicate in the tagged debate about the election on the Twitter platform. As we have argued, the top ten users are made up of quite a diverse set of user types. Mainstream media outlets and established journalists are present, as are users who identify themselves on their Twitter profile pages as experts (e.g. PR consultant and IT professional). These could both be considered as key categories to be present according to a representational ideal. Interestingly, no politicians – the third category of such users – appear in our analyses. This is perhaps especially noteworthy since politicians have often been accused of leaving the deliberative potential of Internet services at bay, using their web presences in a one-way communicative fashion (e.g. Larsson 2013).

Moreover, several of these top singleton users fall outside of the categories posited by representative liberal theory regarding who should communicate in the public sphere. As we have shown, students, comedians, and other individual citizens were among those who most actively tweeted about the election. The presence of comedians in the Danish case can also be linked to the popularity of political satire (such as *The Daily Show* or *The Colbert Report*) in other contexts – popularity that is sometimes discussed in terms of effects on political engagement (e.g. Xenos and Becker 2009). Based on this one measure, and on our particular delimitations, we might say that political communication on Twitter in the present case transgresses the idea of representation, and includes popular participation. To gain a better understanding, however, we need to look beyond a basic volume measure, and look closer at who gets attention from other users. This can be assessed through the previously presented network analyses of @ reply and retweet patterns.

While citizen actors were indeed present also in these networks, both networks were dominated by actors introducing themselves as experts of some sort, or by actors related to some media outlet or political party. Again, we see a pattern similar to the one shown before: that of a mostly representative public sphere, with overlaps of participatory tendencies.

Furthermore, the specific practices of these actors within the different networks are interesting. For @ replies, journalists and politicians were more often on the receiving end. Conversely, citizens and experts appeared as more well-rounded users, appearing as sender-receivers in our analyses. A somewhat similar impression emerges when considering the retweet networks. Here, citizen actors are present in all three classifications, while media actors appear as both elites and networkers, showing the often discussed tendency for journalists to casually approach the pos-

sibilities of the new medium (e.g. Larsson 2013). As for politicians, the findings for retweeting suggest that a similar approach is being adopted by such actors as well.

The political communication on Twitter during the election campaign in Denmark as studied here can not be unreservedly understood as either participation or representation. Both perspectives offer some insights into the workings of this specific part of the public sphere. Rather than comparing the empirical findings to merely one normative ideal, our approach opens up new avenues for discussing the phenomena at hand since it allows us to connect ideal answers to the question of who communicates with fundamentally different ideas of democracy. As such, the mobilisation of different strands of public sphere theory can help facilitate new analyses of power in political communication. It can also serve as a fundament for prescriptions of remedies for democracy, such as those offered by Coleman and Blumler (2009; see also Coleman 2005). They argue that a “lack of political culture in which citizens can deliberate effectively” coupled with a mass media “which undermines public trust in politics per se” has led to severe democratic deficits (Coleman and Blumler 2009, 68). What they term “direct representation”; “mobilising, listening to, learning from, mapping and responding to diverse articulations of public experience” (Coleman and Blumler 2009, 79) is presented as a measure to potentially mend the state of politics and political communication.

Limitations and Suggestions for Future Research

While debates regarding the potential of the Internet for widening the public sphere, allowing for a more participatory rather than representative space, will most likely spring to life at the launch of every new Internet service, it is of utmost importance to empirically assess such claims. This article has done exactly this in relation to Twitter, simultaneously testing the explanatory force of different strands of public sphere theory.

Our findings indicate that while participatory tendencies could indeed be found, most of the top users identified here would indicate a more representative online space. Of course, by concentrating on the very tip of the proverbial iceberg, we might miss out on certain activities. Future research should consider taking the “long tail” of communication into account. Similarly, our focus on structure rather than on content does not allow us to systematically assess the specific topics being discussed under the #fv11 hashtag. Thus, we would assume that the quantitative approach employed here could be complemented with some variety of more qualitative inquiry. Nevertheless, the results presented here allow us to identify who makes their voices heard on a larger scale – and who enjoys different forms of popularity across the specified network.

The study design presented here is not able to take activity outside of Twitter into account. While deliberative activities were found to be somewhat limited in our study, the sending and reading of singletons and retweets could perhaps lead users to engage with each other on other platforms – on – or offline. On this basis, we suggest that future research look further into how users move between, and differ in their uses of, various communicative outlets.

Some enjoy popularity in the network and are astute in their ways of using it – some are not. This should come as no big surprise (e.g. Page 1996). The question should perhaps instead be posed: who are the people gaining the wealth of the

network – to paraphrase Yochai Benkler (2006). By gauging these emergent patterns of political communication, mapping upon them established theoretical perspectives, we can provide useful insights, combining methodological sophistication with sound arguments.

Notes:

1. One explanation for this might be the challenges with operationalising a deliberative theory for empirical analysis (see Janssen and Kies 2005, 331; Mutz 2008).
2. As Wessler (2008, 3) argues, different normative standards exist in parallel, with one taking the form of “a strong (albeit mostly implicit) egalitarian current demanding that everyone who wants to say something in public should receive an equal share of attention.” In practice, this is of course totally unrealistic. Everyone cannot talk to everyone in a mediated public sphere. As Page satirically comments, using the USA as an example, “if each citizen insisted [...] upon a rather modest two minutes of speaking time, the discussion would take five hundred million minutes: that is, 347,222 days, or 950 years. Extreme boredom and impatience would result” (Page 1992, 4). In general, if the number of actively participating speakers and the amount of messages rise, it will unavoidably lead to a decrease in the number of recipients to each message given the same time budget (e.g. Peters 1994, 52 n 7; Albrecht 2006, 66). One alternative is to aim for some kind of equal representation (e.g. Habermas [1992] 1996). Wessler opts for another way forward; doing away with the criteria of participation altogether, shifting focus from speakers to content through an ideal of “openness or equal opportunity for topics, perspectives, interpretations, ideas, and arguments” (Peters quoted in Wessler 2008, 3). See Mutz (2008) and Eveland et al (2011) for more fundamental critiques.

References:

- Albrecht, Steffen. 2006. Whose Voice is Heard in Online Deliberation? A Study of Participation and Representation in Political Debates on the Internet. *Information, Communication and Society* 9, 1, 62-82.
- Bastian, Mathieu, Sebastien Heymann and Mathieu Jacomy. 2009. Gephi: An Open Source Software for Exploring and Manipulating Networks. Paper presented at the *Third International ICWSM Conference*. San Jose, California.
- Benkler, Yochai. 2006. *The Wealth of Networks: How Social Production Transforms Markets and Freedom*. New Haven: Yale University Press.
- Bergström, Annika. 2007. Internetval 2006 - För de redan frälsta In S. Holmberg and L. Weibull (eds.), *Det nya Sverige : trettiosju kapitel om politik, medier och samhälle : SOM-undersökningen 2006*, 395-404. Göteborg: SOM-institutet, Göteborgs universitet.
- Black, Laura W. 2009. Listening to the City: Difference, Identity, and Storytelling in Online Deliberative Groups. *Journal of Public Deliberation* 5, 1, 1-35.
- Bohman, James. 1998. Survey Article: The Coming of Age of Deliberative Democracy. *The Journal of Political Philosophy* 6, 4, 400-425.
- Boyd, Danah M. and Nicole B. Ellison. 2007. Social Network Sites: Definition, History, and Scholarship. *Journal of Computer-Mediated Communication* 13, 1, 210-230.
- Bruns, Axel. 2011. How Long is a Tweet? Mapping Dynamic Conversation Networks on Twitter using Gawk and Gephi. Published online before print. *Information, Communication and Society* 15, 9, 1323-1351.
- Bruns, Axel and Jean Burgess. 2011. #ausvotes – How Twitter Covered the 2010 Australian Federal Election. *Communication, Politics and Culture* 44, 2, 37-56.
- Bruns, Axel and Yuxian Eugene Liang. 2012. Tools and Methods for Capturing Twitter Data during Natural Disasters. *First Monday* 17, 4.
- Calenda, Davide and Albert Meijer. 2009. Young People, the Internet and Political Participation – Findings of a Web Survey in Italy, Spain and The Netherlands. *Information, Communication and Society* 12, 6, 879-898.
- Carlson, Tom and Kim Strandberg. 2008. Riding the Web 2.0 Wave: Candidates on YouTube in the

- 2007 Finnish National Elections. *Journal of Information Technology and Politics* 5, 2, 159-174.
- Carpini, Michael X. Delli, Fay Lomax Cook and Lawrence R. Jacobs. 2004. Public Deliberation, Discursive Participation, and Citizen Engagement. *Annual Review of Political Science* 7, 315-344.
- Castells, Manuel. 1996. *The Information Age: Economy, Society and Culture. Vol. 1, The Rise of the Network Society*. Malden, Mass.: Blackwell.
- Chadwick, Andrew. 2008. Web 2.0: New Challenges for the Study of E-democracy in an Era of Informational Exuberance. *I/S: Journal of Law and Policy for the Information Society* 4, 3, 9-42.
- Coleman, Stephen. 2005. *Direct Representation: Towards a Conversational Democracy*. London: Institute for Public Policy Research (IPPR).
- Coleman, Stephen and Jay G. Blumler 2009. *The Internet and Democratic Citizenship: Theory, Practice and Policy*. Cambridge: Cambridge University Press.
- Dahlberg, Lincoln. 2011. Re-constructing Digital Democracy: An Outline of Four 'Positions'. *New Media and Society* 13, 6, 855-872.
- Eveland, William P., Alyssa C. Morey and Myiah J. Hutchens. 2011. Beyond Deliberation: New Directions for the Study of Informal Political Conversation from a Communicaton Perspective. *Journal of Communication* 61, 6, 1082-1103.
- Ferree, Myra Marx, William A. Gamson, Jürgen Gerhards and Dieter Rucht. 2002. Four Models of the Public Sphere in Modern Democracies. *Theory and Society* 31, 3, 289-324.
- Foot, Kirsten A. and Steven M. Schneider. 2006. *Web Campaigning*. Cambridge, Mass.: MIT Press.
- Friedland, Lewis A., Thomas Hove and Hernando Rojas. 2007. The Networked Public Sphere. *Javnost-The Public* 13, 4, 5-26.
- Gaffney, Devin. 2010. #iranElection: Quantifying Online Activism. Paper presented at *WebSci10: Extending the Frontiers of Society On-Line*. Raleigh, NC: US.
- Garrett, R. Kelly. 2009. Echo Chambers Online? Politically Motivated Selective Exposure among Internet News Users. *Journal of Computer-Mediated Communication* 14, 2, 265-285.
- Gastil John. 2000. *By Popular Demand: Revitalising Representative Democracy through Deliberative Elections*. Berkeley, CA: University of California Press.
- Golbeck, Jennifer, Justin M. Grimes and Anthony Rogers. 2010. Twitter Use by the US Congress. *Journal of the American Society for Information Science and Technology* 61, 8, 1612-1621.
- Goodin, Robert E. 2000 Democratic Deliberation Within. *Philosophy and Public Affairs* 29, 1, 81-109.
- Graham, Todd and Tamara Witschge. 2003. In Search of Online Deliberation: Towards a New Method for Examining the Quality of Online Discussions. *Communications* 28, 2, 173-204.
- Gripsrud, Jostein, Hallvard Moe, Anders Molander and Graham Murdock. 2010. Editors' Introduction. In J. Gripsrud, H. Moe, A. Molander and G. Murdock (eds.), *The Idea of The Public Sphere: A Reader*, xiii-xxviii. Lanham, Ma: Lexington Books.
- Gutman, Amy and Dennis Thompson. 1996. *Democracy and Disagreement*. Campbridge: Harvard University Press.
- Habermas, Jürgen ([1992] 1996) *Between Facts and Norms: Contributions to a Discourse Theory of Law and Democracy*. Cambridge, Mass.: The MIT Press.
- Habermas, Jürgen. 2006. Political Communication in Media Society: Does Democracy Still Enjoy an Epistemic Dimension? The Impact of Normative Theory on Empirical Research. *Communication Theory* 16, 4, 411-26.
- Hargittai, Eszter, Jason Gallo and Matthew Kane. 2008. Cross-ideological Discussions among Conservative and Liberal Bloggers. *Public Choice* 134, 1-2, 67-86.
- Hindman, Matthew Scott. 2009. *The Myth of Digital Democracy*. Princeton: Princeton University Press.
- Hirzalla, Fadi. 2007. The Internet and Democracy: Participation, Citizens and Politics. *Javnost-The Public* 14, 2, 83-96.
- Jackson, Nigel A. and Darren G. Lilleker. 2009. Building an Architecture of Participation? Political Parties and Web 2.0 in Britain. *Journal of Information Technology and Politics* 6, 3, 232 - 250.
- Janssen, Davy and Raphael Kies. 2005. Online Forums and Deliberative Democracy. *Acta Politica* 40, 3, 317- 335.
- Jansen, Bernard J., Mimi Zhang, Kate Sobel and Abdur Chowdury. 2009. Twitter Power: Tweets as Electronic Word of Mouth. *Journal of the American Society for Information Science and Technology* 60, 11, 2169-2188.

- Jansen, Sue Curry. 2009. Phantom Conflict: Lippmann, Dewey, and the Fate of the Public in Modern Society. *Communication and Critical/Cultural Studies* 6, 3, 221-245.
- Jensen, Jakob Linde. 2003. Public Spheres on the Internet: Anarchic or Government-Sponsored - A Comparison. *Scandinavian Political Studies* 26, 4, 349-74.
- Kalnes, Øyvind. 2009. Norwegian Parties and Web 2.0. *Journal of Information Technology and Politics* 6, 3, 251-266.
- Karlsen, Rune. 2010. Online and Undecided: Voters and the Internet in the Contemporary Norwegian Election Campaign. *Scandinavian Political Studies* 33, 1, 28-50.
- Karppinen, Kari, Hallvard Moe and Jakob Svensson. 2008. Habermas, Mouffe and Political Communication. A Case for Theoretical Eclecticism. *Javnost-The Public* 15, 3, 5-22.
- Kwak, Haewon, Changhyun Lee, Hosung Park and Sue Moon. 2010. What is Twitter, a Social Network or a News Media? *Proceedings of the 19th International Conference on World Wide Web*. Raleigh, North Carolina, USA.
- Larsson, Anders Olof and Stefan Hrastinski. 2011. Blogs and Blogging: Current Trends and Future Directions. *First Monday* 16, 3. <<http://firstmonday.org/htbin/cgiwrap/bin/ojs/index.php/fm/article/view/3101/2836>>
- Larsson, Anders Olof. 2011. "Extended infomercials" or "Politics 2.0"? A Study of Swedish Political Party Web Sites before, during and after the 2010 Election. *First Monday* 16, 4. <<http://firstmonday.org/htbin/cgiwrap/bin/ojs/index.php/fm/article/view/3456/2858>>
- Larsson, Anders Olof and Hallvard Moe. 2012. Studying Political Microblogging: Twitter Users in the 2010 Swedish Election Campaign. *New Media & Society* 14, 5, 729-747.
- Larsson, Anders Olof. 2013. "Rejected Bits of Program Code": Why Notions of "Politics 2.0" Remain (Mostly) Unfulfilled. *Journal of Information Technology & Politics* 10, 1, 72-85.
- Lilleker, Darren G., Karolina Koc-Michalska, Eva Johanna Schweitzer, Michal Jacunski, Nigel Jackson and Thierry Vedel. 2011. Informing, Engaging, Mobilising or Interacting: Searching for a European Model of Web Campaigning. *European Journal of Communication* 26, 3, 195-213.
- Lilleker, Darren G. and Casilda Malagón. 2010. Levels of Interactivity in the 2007 French Presidential Candidates' Websites. *European Journal of Communication* 25, 1, 25-42.
- Mills, C. Wright. 1969. *The Sociological Imagination*. London: Oxford University Press.
- Moe, Hallvard and Anders Olof Larsson. 2012. Methodological and Ethical Challenges Associated with Large-scale Analyses of Online Political Communication. *Nordicom Review* 33, 1, 117-124.
- Morozov, Evgeny. 2011. *The Net Delusion: The Dark Side of Internet Freedom*. New York: Public Affairs.
- Mouffe, Chantal. 2000. *The Democratic Paradox*. New York, London: Verso.
- Mutz, Diana C. 2008. Is Deliberative Democracy a Falsifiable Theory? *Annual Review of Political Science* 11, 521-538.
- Nielsen, Rasmus Kleis. 2010. Mundane Internet Tools, Mobilising Practices, and the Coproduction of Citizenship in Political Campaigns. *New Media and Society* 13, 5, 755-771.
- Norris, Pippa. 2000. *A Virtuous Circle: Political Communications in Postindustrial Societies*. Cambridge: Cambridge University Press.
- Nyre, Lars. 2011. The Broadcast Public and Its Problems. *Javnost-The Public* 18, 2, 5-18.
- O'Reilly, Tim. 2005. *What is Web 2.0? Design Patterns and Business Models for the Next Generation of Software*. <<http://www.oreillynet.com/lpt/a/6228>>
- Page, Benjamin I. 1996. *Who Deliberates? Mass Media in Modern Democracy*. Chicago and London: University of Chicago Press.
- Peters, Bernhard. 1994. Der Sinn von Öffentlichkeit. *Kölner Zeitschrift für Soziologie und Sozialpsychologie Sonderheft* 34/1994, 42-77.
- Polat, Rabia Karakaya. 2005. The Internet and Political Participation: Exploring the Explanatory Links. *European Journal of Communication* 20, 4, 435-459.
- Roodhouse, Elisabeth Anne. 2009. The Voice from the Base(ment): Stridency, Referential Structure, and Partisan Conformity in the Political Blogosphere. *First Monday* 14, 9.
- Schmidt, Jan. 2006. *Weblogs: Eine kommunikationssoziologische Studie*. Konstanz: UVK.
- Schudson, Michael. 2008. The "Lippmann-Dewey Debate" and the Invention of Walter Lippmann as an Anti-Democrat 1986-1996. *International Journal of Communication* 2, 1031-1042.

- Schumpeter, Joseph. 1942. *Capitalism, Socialism and Democracy*. London: Routledge.
- Schweitzer, Eva Johanna. 2008. Innovation or Normalisation in E-Campaigning? A Longitudinal Content and Structural Analysis of German Party Websites in the 2002 and 2005 National Elections. *European Journal of Communication* 23, 4, 449-470.
- Shirky, Clay. 2008. *Here comes Everybody. The Power of Organising without Organisations*. London: Penguin Books.
- Skogerbø Eli. 1996. *Privatising the Public Interest – Conflicts and Compromises in Norwegian Media Politics 1980-1993*. Oslo: Department of Media and Communication, University of Oslo.
- Strandberg, Kim. 2009. Online Campaigning: An Opening for the Outsiders? An Analysis of Finnish Parliamentary Candidates' Websites in the 2003 Election Campaign. *New Media and Society* 11, 5, 835-854.
- Stromer-Galley, Jennifer. 2000. On-line Interaction and Why Candidates Avoid it. *Journal of Communication* 50, 4, 111-132.
- Sunstein, Cass R. 2007. *Republic.com 2.0*. Princeton and Oxford: Princeton University Press.
- TwapperKeeper. 2010. *Your TwapperKeeper – Archive your own Tweets*. <<http://your.twapperkeeper.com>>
- Vaccari, Cristian. 2008. Surfing to the Elysee: The Internet in the 2007 French Elections. *French Politics* 6, 1, 1-22.
- Wattal, Sunil, David Schuff, Munir Mandviwalla and Christine B. Williams. 2010. Web 2.0 and Politics: The 2008 U.S. Presidential Election and an E-Politics Research Agenda. *MisQuarterly* 34, 4, 669-688.
- Wei, Lu. 2009. Filter Blogs vs. Personal Journals: Understanding the Knowledge Production Gap on the Internet. *Journal of Computer-Mediated Communication* 14, 4, 532-558.
- Wessler, Hartmut. 2008. Investigating Deliberativeness Comparatively. *Political Communication* 25, 1, 1-22.
- Wright, Scott and John Street. 2007. Democracy, Deliberation and Design: The Case of Online Discussion Forums. *New Media and Society* 9, 5, 849-69.
- Xenos, Michael A. and Amy B. Becker. 2009. Moments of Zen: Effects of *The Daily Show* on Information Seeking and Political Learning. *Political Communication* 26, 3, 317 - 332.
- Zhou, Xiang, Yuen-Ying Chan and Zhen-Mei Peng. 2008. Deliberativeness of Online Political Discussion. *Journalism Studies* 9, 5, 759-770.