

Who Participates and How? Twitter as an Arena for Public Debate about the Data Retention Directive in Norway

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This article presents an analysis of public debate about a pressing political issue on a novel Web arena in a small linguistic community: the debate on Twitter about the implementation of the European Union's Data Retention Directive in Norway. Who participates in this communication, and how can we characterize different forms of use? The analysis is based on data gathered from more than 12,000 tweets over a 16-week period. Findings reveal a heavily skewed distribution of activity among users, favoring a tiny core, which consists of five groups with different patterns of use. Discussing Twitter as an arena for public debate, I argue that, although its impact comes across as minuscule, Twitter does seem to facilitate direct engagement among adversaries. These adversaries do, however, still belong to groups that share characteristics with offline elites.

When the public communicates about the collective control of societal rule, they construct a public sphere. At least since Immanuel Kant (1784/1991) defined *enlightenment* in the era of print periodicals, the relation between new forms of mediated communication and the public sphere has concerned scholars. Not surprisingly, then, as the Internet captured the interest of the social sciences two decades ago, its impact on the public sphere was granted much attention. Even so, our understanding of how online media facilitate a transformation of the public sphere remains marked by polar standpoints.

Studies have shown that bloggers are more likely to link to those who match their ideological persuasion (Hargittai et al., 2008), that ideological affiliation also matters for technologies and practices in blogging (Benkler et al., 2010), and that the average blogger does not take part in any substantial dialogue at all (Herring et al., 2005). Others found that, although similar political perspectives are reinforced in online chat rooms, political discussion in groups organized around non-political topics might pull in the opposite direction (Wojcieszak & Mutz, 2009). Yet others have shown how, in general, the Internet looks very much like the offline media world: audiences are no less concentrated; it is still extremely difficult for those outside a small, elite group to get heard; and highly educated white men write the handful of blogs that do receive broad attention (Hindman, 2009).

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But as the Internet has turned into an omnipresent part of everyday life in more and more parts of the world, research on its societal impact remains—as the studies referred to here illustrate—to an overwhelmingly high degree based in an Anglo-American context. Practices such as media use are not uniform across political, cultural, and social borders. Therefore, a pertinent need exists to study the workings of online arenas in diverse contexts. This constitutes a key challenge for researchers. Moreover, we face the challenge of identifying the specific characteristics and assessing the importance of emerging Web services employed for political communication in a rapidly changing environment.

This article seeks to tackle these challenges. It presents an analysis of everyday public debate about a pressing political issue on a novel Web arena in a small linguistic community: the debate on Twitter about the implementation of the European Union's Data Retention Directive in Norway. Who are the participants in this communication, and how can we characterize and explain different forms of tweeting? By scrutinizing what online communication as public debate looks like under such circumstances, the aim is to contribute to our understanding of the transformative force of emerging Web arenas for the structure of the public sphere.

I first review relevant research on Twitter and the public sphere. Next, I describe the method of data collection and analysis used in the present study. The approach is based on computer-assisted gathering of data from more than 12,000 messages about the directive from a 16-week period in 2010, made subject to quantitative analysis, and serving as a starting point for qualitative exploration. Presenting the findings from the analyses, I show how peaks in Twitter activity can be explained by quite diverse factors, originating both off- and online. Furthermore, I underline the heavily skewed distribution of activity among users, favoring a tiny core that uses Twitter for public expression on the issue. Scrutinizing these core users, I suggest five user groups. On this basis, I discuss the performance of Twitter as an arena for public debate, concentrating on two aspects: cohesion or lack thereof—that is, the tendency to contribute to a fragmentation of the public—and participation—the extent of inclusion of novel perspectives from a wide range of actors. I argue that, although its impact comes across as minuscule, Twitter does seem to facilitate direct engagement among adversaries in the present case. These adversaries do, however, still belong to groups that share well-known characteristics with offline elites. In that sense, the democratic potential of Twitter, as an instance of novel online arenas, remains limited in the context studied here.

Researching Twitter Use

Twitter is a free messaging service incorporating aspects of social networking. Since its launch in 2006, the service has grown immensely, reporting 190 million visitors per month by June 2010 (Schonfeld, 2010). Users can compose and publish short messages (maximum of 140 characters) called tweets. By June 2010, users wrote 65 million tweets daily (Schonfeld, 2010). The social networking dimension lies in the possibility to follow users—an act that may or may not be reciprocated, thus facilitating visible hierarchies of users with different follower/following numbers and ratios. While private, direct messaging to individual users constitutes one component of the service, the public modes of communication are made up of three forms: a single tweet is, by default, broadcast to all but can be

directed to specific users while remaining public by inserting “@user id” in the text (called “reply” or “mention”). Redistribution of messages, referred to as retweets (or RT), makes up a third form of public address.¹ Thematic tagging of messages by inserting the hash symbol (#) followed by words or acronyms in the tweets is also customary. Such hashtagging enables users to search for communication on a specific topic.

Research on Twitter and the public sphere can be divided into two parts based on societal context. Scholars have so far predominantly concentrated on either large, democratic, English-language settings (primarily the United States) or on nondemocratic societies. Studies in the latter category tend to focus on potentially transforming nations such as Iran, Moldova, or Tunisia. Some studies of English-language Twitter use in large, open, Western societies have described use among politicians, such as members of the U.S. Congress (Lassen & Brown, 2010). Others have studied intentions of the general user, naming daily chatter, conversations, information sharing, and news reporting as key (Dann, 2010; Java et al., 2007); measured the level of influence individual users can achieve through different practices (Romero et al., 2010); or looked into users’ perceptions of their audiences (Marwick & boyd, 2010). Studies based in nondemocratic settings, on the other hand, tend to focus on the importance of Twitter in political mobilization during times of turmoil. Here, optimists herald the instant spreading of eyewitness testimonies to a global public, while pessimists bring attention to issues of surveillance and unrealistic expectations of impact among a nation’s citizens (e.g., Gaffney, 2010; Morozov, 2011; also Lotan et al., 2011).

Both areas of research have yielded interesting insights. Yet they clearly do not provide a comprehensive picture. Like media use in general, we should expect uses of Twitter to vary with social contexts. One obvious example would be China, where not only political but also linguistic factors impinge on Twitter use. Due to its high ratio of Unicode characters to content, a Chinese tweet can, on average, include more than four times as many characters as an English one (Benney, 2011). As another, contrasting instance, we know little about how the tool is employed in small language areas, in everyday political discussion under favorable freedom of speech conditions. This is anything but surprising. An Anglo-American dominance has also marked research on earlier forms of online communication (Goggin & McLelland, 2009; Moe, 2011). There is a clear need for empirical explorations to add insights from other contexts. The present study aims to do so by focusing on Norway.

Norway is a small social democratic nation state ruled by a Left–Center majority coalition. The country’s media system is characterized by substantial state support based on the arms’-length principle, including a strong public service broadcaster, widespread newspaper readership, and high use of information and communications technology (ICT) (Hallin & Mancini, 2004; Østbye, 2007). In 2010, Norwegians spent 85 minutes online during an average day (Medienorge/SSB, 2011), and 90% had

¹ Since the data for this study were collected, several variations of redistributed tweets have become widespread. One such example is a “modified tweet” (marked MT). For useful discussions of the employment of different modes of communication, see, for example, Honeycutt and Herring (2009) and boyd et al. (2010).

Internet access at home in 2010. During the last three months of that year, 93% of the population reported using Internet services in one form or another (SSB, 2010).

The pertinent political issue under scrutiny is whether Norway should implement the European Union's Data Retention Directive, which regulates archiving of traffic data for telephony and Internet use. The rationale is prevention and prosecution of (organized) crime and terrorism. Somewhat like the U.S. Patriot Act, the directive triggers debate about fundamental privacy issues held against the fight against crime and terrorism. By early 2010, the question of implementation in Norwegian law was given a formal public hearing, followed by extensive public debate throughout the year and into 2011. The Norwegian Parliament finally passed the directive in early April 2011.²

The issue represents a best case in the sense that its case specificity, combined with technical and juridical aspects, would fit net-savvy users in a context with freedom of speech, a consensus-based multiparty political culture, and high numbers of advanced users of ICT. Moreover, since the public debate over the directive has progressed through different stages, from rare mentions online and in media debate in 2005–2008 up until the climax with the parliamentary debate in April 2011, it is possible to select a time period that represents everyday public debate—that is, a period not directly connected to a formal political decision or an election but one that could yield insight into the “uneventful” aspect of political communication online. Under these circumstances, I study the overall structure of the public debate on Twitter and scrutinize the practices of those users who most actively employ Twitter to express themselves publicly.

Methodologically, relevant studies of Twitter and the public sphere have been marked by approaches and aims from quite different research fields. Large-scale quantitative studies typically stemming from computer science invoke a high level of abstraction, as they tend to describe Twitter in general terms. For this purpose, researchers have collected extremely large data sets to find mechanisms of user behavior. Often algorithm-based, such studies look into network relations among 766,000 tweets (Gaffney, 2010), trends among 4,200 hashtags (Kwak et al., 2010), or political polarization in some 250,000 tweets (Conover et al., 2011). Other researchers have relied on approaches from cultural and media studies to examine specific users' motivations and practices. Projects include a survey of audience relations among a random sample of a few hundred users (Marwick & boyd, 2010) and of user modes, for instance, employing a combination of survey data and content analysis (e.g., Mischaud, 2007).

Methodology and Data

This study shares the methodological approach of the large-scale quantitative analyses but with the interest of understanding user patterns in detail, as is prominent in work stemming from media

² Although Norway is not a full member of the European Union, the directive and the question of its implementation into national law applies to Norway, pursuant to the EEA Agreement. For an analysis of online channels in the debate over the directive in Norway during spring 2008, see Grøndahl (2008). For a study of the coverage in selected Norwegian newspapers during April–July 2010, see Jamtvedt (2011).

studies. With a large, but temporally and topically delimited, data set, I undertake quantitative analyses of user behavior in general. The data set also allows me to identify core users, categorize their tweeting about the Data Retention Directive, and look for similar patterns. Moreover, I use the data set for qualitative scrutiny of actual practices of tweeting and as a starting point for discussing characteristics of the identified core users. The aim is to gain insight into specific uses of Twitter and thereby substantiate findings from smaller-scale studies. Importantly, in what some label "the era of Big Data," it is important to be aware of the limits of our data sets (boyd & Crawford, 2011). Moreover, it is crucial to explore the potential value of combining different approaches, levels of analysis, and foci—from general quantitative overviews to qualitative close readings.

Primary data collection was undertaken with the publicly available, free online tool TwapperKeeper. TwapperKeeper searches the Web for specific content, retrieves data, and archives it in a human- and computer-readable form. The tool uses a mix of the Twitter Streaming Application Programming Interface (API) and Twitter Search API, aiming to retrieve every tweet that the researcher wants based on user names and keywords in the tweets or hashtags. The result is an archive with content and metadata: the software collects the message itself, the sender's username and user ID, the recipient's user ID (if the message is a reply), language code, software client, geographical information, and the time the tweet was published.³

The data are based on a hashtag archive set up in mid-April 2010. It collects tweets with the hashtag #DLD, the predominant marker for communication about the Data Retention Directive in Norway and the acronym for the directive in debates on- and offline. Given my aim of assembling a manageable data set from a relatively mundane and uneventful period of the debate but one that also included some substantial activity, I downloaded and archived data for a 16-week period (until August 10). The set consisted of more than 14,000 tweets with metadata. Since hashtags are community-driven conventions, they are not mutually exclusive and may refer to different issues. Therefore, to eliminate spam and irregularities, I manually checked, sorted, and treated the data before analysis. The final set consists of 12,482 tweets addressing the directive, with metadata.⁴ One advantage of this form of data collection is its unobtrusiveness. However, this does not mean the data are shielded from biases. While the approach ensures a comprehensive basis for quantitative analysis, it has shortcomings that need to be addressed.

The archive only captures tweets with "#DLD" in the text. TwapperKeeper misses any message pertaining to the directive without the hashtag. This may result in tweets from casual or inexperienced users being left out. In addition, short replies tend to not include hashtags, perhaps because hashtagging a response "may be seen as performing the conversation in front of a wider audience" (Bruns & Burgess, 2011, p. 4). As a result, data sets based on hashtag archives risk having a bias toward experienced users. This bias also applies to the present study. However, three aspects serve to lessen the problem.

³ From March 2011, TwapperKeeper no longer allows anyone to download public archives due to stricter enforcement of the Twitter terms of service concerning syndication. The alternative is the self-installable variety yourTwapperKeeper.

⁴ The data set does not include new, integrated retweets. This means that the retweets discussed here were deliberately and manually sent by individual users.

First, because the case of the directive should appeal to net-savvy users who are familiar with the conventions of Twitter communication, a larger portion of tweets should be expected to include a #DLD hashtag. Second, since it is a political issue where wide distribution, discussion, and mobilization are assumed to motivate communication, more users should be expected to include hashtags. In addition, the topic was discussed over a long period of time, and the tag #DLD was established before data collection commenced. This is an obvious advantage compared to, say, attempting to study discussion about a sudden political scandal or natural disaster.

Another challenge with the methodology concerns the TwapperKeeper tool. The use of computer-assisted data collection in Internet studies has often relied on self-written software (Park & Thelwall, 2006, p. 8). A lack of common, available tools that facilitate comparison and allow for verification of prior research has constrained the field (e.g., Gaffney, 2010). Being publicly available, TwapperKeeper represents a step forward. However, such tools can still be unstable and in need of thorough monitoring. Researchers have found TwapperKeeper to miss out on batches of Twitter activity for limited periods of time, creating holes in data sets (Bruns, 2010a). The present data were checked for such irregularities in two ways. First, I ran an alternative data collection based on RSS feeds and compared the two sets for several random dates, finding no tweets missing in the TwapperKeeper data. Second, a detailed analysis of the distribution of tweets in the archive over time showed no unexplainable gaps or leaps in the activity.

This data set is first analyzed quantitatively to yield insight into the distribution of activity among users and over time and then to look for patterns of activity among core tweeters across different modes of communication. By comparing the practices of those who write most of the messages, the idea was to grasp differences in functions or roles in the public communication about the directive. For this purpose, I categorized the activity of the top 10 users in the data set across five measures: number of tweets, number of replies sent, number of replies received, number of retweets sent, and number of retweets received. The result of this comparison, after removing a single bot account, is a pool of 23 core #DLD tweeters.

To substantiate the findings of similarities in Twitter activity, the data set was then used as an entry point for qualitative exploration of the pool of 23 core users. I identified key characteristics based on their self-presentation in Twitter user profiles and, where applicable, links to personal blogs, organizational websites, social networking sites, and so on. The data set also served as an entry point for qualitative study in the sense that I use certain tweets, their distribution or flow among the users and beyond, as well as public conversations between core users as exemplars to illustrate different forms of activity. Taken together, these insights are used to suggest the five groups of core users. These groups do not encompass all Twitter users. For instance, lurkers and others who use Twitter primarily as a source of information fall outside the scope of the discussion. The groups are neither meant as exhaustive of the overall tweeting of the users in question, nor as fixed, mutually exclusive categories. Rather, the categorization focuses on core users and is meant as an analytical tool that highlights differences. The idea is to illuminate key characteristics of the #DLD case and the workings of Twitter as an arena for public debate.

For the final part of the discussion, I relate the findings to the ideals of participation and cohesion in the public sphere. Here, a closer look at the persons assumed to be behind the core user accounts complements the insights from the quantitative analysis and the exploration of user groups. This closer look includes key characteristics such as gender, line of business, education, job title, prolific online presence elsewhere (if applicable), and, by extension, involvement in the debate over the directive on-and offline (e.g., through links in user profiles to civil society groups) to signal professional, political, or social statuses.

Distribution of Activity Among Users Over Time

A first step to assess the character of Twitter as an arena for public debate on the Data Retention Directive is to look at the distribution of activity among users. The tweets from the 16-week period were published by 1,593 different users. Even if we disregard problems with actually getting heard, this is obviously a high number of public speakers, dramatically overshadowing anything found in traditional mass media. However, these users demonstrated very diverse levels of activity. Figure 1 shows the distribution of different forms of communicative modes among the top 100 users.

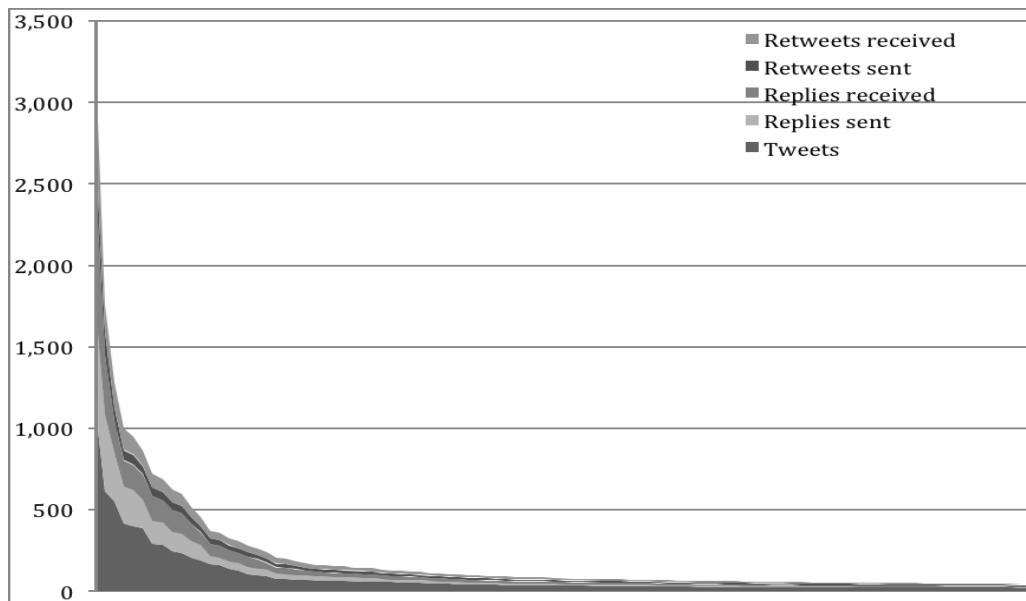


Figure 1. Distribution of tweeting among top 100 users, #DLD, April 19–August 10, 2010.

The number of tweets per user follows what is often referred to as a power law distribution. In nonmathematical use, the expression refers to the observation that small occurrences are extremely common, while large instances are extremely rare. The most active user wrote more than twice as many tweets as the second most active; only 17 users wrote more than 100 messages; and merely 185 users,

or 11.6%, contributed more than 10 tweets each. Retweets follow a similar pattern. Of the total 12,482 tweets, 3,369—almost one in four—were marked as retweets. Altogether, 1,037 users sent these, but only 48 users, analogous to 4.6%, sent more than 10 retweets. Again, the most active retweeter sent more than twice as many as number two on the list. Correspondingly, if we look at who is being retweeted—that is, whose messages are being forwarded—the pattern also reveals a power law distribution. The most retweeted user got his messages picked up and resent 519 times, while no other user even reached 200. As shown in Figure 1, a similar distribution characterizes the number of replies sent and received per user.

These measures of concentration in the distribution of activity are not surprising. They resemble findings from other studies of online behavior (e.g., Hindman, 2009), blogs (e.g., Farrell & Drezner 2008), and political communication on Twitter (Larsson & Moe, 2011). Still, the finding curbs the most optimistic expectations of the impact of mass participation on Twitter. A look at the distribution of communication over time can yield further insights.

The total number of #DLD-tagged tweets from the 16-week period amounts to almost five tweets per hour on average, but, as should be expected, these were unevenly distributed across the period (see Figure 2). More tweets were sent during the day than at night, and fewer were sent during the weekends than on weekdays. Also, the main Norwegian summer vacation period in late June and July shows reduced activity.

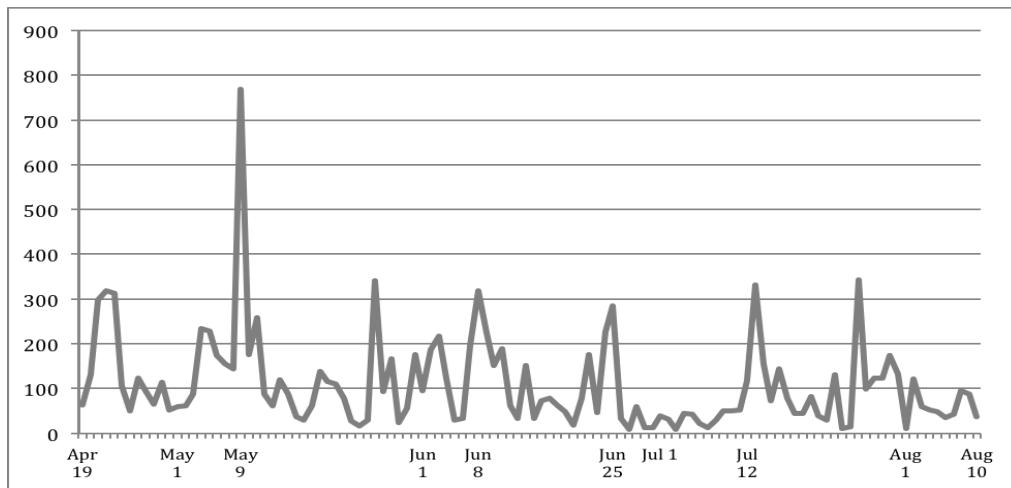


Figure 2. Number of tweets per day, #DLD, April 19–August 10, 2010 (N = 12,482).

A first observation concerns the volume of activity. Compared to other studies, the #DLD tweets do not amount to much: the number of tweets per hour rarely surpasses 50. The explanation for this low level of activity partly lies in the issue and partly in its context. Recent studies of Twitter use in political communication have focused on election campaigns (Bruns, 2010b; Moe & Larsson, 2011) or sudden outbursts of public debate—for instance, linked to political crises (e.g., Gaffney, 2010 on Iran). The Data

Retention Directive is not linked to such events and therefore facilitates a different mode of communication. The context matters here simply because there are far fewer users who would talk primarily in Norwegian about the implementation of an EU directive in Norwegian law compared to, say, a general election in Australia or a political scandal in the United States. Figure 2, then, illustrates that there was continuous communication about the directive on Twitter, but not of a very large volume.

A second observation concerns the peaks in the time line. A closer look at the senders, content, and recipients of the tweets at these points in time reveals different characteristics for these bursts of activity. The most notable peak is on May 9, with close to 800 tweets. This was the day of the Conservative Party's national congress, with the Data Retention Directive high on the agenda. The May 9 tweets partly anticipated the outcome of the discussions and partly offered minute-by-minute reports on the proceedings. A corresponding offline event—a panel debate on the directive organized by the Ministry of Transport and Communications—triggered a smaller peak with live reporting and commenting on June 8.

Other peaks, however, did not relate to external events. The spike around lunchtime on June 25 represents lively activity in the form of reply messages between core users. The same happened in the late evening on July 12 and the following morning, as well as at several points during the normally quiet summer weeks of late July, when there were a few hours of fierce activity in the form of reply messages between active users. At other times, small peaks result from a key user sending a much-retweeted message—for instance, linking to a relevant op-ed in a national newspaper on May 26.

The level of activity, then, seems to relate to several factors: On the one hand, the directive was not simply a trendy topic that rose quickly only to just as quickly get dropped from the agenda. Rather, the topic proved resilient, even through the summer vacation period. On the other hand, #DLD tweets failed to gain the volume of more general and time-specific political issues elsewhere. The heights of activity can be linked to a variety of triggers, some external, such as political events or news reports in mainstream media, and some internal, such as outbursts in reply activity among active users. The internal triggers signal that the case stands out, as several other studies have shown how increases in Twitter activity depend on events covered by or originating within the mass media (Bruns, 2010b; Larsson & Moe, 2011). This relationship to mainstream media is also interesting because it points to uses of Twitter beyond merely commenting on already-mediated events. To understand why the DLD communication has these characteristics, we can look more closely at the roles of different core users.

Five Groups of Core Users

Figures 3–7 show the activity of the top 10 users in the data set across five measures: number of tweets, number of replies sent, number of replies received, number of retweets sent, and number of retweets received—together creating a pool of 23 core #DLD tweeters. Combined with exploration of these users' self-presentation and the content of their tweets, I suggest they represent five groups: *activists*, *pundits*, *resources*, *conversationists*, and *conformists*.

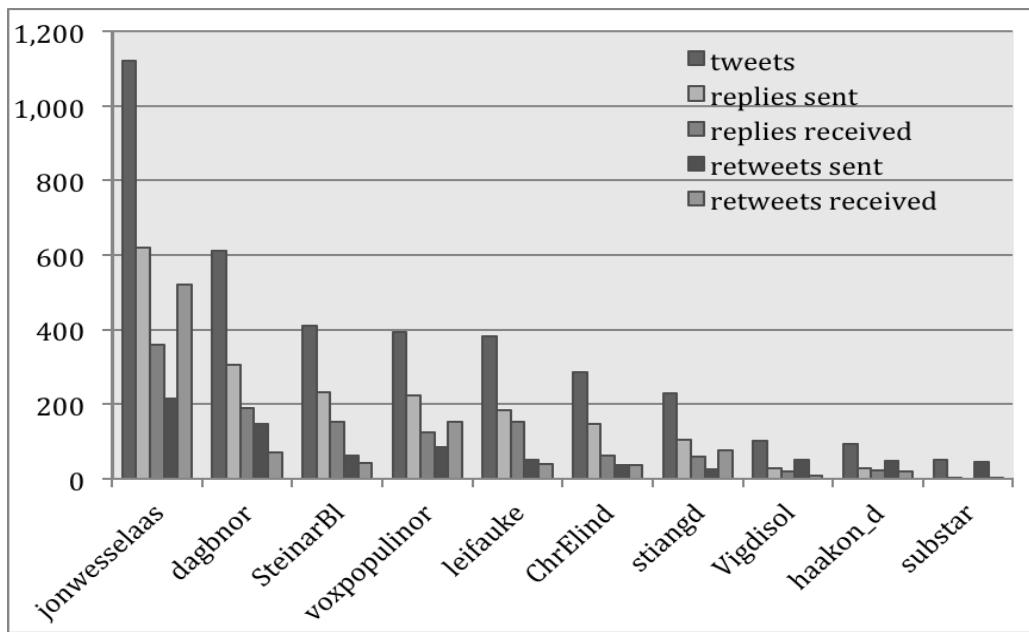


Figure 3. Representatives of core user group activists, #DLD Twitter activity among top 10 users across five categories, April 19–August 10, 2010.

Among the core users, the *activists* were the largest group. In addition to the top-ranking user, *jonwesselaas*, the activist label fits users *dagbnor*, *SteinarBL*, *voxpulinar*, *leifauke*, *ChrElind*, and *stiangd*, as their #DLD Twitter activity shared some key characteristics (see Figure 3). They were among the most active in terms of overall number of messages, about half of their tweets were replies, a smaller portion were retweets, and they all received a relatively small number of retweets. The activists all explicitly protested the directive. They used Twitter to spread and receive information about the issue and to discuss its problematic aspects. While several of them also tweeted about other topics in the period under scrutiny, the directive was central to their overall Twitter activity. Some of them had integrated an anti-DLD badge in their avatars, and one of them even stated his disregard for the directive in his user profile bio. To different extents, these users' involvement in the cause extend beyond the Web: Several were involved in establishing an interest group against the directive (StoppDLD), and one acted as a board member of the Norwegian branch of the International Commission of Jurists, whose objective is to protect human rights.

The activists were, however, not necessarily opinion leaders in the sense of having a wide impact on Twitter followers: As of autumn 2011, none of the most prolific activists had more than 2,100 followers, and three of them had fewer than 300.⁵ Still, they constituted a first tier. *Vigdisol* and *haakon_d* represent a second tier of activists in the pool of core users. These users also portrayed themselves as

⁵ Follower counts as per autumn 2010.

activists against the directive (both had anti-DLD badges on their profile photos). Yet the #DLD Twitter activity of the second tier, as displayed in Figure 3, shows not only overall lower numbers compared with the first tier, but also a relatively higher proportion of retweets sent. That is, rather than being retweeted, the second tier, to a larger extent, forwarded others' messages. An extreme example of this is the user *substar*, whose #DLD activity was almost entirely made up of retweeting first-tier activists.

When the Conservative Party's congress discussed the directive on May 9, the activists were a major cause for the peak in the activity (see Figure 2). During three hours around lunchtime, one of the first-tier activists for instance, sent 20 tweets tagged with #DLD. The most prolific activist composed 10, expressing anticipation that turned into disappointment as the congress failed to take a clear stand against the directive: "If I hear [Conservative party leader] Erna Solberg & co mention the word privacy or rule of law again, I'll need one of those paper bags they keep in flight seat pockets #DLD #Shame."⁶ Such tweets, along with others from the first tier of activists, were quickly retweeted a number of times within two or three hours. This is not to say that the activists alone constituted the tweeting behind the major peak on May 9. During three hours on this date, as the congress discussed the directive, a total of 173 users employed the hashtag, signaling how less-active users joined the debate at a crucial moment.

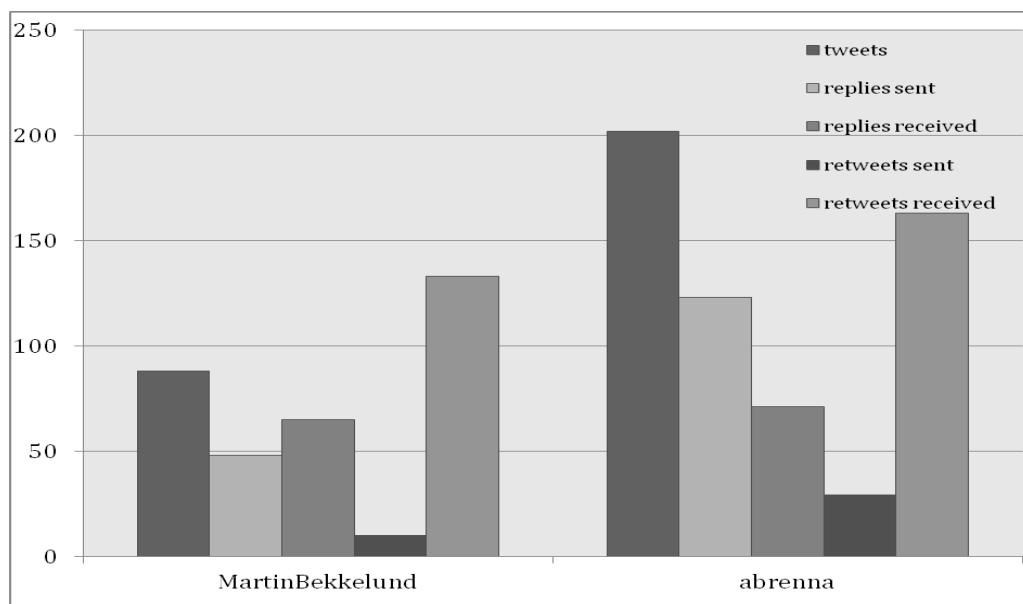


Figure 4. Representatives of core user group pundits, #DLD Twitter activity among top 10 users across five categories, April 19–August 10, 2010.

⁶ Translations from Norwegian are by the author.

A second group of core users—represented by *MartinBekkelund* and *abrenna*—can be described as *pundits*. They showed user patterns similar to the activists, but they stood out with a higher percentage of retweets received (see Figure 4). That is, more of their #DLD messages ended up in wider circulation. Like the activists, the pundits opposed the directive. However, the pundits described themselves as commentators or writers. Focusing on issues of technology and new media, they tweeted about a wider range of issues than the activists. The pundits also displayed a more explicit professional interest in their Twitter activity—that is, related to their status as independent commentators, entrepreneurs, or consultants. Also, compared to most of the activists, the pundits have more followers. Though a simple follower count should not be seen as measure of impact (Kwak et al., 2010; Romero et al., 2010), it can partially explain their success in getting more retweets.

More consistently than the activists, the pundits tended to use Twitter to draw attention to opinions or events elsewhere on the Web. For instance, during April, one of the core pundits wrote a post on his blog titled “How to evade the Data Retention Directive” and another post summing up the debate so far, urging members of Parliament to put their ears to the ground.⁷ He tweeted about both posts, including links, and was widely retweeted.

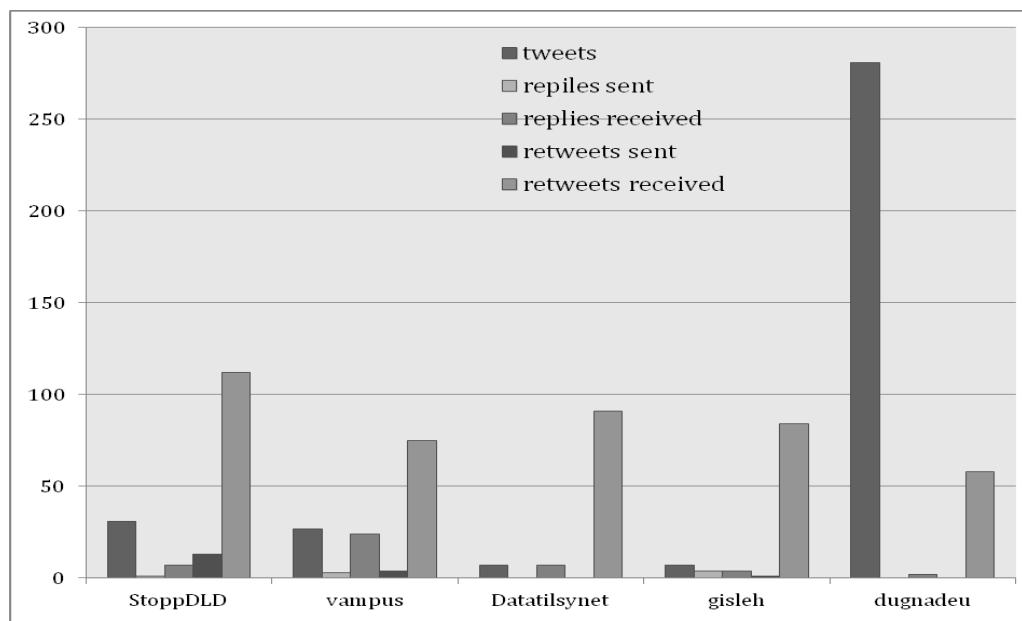


Figure 5. Representatives of core user group resources, #DLD Twitter activity among top 10 users across five categories, April 19–August 10, 2010.

⁷ *Slik omgår du Datalagringsdirektivet* [How to evade the Data Retention Directive]. Retrieved from <http://www.bekkelund.net/2010/04/14/slik-omgar-du-datalagringsdirektivet>. And *Fingeren i datalagringsjorda* [Put the ear to the data retention ground]. Retrieved from <http://www.bekkelund.net/2010/04/21/fingeren-i-datalagringsjorda>

A third group, also consisting of opponents of the directive, can be described as *resources*. This label is fitting for users like *StoppDLD* (civil society group), *vampus* (politically conservative A-list blogger), *Datatilsynet* (the Norwegian Data Inspectorate), and *gisleh* (academic). As Figure 5 shows, the resources received a high number of retweets compared to their own messaging. That means that their relatively few tweets were widely redistributed by other users. They also had a relatively high number of followers: all had more than 1,000, and *vampus* had as many as 4,500, the highest number of followers among the core users. Measured by followers and the relative amount of retweets, then, the resources were popular and acted as authoritative sources or even agenda setters.

One instance where we see this mechanism in action is in the early morning of May 26. *Datatilsynet* posted a message alerting followers to an op-ed by the Inspectorate in the day's edition of a national newspaper. In the following few hours, the message, which also linked to the article, was retweeted and commented on nearly 50 times, constituting a peak in the time line (see Figure 2). Not only was the Inspectorate successful in drawing attention to its message, but the op-ed article dominated that morning's #DLD Twitter activity and set the agenda for the day. *dugnadeu* (the account of a now-defunct group blog) is an example of a less successful resource: on average, only about one in five of its frequent tweets of links to DLD-relevant blog posts and news reports were retweeted.

These three groups of users—activists, pundits, and resources—were all vigorously protesting the directive. Together, they represented the majority among core users, and their viewpoints colored the general impression of public communication about the directive on Twitter during the period. The remaining core users either had a less explicit stand on the issue or belong to the small minority of supporters.

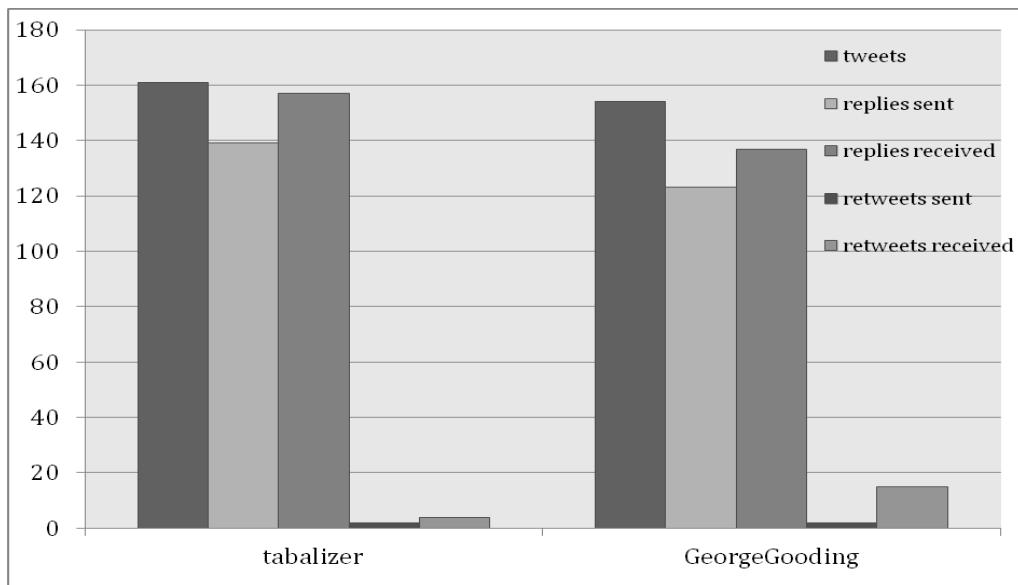


Figure 6. Representatives of core user group conversationists, #DLD Twitter activity among top 10 users across five categories, April 19–August 10, 2010.

The fourth group—represented in Figure 6 by *tabalizer* and *GeorgeGooding*—stands out with a very high percentage of replies and can be labeled *conversationists*. They have a few hundred followers. Almost all their #DLD messages were addressed to another user, and they also received a high number of replies. As such, these users were not so much involved in the dissemination of information but more clearly took part in dialogue. The conversationists seem to problematize arguments from both sides in the debate, often resulting in quite specific discussions—for example, about characteristics with mobile phone technology or the legal status of certain terms.

These users came across as knowledgeable and appreciative of lively debate. On May 21, for instance, one of the most active conversationists sent a recommendation of who to follow using the hashtag "#ffnor," meaning "follow Friday Norway."⁸ He listed core activists and pundits along with fellow conversationists: "#ffnor to the 5. estate and #dld-mob general @jonwesselass #dld-quarreler @abrenna @voxpulolinor & the #dld-ambivalent @GeorgeGooding et al." During the period under study, core activists, pundits, and conversationists exchanged several such acknowledgments, often with a sting of humor, showing appreciation for stimulating exchanges of opinions.

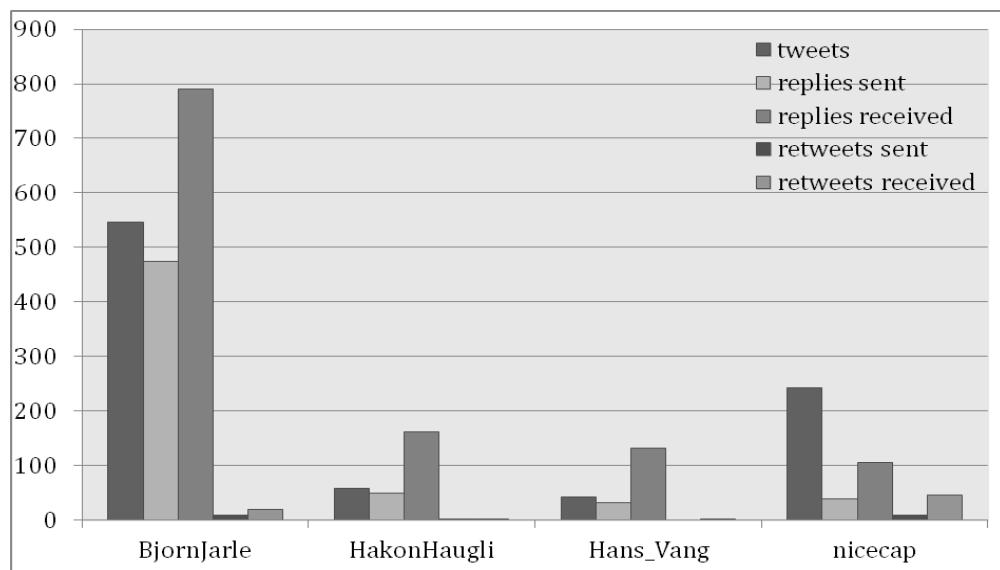


Figure 7. Representatives of core user group conformists, #DLD Twitter activity among top 10 users across five categories, April 19–August 10, 2010.

⁸ "Follow Friday" is a label and hashtag used to recommend Twitter users to follow.

A final group of users can be labeled *conformists*, represented by *BjornJarle*, *HakonHaugli*, and *Hans_Vang*. Their #DLD tweeting was characterized by a disproportionately high number of replies received—much higher than their own reply sending (see Figure 7). In other words, a lot of other users addressed #DLD messages to them. The conformists belong to the clear minority on Twitter that defended the directive. The high number of received replies can be explained by opponents addressing these relatively few supporters with critical questions. Two presented themselves as politicians (both representing the Labour Party), while a third described himself as a police attorney.

One example of conformists' activity occurred in the afternoon of July 26. A Labour Party representative composed two subsequent tweets claiming a new EU report showed that the directive is necessary and that the Labour Party's proposal for implementation is the best way forward. He was immediately prompted by a core activist in a reply message for a link to the report. The following hour saw a sudden rise in activity, as several users—core activists featuring prominently—disputed the conformist's interpretation of the report and his arguments. In this exchange of opinions, both sides offered links to background data as well as to cases and testimonies from different countries.

The last user from the core user pool, shown at the far right of Figure 7, stands out. *nicecap* is a high-profile Twitter user, writing on a range of everyday issues as well as commenting on political topics. He came across as cautiously positive to the directive. As such, *nicecap* can be grouped with the conformists. However, to a larger extent than the other core users, *nicecap* used satire and self-irony in his #DLD tweets. For instance, replying to another user, he wrote: "Seem to have forgotten to have an opinion about #dld tonight. Will have to have one tomorrow, then." Later, he provided a link to a mainstream online news site's report on a survey revealing that only a minority of Norwegians' opposed the directive and added: "The involvement of the Twitterati [i.e., Twitter elite] seems unbeknownst to the public :)." Such meta-comments made this user stand out, even though he frequently stated arguments for the directive (which tended to be retweeted by key conformists) and invited dialogue with problematizations like the conversationists did.

The identification of these five groups among the pool of core #DLD tweeters—activists, pundits, resources, conversationists, and conformists—and their key characteristics bring light to the diverse functions tweeting can have for different users' participation. The question is what this categorization of core users and their activity tell us about Twitter as an emerging arena for public debate.

The Limits of Democratization

Communication technologies can be seen as the infrastructure of the public sphere.⁹ To different extents, they should provide channels for dissemination of information from the centers of power to the periphery, work as arenas for discussions among small and larger groups of citizens, and constitute outlets for communicating public opinion back to the authorities. This normative ideal can be specified and

⁹ I build here on the tradition of democratic theory often referred to as deliberative, with Jürgen Habermas ranking as the most cited representative (e.g., Habermas, 2006). For a recent discussion of the concept of the public sphere, see Gripsrud et al. (Eds), 2010.

operationalized in different ways. Depending on analytical foci, criteria such as popular inclusion, deliberativeness, equality and reciprocity, openness, and civility and closure can be highlighted (Ferree et al., 2002, p. 306; Peters, 1994, pp. 46–47; also Michailidou et al., 2010). To discuss the performance of Twitter as an arena for public debate, I here concentrate on two aspects: participation—that is, the extent of inclusion of novel perspectives from a wide range of actors—and cohesion or lack thereof—the tendency to contribute to a fragmentation of the public.

Despite much media attention combined with seemingly high numbers of users and its position as the successor of blogs as a democratizing online tool, Twitter remains a marginal service. U.S. statistics reported that 8% of adult Internet users were Twitter users by late 2010, and 14% of 18- to 29-year-old Internet users were Twitter users (Smith & Rainie, 2010). The numbers elsewhere are lower. A recent survey found that only 3% of Germans older than 14 years of age are Twitter users (Busemann & Gscheidle, 2010). Importantly, almost two-thirds of those older than 14 never tweeted. Data from Norway suggest that 6% of the population older than 15 years used Twitter on a weekly basis during the second quarter of 2010 (TNS Gallup, 2010). By contrast, 69% of Norwegians had access to a print newspaper subscription in 2010, 82% watched television daily (Medienorge/SSB, 2011), and over 60% used Facebook weekly (TNS Gallup, 2010). Compared to other channels, Twitter appears as a quantitatively minor arena for mediated public debate. At the outset, then, we are confronted with early adopters or advanced users. The interesting question is whether these users belong to groups that already have ample access to arenas for public debate or whether Twitter appears as a possibility for wider participation of new voices—that is, whether the elite that constitute core Twitter users is the same as or different from offline elites (e.g., Breindl & Gustafsson, 2010).

In this case study, it is hard to argue that a substantially different compiled grouping emerges: the core users share key characteristics such as high education and professional, political, or social statuses held offline. They identify themselves as having expert knowledge of ICTs and/or juridical issues and, to a certain degree, act as public figures in mainstream media as well. It is also worth noting that in the pool of 23 core users, only two are women. Some of the users, mainly those labeled pundits and resources, do—as the labels signal—build on their existing positions as authorities or opinion leaders outside of Twitter. The only weighty, sole exception in the pool of core users is *nicecap*. This user is neither a politician nor representing a public authority. Rather, as portrayed in mainstream media, he is an unemployed economist, a recovering alcoholic who has lived on welfare for over a decade, and has used Twitter to gain a position as a public commentator in Norway (Mosveen, 2010; Skybakmoen, 2010). His #DLD tweeting is hard to categorize. *nicecap*'s ability to get heard seems independent of his standing offline—or perhaps it is amplified precisely by his role as a novel participant.

This instance notwithstanding, the overall impression of the composition of core users debating the directive on Twitter in Norway is one of well-known features, as also found in other studies of online communication (e.g., Hindman, 2009; Larsson & Moe, 2011; Tumasjan et al., 2010). As such, Twitter fails to meet the criteria of participation (e.g., Michailidou et al., 2010): although the threshold for taking the role of a public speaker is low, in practice, participation is to an overwhelming degree limited to recognizable elite groups. This is not least illustrated by the power law-like distribution of user activity found in the present case, where a small minority of users constitutes the vast majority of tweeting.

The diversity in patterns of use among the core #DLD tweeters points to the range of aims and motivations behind people's involvement in this form of public communication. Merely counting the number of messages and speakers provides only a cursory understanding. In the present case, mobilization of persons of similar opinion seems to be a key objective for a majority of core users: it is an explicit aim for the group I have labeled activists and also a result of the activity of resources, especially organizations such as *Datatilsynet* and *StoppDLD*. This is Twitter used as broadcasting, as primarily one-way spreading of information to as many recipients as possible.

Reciprocal modes of communication are, however, also clearly important. It appears as the key mode for the conversationists. In addition, as I have shown, there was discussion between those opposed to and those in favor of the directive. At several instances, the most persistent activists engaged in debate with profiled conformists, which signals a willingness for some kind of communication between those who oppose and those who support the directive. To the extent that such direct exchange of opinions between adversaries takes place, it represents the utilization of a positive potential with Web arenas: the facilitation of mediated, public one-to-one and many-to-many communication. Moreover, involvement between opposing camps would lessen the fear of the fragmenting force of online media. In this regard, the actual meetings between segments of the public are what separate a healthy public sphere from a fragmenting one in risk of political polarization (Peters, 1999/2008; Sunstein, 2007). Other studies of political Twitter use have found communication between adversaries to merely aim at sabotage or spamming (e.g., Conover et al., 2011). In contrast, in the present case, Twitter comes across as an arena where actual meetings between adversaries with exchanges of opinions can take place—a key criterion for the social cohesive functions of the public sphere.

Quantitatively, the two camps—those for and those against the directive—are not on equal terms. The supporters comprise a small minority. Yet, in Parliament, the reverse is true. On Twitter, Labour politicians and other supporters appear as dissidents, but they are conformists offline, as they represent not only the majority in Parliament but also the authority. As such, in this case, Twitter serves as an alternative arena for public debate—one that lets the opposition mobilize, develop and test arguments, and engage in direct discussion with the ruling representatives. Herein lies a more general point.

The public sphere can fruitfully be separated into different parts based on proximity to the political centers of power. Different metaphors can be used, the most well known being "weak" and "strong," as introduced by Fraser (1992). If Parliament represents the strong part, then Twitter clearly constitutes a weak sphere. This is important to emphasize for two reasons. First, it means that, even though the Labour Party representatives appear as dissidents on Twitter, they belong to the majority in the public sphere. The direct impact of the opposition against the directive on Twitter, then, should not be exaggerated. It only has consequences for policy making if supporters with access to strong parts of the public sphere are mobilized to change their stand. The way to efficiently drive such opinion formation is obviously through the use of larger arenas for public debate—which remain constituted by mainstream media. Thus, the relations between the small-scale arena of Twitter and other parts of the public sphere constitute a key task for research.

A mapping of the blogosphere constituted by discussion of the directive in Norway can provide some preliminary insights (Moe, 2011). While the users described above as key activists and resources also appeared as important nodes in the blog network around the directive, other core Twitter users were absent. One finding from the analysis of political blogs concerns the role of those representing the political parties of the coalition government: while those participating in the DLD debate on Twitter are represented by lower-ranking representatives involved in local or regional politics, the blogging platform saw the presence of leading political figures—especially from the Socialist Left Party, including members of Parliament as well as a secretary of state. On the one hand, this could illustrate how activists utilize all arenas available to them and seek to build a concerted presence across different media. On the other hand, it could signal that prominent politicians still perceive Twitter as a minor arena, as a weak part of the public sphere. Or it could signal a casual or even incidental approach to different online tools for political communication among established political actors.

Conclusion

The starting point for this article was an acknowledgment that communication researchers tend to show an interest in new technologies' impact on the public sphere. Such an interest is crucial if we aim to understand the workings of political communication and democracy in our time. However, rather than plunging headlong into yet another tool with the potential of enhancing the infrastructure of the public sphere, we need critical empirical analyses. These, I have argued, should reach beyond Anglo-American settings and examine how tools such as Twitter are employed in other contexts.

To this aim, the article has presented a case study of who uses Twitter as an arena for public debate about a pertinent political issue in Norway—and how different core users assume different roles in their tweeting. By sorting core users into five groups, I have discussed how motives and content can impact patterns of use. This discussion is of value as we try to grasp the use of Twitter in other contexts—for instance, the dynamics between heavy users in everyday political debate and the mobilization of a wider range of users that seems to occur in the run-up to important political events such as elections. Working with a set of core user groups may facilitate a better understanding of different modes of communication in such cases.

In sum, in the case of the Data Retention Directive in Norway, Twitter can be described as an arena for public debate for a small group of almost exclusively male experts, predominately representing a minority view on the issue. These core users employed Twitter to mobilize and to engage in direct discussions with adversaries. Little evidence was found of new participants getting heard in public debate, and there were no weighty signs of fragmentation. The result is a democratizing infrastructural tool for the public sphere, but one with—thus far—limited direct implications. The interesting remaining questions, which warrant further research, are precisely to what extent and how the political communication on Twitter flows into other arenas, including mainstream off- and online media, and to what extent it affects political outcomes.

When looking further into these issues, we are well served by innovative approaches to data collection that employ computer-assisted methods. The range of analyses that can come out of such

approaches promises to open new avenues for communication research. Crucially, we should be careful not to oversell the possibilities of large-scale data sets or underestimate their pitfalls. The present study has employed a large-scale data set not only to get an overview of the phenomenon at hand but also as an entry point for further exploration. Such combinations of quantitative mappings and qualitative scrutiny seem to be a fruitful way forward. The possibilities of social network analysis for mapping links between different users represent one specific option, as it can help us grasp the impact of different users in more detail. Importantly, though, when utilizing these new possibilities, we need to keep our contextual awareness—historical as well as political and social—front and center. Only then are we able to grasp the workings, and importance, of new parts of the infrastructure of the public sphere.

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