Campaigning on Twitter: Microblogging and Online Social Networking as Campaign Tools in the 2010 General Elections in the Netherlands

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The present study focuses on how candidates in the Dutch general elections of 2010 use Twitter, a popular microblogging and social networking service. Specifically the study focuses on explaining why some candidates are more likely to adopt Twitter, have larger networks, and show more reciprocation than other candidates. The innovation hypothesis, predicting that candidates from less established and smaller parties will use Twitter more extensively, is unsupported. This suggests that normalization of campaign practices is present on Twitter, not changing existing communication practices. The findings do show that being an early adopter of these new technologies is more effective than adoption shortly before Election Day.

Key words: microblogging, election campaign, online social networking, political communication.

Introduction

In many Western countries national politics increasingly suffers from declining interest and declining participation in the political processes (Flickinger & Studlar, 2007; Gray & Caul, 2000). Thus it becomes a challenge for politicians to reduce this growing gap between citizens and politics. E-campaigning, in particular creating more visibility and interactivity between politicians and citizens, might be able to increase the mobilization of people into political involvement, in turn reducing the gap between politics and citizens. This study focuses on candidates' use of Twitter as a microblogging and social networking tool during the Dutch 2010 general elections. It describes how candidates use Twitter and aims to find explanations for differences by using party and candidate characteristics.

The Internet as a Campaigning Tool

From the moment it became popular among the general public in the late 1990s, the Internet, in particular the Web, has been viewed as a means to try to reverse the decline in political participation. Parties and candidates do indeed increasingly use Web sites to communicate and connect to the electorate (Kluver, Jankowski, Foot, & Schneider, 2007). The use of websites coincides with the emergence of a new campaign strategy at the end of the last century (cf. Norris, 2000; Gibson & Römmele, 2001) called the professional campaign. With the rise of individualization and modernization in society and

declining political involvement and interest in politics, parties are searching for new options to reach voters by using the Internet and applying a marketing approach to target specific groups of people.

Even though studies on Web campaigning are numerous, many online campaigns analyzed are Web 1.0 campaigns (cf. Kluver, Jankowski, Foot & Schneider, 2007; Norris, 2001, 2003; Tedesco, 2004). The concept of Web 1.0 indicates that Web sites are predominantly hierarchical and disseminating, from the politician and party directly to the citizens, using standard technology (predominantly html). The benefits of Web 1.0 in political campaigning have been described by Barber, Mattson, and Peterson (1997) - interactivity, potential for horizontal and lateral communication, nonhierarchical communication, low costs for users, speed of communication, no national or geographical boundaries, freedom from intrusion and monitoring by government. Although these characteristics are valid for Web 1.0, research shows that most options are still underutilized, and that most political websites are used in ways similar to traditional mass media, i.e. as one-way communication (Jackson & Lilleker, 2010). Supposed technical limitations and low user-friendliness of Web 1.0 (as compared to Web 2.0) still limits the extensive use by producers and consumers.

The first signs of the rise of more interactive applications in political websites were found in the presidential elections in the US in 2004 (Vaccari, 2008) and the parliament elections in the UK in 2005 (Jackson, 2006). Foot, Schneider, and Dougherty (2007) also found elements of connecting and mobilizing on the political websites during the 2004 US congressional elections. They are optimistic that, due to new technological developments, the use of interactive applications will grow in future elections. However, the overall conclusion that politicians use websites mostly for transmitting information to website visitors (Gulati & Williams 2007; Jackson & Lilleker, 2010) is a disappointing result from a cyber-optimist's perspective.

Frequently new Web applications - in particular the so-called Web 2.0 apps - are considered to increase political participation. Web 2.0 (Chadwick, 2009; Cormode & Krishnamurthy, 2008; O'Reilly, 2005) characterized by technological innovations (e.g. rich user experience, Web as platform; collective intelligence) is facilitating for people to engage directly and interactively with others on the Web, irrespective of actual use. Keywords associated with Web 2.0 are bottom-up approach, sharing of content, online collaborating between people, socializing among people, networking, and user-generated content [UGC]. Nowadays, in professionalized election campaigns, Web 2.0 applications are still considered as providing new opportunities to positively increase dialogue between people. This study will focus on one of the newest and hyped forms of Web 2.0 applications candidate use: Twitter, a microblogging annex Social Networking Site [SNS]. The Netherlands is a worldwide frontrunner in terms of adoption of Twitter adoption (Comscore, 2011) with an adoption rate of 16% in 2010 and 27% in 2011. Already many studies have focused on Twitter in the broader political context from distinct angles, for instance from a content analysis perspective (Zappavigna, 2011), a network perspective (Hsu & Park, 2011) or a political collective action perspective (Segerberg & Bennett, 2011).

Politicians' and candidates' use of Web 2.0

When reviewing the opportunities these new Web 2.0 technologies offer, we see that the architecture of Web 2.0 enables nonexperts to use and to contribute to the Web in a way that was not possible in the Web 1.0 era. This not only potentially closes the gap between politicians and the electorate; it also holds out the promise of closing the digital divide between people in general. As such, it has potential to increase democratization and emancipation, especially for those categories of people caught in disadvantaged positions. With the introduction of Web 2.0, parties, politicians and candidates started to use blogging, social network sites, and sharing sites (Park & Jankowski, 2008; Lilleker & Malagón, 2010). Consequently, the question arises whether this leads to a new campaign style, and if so, how

it differs from the professional campaign style (Gibson & Römmele, 2001). Web 2.0, with popular examples such as Facebook, YouTube, and Twitter, enables politicians to individualize and personalize their campaigning style (Vergeer, Hermans & Sams, forthcoming). By doing so, politicians might try to decrease an existing psychological distance between themselves and the voters (Caprara, Barbaranelli & Zimbardo, 1999).

An important benefit of the Web in general and (micro)blogging in particular is that it gives the party, the politician and candidate greater autonomy, due to more direct and intense communication by circumventing institutionalized and traditional media. Using the Web also enables politicians and candidates to operate individually and relatively autonomously of the party by easily communicating online and on a personal level with people from the general public (among them potential voters), bypassing party channels. It can be argued that some parties (e.g. liberal parties) allow their candidates more autonomy than other parties (i.e. left-wing and conservative). Nevertheless, whether these online activities are beneficial to the party's strategy is unclear. It is very easy for candidates to forget their role as politicians and act as amateurs by debating online without the necessary professional restraint, which already has occasionally led to slips of the tongue causing parties more harm than good (Williamson, 2010).

Innovation, equalization, and normalization

A formalization of prior arguments that can be described as an e-optimist view is summarized in the innovation hypothesis (cf. Schweitzer, 2008) which states that certain characteristics of new media technologies fundamentally change the way politics is brought to the public. Through the Internet information can be transmitted rapidly to people, without interference of traditional media (Bimber & Davis, 2003). As such, it offers more options for direct and interactive communication with citizens (Cornfield, 2004) and finally, individuals can select and filter information, based on their own interest, from political websites that can provide more and advanced—tailor-made information (Kaid, 2006). Whether the option of tailoring news provision to people's interests is always a good thing is subject to discussion since it also implies the avoidance of information which might be important to them. It differs from the offline patterns of electioneering, and offers opportunities to revitalize rational ideals on democratic discourse. Contrary to this positive view on new media in political campaigning is the normalization hypothesis (Margolis, Resnick & Wolfe, 1999): E-campaigning reinforces existing power relations and maintains the political status quo. Political e-campaigning merely replicates offline political campaigning; it reinforces old patterns, turning online campaigning into business-as-usual. The present state of research is not yet fully clear about which is usually the case, although normalization tends to prevail.

Our study will contribute to the discussion of the benefits of using the Internet for political campaigning purposes by looking at candidates' use of one of the newest (at the time of the 2010 election) and most hyped services for microblogging and online social networking on the Internet, Twitter. We will focus specifically on the following research question:

A. To what degree are party and candidate characteristics related to microblogging and social networking on the microblogging platform?

We will answer this question using data from the case of the general elections of 9 June 2010 in the Netherlands. Before turning to the hypotheses we briefly describe the nature of the dependent variables.

The meaning of Twitter activities: Adoption, microblogging activity and online social networking

We aim to explain the variation in a number of Twitter concepts that refer to communicating and networking. First we will look at how to explain whether or not candidates have adopted Twitter as a campaign tool. Subsequently we will focus on communication behavior, i.e. sending out tweets. Furthermore we will look at the networking activities: i.e. the number of people following the candidate, the number of people followed by the candidate, and the number of reciprocal relations. Regarding the number of followers of the candidate, the initiative to increase this lies first and foremost with members of the population, not with the candidate, although the candidate may actively solicit new followers. As such the *number of followers of the candidate* indicates the relative popularity. There is little research on people's motives for tracking politicians on Twitter. Parmelee and Bichard show that motives for following politicians on Twitter are social utility, entertainment self-expression, information guidance and convenience (p.46-47, 2012). Those people that followed elected politicians - as opposed to following various political leaders - are less motivated by social utility, entertainment and self-expression (p.50-51, 2012). The *number of people followed by the candidate* (dubbed "following" by Twitter.com) indicates the extent to which the candidate wants to be informed about people's status updates. As such it gives an idea of the extent that Twitter serves as an online source of information for the candidate. The more the candidate follows others on Twitter indicates that the candidate has more need for or interest in information from other people, while those with a smaller following network are more inward looking or have other external sources of information and news. Other interpretations why candidates follow others may be possible as well. One such interpretation is by following others the candidate indicates his presence on Twitter, maybe hoping that the other person will decide to follow the candidate in turn. The *number of reciprocal relations* on Twitter refers to the extent to which there is a successful two-way relation, indicating mutuality or commonality (McPherson, Smith-Lovin, & Cook, 2001).

Hypotheses

In this section we will develop arguments as to why candidates from different parties use microblogging annex SNS as a campaign tool. Here, we distinguish between the simple adoption of Twitter and the activities candidates conduct on Twitter, as well as their Twitter popularity as indicated by their number of followers. Even though the adoption and use of microblogging and online social networking might seem an individual undertaking, parties may have policies or even instruct on how to campaign with social media. Therefore, we will look at party characteristics as well as candidate characteristics.

Establishment

Parties that were founded a long time ago, as well as governing or ruling parties, are viewed as being part of the establishment. These established parties, measured by party age and (relative) electoral success in the past, appeal to a significant portion of the electorate, at least enough to secure some basic and continued presence in parliament. In general, leading politicians from these established parties receive a fair amount of attention from the traditional media (television, newspaper and radio), at least more than those of new and small parties (cf. Scholten & Ruigrok, 2006). Because of the limited space available in traditional media (as measured by time and square inches), the overrepresentation of established parties leaves new and small parties in a position of disadvantage. Since the Web solves this scarcity by providing virtually limitless space, new or less successful parties can use the Web as additional and

alternative channels to increase visibility. Furthermore, restrictions in terms of finance, time, and space imposed by third parties (i.e. publishers and broadcasters) do not apply as much in the Internet age.

The use of Web 2.0 requires fewer technical skills than Web 1.0, is easy to use on fixed and mobile devices, and the costs of implementation and use are low. As such it enables candidates from disadvantaged parties (e.g. those with few financial resources, knowledge and manpower) with better opportunities to create more online visibility. New and smaller, fringe parties consist of candidates whose daily activities not only involve politics but often also those to do with keeping a regular job. Therefore, the added value of Twitter for smaller, less professionally organized parties and candidates might prove to be greater than for the more well-established parties and candidates. As such, microblogging specifically is believed to have the potential to overturn existing differences in general party and candidate visibility by empowering the disadvantaged (cf. innovation hypothesis). Whether in time this will result in an equalizing effect, i.e. changing the existing power structures is yet unclear, even though some state that Obama's 2008 campaign's extensive utilization of Facebook is a perfect showcase (Greengard, 2009; Stirland, 2008). However, previous research does not show clearly that less established parties benefit from the utilization of new media. According to Gibson and Ward (2009), larger parties in parliament offer more sophisticated online campaigns than other parties. Exceptions are Green parties and far-right parties, which exploit new technology extensively. Chen (2010) found that opposition parties use the Internet more often than incumbent parties. Contrary to the innovation hypothesis, the normalization hypothesis (Margolis et al., 1999) states that the power distribution online is merely a replication of the offline power distribution. Larger and older parties might still have the upper hand because they have the advantage of a strategic department dealing with publicity issues continuously, and having professional politicians whose daily business is politics, as well as having more political experience. These arguments imply that established parties use new media technology more effectively than new parties.

Still, because Twitter at the time of the 2010 elections was one of the newest Internet applications and quickly became popular among politicians, we tested whether the innovation hypothesis holds for Twitter. Thus, the following hypothesis was formulated:

> Hypothesis 1) Candidates from parties that do not belong to the establishment have adopted Twitter more frequently and microblog more frequently than candidates from parties that belong to the establishment.

Ideology

Ideology refers to ideas about how society should be organized, what societal goals should be achieved and how to accomplish these. As such the ideological position may reflect how new media are utilized in electoral campaigning. Keman (2007) argues that, in addition to the left versus right positioning of parties, another dimension is relevant - progressive versus conservative. Van Kersbergen and Krouwel (2008) identified both dimensions within the Dutch political system. Regarding social v. liberal, socialist parties are more focused on a cohesive and supportive society, caring for weaker and disadvantaged groups in society. These characteristics might explain why Sudulich (2009), who studied e-campaigning of 33 European political parties, concluded that left-wing parties in several European countries used more interactive applications on their websites and therefore might also use microblogging more extensively to connect to and engage with the electorate. Alternatively, the more left-wing political parties promote collective action whereas more liberal thought propagates individual freedom. Applying this argument to electoral campaigning, one would expect that candidates from left-wing parties would conduct the campaign as a party collective and not individually.

On the other hand, liberal parties appear to be early adopters of the use of the Internet in their campaign strategy (Copsey, 2003), particularly the interactive applications (Jackson & Lilleker, 2009). Because of their liberal attitude they might allow their candidates to design their campaign more freely and in a more individualized way. Allowing candidates to use Twitter provides candidates with more freedom, less party control over how candidates conduct online activities in their campaign. Furthermore, Gibson and Römmele (2001) suggest that right-wing parties are more willing to use a more business-like, professional campaigning approach, an approach disliked by left-wing parties. Previous research shows that in the Dutch European Parliament elections of 2009 the progressive-liberal party D66 used Twitter most extensively (Vergeer, Hermans & Sams, forthcoming); the Democrats in the US used Facebook during the elections for the House of Representatives in 2006 and 2008 more extensively than did the Republicans (Gulati & Williams,). Also, the more left-wing elected candidates for EP were, the more they used informing website features in their campaign websites (Vergeer, Hermans & Cunha, forthcoming). Because the findings regarding whether candidates from left-wing and progressive or right-wing and conservative parties are more likely to adopt and use microblogging are still inconclusive, we pose the following research question:

RQ 1 To what degree is ideology related to candidates' adoption and microblogging activity?

Intraparty competition
Not only parties as a whole can utilize the Web for increased visibility and better connectedness with voters, candidates can do this too. Particularly candidates that are ranked lower on the party list (i.e. the least likely to be elected to parliament) might benefit from using the Web for their personal campaign. In the Dutch electoral system, political parties prioritize their candidates from high to low. Normally candidates are elected for parliament according to the party's priority. However, each voter can cast a preferential vote for a specific candidate. If this candidate receives enough preferential votes he or she will be elected to parliament, even though other candidates were given a higher priority by the party. Two major factors, apart from the party program, increase the likelihood for candidate to be elected: (1) the total number of votes the party receives, and (2) the number of preferential votes a candidate receives. If Web 2.0 is designed to be bottom-up, facilitating user generated content and creating a more level-playing field for all parties and candidates, Twitter should particularly be beneficial to disadvantaged (i.e. lower ranked) candidates due to a lack of visibility and thus are the least likely ones to be elected. As such, personalized campaigning can be aimed at generating more preferential votes and increasing intraparty competition between candidates. The question whether lower prioritized candidates indeed use Twitter more than higher prioritized candidates leads us to formulate the following hypothesis:

Hypothesis 2) The less priority the party has given a candidate, the more likely this candidate adopts and uses Twitter more actively.

Internal and external shock
Gibson and Römmele (2001) suggest that a major party event, such as the change of a party leader (internal shock) or a massive loss in elections (external shock), could affect a party's campaign strategy. To try to overcome this in upcoming elections, a new campaign strategy might be deployed, for instance, a new Web campaign strategy utilizing new media technology such as Twitter. This should be

measurable by a higher adoption rate of Twitter and increased activity of microblogging and/or online social networking. The hypotheses therefore are:

Hypothesis 3) The more seats a party has lost in the last general elections (external shock), the more likely it is that its candidates use Twitter;

Hypothesis 4) Candidates from political parties with uncertain leadership (internal shock) will use microblogging more extensively.

Control variables

Research shows that there are gender differences in the use of social network media, indicating that women are more likely to use social network sites (Hargittai, 2007). However, women also show fewer of the general Internet skills that and perform fewer capital enhancing activities (Hargittai & Hinnant, 2008). Furthermore, research on social media and mobile phone use suggests that women use new media technology more sociably than men do (Ran & Lo, 2006; Pujazon-Zazik & Park, 2010). On the other hand, men apparently use Twitter more extensively for finding breaking news and political news (Abraham, Mörn & Vollman, 2010). Because these findings on the role of gender in its relation to use of microblogging are somewhat contradictory, the research question is as follows:

RQ 2 To what extent is the candidate's gender related to the adoption of Twitter, microblogging and networking activities?

Age is considered an important factor for predicting the level of adoption of new technology. Several studies have established people from older age groups are less likely to adopt new (media) technology such as the Internet or mobile phones at an early stage (Rice & Katz, 2003; Rojas & Puig-i-Abril, 2009). As for online networking, assuming that Twitter networks are similar to general social networks, the followers of a candidate will show similar characteristics to those of the candidate. This implies that if the candidate is older its target group is older as well. This group most likely will show a low adoption rate of Twitter. This would consequently limit the follower network size of older candidates.

Hypothesis 5) The older a candidate is, the less likely he or she will adopt Twitter, and the less likely the candidate will use Twitter actively.

We also statistically controlled for how long candidates were already signed up to Twitter, assuming that those already having a longtime subscription have more experience and a larger online social network. This relation most likely is stronger for the network sizes, than for the microblogging activity.

Method

Sample

The names of all candidates of 18 political parties participating in the Dutch general elections as well as the ranking of the candidate on the party list and the number of votes he or she received were obtained from the Electoral Council (www.kiesraad.nl). This resulted in a list of 682 candidates, representing all 18 parties running for 150 seats in parliament. Subsequently, by using various online sources (i.e. search engines, personal Web pages, political party Web pages), candidates who used Twitter prior to the

elections were identified, resulting in 220 candidates using Twitter. Twitter data were downloaded on 10 June 10 2010 from www.twitter.com using Twitter's Application Programming Interface (API). The API grants access to Twitter's database and obtain detailed information on users, their characteristics and activities on Twitter (cf. Sams, Lim & Park, 2011).

Measurements

The adoption of a microblogging site was measured by determining whether candidates subscribed to Twitter or not. *Microblogging activity* was measured by counting the total number of messages a candidate posted in the period from the official start of the campaign (May 1st, 2010) and up to and including Election Day (June 9th, 2010).

Network characteristics We distinguish a number of network characteristics. The *number of followers*[1] is the network size of people following the candidate while the *number of following* is the network size of people followed by the candidate. *Reciprocal following* is the number of following relations that are mutual between candidate and people.

Establishment[2]. The degree to which parties are established was measured using the *age of the party (in years)*, measured by subtracting the year the party started using the party name from the year 2010. The date of formation was determined by the first appearance of a party under that specific name, excluding the years when parties were known under a different name. *Ideology* was measured using data from the www.kieskompas.nl which classified parties on a number of statements in the context of the 2010 general elections. Although Keman (2007) assumes two ideological dimensions in the Netherlands—left versus right-wing and conservative versus progressive—these correlate positively. During the screening of the data it turned out that simultaneous inclusion of two separate dimensions led to multicollinearity (VIF > 10 Cohen, Cohen, West & Aiken, 2002). Therefore, the two separate dimensions were collapsed into a single one: left-progressive versus right-conservative (Cronbach's α = .92).

Internal and external shocks Internal shock was indicated by parties having uncertainties about leadership. The social-democrats (PvdA) and the Socialist Party (SP) had a change of leadership only a few months before the elections, and the Christian Democrats, whose leader Balkenende was Prime Minister for 8 years, were not sure their leader should continue leadership (0 = no internal shock, 1 = internal shock). External (electoral) shock was measured by the *relative change* in number of seats in parliament a party obtained in 2006 as compared to 2003.

Candidate characteristics The *prioritization of the candidates* by the political parties themselves measures the likelihood of a candidate being elected. The higher the candidate is ranked (indicated by a lower number), the more likely the candidate is to be elected. Furthermore *age* and *gender* were determined for all candidates.

Analysis

The strategy for the analysis is first to look at the entire set of candidates to try to explain why candidates subscribe to Twitter. To estimate these effects we use logistic regression analysis (Hosmer, Lemeshow, & Cook, 2000). Because the ideology of some fringe parties was not available, candidates from these parties were excluded from the multivariate analysis. This reduced the sample size from 682 to 520.

Subsequently we focus on the subsample of Twitter users (N = 220). The dependent variables in these analyses (i.e. number of tweets, number of followers, following and reciprocal relations) represent count data (nonnegative integers), therefore Poisson regression would be applicable. However, a Poisson distribution assumes that the mean is equal to the variance. This assumption is not tenable in these
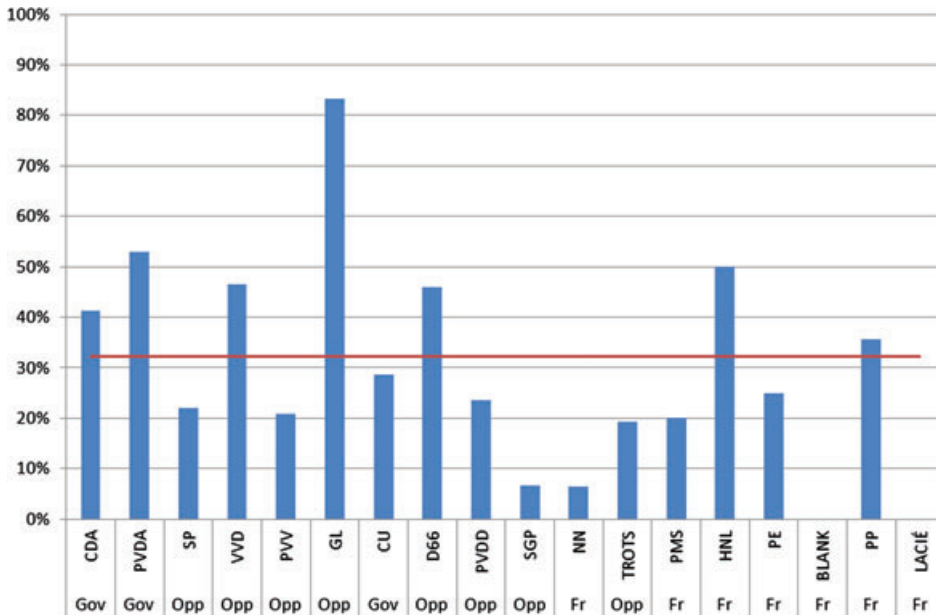
Figure 1 Level of adoption of Twitter by candidates per political party Note: N = 682; Gov = government party, Opp = opposition party, Fr = fringe party. The order of the parties on the x-axis is according the order as determined by the Electoral Council based on the election outcome of the last general elections of 2006. See Appendix A for full names of political parties.

data due to overdispersion of these count data. Therefore we use negative binomial regression analysis which relaxes this equality restraint and estimates the scale-parameter (Hilbe, 2007).

Results

Before turning to the tests of the hypotheses, we will first look at some descriptive analyses of the dependent variables, and the relations between these. Figure 1 shows the level of adoption is 32% on average (horizontal line). There are large differences in adoption levels between the parties: the levels range from 0% for two new fringe parties Blank (i.e. list without a name) and Lacié to 83.3% for the Green Party (abbr. GL). The parties are ordered on the X-axis from left to right according their past (2006) electoral success. From party Nieuw Nederland (abbr. NN) further to the right are parties that have never been elected to parliament before[3].

Reviewing adoption rates along the x-axis, there is no clear pattern as to whether the adoption rate increases or decreases moving from left to right, suggesting that the level of adoption is unrelated to the number of seats in parliament. However, there are some political parties that show higher than average levels of adoption (CDA, PvdA, VVD, GL, D66). What is striking is that candidates from two of the three prominent parties in parliament show less than average adopter rates are considered populist parties, but also historically had strong leaders[4] (leftwing SP (former) party leader Jan Marijnissen and right-wing PVV party leader Geert Wilders). On the one hand, being a populist party would suggest candidates would want to listen and connect to the larger part of the electorate, yet, the low adoption rate suggests otherwise. On the other hand, having strong leaders suggests they want to
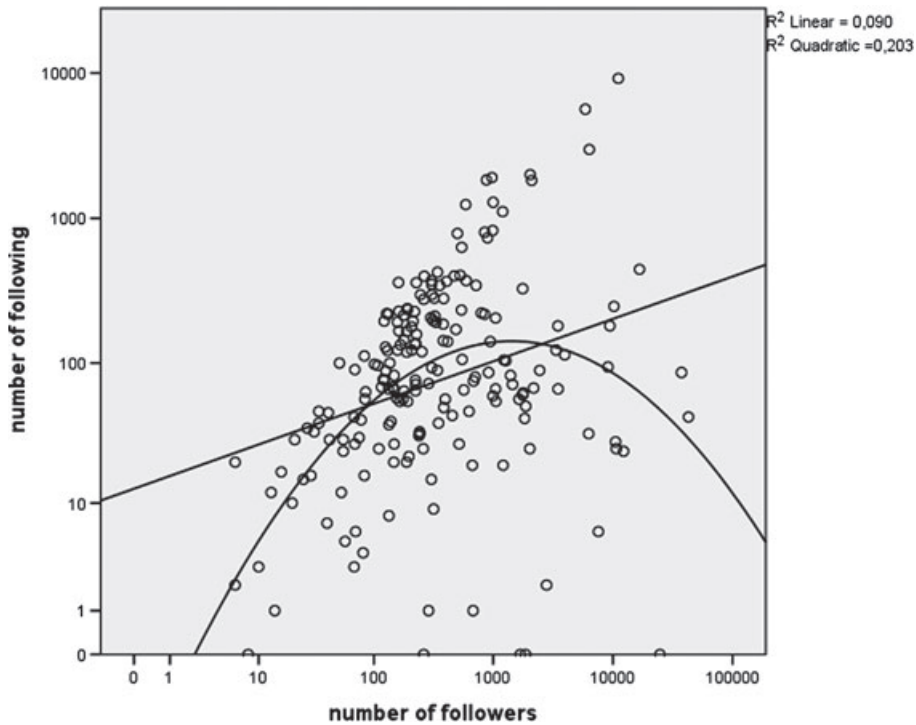
Figure 2 [v]The relation between the number of people followed by the candidate and the number of people following the candidate. Note: linear trend r = .300, curvilinear trend r = .451

control external communication, centralizing it, and to focus on party and specifically party leader communication instead of general candidate communication. This suggests that these parties utilize personalization strategies for all party candidates to a lesser extent (Caprara, Barbaranelli & Zimbardo, 1999) as indicated by the lower adoption rate.

To further understand how the Twitter activities are interrelated we produced Figures 2 to 5. Figure 2 shows that there is a positive relation between the number of people following the candidate and the number of people followed by the candidate. However, at a certain point, saturation occurs: Even though a candidate is followed by more people, the number of people followed by the candidate is not likely to increase to the same extent or even decreases. The rate between the number of followers and following is .56: For each person that is followed by the candidate, the candidate is followed by two persons[5].

According to Figure 3 the number of reciprocal relations lags behind the number of followers (rate = .26: for each four followers one relation is reciprocated). When the number of people following the candidate (followers) is still low, the relation between the number of followers and the number of reciprocated relations is linear: the number of reciprocated relations increases roughly at the same level as the number of followers. However, when candidates have a certain number of followers, the amount of reciprocated relations levels off and subsequently decreases. This suggests that as candidates become more popular, indicated by the number of followers, Twitter becomes less reciprocal and Twitter is used more as traditional mass media instead of a social medium. An interesting observation from Figure 4 is
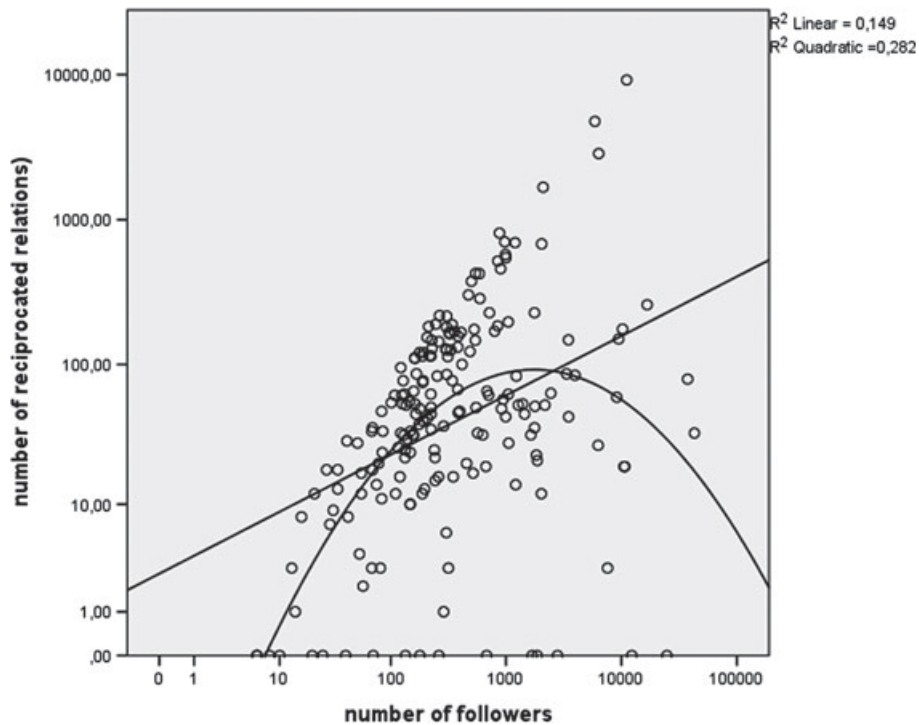
Figure 3 The relation between the number of followers and the number of reciprocated relations. Note: linear trend: r = .386; curvilinear trend r = .531

that some candidates, who have others following them on Twitter, do not themselves follow any others. These candidates are located on the x-axis and use Twitter solely as a mass medium, merely creating a following without following others or even reciprocating.

Figure 4 indicates there is a near perfect relation between the number of people the candidate follows and the number of reciprocated relations. The correlation of .945 indicates that the number of reciprocated relations can be predicted almost perfectly, based on the number of people followed by the candidate, or vice versa. The rate between the number of following and reciprocal relations is .56: For each two people a candidate follows one is reciprocated.

Figure 5 shows that the more followers a candidate has, the more tweets the candidate sent out. The rate is 1.90: For each follower, the candidate sends out two tweets. Whether increased tweeting leads to more followers, or more followers leads to more tweets, or whether that these processes take place simultaneously is not testable with these data. Strikingly, some candidates never tweeted, and yet had quite a large group of followers. These candidates used Twitter solely as a social networking tool rather than a communication tool. These Twitter accounts and those not following others can be considered dormant accounts: called into life at one point, but no longer used actively.

Explaining activities on Twitter

Table 1 and Table 2 present the findings that aim to provide an answer to why candidates from different parties use Twitter in various ways. Table 1 on the adoption of (i.e. subscribing to) Twitter shows that candidates from established (i.e. older) parties are not more or less likely to subscribe to Twitter than
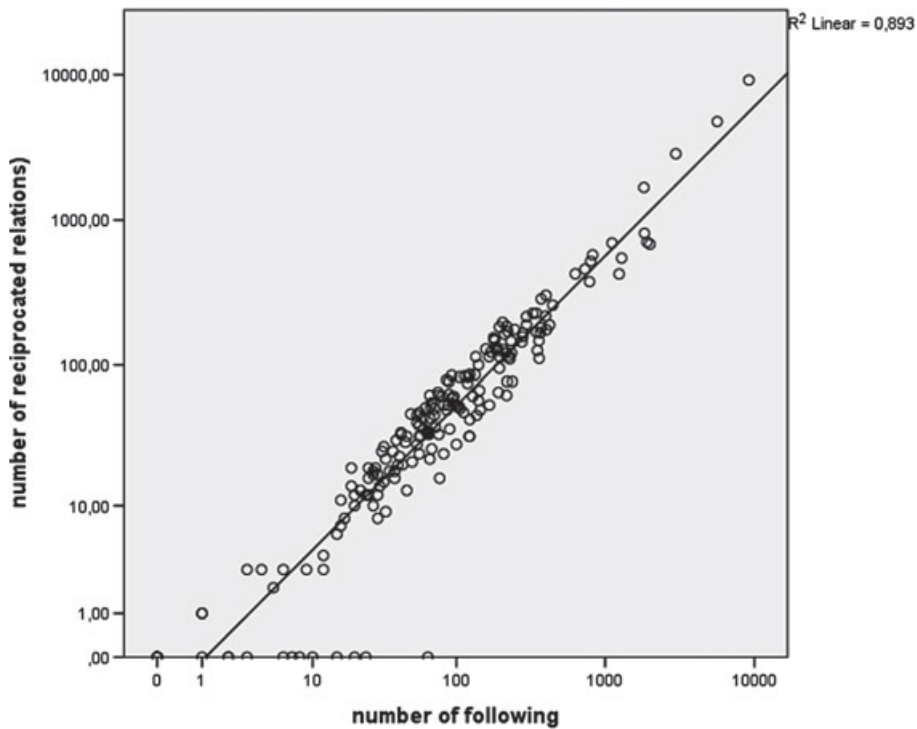
Figure 4 The relation between the number of people the candidate follows on Twitter and the number of reciprocated relations. Note: linear trend: r = .945

Table 1 Logistic regression analysis of subscribing to Twitter on party and candidate characteristics.

	B
Intercept	2.826***
Party age (in years)	−.001
Ideology	−.035
Candidate rank	−.017***
External shock (relative change in seats) Internal shock	−.207***
(leadership uncertainty no = 0, yes = 1)	−.162
Gender (female = 0, male = 1)	.166
Candidate's age (in years)	−.064***

N = 520, Fit measure: ROC = .715,   * p<.05   ** p < .01   *** p < .001

those of younger parties. Party ideology is also unrelated to having adopted Twitter as a campaign tool. As such it appears that whether or not being a member of an established party does not affect the likelihood of subscribing to Twitter.

Candidates from parties that had lost seats in the last general elections of 2006 were more likely to subscribe to Twitter, suggesting they sought new ways to reach out to voters. Also, candidates from the
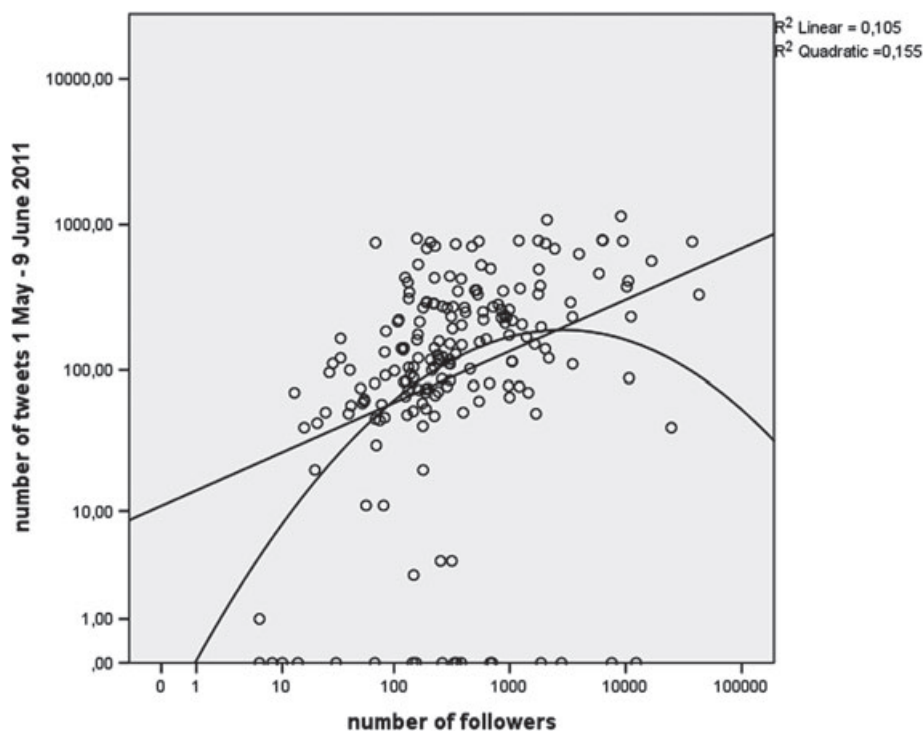
Figure 5 The relation between the number of people followed by the candidate and the number of tweets sent by the candidate. Note: linear trend: r = .324; curvilinear trend r = .394

parties with leadership problems were neither more nor less likely to subscribe to Twitter than those from other parties.

Candidates that were given lower priority by their party (i.e. having higher rank number) are less likely to subscribe to Twitter. Male and female candidates (RQ2) do not differ as to the likelihood of subscribing to Twitter. Older candidates appear less likely to subscribe to Twitter.

In Table 2 negative binomial regression analyses are presented in order to understand which factors explain various activities on Twitter.

Microblogging
Trying to explain why candidates use microblogs seems difficult. Of all the explanations proposed, only the length of the subscription shows a statistical significant effect: The longer the candidate has been signed up, the more the candidate tweeted during the 40-day period prior to Election Day. This suggests that having more experience is reflected in more tweeting activities later in time. All other explanations (party characteristics, personal characteristics) show no significant effects.

Followers
Candidates from older parties have more followers than those from younger parties, suggesting that established parties know best how to utilize new technology to reach out to people, or at least are able to bind an existing offline supporter base utilizing Twitter. Put differently, people know how to

Table 2 Negative binomial regression analysis on key concepts of candidates' use of Twitter.

	Micro-blogging	Followers	Following	Reciprocal
Intercept	5.404***	5.450***	3.959***	3.224***
Party age (in years)	−.004	.020***	.003	.006
Ideology	.049	.068	.002	.015
Candidate rank	−.005	−.056***	.011*	.003
Shock				
External (relative change in seats)	−.050	.104*	−.109*	−.097
Internal (leadership issues no = 0, yes = 1)	−.231	.518*	−.875***	−.796**
Gender (female = 0, male = 1)	.042	.161	−.312	−.376
Candidate's age (in years)	−.008	.014	−.009	−.006
Twitter subscription (in years)	.437**	1.523***	1.020***	1.259***
Log likelihood	−1232	−1285	−1208	1086
Likelihood Ratio χ^2	7.276	154.706	57.657	66.030

N = 220   * p<.05   ** p < .01   *** p < .001

find candidates from older, established parties more easily on Twitter, in part due to the general mass media attention these high profile candidates receive. Ideology is unrelated to the number of followers: Candidates from the left-wing and the more progressive parties do not have significantly more or less followers online than the right-wing and conservative candidates. Candidates ranked higher by their party (lower rank number) have a significantly larger following than those ranked lower. This refutes the idea of intraparty competition in favor of less prioritized candidates competing with higher prioritized candidates for votes. It implies that the party leader and those candidates most likely to be elected to parliament have the most followers on Twitter.

Male candidates do not significantly differ from their female counterparts, regarding their number of followers. Age is unrelated to the number of followers, although there is a slight tendency for older candidates to have a larger following, suggesting that seniority and reputation is important in attracting followers. Candidates from parties with internal leadership issues did have a larger following, perhaps due to the additional media attention these problems created. Furthermore, candidates from parties that gained seats in the last general elections also had a larger following.

Following and reciprocal relations
The regression models for following and reciprocal relations are expected to produce similar results due to the large correlation between the two (r = .945, p<.001). As to the extent the candidate follows others or reciprocates a relation on Twitter, the findings in Table 2 show that party age and ideology are unrelated.

Candidates that had to deal with internal leadership problems followed fewer people on Twitter. Whether these candidates were more occupied resolving these internal party issues than bothering with soliciting people's support using social media is unclear. While the candidates that suffered an internal shock followed fewer people, candidates from parties that had lost seats in the last general elections followed more other people on Twitter. To turn around the downward trend candidates might have decided to utilize new media to communicate with the constituency and seek their support, or those who did win in the last elections became complacent and did not put much effort in retaining the electoral advantage.

Candidates who were given a lower propriety by the party did not follow other people more or less frequently. Male and female candidates are equal as to the number of other people they follow on Twitter. The same holds for age: The older candidates do not follow more or less others than the younger candidates do.

Summarizing the results in terms of the hypotheses, we find that hypothesis 1 on establishment (i.e. party age) receives little support, only for the number of followers. Hypothesis 2, predicting that less prioritized candidates use Twitter more extensively, finds no empirical support. Rather, higher prioritized candidates use Twitter most extensively, indicating there is little to no intraparty competition between candidates. As for ideology (RQ1), there appears to be no significant relation whatsoever with dependent variables. Hypothesis 3 on the external shock of having won or lost in the prior national elections, is supported regarding the adoption of Twitter and for following others. It is not supported regarding microblogging, number of followers, and reciprocal relations. Hypothesis 4 on leadership issues as internal shock shows a significant predicted effect for the number of followers, but a contradictory relation for the numbers of following and reciprocal relations. Hypothesis 5 on the candidate's age is supported for adopting Twitter, but for all other Twitter activities it receives no support. Furthermore, there are no differences between male and female candidates in how they use Twitter (RQ2). Candidates that adopted Twitter at an earlier stage are also the most active in terms of microblogging (tweeting) and online social networking.

Discussion

This study focused on candidates' adoption of micro-blogging and online social networking activities using Twitter for e-campaigning during the general election of 2010 in the Netherlands. In particular, this study focused on whether Twitter as a microblogging and social networking service was able to equalize the political playing field, or whether the use was merely reflective of offline power structures. The findings show that the overall adoption level of Twitter among candidates increased sharply within one year: In the 2010 elections 32% subscribed to Twitter, compared to 12.5% in the 2009 EP elections (Vergeer, Hermans & Sams, forthcoming). Whether the 32% adoption rate constitutes a critical mass to entice the remaining politicians to adopt Twitter is unclear. We also see that ''social'' as in ''social media'' is limited: As candidates become more popular (i.e. have more followers) they tend to follow others or even reciprocate these relations less likely.

As for one key feature of SNSs, i.e. setting up and maintaining online networks, using Twitter at an early stage, long before the election campaign starts, ensures the candidate of a larger network to which to send messages. This is a network that both serves as an audience and also as a re-layer of messages to others through the use of retweeting. Over time, it is more likely these Twitter networks grow, instead of declining. Whereas on Facebook de-friending seems to be a practice, on Twitter this seems less likely for two reasons. First, de-friending by politicians or candidates seems, from a strategic point of view, less likely: Candidates need a large following to create an audience and to gain support. Second, Twitter is more liberal in setting up relations than Facebook: whereas Facebook requires mutual consent to set up a relation, Twitter allows for purely one-directional relations. However, Lewis and West (2009) find that youngsters on Facebook ignore friendship requests rather than explicitly turn them down. This practice of merely ignoring friend requests does not decrease online network sizes, merely slows down its growth.

Microblogging activities seem difficult to explain using the set of predictors in this study. Common attributes used in studies in political communications did not show significant differences, apart from being an early adopter of microblogging as indicated by the Twitter sign-up date. Other factors, such

as psychological traits might play a role in the use of SNS. Previous research by Orchard and Fullwood (2010) suggests that introversion, extraversion, and neuroticism, three of the Big Five personality traits, play a role in the use of Twitter. For instance, previous research suggests that introversion is positively associated to more preference for online computer-mediated communication (CMC), whereas extraverts prefer face-to-face communication. Also, neuroticism seems to be negatively related to online discussions, suggesting that emotionally stable persons - and politicians need to be, or at least are expected to be, stable emotionally - like online discussions.

Even though these factors could play a role in the use of Twitter, studying psychological traits of politicians might be very difficult to organize, requiring a survey among politicians and candidates. It is highly unlikely politicians and candidates would agree to participate in a study to assess their psychological make-up. One of the few studies shows that female politicians can be characterized as being more extravert and open than voters (Caprara, Francescato, Mebane, Sorace & Vecchione, 2010). Alternatively, analyzing the content of their (online) communications, an unobtrusive way of measuring (e.g. lexical tradition of measuring; cf. Wiggings, 2001), might shed more light on their psychological make-up. Still, this is not without problems, because one needs to make sure that the author of the texts is indeed the politician and not, for instance, an assistant. This holds for official documents, but also for the tweets being sent out.

A final remark is that the use of Twitter as a campaign tool is only one of the many tools that are available to candidates. Apart from the traditional channels, such as television, newspapers and radio, candidates can use personal profiles page on the party website or opt for a personal website. As such, Twitter is not and will not be expected to be the single most important communication channel. Yet, it enables candidates to connect very directly on a regular basis to those that for some reason are interested in the candidate. Therefore, to fully understand today's online political campaigning, not only specific modal campaigning is needed (as in this study), also multi-modal research (e.g. websites, Facebook, Hyves) is required.

The implications of these findings from a political perspective are that, even though new campaign instruments such as new media technology may appear, to attribute any changes in the power structure to these tools is very hard. Furthermore, the notions of ''birds of a feather flock together'' (McPherson, Smith-Lovin & Cook, 2001) and ''preaching to the converted'' (Norris, 2003) suggests that the people that are reached with social media are those already interested in politics and a specific political party or candidate. If the electoral gain is to be achieved by convincing the floating voters social media campaigning might need to cross the boundaries of their homogeneous social networks and strive for pluralistic networks by focusing on *different* segments in the population. A similar argument has been made by Chadwick (2009) on hyperlinks on government websites, indicating that by providing these links the government's policymaking is pluralistic and inclusive. This, of course, could be extrapolated to political parties as well.

Furthermore, even though this study has shown no clear indication of innovation or even equalization, Twitter (and other online services such as YouTube and Facebook) may well have other effects. For instance, candidates' access to these communication tools allows them to campaign at an individual level, less attached to the overall party campaign. This might have consequences for parties' campaign strategies. These individualized campaigns coincides with an increasing trend in politics to personalize politicians and candidates, particularly to present candidates as regular people, maybe even likeable, and not as the distant politician far away in the countryás capital. The use of social media might be a means to achieve this goal. It is also important to note that there are good reasons to assume that process of normalization and equalization may be dependent on institutional factors as well. Anstead and Chadwick (2009) note that the type of electoral system (cf. Farrell, 2001), campaign finance (cf. Anstead, 2008), or the degree countries differ with respect to whether or not a few parties dominate the

political playing field (cf. Rae's fractionalization, 1968) might affect the role of the Internet in electoral campaigning. Because these institutional factors are conceptualized at the country level, a cross-national comparative research approach show could be very productive in establishing the role of these factors.

Acknowledgments

Notes

1 Because the propensity of people to use the Internet may affect their use of Twitter, and might increase the number of followers for party candidates, we checked whether this propensity is associated with party preference using data from the European Social Survey (www.europeansocialsurvey.org; http://ess.nsd.uib.no/ess/round5/). Even though Internet users are younger and higher educated, the association between party preference and Internet use for the Netherlands was negligible ($\eta^2 = .049$), indicating there were hardly any differences.
2 Other independent variables, such as past electoral success (number of votes in the past elections), and total seats in parliament were considered. However, including these in the regression analysis led to multicollinearity (Cohen et al. 2002).
3 Trots op Nederland (TROTS: Proud of the Netherlands) was represented in parliament from October 2007, after Rita Verdonk (party leader of TROTS) was expelled from the VVD. TROTS did not participate in the 2006 general elections.
4 Jan Marijnissen, considered a strong leader of the SP, stepped down in 2008 to give way to Agnes Kant, who decided to step down as party leader in March 2011 after losing the popular vote in the local elections. Emile Roemer, relatively unknown then, was elected as new party leader and has led the party since.
5 Because the distribution of network size and the micro-blogging activity roughly resembles a power law distribution (i.e. heavily skewed to the right), the axes of the graphs were transformed using the natural log. This transformation is applied to all graphs in Figure 2 to Figure 5.

References

Abraham, L.B., Mörn, M.P. & Vollman, A. (2010). *Women on the web: How women are shaping the internet*. Comscore. Retrieved October 20 2010 from http://www.comscore.com/Press_Events/ Presentations_Whitepapers/2010/Women_on_the_Web_How_Women_are_Shaping_the_Internet.

Anstead, N. (2008). The internet and campaign finance in the U.S. and the UK: An institutional comparison. *Journal of Information Technology and Politics*, 5(3), 285–302.

Anstead, N. & Chadwick, N. (2009). Parties, election campaigning, and the internet. In A. Chadwick, & P.N. Howard (Eds.), *Handbook of internet politics* (pp. 56–71). London: Routledge.

Barber, B.R., Mattson, K. & Peterson, J. (1997). *The state of 'electronically enhanced democracy': A survey of the Internet*. New Brunswick, NJ: Walt Whitman Center.

Bimber, B. & Davis, R. (2003). *Campaigning online: The internet in US elections*. Oxford: Oxford University Press

Caprara, G.V., Barbaranelli, C. & Zimbardo, P.G. (1999). Personality profiles and political parties. *Political Psychology*, 20(1), 175–197.

Caprara, G., Francescato, D., Mebane, M., Sorace, R. & Vecchione, M. (2010). Personality foundations of ideological divide: A comparison of women members of parliament and women voters in Italy. *Political Psychology*, 31(5), 739−762.

Chadwick, A. (2009). Web 2.0: New challenges for the study of e-democracy in an era of informational Exuberance. *I/S: A Journal of Law and Policy for the Information Society*, 5(2), 9−42.

Chen, P. (2010). Adoption and use of digital media in election campaigns: Austria. Canada, New Zealand. *Public Communication Review*, 1, 3−26.

Cohen, J., Cohen, P., West, S.G. & Aiken, L.S. (2002). *Applied multiple regression/correlation analysis for the behavioral sciences*. Mahwah, NJ: Lawrence Erlbaum.

Copsey, N. (2003) Extremism on the net: The extreme right and the value of the internet. In R. Gibson, P. Nixon & S. Ward (Eds.). *Political parties and the internet: Net gain?* London: Routledge.

Comscore (2011). *The Netherlands ranks #1 worldwide in penetration for Twitter and Linkedin*. Retrieved May 3rd 2011 from http://www.comscore.com/Press_Events/Press_Releases/2011/4/ The_Netherlands_Ranks_number _one_Worldwide_in_Penetration_for_Twitter_and_LinkedIn

Cormode, G. & Krishnamurthy, B. (2008). Key differences between Web 1.0 and Web 2.0. *First Monday*, *13*(2). Retrieved from http://firstmonday.org/ htbin/cgiwrap/bin/ojs/index.php/fm/ article/view/2125/1972

Cornfield, M. (2004). *Politics moves online: Campaigning and the internet*. New York: The Century Foundation Press.

Farrell, D.M. (2001). *Electoral systems: A comparative introduction*. London: Palgrave.

Flickinger, R.S. & Studlar, D.T. (2007). One Europe, many electorates? Models of turnout in European Parliament elections after 2004. *Comparative Political Studies*, 40(4), 383−404.

Foot, K.A., Schneider, S.M. & Dougherty, M. (2007). Online structure for political action in the 2004 U.S. congressional electoral web sphere. In R. Kluver, N.W. Jankowski, K.A. Foot & S.M. Schneider (Eds.) *The internet and national elections: A comparative study of web campaigning*, pp. 93−103. London: Routledge.

Gibson, R. & Römmele, A. (2001). Changing campaign communications: A party-centered theory of professionalized campaigning. *Harvard International Journal of Press-Politics*, 6(4), 31−43.

Gibson, R. & Ward, S. (2009). Parties in the digital age. *Representation*, 45(1), 87−100.

Gray, M. & Caul, M. (2000). Declining voter turnout in advanced industrial democracies, 1950−1997: The effects of declining group mobilization. *Comparative Political Studies*, 33(9), 1091−1122.

Greengard, S. (2009). The first internet president. *Communications of the ACM*, 52(2), 16−18

Gulati, G. & Williams, C. (2007). Closing the gap, raising the bar: Candidate web site communication in the 2006 campaigns for congress. *Social Science Computer Review*, 25(4), 443−465.

Gulati, G. & Williams, C. (forthcoming). Social networks in political campaigns: Facebook and the congressional elections of 2006 and 2008. *New Media & Society*.

Hargittai, E. (2007). Whose space? Differences among users and non-users of social network sites. *Journal of Computer-Mediated Communication*, 13(1).

Hargittai, E. & Hinnant, A. (2008). Digital inequality: Differences in young adults' use of the Internet. *Communication Research*, 35(5), 602−621.

Hilbe, J.M. (2007). *Negative binomial regression: Modeling overdispersed count data*. Cambridge University Press.

Hosmer, D.W., Lemeshow, S. & Cook, E.D. (2000). *Applied logistic regression (2nd ed.)*. New York; Chichester: Wiley.

Hsu, C.L., & Park, H.W. (2011). Sociology of hyperlink networks of Web 1.0, Web 2.0, and Twitter: A case study of South Korea. *Social Science Computer Review*, 29(3), 354−368.

Jackson, N. (2006). Banking online: The use of the Internet by political parties to build a relationship with voters. In D. Lilleker, N. Jackson & R. Scullion. (Eds.). *The marketing of political parties* (pp. 157–184). Manchester University Press: Manchester.

Jackson, N. & Lilleker, D. (2009). Building an architecture of participation? Political parties and Web 2.0 in Britain. *Journal of Information Technology and Politics*, 6, 232–250.

Jackson, N. & Lilleker, D (2010). Tentative steps towards interaction: The use of the Internet in the British European parliament election 2009. *Internet Research*, 20(5), 527–544.

Kaid, L.L. (2006). Political web wars: The use of the internet for political advertising, in A.P. Williams and J.C. Tedesco (Eds)., *The internet election: Perspectives on the web in campaign 2004*. pp. 67–82. Lanham, MD: Rowman and Littlefield.

Keman, H. (2007). Experts and manifestos: Different sources—Same results for comparative research? *Electoral Studies*, 26(4), 76–89.

Kluver, R., Jankowski, N., Foot, K. & Schneider, S.M. (Eds.) (2007). *The internet and national elections*. A comparative study of web campaigning: Routledge.

Lewis, J. & West, A. (2009). 'Friending': London-based undergraduates' experience of Facebook. *New Media & Society*, 11(7), 1209–1229.

Lilleker, D. & Malagón, C. (2010). Levels of interactivity in the 2007 French presidential candidates' websites. *European Journal of Communication*, 25(1), 25–42.

Margolis, M., Resnick, D. & Wolfe, J.D. (1999). Party competition on the Internet in the United States and Britain. *Harvard International Journal of Press-Politics*, 4(4), 24–47.

McPherson, M., Smith-Lovin, L., & Cook, J.M. (2001). Birds of a feather: Homophily in social networks. *Annual Review of Sociology*, 27, 415–444.

Norris, P. (2000). *A virtuous circle: Political communications in postindustrial societies*. Cambridge: Cambridge University Press.

Norris, P. (2001). *Digital divide? Civic engagement, information poverty and the internet worldwide*. Cambridge: Cambridge University Press.

Norris, P. (2003). Preaching to the converted? Pluralism, participation and party websites. *Party Politics*, 9(1), 21–45.

Orchard, L.J. & Fullwood, C. (2010). Current perspectives on personality and internet use. *Social Science Computer Review*, 28, 155–169.

O'Reilly, T. (2005). What is Web 2.0: Design patterns and business models for the next generation of software. Retrieved from http://oreilly.com/web2/archive/what-is-web-20.html

Park, H.W., & Janowski, N.W. (2008). A hyperlink network analysis of citizen blogs in South Korean politics. *Javnost/the Public*, 15(2), 57–74.

Parmelee, J.H. & Bichard, S.L. (2012). *Politics and the Twitter revolution: How tweets influence the relationship between political leaders and the public*. Lanham, MD: Lexington Books.

Pujazon-Zazik, M. & Park, M.J. (2010). To tweet, or not to tweet: Gender differences and potential positive and negative health outcomes of adolescents' social internet use. *American Journal of Mens Health*, 4(1), 77–85.

Rae, D. (1968). Fractionalization of some European party systems. *Comparative Political Studies*, 1(3): 413–418.

Ran, W. & Lo, V.H. (2006). Staying connected while on the move: Cell phone use and social connectedness. *New Media & Society*, 8(1), 53–72.

Rojas, H., & Puig-i-Abril, E. (2009). Mobilizers mobilized: Information, expression, mobilization and participation in the digital age. *Journal of Computer-Mediated Communication*, 14(4), 902–927.

Rice, R.E., & Katz, J.E. (2003). Comparing internet and mobile phone usage: Digital divides of usage, adoption, and dropouts. *Telecommunications Policy*, 27(8–9), 597–623.

Sams, S., Lim, Y.S., & Park, H.W. (2011). E-research applications for tracking online socio-political capital in the Asia-Pacific region. *Asian Journal of Communication*, 21(5), 450–466.

Scholten, O. & Ruigrok, N. (2006). Politiek en politici in het nieuws in vijf landelijke dagbladen *[Politics and politicians in the news of five newspapers]*. Amsterdam: Persinstituut/Nieuwsmonitor.

Schweitzer, E.J. (2008). Innovation or normalization 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.

Segerberg, A. & Bennett, W.L. (2011). Social media and the organization of collective action: Using Twitter to explore the ecologies of two climate change protests. *The Communication Review*, 14(3), 197–215.

Stirland, S. (2008, 4 November). Propelled by internet, Barack Obama wins presidency. *Wired Magazine*. Retrieved from http://www.wired.com /threatlevel/2008/11/propelled-by-in/

Sudulich, L. (2009, April) *Do ethos, ideology, country and electoral strength make a difference in cyberspace?* Testing an explanatory model of parties' websites. Paper presented to ECPR Joint Research Workshops, Lisbon.

Tedesco, J.C. (2004). Changing the channel: Use of the Internet for communicating about politics. In L. L. Kaid (Ed.), *Handbook of political communication research* (pp. 507–532). Mahwah, N.J.: LEA.

Vaccari, C. (2008). From the air to the ground: The Internet in the 2004 US presidential campaign. *New Media Society*, 10, 647–65.

Van Kersbergen, K. & Krouwel, A. (2008). A double-edged sword! The Dutch centre-right and the 'foreigners issue'. *Journal of European Public Policy*, 15(3), 398–414.

Vergeer, M., Hermans, L. & Cunha, C (forthcoming-a). Web campaigning in the 2009 European Parliament elections: A decade of cross-national comparative website-feature analysis. *New Media & Society*.

Vergeer, M., Hermans, L. & Sams, S. (forthcoming-b). Online social networks and micro-blogging in political campaigning: The exploration of a new campaign tool and a new campaign style. *Party Politics*. DOI: 10.1177/1354068811407580

Wiggins, J.S. (2001). Personality structure. In N.J. Smelser & P.B. Baltes (Eds.), *International encyclopedia of the social & behavioral sciences* (pp.11317-11320). London: Elsevier.

Williamson, A. (2010). Inside the digital campaign. In R.K. Gibson, A. Williamson & S. Ward, *The internet and the 2010 election putting the small 'p' back in politics?* (pp. 17–26). London: Hansard Society.

Zappavigna, M. (2011). Ambient affiliation: A linguistic perspective on Twitter. *New Media & Society*, 13(5), 788–806.

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Appendix

Political parties: names and abbreviations.

Rank	Abbreviation	Full party name (in Dutch)
1	CDA[*]	Christen Democratisch Appèl
2	PVDA[*]	Partij van de Arbeid
3	SP[*]	Socialistische Partij
4	VVD[*]	Volkspartij voor Vrijheid en Democratie
5	PVV[*]	Partij voor de Vrijheid
6	GL[*]	Groen Links
7	CU[*]	ChristenUnie
8	D66[*]	Democraten 66
9	PVDD	Partij voor de Dieren
10	SGP[*]	Staatkundig Gereformeerde Partij (SGP)
12	NN	Nieuw Nederland
13	TROTS[*]	Trots op Nederland Lijst Rita Verdonk
14	PMS	Partij voor Mens en Spirit (MenS)
15	HNL	Heel NL
16	PE	Partij één
17	BLANK	Blanco lijst met eerste kandidaat Feijen, L.L.
18	PP	Piratenpartij
19	LACIÉ	Blanco lijst met eerste kandidaat Lacié, Y.I.

[*]official abbreviations