THE VOTER IS ONLY A TWEET AWAY MICRO BLOGGING DURING THE 2009 EUROPEAN PARLIAMENT ELECTION CAMPAIGN IN THE NETHERLANDS

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THE VOTER IS ONLY A TWEET AWAY

Micro blogging during the 2009 European Parliament election campaign in the Netherlands

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INTRODUCTION

In many western countries politics increasingly suffers from declining interest and declining participation in the political processes (Flickinger & Studlar, 2007). This not only applies to national politics but also, or even more so, to European politics. The European Union in particular is said to suffer from a severe democratic deficit (cf. van Os, Jankowski, & Vergeer, 2007). In general, support for the European Union is low: only a small majority (52%) supports its country’s EU membership (European Commission, 2009). This is reflected in the low voter turnout (43%) for the EP elections. The Netherlands, although its population supports the European Union (EU) membership quite strongly (78%), the voter turnout of 37% is well below the EU average. Even though support for the EU remains relatively stable, it is not clear whether the steadily decline in voter turnout is reversible.

THE INTERNET AS A CAMPAIGNING TOOL

A means to try to reverse this trend is the increased use of the Internet, in particular Web2.0, to close the gap between politics, politicians and citizens. Gibson and Römmel (2001) provide an overview of how political campaigning has changed over the years. They distinguish pre-modern, modern and professional campaigns. The pre-modern campaigns rely predominantly on the use of print media, rallies, meeting and foot soldiers. This style of campaigning is quite labor-intensive due to the interpersonal nature. Because its labor intensiveness it is conducted for the most part by inexpensive non-professionals and amateurs. The general aim in these campaigns is to mobilize voters, most likely those that are already loyal to the party. Modern campaigns are characterized by the large employment of mass media and therefore less interpersonal and more direct. This campaign style is more expensive. Because of the use of mass media this type of campaigning is more nation centric instead of local. Modern campaigning focuses not only on loyal voters but also where the electoral gain is to be found, i.e. the floating voters. The third campaigning style, labeled "professional", uses the Internet and uses a marketing approach by using direct mail targeted at specific groups of people direct mail. Campaigning takes place continuously and contact with voters is interactive. Moreover, voters are viewed as consumers that may want to acquire a product. Although this field of research on political campaigning on the web is relatively new, it already has produced many studies. The first studies focused on how political parties use web features on their websites to inform and communicate with visitors of their websites (cf. R. Gibson & Rommele, 2001; R. K. Gibson, Margolis, Resnick, & Ward, 2003; Jackson & Lilleker, 2007; Norris, 2000, 2001).
Others took this research field a step further by including, not only political party websites, but also websites produced by institutions that play a role in the larger political arena (Foot, Schneider, Kluver, Xenos, & Jankowski, 2007). By doing so they aim to analyze the political web sphere, referring to Habermas’ public sphere (Habermas, 1989).

Even though studies on web campaigning are numerous, most 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 websites are predominantly hierarchical and disseminating, from the politician and party direct 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 (in Tedesco, 2004): interactivity, potential for horizontal and lateral communication; non-hierarchical communication; low costs for users; speed of communication; no national or geographical boundaries; freedom from intrusion and monitoring of government. Although these characteristics are valid for Web 1.0, these were still underused. Technical limitations and low user-friendliness still limited the extensive use by producers and consumers. Web 2.0 (Cormode & Krishnamurthy, 2008; O’Reilly, 2005) with many new innovations (AJAX, the web as a platform) is suitable for people to engage directly and interactively with others on the web. Keywords characterizing Web 2.0 are bottom-up approach, sharing of content, online collaborating between people and socializing among people and networking.

**POLITICIANS’ USE OF WEB 2.0**

When looking at the opportunities these new web technologies offer, we see that the architecture of Web 2.0 allows non-experts to use the Web 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 has the potential to close the digital divide between people in general and politicians specifically. As such it potentially increases democratization and emancipation, especially for those trapped in disadvantaged positions. Not only disadvantaged groups in society can easily publish onto the web, politicians themselves, especially those that receive little media attention can now easily publish their opinions through new and additional web channels such as personal websites, (micro-)blogging sites and social networking sites.

With the introduction of Web 2.0, many parties, politicians and candidates have adopted blogging, social network sites and sharing sites, the question arises whether this is a new campaigning style, different from the other types. If so, what are the basic characteristics of this new campaigning...
style? Web 2.0 is associated with different platforms, technology and practices that share keywords such as User Generated Content (UGC), social networking, sharing, social media (Cormode & Krishnamurthy, 2008). Web 2.0, noted for applications such as Facebook, Twitter, YouTube, MySpace, allows politicians to individualize and personalize their campaigning style.

Personalization in politics can imply two strategies. The first strategy is to focus on a single party member leading the party in the election campaign. As such the party is embodied by the party leader. Other candidates then settle for a less visible role in the campaign. The second strategy of personalization and individualization refers to tactics to present the politician as someone that is more than a professional but also a normal person with personal interests and a family life. By doing so they try to limit the psychological distance between themselves and voters (Caprara, Barbaranelli, & Zimbardo, 1999). In social network theory this is called homophily (McPherson, Smith-Lovin, & Cook, 2001).

Furthermore, journalists’ mediation of political messages to the general public, especially those journalists that are critical, inherently contains biases and contextualization of the message, in ways politicians do not want. Especially in a country as the Netherlands where there is little affiliation (i.e. political parallelism, cf. Hallin & Mancini (2004) and Van Kempen (2007)) between the press and political parties, journalism is independent from political influences and the watchdog function of journalism is strong (Hallin & Mancini, 2004; Weaver, Beam, Brownlee, Voakes, & Wilhoit, 2007). By using new media technology politicians increasingly circumvent journalism to communicate directly in a less distorted manner to the public.

Whether the Internet succeeds in creating a level playing field for parties and candidates is entirely clear. The innovation hypothesis (cf. Schweitzer, 2008) states that certain characteristics of new media technologies fundamentally change the way politics is brought to the public. 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): political campaigning with new media is merely replicating offline political campaigning. It even reinforces these patterns, turning online campaigning to business as usual. These two hypotheses are almost mutually exclusive: if one hypothesis is supported by the data, the other one needs to be refuted. However, the real test on either of these hypotheses has yet to be conducted, because many studies have suffered one or more of four methodological constraints limiting rigorous testing: (1) data are often cross-sectional instead of longitudinal; (2) evidence mainly from the US; (3) focused on candidate websites; (4)
focusing on web features and seldom on the content of communications (Schweitzer, 2008). Utz (2009) showed that the effects of social network sites only reinforced existing attitudes, i.e. those that already favor the candidate are the ones that subscribe to the politician's network. This suggests that politicians that use social network sites are merely 'preaching to the converted' (cf. Norris, 2003). However, politicians were evaluated more positive in some instances when they responded to comments on their social network site (Utz, 2009). Our study will contribute to the discussion of the benefits of using the Internet for political campaigning purposes by looking at candidates’ use of micro-blogging.

MICRO-BLOGGING AS A CAMPAIGNING TOOL: THE CASE TWITTER IN THE DUTCH EUROPEAN PARLIAMENT ELECTION CAMPAIGN

One of the latest additions to the many new Web 2.0 platforms is Twitter. Introduced in 2006, Twitter is a mixture of micro-blogging and a social network site [SNS] (Boyd & Ellison, 2007) and short text messaging. Users can post and read Twitter messages (so-called tweets) from the computer and the mobile phone. Twitter allows people to send messages no longer than 140 characters to a public or private web page. A public Twitter page that belongs to a person can be accessed by all people, even those that do not have a Twitter-account or have indicated wanting to follow that person. Private Twitter pages can be viewed only by people that are allowed to follow that person and thus have their own Twitter account as well. By subscribing to the person's messages (i.e. following the tweets) a social network and a communication network of people is created. Although Twitter is important in the western world, micro-blogging is popular in many countries where different platforms are being used (Me2Day in South Korea, Renren in China, Plurk in Taiwan). SNS such as Facebook and Hyves also have some form of micro-blogging or short text messaging. However these are more privately organized and less specialized than Twitter.

The adoption of Twitter by the Dutch general public lags behind other social network sites such as Hyves (2nd), YouTube (3rd) and Facebook (10th). However, Twitter has made a quick and successful entrance in the political domain. To study how politicians use micro-blogging this paper focuses on how candidates from the Netherlands use Twitter in the European parliament election campaign of 2009. This election was the first one in the Netherlands where Twitter was used. The research questions that guide this study are the following:

A. To what extent do political candidates with different backgrounds adopt micro-blogging as a campaigning tool in the European Parliament elections 2009?
B. To what degree are these differences in background related to the activity on the microblogging platform?
C. To what extent is micro-blogging effective in gaining votes?

**THEORY**

Adoption theory (Rogers, 1995) predicts that adoption of new technology tends to diffuse through populations in a specific manner, indicated by the S-curve. At a particular point in time the population then can be divided in terms of different groups reflecting the degree of adoption: innovators, early adopters, early majority, late majority, and laggards. If an innovation reaches a certain degree of penetration in the population (a critical mass, (cf. Markus, 1990)), its introduction has succeeded. The subsequent (near to) full adoption by the entire population, or at least the persistent use of the innovation by a portion of the population then is only a matter of time. Whether this is the case for microblogging in general and microblogging by politicians in particular is too soon to tell.

**INNOVATION HYPOTHESIS**

The Web in general and micro-blogging specifically has the potential to overturn differences in visibility: its use is very easy, large mobility and the costs are very low. As such it provides disadvantaged parties and candidates with little resources (e.g. financially, knowledge and manpower) increased opportunities to create more visibility. Smaller parties lack funding and expertise, resulting in only a few people having to take on many tasks. New and smaller parties consist of politicians whose daily activities not only involves politics but also still having to keep a regular job. Larger parties still may have the upper hand because they have the advantage of a strategic department dealing with publicity issues continuously, and have professional politicians that do politics as a daily business, as well as experience. However, the added value of the Web for smaller, less professionally organized parties and candidates may prove to be larger than for the more well-established parties and candidates. They can benefit more from these new online opportunities that the large established parties.

Parties that were founded a long time ago as well as parties that participated in government are viewed as belonging to the establishment. They, at least, appeal to a significant fraction of the electorate, enough to secure some presence in parliament. New, fringe parties that entered the political stage recently, lack a basic of level reputation and trust from the general electorate. In general, they are expected to attract little to no votes. Especially the candidates from these new parties could utilize new media technology to connect to the electorate, create more attention
which subsequently could result in more votes. From an innovation perspective (cf. Schweitzer, 2008), these less established parties, having little to no prospect of getting many votes, are deemed to benefit the most from new media technology. The use of new media technology enables them to create more visibility and attention and maybe even a basic level of trust. 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. This implies that established parties will be the ones that use new media technology more effectively than new, fringe parties. Because the normalization hypothesis is a reversed version of the innovation hypothesis we only test the innovation hypotheses.

Hypothesis 1) Parties not belonging to the establishment use micro-blogging more extensively than parties that belong to the establishment.

Ideology refers to how society is to be organized, what societal goals and how these goals should be achieved. According to Van Kersbergen and Krouwel (2008) two ideological dimensions exist in the Dutch political system: social versus liberal thought, and conservative versus progressive thought. Whereas conservative thought promotes stability and continuity, progressivism, in contrast, promotes change and reform. Therefore progressive parties and politicians are expected to adopt innovation more quickly than their conservative counterparts. Regarding social versus liberal ideology, it can also be argued that candidates from political parties that have a socialist background (as opposed to the liberal ones) are also the candidates that are the most communicative ones. Socialist parties are more focused on a cohesive and supportive society, caring for weaker and disadvantaged groups in society. These characteristics might explain why social parties use micro-blogging more extensively. Also these political parties promote collective action whereas liberal thought propagates individual freedom. Extrapolated to electoral campaigning one could argue that candidates from social (left-wing) parties are pressed to conduct the campaign as a party collective as opposed to individually. Right-wing parties on the other hand would allow candidates to design their campaign more freely and individualized. Allowing candidates to use Twitter provides candidates more freedom, less control over how candidates perform in their campaign. Furthermore, Gibson and Römele (2001) suggest that the liberal parties are more willing to use a more business-like, professional campaigning approach, something left-wing parties dislike. Because it is not yet apparent whether social liberal, conservative or progressive parties are more likely to adopt and use micro-blogging we pose the following research question:
Hypothesis 2) More liberal candidates will use micro-blogging more than more socialist candidates.

Hypothesis 3) More progressive candidates will use micro-blogging more than conservative candidates will.

The Dutch political system is characterized by a large degree of pluralism. The Netherlands has 11 parties in national parliament. In the 2009 EP elections 288 candidates from 17 political parties participated. These candidates and parties try to increase visibility to attract more attention to their political standpoints. In the traditional media system (television, newspaper and radio) larger, more successful political parties have fewer difficulties to create visibility. In general, there is a tendency for increased media attention for larger and more successful parties, those that are in office or part of the coalition and candidates that are ranked high (Scholten & Ruigrok, 2006). This leaves new and small parties in a disadvantaged position compared to larger well-established parties. This is reinforced by the large number of parties and candidates all competing for the limited space available in traditional media. This changed when the Internet became popular. Because the Internet seems to have limitless space, new or less successful parties can use the Web as additional and alternative channels to increase visibility. Restrictions in terms of finance, time and space imposed by third parties (i.e. publishers and broadcasters) do not apply anymore. Not only parties can utilize the Web for increased visibility and better connectedness with voters, candidates can do this too. Especially candidates that are ranked lower on the party list may benefit from using the Web for their personal campaign. In the Dutch electoral system political parties prioritize their candidates. Normally these candidates are chosen for parliament according the party's preference. However, voters may have a preferred candidate. If so, the voter can cast a preferential vote. If this candidate receives enough preferential votes he or she will be elected for parliament, even though other candidates were given a higher priority by the party. Two major factors, besides the party program, that increase the likelihood for candidate to be elected are (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 more level-playing field for all parties and candidates, it should particularly be beneficial to parties and candidates that lack visibility and the least likely to be elected. As such, individualized campaign can be aimed at generating more preferential votes. For larger parties and candidates ranked higher, the added value of additional and alternative channels is smaller than it is for smaller parties. The cost-benefit ratio could be less positive to adopt a new channel.
Hypothesis 4) The less past electoral success in the past, the more likely candidates adopt and use micro-blogging.

Hypothesis 5) The less priority the party has given a candidate the more likely candidates adopt and use micro-blogging.

Gibson and Römmele (2001) suggest that a shock such as the change of a party leader (internal shock) or a massive loss in the elections (external shock) could affect a party's campaign strategy to try to reverse this loss, a new strategy needs to be developed, for instance a new web campaign strategy by utilization of new media technology. The hypothesis therefore is:

Hypothesis 6) The more seats a party has lost in the last elections, the more likely candidates adopt and use micro-blogging.

Besides party strategy, candidates themselves can decide to use new technology. One characteristic is gender. Research shows that women are more likely to use social network sites (Hargittai, 2007), but also report less Internet skills and perform less capital enhancing activities (Hargittai & Hinnant, 2008). Research on mobile phone use suggests that women use new media technology more sociable than men do (Ran & Lo, 2006). These findings are somewhat contradictory. To determine whether and how gender is related to the adoption of micro-blogging, the research question is as follows:

RQ 1 To what extent is gender related to adoption and use of micro-blogging?

**POSSIBLE EFFECTS OF MICRO-BLOGGING ON THE ELECTION OUTCOME**

The question whether the use of micro-blogging equals the question to whether micro-blogging increases the number of votes in the elections. In general, deriving from the innovation hypothesis, the expectation is that the more the candidate sends messages using the micro-blogging site, has a large micro-blogging network, especially those that follow the candidate, and the more the candidate sends messages directly to people, the more votes this candidate will receive. The hypotheses are as follows:

Hypothesis 7) The more a candidate uses micro-blogging, the more votes he or she receives.

Hypothesis 8) The larger candidate's online social networks, the more votes he or she receives.

However, there are some alternative explanations besides the use of micro-blogging that may account for candidates receiving more votes. Because these explanations concern the normal state of affairs, they predict the continuation of existing power distributions. Especially candidates that
are member of established parties (represented in government, party age, past electoral success, participation in prior election) will receive more votes. The hypothesis is as follows:

Hypothesis 9) Candidates from established parties receive more votes than candidates from non-established parties.

As stated earlier, parties prioritize their candidates: the higher the candidate is prioritized the more likely it will be chosen. However, if a voter does not agree with the priority list of the party, the voter can cast preferential vote for a particular candidate anywhere on the list, in doing so increasing the likelihood of that candidate to be elected. However, in general it holds that candidates prioritized by their political party will receive more votes. The first reason is that if voters do not have a preferred candidate they most likely vote for the top candidate of the party. The second reason is that if many voters have a preferred candidate it will already be prioritized by the party anyway. A third reason why most voters may vote for the top candidate, is that in the Netherlands personalization has not yet evolved as in the US and the UK. The hypothesis thus reads as follows:

Hypothesis 10) The more a candidate is prioritized by the party, the more votes it receives.

DATA

Sampling
The names of all candidates of political parties participating in the European parliament elections were obtained from the Electoral Council (www.kiesraad.nl). Subsequently, by using various online sources (i.e. search engines, personal web pages, political party web pages), candidates that use Twitter were identified. This resulted in a list of 36 candidates running for a seat in the European Parliament and using Twitter. Six candidates had deleted their account. One candidate replaced one account with another new one. Data were downloaded in October 2009 from www.twitter.com using Twitter’s Application Programming Interface (API). The data were downloaded for the period of February 1st 2009 to October 13th, 2009. However, for these analysis only data up to June 4th 2010 (i.e. election day) will be used.

Measurements
Adoption of micro-blogging site was measured by whether or not a candidate has an account on Twitter. Micro-blogging use was measured using several indicators. Micro-blogging activity was measured by counting the total number of messages a candidate posted in the period from the official campaign started (March 17th, 2010) and the Election Day (June 4th, 2010).
increase was measured by the average daily increase of tweets in the campaign. A low increase indicated that micro-blogging is performed in a normal regular fashion, whereas an increase indicates that micro-blogging is used especially for the campaign. The consistency of micro-blogging was measured with two indicators: the standard deviation of daily micro-blogging activity and when the candidate started micro-blogging. The standard deviation of daily micro-blogging activity indicates whether the candidate has developed a routine of daily micro-blogs (i.e. low standard deviation) or that the candidate is an irregular micro-blogger (high standard deviation). The start of micro-blogging was measure by the number of days prior to the Election Day the first tweet was posted. The more days prior to the elections the candidate started, the less it was specifically connected to the election, and more as a off-campaign activity.

To what degree the candidate is communicating with others on Twitter people was measured by counting the number of @-tweets. To relate the @tweets to the non-@-tweets the communication ratio was calculated: lower than one indicating there were more non-directed tweets than directed tweets; larger than one indicates there were more directed tweets than non-directed tweets.

Network characteristics We distinguish a number of network characteristics. The candidate’s network size consists of all first degree people in the network, regardless of people are following the candidate or the candidate is following people from the public. The number of followers 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 citizen. The candidate’s followers net size is the second degree network size of those that follow the candidate, and the candidate’s following net size is the second degree network size of the politician following others. The average number of shared connections is the mean number of identical relations candidates have with other people (irrespective of it being follower or following). The maximum number of shared connections is the maximum number of shared connections with one single other candidate. Because network indicators are heavily skewed a log transformation was used to normalize them.

Established parties Whether parties are well established was measured in several ways. One indication is the age of the party (in years), measured by subtracting the year the party started using the party name from the year 2009. The date of formation was determined by the first appearance of a party under that specific name, excluding years prior to when parties were known under a different name. The second measurement is by its past popularity in elections, measured by the number of votes in the last national elections (i.e. 2006). The third indicator of whether candidates are member of a well-established political party was measured by whether the party participated in
the national government since the last election. A final indicator of the degree of establishment of political parties is the number of days a party was part of the government. The external electoral shock was measured by the change in number of seats in parliament a party obtained in 2006 as compared to those in 2003.

To measure the likelihood of a candidate to be actually elected we used the prioritization of their candidates by the political parties themselves. The higher the candidate is ranked (indicated by a lower number), the more likely the candidate is elected. Candidate rankings per party as submitted by the parties themselves were obtained from the Electoral Council (Electoral & Council, 2009).

Ideology was measured using data from Van Kersbergen and Krouwel (2008) who classified parties on 36 statements in the context of the 2006 general elections (see appendix). An exploratory factor analysis was performed on these data, indicating seven dimensions (Eigen value > 1). However, only two dimensions were clearly interpretable. The first ideological dimension is the social versus liberal continuum (i.e. left-wing versus right-wing). The second ideological dimension is the progressive versus conservative continuum. Gender of the candidate was obtained from the electoral lists provided by the Election Council. Euro skepticism, the classification which political parties are skeptic or not regarding the European Union was based on Lubbers (2008). We also measured whether candidates are from political parties that are seated in government or not.

The number of valid votes for each candidate were obtained from the Electoral Council (2009).

METHODS

Normally this type of research would involve multivariate analysis. However, the sample is small and the variance of adoption of micro-blogging is small. This combined with the large number of independent variables, leads to the risk of overfitting (Fox, 2008). Therefore, only bivariate analyses are conducted, in particular the comparisons of means as well as the calculations of correlations.

RESULTS

DESCRIPTIVE RESULTS

First, we present basic characteristics of the parties participating in the European Parliament elections (see Table 1). The adoption rate and use of Twitter as a tool to communicate differs extensively across candidates and political parties.
### Table 1  
Twitterers per political party (expressed in absolute numbers, percentage of users and ratio non-Twitterers and twitterers)\textsuperscript{iii}

<table>
<thead>
<tr>
<th>Political Party</th>
<th>Abbr.</th>
<th>Number of candidates</th>
<th>Twitter users</th>
<th>Account deleted</th>
<th>Total number of twitter users</th>
<th>% of users</th>
<th>Ratio non twitterer - twitterer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Christian Democrats</td>
<td>CDA</td>
<td>25</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>20.0</td>
<td>0.14</td>
</tr>
<tr>
<td>Social Democrats</td>
<td>PvdA</td>
<td>13</td>
<td>3</td>
<td>1</td>
<td>4</td>
<td>38.5</td>
<td>0.44</td>
</tr>
<tr>
<td>Liberal party</td>
<td>VVD</td>
<td>30</td>
<td>4</td>
<td>1</td>
<td>5</td>
<td>20.0</td>
<td>0.20</td>
</tr>
<tr>
<td>Green-Socialist Party</td>
<td>GL</td>
<td>19</td>
<td>6</td>
<td>0</td>
<td>6</td>
<td>31.6</td>
<td>0.46</td>
</tr>
<tr>
<td>Socialist Party</td>
<td>SP</td>
<td>30</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>3.3</td>
<td>0.03</td>
</tr>
<tr>
<td>Christian Party</td>
<td>CU-SGP</td>
<td>20</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>5.0</td>
<td>0.05</td>
</tr>
<tr>
<td>Liberal progressive party</td>
<td>D66</td>
<td>30</td>
<td>5</td>
<td>1</td>
<td>6</td>
<td>23.3</td>
<td>0.25</td>
</tr>
<tr>
<td>Newropeans</td>
<td>NR \textsuperscript{a}</td>
<td>8</td>
<td>4</td>
<td>0</td>
<td>4</td>
<td>50.0</td>
<td>1.00</td>
</tr>
<tr>
<td>Europa Voordelig! &amp; Duurzaam</td>
<td>EVD \textsuperscript{a}</td>
<td>5</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0.0</td>
<td>0.00</td>
</tr>
<tr>
<td>Solidara</td>
<td>SOL \textsuperscript{a}</td>
<td>25</td>
<td>2</td>
<td>0</td>
<td>2</td>
<td>8.0</td>
<td>0.09</td>
</tr>
<tr>
<td>Party for Animal Rights</td>
<td>PVDD</td>
<td>15</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>6.7</td>
<td>0.07</td>
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<tr>
<td>Europese Klokkenluiders partij</td>
<td>EPK \textsuperscript{a}</td>
<td>10</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0.0</td>
<td>0.00</td>
</tr>
<tr>
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<td>GR \textsuperscript{a}</td>
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<td>0</td>
<td>0</td>
<td>0</td>
<td>0.0</td>
<td>0.00</td>
</tr>
<tr>
<td>Partij voor de Vrijheid</td>
<td>PVV</td>
<td>10</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0.0</td>
<td>0.00</td>
</tr>
<tr>
<td>Liberaal Democratische Partij</td>
<td>LDP \textsuperscript{a}</td>
<td>11</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>9.1</td>
<td>0.10</td>
</tr>
<tr>
<td>Partij voor Europese Politiek</td>
<td>PEP</td>
<td>6</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0.0</td>
<td>0.00</td>
</tr>
<tr>
<td>Libertas</td>
<td>LIB \textsuperscript{a}</td>
<td>24</td>
<td>2</td>
<td>0</td>
<td>2</td>
<td>8.3</td>
<td>0.09</td>
</tr>
</tbody>
</table>

**Total**

|                                                | 288 | 31 | 5 | 36 | 12.5 | 0.14 |

Note: rows are sorted (descending) by votes received in the general elections of 2006. \textsuperscript{a} Non-official abbreviation.
Table 1 shows that micro-blogging is only adopted by a fraction of all candidates: about 12% has subscribed to Twitter. However, there are some parties that show quite higher fractions, such as the social democratic party PvdA, the green party GL, the liberal-progressive party D66 and the Pro-EU party Newropeans. As such all candidates that use Twitter can be labeled as innovators or at least early adopters.

**THE CORRELATES OF MICRO-BLOGGING ADOPTION AND ACTIVITY**

Table 2 shows that party characteristics show differences between those that adopted micro-blogging and those that did not. Regarding whether the candidates’ parties are represented in government or not is unrelated to the adoption of micro-blogging. This finding does not support hypothesis 1. This also holds for whether their parties participated in the 2004 EP elections and the general elections of 2006. Candidates running for euro skeptic parties used micro-blogging to lesser extent, while candidates running for younger parties adopted micro-blogging more frequently. Candidates that adopted Twitter were of older parties than those that hadn’t adopted Twitter, a
further refutation of hypothesis 1. Ideology, a more fundamental party characteristic, shows no differences between those that do or do not use micro-blogging, not supporting hypothesis 2 and 3. As for electoral success in the past, the results show that candidates that adopted micro-blogging did not differ regarding the number of votes their party received in the last 2006 elections, refuting hypothesis 4. However, candidates that had adopted micro-blogging were running for parties that had lost seats in parliament. This finding supports hypothesis 6.

Of the two personal characteristics of the candidates (gender and rank on party list), gender is unrelated to the adoption of micro-blogging. The position of the candidate on the party list is related to micro-blogging adoption: those who had adopted micro-blogging were more prioritized (lower rank number) on the list. This finding does not support hypothesis 5.

Table 3 shows the correlates of party and candidate characteristics and micro-blogging characteristics and network characteristics. Regarding the party characteristics and blogging activities, we see that there are only a few notable correlations. Candidates from parties represented in government started micro-blogging later than those that were in opposition. However, candidates who participated in the 2004 EP campaign blogged more frequently than candidates from parties that did not participate. These candidates also more frequently directed their tweets directly to people. As for the network characteristics, Table 3 shows that especially candidates from opposition parties have larger networks. Also, these opposition candidates more often communicate directly to other. Candidates that did not participate in the 2004 EP elections follow more people than those that did participate. Candidates from Euro-skeptic parties have more shared connections with other politicians than other candidates. Euro-skeptics, however, have less reciprocal following-follower relations.

As for electoral success of parties in the past, these indicators are not related to blogging activities, as such not supporting hypothesis 7 and 8. The number of votes received however is correlated to network characteristics: the more votes the smaller the network sizes and the less frequent the candidate follows a member of the public or reciprocates a relationship on Twitter. These findings in part reflect those regarding being represented in government because the more votes a party receives the more likely it will be represented in government.

The two political ideologies show that the left-right ideology is not related to micro-blogging activity and network characteristics. However, the progressive – conservative dimension is related to blogging behavior: more progressive candidates blog more frequently and started blogging.
earlier. As for network characteristics, progressive candidate had more followers than conservatives.
Candidate's characteristics showed only notable relation for the rank number of the candidate but not for gender. Candidates that were ranked higher by the party blogged more consistently throughout the campaign period. Also these higher ranked candidates also showed significantly more followed people from the public.
Table 3  Correlates of party and candidate characteristics and micro-blogging activities and network characteristics

<table>
<thead>
<tr>
<th>Party Characteristics</th>
<th>Electoral Success</th>
<th>Political Ideology</th>
<th>Candidate Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>represented part. in EP</td>
<td>part. in GE sceptic</td>
<td>Euro- age</td>
<td>votes % change</td>
</tr>
<tr>
<td>government '04 '06 parties</td>
<td>party</td>
<td>party</td>
<td>2006</td>
</tr>
</tbody>
</table>

Blog characteristics

| # number of tweets | -.130 | .298* | .270 | -.134 | .170 | -.059 | -.139 | -.076 | .323* | -.216 | -.194 |
| Tweet start (# days prior Election Day) | -.310* | .208 | .156 | -.221 | .085 | -.207 | -.200 | -.202 | .485*** | .184 | -.213 |
| Stand.dev. daily tweets | -.116 | .137 | .142 | -.113 | .175 | .041 | -.178 | .174 | .186 | -.363** | -.053 |
| Daily tweet increase | .154 | .081 | .056 | -.112 | .015 | .176 | -.095 | .042 | -.025 | -.271 | -.043 |
| Frequency of @tweets | -.013 | .282* | .265 | -.171 | .218 | .081 | -.165 | .022 | .221 | -.233 | -.078 |
| Ratio @tweet/non@tweet | .046 | .205 | .213 | -.119 | .253 | .161 | -.112 | .184 | .071 | -.158 | .025 |

Network characteristics

| Candidate’s network size a | -.329** | -.067 | -.042 | -.071 | -.123 | -.319* | .049 | -.165 | .292 | -.182 | -.051 |
| Candidate’s followers net size a | -.297* | -.121 | -.092 | .030 | -.169 | -.368** | .111 | -.079 | .154 | -.254 | -.016 |
| Candidate’s following net size a | -.369** | -.222 | -.178 | -.016 | -.213 | -.404** | .125 | -.055 | .152 | -.220 | -.047 |
| Candidate’s favorites net size a | -.341** | -.109 | -.072 | -.094 | -.140 | -.331* | .023 | -.125 | .228 | -.197 | -.065 |
| Average # shared connections a | -.086 | -.107 | -.058 | .335** | -.109 | -.188 | .260 | -.168 | -.075 | -.185 | .029 |
| Max # shared connections a | -.195 | -.193 | -.146 | .234 | -.170 | -.271 | .235 | -.105 | -.006 | -.230 | .011 |
| Follower of the party or candidate a | -.250 | .122 | .118 | -.010 | .001 | -.222 | .020 | -.223 | .308* | -.132 | -.086 |
| Following a member of the public a | -.226 | -.281* | -.213 | -.132 | -.213 | -.279* | .045 | .014 | .120 | -.388** | .022 |
| Reciprocal following a | -.313* | -.223 | -.180 | -.322* | -.170 | -.352** | -.115 | .002 | .244 | -.204 | -.058 |

* p<.100, ** p<.050, *** p<.010; N=36, except for correlations involving political ideologies: N=30
a natural log transformation
Table 4 shows the correlations of blogging activities, network characteristics and party characteristics with the number of votes candidates received in the European Parliament elections of 2009. The more frequently candidates blogged, the more votes they received, supporting hypothesis 7. The less consistent (i.e. larger standard deviation) candidates blogged the more votes they received. Candidates that increased their blogging closer to Election Day also received more votes. Also, the more tweets were directed to people the more votes they received. Regarding the network characteristics, the amount of people following the candidate was positively related to the number of votes, supporting hypothesis 8.

To explore whether there are possible alternative explanations for the relations we found between micro-blogging activity and twitter network characteristics, correlations between party characteristics, past electoral success, and candidate characteristics were calculated. All party characteristics show significant relations with the number of votes received in the 2009 EP elections. Candidates from parties represented in government received more votes, as did those that participated in the 2004 EP elections and the 2006 general elections. These findings support hypothesis 9. Candidates running for euro skeptic parties received more votes in the EP elections as well as parties that existed longer. As for the two ideologies, the more right the candidate’s ideology the less votes these candidates receive. Regarding the conservative-progressive dimension there is no relation with the number of votes, these do not correlate the number of votes candidate received. The number of votes the party received in the general elections of 2006 correlated positively with the number of votes the candidate received in the 2009 EP elections. The rank number given by the party to the candidate in the 2009 EP election (indicating the level of priority) correlated negatively with the number of votes they received: the more priority the candidate has the more votes, supporting hypothesis 10.
Table 4  Correlation analysis of casted votes a, party and candidate characteristics and micro-blogging activities

<table>
<thead>
<tr>
<th></th>
<th>all candidates (N=288)</th>
<th>subsample of micro-blogging candidates (N=33)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Blog characteristics</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td># of tweets</td>
<td>.342***</td>
<td>.310*</td>
</tr>
<tr>
<td>Tweet start (# days prior to Election Day)</td>
<td>.318***</td>
<td>-.068</td>
</tr>
<tr>
<td>Standard deviation daily tweets</td>
<td>.422***</td>
<td>.511***</td>
</tr>
<tr>
<td>Daily tweet increase</td>
<td>.307***</td>
<td>.306*</td>
</tr>
<tr>
<td>Frequency of @tweets</td>
<td>.320***</td>
<td>.337**</td>
</tr>
<tr>
<td>Ratio @tweets/non@tweets</td>
<td>.031</td>
<td>.343**</td>
</tr>
<tr>
<td><strong>Network characteristics</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Candidate's network size a</td>
<td>.401***</td>
<td>.169</td>
</tr>
<tr>
<td># followers of the party or candidate a</td>
<td>.426***</td>
<td>.328*</td>
</tr>
<tr>
<td># following a member of the public a</td>
<td>.332***</td>
<td>.009</td>
</tr>
<tr>
<td>Reciprocal following a</td>
<td>.312***</td>
<td>-.129</td>
</tr>
<tr>
<td>Candidate's followers net size a</td>
<td>.394***</td>
<td>.115</td>
</tr>
<tr>
<td>Candidate's following net size a</td>
<td>.385***</td>
<td>.045</td>
</tr>
<tr>
<td>Candidate's favorites net size a</td>
<td>.395***</td>
<td>.145</td>
</tr>
<tr>
<td>Average # shared connections (network overlap) a</td>
<td>.354***</td>
<td>.097</td>
</tr>
<tr>
<td>Max # shared connections (network overlap) a</td>
<td>.375***</td>
<td>.074</td>
</tr>
<tr>
<td><strong>Party characteristics</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Represented in national government</td>
<td>.345***</td>
<td></td>
</tr>
<tr>
<td>Participated in EP elections 2004</td>
<td>.537***</td>
<td></td>
</tr>
<tr>
<td>Participated in general elections 2006</td>
<td>.593***</td>
<td></td>
</tr>
<tr>
<td>Euro skeptic political parties</td>
<td>.251***</td>
<td></td>
</tr>
<tr>
<td>Age of the party in 2009</td>
<td>.412***</td>
<td></td>
</tr>
<tr>
<td><strong>Ideology</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Left-right</td>
<td>-.132*</td>
<td></td>
</tr>
<tr>
<td>Conservative-progressive</td>
<td>-.007</td>
<td></td>
</tr>
<tr>
<td><strong>Past electoral success</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td># votes NP 2006</td>
<td>.500***</td>
<td></td>
</tr>
<tr>
<td>Change in number of seats 2003-2006</td>
<td>-.157***</td>
<td></td>
</tr>
<tr>
<td><strong>Candidate characteristics</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rank # of candidate on party list</td>
<td>-.324***</td>
<td></td>
</tr>
<tr>
<td>Gender of candidate</td>
<td>-.203***</td>
<td></td>
</tr>
</tbody>
</table>

* p<.01, ** p<.05, *** p<.01

a natural log transformation
CONCLUSION AND DISCUSSION
This study focused on the adoption and the use of micro-blogging in political campaigning. Subsequently we focused whether there are indications whether the use of micro-blogging is effective the gain more votes. The findings show that micro-blogging as a campaigning tool is adopted only by a minority of approximately 12%. The adoption rate for different parties varies quite strongly. Some parties appear to be quite reluctant to use micro-blogging, such as some of the new parties and the PVV. Candidates from other parties (PvdA, GL, and Newropeans) seem to be more willing to use micro-blogging. As such these candidates can be seen as the innovators and early adopters. These findings support the normalization and not the innovation hypothesis.

As for the candidates’ activities on micro-blogging site Twitter the results also vary quite extensively. Those that are in opposition in the national parliament started micro-blogging significantly earlier, and have larger online networks. As such it seems that micro-blogging is associated with being in the opposition and getting fewer votes. However, fringe parties seem not to benefit from this. Apparently some initial visibility and media attention, something fringe parties lack, is important to create larger networks.

Regarding the supposed benefits new media provide for those that lack chances to be elected (parties and candidates alike), the results show that candidates less likely to be elected do not use micro-blogging to promote themselves. As such this finding refutes the innovation hypothesis and supports the normalization hypothesis. Still the question remains, did these candidates not use Twitter because they evaluated Twitter as an inferior tool, or were they unfamiliar with utilizing new media in general and Twitter specifically to begin with?

The question what it's good for to micro-blogging? What benefits does micro-blogging have for politics in general or politicians in particular? This questions the effectiveness of micro-blogging. Effectiveness could be measured in terms of to what degree people are informed by reading the micro-blogging messages. Do people learn from political micro-blogging, do they become more knowledgeable? The answer to this question is still open. However, we can surely say that conveying complex messages on complicated politics using merely 140 characters is quite difficult, unless one uses many messages or hyperlinks to more informative web pages. However, whether micro-blogging is about informing people at all, can be argued. More and more politics tends to focus on the personal characteristics instead of the political messages. People want to be friends with some politicians, or want to despise others. Social network sites allow people to socialize with politicians, thus diminishing the psychological distance between politicians and
voters, especially when politicians write about their personal life. Also, followers can direct messages to the politician, making them more approachable. Thus far these effects seem to be limited or nonexistent (Utz, 2009). Only when politicians engage directly in reciprocal online conversations, the attitude towards the politicians tends to be more favorable.

As for the question whether micro-blogging is supporting the innovation or the normalization hypothesis, the results indicate that micro-blogging is used by the traditional opposition parties. As such it supports the innovation hypothesis. However, the results also show that fringe parties do not utilize micro-blogging to their full advantage. Moreover, they do not use it.

The question on the effectiveness of micro-blogging in gaining votes the results show that indeed there are positive relations between the various blogging activity indicators and the number of votes. However, at the same time other indicators of belonging to the establishment and participation in prior elections also show positive relations with the number of votes. These combined findings suggest that there is no single explanations for the number of votes candidates receive, or that some explanations even may be spurious. However, because of the small sample, the use of multivariate analysis to determine what the net effects of factors are is not possible.

Still, an important characteristic of twitter as a micro-blogging application is that it draws people to a politician for which they already have a preference. In social network theory this is called homophily (McPherson, et al., 2001): people with similar characteristics tend to interact more amongst each other than people that are dissimilar. Utz's (2009) study confirms Norris' notion that online social networking means 'preaching to the converted’ instead of ‘preaching to the disbelievers’ (2003).

FUTURE DIRECTIONS
The European Parliament elections of 2009 were the first elections where micro-blogging was used in official campaigning. Given that the sample is small and the number of candidates that adopted micro-blogging is even smaller, makes it impossible to conduct multivariate analysis. A solution to increase the sample size and reducing the risk of overfitting by waiting for future elections where micro/blogging has been adopted more.

Because the data are highly structured pooling different data sets, even from different countries is quite straightforward. Local elections, with many constituencies, parties and candidates also form a good opportunity to study micro-blogging in political campaigns. Pooling these data sets introduces more options to search for explanations. For instance, whether characteristics of the populations or
constituencies are related to the use of micro-blogging, or in the case of cross-national analysis, whether differences in electoral systems are related to micro-blogging. Furthermore, differences between countries regarding the Internet use in general may affect micro-blogging as well.

Other approaches may be fruitful as well. An important one is content analysis to analyze whether candidates actually raise political issues or predominantly focus on creating a likeable image by sending messages disclosing personal information. Another approach entails a longitudinal analysis of blogging activities. This may shed light on the process of campaigning: how does the online campaign develop and to what extent do candidates and parties react to political events in the campaign and events unrelated to the political campaign. A final approach involves social and communication network analysis, whether this is networks between people on micro-blogging sites, or communication networks on micro-blogging sites. This could culminate in a mixed methods approach (cf. Vergeer & Hermans, 2008) that provides detailed information on political micro-blogging and the use of online social networking.

REFERENCES


For instance, the liberal party politician Hans van Baalen subscribed to Twitter to participate in a Twitter debate, organized by radio program TROS Radio Online, May 30, 2009. Subsequently, this account was discontinued and replaced with a new one.

Other indicators were considered, for instance the number of days the party was a member of the government in the last 30 years, and the ranking of the party election list. However these variables correlated very strongly amongst each other (multicollinearity), as such not providing additional information.

A few candidates removed deleted their accounts after the elections. Of the 288 candidates, 36 candidates had a Twitter account; five had removed the account before data could be archived. These five candidates were included in the category twitter users. However their Tweets were deleted from Twitter.

What constitutes a friend on social network sites is matter of debate, especially whether an online only friend equals an offline friend.