Social media actions and interactions: The role of the Facebook and Twitter during the 2014 European Parliament elections in the 28 EU nations.

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Introduction: social media as a campaign tool

Much has been written about the fact that social media facilitates the conditions for a more interactive and participatory form of politics, and for political public spheres to emerge online (Papacrissi, 2010). However whether any space within social media acts as a public sphere is reliant upon the organisations and individuals that use those spaces. On the whole research finds that social media is predominantly used by organisations, commercial and political, for broadcasting informative and persuasive content to their audiences. The difference between social media and other broadcast forms is that users can respond. Responses can be in the form of comments, positive or negative, users can share a message within their networks or endorse it through liking or making it a favourite. Highly active communities have been discovered, sustained by fans around films, books, authors, bands or similar (Baym, 2010). However, studies within the realm of politics find less hopeful signs, with interactions being limited, characterised as hostile 'flaming' or 'graffiti', and deficient in being deliberative, informed and reflective (Jackson & Lilleker, 2009).

Most political parties across democratic nations have created their own spaces within social media. Ostensibly studies show that social media is seen as an important campaign tool across parties in EU member states (Lilleker et al, 2014) and parties utilized these platforms chiefly to further their electoral goals (Ross et al, 2015), but whether their social media profiles are used by visitors and what forms of behaviour are encouraged is largely beyond official control without devoting significant resources to moderation (Jackson & Lilleker, 2009). Hence visitors to and members of party profiles can choose whether to show support, through using the like or favourite buttons, to extend the reach of the party through sharing or retweeting to their own followers; these we classify as actions. Additionally, or alternatively, users can respond to a post by adding their own comment: basically users can endorse, critique or question, or indeed ignore or avoid, as they wish; these we classify as interactions. This article is the first to gather data that allows us to detect and explain patterns of participation within social media. Our dataset is the posts and responses from the Facebook and Twitter profiles for all the 291 political parties who used these platforms standing across the 28 EU member

states for election to the European Parliament in 2014. The aggregated data, organised by party and by country, allows us to determine how political factors determine which parties gain the greatest support and interaction (new fans or followers acquired during the electoral period). The disaggregated data consists of 17,863 threads created by 291 parties on Facebook with detailed information (date, hour, format, length of the text etc) and number of likes, shares and comments to them. This data allows us to determine how communication factors influence actions and interactions. Cumulatively this paper provides the first analysis of the determining factors of political participation within the social media profiles of political parties.

Literature review

Studies find that social media, such as Facebook, provides social capital, usually measured in the number of friends, however the notion of capital may also spill over into other activities such as interacting with individuals perceived to be influential (Ellison et al, 2007). Research has also suggested Facebook acts as a social lubricant, encouraging individuals to convert latent to weak ties and enabling them to broadcast requests for support or information (Ellison et al, 2011). Our research questions whether we find evidence that social media might also offer political capital, for organisations, and act as a lubricant for online forms of political interaction and activism.

Joinson (2008) proposes a set of seven gratifications which are relevant for Facebook users, these are: social connection, shared identities, content, social investigation, social network surfing and status updating. Joinson's represents the most detailed, others propose four gratifications: socializing, entertainment, self-status seeking, and information (Park et al, 2009). These broad gratifications categorisations are as relevant to the context of politics as that of the profiles of the corporate or entertainment environment. Those political activists who confine their activism to being e-expressive (Gibson, 2015) seek to satisfy their needs through being 'political' via social media.

Motivations are suggested to not be within Facebook but external to Facebook. Offline interests, friendships etc. are accelerated and facilitated through Facebook. Furthermore usage of Facebook is driven by a motivation to communicate to the profile creator or about a topic (Ross et al, 2009). Baym (2010) reinforces the notion of there being an underlying motivation to communicate, approaching the study from the

perspective of analysing fandom, she argues that connections are often made online through shared interests as opposed to offline friendships merely being replicated online. These connections, she argues, can be seen through interactions on dedicated pages. In the context of music fans, interactions demonstrate connections between individuals across sites and spaces, and connections can become stronger through interaction as well as wane over time (Baym, 2007). Arguably actions and interactions within the profile of a political party will demonstrate, through liking and making a favourite, a degree of support; sharing and retweeting a desire to make a particular message seen more widely, possibly adding text to show relevance within a network; commenting represents a desire to be heard either showing support or opposition, offering an alternative or oppositional proposal or responding to another user. Cumulatively each action and interaction contributes to a campaign narrative that can be viewed by any other user if they wish.

There is evidence that an individual's success in society depends on the shape and size of his/her social network and ability to network and form connections with other social groups (Adler & Kwon, 2002). This is argued to be similar for organisations. In particular, organisations with influence within a network, virtual or not, which can harness the innate human ability to manage knowledge, will be able to lower transactions costs and become more profitable (Zyl, 2009). The concept of organisational capital has been applied to the use of social networks by organisations. Shih (2009) argues in fairly simplistic terms that social networks, focusing on Facebook, permits organisations to fulfil three objectives easily. Firstly product development can be enhanced through crowdsourcing feedback and interacting with past and potential users. Secondly it allows greater reach to a wider audience than can be the case for awareness campaigns using traditional media due to the chances of accidental exposure (Tang & Lee, 2013). Thirdly, as a concomitant, organisations can sell more of their products, with enhanced consumer satisfaction, to a wider group of consumers. If directly translated to a political context, parties could use social media to crowdsource policy ideas, support and engage in longterm interaction with members and supporters. However, data shows political parties tend to use social media for 'controlled interactivity' at best (Stromer-Galley, 2000) and mainly for broadcasting messages (Jackson & Lilleker, 2009). Our data reinforces this, finding that out of 11784 posts receiving at least one comment only 1,137 received a response from the party. We might therefore hypothesise that parties should gain minimum attention from their followers as users are argued to seek out organisations which adhere to the communicative norms of the social media environment and will interact with users (Lilleker & Jackson, 2011; Heller Baird & Parasnis, 2011), however this would seem not to be the case, though how we can measure and compare levels of attention and make a normative judgement regarding what might be high or low is a moot point.

While there is wide agreement that social media holds enormous potential for companies to get closer to customers and, by doing so, increase revenue, and reduce costs and efficiencies, the same is less clear for political parties. From a broad service provision perspective, a range of studies suggest social networks are reengineering the way citizens or consumers interact with a range of organisations. Hawn (2009) found social media were changing the nature of interactions between patients and doctors, for example. Studies focusing on the value of user-generated social media communication find a positive influence on both brand equity and brand attitude, whereas organisational-created social media communication affected only brand attitude. Both brand equity and brand attitude were shown to have a positive influence on purchase intention (Schivinskia & Dabrowskia, 2014). These studies suggest that interest, measured in numbers of fans and followers and their forms and levels of engagement, may be an indicator of equity and support in the 'real' world outside social media.

Small-scale studies of advocacy groups' websites suggest that the use of dialogic strategies could lead to greater dialogic communication. One study also examined whether dialogic strategies utilized by environmental advocacy groups via their social networking profiles lead to greater dialogic engagement between organizations and visitors and was the first to examine the relationship between the creation of an online space for dialogue and actual dialogic engagement by identifying and measuring six dialogic outcomes (Bortree & Seltzer, 2009). Bortree & Seltzer find that where levels of conversation are visibly greater between members of a group who like an organisation on Facebook there are greater numbers of members and visits suggesting that interactions within a group lead to increased interest and support. Furthermore where the organisation visibly interacts with its members there are greater numbers of visitors converted into being members. In fact organizational engagement exhibited the most significant relationships with outcomes leading the authors to conclude that "strategies to create opportunities for dialogic engagement may produce positive outcomes such as increasing the number of stakeholders who interact with the organization by

growing the organization's social network. This is especially true when the organization takes the first step to stimulate dialogic engagement by posting comments in dialogic spaces on their profile where users within the social network can then capitalize on available dialogic loops" (Bortree & Seltzer, 2009: 318). The size and character of our dataset makes it impossible to reliably determine the extent that organisations initiate dialogue, by asking questions, however we are able to map whether frequency of posts is correlated with fan or follower numbers, growth in followers and their subsequent levels of engagement.

This approach is validated as success in terms of user engagement, be that following or being an active follower, is not simply a factor of initiating dialogue by asking questions. The richness of the content (inclusions of images and videos) raises the impact of the post in terms of likes. On the other hand, using images and a strategic publication time, for example posting when platform users are most likely to be browsing, significantly influence the number of comments (Sabate et al, 2014). To provide insights to practitioners willing to utilize social networks for marketing purposes, one study analyzed the factors in terms of characteristics of the content communicated by the company, such as media type, content type, posting day and time, over the level of online customer engagement measured by number of likes, comments and shares, and interaction duration for the domain of a Facebook brand page. The results show that there is a different effect from the analyzed factors over individual engagement measures (Cvijikj & Michahelles, 2013). As would be expected entertaining content, what we in previous work have classified as engaging content (Koc-Michalska et al, 2013), such as pictures and videos, gain increased levels of engagement with pictures being the most popular. This is the case also for informative content, but curiously interactivity may decrease engagement. Cvijikj & Michahelles also found that posting on workdays and out of peak hours of activity within a network increased levels of engagement suggesting that posts need to be seen to be engaged with and so strategically parties need to be aware when the environment is least cluttered but also when their followers are most likely to be online. While interesting, the focus on consumer brands means we can raise questions about the applicability for a political context.

Hudson and Hudson (2013) similarly found that for Facebook, the probability of generating engagement was dependent upon, inter alia the type of event, the number of fans and the number of posts by the organisers, whereas the level of engagement was dependent upon, inter alia the topic, timing, and length of the post, but

also on the number of visitors and length of the event. For Twitter, engagement was also dependent upon the use of links and hashtags, the medium through which a message was posted, and whether or not a post was a reply to, or retweet of, another tweet. Youtube engagement was dominantly predicted by number of views. Hence there is a sense that the rich, measured in numbers of engaged users, will get richer and receive further, higher levels of engagement.

Yet, the majority of studies find that the types of interaction on Facebook pages and user involvement are key factors affecting a range of behaviours, in particular decision making over purchases and building loyalty. Specifically where users could interact directly with the company and see an impact resulting from their input they felt greater involvement and so claimed they would exhibit greater loyalty (Shin & Kang, 2014).

While communication style, timing and content is deemed important these studies tend to focus on highly prominent commercial brands, for example the four market-leading home-shopping brands (Shin & Kang, 2014) or the top 100 brands advertising on Facebook (Cvijikj & Michahelles, 2013). Market leaders in any sector have an advantage in gaining fans, and politics is no different. Hence, independent of communication strategy, we might find that the political parties with historically high levels of electoral support will equally have the highest numbers of fans, make the largest net gain during the campaign and also receive the greatest number of actions and interactions. Many studies have used the normalization thesis to highlight how in politics the parties with the greatest levels of support in previous contests have access to greater resources, so have a more sophisticated offline and online campaign (Schweitzer, 2011; Lilleker et al, 2011) and gain the greatest attention through the campaign (Strandberg, 2013). However, within the context of a second-order election we also may find that smaller parties with lower resources are able to leverage the electoral context and social media environment to mobilize supporters to a greater extent, in particular where the European parliamentary election presents an opportunity to vote against the established parties.

We therefore hypothesise that:

Macro-variables

H1: Parties in countries with larger Facebook penetration rate (number of Facebook users per population) have a potential to have larger social media communities.

H2 Parties with greater electoral success will have larger social media communities, so confirming the normalization theorem, and in general we find a pattern between online support and vote share.

H3.1 The profiles of parties with the greater number of users at the beginning of campaign period will receive a further dividend in profile likes or follows ; and H3.2: Parties with historical electoral success will attract the larger community (gain of new followers) during the electoral campaign.

H4: The profiles of parties with the most content (in sheer numbers) will attract the greatest numbers of fans or follows.

Communication strategy variables

H5: The posts with the more engaging content, in terms of photo, video and hyperlinks will earn the greatest number of actions and interactions.

H6: Posts with engaging content accompanied by explanatory text will earn a further dividend in actions and interactions

H7: Interactivity among profile owner and fans influence the actions and interactions of fans

H8: Activity and interactivity on previous post (t_{n-1}) should have a positive effect on activity and interactivity on the next post (t_n)

H9: The timing of the post will be important for gaining a greater number of actions and interactions

Methodology

Sample

The study is based on two samples. First, we use the *aggregated data* which comprises the activity of the parties (posting strategy) and the general responses it achieves (new fans or followers acquired during the electoral period; likes, comments and shares). Second the *disaggregated data* based on the detailed information on each Facebook thread created by parties during the campaign. The first sample includes the Facebook and Twitter profiles for all the 291 political parties who used these platforms standing across the 28 EU member states for election to the European Parliament. The second sample includes 17,913 threads created by 291 parties on Facebook with detailed information (date, hour, format, length of the text etc). The collection, both samples, was performed during the two weeks before the EP 2014 elections held in most countries on 25th May 2014, with the exception of United Kingdom, Netherlands (22nd May), Ireland and Czech Republic (23rd May), Slovakia, Malta and Latvia (24th May) where the period of two weeks was adapted accordingly. We exclude from our analysis the day of voting, as in many countries posting on that day was forbidden until the closing of the polling stations. The sample is based on all parties standing in the elections with the exception of a few local parties which entered no more than one candidate and so were impossible to detect due to their invisibility in the main media before the elections. Among the 291 parties¹, 213 were present both on Facebook and on Twitter, 11 were present only on Twitter and 67 only on Facebook. The aggregated data covers both Facebook and Twitter, the disaggregated data is only for Facebook.

During the period of research we gathered and archived all the data available on both social media for all parties in the sample. We have used a special, paid version of an application called SoTrender.com to construct our data set from active official profiles of the political parties on the Facebook and Twitter profiles.

Dependent variables

Our set of dependent variables is based on the data available from the social media profile.

Fans or followers of the profile: number of users who liked or followed the profile of the political party on Facebook or on Twitter. Our definition of fans or followers is those who decided to like or follow the whole

¹ In the preliminary data set we have identified 363 active parties however we eliminated those without an official Facebook or Twitter profile available two weeks before the election.

profile, so that the feeds from the profile would appear on their news feed, and are people interested in the party and likely to be supporters or sympathizers. The mean for the Facebook fans for all parties in our sample is M=24,495 (SD=44,086), for Twitter followers M=16,765 (SD=38,781) (for general statistics per country please see the Appendix.). This variable is not correlated with the electoral campaign however allows us to describe the general trends within the countries or across parties. This variable is further used as an independent variable to control for the size of the community at the beginning of the campaign (t_1).

Community gain: number of new followers of the profiles on Facebook or on Twitter gained by the political party during the campaign. The overall Facebook community around political parties developed on average by M=1,778 newcomers (SD=5238) and Twitter by M=298 (SD = 619). Those variables are analysed by using aggregated data.

Audience engagement counted separately in the number of *Likes*, *Comments* and *Shares* made by visitors on Facebook during the campaign period. The most popular activity is liking, number of *Likes* M=281 (SD=921) (with the largest amount of 31523 likes per post); other, more engaging activities are definitely less popular: for *Shares* M=61 (SD=402) (with the most shared post by 39550) and for *Comments* M=30 (SD=139) (with the highest post gaining 8342 comments). Those variables are analysed using the disaggregated data.

The counted dependent variables indicate the usage of the Poisson regression however due to the strong overdispersion Pearson statistics for Poisson regression reach beyond the excepted values (P>20) thus we use the negative binomial regression which allows reaching Pearson statistics around 1 (Hilbe 2011).

Independent variables

Threads by the political parties: number of threads posted on the official profile by political parties during the two weeks of electoral campaign. The threads are recorded as the general number created on FB or TW during the campaign (for aggregated data) or are divided into *photos*, *videos*, *status* (text), *links* (for Facebook profile). The mean number of all posts for all parties on Facebook is M=60 (for *photo* M=26 (SD=37); for *video* M=7 (SD =9); for *links* M=23 (SD=42); for *status* M=4 (SD=11)) for tweets M= 119 (SD=187). When analysing the disaggregated date we use *link* as a reference group, following the argument of Cvijikj & Michahelles (2013) characterizing them as medium with high vividness and high interactivity, so being in

between other activities (*photo* having low vividness and low interactivity; status having no vividness and low interactivity; video having high vividness and high interactivity).

Country characteristics: countries are included as fixed effects in the regression with Ireland being a reference (Ireland was chosen as the country with an Internet penetration rate² (M=78.2%) closest to the average for our sample (M=77.8%)). Due to output size this is not reported but is available on request.

Party characteristics.

For aggregated data: Party years of existence (continuous) number of years since party was established; Party size (dummy) categorization of the parties according to their score in last national elections and number of seats in national parliament³: major parliamentary (scored above $20\%^4$ in elections, N=51), minor parliamentary (other parties present in parliament, N=142), major fringe parties (gained more than 1% of national votes but do not sit in national parliament⁵, N=21), minor fringe parties (all other parties, N=77). Party ideology (dummy) and EU positioning (dummy) variables are based on the data delivered by the EU profiler study⁶. Party ideology consists of four categories: Right leaning parties (N=88), Left leaning parties (N=126), Centre leaning parties (N=32) and Single issue/other parties (N=45). EU positioning identifies three groups: Pro-EU (N=176), Neutral (N=59) and EU-sceptics (N=56) (comparative categories). Party in government or in opposition (dummy, 1= in government N= 72, 0 = in opposition N=219).

For the disaggregated data: party dummies are used as fixed effects (omitted from the output)

Facebook characteristics (for disaggregated data only):

Interactivity indicates if the owner of the profile (political party) is responding in the comments section under the original thread to comments left by the visitors. 1,137 threads received additional interactivity where conversation was initiated among the political party and community members. The most commented thread had 78 responses comments from the political party, the mean M=.13 additional comments (SD=1.17). The variable is included in the analysis as dummy.

² data.worldbank.org

³ We used that mixed system in order to detect parties which scored on general low in elections however due to electoral system have representatives in the national parliament (for example in France *Debout la République* gained .56% of votes in 2012 legislative elections however due to coalition electoral system has two representatives in Assemblée nationale <u>http://www.france-politique.fr/elections-legislatives-2012.htm</u> (accessed 05.01.2015)

⁴ With the exception of Liberal Democrats (UK) who gained 22% of votes however have the minor parliamentary group ⁵ With some exceptions, please see the footnote above

⁶ EU profiler study directed by Alexander Trechsel and his team at EUI University, Florence. (Garzia et al, 2015)

Post length continuous variable indicating number of characters in the text under the thread, some of the post could have no text at all, the longest post had 17,442 characters; M=212 (SD=497) characters, indicated as a logarithm. Additionally the types of interaction (*Likes, Photos*, and *Shares*) were measured comparing post content and text length in order to control for threads which included both more interactive and vivid content with textual content. Facebook recognizes and hierarchizes the threads according to only one out of four groups *Video, Photo, Like* and *Status* (in practice it means that if video is accompanied by text message the text is not taken into account). However it is important to control for the different character of the threads, as the meaning of video only content differs from video with comment and may be important for the type of interaction.

Historical community activity indicates the activity of the community towards the previous threads. It measures accordingly number of *Likes, Shares* or *Comments* for the previous thread made by political parties. This controls for communication going viral, which may attract additional community members). This is a continuous variable, with first thread excluded, indicated as logarithm.

Campaign stage: number of days since the campaign start, continuous variable from 0 being the first day of campaign to 13 being the day before voting). Here we control for the development or maturity of the campaign and the possible influence of campaigning on community responsiveness. In the analysis we do not use data from the day of voting as due to the campaign silence in twenty one countries where posting is forbidden on the day of voting, as consequence the posts from that day are done after the campaign.

Campaign silence in some countries there is an electoral silence 48h or 24h before the end of voting, We control for that using dummy variables where 0 = no restriction 1 = restriction on campaigning.

Time intervals: we count in seconds two time intervals (in logarithms) *since last thread* and *till next thread*. With this variables we can control for the threads that are published in a very short time slots (in some cases the difference between posting photos were a few seconds), in such cases it was possible that the community would be active only on the last thread and not on the first thread of a series. It can be hypothesised that the posting systematically, leaving gaps between posts to allow for reading and responding, may have a positive impact on community (in contrary to very intense but sporadic communication).

Days of the week counted as dummy for weekdays. We assume that people may be more active outside working days. *Hour of the day* (included in regression but omitted from the output) counted as dummy variable for hourly intervals.

Social media political communities in Europe

The size of the Facebook and Twitter community of fans or followers is highly dependent on party size, suggesting adherence to the 'politics as usual' hypothesis which states parties with highest financial and human resources, and highest visibility offline, have the highest following online. In our sample all parties perform better then minor fringe parties (so those gathering less than 1% of vote in national elections). Major parliamentary parties gather the largest communities on both platforms. Minor parliamentary parties perform better on Twitter than Major fringe parties however they gather smaller communities on Facebook. Political ideology is not significant for creating a community on Twitter. Parties with clear ideological stances – left or right oriented (in comparison to centrist or single issue parties) have more followers on Facebook.

Country characteristics importantly differentiate the communities on social media. Not surprisingly the largest EU countries also gather the largest Facebook communities Italy (797ths), UK (784ths) and Germany (735ths) or Twitter communities Italy (702ths), UK (538ths), Spain (520ths) and as the exception the Netherlands (520ths). The smallest Facebook communities are gathered in Latvia (1650), Estonia (16ths) and Luxemburg (17ths); for Twitter those are Bulgaria (318), Slovakia (1080) and Romania (2077).

Facebook statistics allows us to compare countries according to penetration rate of political communities in relation to the Facebook users per country (dividing number of parties' followers by Facebook users in country). Malta is the definite leader, as political parties achieved 22% of potential followers available on Facebook. Hungary (12%) Cyprus and Czech Republic (10%) are next, below are Luxemburg (8%), Sweden and Austria (6%), Denmark, Slovakia, Belgium, Portugal, Greece and Poland (5-4%), with parties from other countries gaining less than 3% of their potential audience, with France (1.6%) and Latvia (.04%) gathering the smallest percentage of Facebook users within their communities. Findings from Table 1 do not confirm Hypothesis 1, parties from countries with the highest Facebook penetration rate per population do not gather

proportionally more followers than other countries, with the exception of Malta, where Facebook reaches half the population and parties reach 20 percent of those Facebook users. Parties in other countries with similar Facebook penetration rates (United Kingdom, Sweden, Denmark) hardly reach beyond a few percent of their potential supporters (UK 2.6%, SE 6.6%, DK 4.8%).

	Political fans	Facebook users	% ^a)	ratio ^b		Political fans	Facebook users	(% ^a)	ratio ^b
Austria	200 177	2 915 240	(35%)	.069	Italy	846 181	23 202 640	(37%)	.036
Belgium	196 451	4 922 260	(47%)	.040	Latvia	1 731	414 520	(19%)	.004
Bulgaria	59 032	2 522 120	(36%)	.023	Lithuania	32 711	1 118 500	(32%)	.029
Croatia	49 369	1 595 760	(35%)	.031	Luxemburg	18 391	227 520	(44%)	.081
Cyprus	59 854	582 600	(49%)	.103	Malta	47 739	217 040	(52%	.220
Czech	399 734	3 834 620	(36%)	.104	Netherlands	182 390	7 554 940	(45%)	.024
Denmark	145 925	3 037 700	(54%)	.048	Poland	381 727	9 863 380	(26%	.039
Estonia	17 030	501 680	(39%)	.034	Portugal	182 411	4 663 060	(43%	.039
Finland	55 672	2 287 960	(43%)	.024	Romania	115 036	5 374 980	(29%)	.021
France	402 044	25 624 760	(38%)	.016	Slovakia	85 273	2 032 200	(37%)	.042
Germany	801 353	25 332 440	(31%)	.032	Slovenia	24 245	730 160	(37%)	.033
Greece	149 859	3 845 820	(35%)	.039	Spain	446 752	17 590 500	(37%)	.025
Hungary	525 463	4 265 960	(43%)	.123	Sweden	325 735	4 950 160	(51%	.066
Ireland	64 561	2 183 760	(45%)	.030	United Kingdom	860 723	32 950 400	(52%)	.026
Source: http://ww	Source: http://www.internetworldstats.com/stats9.htm Facebook data for Dec 2014								

Table 1. Politically oriented Facebook community in Europe

a. % of Facebook users among the population, b. proportion of political fans on Facebook to general Facebook community

Regression analysis using fixed country effects, which means that we control for any characteristics of the country, (Table 2) confirms Hypothesis 2, well established political parties do have a larger communities of fans suggesting the normalization theory continues to dominate explanations of performance. However, interestingly, we can detect two patterns. All parties have larger communities on Facebook than Minor fringe parties, however Major fringe parties perform better than Minor parliamentary parties, so there is evidence of exploiting the mobilisation potential by parties on the edge of being (but which are not) present in the parliament. Parties with a definitive ideology (either left or right) also seem to build larger communities than centre-oriented or single issue parties. We can say a little about outsider parties (major fringe) in the context

of 2^{nd} order elections, they may gain a dividend from protest supporters and so be successful at mobilization, clearly they seem to gain more supporters than minor parliamentary parties.

Table 2. European political social media communities (here or appendix)

	Facebook community size	Twitter community size	
	Coef.	Coef.	
Party size (comp. Minor fringe)			
Major Parliamentary	1.291**	2.344**	
Minor Parliamentary	.678*	1.475**	
Major Fringe	1.182**	1.245*	
Party years of existence	001	003	
Party ideology			
Left leaning	.377*	.368	
Right leaning	.507**	.089	
Pro-EU	.327	.296	
Governmental party	163	283	
BE	.530**	.364	
BG	.271	-3.838***	
CY	.353	584	
CZ	1.333***	-1.810***	
DE	1.719***	.813***	
DK	.816***	825***	
ET	-1.281***	-2.753***	
ES	1.538***	1.230***	
FI	307**	231	
FR	.929***	.732**	
GR	.729**	085	
HR	651**	-2.860***	
HU	2.342***	-1.420***	
IT	2.699***	2.106***	
LI	792**	-3.520***	
LU	-1.234***	-1.661***	
LT	-2.640***	-1.180**	
MT	.263	-1.432***	
NT	.898***	1.910***	
PL	1.332***	731**	
РТ	.889***	-1.723***	
RO	1.049***	-1.996***	
SE	1.549***	1.369***	
SI	863**	820**	
SK	.287	-3.848***	
UK	1.157***	1.056***	
AU	1.066***	-1.236***	
CONSTANT	7.788***	7.405***	

New Community Building dynamics: external factors (party characteristics)

Strategies employed may play an important role in attracting new fans and followers to Facebook or Twitter party profiles. Table 3 presents the regression results where the independent variable is the number of people who started to follow the parties' social media profile during the campaign. The regression analysis confirms the hypothesis (H 3.1) that there is a cumulative effect of parties already rich in followers or fans (at t_1) before the electoral campaign gain most followers during the campaign (t_2) , even if this effect is minimal. However the growth in the size of the community on Facebook, in contrary to Twitter, is not related to overall party size. For Facebook there is no effect from being in the national parliament (and the finding persists if interactions between party size and size of the initial community are introduced into the regression). Results for gaining Facebook fans do not confirm hypothesis 3.2, we do not find the confirmation of the supremacy of the historically larger national parties, however since the differences are not statistically significant we also cannot confirm a mobilization effect of the campaigns of smaller parties, at the best we would claim that there is an equalization of the chances for community building as differences between parties are close to zero and are not statistically significant. Interestingly, for Twitter, parties of all size gain more than the fringe minor parties, however when introducing the interaction between party size and initial community we find that it is parties of each category but with smaller initial Twitter communities that gain most new followers. Parties in opposition are definitely more likely to attract a new community, on both Facebook and Twitter, reflecting the fact that governing parties tend to do worse generally at EP elections (Hix & Marsh, 2007). Left leaning parties tend to have slight advantage on Twitter, but political ideology, similarly to years of existence or position towards EU plays no role in community building.

The types of content strategies employed by political parties for both Facebook and Twitter shows the effect of the active owners, the more posts the more chances to attract new fans or followers of the profile, confirming Hypothesis 4. The question of how party activity on social media translates into user engagement in general follows in next part. However for our macro variables we find the normalization theorem is confirmed for Twitter only, Facebook allows smaller in general parties to mobilize to a similar extent to the most popular parties, especially during the electoral period, but increased levels of activity can also lead to gains in supporter numbers.

Table 3. New community members

	Facebook new fans	Twitter new followers
	Coef.	Coef.
SM entry		
thread	.006**	.001***
Party size (comp. Minor fringe)		
Major Parliamentary	.631	3.969***
Minor Parliamentary	.393	2.029***
Major Fringe	942	3.052***
Party years of existence	.006	002
Party ideology		
Left leaning	.361	.431*
Right leaning	.072	.486
Pro-EU	.286	236
Governmental party	627**	430*
FB/TW fans t1	.00004**	.0004**
Interaction		
Major Parliamentary * nb of fans/followers t ₁	-0.00002	-0.00045**
Minor Parliamentary * nb of fans/followers t ₁	-0.00001	-0.00042**
Major Fringe * nb of fans/followers t ₁	0.00001	-0.00045**
CONSTANT	4.206***	2.840***
(1/df) Deviance	1.293	1.216
(1/df) Pearson	1.186	.982
Ν	278	79

Country fixed effects omitted from the output

While it is impossible to infer causality between the activities of parties and engagement of the network with their profiles on Facebook and Twitter and the outcome of an election, it is interesting to assess the extent to which support within a social media environment mirrors that at the ballot box, as we suggest in Hypothesis 2. We find that those who gained a greatest share of the vote were also likely to have the greatest number of fans of their profile but that this pattern is not the same for earning fans during the campaign. In other words, in most countries, they had built their support network prior to the campaign and the parties who earned fans as a result of the campaign were no more likely to gain votes than those that did not. Similarly, the parties who gain the most votes are also slightly more likely to have posts liked and commented on. However, what is

interesting is that the parties who gained new fans during the campaign were the parties that were most likely to have a highly engaged audience carrying out a range of activities and extending their reach online. While this dynamic appears particular to Facebook, it would seem that those parties that are able to gain new fans during a campaign gain fans who are at that time keen to be part of an active audience, the engaged audience who actually take an active role in showing support as well as entering into conversations and responding to posts.

	Vote Share	New Fans
Facebook fans (total)	.265**	.535**
New Facebook fans (earned during campaign)	.058	
Likes of posts (during campaign)	.151*	.629**
Comments on posts (during campaign)	.139*	.541**
Share of posts (during campaign)	.075	.640**
Number of engaged (fans who performed any action	110	270**
during the campaign)	.118	.3/8**

 Table 4: New community members and communication dynamics

Numbers indicate Pearson r. Stat significance * p<0.10, ** p<0.05, *** p<0.01

However the findings differ a little between nations. Specifically we find in Belgium (.666**), the Czech Republic (.582**), France (.768**), Greece (.913**) and the UK (.642**) there are clear correlations (coefficients and their statistical significance shown in brackets after the country name) between gaining new fans and gaining vote share. For the case of Belgium's New Flemish Alliance, France's Front National and Parti Radical de Gauche, Greece's Coalition of the Radical Left and UK's UK Independence Party this mirrors the rising popularity of extremist parties but shows in Belgium, France and the UK that it has become socially acceptable to publicly support the radical or Eurosceptic right. However, it shows that mainstream parties can also benefit, in the UK the Labour Party also gained significant numbers of followers, whereas in the Czech Republic the main beneficiary in terms of followers and electoral support was the populist but centre-left ANO 2011 party. Therefore, we find in some countries that the social media dynamics mirror wider political trends but that overall there is a much more mixed picture and for some countries the parties who gained online were by no means beneficiaries of a boost in electoral support.

Communication strategies

Social media allows profile owners to post messages which reflect their strategic choices (Table 5). For Facebook, most parties post photos and links, following the best practice of social media attractiveness larger parties tend not to post the text-only threads, however fringe parties are more likely to post text without any additional engaging content (photo or video). Similarly for Twitter, as could be expected, the size of the party plays an important role in number of tweets in electoral period, with minor parliamentary parties being the most active.

Table 5. Average number of posts by party size

	VIDEO	LINK	TEXT	РНОТО	TWEET
general	7.44 (SD 9.8)	23.4 (SD 42)	3.8 (SD 11)	26.1 (SD 37)	118.8 (SD 187)
MAJOR PARLIAMENT	8.6	21	2.1	32	134.9
MINOR PARLIAMENT	8.5	23	3	28.1	137.1
MAJOR FRINGE	7.7	21.4	5.5	26.6	107.5
MINOR FRINGE	4.8	26.4	5.8	18.6	69.3

Note: differences are not statistically significant

Community activities dynamics: internal factors (Facebook strategy)

Political actors were especially active on the two days before election day, there is a strong drop off in posting the day before the election and again a rise on the day of elections (Graph 1). The low number of posts on the day before the election is most probably due to the campaign silence regulation in most of the countries. Although the restrictions are not fully clear for social media campaigning (as they are for the traditional media campaigning⁷), in countries where restrictions are in place there is a significant reduction in posting activity.





⁷ <u>http://www.elections2014.eu/en/in-the-member-states</u> (accessed 30.05.2015)

We find similar patterns for community activity, there is a growing tendency of *liking* and *commenting* closer to the campaign, with the highest activity two days before and a drop on campaign silence day. However we see a spike in engagement on election day. This may suggest that the Facebook *liking* and *commenting* is less connected with the campaign activity itself but rather with expressing oneself as a person (who voted or not, and is satisfied or not). Gearhart and Zhang (2013) in their research on spiral of silence on social media found Facebook users rather passive readers not commenting on social issues unless the issue has a great level of importance for them. Possibly a similar logic is found in political context, a minority engage in actions and interactions on an everyday campaign basis (probably those traditionally engaged in political campaigning, those being more interested in politics, maybe being active also offline or engaged in party activities), however for the majority only the day of elections, the victory or loss of the party to which they feel close, may feel important enough to activate their propensity to express their support. Therefore, political expression on social media may follow the same logic of traditional expression, and be most likely to occur on the day of voting and when results are announced.



Graph 2. Response of community by posting the threads during day of campaign

Different patterns are found for the *sharing* of the posts, an explicit measurement for the virality of the content and campaign promotion. *Sharing*, with its ups and downs, is divided into two periods: low-active first and high-active second week (graph 2).

Political actors are most active during the morning hours (8 to 12 a.m.), and as a result most attention is given to threads posted during the working hours, the most popular, in number of *likes, comments* and *shares*, are the threads posted during the daytime from 6h to 21h, with key periods of activism being at 9 and 11 a.m. for *liking* and 3 p.m. for *commenting*, and lunch time for *sharing*. This may suggest that the strategic posting of

the thread at specific times may influence the engagement of social media activists as it may align with the times they check Facebook.



Graph 3. Posting the threads by political parties on FB by hour of posting the threads during the day





The in-depth analysis of the influence of the internal dynamics on attracting engagement is examined by regression analysis on the number of *Likes*, *Comments* and *Shares* on the threads started by political parties.

Internal dynamic of Facebook strategies

In order to further understand the levels of engagement, and the types, we focus on the nature of the threads in order to understand how the strategies employed by political actors encourage actions and interactions. So basically what threads lead to campaign virality, gaining reach through community activities such as *Liking* or/and *Sharing* the content of the posts, or interactivity encouraging the community to participate in online conversations by *Commenting* (positively or negatively).

Table 5 shows the regression analysis on the three main activities performed by community members. The main explicative variables are interactivity, thread's character, historical community score, and time specificity⁸.

First, and probably the most intuitive finding is that interacting, so responding directly to comments of community members, brings a high dividend. Interaction has a strong positive impact on increasing further *commenting* and participation in dialogic discussion, as well as accelerating *liking* and *sharing*. This confirms Hypothesis 7 indicating that more engagement from the profile owner may reinforce the engagement of the community.

Second the character of the thread brings different results. In comparison to leaving a link (reference group), posting photos is definitely the better strategy to attract any kind of activity, video content has a positive effect only on sharing activity. In contrast, status (with a medium size text) has a negative results, which is especially strong for not encouraging sharing. Communities tend not to share, like or comment on simple, short cost-minimal text, probably graffiti style (Jackson and Lilleker, 2009) posts by political parties. On the contrary elaborated and longer in character status threads (Status*Length of thread) do gain additional community activity, especially *sharing* and *commenting*. However the effect of the thread character effect is slightly altered if we introduce the interaction of posting photo, video, status or link with the text (controlling for the number of characters). If the photo or video is accompanied by a long text message it has no statistically significant impact (or is negative for *liking*) on community activity. This may suggest that social media may play an important role in transmitting the carefully constructed and presented messages that political parties wish to share with their communities. Further semantical analyses are required⁹ to understand this phenomenon, from quick browsing of the data we learn that it is mostly smaller parties that use the longer text expressing often their political views and ideological stands thus probably bypassing traditional media in reaching their audiences. Thus we find mixed results for the hypothesis 5 and 6, while interactive threads (photo) may bring an additional dividend, when combined with text they may bring negative results. An

⁸ Some of the technical control variables (e.g. hour of post, detailed time slots, exponential of time variables etc.) are omitted from the output, as they do not influence the explicative variables strongly and serve as a base for the 'best practice' indication.

⁹ Text analysis is not the purpose of this study and it requires substantial resources allowing for analysis in 28 languages. Thus the presented explications are not based on systematic analysis but rather browsing in languages available to researchers.

elaborated status update, in contrast to short, graffiti style text updates, may yield a the high return in interactivity of the community.

	Likes		Comn	nents	Shares	
Interactivity	.372	***	1.041	***	.596	***
Thread characteristics (ref. hyperlinks)						
Photo	.834	***	.306	***	.666	**
Status	914	**	-1.158	**	-2.888	***
Video	.133		.061		.647	***
Length of the thread (In)	.035	**	.072	***	.143	***
Photo*Length of thread (In)	075	***	010		010	
Status*Length of thread (In)	.125	**	.185	**	.387	***
Video*Length of thread (In)	.003		.016		008	
Historical community						
Likes for last post (In)	.109	***	.006		.022	
Comments for last post (In)	001		.100	***	.026	
Shares for last post (In)	015		016		.039	**
Time specificity						
Day of campaign	.026	***	.025	***	.029	***
Time since last post (In)	.592	***	.581	***	.719	***
Time till next post (ln)	.449	***	.426	***	.283	**
Number of posts within a 1 hour window	062	***	085	***	069	***
Weekend	.025		067		072	
Campaign silence 48h	104		231		322	***
Campaign silence 24h	168	**	.124		267	**
Constant	.379		-1.692	***	-4.378	***
Dispersion	1.137		1.029		1.101	
Diespersion - Pearson	1.950		1.794		1.924	
Number of observations	16218		16218		16218	

Table 5. Regressions results for activity and interactivity

Stat significance * p<0.10, ** p<0.05, *** p<0.01

Note: time slots, squares and cubes of time slots, party fixed effects are omitted from the output.

We observe quite interesting tendencies which we suggest is a result of audiences clustering around similar activities. Historical community activity (number of *likes, comments* or *shares* left for the closest previous thread) is statistically significant only within the same activity indicating a kind of clustering of the visitors. Number of *likes* for the previous thread has a significant impact on attracting *likes* for next thread but not for *commenting* or *sharing*. Similar patterns are found for two other activities, the number of *comments* on previous post may attract more *comments* on the next one (but not on *shares* or *likes*) and more *shares* in t_{n-1} attracts more *shares* t_1 . This may suggest that certain community members perform one activity most, for

example a person might *like* but not necessarily *comment* or *share*. These speculations on varied actions stay in line with other research on behaviour on social media. Gearhart and Zhang (2013) found three distinct social media behaviour: commenting, reading but not commenting and ignoring (with the fourth behaviour being offline discussion).

Time specificity plays an extremely important role in explaining community behaviour. The intensity of *likes*, *comments* and *shares* grows over the lifetime of the campaign, the closer election day the more likely that supporters *like*, and supporters or opponents *share* or participate in *commenting*. Similar effects of intensity of community activity are found in other studies on Facebook during the elections, Wells et al. (2015) also founds that posts close to the election attract not only supporters of the profile owners but also opponents. The day of publication plays no statistically significant role in gaining community engagement, regardless of weekend or workdays (we also checked for the difference between each day, which was not statistically significant). Threads posted during the 24h campaign silence are definitely less *liked* or *shared*. Time slots since last post and till next post and hour of posting play an important role in attracting activities,

and due to the complexity of their impact they are discussed further in more detail.

Time slots and the yield of likes, comments and shares from posts

The estimated model (table 6) allows us to investigate the strategies that parties could undertake to maximise the *likes, comments* and *shares* gathered during the campaign. We now turn to the effects of time.

Since it is impossible to control for the cost of a post (party-specific), we cannot calculate the best strategy for a party to follow. Basing on the regression analysis we take the time characteristic variables and assuming that all other variables (including the constant) have a value of zero, we can evaluate different strategies and see what one can obtain on average the most actions or interactions. Table 7 shows the results calculated for each thread separately (hyperlink, photo, status and video) taking into account ten different strategies. We interpret only the time effects for a basic scenario of posting a hyperlink.

Strategy type	post / day	Time	A. ave	rage yield from	m a post	B. average yield daily		C. Total n over campaign, 14 days			
HYPERLINKS			likes	comments	shares	likes	comments	shares	likes	comments	shares
1 post per 14 days	0.071		4.11	5.00	4.85	0.29	0.36	0.35	4.11	5.00	4.85
1 post every two days	0.5	at 6-7h	3.04	3.73	3.88	1.52	1.87	1.94	21.31	26.14	27.18
1 post per day	1	at 6-7h	2.84	3.47	3.69	2.84	3.47	3.69	39.81	48.63	51.61
2 post per day	2	at 6-7h, 18-19	2.71	3.29	3.55	5.43	6.58	7.10	76.01	92.15	99.41
6 post per day	6	6h - 21h	2.62	3.11	3.41	15.79	18.79	20.56	221.04	263.01	287.89
12 post per day	12	6h - 21h	2.63	3.09	3.39	31.63	37.18	40.75	442.86	520.48	570.55
1 post per hour - 18 a day	18	6h-23h	2.53	2.91	3.24	45.71	52.90	58.72	639.98	740.55	822.14
2 posts per hour	36	6h-23h30	2.44	2.75	3.10	88.27	99.91	112.16	1235.79	1398.68	1570.26
1 post each 5 minutes	216	6h-24h	1.27	1.07	1.67	277.56	234.79	363.68	3885.86	3287.05	5091.54
continuous time	inf	24h	-inf	-inf	-inf	-inf	-inf	-inf	-inf	-inf	-inf
РНОТО									1		
1 post per 14 days	0.071429		4.94	5.31	5.51	0.35	0.38	0.39	4.94	5.31	5.51
1 post every two days	0.5	at 6-7h	3.88	4.04	4.55	1.94	2.02	2.27	27.15	28.28	31.84
1 post per day	1	at 6-7h	3.68	3.78	4.35	3.68	3.78	4.35	51.48	52.91	60.94
2 post per day	2	at 6-7h, 18-19	3.55	3.60	4.22	7.10	7.19	8.43	99.35	100.71	118.06
6 post per day	6	6h - 21h	3.46	3.42	4.08	20.79	20.62	24.56	291.07	288.72	343.85
12 post per day	12	6h - 21h	3.47	3.39	4.05	41.64	40.85	48.75	582.92	571.88	682.45
1 post per hour - 18 a day	18	6h-23h	3.36	3.22	3.91	60.72	58.40	70.71	850.07	817.66	990.00
2 posts per hour	36	6h-23h30	3.27	3.06	3.76	118.28	110.92	136.14	1655.97	1552.91	1905.97
1 post each 5 minutes	216	6h-24h	2.11	1.37	2.33	457.64	300.88	507.56	6406.96	4212.39	7105.83
continuous time	inf	24h	-1nf	-1nf	-inf	-1nf	-1nf	-inf	-ınf	-inf	-1nf
STATUS											
1 post per 14 days	0.071429		3.19	3.85	1.96	0.23	0.27	0.14	3.19	3.85	1.96
1 post every two days	0.5	at 6-7h	2.13	2.58	0.99	1.07	1.29	0.50	14.92	18.04	6.96
1 post per day	1	at 6-7h at 6-7h,	1.93	2.32	0.80	1.93	2.32	0.80	27.01	32.42	11.18
2 post per day	2	18-19	1.80	2.13	0.66	3.60	4.27	1.32	50.42	59.73	18.54
6 post per day	6	6h - 21h	1.71	1.95	0.52	10.31	11.84	3.24	144.28	165.77	45.30
12 post per day	12	6h - 21h	1.72	1.93	0.50	20.67	23.29	6.10	289.34	326.00	85.36
1 post per hour - 18 a day	18	6h-23h	1.61	1.76	0.35	29.26	32.06	6.74	409.70	448.83	94.36
2 posts per hour	36	6h-23h30	1.53	1.60	0.21	55.37	58.23	8.19	775.23	815.25	114.70
1 post each 5 minutes continuous time	216 inf	6h-24h 24h	0.36 -inf	-0.09 -inf	-1.22 -inf	80.18 -inf	-15.25 -inf	260.13 -inf	1122.52 -inf	-213.54 -inf	-3641.77 -inf
VIDEO											
1 post per 14 days	0.071429		4.24	5.06	5.49	0.30	0.36	0.39	4.24	5.06	5.49
1 post every two days	0.5	at 6-7h	3.18	3.80	4.53	1.59	1.90	2.26	22.24	26.57	31.71
1 post per day	1	at 6-7h	2.98	3.53	4.33	2.98	3.53	4.33	41.67	49.49	60.67
2 post per day	2	at 6-7h, 18-19	2.85	3.35	4.20	5.69	6.70	8.39	79.72	93.87	117.52
6 post per day	6	6h - 21h	2.75	3.17	4.06	16.59	19.15	24.45	232.19	268.17	342.23
12 post per day	12	6h - 21h	2.76	3.15	4.03	33.23	37.91	48.52	465.17	530.79	679.23
1 post per hour - 18 a day	18	6h-23h	2.66	2.97	3.89	48.10	54.00	70.37	673.45	756.02	985.16
2 posts per hour	36	6h-23h30	2.57	2.82	3.74	93.05	102.12	135.45	1302.72	1429.63	1896.29
1 post each 5 minutes	216	6h-24h	1.40	1.13	2.31	306.25	248.05	503.41	4287.44	3472.72	7047.77
continuous time	inf	24h	-inf	-inf	-inf	-inf	-inf	-inf	-inf	-inf	-inf

Table 7: Modelling returns on ten strategies for communication

First, the average number of *likes, comments* and *shares* is the highest with infrequent posting (table 7 column A). As the frequency of posting increases, the yields in terms of responses to **each** post diminish. At the limit, with continuous posting, our estimated model implies that the yield per post becomes arbitrarily low. This is because there is a negative effect on too many posts within a small time frame, captured in our regression by the negative coefficient ($\beta = -.062^{***}$) on the number of posts within a 1 hour window around the posting time (see the regression table 6). What may matter, however, for a political party is the total number of responses obtained throughout the campaign. To obtain the total number of posts. Then we see in Table 7, columns B and C that the highest number of responses would be obtained from strategies with most frequent posting (albeit, as noted before, not in continuous time).

Let's turn to what the "best" strategy would be according to our model out of the ten considered, assuming that parties wish to maximize the total number of likes, comments and shares over the course of the campaign. If the cost of producing a post would be negligible, then this implies that the best strategy for each party would be to produce a post quite frequently, for example every 5 minutes (table 7, column B and C). Then the total number of responses would be highest – daily and over the course of the campaign. We can also infer that parties with larger costs per update would publish threads less frequently given a fixed budget, and obtain a higher average of responses per post. Similar results are found for photo and video, and to some extent for status update which indicates that posting text more often than every five minutes may have negative impact on gains.

What we said so far applied to all parties on average – we disregarded the yield a party can have from each post that can depend for example on the characteristics of its internet community. The latter (with other effects) is captured in our model by the party fixed effect and can be included in more precise calculations for each of the parties in the study. As an example we computed the yield of different strategies for parties in Great Britain. We find out that parliamentary parties (e.g. Conservatives, Labour, UKIP, Liberal Democrats) and major fringe parties (British National Party) should post as often as possible – for example every 5 minutes, budget permitting but not continuously. The picture is different for minor fringe parties. The model indicates they should post also frequently to gain the *likes* but less frequently to obtain *comments* or *shares*, otherwise said it is harder for the smaller parties to balance the costs and gains per thread.

We should note that our model indicates that each post, as the campaign progresses, obtains more *likes*, *comments* and *shares* (the estimate of the variable Day of campaign is positive and statistically significant in all cases). After 10 days of the campaign, a median post would obtain 10% more *comments* and *shares*. Hence the best strategy would change also with the progress of the campaign: if the cost of a post is linear and the parties have a fixed budget for the internet campaign, then we expect parties to provide more posts towards the end of the campaign. Indeed, this is what we observe in the days before the end of the campaign -- the number of posts increases (see graph 1).

Conclusions

The data that can be extracted from Facebook allows researchers to understand the dynamics, in terms of ebb and flow, of actions and interactions that profile owners and their followers undertake. Twitter does not offer the same granularity of data, nor the range of user actions; therefore the majority of the data focuses on Facebook alone. Due to the scale of the data, and the fact that it is in the native language of each of the 28 EU member states, we are able to determine the effects of a range of macro and micro variables, but without hand coding no assessment can be made of whether the subject of the post or its tone influences the form or nature of community engagement.

What we can say therefore speaks more about the extent to which party strategies in determining some aspects of content design and the timing of communication over social media can influence the actions of the follower community. The macro independent variables show fairly predictable results, with the larger parties having most fans, and parties who post frequently also gaining fans. But the data also shows that Facebook can offer dividends for all parties independent of their size and popularity at previous contests. Of course some of the dynamics may be specific to the European Parliamentary election, where smaller parties tend to benefit from protest votes; we also know that a range of more ideological and Eurosceptic parties gained in terms of vote share so it may not be surprising that the parties of government and those who inhabit the political centre ground were also not as popular during the campaign on Facebook and Twitter.

Communication strategies are a little more surprising, and our sample allows us to build a concrete picture of what works for parties. Timing is clearly important, but so is content. Campaign videos are clearly designed to go viral, and it is good news for the parties that they are most likely to gain shares. Photos also gain shares but

are more likely to be rewarded with a like. Status updates are more interesting and it seems if they are longer then they are likely to stimulate conversations. The fact that parties rarely respond may suggest that actually this behaviour is not desirable to party communication strategists. Hence, while we find a lot of interactions being contributed, some of which may be hostile, this type of behaviour may be problematic for parties; they require resources for monitoring, in order to censor or decide if an answer is required. So overall we find that if parties simply wish to harness their online support to gain reach they should use minimal amounts of words, concentrate on photos and in particular video and consider the patterns of responses in order to gauge frequency. As social media becomes more important parties will be keen to ensure there is a total communication strategy, so while the current fairly sporadic approach appears to be working it is likely that no parties are fully optimising the benefits from social media campaigning.

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Appendix

Table A1: Statistics for Facebook fans and Twitter followers per country

Country	Nb of parties with FB profile	Average number of FB fans	St.Dev	MIN nb of fans on FB	Max nb of FB fans	Nb of parties with TW profile	Average number of TW followers	St.Dev	MIN nb of followers of TW	Max nb of followers TW
AUSTRIA	7	28597	22147	783	52748	6	3559	3225	0	7862
BELGIUM	16	12278	11186	31	35499	18	6106	8411	0	28130
BULGARIA	5	11806	16432	2000	40243	2	159	225	0	318
CYPRUS	9	6650	13388	160	41860	8	1957	3844	0	11371
CZECH REP	12	33311	30216	234	90840	10	1428	2241	0	6295
GERMANY	21	38160	40894	132	114805	17	22986	35471	41	125453
DENMARK	7	20846	9892	8909	38789	5	4944	4619	0	9725
ESTONIA	5	3386	2435	799	6681	3	941	54	882	987
ESPANIA	16	27922	48919	301	195637	14	37203	49796	0	139448
FINLAND	12	4639	3873	78	12894	6	4736	3797	0	10425
FRANCE	17	23650	41944	124	152948	15	25505	35849	919	108055
GREECE	9	16651	15465	593	35663	9	8635	6619	0	18095
CROATIA	12	4114	4199	50	10893	5	761	890	125	2319
HUNGARY	7	100976	98909	3802	277240	5	2382	2286	81	5344
IRELAND	10	6456	9758	302	33004	8	9182	9168	619	24156
ITALY	9	94020	123833	549	401074	10	70206	91345	512	296944
LITHUANIA	8	4089	4929	100	15747	4	612	788	0	1749
LUXEMBURG	7	2627	1762	261	5125	6	997	882	435	2707
LATVIA	3	577	291	352	906	4	2398	2448	34	5195
MALTA	3	15913	11463	3927	26770	2	2044	2048	595	3492
NETHERLAND	9	20266	12194	6590	48197	9	57821	100744	9294	323664
POLAND	10	38173	46163	6799	149300	8	5407	6749	190	21576
PORTUGAL	10	18241	17851	711	48259	6	2282	3718	0	9411
ROMANIA	6	19173	8799	9614	31878	2	1039	432	733	1344
SWEDEN	9	36193	28842	5555	81999	8	26566	10103	13159	39105
SLOVENIA	7	3464	2577	1006	8179	6	3532	2449	1000	7735

SLOVAKIA	8	10659	6945	4003	23732	4	270	309	4	656
UK	26	33105	56799	0	171831	24	22444	36109	19	136071

Table A2: Average number of posts in country per number	r of parties (number of posts divided by
number of parties)	

	all POSTS	VIDEO	LINKS	TEXT	РНОТО	Tweet
Austria	45	6	9.1	3	26	60
Belgium	52	7	22	2	21	114
Bulgaria	45	8	23	0	13	3
Cyprus	109	11	76	9	12	99
Czech Republic	37	4	10.8	2	21	25
Germany	49	5	16	2	26	44
Denmark	28	4	12.6	0.3	11	18
Estonia	30	5	13	2	10	3
Spain	79	14	18	5	42	228
Finland	49	2	25	2	20	26
France	38	4	22	3	9	229
Greece	47	9	18	4	16	133
Croatia	31	3	13	4	12	16
Hungary	98	18	30	3	48	57
Ireland	27	5	10	2	10	71
Italy	162	14	31	18	98	304
Lithuania	38	4	24	1	10	14
Luxemburg	30	6	8	0.3	16	13
Latvia	14	1	5	0.4	7	20
Malta	123	22	57	7	37	91
Netherlands	27	4	9	1	13	99
Poland	79	16	28	5	31	100
Portugal	98	11	48	5	34	42
Romania	123	12	37	1	73	27
Sweden	55	6	19	2	28	106
Slovenia	70	7	22	3	38	198
Slovakia	27	4	14	1	8	9
United Kingdom	63	5	25	8	25	97

Table A3: Average number of new fan or follower joining profiles in time of campaign

	FB new fans	TW new followers
MAJOR PARL.	1489	746
MINOR PARL.	1221	257
MAJOR FRINGE	6185	727
MIOR FRINGE	1748	88

	FB new fans	TW new followers
CENTER	205	1306
LEFT	308	1394
SINGLE ISSUE	122	1315
RIGHT	379	2779

Table A4: Growth % of the number of Facebook fans during the campaign period

	% of community growth	
Austria	2.7	
Belgium	4.7	
Bulgaria	12.9	
Cyprus	5.9	
Czech Republic	6	
Germany	8.9	
Denmark	2.1	
Estonia	3	
Spain	18.9	
Finland	4.5	
France	2.6	
Greece	4.7	
Croatia	3.4	
Hungary	.8	
Ireland	8.5	
Italy	6.2	
Lithuania	7.8	
Luxemburg	8.9	
Latvia	4.9	
Malta	3.1	
Netherlands	5.4	
Poland	18	
Portugal	1.3	
Romania	47.4	
Sweden	10	
Slovenia	37.4	
Slovakia	1.6	
United Kingdom	9.7	