

Internet and Votes: The Impact of New ICTs on the 2008 Spanish Parliamentary Elections

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Abstract

Evaluations of the electoral impact of new information and communication technology (ICT) campaigns on voters have been somewhat limited and inconclusive. These results can be explained by the limited introduction of new ICT among the electorate and also by the intrinsic characteristics of the new media. Internet has an enormous potential in disseminating electoral messages at a low cost (compared to traditional media), but it also has its drawbacks which can be broadly summarized as an increase in the transaction costs or a loss in the control of the election message. Some recent studies addressing this point have found a positive correlation between cyber-campaigning and election performance. This article will try to unravel this question in the 2008 Spanish parliamentary election. Beyond the enthusiasm towards new ICT exhibited during the electoral campaign by both politicians and traditional media, can an independent and significant effect of new ICT on the vote be found? It is certainly worth answering this question in a political system traditionally dominated by mass media campaigning but that has recently (namely, in the 2004 parliamentary election) experienced the potential disruptive power of new ICT.

This article takes advantage of the 2008 Spanish general election panel survey study. To cope with the multi-party nature of the Spanish political system, a multinomial logistic regression is estimated. The results show that the cyber-campaign had a small but statistically significant impact on the vote, even when controlled by an objective measure of political knowledge and by off-line political campaign exposure. This impact differs according to party preference. Counter to the 'normalization' hypothesis of the political impact of the internet, cyber-campaign exposure helped minor parties (the post-communist IU and a newly-born Spanish nationalist party, UPyD), increased abstention and decreased the vote for major parties (the conservative PP and, mainly, the incumbent socialist PSOE). These results can be explained by the political and social context of the 2008 Spanish election campaign and give interesting insights into the ways new ICT is modifying our political systems' dynamics. If political actors tend to communicate taking the least-effort path, they will use new ICT to disseminate their messages when they perceive a relative blockage in the traditional communication channels. This situation affected the minor and fringe parties in Spain 2008 because of the strong polarization of the traditional media. Meanwhile, PP's leadership in opposition allowed media groups and sympathisers to conduct a strong campaign on the web precisely because they were in the opposition. Allegedly Spain 2008 is quite a normal case among other developed political and media configuration systems and may be representative of the kind of pressures currently at work in our political systems. Actually, the explanation could also be sensibly extended to more extreme cases where the use of ICT made a strong political impact. For instance, democratic transition countries like the Ukraine of the 'orange revolution' or countries with media system crises like Spain during the exceptional 2004 general elections.

Introduction

The campaign for the 2008 Spanish general elections was run under the shadow of Obama's impressive campaign and victory in the US primaries and its masterful use of new ICTs in mobilizing the electorate. Admittedly, the main Spanish political parties used the new ICTs comprehensively, but in a clearly different way than in the US. In Spain there was nothing like the strong interaction between online and offline grassroots mobilization that seems to be the key characteristic of Obama's campaign. The reasons behind this difference are the public financing and stable offline organizational structure of the parties in Spain. Yet the traditional media paid a lot of attention to the use of new ICTs during the election campaign, also partly because of these technologies' alleged role in the previous 2004 general election, held after the terrorist attacks on 11 March. Actually, given the relatively low diffusion of the Internet among the Spanish electorate, the main parties' campaign actions on the Internet sought to gain the attention of the traditional media and use them as multipliers or amplifiers to spread their message. This is not to say that Internet campaigns were irrelevant or inconsequential. For instance, some political activists were deeply involved in campaigning activities that used new ICTs. Actually, the perception among party activists of the impact of their activities on the Internet triggered some conflicts in the party congresses held after the general election (Padró-Solanet 2009).

It therefore seems in order to question the actual impact of the campaign using new ICTs on the decisions of the Spanish electorate. Here interest meets opportunity. A two-wave panel survey on the election is available, carried out by the government, with a highly detailed questionnaire regarding the campaign's use of new ICTs. This makes possible to test the impact of ICTs on the campaign beyond the perceptions of the agents involved.

This article is organized as follows. It begins by reviewing the literature on the traditional debate regarding whether the Internet has a revolutionary potential. Then the political context of the 2008 Spanish parliamentary election is presented. The second part of the article explains the empirical model used and the data. The estimate provided by a multivariate model found that political information via the Internet has an independent and significant impact on vote probability for the different electoral options. In addition, the direction of this impact can be different to the impact of a traditional offline campaign. The article concludes by discussing to what extent the findings can be generalized.

Revolution vs. normalization: the political impact of the Internet

Two polar speculative theoretical positions have framed the debate on the Internet's impact on politics. *Cyber-optimists*, at one extreme, have hypothesized that new ICTs will entirely transform the political system, dis-intermediating it and enabling direct, participatory and deliberative democracy (see e.g. Morris 1999; Grossman 1996; Toffler and Toffler 1995; Rheingold 1993, 2002). *Dystopists*, at the other extreme, have warned about the risks to democracy, civil engagement and freedom posed by the

advance of new ICTs (see e.g. Galston 2002; Streck 1998; Sunstein 2001, 2007; Wilhelm 2000, 2004). Between both extremes, the mainstream of academic scholars take a relatively pessimistic position about Internet's ability to invigorate our democracies, known as the "*normalization*" or "*politics-as-usual*" theory (see e.g. Resnick 1998; Margolis and Resnick 2000). Avoiding technological determinism, normalization theory argues that the broader resources available to political actors, such as money, bureaucracy, support networks or an interested mainstream media, will heavily condition their ability to make effective use of the Internet for campaigning or generally doing politics. The strongest offline actors accrue an online advantage.

The first empirical efforts to study the Internet's impact on electoral politics focused on the **supply side**: i.e. the way political parties use their websites – or other ICTs – to reach voters or to mobilize and involve supporters. The study of Internet objects raises a lot of methodological issues that threaten its validity and reliability (see e.g. Schneider and Foot 2004; 2005) but, in the early days, it was advisable to look for traces of its political impact where this was easier to observe, rather than to investigate the marginal share of the electorate that used the Internet for political purposes. Therefore, a large number of studies used content analysis to analyze the functions of political websites (see e.g. Foot and Schneider 2006; Jackson and Lilleker 2009; Jackson 2007; Benoit and Benoit 2002; Margolis et al. 1999; Margolis et al. 2003). They witnessed the predominance of top-down information in contrast to the interactive-horizontal communication with followers and voters. Main political actors in the offline world were able to use technological tools better than the minor fringe actors of the political system confirming the normalization hypothesis (Margolis et al. 1999; Margolis et al. 2003).

Interestingly, these rather moderate conclusions of the Internet's impact are based on studies of well-established democracies. Other studies focusing on countries with problems of political legitimacy or with a closely controlled media system show that the Internet can play an important and even decisive political role (cf. March 2006, 2004; Semetko and Krasnoboka 2003; Shynkaruk 2005; Rheingold 2002). As should be expected, the issue of the Internet's political impact cannot be generalized without taking into account its political and media context (cf. Anstead and Chadwick 2009; Sey and Castells 2004).

On the **demand side**, one branch of studies is related to the literature on political participation. This branch focuses on the complex interplay between political information, political awareness, political participation in broad terms and exposure to the Internet. It tends to assume a positive correlation between information and communication resources and the degree of citizen involvement, producing what Norris described as a 'virtuous circle' (see e.g. Norris 1999, 2000; Althaus and Tewksbury 2000). Although this position is disputed from a wider theory of media effect, dubbed as a 'crisis of political communication' (see Coleman and Blumler 2009; Blumler and Coleman 2001; Prior 2007; Blumler and Gurevitch 1995), some individual-level studies suggest that Internet exposure improves all the dependent variables: information, awareness and political participation (see e.g. Bimber 2001; Anduiza et al. 2009; Karlsen 2007; Kenski and Stroud 2006; Lusoli 2005b, 2005a; Mossberger et al. 2008; Scheufele and

Nisbet 2002). On the other hand, as Internet access is not equally distributed throughout the different social groups (the “digital divide” phenomenon), the Internet can, in fact, reinforce the current political and social differences of our political systems instead of improving their democratic qualities, confirming some of the implications of the “normalization hypothesis” (Mazzoleni and Schulz 1999). Against optimists’ expectations, the Internet is not actually expanding the numbers of politically active, in terms of reaching groups that are typically inactive or less active in conventional or offline forms of politics. Nevertheless, a growing body of literature (see e.g. Gibson and McAllister 2005; Gibson et al. 2005) has recently been calling for the normalization thesis to be re-evaluated and has found that, ultimately, the Internet will lead to a further narrowing of the pool of politically active citizens by reinforcing existing levels of engagement.

One problem with this literature is that the concept of political participation is complex and difficult to turn into empirical measures. Political participation can be observed in a multitude of specific behaviours, from wearing a button to contacting a public official, but the relations between them are not obvious. Using various indices of political participation is likely to make it more difficult to specify empirical models with clearly interpretable results. Additionally, the normative background of literature on political participation (namely, to find ways of promoting political participation in order to improve the quality and sustainability of a democratic government) displaces attention from a more direct and realistic approach to political behaviour that takes into account the competitive background of politics (Schattschneider 1960).

Fortunately, some of the studies of the Internet’s impact on politics have treated its impact on voting behaviour. From the viewpoint of this paper, focusing on voting behaviour has two practical advantages: first, it simplifies the empirical measurement of the behaviour of question and, second, it is more easily related to the competitive environment because of its focus on elections.

Some studies have treated the Internet’s impact on voting at an aggregate level, linking candidate communicative behaviour and the electoral results obtained (Gibson and McAllister 2006; D’Alesio 1997). This line of research has clear advantages. It uses hard census data and it makes easy to connect the strategic behaviour of the elites to the electoral responses (see e.g. Herrnson et al. 2007; Druckman et al. 2007). On the other hand, this approach can only be applied to cases using electoral systems with multiple individual candidate votes. Additionally, the validity of the findings can be affected by the ecological fallacy problem (D’Alesio 1997; Sudulich and Wall 2009).

Other studies try to establish the Internet’s impact on voters’ attitudes and behaviour at an individual level. Some of the studies measure voters’ exposure to the Internet and its impact on the image and evaluation of parties and candidates, or on electoral participation (see e.g. Park and Perry 2008; Taveesin and Brown 2006; Owen 2006; Tolbert and McNeal 2003; Mossberger et al. 2008; Gibson et al. 2005; Farnsworth and Owen 2004; Bimber and Davis 2003; Paolino and Shaw 2003; Coleman 2001; Johnson and Kaye 2003; Krueger 2002). The results of these studies are rather inconclusive and they tend to note that, even if some evidence is found of the Internet’s impact on voting, the role played by the Internet in

the elections is probably only peripheral (for a meta-analysis of the effects of internet use on engagement see Boulianne 2009).

These studies are part of the elusive literature on the persuasive effects of information in politics (see e.g. Brady and Johnston 2006). Their feeble power to establish a clear causal relationship between exposure to new ICTs and electoral behaviour stems partly from the limitations in the data they use and the statistical models specified. The issue of causality can only be convincingly established by panel survey data from a large sample, or in laboratory experiments (cf. Iyengar 2001), but both instruments are costly and therefore rare. Measuring independent variables, exposure to political information, is complex and has problems of validity. Additionally, the statistical model chosen of the impact of campaign information must fit the problem it has to solve. It's not reasonable to assume that the same political message has the same impact on different segments of the electorate with different party preferences. But taking this heterogeneity into account multiplies the effects to be estimated by the statistical models, making them more complex and requiring them to be based on larger samples.

Nevertheless, including political context within an analysis probably clarifies many of the observed characteristics of an election and can actually simplify the interpretation of the observed phenomena: levels of electoral turnout, fluctuations, trends and the reversal of these trends. This paper attempts to tackle this challenge by using, firstly, a panel electoral survey that partially addresses the problem of establishing causality between independent and dependent variables and, secondly, proposes a statistical model that allows part of the election's competitive context to be retained.

The context of the 2008 Spanish parliamentary election

Three contextual political factors can be considered in order to understand how new ICTs were used in the elections of 2008. The first is the structural and organizational characteristics of the Spanish political parties, their institutionalization and their relationship with the traditional mass media. This factor is a constant and is not specific to this election. Political parties in Spain enjoy a stronger relationship with traditional mass media than is typical in other well-established democracies. This situation can be explained, first, democratic parties in Spain were (re)born within an environment with a totally developed modern mass media (Barnes et al. 1985, 1986). From the beginning there has been a strong connection between the main political alternatives and the major media groups (newspapers and radio chains, at first, and currently TV stations, digital media platforms and popular news blogs) (Gunther et al. 1999). In addition, the consensual policy of the transition towards democracy in Spain sought to reinforce the role of political parties in order to promote political stability. Electoral law therefore grants parliamentary political parties public financing and provides free space in the mass media for their election campaigns. These resources are easily controlled by parties' central offices, giving them little incentive to seek support or participation from rank and file members and other affiliates in their election campaigns. This means that established (parliamentary) parties in Spain have relatively little incentive to engage in

election campaigns based on new technologies, especially if using new ICTs implies being less able to control the electoral message (cf. Stromer-Galley 2000; Foot and Schneider 2006).

The Internet penetration rate among the Spanish electorate is one of the lowest in western Europe (see e.g. OECD 2010). This low penetration explains the somewhat paradoxical use of ICTs made by the parties in the Spanish campaign. All over the world, the successful Obama campaign in the primaries, masterfully and massively using new ICTs, drew a lot of attention of the traditional mass media to this approach. Political leaders could not ignore this potential of attracting media attention and manoeuvred to produce online events to feed the media hunger. As a consequence, the major parties produced videos to be seen online on the TV channels of the party website or on YouTube, but these videos were actually intended to be shown by TV news programmes. Admittedly, in the 2008 Spanish parliamentary election campaign these videos were first presented at press conferences called by the parties' central leadership to ensure their impact on the traditional mass media. In short, political communication on the Internet was not the primary concern of political parties but merely a way to curb the information supplied by the traditional mass media.

Ultimately, the shadow of the previous 2004 parliamentary election influenced the way the 2008 was fought. The 2008 campaign was merely the latest stage in a period of extraordinarily strong opposition and confrontation between the two major parties involving a large part of the main media groups. After the parliamentary election of 2004, the right-wing party was electorally defeated and excluded from government, partly as a consequence of the majority of the public rejecting its (mis-)management of information in the crisis produced by the terrorist attacks of 11 March the same year. Extreme (or more vociferous) sectors of the right never accepted this electoral defeat and felt prompted to fight, by any means necessary, the "illegitimate" government resulting from this situation. The optimal strategy to confront the government seemed to be clearly indicated by the former opposition's strategy. For some sectors of the party, the unexpected defeat of 2004 had, in part, been attributed to mass mobilization using text messages. These sectors felt that "a political and techno-media conspiracy was led by certain leaders of the main opposition parties and executives of the most important media corporation. This group consciously and successfully coordinated a disinformation campaign through traditional media and the new ICTs that resulted in a PP electoral defeat" (Dader 2008: 166). Since then, mass mobilization and the use of new ICTs as pressurizing tools have become an unavoidable strategy in opposing the socialist government. Therefore, the success attributed to new ICTs in defeating the party in government, the PP, together with the influence of the new forms of activism of the American radical right, have contributed to an intense mobilization of the organizations close to the PP through demonstrations and online activism throughout the legislative period before the election, contributing to what was dubbed a 'strategy of confrontation' (see Maravall 2008; Urquizu 2008; Sampedro and Seoane Perez 2008). Remarkably, the intense use of new ICTs by both political parties and broad sections of the electorate in Spain is related to the (perceived) malfunctioning of the democratic, political and institutional set-up. This situation can be compared to some new democracies or countries going through a transition to democracy, where the

Internet has played a greater role because the political and communication systems are less fixed than in established countries.

In summary, the context is a mix of contradictory forces with respect to Internet use. On the one hand, some elements favour the use of the Internet; namely, the maximum polarization of elections and the interpretation that the Internet, or new ICTs in general, played an important role in the electoral result of the last parliamentary election. This situation can favour the use of new ICTs by marginal and minor parties and groups, but can also explain its intense use by one of the major parties, the PP, trying to colonize the Internet. On the other hand, other factors go clearly against any huge investment of effort in new ICTs: a political system that is highly reliant on the traditional mass media, with public resources available to be invested in the traditional media in order to gain electoral support. Clearly, this provides a most intriguing situation where, in order to unravel how these new ICTs actually worked in such a complex environment, it is very interesting to apply an analytical approach that focuses on the impact of the traditional media on campaigns.

The following section presents the theoretical model used to tackle the issue of the impact of new ICTs on the election campaign.

Theoretical model and data

Theory and hypotheses

In this paper, the expected relationship between exposure to political information from different media and voting behaviour is primarily explained by the *dosage-resistance* (Krosnick and Brannon 1993) or *resonance* (Iyengar and Simon 2000) model of persuasion. This article follows partially Franz and Ridout's (2007) theoretical route for testing the persuasive effect of advertising. The origins of this classical model in political science can be traced back to the pioneering work of Lazarsfeld and his colleagues (Lazarsfeld et al. 1948), more recently resurrected by Zaller (1992). According to this model, the impact of a political message (conveyed through advertising or acquired in the search for political information) can be understood in terms of how many messages one is exposed to and also one's ability to reject or accept such messages. In the initial reception phase, the more campaign information one is exposed to, the more one should be influenced by it. In the subsequent resistance phase, the influence of the campaign information is mediated by the voters' characteristics, helping them to resist or accept them.

Two characteristics are commonly associated with an individuals' resistance to political persuasion. The first is partisan identification or proximity to one party that, in terms of an economic model of political cognition, can be understood as a long-term decision made as an information shortcut, given the low incentive to be rationally informed in politics (see Popkin 1991). The second characteristic related to resistance is the individual's degree of general political knowledge. It is therefore supposed that messages inconsistent with one's partisan identification, i.e. counter-attitudinal messages, are actively resisted while messages consistent with one's partisan identification are readily accepted. Similarly, having a large store of political knowledge equips one with a better understanding of the political implications of a new message and allows one to resist those messages inconsistent with one's beliefs.

The model of the impact of exposure to political information on voting behaviour can be formalized as follows:

$$Vote_t = f (Vote_{t-1}, exposure\ to\ online\ campaign_t, exposure\ to\ offline\ campaign_t, political\ knowledge)$$

Based on this simple model, it is possible to state several hypotheses about the impact of exposure to political information on vote choice. A first and general **hypothesis (H₁)** is that exposure to campaign information will have some impact on the individual's voting decision.

As we do not have a measurement of the partisan bias of the information reaching individuals in their search for political information, and only subjective measurement of exposure to different media is available, we need some complementary assumptions to develop more precise hypotheses of the impact of political information on voting decisions.

The first additional assumption is related to the electorate's information searching behaviour. The "selective exposure" hypothesis supposes that individuals tend to be more attentive and exposed to sources of political information that offer information consistent with their beliefs, to avoid "cognitive dissonance" (Festinger 1957).

The second additional assumption deals with the nature of the information provided by the different media channels. On the Internet (as well as with other new ICTs, such as cable or satellite TV), users have more room to select or filter the kind of information that best fits their interests and beliefs; consequently, scholars have warned against the homophile bias of Internet users (Bimber and Davis 2003: 150; Mutz and Martin 2001). But the key difference of the Internet is that it allows information to be found with greater detail, depth and interactivity than other media, and selecting information is not a common activity among all individuals (Kinder 2003). If the supply of political information on the Internet is much more plural and richer than the information available on other media, avoiding exposure to conflicting political information may become more difficult on the Internet than on traditional media (Brundidge and Rice 2009). Interactivity, unsolicited mails, political forums and the like make it easier to be exposed to a greater variety of political arguments and points of view in a new information technology environment (see Iyengar 2001).

Therefore, the **second hypothesis (H₂)** states that, due to *selective exposure*, exposure to political information will increase the probability of consistently voting according to one's previous party preferences (*reinforcement*) and will reduce the probability of abstaining from voting (*mobilization*) or the probability of voting for another party (in the case of voters close to minor parties, this implies an increasing resistance to *strategic voting*). This hypothesis is consistent with the impact of political information on reinforcement and mobilization in traditional campaign studies.

In the **third hypothesis (H₃)**, the **intensity** of the impact of political information can differ between major and minor and fringe parties. The content of political information during an election campaign tends to be favourable to both major parties because general elections are the most important in Spain (the control of the central government is at stake). The traditional media's political information tends to focus on major parties and interests dominating the information environment; therefore, unconscious exposure to political information will encourage mobilization for the major parties. While conscious exposure to political information provided by a campaign (as far as the saturation of information by the major parties can be overcome) will have a greater impact on the minor and fringe parties rather than on the major parties (for a related argument on the differences in the content of the campaigns, see Prior 2007: 171-172). A conscious search for political information will make selective exposure easier, and we should therefore expect greater impact on minor rather than major parties regarding reinforcement or mobilization in terms of voting.

The **fourth hypothesis (H₄)** states that exposure to political information on the different media allows for **divergent** impacts on voting behaviour. If political information on the Internet is more plural and effective than on the traditional mass media, exposure to it will entail different things to different kinds of voters. In the case of voters who identify with the main political parties, more exposure to the plural political information available on the Internet changes their general information environment. Exposure to the Internet's political information will tend to have a negative impact on votes for the major political parties, while it will still have a positive impact on votes for minor and fringe parties. Note that this hypothesis covers the prediction made by optimistic theories of the Internet and its revolutionary potential, against the entrenched interests of traditional major parties and the normalization hypothesis.

Finally, the **fifth hypothesis (H₅)** expects exposure to political information on different media to have a different impact on abstention. Exposure to traditional mass media will tend to mobilize the electorate and decrease political abstention because, on these media, political information tends to be consistent with the hegemonic views and interests of society; i.e. with the parties represented in parliament. On the other hand, exposure to political information on the Internet can tend to favour abstention, insofar as it is proportionally less favourable to the mainstream political interests (abstention by *alienation*) or provides a critical appraisal of the normal political parties (abstention by *indifference*).

Data and variables

The first wave of the electoral study (CIS 2008) was carried out between January and February 2008, well before the formal election campaign began. The second wave was carried out within two months after the date of the general election, from 12 March to 12 May. In the first wave, the sample (N = 18,221) was selected using a multistage stratified random procedure. The second wave (N = 6083) was selected using a two-stage random selection of council census divisions and the respondents in the first wave.

The **dependent variable** is the declared vote in the 2008 Spanish parliamentary election. It is coded into five categories: a vote for the Socialist Party (PSOE), the conservative Popular Party (PP), the main state-level minor party, United Left (IU), a vote for the other minor party (other) and voluntary abstention.

Catalonia and the Basque Country sub-samples are excluded from the analysis. Here the main political parties play a different role than in rest of the state. For instance, in Catalonia, the main state level conservative party PP is almost a minor, marginal party. Similarly, in the Basque Country the most voted-for party is the centrist Basque Nationalist Party, while the PP and the PSOE compete strongly with each other for the Spanish nationalist half of the electorate. Not taking into account this change of role can only introduce noise into our data, blur the true relationship with the independent variables, and make it more difficult to interpret. Therefore, our initial sample of 6,083 interviews was reduced to 5,008.

The stated **voting intention** in the first wave of the panel survey is the (independent) variable that indicates voter attachment to a party and provides a baseline to measure the impact of the election

campaign information on the final voting decision. It reveals the respondent's "normal vote" in the absence of information received during an election campaign. Any discrepancies between the stated voting intention and the vote actually cast have to be interpreted as a product of the events occurring and the information received during the election campaign. This variable is measured using five categories (matching the categories of the dependent variable): intention to vote for the PSOE, PP, IU, Other Parties and, finally, the intention to abstain or undecided voters. This variable is introduced into the multinomial logit regression (MNL) as a series of four dummy variables that enable an estimation of the different impact of political information on the probability of voting for each party. This procedure allows the three kinds of effects to be estimated (activation – or voting for the previously preferred party, deactivation – or abstaining, and conversion – or, voting for another party) for each party and with regard to each other.

This operationalization differs from the one typically used in a survey-based analysis of campaign effects. Normally, these studies start by identifying the behaviour in question (reinforcement or activation, conversion or deactivation) and then encode it using a dichotomous variable (e.g. the voters that, in the first wave, stated they would vote for a party and that, in the election, voted for another vs. the voters that voted according to their previous voting intention, etc.). These dichotomous variables make it possible to estimate a binary dependent variable method in order to assess the impact of the independent variables (campaign exposure or group membership, etc.). This procedure allows the outputs to be interpreted in a simple and straightforward way. But voters' decisions actually pose a problem that is more complex than these simpler models are able to capture. Voters have to choose whether to participate or not and, if they decide to vote, which party to vote for. The same persuasive information that induces some voters to vote for one ('their') party, can induce other voters not to vote for what is, in principle, their favourite party. The same information that encourages voting for one party (*reinforcement, activation*) may lead to *inactivation* in other groups of voters, or even *conversion*. Consequently, when we deal with all these effects together, as in traditional models, one might cancel out the other, making it impossible to capture the actual effect. This is true for a two-party system but the problem is clearly more acute in a multiparty system, because the conversion effect of information is likely to be different for each "pair of parties".

Three variables are used to measure individual campaign exposure to political information; these are our variables of interest.

The first is an objective **scale of factual political knowledge**, produced by adding together the correct answers to four political questions: the name of the former President of the Spanish Government; the year the Spanish Constitution was passed; knowing whether the incumbent government (PSOE) has a majority in the Spanish parliament; and the correct placing of the main Spanish national parties (IU < PSOE < PP) on the ideological left-right scale. Political knowledge has a complex relationship with campaign exposure. On the one hand, it can be viewed as a general indicator of attention to the election campaign, favouring persuasion (only knowledgeable people are capable of listening to electoral messages); on the other hand, it can be viewed as an indicator of resistance to persuasion (politically

knowledgeable people have arguments to resist new persuasive information) (Zaller 1992; Ansolabehere 2006:126-127).

The other two scales capture the respondents' stated exposure to campaign information via two different groups of media: the scale of traditional offline media exposure and the scale of Internet exposure. Asking directly if someone has watched or heard some programmes or read some news do not capture the actual exposure very well (see Ansolabehere 2006; and specially, Ansolabehere and Iyengar 1995). But our questionnaire asks about the frequency of use and media preference, and this means that these measures do not incur the same problems related to recalling exposure to specific pieces of information such as advertisements (although, as is well known, some respondents will tend to over-report their exposure to some media, especially to newspapers).

The scale of **offline media political information** takes three questions into account, asking how frequently the respondent had "followed the political and electoral information via the general information newspapers, television and radio stations". The values of the six point ordinal scales ranging from "never or almost never" to "every day or almost every day" were added together and the result was recoded into a five-point ordinal scale. The **scale of Internet campaign exposure** records the answer to the question "did you follow the election campaign or do you get informed on the elections through the Internet?" and it was also recoded to obtain a five-point scale.

Some of the most commonly used control variables are introduced in the statistical model. **Education** is measured using a six-point ordinal scale, asking about the highest qualification attained by the respondent and ranging from less than primary school to a college degree or more. **Age** is introduced as a numerical variable without any qualitative or non-linear transformation. Similarly, **gender** and the **population** of the district where the respondent lives are related to a lot of attitudinal and structural variables, making them perfect candidates for control variables.

Statistical model and results

One natural choice when modelling voting behaviour is the multinomial logit model (MNL), which assumes a qualitative dependent variable that can adopt multiple, non-ordered values; in our case, the voting decision reported in the post-electoral wave by the panel. The previously stated voting intention can be introduced as a series of dummy independent variables along with the variables for exposure to political information (our variables of interest). The effect of reinforcement, conversion or mobilization of the political information exposure can be assessed comparing the values of the predicted vote probabilities with or without campaign exposure. In the MNL regression it is supposed that the impact of the independent variables on these choices or values is different for each alternative. For each voting alternative (PSOE, PP, IU, "other party" vote or abstention) different coefficients for each independent variable will be estimated (see McFadden 1982; Aldrich and Nelson 1988; Greene 2000).

The enormous growth of the estimated coefficients as the number of categories for the dependent variable increases is one usual drawback for not using MNL. But in our model the dependent variable has been restricted to only five possible values. In addition, in estimating the MNL regression, the coefficients of one of the categories of the dependent variable are normalized to zero and this serves as a reference for the other outcomes. Consequently, we only need four equations to get the full model estimated. Another difficulty of the MNL regression comes from the non-direct interpretability of the estimated coefficients. This difficulty is worse than in binary logistic regression because, in the MNL, not only is the impact of the independent variables on the dependent not linear, but even the sign of a coefficient does not necessarily show the right direction of the relationship between the variables (cf. Greene 2000). I will therefore avoid focusing on the regression coefficients reported in **table 2** to interpret the relationships found. The interpretation of the impact of the variables of interest will be based on the predicted values and the first differences shown in **graph 2** and **table 3**.

Table 2 shows the four estimated equations of our model. The base outcome is PSOE voting, therefore the coefficients of the equations capture the probability that changes in the independent variables will produce a change from voting PSOE to voting each of the other alternatives (Abstention, PP, IU or other party). The first column shows the coefficients of the variables in the equation that differentiate abstention from voting PSOE. The first four coefficients are the dummy variables that indicate the previous voting intention, while the intention to abstain from voting or being undecided is the reference category. All these coefficients, except the previous intention to vote for another party, are statistically significant. Similarly, all the coefficients of the indicators for campaign exposure are statistically significant. All the control variables, except education, also have significant coefficients. Jointly, all the variables introduced in the model have statistically significant effects on at least one of the model's outputs. On the other hand, the Wald Chi-Square statistic, which tests that at least one of the predictors' regression coefficients is not equal to zero in the model, is statistically significant. Additionally, the McFadden's pseudo R-squared has a satisfying value of 0.35. Of course, all this matters in terms of the statistical suitability of the model

estimation, but in order to interpret the impact of the independent variables we have to turn to the predicted values estimated and their first differences.

Table 2: Multinomial Logit Regression

	Abstention		PP		IU		Other	
	Coef	P> z	Coef	P> z	Coef	P> z	Coef	P> z
PSOE $t-1$	-2.120	0.000	-3.014	0.000	-2.009	0.000	-2.740	0.000
PP $t-1$	0.531	0.005	2.811	0.000	-0.620	0.295	-0.142	0.579
IU $t-1$	-0.951	0.014	-2.573	0.000	2.793	0.000	-0.789	0.130
Other $t-1$	0.061	0.867	-0.141	0.682	0.317	0.640	2.155	0.000
Political Knowledge	-0.492	0.000	-0.004	0.950	0.089	0.430	0.054	0.515
Offline information	-0.358	0.000	0.025	0.554	0.032	0.700	-0.009	0.874
Online information	0.138	0.066	0.080	0.191	0.154	0.089	0.137	0.080
Education	0.036	0.699	0.291	0.000	-0.181	0.396	0.594	0.000
Age	-0.015	0.000	0.014	0.000	-0.013	0.132	-0.004	0.415
Gender (male = 1)	0.494	0.000	0.061	0.578	0.547	0.011	0.053	0.728
Population	0.107	0.002	-0.030	0.365	0.097	0.133	-0.004	0.923
Constant	1.510	0.000	-1.518	0.000	-2.365	0.081	-2.224	0.000

Base outcome category is **PSOE**

Wald $\chi^2(44) = 2477.60$; Prob > $\chi^2 = 0.0000$

Log pseudolikelihood = -3829.3081 Pseudo $R^2 = 0.3498$

Number of observations = 4,540; Source: Electoral panel survey CIS 2008

(Coefficients significant at $p < 0.1$ are highlighted in bold)

Graph 2 Predicted values panel

Probability of voting behaviour by previously stated voting intention and exposure to campaign information

Voting intention t-1

PSOE

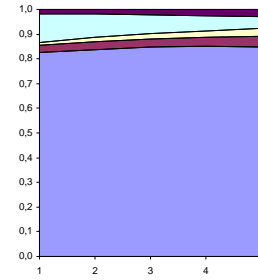
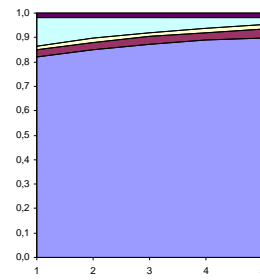
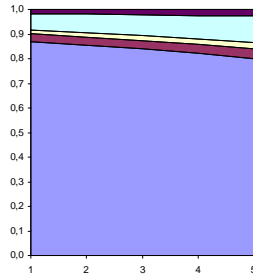
Vote probability



online campaign exposure

offline campaign exposure

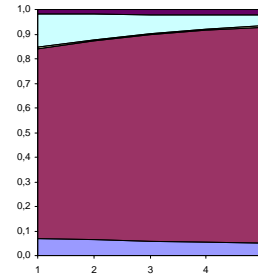
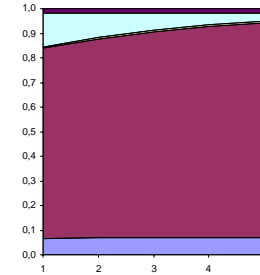
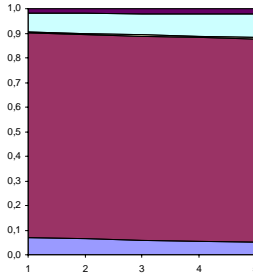
total campaign exposure



Voting intention t-1

PP

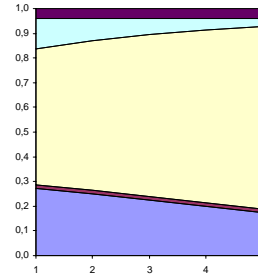
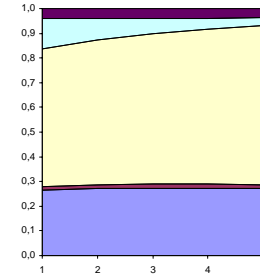
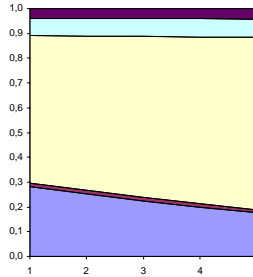
Vote probability



Voting intention t-1

IU

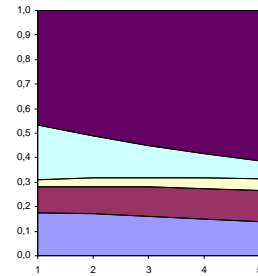
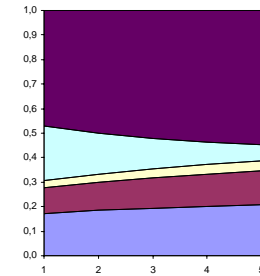
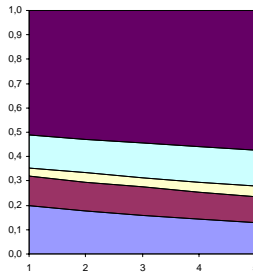
Vote probability



Voting intention t-1

Other

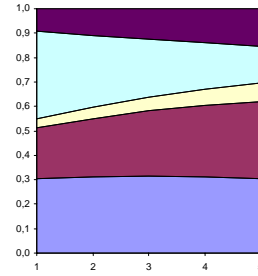
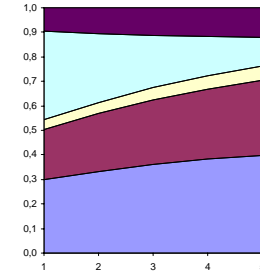
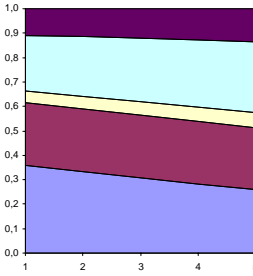
Vote probability



Voting intention t-1

Abstention & Undecided

Vote probability



Cumulative probability of voting for a party or abstaining conditional to the voting intention in the 1st wave of the panel survey (rows) and the level of exposure to campaign information offline (column 1), online (column 2) and both exposures (column 3). The rest of the variables are set at their mean levels except gender, which is assumed to be male (1). Reinforcement is visible in almost all the quadrants: more exposure increases the probability of voting for the previously stated preference. Remarkably, the direction of the effect of both kinds of exposure can change in some cases (Source: electoral panel survey CIS 2008).

		Campaign exposure		
		online	offline	total
PSOE _{t-1}	PSOE	-0,069	0,078	0,023
	PP	0,008	0,006	0,016
	IU	0,011	0,003	0,016
	Abst	0,040	-0,088	-0,067
	Other	0,010	0,001	0,012
PP _{t-1}	PSOE	-0,020	0,002	-0,017
	PP	-0,006	0,102	0,104
	IU	0,002	0,001	0,003
	Abst	0,019	-0,104	-0,094
	Other	0,005	0,000	0,004
IU _{t-1}	PSOE	-0,105	0,005	-0,099
	PP	-0,002	0,002	0,000
	IU	0,097	0,088	0,188
	Abst	0,006	-0,094	-0,091
	Other	0,003	-0,001	0,002
Other _{t-1}	PSOE	-0,070	0,035	-0,038
	PP	-0,013	0,035	0,021
	IU	0,007	0,011	0,020
	Abst	0,016	-0,158	-0,149
	Other	0,060	0,077	0,146
Abstention & undecided _{t-1}	PSOE	-0,100	0,100	-0,001
	PP	-0,001	0,099	0,108
	IU	0,016	0,020	0,041
	Abst	0,058	-0,246	-0,210
	Other	0,027	0,027	0,062

Cells are the first differences in the estimated probability for each voting alternative conditional to the voting intention in the first wave of the panel (maximum campaign exposure - minimum campaign exposure). They summarize the graph 2 panels. Negative impacts are highlighted in bold.

Source: prediction of the estimated MNL model, table 2; electoral panel of the Spanish parliamentary elections CIS 2008.

The predicted impact of the variables for exposure to campaign information on the probability of voting for the different parties given the previously stated voting intention is shown in **Graph 2**. The two first columns depict the estimated impact of political information online and offline, while the third column shows the addition of both impacts. Each row corresponds to the stated voting intention in the first wave of the electoral survey panel. Consequently, each cell shows the cumulative probability of voting at the different values of the dependent variable according to the previously stated voting preference and the impact of political information. In the estimation, all the other variables are at their mean value and the gender is male.

Graph 2 shows that those respondents who said they would vote PSOE have a lot of probability of actually voting that way (at least more than an 80%) (**graph 2, row 1**). A slight probability of voting to any other alternative always exists, and this is normal and foreseeable. But what is remarkable is the diverging impact on vote probability of the exposure to campaign information on the different media: online and offline. Offline exposure increases the probability of voting for the PSOE, mainly at the expense of abstention. Online exposure inverts this relationship and shows a decrease in the probability of voting for the PSOE, at the expense of the IU, the other parties and mainly abstention. **Table 3** summarizes the data on the predicted values presented in graph 2 and shows the first differences (or the differences between the maximum and minimum level of campaign exposure). Notably, while offline exposure does not affect the probability of voting for United Left (IU) or the other parties (among which is the newly created party, UPyD, led by a charismatic leader Rosa Díez and supported by a group of Spanish nationalist intellectuals), online exposure increases the probability of voting for them by 1 percent.

The predictions for the PP (**graph 2, row 2**) are quite similar to the results for the PSOE. Most of the respondents who said they would vote for the PP actually did so. Two differences are remarkable: first, the probability of voting IU almost vanished in the PP. Second, the negative impact of online exposure is much lower than for the PSOE. And this party sees the greatest decrease in its vote probability while abstention increases slightly by only 2 points (compared with 4 points in the case of the PSOE). It therefore seems that the PP has had a less negative online information environment than the PSOE. This may not be so surprising if we take into account the PP's kind of online mobilization: with several religious and Spanish nationalist right-wing groups related to the PP strongly fighting against the socialist government on the Internet (see Sampedro and Seoane Perez 2008; Padró-Solanet 2009; Aguilar 2007).

As previously, in the case of the United Left (IU) (**graph 2, row 3**), the higher probability is to vote according to the previously stated voting intention. Yet in this case the probability is lower: just above 70% in the best case (with both campaign exposure levels at maximum). This is not surprising because the IU is a minor party in all Spanish constituencies and can be affected by strategic voting. Of course, this incentive to vote strategically is in play long before the election campaign actually begins. In fact, only

4 percent of the sample stated in the first wave that they would vote IU in the next general election. In both types of exposure to campaign media, there is positive impact on the IU vote (**table 3**). In the case of offline exposure, this increases at the expense of abstention (the typical impact of a mobilization campaign); whilst online exposure affects the probability of voting PSOE while not affecting abstention. Unsurprisingly, this result is similar to the result obtained in the case of the PSOE, both suggesting the potential disruptive impact of new technologies on politics.

Again, for the other parties, the greatest probability is to vote for the same alternative (**graph 2, row 4**). But now this probability is even lower than for the IU, reaching a level of 60% at maximum exposure. This low probability also seems to be the result of strategic voting. The impact pattern of media exposure closely mimics the pattern found for the IU: both kinds of exposure to political information increase the probability of voting for other parties (**table 3**). In offline exposure, the gain in probability of voting for other parties is at the cost of abstention, whilst in online exposure this gain is at the cost of voting PSOE (and to a lesser extent PP), while the probability of abstention actually increases a little.

Abstainers and undecided voters broke away from the previous pattern, and here the probability of abstaining is not the highest output category (**graph 2, row 5**). The impact of exposure to political information is similar to that found for the IU and the other parties: offline campaign exposure reduces the probability of abstention and increases the probability of voting for the rest of the alternatives (the maximum beneficiaries of this increase are the major parties, PSOE and PP) (**table 3**). On the other hand, online campaign exposure actually increases abstention (almost 6 percent) and the odds of voting for minor parties (the IU and mainly others) at the expense of the PSOE, while the PP remains almost unaffected. Remarkably, this result goes against or qualifies other studies which found a positive impact on voting participation of accessing the Internet and consuming online news (see mainly Norris 2000; see also Tolbert and McNeal 2003; or Gibson et al. 2005; also related to these results Mossberger et al. 2008). Naturally, voting or politically participating in a highly institutionalized and restricted sense differs from a wider concept of political engagement. Interest in political information on the Internet can certainly reduce voting participation among our respondents but it can actually increase non-partisan, non-conventional participation. These trends could easily be related to the anti-hierarchical and libertarian ethos of the Internet and the fall in the electoral turnout merely proves the potential disruptive power of the Internet in another way (Scott and Street 2001).

The results show the potential disruptive impact of the new media in politics. There is a clear divide between the impact provided by the two kinds of exposure to political information with respect to the outcomes of the simulation. Major parties (the PSOE and PP) clearly benefit from offline campaign exposure, although the probability of voting for them falls in online exposure (especially for the PSOE). On the other hand, the minor parties (the IU and other parties) benefit from all kinds of media exposure (in the case of the IU, the increase is virtually the same). Finally, abstention follows the same pattern

found among the minor parties; it benefits slightly from online campaign exposure but falls in general when affected by exposure to offline political information.

Table 4. Summary of hypotheses		Offline	Online
H₁	Exposure to political information affects vote probability	Yes	Yes
H₂	Political information implies reinforcement (selective exposure)	Yes	No
H₃	Reinforcement is higher among minor parties	No	Yes
H₄	Reversal of the online mobilizing impact (especially among major parties)		Yes
H₅	Abstention is affected differently by campaign exposure on different media	Yes	

Table 4 summarizes the results in terms of the aforementioned hypotheses. Exposure to political information affects vote probability (H₁). Exposure to political information during a campaign reinforces the previously stated voting alternatives only in offline channels, but fails to be verified for online information (H₂). This effect matches the fifth hypothesis (H₅) that predicts a different effect for exposure to political information on different media: abstention can actually increase with exposure to online political information. Finally, minor and fringe political parties are more reinforced than major political parties by online political information (H₃) and, actually, major political parties can see their vote probability fall as a result of online political information (H₄).

Conjointly, the hypotheses tests support the theory of the disruptive or revolutionary potential of the Internet in politics, as opposed to its tendency to normalize or reinforce. Naturally, although the effects observed are statistically significant, they are still minor in terms of the actual number of electors affected. However, it is known that politics works in a non-linear world and a few votes can make a big difference in qualitative terms. For instance, new ICTs in the Spanish parliamentary election helped a new party to be born, UPyD, to gain 1.6 percent of the votes at a state level and to win one seat in a Madrid constituency. And this party entering parliament was not a minor change within the context of Spanish politics, as it might affect the political and electoral positions of the major parties regarding the key and disputed issue of the unity of Spain. On the other hand, there is the issue of how far the findings can be generalized. The outcomes obtained are probably typical of the political and communicative context. But precisely because of this, provided this context is taken into account, the findings can be interpreted and understood.

Concluding remarks

A contribution of this paper consists of the specification of a more complex than usual statistical model that provides a closer analysis of how the media affects voting decisions. The application of this model to the 2008 Spanish election confirms a small but statistically significant effect of exposure to political information on the Internet in the increase of votes for minor parties and abstention. This result is consistent with the theory of the revolutionary potential of the political use of the Internet.

The wider political context explains this finding. First, it is based on a specific sample and at a specific time in the Spanish political and media system. Probably, minor and fringe parties have an advantage on the Internet because of the limited penetration of the Internet among the Spanish electorate and, consequently, of its limited impact. The tense and polarized election campaign conducted by the two major Spanish parties using the traditional mass media seems to have relegated the information concerning (and possibly favourable to) other parties to alternative and more plural media such as the Internet. Nevertheless, the media environment of political parties seems to have been irreversibly changed as the success of newly created political parties such as the UPyD seems to prove.

The impact of the Internet on politics is usually misinterpreted because it is oversimplified. To fully understand the impact of new ICTs we need to take the context and the message into account. For instance, most of the interpretations of Obama's success in mobilizing young people and traditional abstainers focused on what is most visible, i.e. the use of new ICTs, especially the social network tools, forgetting that, in Obama's campaign, the message (instead of the media) and the context were crucial. Obama was able to give "young people the feeling that (getting involved in politics) is something that can be interesting and inspiring, and not just something that is just dirt politics," as Kate Phillips, online politics editor of the New York Times, said (Perlmutter 2008: 164). Aggressively using social networking sites was effective because that's how young people communicate. But this success would not be attainable with a different message, a different target or a different political context. Similarly, case studies of countries with democratic gaps (democratic transitions) or with problems in the political information system are witnessing the stronger impact of new ICTs. One case of the Internet's context-dependent impact was the 2004 Spanish general election and the collapse experienced by the information system.

In the 2008 Spanish general election, although major parties were interested in developing a costly campaign using new technologies, these strategies mainly succeeded by being amplified in the traditional media. Those identifying with the major parties (measured through voting intention) that sought political information online were not mobilized to vote for their party. Those identifying with the PSOE even decreased their vote probability, moving towards the minor parties and abstention. The PP didn't lose vote probability thanks to an aggressive, decentralized online campaign and less competition from minor parties for its policy-ideological space. On the other hand, minor parties that matched message and media (here the perfect example is the UPyD, a party of intellectuals that appealed to the middle classes)

took advantage of the opportunity offered by new technologies to increase their vote probability. Similarly, abstention (consistent with political mobilization outside the traditional party system) was stimulated rather than attenuated by online campaign exposure.

Generally, these patterns seem to follow a “least-effort-path” model of political communication. In Spain, the obstacle to a range of political information being provided through the traditional mass media due to the high degree of polarization seems to have led dissatisfied voters and minor and fringe parties to use the Internet as a way to avoid the low permeability of the traditional mass media to their messages and interests. Sey and Castells (2004) interpreted this mechanism as a crisis of legitimacy produced by media politics.

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