Populism, selective exposure, and emotional appeals in social media: a comparative approach using Facebook reactions

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Abstract

Politicians, when trying to convince or strengthen voters' attitudes, usually appeal to voters' emotions (Brader, 2005). Populist parties seem to raise in people, more than other parties, specific emotions, such as anger and disenchantment, to gain electoral benefits (Hameleers et al., 2016). Focusing on the influence effects of populist appeals, the literature paid scarce attention to possible effects coming from selective exposure, namely the active role of people in selecting their source of information. In addition of being affected by populist messages, thus, people could actively seek for emotional appeals, and being exogenously more prone, for instance, to present angry responses. The hypothesis will be tested by employing, as a measure of emotional response, the so-called Facebook reactions (Turnbull and Jenkins, 2016), a new feature provided by the social network Facebook that allows users to indicate a set of emotion that a certain Facebook page post transmits them (sadness, joy, anger, fun, etc.). The dataset will be collected by scraping official Facebook fan pages' reactions of the main leaders and parties in two European countries (Italy and the UK) during the period going from March 1 to July 1, 2016.

Keywords: Populism, Emotional appeals, social media, Facebook reactions, fractional response models

Introduction

According to researchers, consultants and politicians, the role of emotions in contemporary political discourse is crucial (Brader, 2005; Marmor-Lavie and Weimann, 2006; Valentino et al., 2011; Jones et al., 2012). Politicians often appeal to voters' emotional sphere to affect rational mechanisms of decision making and get benefits in terms of electoral support (Brader, 2005; Valentino et al., 2011; Hameleers et al., 2016). Besides few classical studies arguing the role of emotional appeals in public opinion (Lazarsfeld, Berelson and Gaudet, 1944), the scientific literature has deeply focused on the mechanisms that drive emotional decision making only in the last 10-20 years (Boyney and Paletz, 1991; Bader, 2005; Jones et al., 2013). The literature concerning emotional appeals has focused mainly on defining the mechanisms that depict the relation between an emotionally-charged political message and individual responses to this message. As a result of this interest, the literature on the topic tends to privilege an experimental design to test its expectations (Bader, 2005; Valentino et al., 2011; Hameleers et al., 2016). Such a hypothesis testing strategy, indeed, is perfectly suited for investigating how (and whether) emotionally-charged messages can affect individuals' psychological structures. The literature, however, disregards systematically at least two other important elements.

First, this line of research assumes a generic, "faceless" message sender. A little research, indeed, has committed in finding how actual parties exploit the emotions of their audience (Marmor-Lavie and Weimann, 2006). In particular, populist parties literature shows that these parties' communication strategies are systematically aimed at presenting opponents (usually governing parties) as failing at represent the will of the people: "[t]he corrupt elites are held responsible for causing the crisis of the heartland (Taggart, 2000). Attributing responsibility for negative outcomes - blame - to the corrupt elites for causing the people's problems is thus inherently populist." (Hameleers et al, 2016, 3). Populist parties, thus, are seen as those political objects which are able to systematically exploit the negative feelings of their electorate and transform it in political support (Betz, 1994; Betz, 2002; Bowyer, 2008; Hameleers et al, 2016). This theoretical

argument, although convincing, has been rarely systematically tested, especially in the European context.

Second, by focusing on the influence that the populist message exerts on the individual in a laboratory-like environment, the literature tends to systematically underestimate the active role of individuals in being exposed to such messages. According to another stream of literature, indeed, people tend to choose to be exposed to certain political messages, selecting those which are generally less discordant to their previous attitudes and opinions (Stroud, 2008; Garrett, 2009; Messing and Westwood, 2012). If we rely on the "selective exposure" or "echo chamber" literature, we can expect that those who are exposed to populist messages could have chosen the messages to which are exposed, being thus exogenously more prone to have an emotionally-charged response. Connecting this argument with that presented above, we can argue that people could actively seek for sources of indignation and resentment. This argument does not challenge the empirical evidence of previous studies, but, more simply, contributes to the debate with a side of the story that is rarely taken into consideration.

Contrarily to much of the literature on the topic, these expectations need to be tested "in nature", that is, outside the experimental lab. What we ask ourselves, indeed, does not concern the way in which a generic, populist political message affects the individual. Rather, we should be able to detect an actual political message sent by a recognizable political actor and, at the same time, being able to measure the emotional reaction that this political actor's public gives to this message. One of the main arguments of this paper is that new media (and especially social media) can help us to collect data that would be extremely difficult to collect otherwise, for instance, by means of surveys. It is well-known that politicians and consultants consider social media (and especially the most spread on the European population, Facebook) as tools for people's engagement, especially for what concerns communication information of supporters (Gustaffson, 2012). Our hypotheses will be thus tested by employing the so-called "Facebook reactions" (Turnbull and Jenkins, 2016), a new feature provided by the social network Facebook that allows users to indicate, in response to a post, a set of emotion that transmits them (sadness, joy, anger, fun, etc.). In this way, it is possible to identify characteristics' of the sender (the party/candidate publishing a post on an official page on

Facebook), the content of this message (whether it contains critical/protest attitude toward a political competitor, or rather a constructive proposal) and the emotional reactions of the party/leader's audience (those who are registered to the page, namely, those who have actively "liked" it).

We test systematically our hypotheses by collecting Facebook posts and reactions data among main parties and leaders in two countries (Italy and the UK) during the period going from March 1 to July 1, 2016 (thus, a few days after the introduction of reactions by Facebook, on February 24, 2016)[1].

Emotions, political behavior and populist parties in Europe

Emotions and political behavior

Several authors have stressed that emotions can affect in different ways political behavior and have a pre-conscious effect on different human biological reactions (Marcus et al., 2000; Brader, 2005; MacKuen et al., 2007). The literature also shows that emotionally-charged messages can affect voters' behavior: for instance, Valentino and colleagues (2011) demonstrated quite convincingly, by means of both experimental and observational data, that anger motivates voters' participation. In addition, several scholars have stressed that emotions guide strategies and behaviors of both parties/candidate and voters: Marmor-Lavie and Weimann (2005) show that right-wing parties tend to embrace, more than left-wing ones, the employment of appeals to fear and anxiety.

However, at least three gaps can be recognized in this corpus of works. First, except from some cases, empirical evidence has been largely based on experimental data, aimed at finding causal mechanisms by which a (usually fictitious) party can affect voters. Nothing is wrong with that, and experimental design is fundamental in recognizing causal mechanisms that link political stimuli and emotional responses of individuals. The

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[1] Italy and UK have been chosen because their party system presents parties that have been defined as populist in the literature (e.g., van Kessel, 2015) and because they both second-order elections in the considered time-span.

literature, however, focused much less on what happens between emotional appeals and voter reactions "in nature", namely, in a situation in which an actual party/candidate tries to trigger people's emotional sphere.

Partially related to this fist drawback is the fact that the literature has disregarded the fact that usually citizens can have an active role in selecting the messages they want to be exposed to. According to a growing amount of evidence, it is increasingly simple to engage in selective exposure. People living in contemporary democracy can select their media diet to avoid political messages at all (Atre and Katz, 2005; Baum and Kernell, 1999; Prior, 2007) or avoid information concerning a particular issue (Galston 2003; Sunstein 2001). People can also engage in what is called partisan selective exposure, namely, the selection of media and political messages that are consistent with people's previous attitudes (Mutz and Martin, 2001; Stroud 2008). Selective exposure has became in the last 10-15 years a widely debated topic, and the literature showed that applying such a strategy depends on a number of factors, such as the strength of previous political predispositions (e.g. Taber and Lodge, 2006) or the context in which the selection happens - whether near an election or not (Stroud, 2008). Other lines of research (Stroud 2008, Garrett 2009, Garrett, Carnahan, and Lynch, 2013; Messing and Westwood, 2012) focused on the nature of the media on which the process of selection is engaged. In particular, this stream of research showed that selective exposure is far more likely in social media, since the nature of the environment itself incites people to choose and select their own sources of information.

The third gap is represented by the contexts in which empirical evidences are collected: except for a few works, (Bobba, 2016; Hameleers et al., 2016) the very large majority of both observational and experimental studies are based on American (Brader, 2005; Valentino et al., 2011; Jones et al, 2013) or extra-European (Marmor-Lavie and Weimann; 2006) data, and, at the best of author's knowledge, no comparative study has been conducted yet in the European context. This latter gap is even more pronounced if we consider that the literature has widely acknowledged that the emotional component in European political communication is crucial, especially for populist parties, which seem to establish their political strategy on negative feelings (Betz, 2004; Hameleers, Bos and de Vreese, 2016)

Populism and emotional appeals in Europe

As Taggart (2000) and van Kessel (2015) argued, although the concept of populism is not new, its application in European scientific debate has raised during the past few decades, following the appearance of western European political parties that could be defined as radical right-wing, or, indeed, populist (Ignazi, 1992; Betz, 1994; Taggart, 1996; Tarchi, 2008). According to the literature, populist parties share at least three features (Taggart, 2000; van Kessel, 2015):

1) they depict a society divided between "the people" (an homogeneous and virtuous entity) and a (corrupted/unfit) establishment;
2) they define themselves as fierce opponents of this establishment;
3) they privilege a direct relationship between the leader and his followers, avoiding intermediate bodies typical of traditional parties.

As it is clear from this definition, populism has been perceived as a thin ideology (Stanley, 2008; Rovira Kaltwasser, 2014, van Kessel, 2015). This argument is pretty consistent with Taggart statement that populism is naturally chameleonic in adopting ideological colors, compatible with the heartland of the public opinion in a specific spatio-temporal context. For this reason, depicting a clear list of members of the populist parties' family in Europe is far from easy. As several authors suggest, indeed, populism cannot be intended as a coherent philosophical school or a political doctrine. Rather, populist parties tend to increase their support by vampirizing the structural drawbacks of the contexts in which they appear. With reference to the economic crisis of 2008 and the 2015 refugees crisis, it is possible to say that populist parties in Europe in the last years were mainly focused on four main themes: 1) the cultural and ethnic problem; 2) the economic crisis; 3) The European integration (and related issues); 4) corruption of the political establishment, or the "caste" (van Kessel, 2015; Corbetta, 2013). This theoretical argument is supported by empirical results: by employing an experiment carried out on a Dutch sample, Hameleers and colleagues (2016) show that appeals typical of populist

parties, based on blaming the opponents of not being active in solving these problems, affect voters' blame perceptions and populist attitudes.

As stressed above, the branch of the literature exploring emotional appeals generally tested whether an experimental stimulus of a fake party can affect in the first place voters' emotion and, in turn, their attitudes. As pointed out above, however, experiments can only account for influence processes, namely, how people are affected by political messages. In the actual political arena, as pointed out above, people are able to decide to choose certain political messages, being selectively exposed to them (Sears and Freedman, 1967; Ditto and Lopez, 1992; Stroud, 2008, Garrett, 2009). To the extent that people decide to expose themselves to political information reinforcing their view, the access to such information can increase the likelihood to select congenial contents, which lead to an "echo chamber" environment in which political messages and individual responses lead to polarizing the political environment (Iyengar & Hahn, 2009; Prior, 2007).

If we accept the idea that selective exposure can also convey emotionally-charged messages, we could infer that a situation in which populist political messages affect virtually unidirectionally people (as argued in experimental designs) is not the only situation that we can find in nature. The main argument of this paper is that populist parties' supporters can choose to be exposed to populist messages in order to reinforce their negative feelings about the establishment. This, in turn, can make these people more likely to present emotional (negative) reactions when these parties air populist blame attribution messages (as in Hameleers et al., 2016).

Hypotheses

The first expectation that it is possible to argue is that the level of anger and resentments are more likely to be found among populist parties messages. If the literature is right in saying that populist communication style is more oriented at criticizing the establishment and blaming it for the country problems, the simplest expectation will be a negative sentiment by the audience. The first hypothesis thus states:

Hp1: populist parties' messages are more likely to be responded by the audience with

negative emotions with respect to other/traditional parties.

This hypothesis, alone, does not tell us anything about the mechanisms that underlie the relationship between populist parties/leaders and their audience. For instance, it could be that populism style does not try to stimulate only negative emotions in its audience. It can be, contrarily to Betz (1994) and others' (Hameleers et al., 2016) argument, that populism fosters more emotional responses, both positive and negative. In that case, the idea of a populist style of communication that tends to feed people with anger would be much less sustained with empirical data. If we stick to the literature, however, our hypothesis can be exposed as follows:

Hp2: populist parties are equally (or less) likely to be responded by the audience with positive emotions with respect to other/traditional parties.

The first two hypotheses are explicitly designed to focus on the demand side of the relation between the audience and the populist party. These hypotheses, however, do not tell us anything about the relation between the content of the message and the audience's reaction. It has been argued that part of the populist party/leader's audience could be self-selected in being exposed to their messages. In other words, people more prone to get angry could be more likely an audience of the populist party, and, in turn, react angrily. In other words, we can expect that populist messages contribute to affect the emotions of people who are already prone to get angry.

The question that arises here, thus, is how we can isolate the effect of selective exposure. First, we must add in our theoretical framework the nature of the political message sent by the actual political party or leader: it is possible to easily recognize how the kernel of a populist message represents a critique of a certain situation/political actor (see Hameleers et al., 2016). However, also non-populist parties air critical messages towards their opponents, which are usually as harsh as those aired by populist parties. The difference, here, is that populist parties' messages are expected to have an angrier response by their audience (given by selective exposure), compared to non-populist

critical messages. In other words, if selective exposure works as expected, given two messages roughly similar in terms of aim and content, the audience of a populist party will react in a disproportionately angrier way compared to the audience of a non-populist one.

Hp3: populist parties' audience reacts with more negative emotions when populist messages are critical towards political opponents, with respect to audience's reactions to non-populist critical messages.

Since selective exposure represents some sort of other side of the coin of influence, it is interesting to stress that here we adopt the opposite strategy of experimental designs that is aimed to test influence. If these latter types of studies consider a group of individuals virtually equal, presents to random groups critical and non-critical messages and assess the difference of the effect, in this case we consider two audiences already self-selected, consider a (roughly) similar political message and assess whether the populist group gets angrier than the non-populist one[2]. As stressed above, testing this latter expectation needs us to leave the experimental lab, and find observational data that are suited for accounting for selective exposure processes that actually happen in nature. The following section is aimed at describing the data and methods that are going to be employed in the work.

Data and models

Our hypotheses need a very specific type of data. First of all, these data must be able to isolate a more or less large number of political messages aired by actual political subjects. We must, moreover, subdivide these messages in messages aired by a populist/non-populist party. Third, these messages must be aired to roughly a group that

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[2] Of course, another difference between the first and the second strategy is that the first, based on an experimental design, produces stronger results, while the second must rely on (methodologically weaker) observational data.

has chosen to follow those messages (that, thus, selected them). Fourth, the data must be able to record the emotional response that the audience of that political subject can give. There are several ways in which one can imagine to obtain this kind of data. One could set up some form of live survey in which respondents, while watching TV, or listening to the radio, are requested to give their emotional status in conjunction with political news or adverts. Besides the costs of such a data collection strategy, we could also find an additional drawback: since respondents' emotion should be in some way solicited, biases such as social desirability (as stressed in Ficher and Dubé, 2005) could arise. In other words, the emotions could be not completely genuine.

Another strategy could be employing data that people naturally provide, such as those of online social network websites. In particular, the literature stressed that there is an ever-increasing employment of social media (and especially Facebook) by both voters and political subject. These latter, in particular, employ official pages by communicating initiatives and informing (Gustaffson, 2012) and express the official point of view of the party/leader about political facts. For our purpose, employing Facebook data allows us to clearly recognize both the political/emotional message sender (and its characteristics) and the nature of this message (whether critical, namely, blaming someone for something, or constructive, namely, proposing a solution to a problem). More important, in Facebook fan pages posts appear automatically in a user's timeline (the "home page" of every Facebook user) if said user (or, more rarely, a friend) have "Liked" the page. In this way, it is possible to infer that the audience of a certain Facebook post is a more or less faithful representation of those who support that party/leader[3].

Since late February of 2016, moreover, Facebook data are enriched by a new function that allows users to express, by means of a fixed amount of icons, different emotions in response to public posts (and, thus, political messages). This new feature can allow us to roughly measure the mood of the audience towards certain political messages (the last information that our hypotheses needed).

Of course, employing data scrapped from a social network like Facebook, raises a number of concerns that would easily avoidable when employing a representative survey,

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[3] We do not have the peace of mind of knowing that every person who liked the page is an actual supporter of the said party. We will account for this issue in the Discussion paragraph.

or an experimental study (see Discussion for a thorough list of Facebook data drawbacks). However, to the author's knowledge, it is extremely difficult to find data that can record at the same time political party/leader messages, their nature and non-solicited emotional response of their audience. Thus, our conclusion about Facebook data is that these, rather than being the most suitable data that can systematically test our hypotheses, are to date the only that collect together the measures that the hypotheses need, and thus represent, so far, the best solution to analyze possible mechanisms of selective exposure.

Data and main variables

The data collection focused on posts published on main parties and leaders' official Facebook accounts in two countries (UK and Italy). The data of the relevant parties and leaders of the selected countries have been collected, in a period going from March 1 to July 1, 2016[4]. In total, the dataset consists of 11,229 posts. These messages, in addition to the content of the post, present other information, such as the day in which the message was published and the various ways in which the audience, constituted by fans or users who happened to come across the message in their Facebook timeline, can respond to the message. The Facebook platform allows users to interact in basically four ways. The first is the so-called like button, which generally express generic favor to the content of the message. The second is the possibility to share in one's personal page the public content seen in the fan page. The third is commenting publicly the post, expressing favor or a critique to the content of the message, or even answering to another user's comment.

The final, and newest, way in which a Facebook user can interact with the contents published in a fan page is represented by the so-called Facebook reactions, a feature that allows users to indicate - in a totally unsolicited way - a set of emotion that a post transmits them (see figure 1). Besides the Like (the left icon in figure 1) a user can

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[4] The pages of parties and leaders collected are: Conservatives (and David Cameron), The Labour Party (and Jeremy Corbyn), UK Independence Party (and Nigel Farage), Partito Democratico (and Matteo Renzi), MoVimento 5 Stelle (and Beppe Grillo), Lega Nord Padania (and Matteo Salvini), Forza Italia (and Silvio Berlusconi). The data were collected on July 15, 2016.

express love, fun, astonishment, sadness and anger in response to a certain content. The feature has been introduced on February 24, 2016 (a few days before our time-span starts).

FIGURE 1 ABOUT HERE

Figure 2 shows descriptively the aggregate trend (collecting thus every party/candidate in the two contexts) of these reactions during the considered time-span. The graph shows the percentage of every reaction, based on the entire number of possible responses that the users can give (by also taking into account Likes). As a result, reactions represent, at maximum, about 10% of the range of responses, meaning that Likes, the standard way of expressing generic favor to the post, are still largely prevalent. This can be due by the fact that reactions are newcomers of the platform, or because the Like is still the most immediate way of reacting: in order to express a reaction, users must keep the mouse for some time on the Like button, and only after it is possible to choose the desired reaction in a pop-up window. It must be stated, however, that the process is extremely simple and it should not create problems to Facebook users.

According to the graph, if we except a couple of fluctuation of other reactions, it seems that political leaders and parties mainly arouse two emotions: from one side "Anger", and less frequently "Love" ("Haha", "Sad" and especially "Wow" reaction barely arrive at 1% of the possible responses). All in all, this result does not surprises much, since it shows that emotional reactions can be mainly positive (the "Love" button) or negative/hateful ("the Angry" button). The dependent variables used will thus be the percentages of "Angry" (for testing Hypotheses 1 and 3) and "Love" (for testing hypothesis 2) reactions percentages.

FIGURE 2 ABOUT HERE

The main independent variable is represented by the nature of the message sender, namely, whether it is sent by a populist or non-populist party/leader[5]. As stressed above,

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[5] This choice has been made in order to favor the readability of tables and graphs. In Appendix 1 results for

defining populism and identifying populist parties is far from simple. In this paper we identify in our two contexts three parties that, according to the literature, present clearly populist traits: in the UK, the party that clearly present populist characteristic is Nigel Farage's UK Independence Party (UKIP - see Abedi and Lundberg, 2009; Ford et al, 2012; Turnier-Sol, 2015; Cutts et al, 2009). The second context, Italy, presents, according to the literature, at least[6] two populist parties, the Movimento 5 Stelle (Corbetta, 2013; Diamanti, 2015; Vezzoni and Mancosu, 2015) and the Lega Nord (Mancosu, 2014; Mancosu, 2015; Albertazzi, 2016).

The third, main variable that is employed in hypothesis 3 testing represents the critical content of a certain message. Since this variable must be coded manually, it can be constructed in many ways: for instance, the variable can record only a generic critical style of the post or, rather, it can be more complex, trying to code the *degree* to which the post is critical towards its opponents (from, say, "politely critical" to "very harsh"). A qualitative assessment of the posts leads us to choose the first alternative, because no clear differences between parties and leaders tone emerged: for instance, critical posts by Jeremy Corbyn against Cameron's government are usually as harsh as those published by Nigel Farage; in the other context, Silvio Berlusconi's critiques to the government of Matteo Renzi cannot be evaluated as more polite than those aired by Matteo Salvini or Beppe Grillo. This result is rather counter-intuitive, since one may think that populist parties will tend to be harsher in criticizing their opponent. Apparently, however, the populist style affects only marginally the Facebook platform[7]. This evidence, in addition,

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the main hypothesis of the paper (Hp3) are presented for all the main parties/leaders and do not challenge substantially the results presented here.

[6] A possible third party that could be defined as populist is Silvio Berlusconi's Forza Italia. However, we decided not to define the party as a populist because, since 2013 (the year of its refoundation), Forza Italia seems to have changed radically its aims and style. In particular, as stressed by Albertazzi and Giovannini (2015), the main aim of the party is to start a process of institutionalization, trying to become "a more democratic organization, a broad, enduring conservative party able to fight elections without having to rely on Berlusconi's communicative skills" (Albertazzi and Giovannini, 2015: 434)

[7] Of course, this does not mean that, in other contexts (such as parties meeting and happening, or TV shows), populist parties maintain the same level of harshness in critical claims. These other contexts, indeed, could be the reason why more critical and angrier people select those parties instead of non-populist

contributes to make the test of our hypothesis about selective exposure easier and more robust[8]. In the same way, the variable measuring the constructive posts has been created. This latter variable is coded 1 when the post presents a constructive claim and 0 otherwise.

Models

The three hypotheses will be tested by means of a set of fractional logistic models[9], fitted separately for each national context. The first hypothesis tests whether the audience of above-mentioned populist parties is generally angrier than the audience of other parties. The model testing the first hypothesis can be written as follows:

Model 1: `Perc. Angry = Populist + Perc. Reactions + Candidate + Date + Government + # Reponses + Avg. Daily posts`

Where `Perc. Angry` is the percentage of Angry reactions on the total of responses for each post, `Populist` is a dummy variable that discriminates between the populist party(/ies) in the context and other parties, `Perc. Reactions` is the percentage of Reaction on total responses to the post (reactions + Likes), `Candidate` is a dummy that is 1 when the post comes from a candidates' official page and 0 when comes from a party page, `Date` is the day in which the post was published, `Government` is a dummy equal to 1 when the party/candidate is in government and 0 otherwise, `# responses` is the number of responses (reactions+likes) and `Avg. Daily posts` is the average number of posts per

ones.

[8] The reader can evaluate the harshness of critical posts by downloading the data from which the analyses are based on at the URL http://tinyurl.com/hlfsro7.

[9] As stated above, the dependent variable of our models is the fraction of Angry/Love reactions for every post. Generally, OLS (Ordinary Least Squares) regression model, with a Normal distributional assumption of the dependent variable, is the most obvious choice to model fractional outcomes. However, it is conceptually flawed to assume a normal distribution for a response variable in the (0, 1) range. Fractional logistic models (flm) allow to provide unbiased estimates of both coefficient and standard errors (for more information about flm's, see Papke and Wooldridge, 1996).

day published in the page.

The second model, testing hypothesis 2, is equivalent to the first model but changing the dependent variable:

Model 2: `Perc. Love = Populist + Perc. Reactions + Candidate + Date + Government + # Reponses + Avg. Daily posts`

In this case, the variable `Perc. Love` is the percentage of Love reactions on the total of responses for each post. As stressed above, the trivial presence of "more anger" and "less love" among populist audience tells us not much about the mechanisms of selective exposure of citizens. In order to disentangle the relationship between critical messages and emotionalized audience's responses, we must take into account the nature of the message.

Model 3, which tests whether the selection of the audience of a certain party represents a factor in driving levels of anger, is designed as follows. First of all, a random sample of 750 posts among every context has been drawn[10]. Successively, the variables measuring the critical/constructive content of the message have been constructed. The main substantive difference between Model 3 and model 1 is that the variable `critique` is interacted with the `populist` variable.

Model 3: `Perc. Angry = populist*critique + construct + Perc. Reactions + Candidate + Date + Government + # Reponses + Avg. Daily posts`

In this way, we can see predicted levels of anger in response to a critique message of a populist party, to a non critique message of a populist party, to a critique message of a non-populist party and finally to a non-critique message of a non populist party.

The main idea behind the interaction is that if, as expected, selective exposure is involved in driving emotional responses of the audience, the interaction should be

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[10] Selecting only 750*2 cases from the more than 11,000 of the original dataset would have biased statistical significance of the results. In order to avoid this issue we applied finite population correction (where the population is the number of posts for each national context - see Burstein, 1975)

positive and significant: in other words, there should be no difference (or a small difference) in anger reactions between critique and non-critique messages among people exposed to non-populist parties and, on the contrary, the difference between these two types of messages should be large and significant among populist parties' audiences. This would be an indirect evidence of the fact that the audience of populist parties, when exposed to critical argument, is more prone to react with negative emotions compared to non-populist audiences.

Results

Table 1 tests the first hypothesis.

TABLE 1 BOUT HERE

As it is possible to see in Table 1, if we contrast populist parties against all other parties, we see that the level of anger responses by the audience is significantly higher in every national context. Especially, the effect is more pronounced in Italy, for what regards both parties. In Figure 3 are presented predicted percentages for the populist dummy variables in the two contexts: the figure shows that the level of anger in response to those populist party posts (independently from the nature of the post) in the two national contexts is between 3.1 and 3.3. On the contrary, the average of predicted angry responses of non-populist parties is between 1.8 and 2.5%. Our first hypothesis, which expected a higher level of anger among the audience of populist parties, is corroborated.

FIGURE 3 ABOUT HERE

The second hypothesis is tested in Table 2. In this model, the dependent variable is the level of positive emotions in response to a post. For what concerns the main independent variable, our hypothesis is corroborated – namely, levels of positive emotion ("Love" reaction) is equal or lower than other parties in the national context.

TABLE 2 ABOUT HERE

Figure 4 presents the predicted percentages of Table 2's results, showing more clearly the differences between populist and non-populist parties.

FIGURE 4 ABOUT HERE

Table 3 shows four models: the first two represent the equivalent of Model 1 fitted only on the random sample of 750 posts for every national context. As we can see, results for the random samples do not differ much from those presented in table 1. The second set of models interacts the populism dummy with information about the nature of the post. In hypothesis 3 we have stated that, besides the influence effect exposed by different studies in the literature, some individuals could be also exogenously more prone to get angry when exposed to claims that criticize the establishment or opponent views. If we rely on the selective exposure literature, we can say that the people who choose to follow a certain page (largely because is supporters of that party/politician) could be exogenously more prone to have negative reactions to the critical claims of populist parties. On the other side, we expect that people who support and follow non-populist parties will tend to be exogenously less emotional, even if exposed to a critical claim[11].

TABLE 3 ABOUT HERE

Figure 5 shows Average marginal effects for the "critical message" dummy variable, by party and context are presented in Figure 5. In other words, the estimates represent the increase, in percentage points, of anger reactions when a message passes from non-critical to critical. Results for both UK and Italy are similar, and tend to corroborate Hypothesis 3. As we can see, the difference between blame attribution messages sent by non-populist parties does not change much the prevalence of angry reactions. In other

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[11] We must stress that we can make such a hypothesis because, all in all, no big differences in the critique style of the messages among non-populist and populist parties have been noticed.

words, in both UK and Italy, a non-populist party that expresses a critique to an opponent, or denounce a certain negative situation does not make people more angry (in the UK the difference is substantially small, although significant, while in Italy the difference is even not significant). On the opposite, populist parties/leaders that express a critique in the post see relevant and significant increases in the level of anger in the responses (between 2.5 and 4 percentage points).

FIGURE 5 ABOUT HERE

Discussion

Emotions are relevant in political decision-making. A large number of studies show that emotions can undermine voters' rational decision making (Brader, 2005; Valentino, 2011; Hameleers et al, 2016) and even more prone to participate in elections. As a result, political entrepreneurs, over the last decades, invested much of their resources in producing a winning emotionally-charged style of communication. In Europe, this strategy has been generally associated with the populist style of communication. So far, the literature mainly focused on the effectiveness of such claims, namely, by testing whether a blame attribution claim can influence people's emotions, making them, for instance, angrier. These studies showed that being exposed to critiques towards political opponents or problematic situations (the trademark of European populist discourse) actually leads individuals to be angrier (Betz, 2002; Hameleers et al, 2016).

Little research has focused on the ways in which people come in contact with these claims. According to the theory of selective exposure, people are mainly interested in being exposed to information that tends to confirm their opinions (Sears and Freedman, 1967; Mutz and Martin, 2001; Stroud, 2007, 2008). In this way, it is possible for people to create an "echo chamber" that endorse previous attitudes and avoid cognitive dissonance (Garrett, 2009; Messing and Westwood, 2012; Garret et al., 2013). This paper mainly aimed at testing whether selective exposure strategies can explain the emotional reactions of populist parties' audience.

One of the main issues in testing this expectation concerns the data: as pointed out above, we need observational data (being experimental data not suitable for testing the hypotheses) that can account for both the nature of the political message and the emotional response of the audience. We argued that data that measure people's attitudes and behaviors would be poorly suited for our aim, since the most relevant process in this case is represented by what happens in a situation in which people, after being exposed to a political message, react in an immediate/almost pre-logical way. We thus argued the need of what we can call *situational data*, namely, data that record a situation that happens "in nature" and that is neither related to the mediation of the people involved in that relation (as in survey data), nor is the product of some sort of experimental design. Online social network sites data allow us to capture these situations, being able to register both the supply and the demand side in action.

By means of these data, we found evidence compatible with the selective exposure argument. In other words, people who decide to be exposed to a populist party tend to be more prone to respond with negative emotions (and less likely with positive emotions). In addition, we have shown that the negative responses are boosted by the exposure to a critique post aired by the party/leader, consistently with the idea that, besides the messages of the supply side, also populist parties audience is different (namely, more prone to get angry in response to a critique post).

Of course, dealing with social networks' situational data leads also to a number of drawbacks. In this case, we can identify at least three main problems of dealing with online social network data to recognize selective exposure processes in emotional responses.

The first order of issues concerns the nature of the message. If it is clear from the results that a critical message boosts the angry reactions of populist parties to a greater extent with respect to non-populist parties, it is still debatable that the critique is aired with the same harshness. Otherwise, it could be that the increase we see is only related to the fact that the critique is addressed by populist parties with a stronger emotional tone (with respect to non-populist parties), leading to support the influence argument with observational data. Although a qualitative assessment of the data reassured us about this possible bias - showing that it is very difficult, if not impossible, to detect differences in

the critical messages of different parties - no clear empirical evidence about this issue has been brought in this paper.

The second order of possible drawbacks is related to the message receivers. In the paper, we make a very strong assumption, by speculating that the audience of the Facebook page is exclusively an audience of fans of the page. However, it is possible that part of the audience that react to the posts is partly composed of detractors of the same party: the presence of these people can be assessed by qualitatively looking at the comments of any post, which present a, usually quite small, quota of people criticizing the message sender. As a consequence, the measures we adopted as dependent variable could be biased. It can be, thus, that the anger is not directed towards the object of the critical message, but towards the message sender himself.

The third order of issue regards the problem of inference. In other words, it is doubtful that we can extend these results to real life. In addition, our analyses consider the Facebook post as the observation in the regression models. In this way, we have poor evidence of people's choices and reactions.

There is no easy way out of these three orders of issues, and additional research is necessary to exploit more the data in order to find convincing answers to these issues.

These issues lead us to argue that social network data will hardly be able to give us, unlike experimental evidence, the "smoking gun" of a certain political behavior. However, we are confident that the case showed in this paper clearly underline how online social network data (and especially Facebook data) can be an essential ally of political behavior studies, by providing information that, although affected by several flaws, are the only one that can give us interesting evidences about behaviors difficult to detect.

References

Abedi, A., & Lundberg, T. C. (2009). Doomed to failure? UKIP and the organisational challenges facing right-wing populist anti-political establishment parties. Parliamentary Affairs, 62(1), 72-87.

Albertazzi, D. (2016) Going, Going,… Not Quite Gone Yet?'Bossi's Lega'and the Survival of the Mass Party. Forthcoming in Contemporary Italian Politics: 1-17.

Atre, J., & Katz, E. (2005). What's killing television news? Experimentally assessing the effects of multiple channels on media choice. In International Communication Association Conference, New York, NY.

Baum, M. A., & Kernell, S. (1999). Has cable ended the golden age of presidential television?. American Political Science Review, 93(1), 99-114.

Betz, H.-G. (1994) Radical Right-wing Populism in Western Europe, New York: St. Martin's Press

Betz, H. G. (2002). Conditions favouring the success and failure of radical right-wing populist parties in contemporary democracies. In Meny, Y, Surel, Y. (Eds.) Democracies and the populist challenge. Palgrave Macmillan: 197-213.

Bobba, G. (2016) Social Media Populism: Features and likeability of Lega Nord's communication on Facebook, Working paper.

Boiney, J., & Paletz, D. L. (1991). In search of the model model: Political science versus political advertising perspectives on voter decision making. In Biocca, F (Ed.) Television and political advertising 1, London: Routledge: 3-25.

Bowyer, B. (2008). Local context and extreme right support in England: The British National Party in the 2002 and 2003 local elections. Electoral Studies, 27(4), 611-620.

Burstein, H. (1975). Finite population correction for binomial confidence limits. Journal of the American Statistical Association, 70(349), 67-69.

Brader, T. (2005). Striking a responsive chord: How political ads motivate and persuade voters by appealing to emotions. American Journal of Political Science, 49(2), 388-405.

Chao, M. T., & Lo, S. H. (1985). A bootstrap method for finite population. Sankhyā: The Indian Journal of Statistics, Series A, 399-405.

Corbetta, P. (2013). Un web-populismo dal destino incerto. In Corbetta, P, Gualmini, E., Il partito di Grillo, Bologna: Il Mulino: 197-214.

Cutts, D., Ford, R., & Goodwin, M. J. (2011). Anti-immigrant, politically disaffected or still racist after all? Examining the attitudinal drivers of extreme right support in Britain in the 2009 European elections. European Journal of Political Research, 50(3), 418-440.

Diamanti, I. (2014). The 5 Star Movement: a political laboratory. Contemporary Italian Politics, 6(1), 4-15.

Ditto, P. H., & Lopez, D. F. (1992). Motivated skepticism: Use of differential decision criteria for preferred and nonpreferred conclusions. Journal of Personality and Social Psychology, 63(4), 568.

Fisher, R. J., & Dubé, L. (2005). Gender differences in responses to emotional advertising: A social desirability perspective. Journal of Consumer Research, 31(4), 850-858.

Ford, R., Goodwin, M. J., & Cutts, D. (2012). Strategic Eurosceptics and polite xenophobes: support for the United Kingdom Independence Party (UKIP) in the 2009 European Parliament elections. European Journal of Political Research, 51(2), 204-234.

Galston, W. A. (2003). If political fragmentation is the problem, is the Internet the solution? In D. M. Anderson & M. Cornfield (Eds.), The civic web: Online politics and democratic values (pp. 35–44). Oxford: Rowman & Littlefield Publishers.

Garrett, R. K. (2009). Echo chambers online?: Politically motivated selective exposure among Internet news users. Journal of Computer-Mediated Communication, 14(2), 265–285.

Garrett, R. K., Carnahan, D., & Lynch, E. K. (2013). A turn toward avoidance? Selective exposure to online political information, 2004–2008. Political Behavior, 35(1), 113-134.

Gerbaudo, P. (2014). Populism 2.0 In Trottier D., Fuchs, C. (Eds.) Social media, politics and the state: Protests, revolutions, riots, crime and policing in the age of Facebook, Twitter and YouTube. Routledge: 16-67.

Gustafsson, N. (2012). The subtle nature of Facebook politics: Swedish social network site users and political participation. New Media & Society, 14(7), 1111-1127.

Hameleers, M., Bos, L. and de Vreese, C. H. (2016). "They Did It". The Effects of Emotionalized Blame Attribution in Populist Communication. Communication Research, early view. DOI: 10.1177/0093650216644026

Ignazi, P. (1992) The Silent Counter-Revolution. Hypotheses on the Emergence of Extreme Right-Wing Parties in Europe, European Journal of Political Research. 22(1): 3–34.

Iyengar, S., & Hahn, K. S. (2009). Red media, blue media: Evidence of ideological selectivity in media use. Journal of Communication, 59(1), 19-39.

Jones, P. E., Hoffman, L. H., & Young, D. G. (2012). Online emotional appeals and political participation: The effect of candidate affect on mass behavior. New Media & Society, 15(7): 1132-1150.

Van Kessel, S. (2015). Populist Parties in Europe: Agents of Discontent? Springer.

Lazarsfeld, P.F., Berelson, B., Gaudet, H., (1968 [1944]). The people's choice: How the voter makes up his mind in a presidential campaign. New York, London: Columbia University Press

MacKuen M, Marcus GE, Neuman WR, et al. (2007) The third way: the theory of affective intelligence and American democracy. In: Neuman WR, Marcus GE, Crigler AN, et al. (Eds.) The Affect Effect: Dynamics of Emotion in Political Thinking and Behavior. Chicago: University of Chicago Press, pp. 124–151.

Mancosu, M. (2014). Geographical context, interest in politics and voting behaviour: the case of the Northern League in Italy. Contemporary Italian Politics, 6(2), 131-146.

Mancosu, M. (2015). La pista nera. Il successo della Lega in Toscana e l'eredità del Msi. In Paparo A., Cataldi, M (Eds.) Dopo la luna di miele: Le elezioni comunali e regionali fra autunno 2014 e primavera 2015. Roma: CISE.

Marcus, G. E., Neuman, W. R., & MacKuen, M. (2000). Affective intelligence and political judgment. Chicago: University of Chicago Press.

Marmor-Lavie, G., & Weimann, G. (2006). Measuring emotional appeals in Israeli election campaigns. International Journal of Public Opinion Research, 18(3), 318-339.

Messing, S., & Westwood, S. J. (2012). Selective exposure in the age of social media: Endorsements trump partisan source affiliation when selecting news online. Communication Research, 0093650212466406.

Mutz, D. C., & Martin, P. S. (2001). Facilitating communication across lines of political difference: The role of mass media. American Political Science Review, 95(1), 97–114.

Papke E. L. and Jeffrey M. Wooldridge (1996). Econometric Methods for Fractional Response Variables with an Application to 401 (K) Plan Participation Rates", Journal of Applied Econometrics, 11(6): 619-632.

Prior, M. (2007). Post-broadcast democracy: How media choice increases inequality in political involvement and polarizes elections. New York: Cambridge University Press.

Rovira Kaltwasser, C. (2014) The Responses of Populism to Dahl's Democratic Dilemmas, Political Studies , 62(3), 470–487.

Ruzza, C., & Fella, S. (2011). Populism and the Italian right. Acta Politica, 46(2), 158-179.

Sears, D. O., & Freedman, J. L. (1967). Selective exposure to information: A critical review. Public Opinion Quarterly, 31(2), 194–213.

Stanley, B. (2008) 'The Thin Ideology of Populism', Journal of Political Ideologies, 13(1): 95–110.

Stroud, N. J. (2007). Media effects, selective exposure, and Fahrenheit 9/11. Political Communication, 24(4), 415–432.

Stroud, N. J. (2008). Media use and political predispositions: Revisiting the concept of selective exposure. Political Behavior, 30(3), 341-366.

Sunstein, C. (2001). Republic.com. Princeton: Princeton University Press.

Taggart, P. (1996) The New Populism and the New Politics. New Protest Parties in Sweden in a Comparative Perspective , London: Macmillan.

Taggart, P. (2000) Populism , Buckingham and Philadelphia: Open University Press.

Tarchi, M. (2008) 'Italy: A Country of Many Populisms', in Albertazzi, D. and McDonnell, D. (eds.) Twenty-First Century Populism. The Spectre of Western European Democracy , Basingstoke: Palgrave Macmillan, 84–99.

Taber, C. S., & Lodge, M. (2006). Motivated skepticism in the evaluation of political beliefs. American Journal of Political Science, 50(3), 755–769.

Tournier-Sol, K. (2015). Reworking the Eurosceptic and Conservative Traditions into a Populist Narrative: UKIP's Winning Formula?. JCMS: Journal of Common Market Studies, 53(1), 140-156.

Turnbull, S., & Jenkins, S. (2016). Why Facebook Reactions are good news for evaluating social media campaigns. Journal of Direct, Data and Digital Marketing Practice, 17(3), 156-158.

Valentino, N. A., Brader, T., Groenendyk, E. W., Gregorowicz, K., & Hutchings, V. L. (2011). Election night's alright for fighting: The role of emotions in political participation. The Journal of Politics, 73(01), 156-170.

Vezzoni, C., & Mancosu, M. (2016). Diffusion Processes and Discussion Networks: An Analysis of the Propensity to Vote for the 5 Star Movement in the 2013 Italian Election. Journal of Elections, Public Opinion and Parties, 26(1), 1-21.

Williams, Richard. 2006. "Generalized Ordered Logit/ Partial Proportional Odds Models for Ordinal Dependent Variables." The Stata Journal 6(1):58-82.

Appendix 1 – Model 3 with all parties

TABLE A1 ABOUT HERE

FIGURE A1 ABOUT HERE

Figures

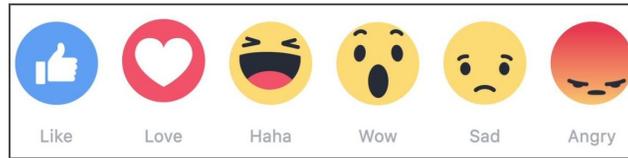**Figure 1. reactions as they appear on Facebook**

Figure 2. Percentage of every reaction on total responses (Likes included), by day
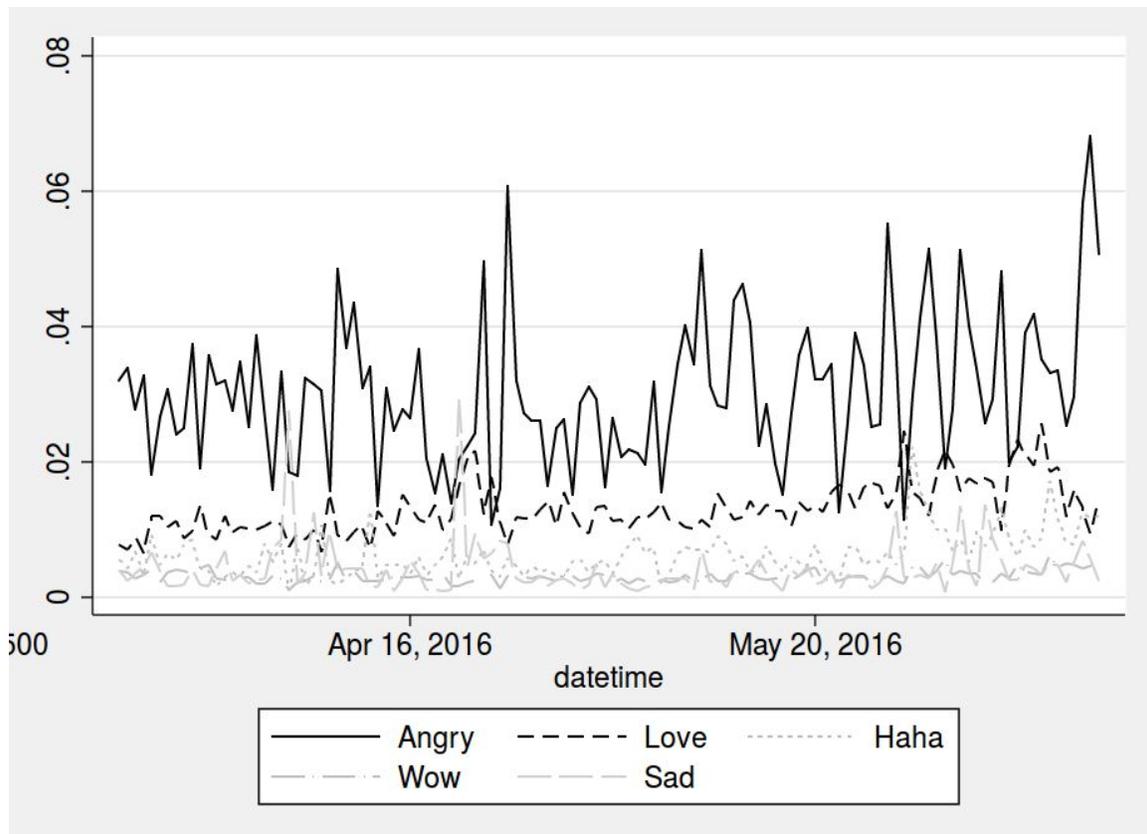
Figure 3. Predicted percentages of Angry reaction per populist/non-populist party and context (Table 1 coefficients)
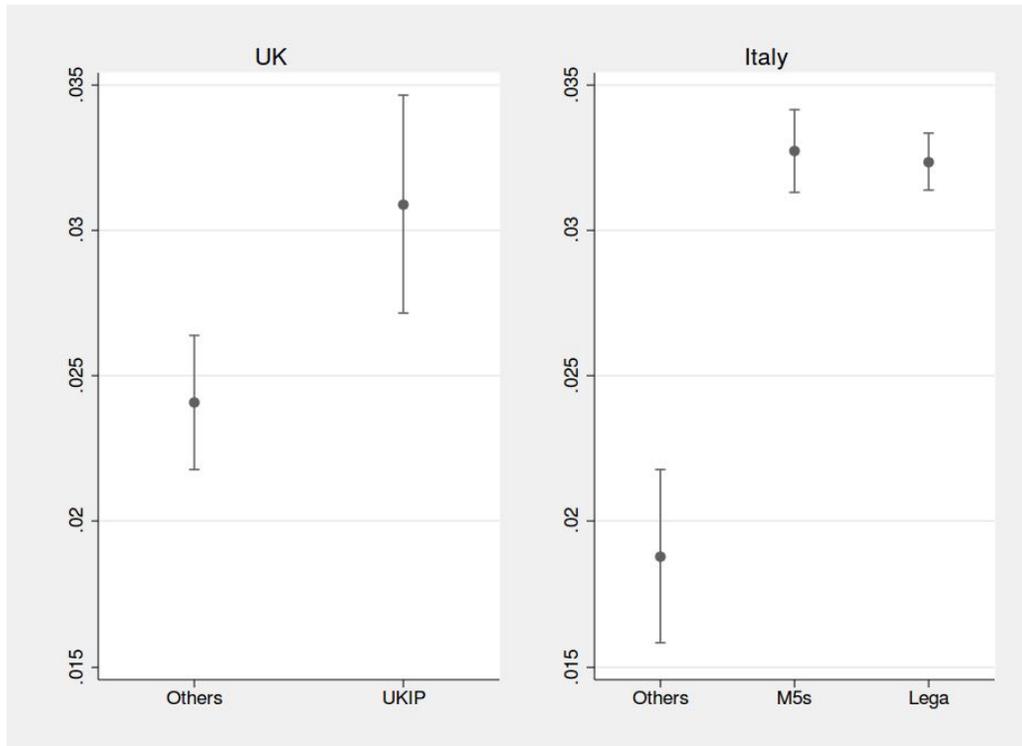

Figure 4. Predicted percentages of Love reaction per populist/non-populist party and context (Table 2 coefficients)
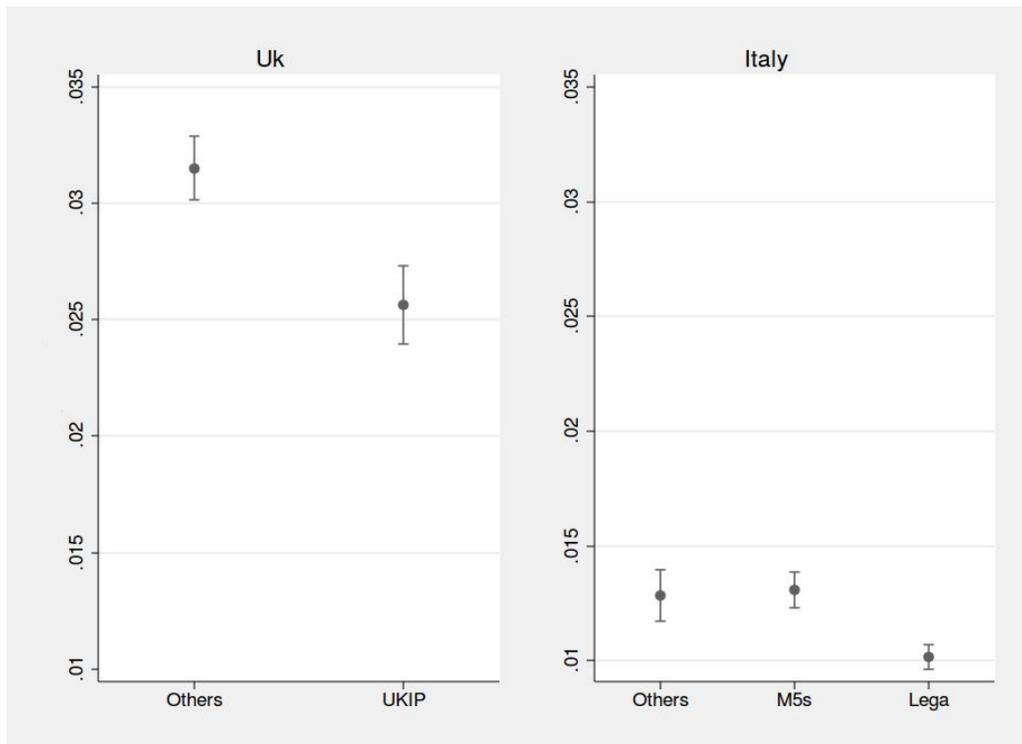
Figure 5. Average marginal effects of Angry reaction percentage for a critique/non-critique message, per populist/non-populist party and context (Table 3 coefficients)
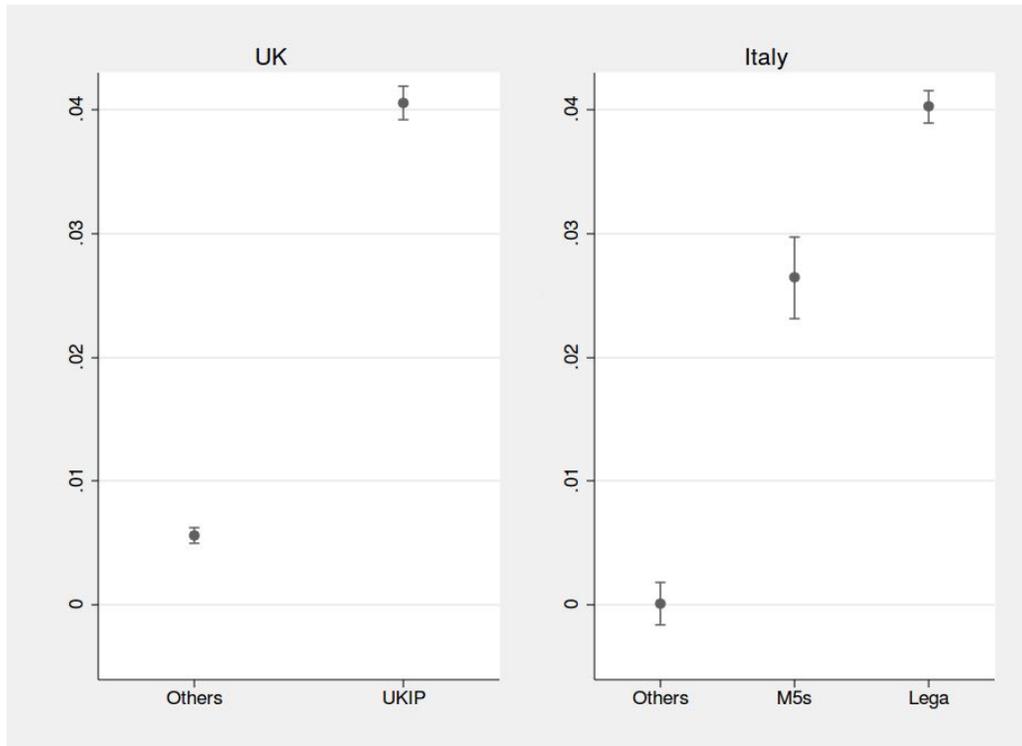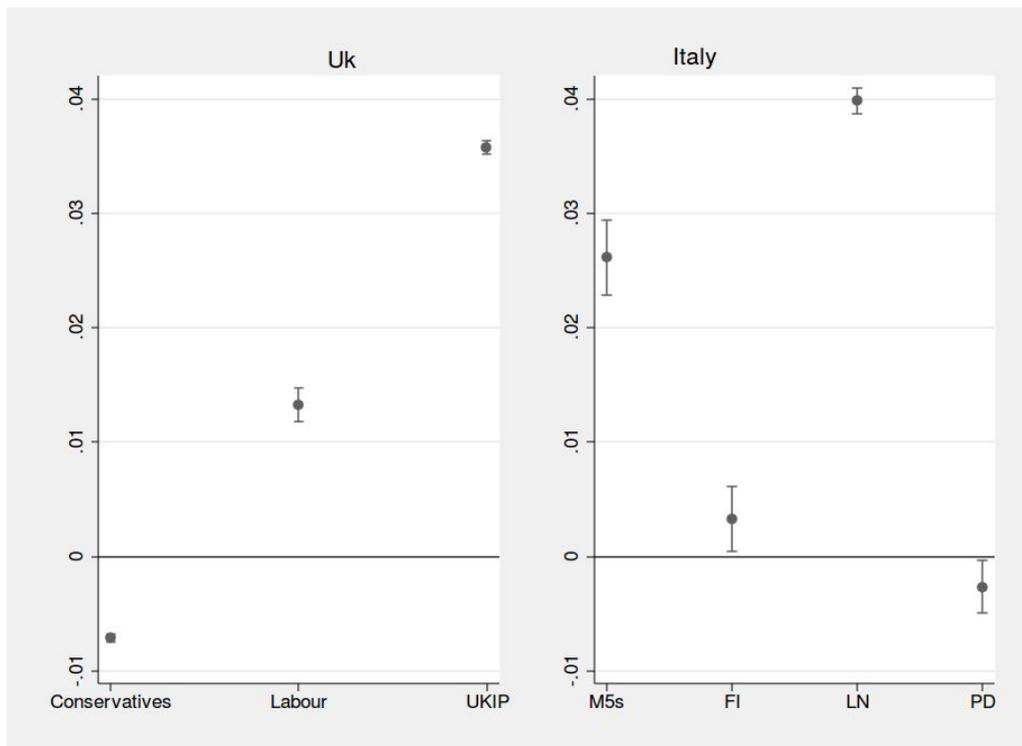

Figure 1A. Average marginal effects of Angry reaction percentage for a critique/non-critique message, per every party and context (Table A1 coefficients)

Tables

Table 1. Fractional logistic model for the study of Angry reaction percentages

independent variables	Model 1 - Uk Coef.	S.E.	Model 1 - Italy Coef.	S.E.
UKIP (ref. other parties)	0.27***	(0.10)		
M5s (ref. other parties)			0.64***	(0.09)
Lega Nord			0.62***	(0.09)
# Reactions on reactions + Likes	0.13***	(0.01)	0.14***	(0.00)
Leader page (ref. Party page)	0.07	(0.09)	0.20***	(0.03)
Date of post	-0.01***	(0.00)	-0.01***	(0.00)
Government party page (ref. Opposition)	0.40***	(0.10)	-0.48***	(0.14)
# Reactions + Likes	-0.00***	(0.00)	-0.00***	(0.00)
Average number of post per day	0.02**	(0.01)	-0.00***	(0.00)
Constant	124.49***	(21.29)	119.67***	(8.59)
Observations	1,305		9,911	

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table 2. Fractional logistic model for the study of Love reaction percentages

independent variables	Model 2 - Uk		Model 2 - Italy	
	Coef.	S.E.	Coef.	S.E.
UKIP (ref. other parties)	-0.21***	(0.04)		
M5s (ref. other parties)			0.02	(0.05)
Lega Nord			-0.24***	(0.06)
# Reactions on reactions + Likes	-0.00	(0.01)	-0.01**	(0.00)
Leader page (ref. Party page)	0.13***	(0.04)	0.06	(0.04)
Date of post	0.01***	(0.00)	0.01***	(0.00)
Government party page (ref. Opposition)	-0.28***	(0.06)	0.31***	(0.05)
# Reactions + Likes	0.00	(0.00)	0.00***	(0.00)
Average number of post per day	0.01	(0.00)	-0.00***	(0.00)
Constant	-131.16***	(10.34)	-210.88***	(8.10)
Observations	1,305		9,911	

Robust standard errors in parentheses

*** $p<0.01$, ** $p<0.05$, * $p<0.1$

Table 3. Fractional logistic model for the study of Angry reactions percentages (plus interaction with the nature of the message)

Independent variables	Model 1 – Uk+ Coef.	S.E.	Model 1 - Italy+ Coef.	S.E.	Model 3 - Uk Coef.	S.E.	Model 3 - Italy Coef.	S.E.
UKIP (ref. other parties)	0.24***	(0.03)			-1.53***	(0.01)		
M5s (ref. other parties)			0.77***	(0.12)			-0.01	(0.13)
Lega Nord			0.85***	(0.19)			-1.34***	(0.12)
Critique post (ref. Non-critique post)					0.25***	(0.01)	0.01	(0.07)
Crit. post * UKIP					2.10***	(0.04)		
Crit. post * M5s							1.23***	(0.15)
Crit. post * Lega Nord							2.69***	(0.14)
Constructive post (ref. Non-constructive post)					-0.08***	(0.01)	-0.53***	(0.06)
# Reactions on reactions + Likes	0.13***	(0.01)	0.14***	(0.01)	0.11***	(0.01)	0.11***	(0.00)
Leader page (ref. Party page)	0.18***	(0.04)	0.07	(0.06)	0.15***	(0.02)	0.04	(0.03)
Date of post	-0.01***	(0.00)	-0.01***	(0.00)	-0.01***	(0.00)	-0.00***	(0.00)
Government party page (ref. Opposition)	0.33***	(0.06)	-0.84	(0.60)	0.45***	(0.04)	0.23***	(0.09)
# Reactions + Likes	-0.00***	(0.00)	-0.00	(0.00)	-0.00***	(0.00)	-0.00	(0.00)
Average number of post per day	0.00***	(0.00)	-0.00	(0.00)	0.00***	(0.00)	-0.00	(0.00)
Constant	141.84***	(4.83)	125.31***	(12.30)	102.53***	(1.85)	52.96***	(6.30)
Observations	750		750		750		750	

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1 - + Model 1 ran only on 750 cases

Table A1. Fractional logistic model for the study of Angry reactions (with all parties' dummies)

Independent variables	Model 3 - All parties - Italy		Model 3 - All parties - Uk	
	Coef.	S.E.	Coef.	S.E.
FI (ref. M5s)	-0.16	(0.13)		
LN	-1.33***	(0.15)		
PD	0.28*	(0.15)		
Labour (ref. Conservatives)			-0.96***	(0.02)
UKIP			-2.17***	(0.04)
Critique post (ref. Non-critique post)	1.24***	(0.12)	-0.25***	(0.01)
Crit. Post*FI	-0.95***	(0.17)		
Crit. Post*LN	1.47***	(0.15)		
Crit. Post*PD	-1.43***	(0.16)		
Crit. Post*Labour			0.97***	(0.03)
Crit. Post*UKIP			2.61***	(0.03)
Constructive post (ref. Non-constructive post)	-0.54***	(0.07)	-0.13***	(0.01)
# Reactions on reactions + Likes	0.11***	(0.00)	0.11***	(0.01)
Leader page (ref. Party page)	0.04	(0.03)	0.14***	(0.02)
Date of post	-0.00***	(0.00)	-0.00***	(0.00)
Government party page (ref. Opposition)	-0.00	(0.00)	-0.00***	(0.00)
# Reactions + Likes	-0.00	(0.00)	0.01***	(0.00)
Average number of post per day	52.65***	(6.40)	87.18***	(3.09)
Observations	750		750	

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1