

# Politics @Pontifex: International Crises and Political Patterns of Papal Tweets

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Political research on social media argues that new channels of technological communication influence political leadership. However, we do not know the extent to which social media affect the power of other authorities - for example, religious leaders - in the secular world. In this paper, I focus on the social media presence of the Pope. I argue that the pontiff uses social media communication to explicitly address certain political issues. Specifically, I claim that his messages on the web tend to be more political when critical world events threaten peaceful international relations and frighten salient religious minorities. I investigate this argument by studying Pope Francis's statements on Twitter. The analysis indicates that the Pope is more likely to release political tweets at times of international crises, thus targeting issues that otherwise belong to other secular authorities. At the same time, it 'normalizes' the church's power in that it allows the Pope to keep with the Vatican's long tradition of safeguarding peace and protecting vulnerable populations. These findings have implications for the leadership of the Catholic Church in the modern world and extend to other papacies beyond Francis's.

*Keywords: international authority, global politics, Pope, crises, social media*

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Political leaders have long used technology to mobilize the masses (Deutsch 1961; Graber and Dunaway 2009). More recently, with the advent of the digital age, web-based communications have become a critical tool shaping political discourse. So, in light of the evolving relationship between politics and technology and its increasing relevance, a vibrant field of social science scholarship has come along to explore the media-based language of political leaders and its connection to audience preferences and real-life events (see, amongst others, King, Pan, and Roberts 2013; Jamal et al. 2015).

A central debate in this large literature is whether the use of new media strengthens or undermines the power of leaders (see Zeitzoff 2011 for a take in conflict studies; see also Barberá 2015; Gainous and Wagner 2014; Grimmer, Messing and Westwood 2012 for insights from party politics). While this discussion has received substantive empirical attention, it is unclear how it travels to religious leaders who presumably have significant influence on political issues. This note seeks to address this gap by focusing on the political tones of the social media communication of the Pope. Exploring the political content of the media messages of the pontiff is important to test the boundaries of the theories proposed by the media communication literature. Furthermore, it is useful to probe theories on the relation between religion and politics in the digital era, a topic that is increasingly receiving attention in political science (Nielsen 2017; Weber and Thornton 2012).

I address the debate of whether and how the Vatican's leader communicates issues that belong to the realm of secular politics. I start by positing that, while the Pope's communication is intended to embrace social issues, it is unclear which issues he concentrates on and under which conditions the papal message becomes more political than usual. I then argue that the patterns of the pope's political messages on social media should be consistent with an overarching goal of the Vatican: protecting the wellbeing of followers and religious minorities. Hence, I claim that the Pope's discourse on social media becomes more political at the outset of international events that threaten salient communities, so at the outbreak of issues that the Roman church deems important for its moral legitimacy and where the Vatican has long been best

positioned to take leadership. More specifically, I expect that the Vatican's leader may be more likely to issue political statements on social media when international crises affect salient audiences around the world.<sup>1</sup>

To empirically test my argument, I study the activity of Pope Francis's Twitter account @Pontifex, and perform a quantitative text analysis of the tweets released between March 2013 and March 2017. I find that the Pope focuses mostly on spiritual matters, but that a subset of his tweets is of clear political nature. The more political tweets concentrate on issues of war, although Pope Francis also addresses the social problems of environmental disasters and immigration crises. Additionally, I find that the Pope's more political tweets are not timed at random. In fact, he is more likely to take political positions in the aftermath of a range of critical events affecting religious minorities. This finding is relevant for theories of religious institutions and their influence on ideology (Norris and Inglehart 2004; Masoud, Jamal, and Nugent 2016), but also for the implications of tweeting leaders more generally (Campbell 2010; Munger 2017). Contrarily to the belief that the Internet may undermine the legitimacy of traditional leaders, the evidence in this paper indicates that the Catholic Church actively engages with the online political discourse. At the same time and contrarily to the common wisdom around Francis's "revolutionary papacy," the paper suggests that the Pope's political voice on social media is still tailored to Rome's traditional role of filling a void for society when crises emerge.

## **Papal Authority and Political Presence in a Global Age**

This note concentrates on an understudied yet significant source of public opinion: the Pope. I focus on the Pope's Twitter stream as this has been active for several years and is one of the most followed social media accounts of a religious leader.<sup>2</sup> My main argument is that the Pope tends to tweet about international politics when international crises erupt. More specifically, I claim that, while the Vatican's Twitter account may on average release a mix of sermons and social messages, it is systematically more likely to focus on the latter in the direct aftermath of dramatic events in the secular world, especially if important communities are affected.

To elaborate on my theory, I shall discuss the political role of the Pope and why he may or may not decide to engage with secular politics when crises erupt. Generally speaking, the debate on whether the Pope is consistently in or out of politics is hardly unsettled. Some scholars believe there is no such thing as an apolitical church and that religious institutions are constantly involved in politics to claim issues (Bueno De Mesquita 2000). By contrast, others believe that religious institutions are well-aware that engaging with politics can negatively affect their reputation and consequently do not consistently engage with it (Putnam and Campbell 2012). Against this light, even a Pope as socially active as Francis may be aware that making the church too political may hurt religious retention, and that the papacy may be better off speaking out for some events and staying neutral on others (Plantak 1998).

I argue that the Pope may be more prone to directly address politics when political events affect communities the church deems most relevant. These may be religious minorities, poor Catholic groups or vulnerable Christian populations. Thus, if critical issues threaten such groups or secular jurisdictions seems unprepared to protect these communities, then the Pope may be more inclined to make explicit references to the state of the world and the political problems around such issues. Vice versa, if a political event does not critically affect such communities, the Pope may be more reluctant to send a message of political concern on social media.<sup>3</sup>

Because this paper focuses mainly on Pope Francis, it is worth discussing whether my theory may be pertinent only to Bergoglio's papacy. Evidently, not all Popes are the same, and some have argued that Pope Francis - whose background is in itself novel to the Roman church - has shown a particular predisposition for particular issues such as environmental degradation, immigration and poverty in the Global South, and for spiritual reform more generally.<sup>4</sup> Despite the remarkable features of the current Pope, I argue that the idiosyncrasies of Francis's papacy do not necessarily determine the basic pattern of the Vatican leader's messages on the Internet. Put differently, I expect that the statements of Pope Francis on Twitter still reflect the long-timed interests of the Roman church to protect its more vulnerable communities, which then emerge in the pontiff's reactions on social media.

In fostering this argument, this paper suggests that the advent of digital communications has not undermined the popular legitimacy of the traditional

leadership of the pontiff. Rather, the Internet has allowed the papacy to claim influence on global issues in that it has integrated the promotion of concerns of vulnerable communities in the Vatican leader's online statements. Hence, this paper also seeks to contribute to the theory of power in the information technology sphere, and to the long-standing debate captured by the equalization versus normalization literature (Gainous and Wagner 2014; Margolis and Resnick 2000). While according to equalizing scholars the Internet is a force that allows 'outsiders' to compete over issues with power-holders (Barber 2001; Corrado and Firestone 1996), for normalization scholars the web reinforces the advantage of incumbents (Hindman 2009; Stromer-Galley 2014). Against this light, my argument is in line with the equalization hypothesis, in that digital media gives the Pope a powerful way to comment on issues that, strictly speaking, are otherwise left to secular institutions to handle. At the same time, I argue that new media has crystalized the Pope's tradition of addressing issues that affect important religious communities. Thus, when issues become particularly salient to the Vatican, social media provides the Pope with an opportunity structure for his message to be spread and for the authority of the church to be reinforced. Within the boundaries of this paper, this leads me to expect that, in the midst of international crises, the Pope is more likely to voice political concerns on social media, *ceteris paribus*.

## **International Crises and the Pope's Political Tweets**

For my empirical analysis I refer to Twitter, because the Pope has no official account in any other large social network. Also, Twitter allows for short communications that can only reflect a small number of topical issues. Consequently, the nature of Twitter statements is useful for testing my hypothesis that the Pope should systematically engage global political events and address concerns at the outbreak of international crises.<sup>5</sup>

I collected all the tweets from the @Pontifex English-language account from March 17, 2013 until March 26, 2017. The body of texts refers only to messages by Pope Francis, as all the tweets by Pope Benedict XVI were archived after his resignation in February 2013 and are too few to justify a quantitative text analysis.<sup>6</sup> The total amount of papal tweets in my sample sums up to 1,142 observations. Not surprisingly, the most frequent words mentioned in the tweets

(>130 times) are *god*, *love* and *jesus*. However, words such as *families*, *poverty* and *work* are repeated more than 25 times, hinting to some consistent reference to other social and political issues.<sup>7</sup>

[Place Figure 1 about here]

[Place Figure 2 about here]

As for the temporal patterns of the Pope's tweeting activity, the median number of tweets per week is five, as on average the Pope releases one message per working day and rarely tweets on weekends. However, as Figure 1 shows, at times the volume of tweets increases well above the median. The highest peak corresponds to the week of the release of the 'Laudato Si' encyclical on June 18 2015, when @Pontifex tweeted more than 60 times. The second most dense window of tweets was the week of International World Youth Day, an event that took place in July 2016 and that focused on Catholic faith among the young generations. Relevantly to the hypothesis explored here, the Pope also released a significant amount of tweets at the outbreak of international crises. For example, in June 2014 the Pope tweeted about the Christian Iraqi genocide perpetrated by the Islamic State more than 20 times in a row. This suggests how outspoken the pontiff can be regarding political issues involving Christians around the world. A similar pattern is shown via the retweets of the Pope's messages (Figure 2). Overall, the public pays significant attention to the papal tweets, and (as of the end of 2017) on average a tweet by Pope Francis receives roughly 8,000 retweets. However, in the past some specific messages have had higher success among his followers. These include statements about communal gatherings such as the Pope's visit to the Philippines in January 2015, but also inherently political events such as the Paris terror attack in November 2015 and the Donald Trump's 13769 executive order renown as his first 'Muslim ban' in February 2017.

While these descriptive findings point to the Pope's sensitivity to events in the political world as suggested by my hypothesis, to systematically evaluate my expectation I proceed with an automated content analysis of the papal tweets.<sup>8</sup> First I employ a topic model estimation to explore to what extent political themes

are discernible from the more ‘spiritual’ ones in papal tweets, and then to estimate whether the more political tweets may be associated to times of political crisis. Technically, I rely on an unsupervised topic model that find sets of words associated with the documents’ latent dimensions following a Latent Dirichlet Allocation (LDA) approach (Blei, Ng, and Jordan 2003).<sup>9</sup> I pursue such LDA estimation to assess the systematic correlations of words in the body of tweets. In other words, I treat this as the first step to inductively identify topics that may be more or less political based on a probability distribution over terms. In a second step, assuming the LDA process is able to identify political themes in the papal messages, I move to test whether the onset of sudden political events (i.e. crises) is a significant correlate of the topical content of the papal tweets. In order to do so, I employ a Structural Topic Model (STM), which is a topic model that allows one to include covariates such as the onset of political crises in the topic estimation (Lucas et al. 2015).

It is worth noting that, following common estimation practices, I explored the topic density in the Pope’s tweets with a so-called ‘perplexity’ score, which is an LDA-based metric where a lower value indicates better generalization performance (Chang et al. 2009). I calculated the perplexity score for 20 LDA models with a number of topics set from 2 through 8 using different initialization values to ensure that my conclusions are not driven by the starting parameters. The values suggest that the identification of the topics improve significantly above 3 topics but only minimally after 8 topics.<sup>10</sup> In the main analysis I report the results based on 8 topics to allow for subtle variations across the tweets, but the substantive findings remain unaltered if I perform alternative estimations.

[Place Figure 3 about here]

I first run the basic LDA estimation. I remove basic English-language stop words and estimate the topic models 50 times using different random initialization values to ensure that my conclusions are not driven by the starting parameters. The LDA decomposes the words of the 1,142 tweets into eight clusters and provides a list of words loading on each dimension, as reported in Figure 3. The eight topics are not exclusive in that some words overlap, such as *god*, *jesus* and

*love*. This suggests that most of the tweets consistently repeat the classical wording of the church. Nonetheless, some words are more exclusive than others, such as *peace*, *lives*, *brothers* and *family*, most of which are especially clustered on some topics, i.e. Topic 2 and Topic 8, which account for almost 20% of the tweets. These terms correspond to messages such as “We pray for the earthquake victims in Ecuador and Japan, may God and all our *brothers and sisters* give them help and support” (tweeted on 18/04/16 after Kumamoto and Ecuador earthquakes), “We run the risk of forgetting the suffering which doesn’t affect us personally - may we respond to it and may we pray for *peace* in Syria” (tweeted on 14/06/14 as ISIS declares a caliphate), or “May every parish and religious community in Europe host a refugee *family*” (tweeted on 08/09/15 as thousands of refugees cross Eastern Europe). All in all, such tweets extend the Pope’s message of solidarity in moments of social despair and humanitarian disaster to salient communities around the world.

In sum, the results from the LDA analysis suggest that on contentious contemporary issues the Pope’s tweets seem to focus on more political themes. This finding fits with the claim that it is in the Pope’s interest - or, in fact, moral domain - to encompass social concerns in the daily preaching of the church (Wald, Owen, and Hill 1988). Hence, the Pope seems capable to capitalize Twitter and strengthen its authority by addressing real-world contemporary issues (Campbell 2010). But in order to fully validate this claim, one must ask: is the timing of the more political tweets *systematically* correlated to critical international political events?

To verify the second part of my argument, I run a Structural Topic Model (STM) analysis, which permits to calculate statistical correlations between topics (the outcome variable) and external covariates at the tweet-level of analysis. To run STM, I generated the binary variable ‘event’, which takes the value of 1 if the day in which the tweet is published is one that includes political events such as conflicts, diplomatic failures and unexpected disasters ( $t = \text{event}$ ).<sup>11</sup> To stay consistent with the previous analysis, I specify the model for 8 topics. My argument suggests that topics that capture more political themes should be correlated with crises, because these should lead to more active political expressions by the Vatican’s leader. For example, following Figure 3, the words



in Topic 2 and 8 should be significantly and positively correlated with the 'event' covariate.

[Place Figure 4 about here]

I estimate the mean difference in topic proportions for the two different values of the covariate (0 for no event and 1 for event). Figure 4 presents these results, controlling for number of retweets and 'likes'. The point estimates with respect to Topic 2 and 8 are positive and statistically significant at the 90% level. This is evidence that the Pope is more likely to discuss the themes captured by these topics (and words such as *followers* as well as *families* and *others*) at the outbreak of critical events in the secular world. Vice versa, more 'doctrinal' words (see, for example, Topic 6) are less likely to be tweeted in days when political events occur. Note that the results stay overall unaltered if I estimate the STM model with fewer topics and if I drop from the analysis the observations following Brexit and the 2016 American elections, assuming that these alone may have triggered a more uncertain political atmosphere and, thus, more political tweets (see additional estimations in the Appendix). In sum, the evidence supports the expectation that shape and timing of papal tweets are deeply correlated with international crises around the world.

Despite this evidence, one may still wonder if the sensitivity to international crises and the expression of concern on Twitter may be a function of the personal idiosyncrasies of the Pope in charge. Recall that the first Pope to ever use Twitter in December 2012 was Benedict XVI. Is it possible that the format and timing of Benedict's tweets differ significantly from Pope Francis, the 'modern' Pope? Put differently: is social media truly strengthening the Vatican's outreaching tradition in moments of crisis, or is this a characteristic of Francis's papacy? Unfortunately there is too little data to systematically compare Francis and Benedict XVI's social media presence to test personality trends in their tweets, as Pope Benedict XVI resigned in February 11 2013, having tweeted only 39 times. However, the qualitative evaluation of his tweets does not suggest that Benedict XVI would have been less likely than Francis to raise political concerns at the outset of international crises. Out of 39 texts, 2 strike as particularly similar to the more 'political' tweets of Francis: one following the 2012 Christmas

shootings in Nigeria by Islamic militants (“Nigerians have a special place in my heart, as so many have been victims of senseless violence in recent months”), and one on Syria’s conflict, at the outset of a UN human rights report issued on 04/01/13 (“Please join me in praying for Syria, so that constructive dialogue will replace the horrendous violence”). These tweets share some words with Topic 2 and 8 from the previous LDA analysis, and they are the only tweets by Benedict XVI with terms such as *dialogue* and *violence*, which suggest a distinct type of social message. I interpret this as further evidence that the Roman church - and not Francis per se - uses media communication to expand its influence and claim issues occurring to relevant communities all over the world.<sup>12</sup>

Last but not least, one may wonder if the results have implications only for the media usage of the Pope or for other global spiritual leaders who may be as sensitive to international crises. To explore this, I collected the tweets of the Dalai Lama for the same years covered by my papal analysis. The pattern of tweeting of the Dalai Lama is by and large similar to the one of the Pope, in that both tweet regularly (although the former slightly less frequently than the pontiff, with a rate of 1 tweet every 3 days). I ran the same type of quantitative text analyses on this text corpus, using the same coding of crisis events as the previous analysis (see results in the Appendix). The direction of the findings suggest that the Dalai Lama may have a propensity to tweet more about *anger*, *tolerance*, *peace* and *change* and less about *teaching* and affairs in *Dharamsala* when a crisis occurs. However, these estimates overlap and do not reach the 90% confidence level. This null result may be in part driven by the smaller sample of Dalai Lama tweets, but also in part to the fact that the Buddhist leader represents a smaller and more confined community of followers. Consequently, the international events coded in my dataset may be on average beyond the authoritative mandate of the Dalai Lama. This interpretation strengthens the thesis that the Vatican, as a truly global actor, is more likely to issue political tweets when it deems crises to affect salient groups around the world.

## Conclusion

The rise of social media has motivated a range of studies on the effects of new communication technologies on leaders and their forms of expression. In line with the normalization versus equalization debate put forward in the information

technology literature, researchers have discussed whether new means of technological communication strengthen the legitimacy of traditional leaders or undermine it by benefitting outsiders. However, this research has mainly focused on 'classical' political authorities, ignoring equally powerful and politically relevant institutions such as religious leaders. In this paper I argued that we still have little understanding of how this type of authorities adjust to mass communication and what implications their use of social media has for politics.

Focusing on the case of the Pope, I argued that the pontiff is more likely to release political statements on social media when secular powers are non-effective at managing events that threaten to shake peaceful relations across religious minorities. A quantitative content analysis of Pope Francis's tweets supports my argument, in that I find that the Pope is more inclined to take more political positions following international crises. One main implication of the study is that, while digital communication channels may weaken some political leaders, they may empower those who have a credible moral aura around issues they own. Consequently, the Internet may equalize the power of the Vatican vis-à-vis other more pertinent secular authorities while simultaneously normalizing the overall clout of the Vatican in the modern world. Finally, by highlighting the link between papal statements and social affairs beyond the domain of Francis's papacy, the paper has implications for the political use of social media by religious institutions and other types of spiritual representatives.

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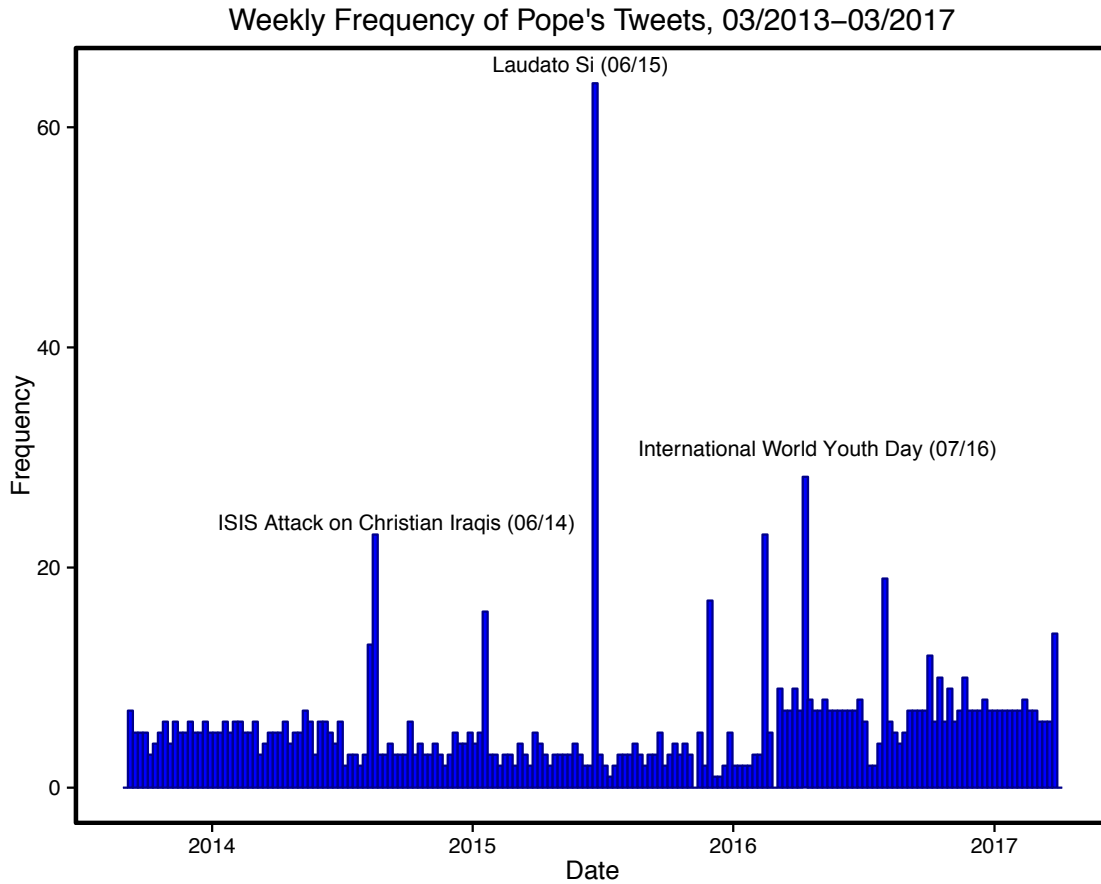
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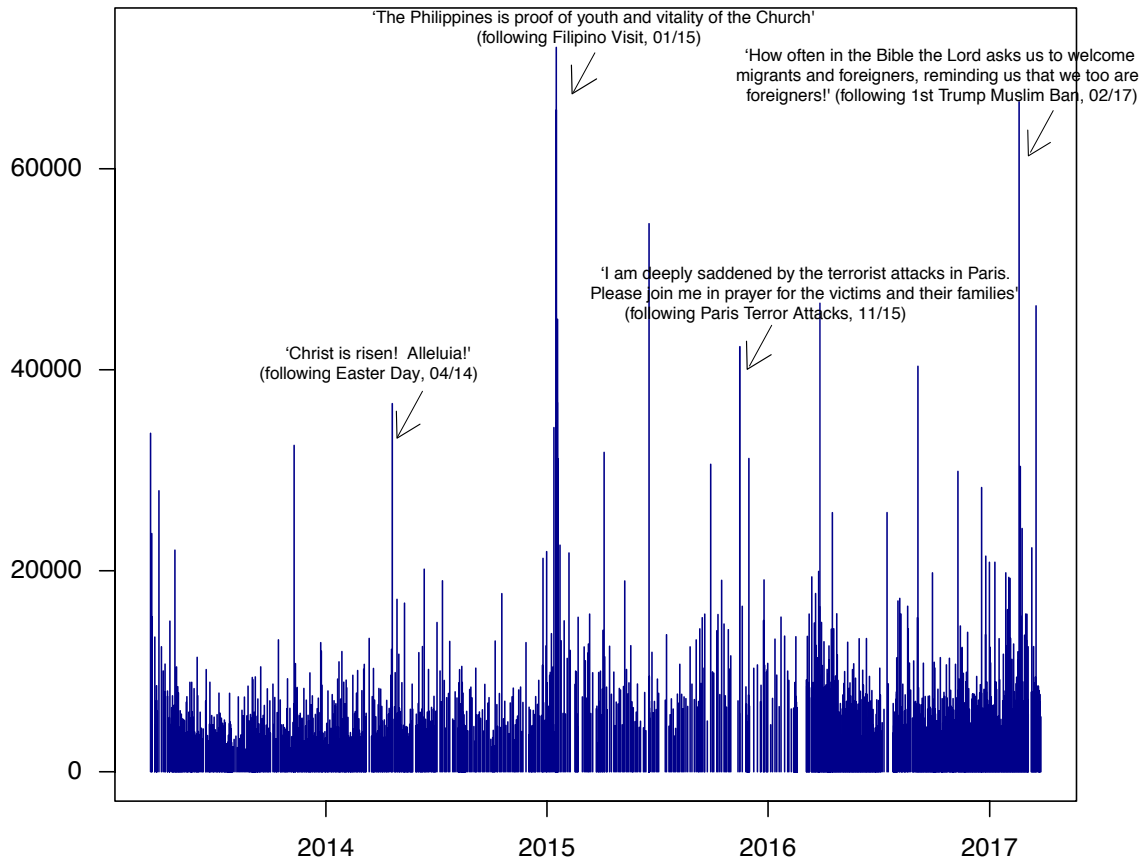
## Figures



**Figure 1: Papal Tweets and Selected International Events**

*This figure illustrates the frequency of Pope Francis's tweets and some selected international events between March 2013 and March 2017 (based on data updated as of March 2017). Data is aggregated at the weekly level.*

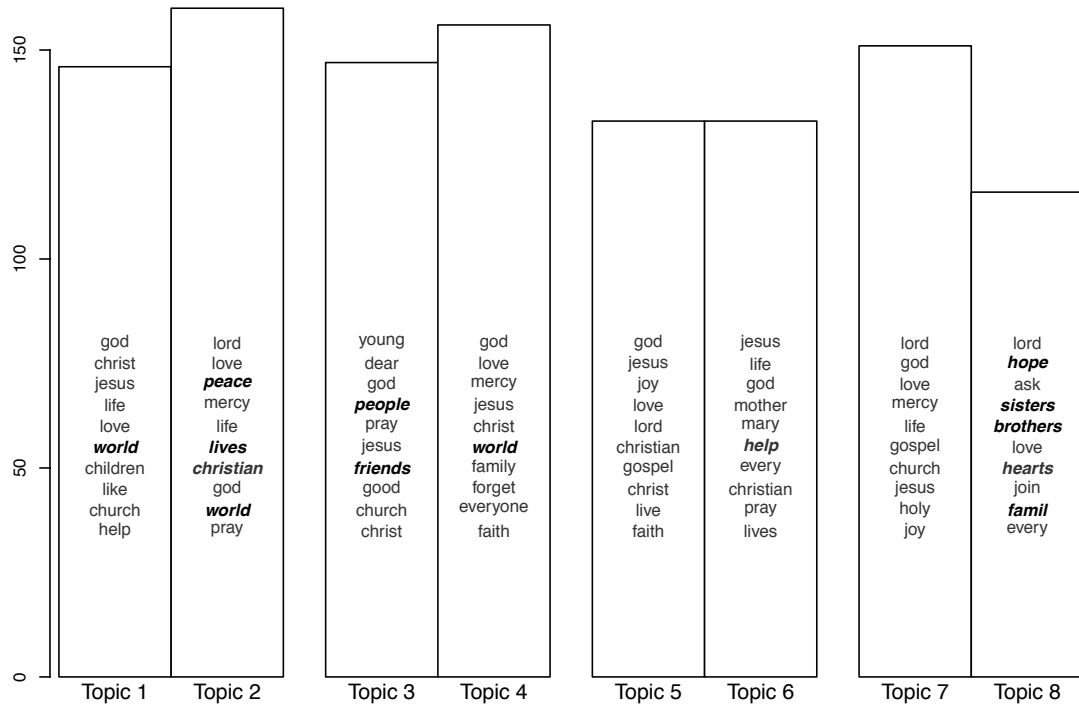
## Daily Frequency of Retweets, 03/2013–03/2017



**Figure 2: Retweets of Papal Messages and Selected International Events**

*This figure illustrates the daily volumes of retweets of Pope Francis's messages and some of his most retweeted tweets between March 2013 and March 2017 (based on data updated as of March 2017).*

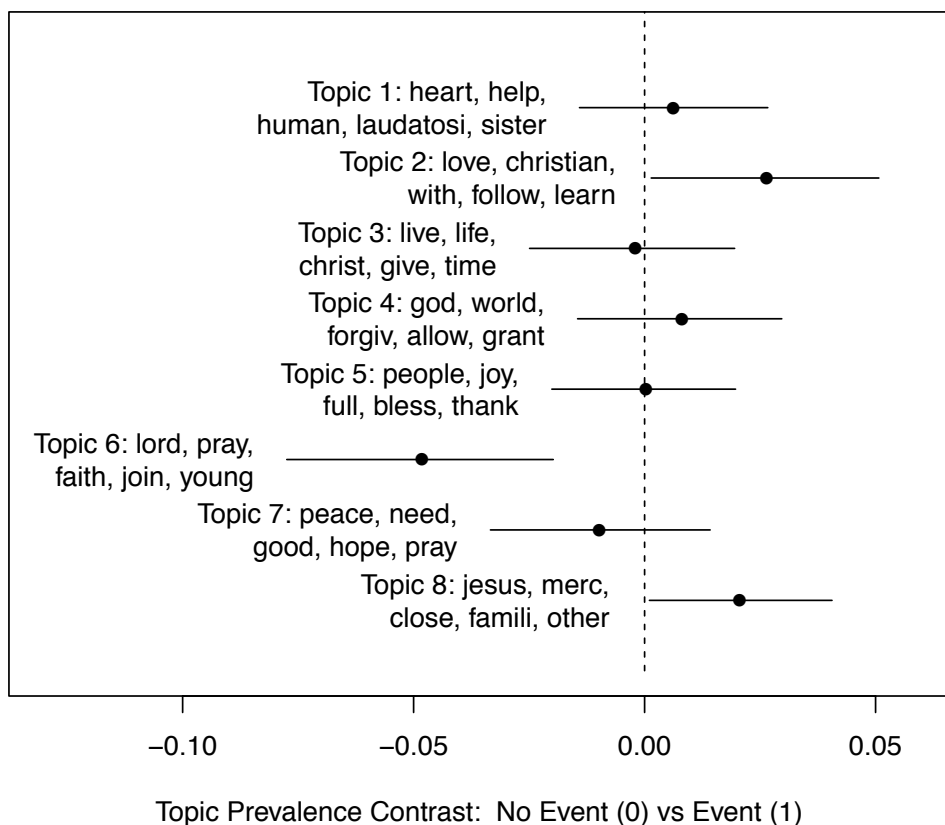
Pope's Tweets (03/2013–03/2017)



**Figure 3: LDA Topic Model of Papal Tweets**

*This figure illustrates the results of an eight-topic LDA estimation process with 50 random initialization values and indicates the relative loadings of papal tweets on the identified topics. Words in bold are unique loading words. N=1,142 tweets.*





**Figure 4: The Effect of International Events and Crises on Papal Tweets**

*This figure illustrates the statistical influence of international crises on the content of the papal tweets. The estimation is based on a Structural Topic Model specified with eight topics. Each dot corresponds to the estimated coefficient, while the line corresponds to the 90% confidence interval. N=1,142 tweets.*

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<sup>1</sup> Crises are here intended as events that involve public tension and generate attrition among several parties.

<sup>2</sup> As of January 2018 the Dalai Lama Twitter account, which was opened in 2009, had 17.9 millions followers - roughly 1 million more followers than the English-speaking Pope account, which was opened at the end of 2012. However, @Pontifex has 'sister accounts' in eight other languages, which together sum up to more than 40 million followers.

<sup>3</sup> Silence may then follow, for instance, events where a secular authority with direct jurisdiction may be handling the situation.

<sup>4</sup> Mark Silk. 2015. "Who Says Laudato Si is not a political manifesto?" *Religion News Service*, June 25. <http://marksilk.religionnews.com/2015/06/25/getgetreligion-who-says-laudato-si-is-not-a-political-manifesto/>

<sup>5</sup> It is also worth noting that papal communications on Twitter are almost always below the 140-character limit, and they never involve chains of tweets. This implies that one tweet counts as one message, which is useful for my analysis.

<sup>6</sup> In total Benedict XVI released 39 tweets in the dates between December 12 2012 and February 28 2013. His tweets were generated at the same rate of Pope Francis's tweets, e.g. with an average of 5 tweets per week and a median of one tweet per day.

<sup>7</sup> See the word cloud and the histogram of most tweeted words in the Appendix.

<sup>8</sup> I prefer this to human coding to maximize efficiency and avoid any human coding bias in interpreting the content of the tweets. The qualitative evaluation of a number of tweets (Table A.1 in the Appendix) suggests that this interpretation is consistent to the quantitative results.

<sup>9</sup> Assuming that each topic is characterized by a distribution over words  $w$ , the LDA estimator first creates the list of words  $w$  used in the set of encyclicals, and then counts  $w_{ij}$ , the number of times each word  $j$  appears in each tweet  $i$ .

<sup>10</sup> See Figure A.1 in the Appendix.

<sup>11</sup> Events coded for the STM analysis were collected from the following Wikipedia sources: the portal of 'current events', the page on annual 'conflicts', the list of annual 'terrorist incidents', and the page on 'natural disasters'. I identify events spread over 46 days in which the Pope tweeted 72 times altogether. Some of these events are listed in Table A.1 in the Appendix. Note that, if the day corresponding to such an event is absent in the Twitter line, I coded as 1 the day immediately after.

<sup>12</sup> This is also in line with previous research on other papal writings, which indicates little evidence that popes have different ways to linguistically address social and political issues. See Genovese (2015).