To Be or Not to Be Charlie: Twitter Hashtags as a Discourse and Counter-discourse in the Aftermath of the 2015 Charlie Hebdo Shooting in France

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ABSTRACT

Following a shooting attack by two self-proclaimed Islamist gunmen at the offices of French satirical weekly *Charlie Hebdo* on 7th January 2015, there emerged the hashtag #JeSuisCharlie on Twitter as an expression of condolences for the victims, solidarity, and support for the magazine's right to free speech. Almost simultaneously, however, there was also #JeNeSuisPasCharlie explicitly countering the former, affirmative hashtag. In this paper, we analyse 74,047 tweets containing #JeNeSuisPasCharlie posted between 7th and 11th January. Our network analysis and semantic cluster analysis of those 74,047 tweets reveal that the hashtag in question constituted a form of resistance to the mainstream framing of the issue as freedom of expression being threatened by religious intolerance and violence. The resistance was manifested through three phases: sharing condolences but indicating a reservation against the mainstream frame (Grief); voicing out resistance against the frame (Resistance); and developing and deploying alternative frames such as hate speech, Eurocentrism, and Islamophobia (Alternatives). The hashtag in this context served as a vehicle through which users formed, enhanced, and declared their self-identity.

Categories and Subject Descriptors

J.4 [**Social and behavioral sciences**]: Sociology.

General Terms

Human Factors.

Keywords

counter-discourse, freedom of expression, hashtag, identity, semantic cluster analysis

1.INTRODUCTION

On 7th January 2015, two gunmen forced their way into and opened fire in the headquarters of satirical weekly magazine *Charlie Hebdo* in Paris, killing twelve staff cartoonists and claiming that it was an act of revenge against the magazine's

portrayals of the Prophet Mohammed. Within hours following the attack, the hashtag #JeSuisCharlie [I am Charlie] began trending on Twitter, in a show of condolences for the victims, solidarity, and support for the magazine's right to satirise any subject including religions. Reportedly created by an artist named Joachim Roncin, who lived in the neighborhood of the shooting site, the hashtag was used over five million times by 9th January and became one of the most repeated news-related hashtags in Twitter's history [22]. In the initiator's own words, 'je' in this context was important as it offered a vehicle through which each individual expressed themselves vis-à-vis threats to the freedom and tolerance underpinning the participants' world (Roncin, interviewed by Sky News, 2015). 'Je Suis Charlie' (and by extension 'Nous Sommes Tous Charlie' [We are all Charlie]) also served as the principal slogan during the vigils and marches that took place in central Paris on Sunday 11th January.

However, there too emerged #JeNeSuisPasCharlie [I am not Charlie], explicitly countering the former, affirmative hashtag. Since the former hashtag entailed a tragedy of twelve deaths and support for the universal value of freedom of expression, #JeNeSuisPasCharlie carried an inherent risk of being viewed as opposing accepted social norms. Despite the risk, the negative hashtag was used more than 74,000 times over the next few days since 7th January. Against this backdrop, we set out to unpack a complex relationship between the willingness to speak up on sensitive topics and identity formation on Twitter. More specifically, we aim to address three interlinked questions as below.

1. What are the characteristics of the network formed around the #JeNeSuisPasCharlie hashtag and the material shared through that network on Twitter?

2. How did users of the #JeNeSuisPasCharlie hashtag position themselves discursively with regard to the #JeSuisCharlie hashtag?

3. How did the activities under the #JeNeSuisPasCharlie hashtag evolve as the broader public discussion of the shooting attack developed?

2.LITERATURE REVIEW

In order to address the research questions above, the present study draws upon a combination of three strands of work in the current scholarship: the network characteristics of Twitter-mediated discussion; the roles of hashtags in such discussion; and the expressions of identity in social media activism. First, recent years have seen a fast-growing body of literature concerned with buzzing discussions on the microblogging platform Twitter and how to examine them systematically. Given the range and amount of data that researchers could mine from the platform, a keen

interest has been shown in employing network-analysis approaches for a 'bird's eye view'. Himelboim and Han [10] argued, through their case study of cancer-related discussion on Twitter, that communities emerged from such discussion with clusters of interconnected users and the information sources on which they relied most. A 2014 special issue of *American Behavioral Scientist*, particularly the contributions by Dubois and Gaffney [5] and Xu et al. [23], showed that opinion leaders and influencers could be metrically identified in Twitter-mediated political discussions. The links formed between political discussants on Twitter turned out to be considerably different from those observed in the Web 1.0 environment or in blogosphere, at least in the South Korean context, according to Hsu and Park [11]. Mapping the landscape of Twitter activity has provided unique insights into various issues of international relevance. Lotan's study of the 2014 Israel-Gaza conflict [12], for example, visually demonstrated a distinct polarisation between the pro-Israel and pro-Palestine sides with a negligible number of bridging actors in-between. By tracing the Twitter network of Western-origin Jihad fighters, Klausen [14] identified that certain strategic roles were assigned to those fighters' Twitter accounts.

Discussions on Twitter are speedy and unstructured and, consequently, the organisational usefulness of hashtags has attracted practical as well as academic attention. Bruns [3] detailed out his methodological experiences and reflections of handling Twitter data around a hashtag and highlighted that hashtags are 'shared conversation markers', which require users to include them in their posts deliberately if they wish to take part in established conversations. Based on a comparison of various hashtag-based communications, Bruns and Stieglitz [4] concluded that different hashtags are associated with different patterns of user behaviours. While crisis- and emergency-related hashtags (such as #tsunami for the March 2011 tsunami in Japan and #londonriots in 2011) have seen a dominant proportion of retweets and URLs pointing outside Twitter, spectacle-oriented hashtags (such as British #royalwedding in 2011 and #eurovision for the Eurovision Song Contest in 2011) seem to elicit more original tweets from users. Indeed, such findings from hashtag studies are in line with the studies focusing on unravelling the network properties of Twitter communications discussed earlier. Siapera's work on #Palestine [19] and Lorentzen's work on #svpol (for Swedish politics) [8], for example, point to homophily and polarisation in hashtag-based discussions, resonating Lotan's findings cited above.

However enthusiastic the participants in Twitter-mediated political discussions may be, whether their participations lead to any concrete outcomes is still an ongoing question. On the one hand, some offer encouraging anecdotes of how Twitter has facilitated protests in different parts of the world, such as one against police brutality in Ferguson in Missouri, US, in 2014 [9]. A cautious voice, on the other hand, is that Twitter and other such platforms make social movements 'easier to organise but harder to win' by pushing them to scale up before they are ready for it [21]. Nevertheless, what social media including Twitter can certainly provide is a space for accommodating expressions of identity at multiple layers. Bennett and Segerberg [2] suggested that, in today's large-scale 'connective action' (in distinction to the traditional concept of 'collective action'), political content is often presented in the form of easily personalised ideas such as 'Put People First' (PPF) during the 2009 G20 London summit protests or 'We Are the 99 Percent' during the Occupy Wall Street movement in the US in 2011. According to the two authors, these personal action frames are particularly inclusive and can be easily passed across different platforms. 'Identity' here can be a collective identity expressed within a limited time span like

during one TV programme [1] or a series [7]. More relevantly to the purposes of the present study, identity may refer to individuality that used to be blended and lost in the presence of the collectivity required in activism in the pre-social media era [18].

3.METHODOLOGY

Our dataset consisted of 74,074 tweets containing the hashtag #JeNeSuisPasCharlie and published by 41,687 unique users between 7th and 11th of January 2015. Due to the known limits of Twitter free API [17], the data was purchased from Sifter, a web application that provides, in partnership with Gnip, search-and-retrieve access to every undeleted tweet in the history of Twitter. The data gathered via Sifter was automatically imported into a new DiscoverText project. It was then exported in CSV format from there and was analysed using R.

### 3.1.Typology of contents and network

The first tweet in the dataset was dated 7th January 2015, 1:46 PM in local time. The hashtag #JeSuisCharlie was reported to be created at 12:59 PM on the same day, immediately following the shooting that took place at around 11:30 AM. Tweets in our dataset were written in various languages. Using the text categorisation engine based on n-grams provided by the textcat R package [6], we discovered that French (30%), English (25%) and Spanish (12%) accounted for the majority of the tweets. It was unsurprising that French was the most frequently used language, but the proportion was smaller than expected, indicating its reference to #JeSuisCharlie. Another interesting characteristic identified was that 1,488 tweets (2%) were made of nothing but the #JeNeSuisPasCharlie hashtag. 70% of the 74,074 tweets were retweets and 41% included URLs. Since retweets account for almost three quarters of the dataset, we computed and visualised a retweet network with a view to identifying central users and their clusters if any. We also identified the most recurring external sources (URLs).

3.2.Topics

In order to understand the main topics addressed, we applied the text mining techniques provided by the textcat R package [16] to the textual corpus of all tweets in the dataset. We lowered the case of all terms in the corpus and cleaned it up by removing auxiliary words in French, English and Spanish, as well as punctuation marks and whitespaces. Additionally, we also removed 'jenesuispascharlie', 'charlie', 'charliehebdo', 'hebdo', 'jesuischarlie' and created a document term matrix to calculate the associations between the remaining words (N=36,030). After removing sparse terms (i.e. the sparsity of a term is defined as the percentage of documents with 0 occurrence; in the present study a term was removed if its sparsity was higher than 98%), we identified the most frequently used terms (N=17) and their Euclidean distances, and created clusters of frequently co-occurring terms.

3.3.Evolution over time

To better understand the evolution of the topics discussed, with particular reference to our third research question, we created a by-minute time series (N=6,444, AVG TPM=11.5) of activity. We also used the Breakout Detection R package, which had recently been open-sourced by Twitter [13], to identify breakouts or shifts in the mean of tweet per minute (TPM).
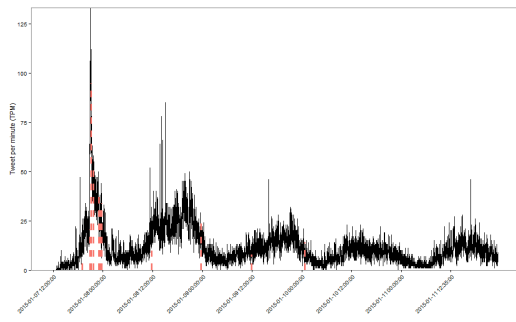
Figure 1. Twitter by-minute activity on the hashtag (dashed lines indicate a breakout)

The Breakouts tool (used with the following parameters: min.size=5, method='multi', beta=.001, degree=1, percent=0.25) detected 14 breakouts (Figure 1), out of which it identified three moments of high user engagement (Table 1).

Table 1. Moments of high user engagement

from	to	tweets	rt	@replies	AVG TPM
07/01 18:07	07/01 23:44	9,194	7,392	150	50.00
08/01 11:42	08/01 23:37	16,048	11,688	472	23.56
09/01 11:55	10/01 00:44	10,159	6,899	465	13.57

Finally, on each subset of tweets created during one of the three moments, we calculated, using the same procedure applied to the entire dataset, a document term matrix of the most frequently used terms. We then grouped those terms according to their co-occurrences.

Table 2. Moments of high user engagement

from	terms	Max sparsity	Most frequent terms
07/01 18:07	5,009	96%	29
08/01 11:42	11,327	96%	22
09/01 11:55	9,735	95%	27

4.DISCUSSION OF ANALYTIC FINDINGS

Adopting the methods suggested in Bruns and Stieglitz's study [4], we used two standard Twitter metrics (i.e. ratio between retweets and tweets and ratio between tweets with URLs over all tweets) to compare #JeNeSuisPasCharlie with other previously studied hashtags. As also discussed in the Literature Review section, Bruns and Stieglitz observed the emergence of two clearly distinct clusters: media events (e.g. #royalwedding, #eurovision) and crisis/emergency events (e.g. #tsunami, #qldflood, #londondriots). In the former case, original tweets are common and URLs are mainly used to share further stories about the media events at hand. In the latter case, during an urgent situation, it is more important to share vital information such as emergency numbers; hence, a characteristically high proportion of retweets and URLs were observed. When mapped on the same

chart, the case of #JeNeSuisPasCharlie is noticeably closer to the second cluster characterised by more retweets and more inclusions of URLs (Figure 2).
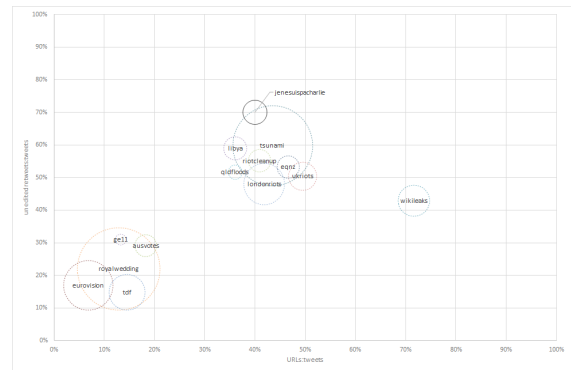
Figure 2. User's activity patterns comparing different Twitter hashtags (size indicates total number of contributor)

A closer analysis of retweets (Table 3) and URLs provided more insights into the nature of #JeNeSuisPasCharlie hashtag.

Table 3. Top 5 most retweeted posts

User	Text of the tweet	N
khurramabad0	Les dessins du dessinateur brésilien Carlos Latuff #JeNeSuisPasCharlie #Charlie_Hebdo #islamophobie http://t.co/a6qrL6pdPt	1,785
RanaHarbi	Last August, The Sydney Morning Herald was forced to remove, apologize for this #JeNeSuisPasCharlie #JeSuisAhmed http://t.co/O7zASRLpD1	868
CoraaantinM	Pr moi ce n'est pas Charlie Hebdo qui est mort mais 2 policiers et des journalistes. L'hommage est à eux, pas au journal #JeNeSuisPasCharlie	794
MaxBlumenthal	A cartoonist with integrity & intellectual consistency – Joe Sacco on Charlie Hebdo #JeNeSuisPasCharlie http://t.co/5uIRwE2wIu	774
SinanLeTurc	Bizarrement quand je dis #JeNeSuisPasCharlie on m'insulte mais quand Charlie insulte notre prophète ça devient de la liberté d'expression.	729

In the aftermath of the shooting, many well-known cartoonists expressed their condolences and solidarity for *Charlie Hebdo* by displaying tribute drawings [20]. Two of the most frequently shared tweets in our dataset also contained links to drawings, but in this case one by the Arab Brazilian freelance political cartoonist Carlos Latuff and another by the Maltese–American cartoonist and journalist Joe Sacco. The two drawings represented a take on the incident that was different from the one put forward by the mainstream community of cartoonists in response to the tragedy of their colleagues at *Charlie Hebdo*. Both Latuff and Sacco pointed out that the magazine had been publishing, in the name of the freedom of speech, images often considered to be offensive for the Muslim population and that the same concept of freedom of speech had not been invoked in the case of an anti-Semitic satire earlier.
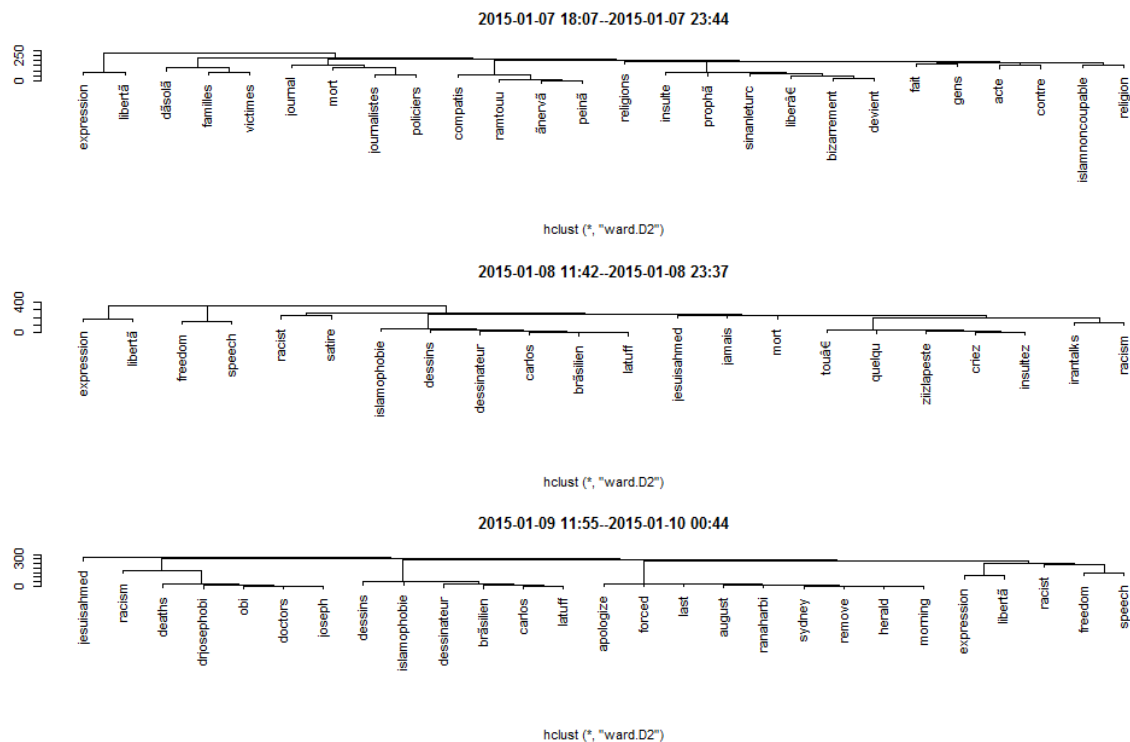
2015-01-07 18:07--2015-01-07 23:44

2015-01-08 11:42--2015-01-08 23:37

2015-01-09 11:55--2015-01-10 00:44

Figure 3. Most frequently used words and their association across the three main phases

Along the same line, another heavily retweeted message recalled the story of Australian newspaper *The Sydney Morning Herald* [15] being forced to issue an apology and remove a drawing that was considered anti-Semitic. This tweet also included the hashtag #JeSuisAhmed, with reference to a Muslim police officer, Ahmed Merabet, also killed during the *Charlie Hebdo* attack. Many Twitter users indeed joined the #JeSuisAhmed hashtag. According to Topsy, it was used over 150,000 times in the days following the attack in a show of condolences for *all* victims of the shooting.

The most frequently shared external sources (URLs) were all images. Links pointing to news sites were rare. This is because #JeNeSuisPasCharlie was not about the news. It's primarily goal was instead to mark and declare an identity by distinction. To that end, 2% of the retrieved tweets were made up of nothing but the hashtag.

As mentioned in the previous section, the first tweet with #JeNeSuisPasCharlie was published less than an hour after what was reported as the first tweet containing #JeSuisCharlie. While the hashtag started as an immediate reaction to #JeSuisCharlie, nevertheless, its nature changed over time.

The Breakout Detection tool developed by Twitter engineers helped us identify three moments of higher user engagement (Table 2). Besides the words related to the most retweeted posts (such as Latuff's cartoon and the *Sydney Morning Herald* case) discussed above, there are a few noteworthy dynamics in Figure 3. First, the clusters of words including *désolé* [sorry] (N=388), *familles* (N=564), *victims* (N=628), and *compatis* [sympathise] (N=409) were present in the first dendrogram but not in the following two. *Liberté* and *expression* (and their corresponding

English words) were prominent in all three moments, confirming that the freedom of expression and its contested limits were the real leitmotif across the entire dataset. Terms such as *racism* and *racist* stood out in the second and third moments since users of #JeNeSuisPasCharlie started to approach *Charlie Hebdo*'s satires from different angles than free speech.

5. CONCLUSION

Using a combination of various quantitative techniques, the present study explored the structure of the discussion around the #JeNeSuisPasCharlie hashtag. First, the discussion had a high proportion of retweets (70%) and URLs (41%). Compared to some previously studied hashtags, #JeNeSuisPasCharlie behaved more like crisis/emergency hashtags than media spectacle hashtags. That said, our analytic results also highlighted the heterogeneity of the viewpoints and arguments aggregated under the hashtag in question. Users of the said hashtag showed resistance to the mainstream framing of the *Charlie Hebdo* shooting as the universal value of freedom of expression being threatened by religious intolerance and violence. In this context, retweeting something that would justify their resistance was a way of marking their identity as distinct from what was accepted in the mainstream. Given the sensitivity of the subject, such retweets also helped the users protect themselves from the risk of being viewed as endorsing the violence. We also observed a unique practice of tweeting nothing but the hashtag, amounting to 2% of the dataset. This is a strategy that can be explained in a similar vein.

Over time, there were three distinguished phases in the manifestation of this resistance: Grief (i.e. joining the mourning

for the victims of the attack but indicating a reservation against the proposed frame); Resistance (i.e. starting to voice out the resistance); and Alternatives (i.e. fully developing and deploying alternative frames). In this study, the hashtag was not a conversation marker as previous studies identified but a discursive device that facilitated users to form, enhance, and strategically declare their self-identity.

Our quantitatively oriented methodology here allowed us to identify the topical and network structure of the discussion around #JeNeSuisPasCharlie and its evolution over time. We also suggest as an avenue for further research to delve more qualitatively into the ways in which individual users coped with the sensitive nature of the issue at hand and challenged the mainstream perspective.

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