



## USES OF THE HASHTAG #BLACKLIVESMATTER: A QUANTITATIVE PROPOSAL FOR RESEARCHING ONLINE SOCIAL MOVEMENTS

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### ABSTRACT

*This study presents a process to research the elements that influence the creation and proliferation of the hashtag #BlackLivesMatter, and explores the ways Twitter members use this hashtag. This objective is divided in four questions: What types of events influence the use of the hashtag #BlackLivesMatter?, What type of user generated content appears with this hashtag?, What other hashtags are used when #BlackLivesMatter is present? And which emotions (rage, fear or enthusiasm) appear in these messages? We present a theoretical framework that includes characteristics of microblogging platforms as well as their impact on social movements of the last decade. The methodology uses a quantitative approach to analyze a sample of tweets that contain the hashtag #BlackLivesMatter. The findings indicated that the events that most influences the use of #BlackLivesMatter are the deaths of black people by the hands of police officers, trials and manifestations. Rage is the most common emotion, closely followed by enthusiasm. The user generated content most shared is webpage links and the hashtags that appear most frequently next to #BlackLivesMatter are #Ferguson (427) and #MikeBrown (111). Future investigations should include a wider range of emotions to be evaluated as well as cross platform analysis.*

**Keywords:** Hashtag, Twitter, Online social movements, Quantitative methods, User generated content, Emotion.

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### Contribution/ Originality

This study contributes to the existing literature on online social movements, hashtag production, emotional and user generated content.

### 1. INTRODUCTION

On February 26, 2012 Trayvon Martin was badly wounded by George Zimmerman, a neighborhood watch volunteer. After an intense and heavily mediated trial, Zimmerman was declared innocent on July 2013. This verdict, followed by the death of Michael Brown (August 9, 2014) in Ferguson, Missouri, generated a social and mediatic movement that continues to this day, *Black Lives Matter*. What started off as a Facebook post has become a multi-modal movement that opens a conversation about police brutality, racial inequality, and institutional racism within the United States. Twitter and other social media have played an important role in the maintenance of this movement.

This project proposes a method to study the use of the hashtag #BlackLivesMatter on the microblogging platform Twitter. I first include pertinent current literature on these platforms and the use of hashtags, followed by a review of social movements of the past decade that were influenced by the use of social media.

## 2. TWITTER

Microblogging platforms are considered a hybrid of the blog and the instant message (SMS) that updates constantly in a form of “feed”, where users are able to reproduce (re-post) and communicate with other users (Schmierbach and Oeldorf-Hirsch, 2012). Microblogging platforms are considered *Social Networking Sites*. Boyd and Edison (2007) on (Chung and Sung-Ho, 2013) define social networks as an internet based service that allows users to create a public (or semi-public) profile, create networks with other users and to explore their network and their friend’s networks.

Social Networks represent a new communication dynamic that facilitates the interaction and personalization, since the user selects specific sources of information. “Social media allows users to engage in discussions not only with people in close proximity but also with those with whom face-to-face interactions are limited” (Chung and Sung-Ho, 2013) Twitter is one of the most popular social networks worldwide. Opening in 2006, Twitter is notorious for its strict 140-character limit on tweets. This restriction comes from the standard limit on text messages on most mobile phones of the time (Dijick, 2011). Originally called “the SMS of the Internet” it was described as a combination of text messaging, calling, email service and blog. One of the advantages of Twitter in its early years was that it could be used from a diverse number of devices including computers, tablets and mobile phones. This ease of movement is one of the reasons why the platform has been used by social movements and groups around the world to broadcast their problems and situations.

## 3. HASHTAGS

One of the most prominent characteristics of microblogging networks is the use of hashtags. Hashtags are a word or phrase (typed with no spaces between words) headed by a number (or pound) symbol (#), that indicates a topic of interest to facilitate the conversation and the finding of related content within the platform. Sharma (2013) indicates that the hashtag started on *Internet Relay Chats*, where the topic of conversation was identified by a number sign (#). The success of the hashtag can be attributed to its cultural generativity potential and its flexibility to adapt to anything from emergency situations to memetic jokes Sharma (2013).

“A key feature of Twitter has been the practice of user- defined hashtags for identifying and propagating messages in the network, and to bring special attentions of popular trending hashtags which can impact on wider media culture beyond the Twitter-sphere” Sharma (2013).

This ease of identification, organization and conversation that Twitter offers facilitates the creation of “hashtag communities” (Sharma, 2013).

## 4. SOCIAL MOVEMENTS AND TECHNOLOGY

Manuel Castells defines a social movement as an organization of actors that produces a qualitatively new effect or change on the social structure. This change can be at structure level, a change in the power structure or a practical change in the relations of power (Castells, 1972) Microblogging platforms like Twitter have played an important roll in recent social uprisings. “It began in the Internet social networks, as these are spaces of autonomy, largely beyond the control of governments and corporations that had monopolized the channels of communication as the foundation of their power, throughout history” (Castells, 2012). Networking technologies provided platform for the communication of the different practices that conform a social movement, facilitating coordination and democracy among the different nodes (Castells, 2012). New digital information technologies have made possible new way of interactive communication that allow for the sending real time many-to-many messages. Castells calls this “mass autocommunication” (Castells, 2010). Thanks to these technologies, subjects can produce instant networks inside their day-to-day lives. This impacts the distribution of information and the proliferation of images, slogans and video, creating a multi-modal call to action (Castells, 2010).

As Fenton (2008 in Frangonikolopoulos and Chapsos (2012)) would argue,

the large, decentralized and often, leaderless networks facilitated by the new communication technologies operated a form of politics that is based on the participation and direct engagement of all citizens rather than the hierarchical model of institutionalized bureaucratic authoritarian politics. They were, and still are, about building relationships and forging solidarity rather than simply providing information

For Castells, “digital networks of horizontal communication are the fastest and most autonomous, interactive, reprogrammable and self-expanding means of communication in history” (2013, p.15). The more interactive the organization the more participatory the movement. It’s because of this that Castells argues that social movements in the digital era are a new kind of movement (2013, p.15).

## 5. RAGE, FEAR, ENTHUSIASM

In the chapter *Networks of Mind and Power*, Castells (2010) explains that political cognition has been a decisive factor in human evolution, fomenting cooperation and collective decision making in search of survival and wellness. According to affective intelligence theory, the most important emotions in political behavior are enthusiasm and fear. (Castells, 2010). The emotional predisposition system includes enthusiasm and motivates subjects to pursue objectives. The vigilance system is based on fear and motivates subjects to be cautious (Castells, 2010).

Castells defines rage as a response to a negative event that contradicts a desire. Rage increases after the perception of an unjust action and with the identification of the agent responsible for the unjust action (Castells, 2010). Rage motivates impulsive action and risky behaviors. Humans tend to give more attention to information that enrages them (Castells, 2010).

On the next section we review social uprisings that occurred in the recent past where microblogging technologies had an important role.

## 6. ONLINE SOCIAL MOVEMENTS

### 6.1. Tunisia

The Tunisian revolution started on January 14, 2011, the day president Ben Ali renounce reelection after a series of protest motivated by the self-immolation of Mohamed Bouazizi, December 10, 2010. Protesters denounced economic hardship, high food prices, high unemployment rates and lack of freedom of expression (Lotan *et al.*, 2011).

“The phrase “Sidi Bouzid” (Bouazizi’s home city) became shorthand for the revolt. On Twitter, participants began labeling messages discussing the uprisings with #sidibouzid, effectively indexing the Tunisian Revolution through a hashtag” (Lotan *et al.*, 2011).

Communication technologies were key, especially among the youth who would record protest with mobile phones and upload the videos to YouTube or Al Jazeera, who would then transmit them to the rest of the population (Castelss, 2012).

### 6.2. Egypt

During the events in Tunisia and Egypt, *Mainstream Media* used Twitter to gather information from persons on the field and to quickly distribute this information (Lotan *et al.*, 2011). Inspired by the Tunisian events, Egyptian youth called for protest in Cairo January 25th of 2011, national police day.

“These protests also emerged from similar frustrations with unemployment, corruption, and the lack of political freedoms, with #Jan25 becoming the common Twitter hashtag used to mark messages relevant to the Egyptian Revolution. The Egyptian protests were well organized through both old and new media, with veteran new media activists, such as the “April 6 Youth Movement,” using social media, blogging, and video sharing to encourage people to protest” (Kirkpatrick & Sanger, 2011; in Lotan *et al.* (2011)).

In this occasion “Speak-2-Tweet” technology was a key element in the transmission and distribution of messages from Tahir Square. This technology allowed users to write tweets without a smartphone or internet connection, this was important since the government cut communications in multiple occasions.

### 6.3. Indignados (Spain)

On May 15, 2011 thousands of young Spaniards stormed *Puerta del Sol* Plaza in Madrid, as well marched the streets of Barcelona, Valencia, Sevilla, Bilbao y Zaragoza. The protest did not have a clear objective, instead they distilled a generalized frustration with high unemployment rates, home evictions, immigration laws and a feeling of abandonment by the political class. The 15-M movement was born on social media and survived thanks to it, their slogans becoming *Trending Topics* on Twitter and their video getting 19,400 views on YouTube (Saíz, 2011). The movement went viral.

Manuel Castells classifies this movement as a *post media* one. “It’s post media because there is a techno political re-appropriation of tools, technologies and mediums of participation and communication that exist today” (Castells, 2012). With its memetic slogans and multiple communication spaces, *Indignados* became a communication ecosystem that facilitated the creation of new identities.

### 6.4. Occupy Wall Street

Castells (2012) argues that the Occupy Wallstreet movement started with an entry on Adbuster’s blog: #occupywallstreet

Are you ready for a Tahir moment? On September 17<sup>th</sup>, flood into lower Manhattan, set up tents, kitchens, peaceful barricades and occupy Wall Street (p.159).

On September 17, 2011, massive protest filled New York’s financial sector Wall Street as thousands of protesters occupied Zuccotti park. The movement managed to keep its momentum and amassed 2,000 people for the first general assembly and occupation camps that had appeared in other cities by September 27, 2011. The most popular slogan was “We are the 99%”

We are the 99% started as a Tumblr blog where people would submit personal stories about how they were affected by the economic crisis, connecting personal drama to collective objectives and projecting the economic system as a common enemy (Castells, 2012). Camps created their own pages and social media accounts, these pages functioned as resource collection, organizational tools and communication mediums to connect with members and other camps (Castells, 2012).

### 6.5. #BlackLivesMatter

Alicia Garza, Patrisse Cullors and Opal Tometi started the #BlackLivesMatter campaign after George Zimmerman, Florida resident, shot Trayvon Martin calling it an act of self-defense. The activist understood that the non-guilty verdict was the result of institutional racism in the American Justice System (Garza, 2014) “The hashtag spread so quickly on social media because it distilled the complexities of police brutality, racial inequality and social justice into a simple, easy to remember slogan that fits in a Tweet or on a T-shirt” (Travis Gosa; in Guynn (2015)). The movement gained momentum after the death of Michael Brown on August 9, 2014. The slogan has been kept alive by a series of police killing of blacks, including the deaths of Sandra Bland, Walter Scott, Eric Garner, and Michael Brown, among others.

For Garza and other activist *Black Lives Matter* goes beyond a simple reaction to police brutality:

“Black Lives Matter is an ideological and political intervention in a world where Black lives are systematically and intentionally targeted for demise. It is an affirmation of Black folks’ contributions to this society, our humanity, and our resilience in the face of deadly oppression” (Garza, 2014).

The activism has transcended social media, physical marches and demonstrations occur constantly. Many of these formations have utilized social media to mobilize large numbers of young people, primarily in protest against police killings of blacks. While social media facilitate quick, intense, and extensive protests, such tools contribute to the often transitory nature of these events, as with the Occupy demonstrations. Nonetheless, these organizations and networks are committed to eradicating racial injustices around a wide variety of issues (Shore, 2015).

## 7. METHOD

This is an exploratory and descriptive research project that intended to identify the events that influence the use and proliferation of the hashtag #BlackLivesMatter. We divide this objective in four questions:

Q.1: What types of events influence the use of the hashtag #BlackLivesMatter?

Q.2: What type of user generated content appears with this hashtag?

Q.3: What other hashtags are used when #BlackLivesMatter is present?

Q.4: Which emotions (rage, fear or enthusiasm) appear in these messages?

The first step was the identification and selection of dates important for the movement. For this we created a list of dates after revising articles, press reports, editorials and user generated databases like blogs and Wikipedia entries. Then we compared these dates with Google search statistics (available through the *Google Trends*<sup>1</sup> service) and the #BlackLivesMatter hashtag use statistics (available through the *Hashtagfy.me*<sup>2</sup> service). Five of the top hashtags used with #BlackLivesMatter were names of victims of police brutality. Taking all of this into account we selected these dates:

Table-1. Dates of study

Name of victim and date of the event	Justification
Michael Brown August 9, 2014	Popular hashtag Marked increase of searches for the term Black Lives Matter on Google.
Tamir Rice November 22, 2014	Popular hashtag Marked increase of searches for the term Black Lives Matter on Google.
Wenjian Lu y Rafael Ramos December 20, 2014	Marked increase of searches for the term Black Lives Matter on Google. Particularity: Police officers killed by an alleged sympathizer of Black Lives Matter
Freddie Gray April 12, 2015	Popular hashtag Marked increase of searches for the term Black Lives Matter on Google.
Sandra Bland July 13, 2015	Popular hashtag <i>Say Her Name</i> campaign

Source: By author, dates used for this study with justification

A sample of 500 tweets per date was collected. These were recuperated using the *Advance Search* tool provided by Twitter. This sample was collected out of 1% of total tweets, as the tool allows. According to recent information about the search algorithm we understand this tweets are randomly selected.

Twitter supplies 10% randomly sampled tweets (known as the garden hose) from its firehose for a fee, and 1% randomly sampled tweets (originally known as Spritzer) for free. Note that the exact details of how these samples are selected are not made public by Twitter. However, the Twitter API documentation [Twitter-stream-api 2012] as well as several public blogs (e.g., spritzer-gnip-blog [2011]) state that these samples are random samples of all public tweets. Hence, we refer to these samples as random samples (Bilal Zafar et al., 2015).

<sup>1</sup> <https://www.google.com/trends/>

<sup>2</sup> <http://hashtagify.me/>

We must mention, that, even though, *Advance Search* provides random tweets, it presents them in a reverse chronology, which influences our sample. In cases where the original sample is bigger than 500 tweets, our sample will be skewed to the end of the period being study.

To collect the sample using Advance Search we use this criteria:

1. #blacklivesmatter
2. Date of the event +2 days
3. Language: English

All other option were left blank

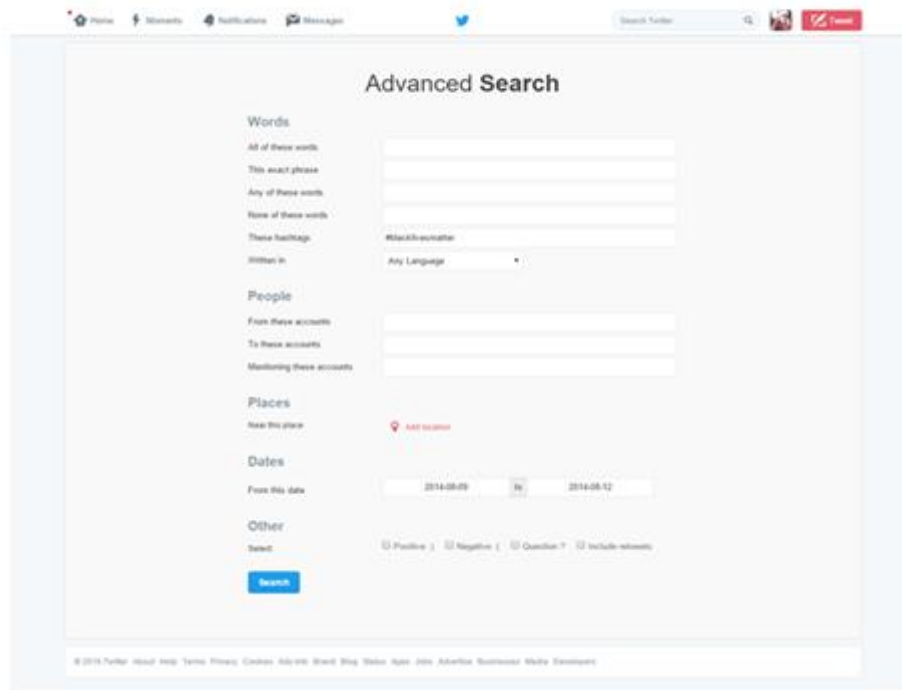


Figure-1. Impute fields for Twitter Advanced Search

Source: <https://twitter.com/search-advanced?lang=en>

The tweets collected were then analyzed using the categories designed by the author (see table 2). Our system analyzes user generated content present in the tweet, other hashtags used and the emotions (rage, fear or enthusiasm) expressed. This information was organized using *Microsoft Excel*, and analyzed to identify frequencies and trends per date/event and later, the entire campaign. For registering user generated content and emotions, we used a binary present (1)-absent (0) system. Emotions were also written verbally. Hashtags were collected verbatim. The hashtag list was then organized using the *Tag Cloud Generator* tool from the *Digital Methods Initiative*, Amsterdam University (<https://tools.digitalmethods.net/beta/tagcloud/>).



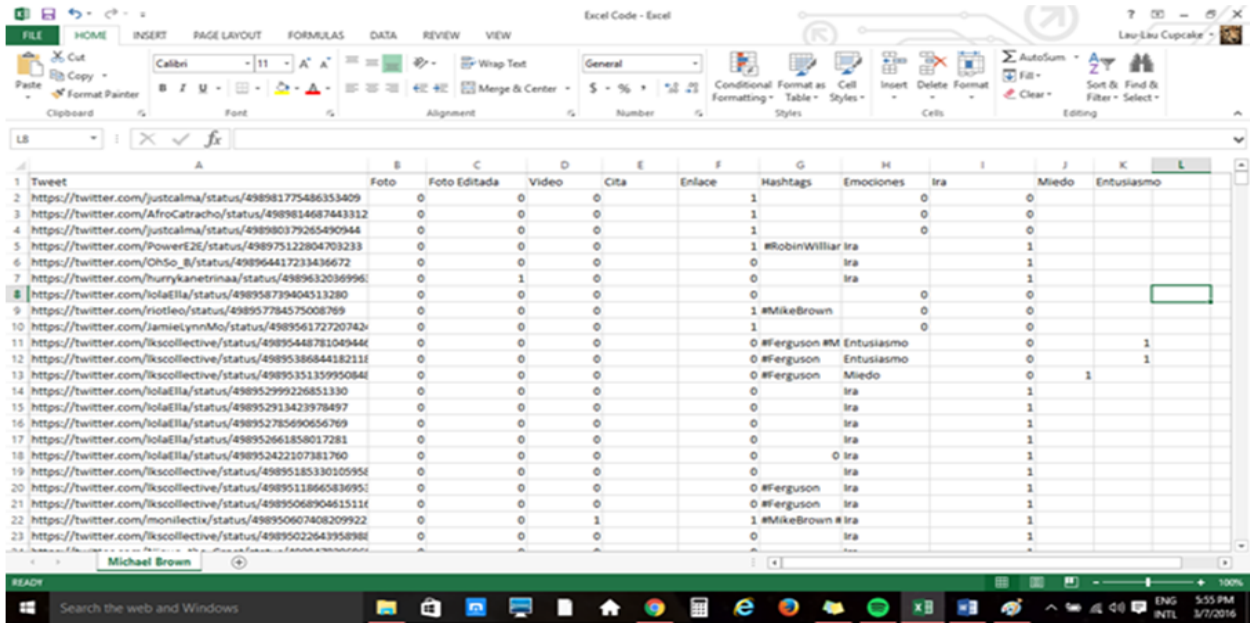


Figure-2.\* due to the fact this project was originally done in Spanish, emotions appear as Ira (rage), Miedo (fear) and Entusiasmo (enthusiasm). Source: By author, sample of coding using Microsoft Excell

Table-2. Categories

Category	Definition
User Generated Content	
Photo	The Tweet contains one or more pictures or links to a picture sharing service (for example, Instagram). There is no major editing other than basic cropping.
Edited Picture	The Tweet contains one or more pictures or links to a picture sharing service (for example, Instagram). They have been edited to contain text, add external images or edit notable changes in color (black and white, sepia, etc.) This category includes memes, banners, cartoons and logos.
Video	The tweet contains a video or a link to a video hosting service.
Quote*	Tweet directly quotes another person or text.
Link	Tweet contains a link to a web page outside of Twitter.
Hashtag	All other hashtags that are not #blacklivesmatter.
Emotions	
Rage	Tweet expresses anger, disappointment, suffering or cynicism. .
Fear	Tweet expresses fear, worry, insecurity, warnings and “praying” .
Enthusiasm	Tweet expresses hope, admiration or calls to action.
An observation	
Anti Program**	Tweet expresses ideas contrary to the ones related to the campaign. Examples include racist and pro-police messages.

\*The quote category was not part of the original design but was added due to the frequency of quotes on the first sample.

\*\* The quote category was not part of the original design but was added due to the frequency of quotes on the second sample.

8. RESULTS

In this section we present the results of the sample analysis of the five dates previously mention. Each sample is named after the victim that passed away the first day of the sample. Frequencies and relative frequencies are presented for user generated content (UGC) and emotions in each sample. The highlighted row represents the UGC and emotion with the higher frequencies. Then we present frequencies and hashtags taking in account all tweets collected.

**1- Michael Brown: August 9-12, 2014**

For this sample we collected all tweets made between August 9 and 12, 2014 that used the hashtag #BlackLivesMatter. Advance Search provided 211 codeable tweets, only duplicate tweets were not analyzed.

**Table-3.** Distribution of Tweets with #blacklivesmatter during the “Michael Brown” period

Category	Frequency	Relative Frequency
User Generated Content		
Photo	13	6.13%
Edited Picture	6	2.83%
Video	3	1.42%
Quote	5	2.36%
Link	38	17.32%
Emotions		
Rage	99	46.69%
Fear	18	8.50%
Enthusiasm	26	12.26%

Source: By author. Distribution of tweets collected that were made between August 9-12, 2014

**Top Hashtags:** Mike Brown (47) y Ferguson (33).

**Other hashtags:**

RipMikeBrown (5) EricGarner (3) JohnCrawford (3) justiceforMikeBrown (3) FergusonPolice (5) MichaelBrown (4) IfTheyGunnedMeDown (4) policebrutality (3) mikebrown (6) StopKillingOurKids (4) RenishaMcBride (3) Ferguson (3) PoliceBrutality (3) racism (3)

**2-Tamir Rice: November 22-25, 2014**

For the Tamir Rice sample we collected tweets made between November 22-25, 2014. During this time period Tamir Rice’s death coincided with the trial for the Michael Brown case. Because of this phenomenon it was decided to take two samples, one covering the days of November 22 and 23 and a second covering the 24 and 25 of November, 2014.

November 22-23, 2014

This sample covers the day twelve-year-old Tamir Rice was shot and the day after. It is interesting how on November 22 there is no mention of Tamir Rice but some tweets mentions “a twelve-year-old boy”. For this sample 402 tweets were analyzed. Anti-program messages include anti-abortion messages, anti-vaccination messages and mentions of black-on-black violence. The most shared UGC are links, a trend that will continue on all other samples. This links includes news, blog, editorials and artist pages. Even when the incident was in Cleveland, Ferguson and Mike Brown are still prominent hashtags.

**Table-4.** Distribution of Tweets with #blacklivesmatter during the first “Tamir Rice” period

Category	Frequency	Relative Frequency
User Generated Content		
Photo	35	8.7%
Edited Picture	28	6.9%
Video	9	2.2%
Quote	11	2.7%
Link	110	27.4%
Emotions		
Rage	136	33.8%
Fear	21	5.2%
Enthusiasm	95	23.6%
Anti-Program	41	10.2%

Source: By author. Distribution of tweets collected that were made between November 22-23, 2014



**Top Hashtags:**

Ferguson (112) ferguson (17) AkaiGurley (16) BlackTwitter (14) MikeBrown (13)

**Other hashtags:** Cleveland (8) TamirRice (8) Every28Hours (8) PoliceBrutality (8) DarrenWilson (6) FTP (6) AllLivesMatter (5) JohnCrawford (5) HandsUpDontShoot (5) shaw (4) NYC (4) NYPD (4) chicago (3) TrayvonMartin (3) RacismIsWhen (3) stl (3) Equality4All (3) Anonymous (3) BlackLivesMatter (3) OpFerguson

November 24-25, 2014.

On this sample we find an increasing complexity in emotion, with some tweets being hard to identified or presenting more than one emotion. The continuing protest, marches and manifestations feed the enthusiasm category, creating a balance between enthusiasm and rage. Part of this enthusiasm comes from the possibility that Darren Wilson will face trial. The hashtag #TamirRice has been established. It is interesting the use of Mike Brown instead of Michael Brown. This could have various implications, from saving characters (a virtue when they are limited) to the intention of creating familiarity with the victim and emphasizing his youth.

**Table-5.** Distribution of Tweets with #blacklivesmatter during the second “Tamir Rice” period

Category	Frequency	Relative Frequency
User Generated Content		
Photo	46	9.2%
Edited Picture	48	9.6%
Video	2	0.4%
Quote	5	1%
Link	54	10.8%
Emotions		
Rage	149	29.8%
Fear	71	14.2%
Enthusiasm	125	25%
Anti-Program	7	1.4%

Source: By author. Distribution of tweets collected that were made between November 24-25, 2014

**Top Hashtags:**

Ferguson (246) MikeBrown (46) TamirRice (26) MichaelBrown (17) JusticeForMikeBrown (12) ferguson (11) DearFerguson (8) DarrenWilson (8)

**Other hashtags:** GrandJuryDecision (7) GrandJury (6) mikebrown (5) HandsUpDontShoot (4) policebrutality (3) IndictAmerica (3) NotOneMore (3) AllLivesMatter (3) FreeMarissa (3) BoycottBlackFriday (3) AkaiGurley (3) ArrestDarrenWilson (3) Anonymous (3) StLouis (2) HealSTL (2) BlackLivesMatter (2) BlackTwitter (2) protectthebabies (2) OpKKK (2) Justice4 (2) every28hours (2) Justice (2) UnionSquare (2) ClassWar (2) Chi2Ferguson (2) mikebrownverdict (2) nojusticenopeace (2) BlackPanic (2) PoliceState (2) Denver (2) VonDerritMyers (2) NoJusticeNoPeace (2) blacklife (2) NYC (2) FergusonAWARENESS (2) ferguson (2) justice (2)

**3- Wenjian Lu y Rafael Ramos: December 20-22, 2014**

On December 20, 2014, two New York Police officers, Wenjian Lu and Rafael Ramos, were shot and killed while on duty by Ismaaiyl Brinsley, a mental patient. Brinsley *Instagram* account was filled with anti-police messages, rumors circulated that Brinsley was a Black Lives Matter militant and that the killing was an act of revenge.

For this sample we revised 500 tweets made between December 20-22, 2014. We notice a high amount of anti-program messages, the hashtag #AllLivesMatter gains popularity.

**Table-6.** Distribution of Tweets with #blacklivesmatter during the “Wenjian Lu & Rafael Ramos” period

Category	Frequency	Relative Frequency
User Generated Content		
Photo	71	14.2%
Edited Picture	33	6.6%
Video	20	4.0%
Quote	6	1.2%
Link	102	20.4%
Emotions		
Rage	111	22.2%
Fear	11	2.2%
Enthusiasm	112	22.4%
Anti-Program	67	13.4%

Source: By author. Distribution of tweets collected that were made between December 20-22, 2014

#### Top Hashtags:

NYPDLivesMatter (49) ICantBreathe (43) NYPD (29) AllLivesMatter (28)

#### Other Hashtags:

Ferguson (17) CopsLivesMatter (17) SilentNight (14) EricGarner (13) BlueLivesMatter (13) ThisStopsToday (12) NYC (10) TamirRice (9) WhiteLivesMatter (9) NYPDShooting (8) PoliceLivesMatter (7) icantbreathe (7) HandsUpDontShoot (5) MillionsMarchNYC (5) MikeBrown (5) alllivesmatter (5) JordanBaker (5) BlackTwitter (4) silentmarch (4) thisStopstoday (4) ferguson2nyc (4) 2014In5Words (4) chanukahAction (3) PolTwt (3) DeBlasioResign (3) tcot (3) ShutitDown (3) JohnCrawford (3) Justice (3) BlackLivesMatter (3) nypd

#### 4-Freddie Gray: April 19-21, 2015

Freddie Gray was arrested April 12, 2014, during his arrest he suffered from injuries that led to his death a week after. The most mentioned name in our sample is not Freddie Gray but Rekia Boyd. Rekia Boyd died after she was shot on the back by officer Dante Servin, March 21, 2012. On April 21, 2014 the court decided not to take Servin to trial. We can see that it's not only deaths that motivate the use of #BlackLivesMatter, but trial and judge's decisions.

For this sample we coded 500 tweets made between April 19-20, 2015.

**Table-7.** Distribution of Tweets with #blacklivesmatter during the “Freddie Gray” period

Category	Frequency	Relative Frequency
User Generated Content		
Photo	35	7%
Edited Picture	29	5.8%
Video	14	2.8%
Quote	24	4.8%
Link	154	30.8%
Emotions		
Rage	140	28%
Fear	32	6.4%
Enthusiasm	103	20.6%
Anti-Program	31	6.2%

Source: By author. Distribution of tweets collected that were made between April 19-21, 2015

#### Top Hashtags:

RekiaBoyd (58) FreddieGray (42) Ferguson (15) AllLivesMatter (15)

**Other Hashtags:**

ReikaBoyd (11) March2Justice (8) WalterScott (8) policebrutality (6) ICantBreathe (6) BreakingTheSilence (6) NYC (5) EricHarris (4) Baltimore (4) EricGarner (4) girlsofcolor (4) BlackGirlsMatter (4) ShutItDown (4) FreddyGray (4) NoJusticeNoPeace (3) GrandCentral (3) AiyanaJones (3) WhitePrivilege (3) police (3) Chicago (3) BlackTwitter (3) TamirRice (2) MichaelBrown (2) ferguson (2) BlackWomenMatter (2) PoliceBrutality (2) injustice (2) StayWoke (2) MikeBrown (2) BlackShul (2) MuslimLivesMatter (2) blkstudiesdigitalage (2) march2justice (2) BlueLivesMatter (2) mlk (2) FTP (2) Gracism (2) DanteServin (2) nojusticenopeace (2) PeoplesMonday (2) justice (2) JusticeforKayleb (2) America (2) SocialJustice (2) BPD (2) chicago (2) ISIS (2) RIP (2) UniteBlue (2) inspiring (2) RodneyKing (2) Christians (2)

**5- Sandra Bland: July 13-14, 2015**

Sandra Bland was arrested on a traffic violation on July 10, 2015, hours later, she was found dead in her cell. It's interesting how Sandra Bland's name is not mentioned in this sample. Other events influence the conversation, including President Obama's speech at the NAACP convention, the Black Lives Matter anniversary and the rumors that Planned Parenthood was selling fetal tissue. This gave birth to a "pro-life" movement so strong that it was decided to measure it apart from other anti-program messages. For this sample we analyzed 500 tweets.

**Table-8.** Distribution of Tweets with #blacklivesmatter during the "Sandra Bland" period

Category	Frequency	Relative Frequency
User Generated Content		
Photo	51	10.2%
Edited Picture	31	6.2%
Video	28	5.6%
Quote	25	5%
Link	174	34.8%
Emotions		
Rage	81	16.2%
Fear	11	2.2%
Enthusiasm	112	22.4%
Anti-Program	44	8.8%

Source: By author. Distribution of tweets collected that were made between July 13-14, 2015

**Top Hashtags:**

PlannedParenthood (28) EricGarner (14) BlackTwitter (14) NAACP106 (12) tcot[1] (11) AllLivesMatter (11)

**Other Hashtags:**

GrowingUpBlack (6) FeelTheBern (6) ICantBreathe (6) JusticeOrElse (5) TPD (4) PPSellsBabyParts (4) WakeUpAmerica (4) Ferguson (4) mlk (4) solidarity (3) NAACP16 (3) CDCwhistleblower (3) PlannedButcherhood (3) IARTG (3) Democrats (3) PoliceBrutality (3) BrandonClaxton (3) NYC (3) BlackBusiness (3)

**All samples combined: 2, 610 tweets**

When combined, all samples show that web links are the most used UGC. But even web links only represent 27% of all coded tweets; 69% of tweets have some UGC.

Rage appears as the main emotion, closely followed by enthusiasm, which is highly influenced by demonstrations and calls to action. There seems to be a cyclical relationship between rage and enthusiasm where rage motivates organization of demonstrations that maintain enthusiasm of the users.

The most popular hashtag is Ferguson, Michael Brown’s home town. Mike Brown is also a popular hashtag. It seems Mike has become the main martyr for the movement, a common context that users share, Hashtags naming victims (like #TamirRice or #ReikiaBoyd) are common,

Table-9. Distribution of all Tweets captured

Category	Frequency	Relative Frequency
User Generated Content		
Photo	251	9.52%
Edited Picture	462	16.32%
Video	251	9.52%
Quote	154	5.89%
Link	710	27.20%
Emotions		
Rage	656	25%
Fear	164	6%
Enthusiasm	563	22%
Anti-Program	263	10%

Source: By author. Distribution of all tweets collected

**Top Hashtags:**

Ferguson (427) MikeBrown (111) AllLivesMatter (62) ReikiaBoyd (58) ICantBreathe (55) NYPLivesMatter (49) TamirRice (45) FreddieGray (42) ferguson (36) EricGarner (36) NYPD (35) BlackTwitter (34) PlannedParenthood (29) MichaelBrown (28) NYC (24) AkaiGurley (20)

**Other Hashtags:**

CopsLivesMatter (17) JusticeForMikeBrown (15) PoliceBrutality (15) policebrutality (15) BlueLivesMatter (15) SilentNight (14) tcot (14) DarrenWilson (14) JusticeforMikeBrown (14) HandsUpDontShoot (14) mikebrown (14) ThisStopsToday (13) WhiteLivesMatter (12) NAACP106 (12) JohnCrawford (12) Cleveland (11) ReikaBoyd (11) FTP (10) racism (10) TrayvonMartin (10) WalterScott (10) BlackLivesMatter (9) Justice (9) Anonymous (9) NYPLShooting (8) DearFerguson (8) justice (8) NoJusticeNoPeace (8) Every28Hours (8) March2Justice (8) alllivesmatter (8) GrandJury (7) GrandJuryDecision (7) police (7) Black (7) America (7) icantbreathe (7) chicago (7) PoliceLivesMatter (7) ShutItDown (6) BreakingTheSilence (6) mlk (6) ericgarner (6) WhitePrivilege (6) solidarity (6) GrowingUpBlack (6) FeelTheBern (6) BlackWomenMatter (6) FergusonPolice (5) StLouis (5) BrownLivesMatter (5) MillionsMarchNYC (5) GrandCentral (5) UniteBlue (5) CDCwhistleblower (5) Democrats (5) StayWoke (5) RIP (5) RipMikeBrown (5) nojusticenopeace (5) protest (5) FERGUSON (5) NotOneMore (5) JusticeOrElse (5) JordanBaker (5)

The next graphic (figure 3)<sup>3</sup> shows the most used hashtags in comparison. The bigger the circle the more popular the hashtag.

<sup>3</sup> Made with RAW: <http://raw.densitydesign.org/>



Thirdly, protests and manifestations tend to inspire enthusiastic tweets. This coincides with Castells idea that enthusiasm motivates action towards and objective (Castells, 2010).

#### **Q.2: What type of user generated content appears with this hashtag?**

The user generated content that appears the most in all samples are web links, this links connects to news articles, opinion pieces in famous publications and popular blogs. Other links also connect with web pages dedicated to the organization of marches and other manifestations. This confirms Castells (2010); Castells (2012) idea the Twitter works as an organizational tool for off-line activity. It also demonstrates that, just like in the beginning, news sharing is still an important activity on Twitter (Cozma and Chen, 2013).

#### **Q.3: What other hashtags are used when #BlackLivesMatter is present?**

The main hashtags that appear next to #BlackLivesMatter on this sample are #Ferguson (427) and #MikeBrown (111). We can observe how lots of users keep going back to that first big event that pushed the movement forward.

A hashtag that gains popularity in later samples is #AllLivesMatter. All Lives Matter has been criticized for being an attempt to erase race from the police brutality issue, while users of the phrase declare that it is just an attempt to be more inclusive. This antagonism is not present until our Sandra Bland sample, before then it is used just as a complement to #BlackLivesMatter and confrontation was minimal. This confrontation grew with time, showing strong antagonism by our last sample.

Hashtags using victims' names are also popular. This could mean a desire to provoke a more personalized narrative of the crimes, challenging the often generalizing discourse of mainstream media, some tweets confirm this, making direct accusations towards the media.

#### **Q.4: What type of emotions (rage, fear or enthusiasm) appear on this messages?**

Rage and Enthusiasm are very close to each other with 25% and 22% respectively. We see a dynamic tension between rage and enthusiasm that could express a cycle of renovation. Unjust events are followed by expressions of rage while concrete actions like marches, presentations, performances and workshops. are accompanied by enthusiastic messages.

This cyclical system breaks the linear rage-fear-enthusiasm perception. We argue the productive potential of rage, since rage messages recognize these problems are a social and institutional level, surpassing the immediacy of the event. This challenges the notion that rage difficulties the process of information, while the high consumption of information it's also a manifestation of rage (Castells, 2010).

In conclusion, we were able to identify police brutality related death, trials and protest as the events that most motivate the creation of tweets using the hashtag #BlackLivesMatter. The deaths and trials inspire rage filled messages while protest and other manifestations are accompanied by enthusiastic messages, This relates to Castells definition of rage as an response to an event that contradicts a desire and that it rises when the person responsible for this contradiction is identified (Castells, 2010). Rage is the dominant emotion with 25% of the sample, closely followed by enthusiasm with 22%. These emotions are not exclusive of one another but equally present. Links are the most used user generated content and #Ferguson (427) and # MikeBrown (111) the most popular hashtags.

Online social movements studies are still something relatively new. Future research could explore anti-program messages and the "hashtag hacking" phenomenon. Other recommendations include studying a wider range of emotions like frustration, tiredness, disenchantment, among others. The use of #Ferguson and #MikeBrown should be study taking into account elements of martyr and mythos creation.

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