Why are YOU responsible for George Floyd's murder & Delhi Communal Riots!!

A ML enthusiast's approach to change the world.



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"Social media is not a safe space." — Tarana Burke

February and May were declared darks months for two of the biggest cities in the world; New Delhi and Miami respectively.

The article intends to show why **YOU** and **ME** are responsible for such events and **most probably such events will happen in the future more often**.

A Brief Introduction

Regarding American Riots

On May 25, 2020, George Floyd, a 46-year-old **black** man, died in Minneapolis, Minnesota, after Derek Chauvin, a **white** cop, bowed on his neck for very nearly nine minutes while he was bound to face down on the road. Two different officials further limited Floyd and a fourth official kept spectators from interceding. During the last three minutes, Floyd was unmoving and had no heartbeat. Officials did not endeavor to resuscitate him, and Chauvin's knee stayed on his neck even as crisis clinical professionals endeavored to treat him. Two post-mortem examinations decided the way of Floyd's demise to be manslaughter.

(Source: Wikipedia)

Regarding Riots in Delhi

The 2020 Delhi mobs, or North East Delhi riots, were different floods of slaughter, property pulverization, and revolting in North East Delhi, starting from 23 February. The dead incorporated a cop, an insight official, and over 53 civilians, who were shot or attacked. Over seven days after the brutality had finished, many injured were moping in deficiently staffed clinical offices and carcasses were being found in open channels. (Source: Wikipedia)

Some Psychological facts about Society

- The presence of other people can have a powerful impact on behavior. At the point when various individuals witness something, for example, a mishap, the more individuals that are available the more outlandish it is that somebody will step forward to help. This is known as the bystander effect.
- **People will go to great lengths to obey an authority figure.** Individuals will go to incredible, and now and then hazardous, lengths to obey authority figures. In his famous <u>obedience experiments</u>, psychologist <u>Stanley Milgram</u> found that people would be willing to deliver a potentially fatal electrical shock to another person when ordered to by the experimenters.
- The need to conform leads people to go along with the group. A great many people will oblige the gathering, regardless of whether they think the gathering isn't right. In Solomon Asch's conformity experiments, people were asked to judge which was the longest of three lines. When other members of the group picked the wrong line, participants were more likely to choose the same line.
- Sometimes it is easier to just go along with the crowd than cause a scene. In gatherings, individuals frequently oblige the larger part conclusion as opposed to cause disturbance. This marvel is known as groupthink and tends to occur more frequently when bunch of individuals share a lot in like manner when the gathering is under pressure, or within the sight of a magnetic pioneer.

Project Blueprint

Before having the option to spread out an outline, a compact goal is required.

The goal is, I will be creating a Machine Learning model that will fetch all tweets related with both incidents for as far back as three days, and will perform sentiment analysis just as detest discourse acknowledgment (on similar information), to assess popular feeling concerning Americans and Indians for respective countries.

For Riots in America

- Fetch all tweets that have been posted from May 26th to May 28th, for the keyword "Racism".
- 2. Fetch all tweets that have been posted from May 26th to May 28th, for the keyword "George Floyd".
- 3. Fetch all tweets that have been posted from May 26th to May 28th, for the keyword "White People".
- 4. Fetch all tweets that have been posted from May 26th to May 28th, for the keyword "Black People".

- 5. According to that score, perform sentiment analysis.
- 6. Perform Hate-Speech Recognition and Analysis of similar tweets.

For Riots in Delhi

- 1. Fetch all tweets that have been posted from Feb 24th to Feb 26th, for the keyword "Islam".
- 2. Fetch all tweets that have been posted from Feb 24th to Feb 26th, for the keyword "Hindu".
- 3. Fetch all tweets that have been posted from Feb 24th to Feb 26th, for the keyword "NRC-CAA".
- 4. Fetch all tweets that have been posted from Feb 24th to Feb 26th, for the keyword "Delhi-riots".
- 5. According to that score, perform sentiment analysis.
- 6. Perform Hate-Speech Recognition and Analysis of similar tweets.

For purpose of tweet fetching for required keyword and required time, we will be using Tweep(official API for twitter), for that one need a consumer key and access token that can be easily availed once you turn on developer's option.

```
searchTerm = "George Floyd"

NoOfTerms = 10065

start_date = datetime.datetime(2020, 5, 26)

end_date = datetime.datetime(2020, 5, 30)

tweets = tweepy.Cursor(api.search, q=searchTerm, lang = "en", since=start

Data preparation hosted with ♥ by GitHub

view raw
```

The searchTerm denotes the required keyword, NoOfTerms denotes total tweets we wish to fetch.

To fetch tweets, we use tweepy.Cursor(), it is an iterator item and result can be yield using iterator function.

As a result, I have successfully fetched 10065 tweets related to "George Floyd".

```
Out[337]: ('RT %madisonnnt4: Join Us in a Protest Against Police Brutality to Shed light on Justice for George Floyd by Marching with Us In Downtown Or.': 'Positive',
    'RT %JayJayBunny: Join Us in a Protest Against Police Brutality to Shed light on Justice for George Floyd by Marching with Us In Downtown O.': 'Positive',
    'RT %cassy r3n33: Join Us in a Protest Against Police Brutality to Shed light on Justice for George Floyd by Marching with Us In Downtown O..': 'Positive',
    'RT %cassy r3n33: Join Us in a Protest Against Police Brutality to Shed light on Justice for George Floyd by Marching with Us In Downtown Or.': 'Positive',
    'RT %CBSNews: Large crowds hit the streets to protest the death of George Floyd in New Yor k City https://t.co/Xffr1y2r3 https://t.co/XdpTXL.': 'Positive',
    'RT %CBSNews: Restaurant that says it was damaged speaks out in support of protests http s://t.co/XdpXLL': 'Neutral',
    'RT %CBSNews: Restaurant that says it was damaged speaks out in support of protests http s://t.co/XdpXLgl': 'Neutral',
    'RT %CBSNews: "COMPLETELY AND UTTFRLY MESSED UP": Minneapolis Mayor Jacob Frey was visibly upset as he reacted to a video of the arrest of G.': 'Positive',
    'RT %GESNews: "ASEATILE AREA FOLKS \ninterested in protesting police and white vig ilante violence against George Floyd, Breoma Taylor,..': 'Positive',
    'RT %GESNews: "IJ UST WANT IO LIVE": A few days after George Floyd died after a police off icer knelt down on his neck for several minutes, L.': 'Negative',
    'RT %GESNews: Fired Minneapolis officer charged with murder in death of George Floyd https://t.co//dayjg/WH!': 'Neutral',
    'RT %GESNews: JUST IN: Derek Chauvin, the former police officer who kneeled on George Floyd of sneck, has been charged with third-degree murde.': 'Neutral',
    'RT %CESNews: Hill No Perek Chauvin, the former police officer who kneeled on George Floyd of sneck, has been charged with third-degree murde.': 'Neutral',
    'RT %CESNews: Minneapolis mayor establishes 8 p.m. curfew https://t
```

It is now important to assign a sentiment score to each individual tweet. This can be performed with the following code:

```
positive = 0
    negative = 0
    neutral = 0
4 polarity = 0
    X=\{\}
6
    for tweet in tweets:
         analysis = TextBlob(tweet.text)
9
        #print(tweet.text)
        polarity += analysis.sentiment.polarity
        if analysis.sentiment.polarity==0:
11
             sentiment = "Neutral"
        elif analysis.sentiment.polarity<0:</pre>
             negative+=1
             sentiment = "Negative"
        else:
             positive+=1
             sentiment = "Positive"
         x[tweet.text]=sentiment
sentiment analysis hosted with ♥ by GitHub
                                                                      view raw
```

Using textblob library, we can analyze every tweet based on its polarity and subjectivity.

And based on the aggregate score, we will classify the tweets in Negative, Neutral and Positive classes. To understand data in a more clear and better way, we can plot a "WordCloud" that gives us a fair idea about frequent words used.

```
from wordcloud import WordCloud
import matplotlib.pyplot as plt
import pandas as pd

df = pd.read_csv("Dataset.csv")

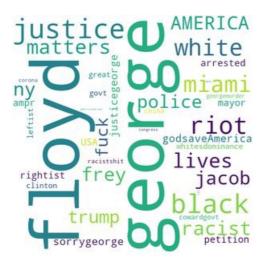
text= "<Enter your text>"

wc = WordCloud(collocations=False, background_color="white", width=600, wc.generate(text)
wc.to_file('output.png')

plt.imshow(wc, interpolation='bilinear')
plt.axis("off")
plt.show()

wordcloud hosted with ♥ by GitHub
view raw
```

The word cloud created for American riots is:-



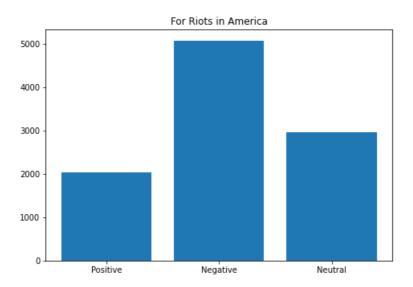
The word cloud generated for Delhi riots is:-



Result

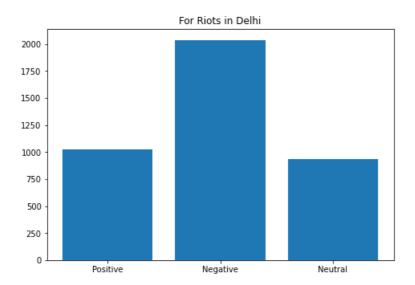
The result generated in both the cases are astonishing!

For America:-



Out of the 10,065 different individual tweets, more than **50.4%** were negative. Another **20.22%** was sympathetic and the remaining **29.38%** of the tweets were neutral and did not mention anything about different races.

For Delhi:-



Out of the 4,000 different individual tweets, more than **52.3%** were negative. Another **25.7%** was sympathetic without using any type of religion comment and the remaining **23.38%** of the tweets were neutral and did not mention anything about different religion.

Source Code

The whole source code along with dataset and trained model can be

found at my Github Repository:- <u>Why are WE responsible for George</u> <u>Floyd's Death and Delhi Communal Riots!!</u>

What's the whole point?

Jumping back to the title "Why are YOU responsible for George Floyd's murder & Delhi Communal Riots!!"

According to the psychological facts, blaming entire groups and effectively segregating people can only have negative effects. As discussed earlier, **The need to conform leads people to go along with the group**, even when they're aware they are doing something wrong they tend to follow the path led by some political influencer or masses.

Can this be avoided?

This can certainly be avoided if we tend to focus more on our decision rather than blindly following a group or leader. Personally rather than playing blame games and marginalizing other caste we can introspect and can improve our decisions to make this world a better place to live.

Something that needed to be noted is, I don't support any race/religion/individual that incites riots/disturbance in the system, this article doesn't intend to hurt anyone's sentiment but rather is just for educational purpose.

I hope this article has given you an essential lesson on how we should push ahead as mankind. It is in our capacity to prevent such wonders from turning into the standard. The main thing required is to act all in all as one first and not decide to see the things that differentiate us, yet rather the things that join us. Let's spread our hands and help each other to create this world a better place.

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By Daksh Trehan on June 6, 2020.

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