



# **BLACK LIVES MATTER, ALWAYS.**

*Sentiment Analysis of the Black Lives Matter Movement*

## **METHODOLOGY TALK**

**Research and Data Methodologies**

# **Research Questions**

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**1** Longevity

**2** Topical Spread

**3** Sentiments

**4** Public perceptions of BLM

**5** Public perceptions of law enforcement

**6** Action



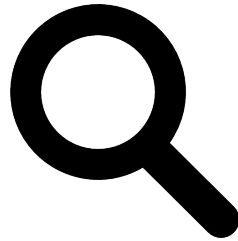
# **RESEARCH METHODOLOGY**



# **Methodology**

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*Interdisciplinary model of research, combining data-focused methods such as **Natural Language Processing** to analyze tweets, collect online data, and create interactive data visualizations with **contextual research**.*



## **RESEARCH**

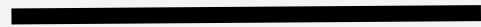
*Acquiring domain knowledge, literary research, and news sources*

**Why** should you do  
**contextual research** in your  
data project?

And **how**?



**Method 1**



***Domain***

***Knowledge***



# **Domain Knowledge**

**domain knowledge:** the *specific, specialized* knowledge someone has about a certain domain or topic.

## **Why?**

Data points reflect actual experiences, people, and things ⇒  
**Learn about them in order to provide accurate, valuable insights.**

## **How?**

Domain knowledge is commonly acquired through **repeated experience**  
**working with that domain** and/or **personal experiences.**

# Example 1: Twitter

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*What should you expect?*

## PROS

- **Multivocal**
  - many views and channels collected within one platform
- **Dialogic**
  - there are active dialogues taking place around these diverse views



## CONS

- Think about *why* you want to collect it from social media (Twitter)
  - Limitations and Audience
  - “Echo-chamber”
- **Expect “limited, filtered, and partial” views** (Bonilla & Rosa, 2015)





# **Example 2: Black History & Critical Cultural Discourse**

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## **For our project:**

- Our research focuses on the inception of the Black Lives Matter movement following Trayvon Martin's murder in 2012
  - What is the scope of your project?

## **Resources for Learning**

- Listening to Black folks when they speak
- Reading academic literature and books written by Black scholars and authors
- Watching documentaries and videos (not necessarily movies)
- News articles (best to see the real-time attitudes and interpretations)



# Quick Tips for Critical Research

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## *A Non-Exhaustive List*

- 1. Be aware of your *ethnocentrism***
  - You enter with your own internalized biases and privileges — check yourself
  - Be aware of *reductionist* arguments and *terminology*
- 2. Be *sensitive* in your research**
  - Especially when researching at-risk populations and historically marginalized groups
- 3. LISTEN**
  - Do your research, but DO NOT speak over the people who exist within those populations
- 4. Ongoing process of learning**
  - Stay humble, stay empathetic
  - Apologize, learn, move on — you're going to mess up



# **Method 2**

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***Literary/Academic/Scholarly/Peer-Reviewed***

***Research***



# Academic Research

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## Why?

**Gain inspiration** about what has been done before and how to structure your project.

## How?

Generally research can be found published in **academic journals**, archived in databases. (But can be costly and time-consuming, with a steep learning curve...)

But there are other ways to gain access to articles, including through the public library, public databases, fact tanks, and personal inquiry.

# Academic Research

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Social Networking for Researchers = Public  
Databases (\$?)

ACADEMIA

ResearchGate

Databases (\$)



Fact Tank

Pew Research Center™



Search for Scholarly  
Research

Google Scholar



# **Method 3**

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## ***News and Recent Events***



# News Articles and Recent Events

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## Why?

Most useful for learning about **real-time reactions, attitudes, and interpretations of events**

## How?

Different outlets have different motives and stakeholders, so **look at a few of them**. Using social media or search engine news tabs can be a quick way of getting most recent/most popular articles.

Look for citations within news articles to see where they sourced their news.



# News Articles & Recent Events

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**BuzzFeed**NEWS

**Forbes**

**The New York Times**

 **USA TODAY**<sup>TM</sup>



# What's Next For BLM Always?

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▶ **Portland Protests**



▶ **Police Sentiments**



▶ **NPO Donation Data**



▶ **Private Briefings**



**Q&A**



**DATA**

**METHODOLOGY**

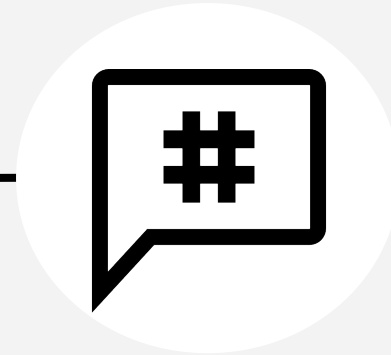
# Methodology

*Google and Twitter are two main online platforms where online footprints can be tracked.  
Multiple methods are leveraged including descriptive analysis (simple), natural language processing(hard).*



## GOOGLE TRENDS

*Top search query  
popularity*



## TWITTER ANALYSIS

*600k+ tweets  
processed*



# **DATA METHODOLOGY**

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## ***Google Trends***



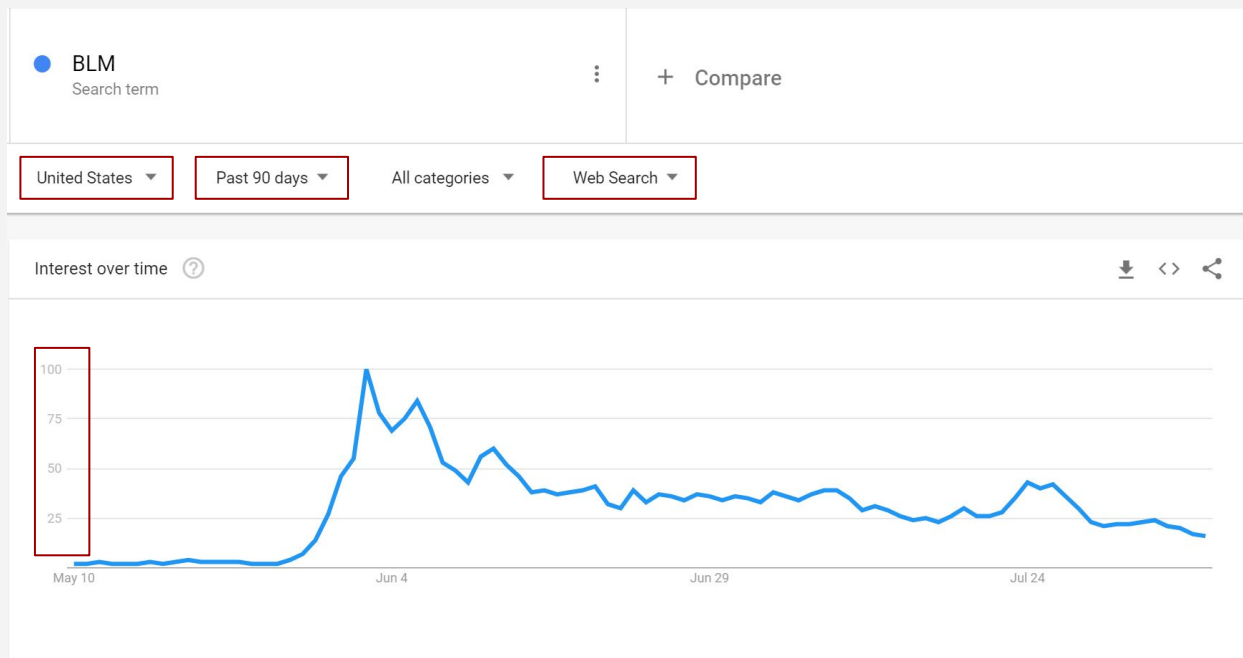
# What are Google Trends?

*“Google Trends is a website by Google that analyzes the popularity of top search queries in Google Search across various regions and languages.” - Wikipedia*

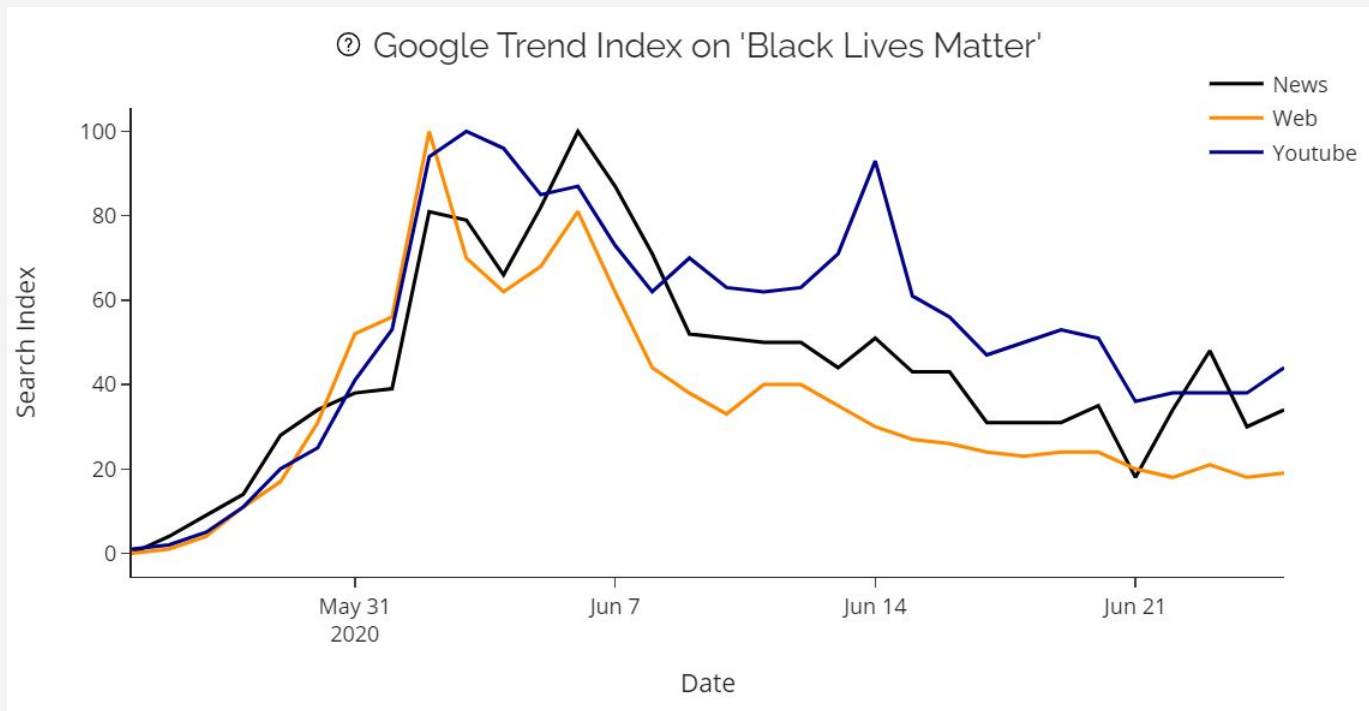
Interest Over Time

Interest by Subregion

Related Topics & Queries

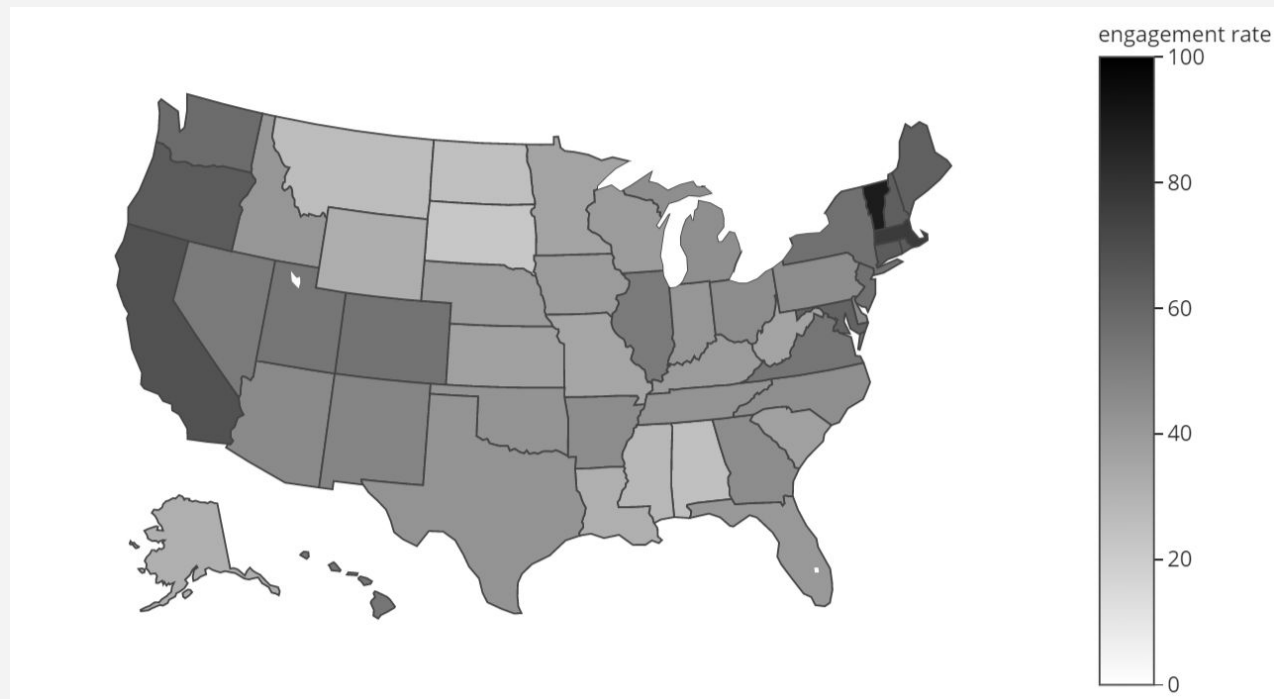


## Interest over Time



## Geographic Distribution in 'Black Lives Matter' Google Query on June 2nd

Interest by  
Subregion







# **Google Considerations**

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## **ADVANTAGES**

**Big Data**

**Honesty**

**Historical Data**

**User Friendly**

## **LIMITATIONS**

**Uncollected  
Queries**

**Inconsistent  
Search Index**

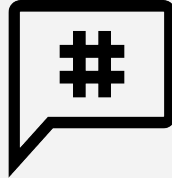
**Affected by  
Population**



# **DATA METHODOLOGY**

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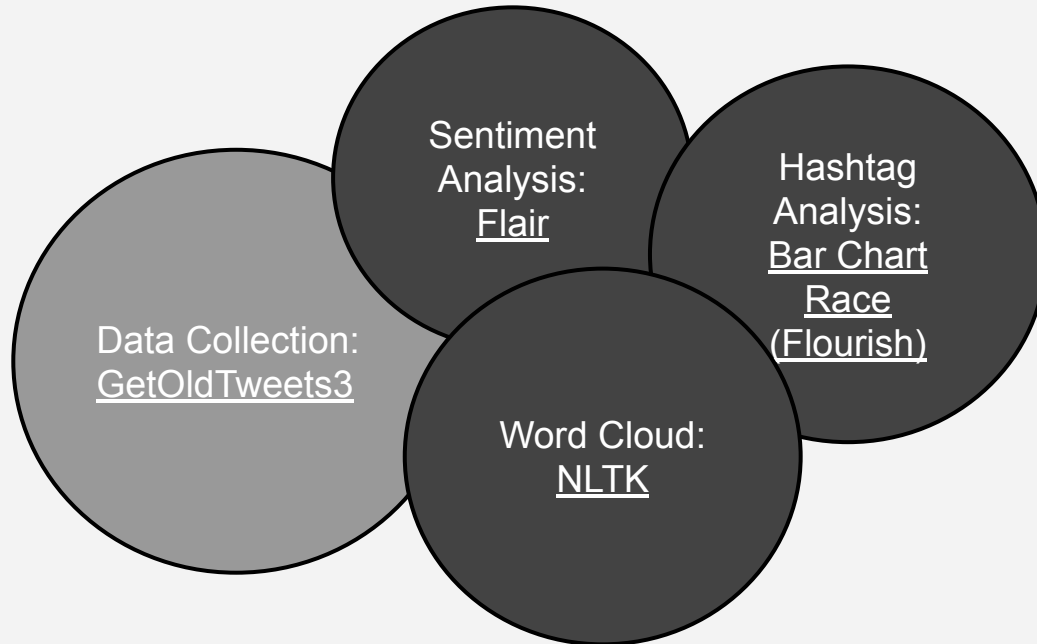
## ***Twitter Analysis***



# What is Twitter Analysis?

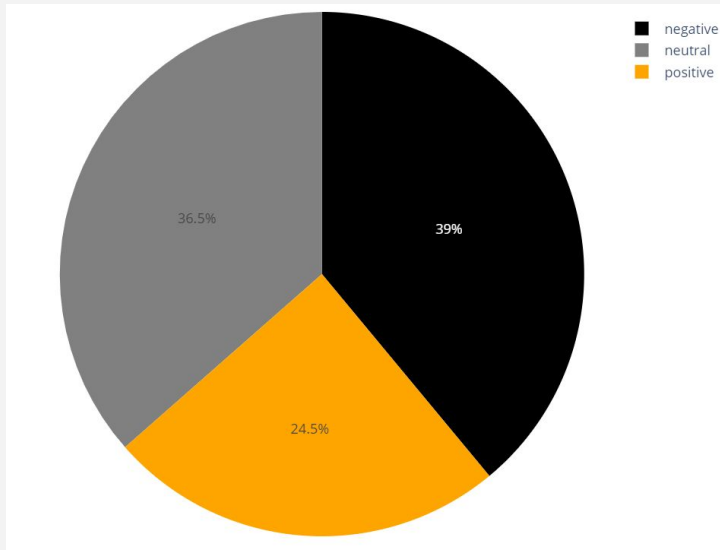
*Twitter analysis, by our definition, includes all steps beginning from data collection to data cleaning, and finally data analysis (Natural Language Processing, or NLP).*

*To be able to conduct analysis on Twitter, proficiency in Python is required.*

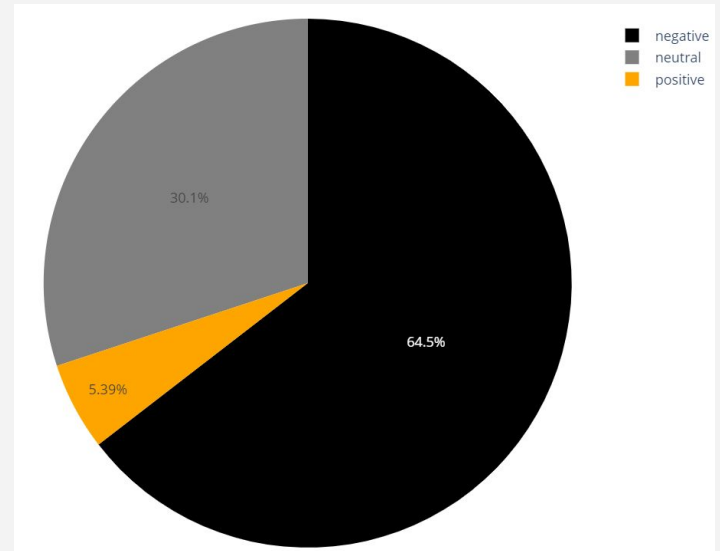


# Sentiment Analysis Example

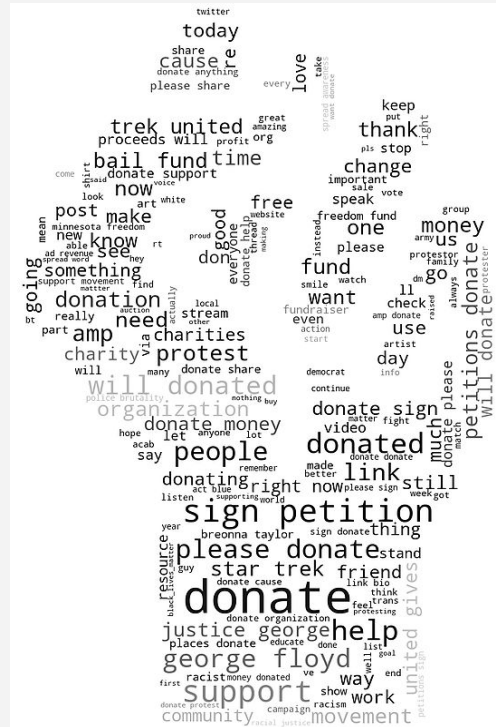
## Donate



## Protest



# Word Cloud Example





# **Twitter Considerations**

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## **ADVANTAGES**

**Big Data**

**Honesty**

**Historical Data**

## **LIMITATIONS**

**Limitation of  
Requests**

**Accuracy of  
Model**

**Dirty Tweets  
(robo)**

**Not User  
Friendly**



# **Conclusion**



**Q&A**



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# THANK YOU

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Feedback: [tinyurl.com/blmafeedback](http://tinyurl.com/blmafeedback)