

The Pursuit of Being Heard: An Unsupervised Approach to Narrative Detection in Online Protest

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Motivation

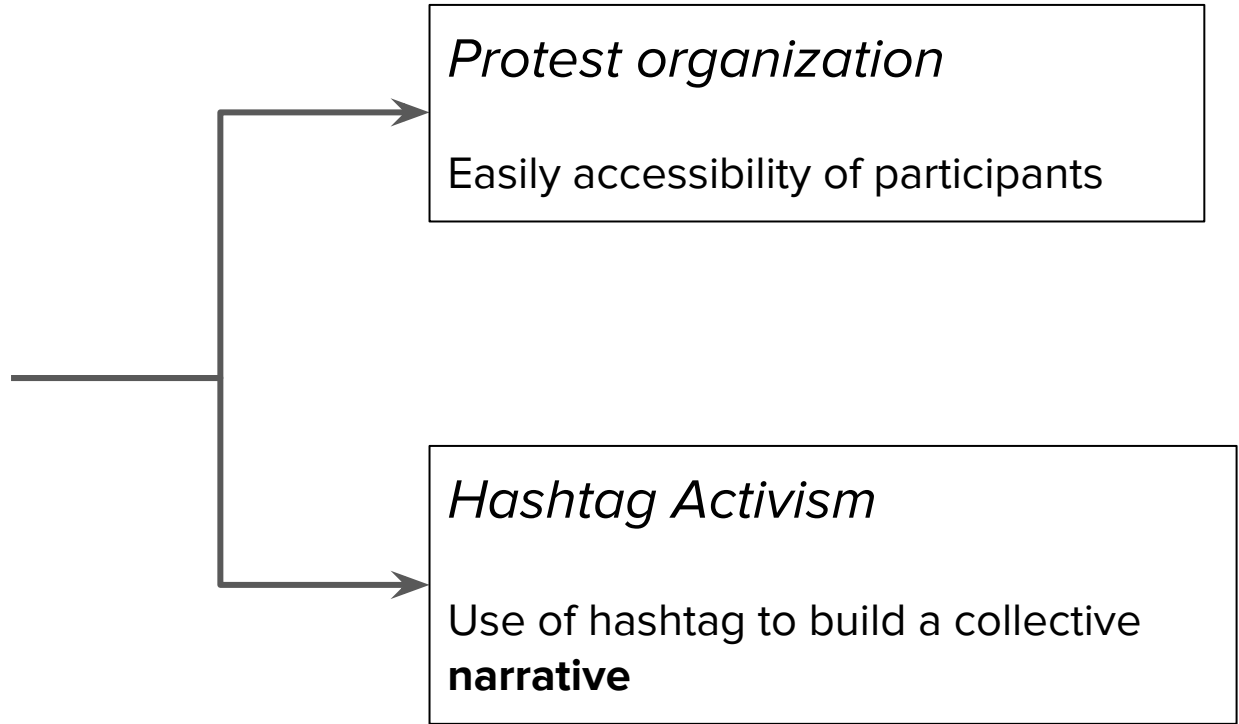
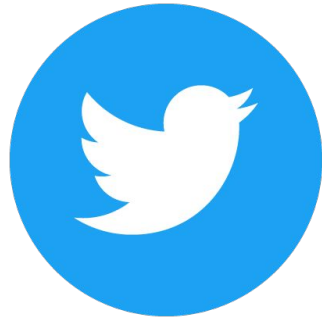


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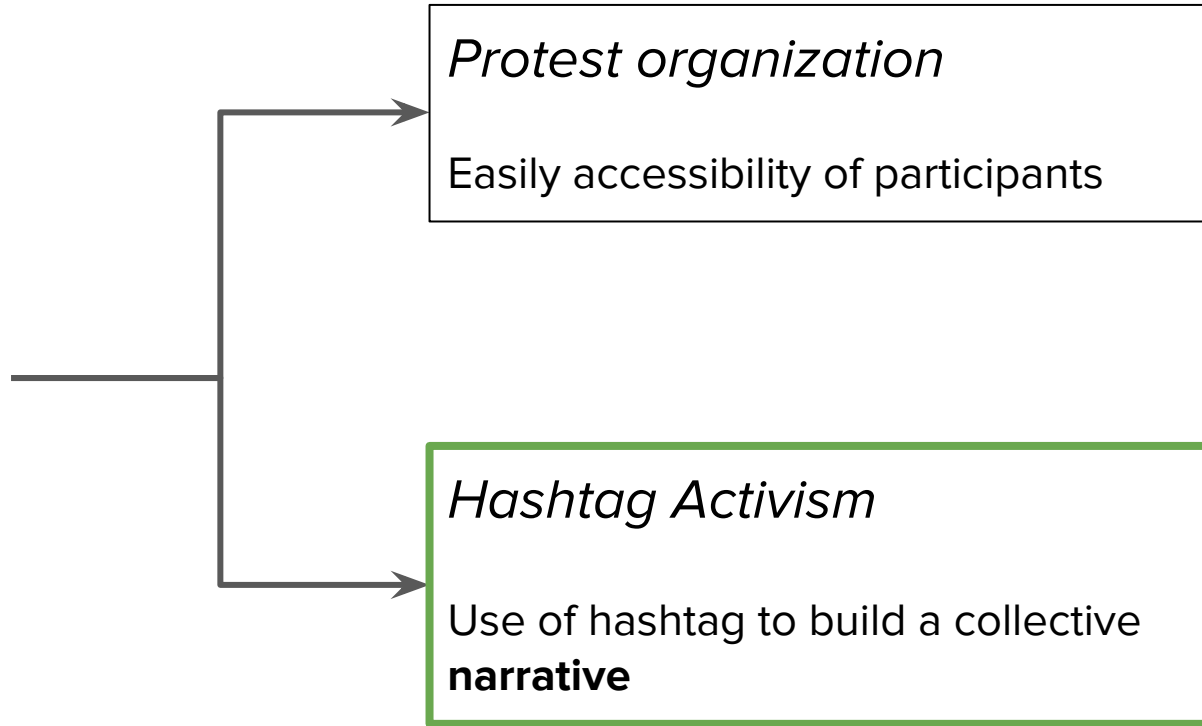


Twitter Revolution

Role of Social Media during protest



Role of Social Media during protest



What are narratives?

Online protests share **similar morphological features** in using social media.

Narratives include collective information disseminated by the crowd



OGA

I applaud you @<user>! The village idiot in front of the camera' #AndrewBridgen is indeed talking a c** of sh**.



#ToriesDevoidOfShame

On-ground Activities



CTA

Keep it up!! When we tweet/RT/QT/comment with the daily hashtag from SKM it helps farmers' issues trend! Help bring awareness to the farmers on the roads! #BoycottBJP_4Farmers

Call to Action



GRV

A friend of mine was detained while trying to record @DelhiPolice illegally harassing and attempting to detain a woman (yes, she is wearing the Hijab, no it's still illegal). Delhi Police doesn't want the world to see this video. #IndiaRejectsCAB #delhi

Grievance

Research Questions

RQ 1: What are the different narratives present in a protest?

RQ 2: What are the most prominent narratives present within a protest?

RQ3: Are there any converging narratives across protests?

Data

Protest	Timeline of Data collection	#Tweets	#Users
CAA	Dec 07, 2019 - Feb 27, 2020	11, 350, 276	931, 175
FP	Mar 31, 2021 - Aug 13, 2021	1, 509, 703	160, 286
KTB	Jan 14, 2022 - Jan 26, 2022	280, 549	73,666

Data statistics for unsupervised narrative detection framework.



हरियाणा दिल्ली की रैली देश की रैलियों से थोड़ी अलग होती है। 😊
 "लंबे लंबे लठ बजाओ, दिल्ली पुलिस लठ बजाओ"
 "मोदी जी तुम लठ बजाओ, हम तुम्हारे साथ हैं"
 | "#CAA_NRC_support #NPRisNRC #CAAProtest
 #CAA_NRC_NPR



@PMOIndia @AmitShah @narendramodi
 @Dev_Fadnavis

Sir the nation stands shoulder to shoulder with you on
 #CAA &#NRC
 PuneKars staged a peaceful solidarity march to show
 their love and support for the government and your
 initiatives.



மொத்த காட்டுமிராண்டி குட
 கனிமொழி MP 🇮🇳❤️

#DMKYWagainstCAB



BBC News Marathi
 @bbcnewsmarathi

CAA विरोधात पुणे विद्यापीठात आंदोलन, सुप्रिया सुळे-सत्यजीत
 तांबेंची हजेरी
 @supriya_sule @satyaJeettambe
 #CAA



આદરણીય વડાપ્રધાનશ્રી @narendramodiજી અને કેન્દ્રીય
 ગૃહમંત્રીશ્રી @AmitShahજીના નેતૃત્વ હેઠળ કેન્દ્ર સરકાર દ્વારા
 લાવવામાં આવેલ #CAA ના સમર્થનમાં અને જનજાગૃતિ અર્થે સૂરત
 ખાતે માન. મુખ્યમંત્રી @vijayrupanibjp જી અને વરિષ્ઠ
 પદાધિકારીઓની ઉપસ્થિતિમાં ભવ્ય જનસમર્થન રેલી યોજવામાં આવી.



சார் உங்களிடம் ஒரு கேள்வி கேக்கனும் சார் Nar
 எங்கே சார்

போலீஸ்: கீழே விழுந்து விட்டது

உங்கள் எல்லாருக்கும் விழுந்து விட்டதா

போலீஸ் : ஆமாம்

உங்களால் name badge இல்லாமல் எப்படி பணி
 முடியும்

போலீஸ்:

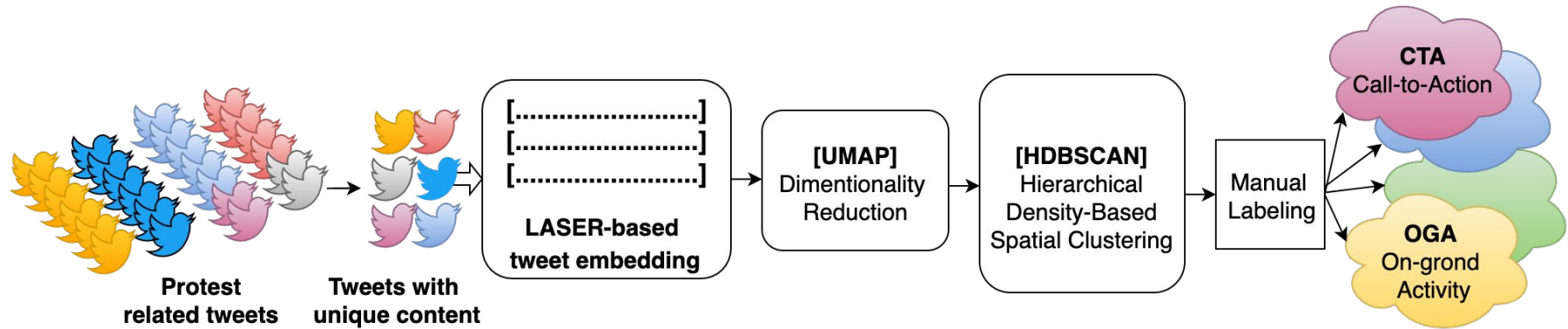
(டெல்லியில் போலீஸ் உடையில் RSS சங்கிகள்)

#CAA_NRC_Protest

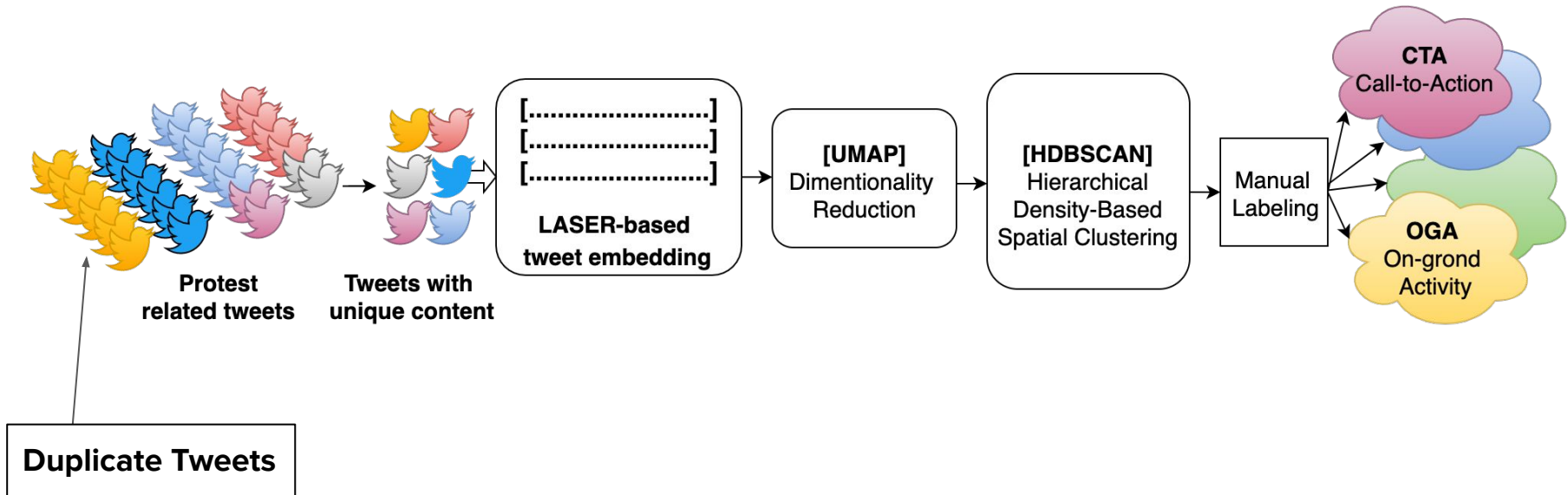


கோயம்புத்தூர் ஆத்துபால ப்ளாக்டு #CAA_NRC_Protests
 வெறித்தனமான கூட்டம் !! 🇮🇳

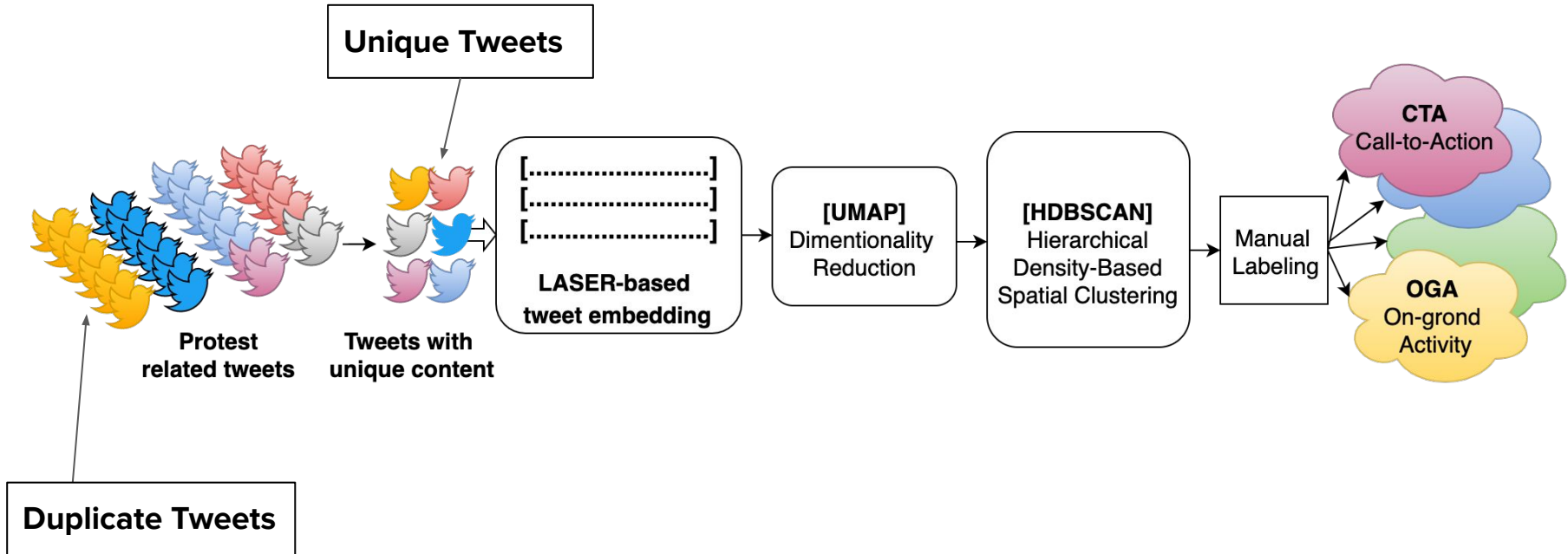
Methodology



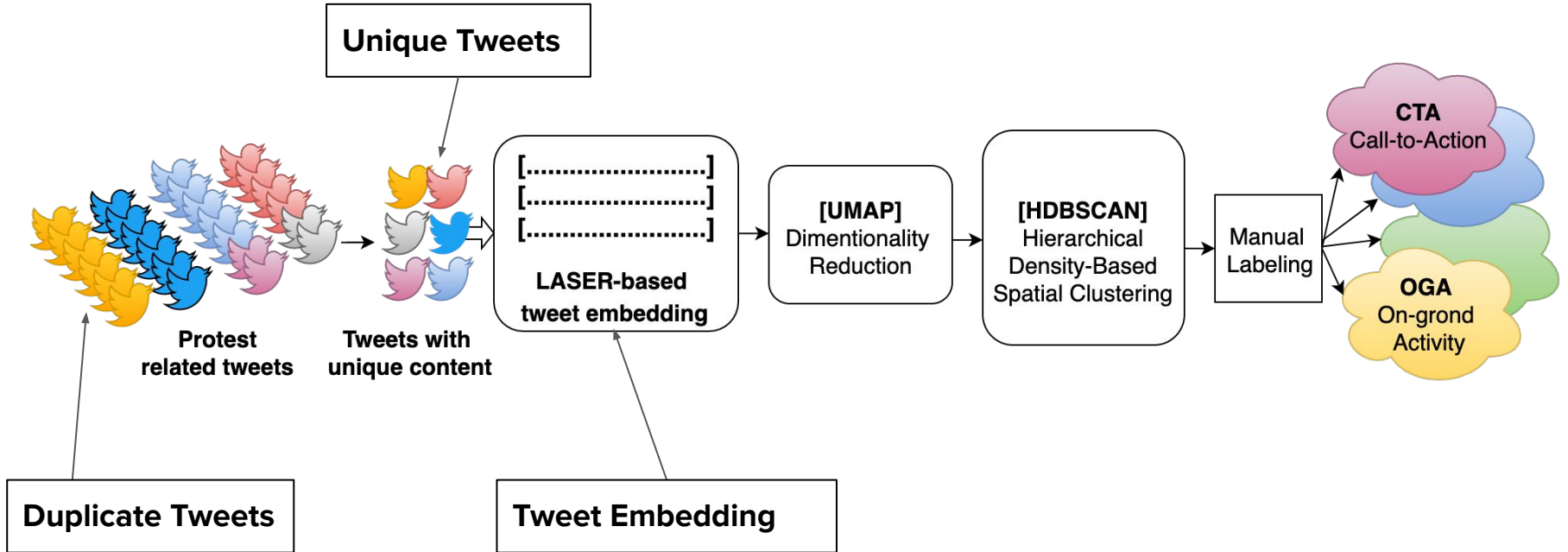
Methodology



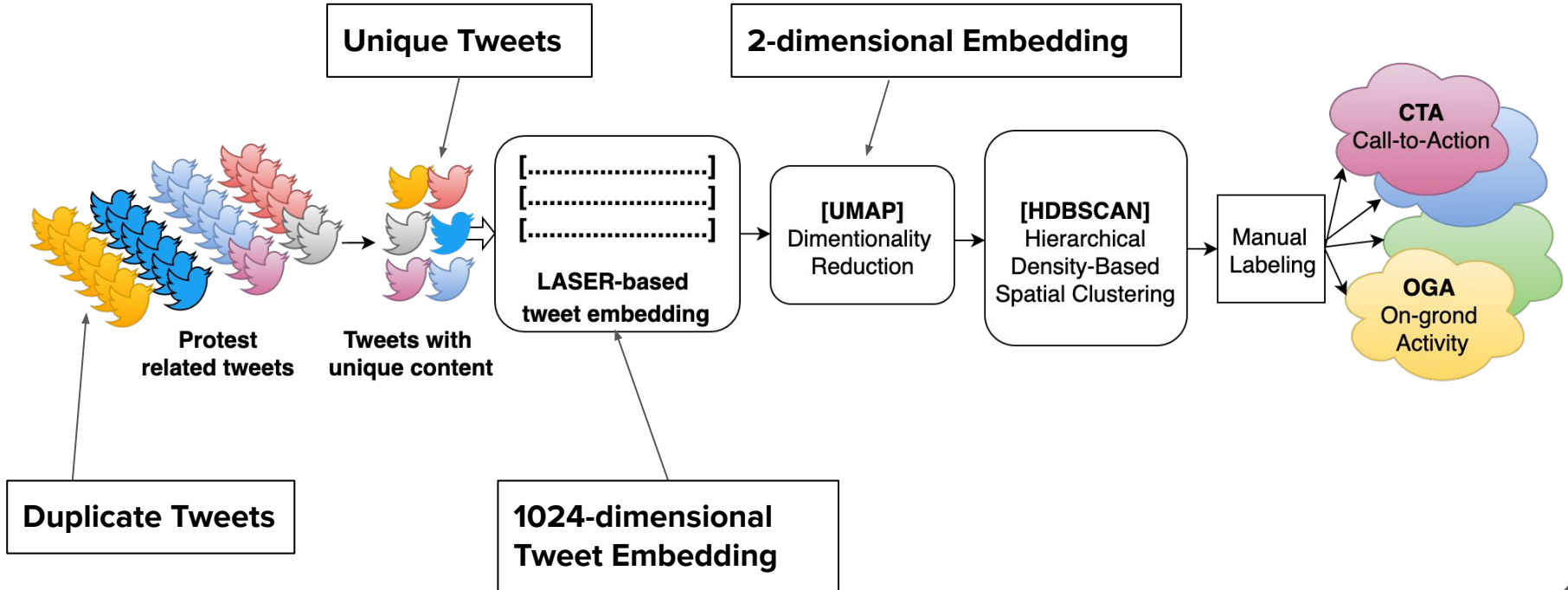
Methodology



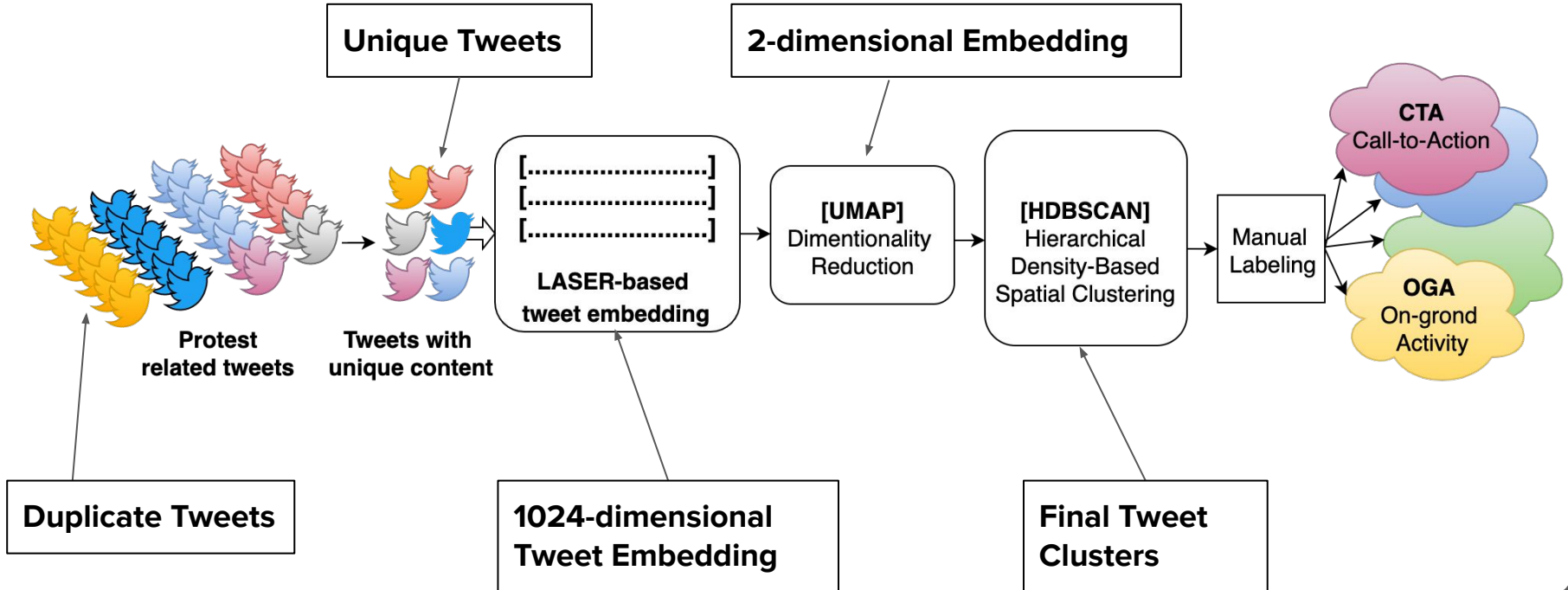
Methodology



Methodology



Methodology



RQ 1: What are the different narratives present in a protest?



Narratives present in a protest

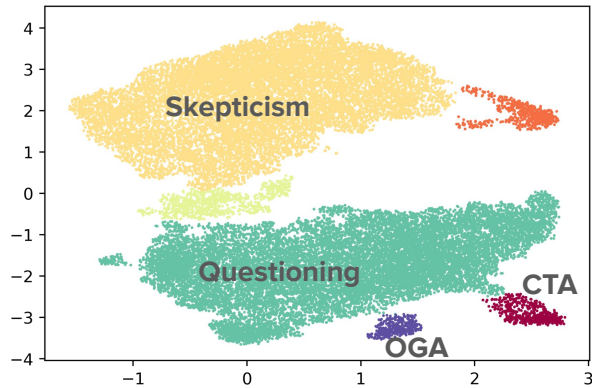


Figure showing clusters in #CAA

Narrative	Unique Tweets	#Tweets	#Users	Example
Skepticism	15, 274	3, 911, 679	466,139	Thousands on the street in support of CAA! I was not expecting this from Bhubaneshwar.
Questioning	13, 380	2, 387, 533	278,184	The police showed patience and did not shoot. Who fired at 56 policemen in Lucknow? Those who are saying that they do not have any paper, are they who are the end? Listen to the story of Pakistani Hindu.
CTA	865	154, 926	72, 415	What ever way is there we oppose poisonous #CAA Rangoli is our too
OGA	647	98, 221	48, 276	The demonstration was held today at the Valluvar Fort in Chennai on behalf of the Tamil National Party and the Tamil National Alliance. Urged to withdraw the Citizenship Act

Narratives present in a protest

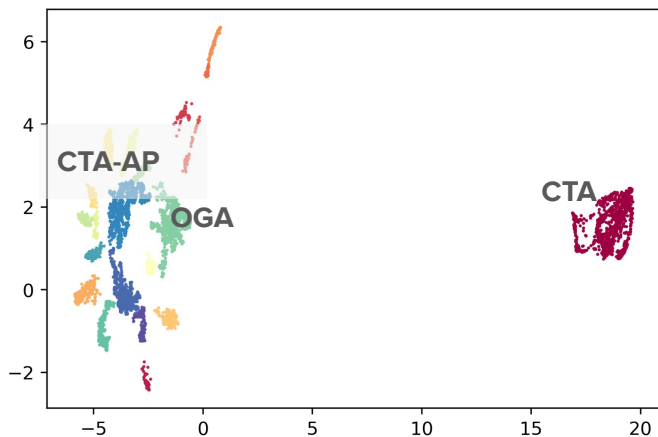


Figure showing clusters in #FarmerProtest

Narrative	Unique Tweets	#Tweets	#Users	Example
CTA	6, 287	13, 734	464	Through violence, haarsh weather, beatings, Deaths of Our Thers and Sisters, We Stand Tall And Adud! We Will Not Back Up Down Till Farm Laws ARE Repealed. #300deathsatProtest The war continues... the war continues ...
CTA-AP	845	26, 897	9, 470	We want humanity in our country We want a government who serve for nation/people not for corporations No more BJP
OGA	683	66, 660	2, 538	Watch- On #HolikaDahan, Farmers in Rajasthan #BurnFarmLawsOnHoli amidst slogans for 300+ who have died in #FarmersProtest.

Narratives present in a protest

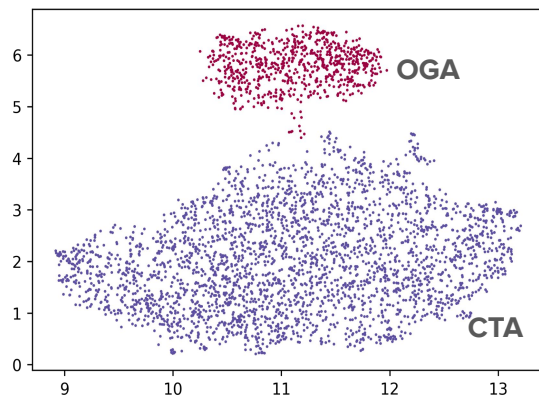


Figure showing clusters in #KillTheBill

Narrative	Unique Tweets	#Tweets	#Users	Example
OGA	742	20,557	9,431	Don't worry we are no longer being gaslighted @BorisJohnson @Conservatives @sajidjavid no trial needed you are as bad as each others. Lie after lie after lie #BorisJohnsonMustGo #ToriesDevoidOfShame #ToriesUnfitToGovern
CTA	2,958	178,499	56,079	The government are stripping away our fundamental rights with the #PolicingBill. It would: - Ban noisy protests - Criminalise the GRT community - Increase stop search powers - Jail protest organisers for up to 10 years. Join us at protests tomorrow to #KillTheBill

RQ 2: What are the most prominent narratives present within a protest?



Prominent narratives present within a protest



CAA: **Skepticism** and **Questioning** in CAA reveal the contention in the online social media about the Act



FP: Protest was more in harmony with opposing the bill, with most prominent narrative being **CTA**



KTB: **CTA** was most prominent narrative in the protest

RQ 3: Are there any converging narratives across protests?



Converging Narrative in protests

Protest	Narrative	Total Tweets	Tweet	Retweet
CAA	CTA	154, 926	2, 926	152, 000
	OGA	98, 221	1, 580	96, 641
FP	CTA	40, 631	925	39, 706
	OGA	66,660	879	65, 781
KTB	CTA	178, 499	4, 546	173, 953
	OGA	20, 557	868	19, 689

Qualitative Analysis of Clusters



Qualitative Analysis

Prominence score: $\log(tf_{t,i}) * \left(2 * \frac{\frac{tf_i}{total_i}}{\sum_{j=1}^n \frac{tf_j}{total_j}} - 1 \right)$

For each term t , the degree of its occurrence in a set of tweets from cluster i , i.e., \mathbf{tf}_i , as compared to all other clusters \mathbf{tf}_j (where j ranges from **Cluster₁** to **Cluster_n**)

Top Terms

Top Hashtags

Top Emojis

Qualitative Analysis

OGA:

Top Terms: Assam, hospital, boriespartiewhilepeopledied

Top hashtags: #curfew, #freeranjitsingh, #lahore

Top Emojis:    

CTA:

Top Terms: initiative, showcase, require, boycotting, votes, saturday

Top hashtags: #jihadists, #killthebill, #23marchwithfarmers

Top Emojis:  

Summary

Across government policy-induced online protests in India and the United Kingdom, we found familiar mass mobilization narratives across protests.

- On-ground activities cluster

- Call-to-action cluster

We found protest-centric narratives clusters together in all protests

Call-to-action is the most dominant cluster among protests

Future Work

- Understanding the Grievances clusters in protests

Thank you!



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