

# Devotees on an Astroturf: Media, Politics, and Outrage in the Suicide of a Popular FilmStar

Syeda Zainab Akbar\*  
University of Washington  
Seattle, United States

Ankur Sharma\*  
Microsoft Redmond  
United States

Dibyendu Mishra  
Microsoft Research  
Bangalore, India

Ramaravind Kommiya  
Mothilal  
Microsoft Research  
Bangalore, India

Himani Negi  
Microsoft Research  
Bangalore, India

Sachita Nishal  
Northwestern University  
Illinois, United States

Anmol Panda  
University of Michigan  
Michigan, United States

Joyojeet Pal  
University of Michigan  
Michigan, United States

## ABSTRACT

The death of Indian film star Sushant Singh Rajput at the peak of the COVID lockdown triggered chaos on the news cycle in India with a range of conspiracy theories that led to a witch hunt of sorts, and the hounding of several entertainers and public figures in the months that followed. Using data from Twitter, YouTube, and an archive of debunked misinformation stories, we examine the drivers and consequences of social media outrage in this case. We analyse these patterns from the framework of conspiracy and astroturfing and contextualize our findings to the socio-political background currently prevalent in India. Primarily, retweet rates on Twitter suggest that commentators benefited from talking about the case, which got higher engagement than other topics. Moreover, we report evidence of political hands in the way the discourse has shaped online, but more importantly that the story bears warnings for the shape and impact of witch-hunts in the backdrop of a fractured media environment. In conclusion, we consider the effects of Rajput's outsider status as a small-town implant in the film industry within the broader narrative of systemic injustice, as well as the gendered aspects of mob justice that have taken aim at his former partner in the months since.

## CCS CONCEPTS

• **Human-centered computing** → **Social media**.

---

\* Both authors contributed equally to this research.

---

Permission to make digital or hard copies of all or part of this work for personal or classroom use is granted without fee provided that copies are not made or distributed for profit or commercial advantage and that copies bear this notice and the full citation on the first page. Copyrights for components of this work owned by others than ACM must be honored. Abstracting with credit is permitted. To copy otherwise, or republish, to post on servers or to redistribute to lists, requires prior specific permission and/or a fee. Request permissions from [permissions@acm.org](mailto:permissions@acm.org).  
COMPASS '22, June 29-July 1, 2022, Seattle, WA, USA  
© 2022 Association for Computing Machinery.  
ACM ISBN 978-1-4503-9347-8/22/06...\$15.00  
<https://doi.org/10.1145/3530190.3534801>

## KEYWORDS

Sushant Singh Rajput, SSR, Rhea Chakraborty, Astroturfing, Conspiracy, Social Media Influencers, Misinformation, Bollywood, Twitter, YouTube, India, Global South

### ACM Reference Format:

Syeda Zainab Akbar\*, Ankur Sharma\*, Dibyendu Mishra, Ramaravind Kommiya Mothilal, Himani Negi, Sachita Nishal, Anmol Panda, and Joyojeet Pal. 2022. Devotees on an Astroturf: Media, Politics, and Outrage in the Suicide of a Popular FilmStar. In *ACM SIGCAS/SIGCHI Conference on Computing and Sustainable Societies (COMPASS) (COMPASS '22)*, June 29-July 1, 2022, Seattle, WA, USA. ACM, New York, NY, USA, 23 pages. <https://doi.org/10.1145/3530190.3534801>

## 1 INTRODUCTION & BACKGROUND

On June 14, 2020, Hindi cinema and television actor Sushant Singh Rajput was found dead in his apartment in Mumbai, having apparently taken his own life. The 34-year-old actor had featured in a number of successful and critically acclaimed films and television sitcoms in the past decade, and was among a small number of top-billed stars in the 'Bollywood' film industry.

At the time of his death, India was in the throes of COVID-19, where several cities were under lockdown. It triggered an outpouring of grief, but unlike the typical star death in India which is often marked by a very public funeral [23] with tens of thousands of mourners, Rajput was grieved online. His death at first triggered active discussion on social media – grief, mental and emotional health during the lockdown [42], and the film industry in general [48]. But within days, the story started to take a sinister turn. The ensuing information cycle has since meandered across varying landscapes - from the social to the political - and counts among its participants and casualties not only journalists and media houses, but also politicians, Bollywood actors, and the late actor's fans. The story is a telling look into the information environment in the Global South, especially the coalescence of television and social media at a time of great polarization and uncertainty.

With the increasing popularity of social media in the Global South, the problems of low digital literacy and increasing risks of misinformation have put stakeholders of information such as mass media, celebrities and social media influencers at the forefront of

the information warfare [58]. Our research primarily questions, how the structure and content of media impact the hysteria and conspiracy theories following the suicide of Sushant Singh Rajput. This research question thus has elements of a case study, and our goal is to examine the temporal characteristics of coverage of the case, the key actors and networks involved. We use mixed methods to arrive at our conclusions, but rather than present a study that provides replicability, our goal is to highlight ways in which an information environment in which traditional and social media intersect can be weaponized when a potent mix of stakeholders converge. While the case was easily one of the most important news stories of the year in India in 2020 and bears examination for its own characteristics, we argue that there are implications beyond India. The development of the story during COVID and in a politically polarized environment offers warnings for ways in which similar cases can be exploited by a mix of opportunistic actors and a sufficiently engaged audience converge.

The paper as it follows from this point has the following structure. First, we outline the key events that provide a background to the suicide and its key related events. Second, we highlight the politico-cultural setting, specifically issues around the ethnicity of the star, and the public discourse around the film, and the environment in which the suicide had political currency. Third, we outline the two theoretical perspectives - of astroturfing, which refers to the means of social media engagement that allows for the gaming and amplification of specific voices, and of conspiracy theory, which becomes a key element of the threads that gained lives of their own. Here, we also focus on fandom, an important facet of what fueled the continuing coverage of the issue. We arrange our findings first covering the broad patterns that we see in the coverage of the the media, followed by using the theoretical lenses of astroturfing and conspiracy to understand the roles of the key actors, frames, and organizations in creating the narratives around the case. In conclusion, we discuss the implications of these with respect to the information environment in India, particularly in the context of political polarization.

## 1.1 Key Events

Since June 14, 2020, a long-standing investigation into the causes and culpability behind the actor's suicide has played out, in realms both online and offline. Within a week of his death, Mumbai Police initiated an official investigation into the circumstances, and on June 24, 2020, they received a postmortem report suggesting the lack of any struggle marks or injuries on the late actor's body. The initial reports called it a suicide. [9]

However, these events were contrasted by clamour about murder and foul play, and calls were made for an official Central Bureau of Investigation (CBI) investigation [26] by politicians, Bollywood actors, and eventually in early July, by the late actor's family himself. In the foreground of these demands for escalation, the Mumbai Police continued their investigation throughout the month of July, and recorded statements from Bollywood celebrities such as the actress and Rajput's former partner Rhea Chakraborty, as well as a number of leading members of the Bollywood industry including filmmakers Sanjay Leela Bhansali, Aditya Chopra, and Mahesh Bhatt. All of these were widely reported in the press. [74, 108]

Finally, on July 29, 2020, Rajput's father KK Singh filed an FIR in Patna accusing six people, including actress Rhea Chakraborty, for abetment of suicide [45]. A separate case, involving the recent death of one of Rajput's former associates, Disha Salian also made it into the news as a possibly connected case. More escalations followed, when on July 31, 2020, the Enforcement Directorate (ED) filed a case [77] for money laundering in relation to the death, and on August 5, 2020, the Indian government accepted the Bihar government's recommendation for a CBI enquiry into the case.

The CBI registered an FIR against Rhea Chakraborty and others for a series of offences (including, but not limited to abetment of suicide and criminal conspiracy), [42] and persisted in their investigation through the month of August 2020. At the end of August, the Narcotics Control Bureau (NCB) initiated their own enquiries into the case, [109] particularly angling for drug-related motives and convictions among varied Bollywood personnel that Rajput had known or worked with. A second post-mortem, conducted at the All India Institute of Medical Sciences (AIIMS), the country's top medical institution, meanwhile confirmed what was found in the first, that there was no evidence of foul play. [16]

What has followed since is a series of grilling sessions, arrests, and releases of varied individuals from the late actor's own social and professional circles in Bollywood, and the investigations of the various agencies continue to be underway at the time of writing. To make sense of the spread of events that have followed the initial reporting of the actor's death, we map and interconnect the various strands that have appeared over time. A critical piece of these is the environment during the period of COVID, as well as the political events preceding it, both of which, we argue, relate to the case at hand.

## 1.2 Politico-cultural setting

The political events that preceded this episode and those yet to arrive played a major role in aligning supporters of rival factions in bitter online exchanges. India's parliamentary democracy is the largest in the world, with scores of major political parties and alliances at the national and state levels. Currently, the Bharatiya Janata party (BJP) enjoys a massive single-party majority in the Union parliament, with the Indian National Congress (INC) being the chief opposition. In much of north and west India, the BJP is the clear hegemon, but in the two states that are relevant to this case - Bihar in the North-Center and Maharashtra in the West, the BJP relies on regional partners to form government.

In Maharashtra, which includes Mumbai - the center of the Hindi film industry and Rajput's adopted home - the Shiv Sena, INC and the Nationalist Congress Party (NCP) share power in a three party alliance - with the BJP being the principal opposition. This crucial state was lost by the BJP in November 2019 after a bitter post-election fallout with its oldest ally - the Shiv Sena - following which the latter formed an alliance with BJP's arch-rivals - INC and the NCP. The Bollywood film industry is also relevant here, since it is often seen as liberal and antithetical to the nationalist leaning of the BJP [60].

In Bihar - the state where Rajput was born - the BJP and its ally the Janata Dal-United (JDU) share power, while the Rashtriya Janata Dal (RJD) and the INC sit in opposition. The state was headed



Figure 1: Timeline of events after Rajput's death. The events stated here are particularly relevant to the study

for elections in November 2020 which only added to the political capital that could be gained from lionising Rajput as a son-of-the-soil who fell victim to conspiracies of Bollywood and Mumbai elites. The Rajputs are a critical part of the upper-caste vote bank that is a necessary component of any winning combination at the polls in the state [7].

In addition, India had witnessed some of its worst riots in its post-independence history as a result of a series of policy moves by the BJP at the center, particularly on the status of Kashmir [80] and a controversial citizenship amendment bill [87]. In the run-up to the lockdowns related to COVID, India already was going through an environment of polarized politics, much of which was being played out online [96] [103]. Several members of the Bollywood film industry (but not Rajput himself) had either spoken up against the BJP government, or were seen as inimical to the nationalist agenda of the central government<sup>1</sup>. The Bollywood industry, at once an object of desire and articulation of aspiration, has also a complex relationship with the populace because of the distance of the 'lifestyles' of the stars with the middle-class values that dominated mainstream discourse, including in the movies they made. [19]

In particular, the gendered elements of this lifestyle issue would come into play soon into the issue, with the transgression of traditional roles in public life by women in the industry [61]. This would emerge as a particularly important factor in the use of morality in the representation and harassment of Rhea Chakraborty, Sushant Singh Rajput's former live-in partner.

The second key factor was the struggle between the states and their peoples in the events to follow. States in India tend to have their own unique linguistic and cultural heritage, often laying the basis of strong sub-national identities. While migration can potentially dilute those differences, anti-migrant rhetoric based on regional and linguistic chauvinism in several states have had an opposite effect. Contributing to the emotional reaction to the case was the history of Bihari migration to Mumbai. For decades, Mumbai has witnessed migration of millions of skilled and unskilled workers from the North [22]. The Bihari migrants to Mumbai were often seen as a cultural underclass [100], and a politically marginalized group under attack from Maratha politics [62].

In the case of Rajput's suicide, we see coalescing of these pent-up sentiments of ill-treatment of people from Bihar by elites in Mumbai and Maharashtra. In addition, the perception of Bollywood as a westernised film industry based outside and culturally dislocated from the Gangetic Hindi heartland further adds to this resentment. The cultural divides overlay with Rajput's middle-class and upper-caste status and age-old misogynist and abusive stereotypes directed at Rhea Chakraborty. The loose group of social media users engaged actively in trying to get 'justice' for Rajput came to call themselves the *SSRians*.

In this study, we map the timeline of the coverage related to the case, both through mainstream channels and on social media feeds of media houses, journalists, and politicians in India. The story and its evolution online is instructive in understanding how the affective contours of a tragedy can be turned into a media event, and in turn, how that can develop a life and trajectory of its own. The

case offers an insight into the ability of media influencers to steer the trajectory of a story, but also a warning about the after-lives of pseudo-events.

## 2 RELATED WORK

There are two broad bodies of work relevant to our examination of this case. First, at its heart, the Rajput case presents an important study in the nature and spread of conspiracy theories. Nested within these are elements of fandom and affective connection with the individual, as well as concerns about alienation from the established systems of power, which act as drivers of the discourse. These are rooted in nationalist rhetoric that present alternative narratives as oppressed by a mainstream media, as seen most evocatively in the conspiracy theories and anti-establishment discourses in the case of Trump-era United States [95] [79].

Second, we build on a body of work on astroturfing. Here, the focus is not on what, but how, i.e. the technological affordances that allow for coordinated construction of certain narratives on social media as representative of widely accepted ideas. While the astroturfing relates to the vested interests – both in politics and in mainstream media – that are relevant to the case, it is equally if not more important to consider the role of fandom and its articulation in what drove the continuing engagement with media in the aftermath of the case.

### 2.1 Conspiracy

Scholars have proposed that conspiracy theories, while not necessarily thought of in those terms, have existed as long as human history has, and may indeed be wired into our being as creatures that learn to fear things outside our known in-group affiliations from hunter-gatherer times [115, 117]. Key moments in post-medieval and modern times that have seen the spawning and historical record of conspiracy theory include events of major political upheaval including the English Gunpowder Plot and the French Revolution [21], or moments of upheaval caused by deaths of major monarchs, for instance that of Ghiyas-ud-Din Tughlaq [6]. Conspiracy theories tend to feature a designated enemy, often an individual or collective understood as different from the group to which the theory appeals – thus notions about plots by the 'illuminati' and Freemasons [92] and the 'Learned Elders of Zion' [86] have in turn spawned generations of demonization of, and disdain towards the communities at whom these are directed.

Studies of conspiracy theories have presented multiple ways of making sense of what drives them. One position is that those who believe in them see as three defining characteristics of the world—that there are no accidents, nothing is as it seems, and that everything is connected [12]. Another approach to understanding what drives conspiracy theory looks at three broad causes - epistemic reasons, in which people are motivated by the need to have knowledge and clarity in a situation, and the conspiracy theory offers closure. The second cause is existential reasons, in which people seek to be secure in one's environment, and dealing with anxiety about current state of affairs seek information that reassures them. The third driver is social, that when people need to feel good about the social groups they inhabit, and sometimes that is reinforced

<sup>1</sup><https://thewire.in/politics/bollywood-attacks-propaganda-movies>



by negative feelings or beliefs about what is perceived as an antagonistic group [24]. Such groups may be ethno-racial [8], gender minorities [55], or institutional entities such as the government or the 'deep state' [68].

It is important that the driver of the same conspiracy theory may be understood differently from one perspective to another - thus for some observers, conspiracy theories around Trump can be seen as both antagonistic and existential, while from other perspectives, they may be seen as driven by anxiety about one's environment [90] [84]. Just as the drivers may be understood differently, there is also an important distinction with the existentially-driven conspiracy theory propagation, which tend to have a more organic, bottom-up driven acceptance [106], versus conspiracy theories propagated when elites actively engage in pushing out innuendo or outright lies [111] [98]. The growing literature on this top-down style encouragement of conspiracy theory makes it important to examine how elites such as politicians and members of the media address certain issues.

Extensions to this position also propose that power asymmetries create a strategic logic to bolster conspiracy theories. Thus, individuals belonging to ideologies or having party affiliations that are in opposition due to having lost elections, tend to be more likely to propagate and accept conspiracy theories [112]. However, while this work takes an existential driver approach of individuals or groups subscribing to conspiracy theories as a result of being out of power or in a minority, a disturbing new trend of majoritarian conspiracy theory peddling has also emerged, often with the blessings of the political establishment [116] [30]. The list of global leaders complicit in amplifying conspiracy includes most significantly US president Donald Trump [44], though increasingly among politicians in power and throughout the world including Jair Bolsonaro [89], Robert Fico and Viktor Orban [85].

While there is work that suggests rumour can act as a helpful part of sensemaking in times of uncertainty [17], the literature on conspiracy theories shows that these have generally bad effects on society, including undermining government, institutions, and order, and leading to witch hunts of those accused [107]. Various estimates show that very high percentages of people subscribe to one or more conspiracy theories based on a debunked falsehood, ranging from 20-80 per cent of populations, depending on the country and issue considered [36] [107]. And some issues that have global ramifications such as the COVID-19 pandemic, are taken advantage of by a range of advertisers to further agendas like donation solicitations, business promotion, stock market advice, animal right campaigns, which intentionally or unintentionally subscribe to conspiracies [58]. Not all those who partake in conspiracy theories actually believe in them, historically, a number of people engage purely for fun [28].

Scholars have further considered the impact of conspiracy theories. Work by Sunstein and Vermeule moves away from these affective cases and situates the problem in the information environment, stating that it results from "crippled epistemology" in the form of a limited number of relevant informational sources [107], a position that proposes that a lack of civil liberties exacerbates the likelihood of people believing conspiracy theories. This position presaged the challenges brought on by widespread use of social media, and the echo chambers it produces, that conspiracy theories

would multiply quickly, setting up an alternate ecosystem of information consumption and reproduction with dramatic impact on what is considered truth [105]. An important consequence, particularly as it relates to the findings of this work, is that the resulting media environment has seen second order effects of what can be called allied causes. Thus, the muddled environment has led to conspiracy theorists with widely divergent interests converging on common issues [56] ranging from cultural beliefs on communities such as minorities [72] to diseases caused by the use of technology [4] to the purported ill-effects of vaccines [66].

Finally, there is important work on the rhetorical form of conspiracy theory, which is of importance to our finds here - it tends to present itself as anti-establishment with a critique of dominant political ideology [73], and aims through the use of metaphor and discursive construction, to delegitimize the 'other' [94].

**2.1.1 Fandom.** Conspiracy theories also have an important overlap with fandom, which is particularly relevant here. Classic cases of this overlap revolve around Elvis Presley, a subset of whose fans promote a range of conspiracy theories around his being alive [31], and around 'Club 27', which alludes to a number of musicians including Brian Jones, Jimi Hendrix, Kurt Cobain etc who died unnaturally at age 27 [78]. The connection to fandom has been raised by multiple commentators, who have seen the intense affective bonds in online engagement between a fan and a fan object [97]. While the Trump and MAGA fandom groups offer one of the most topical cases [63], there are examples of the intersection of fan behaviour and various forms of organized trolling online activity from all over the world, including fandom nationalism over Hong Kong separatism in China [38], or football-related fan nationalism in Greece [120].

There is a growing and important literature on the expression and management of grief online, especially as more and more celebrities' passing is commemorated and enshrined by fans online [32] [14]. Indeed, the wars over ownership of social media spaces where fandom can be articulated, which became a major issue after Rajput's death, is an area of much contestation, as seen in Wikipedia contestation over the biographical details of the deceased [49].

## 2.2 Astroturfing

The notion of astroturfing in social media, derived from the idea of a body of grass that is not what it seems, present a simple idea. A large part of what appears to be "the voice of the many" may indeed be the voice of a few, on closer examination. Astroturfing has been defined by Kovic et al. as "a form of manufactured, deceptive and strategic top-down activity on the Internet initiated by political actors that mimics bottom-up activity by autonomous individuals." This definition largely applies to what we are seeing in this case, though manufactured outreach is layered with fandom-driven organic social media output. Thus, the astroturfing serves as an important instigator of social media content, but is by no means representative of the overall movement of sentiment. There are several cases of astroturfing - some of which involve subversive corporate campaigns to sell environmental or labor-sensitive projects to the general public [43], to push back against lawmakers attempting to regulate certain industries [40], or to influence controversial policy that involves reform of existing systems [11].

A range of factors impacting the economic viability and reliability of news in the digital era have increasingly undermined mainstream media [71], and needing that people look elsewhere to fulfil for their information needs [83]. Consequently, manipulated and interest-driven social media campaigns can play a pivotal role in highly partisan settings – in many societies, including the United States and India where negative affect characterizes the attitudes people from one group have towards that of another [47]. The affordances of social media products have ways of accentuating these problems – filter bubbles, for instance, impact polarization in society[102].

In the past few years, there have been several instances of astroturfing on social media using political campaigns, where parties or groups with partisan interests are able to effectively corner the political discourse through a mix of human and automated methods [50]. While the automated methods, especially the use of bots, has been much more widely reported on, the role of radicalized humans in an astroturfing exercise is equally important.

First, there are those who engage in the aggressive speech and coordinate campaigns – these can be thought of as the principals in a principal-agent framing [51]. For these individuals, the ability to effectively use the affordances of social media are critical in building campaigns, astroturfing or not, and a highly professionalized corps of specialists has grown around such work [82]. Second, there are those who act on behalf of parties or causes – these are agents. In some cases, these individuals are already party to such causes through party membership or some form of paid arrangements. In the event that a campaign is (or can be made to look like) a citizen-initiated campaign, it gets more credibility in online spaces that see themselves as rooting for the something that stands up to the system [35]

Campaigns, even those with short-term goals, are invariably trying to convert social media users. Bystanders need to be converted. While for some people, the cause and its merits is sufficient draw, for others, the ability of the message to inculcate affect is critical [39]. Here, the conversion of bystanders is an important space for us to understand. As research has shown, for some people who see themselves as outsiders or ostracized, being on social media, and being part of a partisan cause has meaning both individually and as part of a community – they in turn are more likely to act online through endorsements of biased or untrue information, even when presented evidence to the contrary [34]. Interestingly, just as the individual's understanding of themselves as an outsider is important, so is that of the object of the campaign – whether leader or cause, for it brings with it the weight of authenticity and relatability [29].

While the vast majority of work on astroturfing has considered pure top-down attempts to manipulate a discourse, our work here brings together astroturfing and conspiracy theory literatures, in the backdrop of the current political and social climate of India because affect plays a very important role in what we have seen happen. Rather than a story of pure manipulation, we see a complex web of interests and coalescence of narratives that help understand the unique case of the social media outrage around Sushant Singh Rajput's death.

Prior work in this field has addressed political social media and the collaborative efforts of the politicians, influencers and public

figures in shaping the political discourse. Various studies had elaborated on the role of hashtags in online activism[99], the appeal of influencers on social media [52], lobbying of politicians by their constituents [91], political propaganda by elected politicians [41], information sharing by rival campaigns on Twitter [18] and election campaigning [76]. Researchers have also addressed the change in quality of political discourse in the era of hashtags[88] and the effect of perceived partisan leanings of news outlets on content sharing by users[69]. However, we are motivated to ask questions on impact of topical events onto mediatization and polarization. Our questions evolve from studies such as the potential for controversy of issues on social media [33], flaring of social schisms during crisis and innuendo led misinformation on social media [5], that address intersectionality and interoperability of social media systems.

With conversations on machine learning, trust and fairness in the forefront, majority of studies on rumour, misinformation and conspiracy on social media focus on detection and correction using automated and semi-supervised methods [119] [67] [70]. However, this work presents significant challenges due to the innuendo and nuanced nature of the information environment. Our case study is one such empirical work that shows the intersection of the political spectacle with the mainstream media. We provide a comprehensive picture of content shared by news media and politicians. While past work has considered small numbers of relatively elite actors, we studied the tweets of thousands of politicians and journalists and YouTube posts of eight key television news channels. In doing so, we report not just the tendency of conspiracy peddling and astroturfing by key individual players in the episode of Rajput's suicide, but also the collaborative efforts of political parties and journalists in pushing unsubstantiated claims of a murder conspiracy.

Finally, the gendered nature of coordinated attacking on social media is an important part of what unfolded in the Rajput case. While there is work that has proposed that trolling is itself a form of symbolic violence [54], and in particular for female Bollywood stars [65] or professional women [113] as well as women who comment on political issues online [3], what we see in this case was a much more direct and concerted attempt from the online community to systematically target Rajput's former partner, who they were able to turn media discourse against, to the point of her incarceration for several weeks largely based on innuendo.

### 3 MOTIVATION

Our goal here was to understand the nature of public discourse, particularly in the role of the media and political establishment, in the events that followed the death of Sushant Singh Rajput. This was motivated by many of us living through this event, which went from an individual's tragic death to the conversation that dominated social media, television, and spilled over into hoardings on the street. In this, we have two main objectives of writing the paper. One, is to situate what happened within extant literature in both Global south and social media studies more broadly, on what drives online engagement above and beyond the characteristics of a network. This necessitates a mixed-method approach that looks interpretively at the artefacts that came to define the media event that emerged from the actor's death. While the literature on

astroturfing has focused on its technical drivers, our work brings a qualitative perspective into approaching the emotional drivers of engagement in an event. Our second objective is to provide a rich descriptive account that helps understand how information environments can be polluted, by exploring multiple aspects of a case, rather than a hypothesis driven study to examine a single characteristic or causal relationship.

## 4 DATA AND METHODOLOGY

We analyzed the data within the time period of June 14th to October 10, 2020, from three sources - Twitter, YouTube, and a debunked misinformation archive. Since our goal was restricted to the role of the institutional actors, we do not follow YouTube or Twitter handles of the general public, but only of public personnel such as politicians, journalist and media houses. This has been done to understand the role played by media and political establishments in driving the narrative and its effect in shaping the public discourse. While we use different methods of analysis for the various platforms, we mainly study the various actors, topical preferences, hashtags, retweet counts and tweets' content.

An initial version of these findings, including a visualization of the key events on the timeline were presented to the general public as commentary on the press coverage of the issue. The links to this work are not included for anonymity.<sup>1</sup>

### 4.1 Data

We collect data across various platforms and across various institutional actors to investigate the coalescence of the Rajput story. For YouTube, we examined pages of mainstream television news channels, for Twitter, we examined all trending hashtags for the study period as well as Tweets from politicians, influencers, journalists, and media houses in India. For misinformation, we coded and analysed an archive of debunked misinformation stories compiled from fact-checkers operational in India.

*Television channels (YouTube).* We studied the YouTube pages of the 4 most viewed English (India Today, CNN-News18, Republic World, Times Now) and Hindi (Aaj Tak, ABP News, Republic Bharat, News 18 India) television news channels in India. These rankings are based on the Broadcast Audience Research Council's ranks based on viewership at the start of the study period.<sup>2</sup> We used the YouTube data API v3 to extract 7875 videos from the news channels' YouTube handles, each of whom had dedicated playlists for Sushant Singh Rajput's suicide. Since these videos are hosted online, their comparative appeal may not be representative of these media houses' viewership. Nonetheless, they serve as a proxy, especially to examine the engagement these media channels get, as against other programming content.

We used the tags used by the news channels on their videos for a temporal topical analysis. Since the purpose of these tags is to improve search engine optimization, these terms may be skewed towards getting more hits than to reflect the full extent of the

<sup>1</sup>This publication included a blog post with the link to the visualizations and data, and a piece posted on ArXiv which had a 'bullet point' version of the key findings as they related to Indian news and media coverage.

<sup>2</sup>Since the study, it has emerged that there was some manipulation of television ratings by channels, though the set of channels we have included are nonetheless the most prominent overall.

linked story, unlike the Twitter hashtags. More often than not, the YouTube tags are more repetitive and redundant than Twitter hashtags. We removed all the redundant words (channel names, times, breaking, news etc.) to understand the patterns seen in the frequently used words and language. Additionally, these terms do not have contextual value for our current research questions.

*Debunked Misinformation.* For debunked misinformation, we borrow our data for the study period from an archive maintained by Tattle Civic Technology (under ODBL licence) [2] for the following Indian IFCN certified fact-checkers: AltNews, BoomLive, Indiatoday Fact Check, Webqoof, NewsMobile Fact Checker, Factly and Factchecker. We manually coded these stories for Rajput related fact-check stories and found 18 unique stories directly related to the case. However, as our sample is limited to stories that have been debunked, we are restricted by the limited resources and selection criteria of fact-checking organizations. [1]

*Twitter data.* To gauge what was trending on Twitter, we maintained a repository of hourly trending hashtags on Twitter in India since June 14, 2020, which can be obtained using the Twitter's Public API. These hashtags were manually annotated by two researchers for a simple binary of whether a topic is related to Sushant Singh Rajput for the study period. We find 378 trending hashtags in the given timeline that trended for at least 10 hours on Twitter in India. The coding scheme was tested by conducting an inter-coder reliability score using Cohen's Kappa which gave a score of 0.876 on a scale ranging from -1 (complete disagreement) to +1 (complete agreement). The rest of the hashtags were arbitrated and re-annotated for disagreements.

*Journalist & Media houses.* To understand content posted by journalists and media houses on Twitter, we extracted tweets from a list of over 2190 journalists and 259 media houses in India. We define media houses as collectives, by ownership or output. Thus, an account of both an organization that owns or distributes media, such as India Today, or a program of that organization, such as 'India First' would be defined as a media house for the purposes of this analysis. Only handles belonging to individuals are separated out as journalists. The list was created using seed accounts of journalists from Twitter lists, then collecting Twitter friends of those seed accounts, with the assumption that journalists were connected to other journalists. We conducted two iterations of finding friends, and then arranged the Twitter accounts based on how many accounts were followed by others within the set, yielding about 40,000 accounts that had more than one follower from within the set. Such thresholding helped to weed out individuals who are connected to a single journalist due to personal connection.

We then included all those that had Twitter verified marks for being journalists, and further manually annotated the top 10,000 accounts to check if they were journalists or media houses. We removed all non-journalists accounts (typically celebrities, politicians, and academics - all of who tend to be followed by journalists on Twitter) and all journalists who were not active in India to create our final list. This method may bias against the journalists who have very small following within the community of journalists on Twitter.



*Politicians.* For politicians, we used the dataset from Nivaduck [75], an open source state-party annotated dataset of more than 36000 politicians in India at various levels of different regional and national parties. For our purposes, we primarily used the Twitter handles of politicians that who had at least once tweeted about Sushant Singh Rajput since June 14, 2020. This was determined using a bag of words and hashtags relevant to the case. We pulled 240501 tweets of 10516 politicians- specifically, 11562 tweets of 413 Bihar<sup>3</sup> politicians and 53168 tweets from 1487 Maharashtra politicians, 101287 tweets of 259 media houses and 84861 tweets from 2190 journalists who actively tweeted between June 14th and October 10th on Sushant Singh Rajput related topics. The determination of whether a topic is related to Sushant Singh Rajput was done by human annotators who were familiar with the case and its related news cycle.

For Twitter dataset, we first preprocess the DataFrame of tweets since the raw tweets are highly unstructured and can contain redundant information. Preprocessing of tweets is done by taking multiple steps, first of which is to separately extract the hashtags and mentions using Regex. Secondly, URLs, Emojis, Smileys, and Reserved words (like RT, FAV) are cleaned using tweet-preprocessor package. In the final step, we tokenize the sentences after removing digits, lower casing, stop words and punctuations using NLTK. We also excluded all location names and abbreviations in the tweets because they acted as a leakage variable in our analysis.

## 4.2 Analysis

We adopted several quantitative and qualitative methods to analyze data that we collected from various online platforms. We analysed topical preferences, emergence of various themes, temporality of the discourse and response of the public through hypothesis testing for statistical significance.

First, to understand the topical preferences by various actors on Twitter, we used an unsupervised topical modelling approach called Latent Dirichlet allocation (LDA) [15] to identify daily topics of the tweets that we extracted. LDA assumes that documents are bags of words and treats them as a vector of word frequencies. Based on this assumption, each document is represented as a probability distribution over certain latent topics where each topic is represented as a distribution over words. Using a generative model, each document is generated by repeating a 2-stage process equivalent to the number of words in the document. First, a topic is sampled from a multinomial distribution of topics associated with the document and then a word is sampled from a multinomial distribution associated with the sampled topic [14]. While LDA has been shown to be highly successful with long documents, it does not perform well with shorter documents which are sparse and have very limited information about co-occurring words [118]. A simple approach, used frequently to tackle this, has been to aggregate short texts to build larger pseudo documents based on user data or bookmarking features like hashtags[57]. For our purposes we built separate LDA models for each group of actors being studied by pooling their tweets into single document on a daily basis. This is done in contrast to pooling weekly in order to accommodate for the volatile nature of proceedings in the Rajput case on certain successive days.

<sup>3</sup>Bihar and Maharashtra were relevant to the case

It should also be noted that we do not consider a user level aggregation of tweets as we study them as members of groups. A group level aggregation helps gauge the collective sentiment and preferences of a collection of entities (Politicians, Media Houses, etc.), and weeds out the fluctuations that may arise at a user level analysis. Topics generated from modeling are not necessarily good to interpret. Therefore, we calculated topic coherence to distinguish between good and bad topics. Topic coherence measures the level of semantic similarity between words with the highest score on a topic. Next, in order to choose the optimal number of topics for each model, we ran a grid search over the range of 5 to 50 and chose the topic size which corresponded to the highest  $C_V$  coherence score[93]. We also considered other NLP models like Latent Semantic Analysis (LSA) [25] for topic modeling, but generally our analysis showed LDA to perform better than LSA based on a higher value of best topic coherence score for each category. LDA best scores were in the range (0.11 - 0.14) and LSA best scores were in the range of (0.10 - 0.12). Moreover, we have only focused our analysis on English tweets & hashtags (LDA-based models in English too) which is a limitation of our work. But we do expect the same pattern to align for regional languages like Hindi and Marathi too based on an empirical analysis of word clouds on the tweets in these languages.

The topics in themselves are hard to interpret as they are latent variables and require manual inspection with thorough domain knowledge. Hence, we further pick the most relevant terms within each topic, using their normalised posterior probabilities for the topic as a measure of relevance, for each model and eyeball them along with a random sample of tweets to detect the themes of the topics.

We used hashtags in our study as their characteristics are apt for our analysis on organisation and framing. We also studied thematic concepts related to *Rajput* that evolve from these hashtags, for which we performed a frequency distribution of the most commonly occurring hashtags from both Twitter and YouTube in the form of word clouds. We individually investigated the word clouds for tweets' tokens to contrast the development of story through hashtags with that of tweets' text. Similarly, we also conducted a thematic analysis of the YouTube tags on a temporal basis to see how various topics emerge on media channels over time. Further, for understanding how some specific themes emerge, we did a substring match of the chosen theme over the tweets and compared the frequency of its occurrence over time.

To discount the effect of repetitive hashtags over time, we followed a sliding window paradigm: a window of fixed size (*winSize*) takes unit step over the time period in loop, and for each step it computes the set of new hashtags that are not present in the previous *winSize* collection/window of days. This step ensured that the analysis weighed in favour of new terms or hashtags that trended, reducing the impact of repetitive threads that had been circulating for a while. It is important to note that the parameter *winSize* is important in capturing the occurrence of new stories, and its value is dependent on the degree of repetitions that we expect over time. The magnitude of *winSize* depends on the estimate of how frequent do we expect new stories and events to show up in the case history. Twitter hashtags are more volatile, that is, the rate at which new hashtags appear on Twitter is higher than YouTube Media channels, which is a more controlled platform. We decided to choose *winSize*



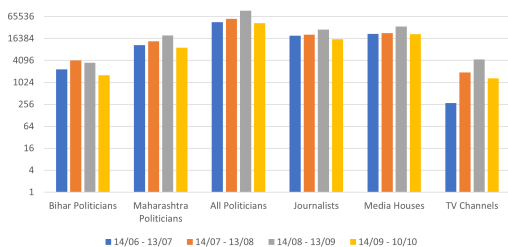
as 3 for Twitter and 7 for YouTube, based on the mean time gaps between the starting occurrence of new events (ones that trended with at least 10% share amongst the trending topics) on the respective platform. The *winSize* parameter only weeds out the repetitive hashtags, and in no way affects the emergence of stories as they happened in the news cycle.

Finally, to investigate the response of public or viewers on Twitter and YouTube channels, we employed the use of median retweet count and maximum view count for tweets and videos respectively. The response of various states and parties is examined by comparing the number of tweets against the number of politicians from those states and parties that talk about the *Rajput's* case in the timeline considered.

## 5 FINDINGS

We begin with statistics of tweets and videos posted on the subject by politicians, journalists and media houses on Twitter and YouTube. Our initial analyses made it evident that the back and forth between two states - Maharashtra and Bihar were central to the politicking online. Two political parties are also central to the conversation: the ruling Bharatiya Janata Party (BJP) and the main opposition Indian National Congress (INC), along with its state-level partner in the Maharashtra Government, the Shiv Sena (SS). We then proceed to analyse two aspects of the discourse here - first, under astroturfing, we consider the various forms of strategic & collaborative messaging online, the engagement of the various institutional actors and the language used for framing. Second, under conspiracy, we examine the profiles & topical preferences of the actors and the ways in which biased messaging was used for framing the situation in conspiratorial tones.

We deal with Astroturfing and Conspiracy Theory engagement and propagation separately, and do not propose a measurable empirical relationship between the two. We proceed with the notion that the idea of murder is in and of itself part of a conspiracy theory, given that initial police reports made no claims of foul play, and that, more importantly, in the months that followed reports emerged of bots being used to push the murder narrative <sup>2</sup>.



**Figure 2: Figure depicting monthly number of tweets/videos (log-2 scale) for various actors from 14th June 2020 to 10th October 2020**

We start by visualizing in Figure 2 the number of tweets about the tragedy posted by politicians, journalists and media houses and the YouTube videos posted by media channels between June 14

<sup>2</sup><https://thewire.in/government/sushant-singh-rajput-death-case-80000-fake-accounts-discredit-mumbai-police>

and Oct 10, 2020. As is evident, interest in the death peaked among Bihar politicians in mid-July and early August, while it continued to rise among politicians from Maharashtra and elsewhere. We also see that journalists and media houses continued to post a significant amount of content about the case, rising consistently into September 2020, with a drop only starting in late September 2020.

For closer examination, we use word clouds as a tool to help inform the research questions, rather than as the analysis in and of themselves, as seen in other research on social behaviour online [13]. The word clouds were instrumental in helping build the categories for analysis. They show for instance that politicians engage inordinately with the notion of murder, as well as with the state of 'Maharashtra' where the incident took place, whereas media houses have more terms that are related to the specifics of the case including the court, lawyers, but also the demolition of the home of a key actor who was engaged in spreading misinformation about the case. This leads us to the heatmaps for another means of visualizing the patterns of the discourse.

Using the LDA methodology outlined earlier, we clustered all aggregated daily tweets from politicians and media houses and trained a topic model for each of them. We found the highest coherence scores of topic clusters at sizes 8 and 11 respectively. We plotted the distribution of the most relevant words in each topic in Figure 3. For example, in Figure 3a we see that topics 3,5 and 6 relate to electoral issues and campaigning and hence we group them under the broad theme of 'Politics'. Similarly, in figure 3b we see topics 1,5,6 and 8 relating to the Bihar elections, the politics around Maharashtra government's handling of the case and a few other electoral cases like farmer's issues and COVID and hence we categorize them under 'Politics'. We have further explained our categorization in the Appendix section below.

For a granular analysis of how the topics of tweets relate to different time periods, we refer to figure 5 that shows the Twitter activity of media houses, politicians, and journalists. This timeline helps us understand the spread of events, and the ways in which October, by mainstream media and politicians, drove up attention to the issue on social media. We note that there are several bursts of activity, resulting in peaks around certain time periods. The peaks have been elaborated in detail in the Appendix.

To sum up, the descriptives provided in this section set the context for the paper. First, that there were perceivable differences in the ways that politicians engaged the issue versus how media houses did. Second, we see the temporal trends of social media activity that help lay out a picture of spikes are driven by news events as well as by motivated actors. The findings in the paper further will elaborate on how the processes of astroturfing were organized, who the key political and media actors were, and how two key partisan media channels engaged with the subject. Thereafter, we discuss the angle of conspiracy, in which we show the framing of conspiracy, and the impact it had on video viewership and the role of key actors, including politicians and entertainers, on the propagation of conspiracy theories.

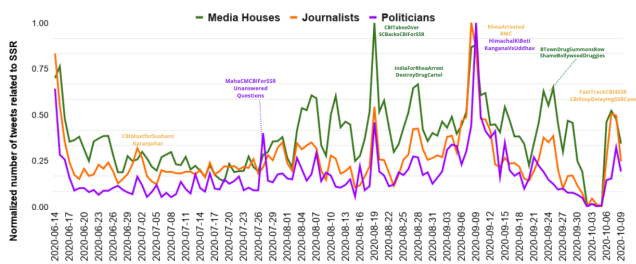
## 5.1 Astroturfing

### 5.1.1 Organisation.



**Table 1: Table marking the 4 significant time periods at which the tweet volume is high but the number of unique tags are low**

Period	Hashtags	Count
23rd July	#candles4ssr #dilbecharatomo #sushantdeathmystery #cbicantbedeniedforssr #ssrkoinaafdo #ssrdidntcommitsuicide #bollywoodpaklink #candle4ssr #westandwitharnabforssr #kangnaranaut	10
8th Aug	#worldforsushant #dishaandssrcaselinked #warriorsforsushant #warriorsofssr #warriors4ssr #rhearrestnext	6
3rd Sep	#focusonmurderangle #stopssrslander #shameonmahagovt #probedishassrcasetogether #sushantcasebreakthrough #cantgagssrcoverage #kangnaranaut #bharatvsrheapr #kanganapagalhai #flag4ssr #reportforssr #shameonsanjayraut	12
2nd Oct	#hungerstrike4ssr #revolution4ssr #worldmovement4ssr #rhealiedaboutssr	4



**Figure 5: Normalised tweet counts for all politicians, media houses and journalists. The absolute count of the number of tweets for each actor has been normalised in the range of 0 to 1 so as to compare their relative volume of tweets.**

and does so by advertising the ‘position’ of a hashtag, and urging fellow followers to retweet the hashtag.

On mapping the Twitter’s list of trending topics for a region (India) in Figure 7 shows that the strategies proposed in figure 6b had consistent impact. The mapping for every given day, shows that out of a maximum of 600 hashtags daily (25 per hour), the actor’s death trended at least once every day without exception, peaking at capturing a third of all trending topics in a given day. This number is stunning, not just given the breadth of topics that get talked about on Twitter, but also because this occurred at the peak of the COVID-19 crisis in India. Parts of the mainstream press<sup>3</sup> have referred to this prolific online activity as India’s own ‘QAnon moment’, and we can recognise the rapidity and consistency of its participating members by examining the way topics have trended over time.

Further examining the use of hashtags shows us that there are consistent attempts on Twitter to keep the number of hashtags high, even when the total number of tweets do not reflect a wider interest in the subject, as seen in figure 8. So while there are clearly peaks in the number of unique tweets, as shown by the dotted lines on figure 8, they should typically coincide with peaks in unique hashtags, since presumably, an increase in conversations surrounding the subject should go hand-in-hand with one in trending hashtags.

<sup>3</sup>[https://m.economictimes.com/tech/internet/sushant-singh-case-india-is-having-its-qanon-moment-as-the-conspiracy-theories-keep-coming/amp\\_articles/78651500.cms](https://m.economictimes.com/tech/internet/sushant-singh-case-india-is-having-its-qanon-moment-as-the-conspiracy-theories-keep-coming/amp_articles/78651500.cms)

However, we see this phenomenon at only one point, when Rhea Chakraborty was arrested. This presumably was newsworthy, but is also a galvanizing point for the SSRians, since much of their ire is aimed at her. At several other points, we find that the attempts to engineer traction are not aligned with the level of engagement by influencers on the subject.

We also see that media channels, such as Republic TV and Times Now (Figure 12), use the affordance of hashtags to get people organized on social media around the issue. The phrasing of the hashtags in nationalistic terms is an act of astroturfing since it provokes people, but disingenuously presents it as the will of the population. Perhaps the most striking feature of astroturfing in this case is the role of the media. While politicians understandably try to move the discourse towards what benefits them, and the BJP clearly targeted the state government in Maharashtra by first going after the Mumbai police, claiming it was incompetent, and then going after the state government, to which the police report. While it is important not to undervalue the role of a devoted group of fans in keeping the issue in the media, there are important political trends that we see in the way some of the social media action has been organized.

To sum up, this section outlined the differences in political engagement with the issue. The differences in the engagement of the BJP over the other parties, especially in Maharashtra, points to a concerted political effort to astroturf and use the event against its rivals. On media houses, the outsize engagement with the case, and ‘reward’ (as measured through retweets) that right-wing television channel Republic TV received is an indicator of the audience that was cultivated around the issue.

5.1.2 Actors.

Next, we examine Figure 9, which highlights how the Twitter activity of politicians in relation to the Rajput case varies by their state of origin. Two obvious cases for study are those of the actor’s home state of Bihar, and Maharashtra where he died. The data in Figure 9 is important as we see, a small number of states are driving the discourse.

For a closer analysis, we examined whether there are trends that separate parties based on their willingness to engage in the Rajput case. As we see in Figure 10 a large number of political parties are to the bottom left of the figure - few of their politicians from regional parties outside the states most concerned with the case,



Figure 6: Three tweets asking users to engage with specific hashtags to engineer virality

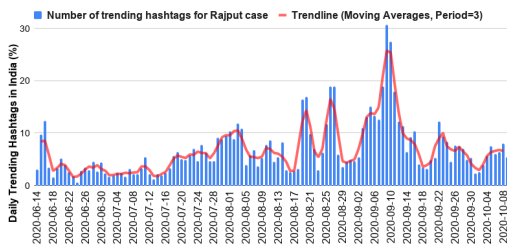


Figure 7: Percentage share of Rajput related hashtags amongst the trending topics

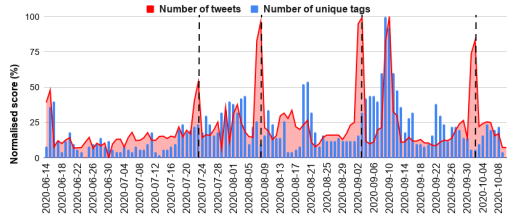


Figure 8: Evidence of unification and coordination among SSRians. The blue bars denote the number of unique tweets related to Rajput’s case, normalised in the range of 0 to 100, that is, the share of unique Rajput’s case related tweets on a given day with respect to the total number of unique tweets on that day. Similarly, the red line graph denotes the normalised (0-100) frequency of the unique trending tags relevant to the Rajput’s case. The dashed vertical lines denote the points in time at which we see unification and coordination among SSRians. The scores for both the time series have been normalised to highlight possible co-occurrence between the two metrics (volume of tweets and number of unique tags).

Maharashtra and Bihar, are actively engaged in the case - upwards of two thirds of politicians from JDU, Shiv Sena and RJD have at

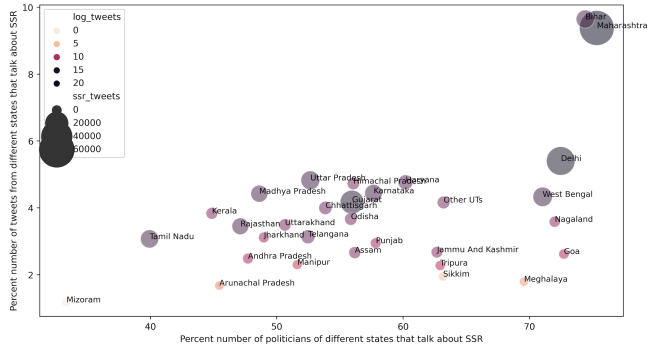


Figure 9: Visualisation of different parties in India in relation to the response received to the Rajput case. Size of the bubble corresponds to the total number of tweets that are related to the Rajput case by a state. The shade of the bubble corresponds to the total number of tweets by the state in the time period considered. Bihar and Maharashtra politicians are both actively involved in the case with a higher percentage share of politicians and tweets related to the case.

least once spoken about the issue. Nonetheless, a significant share of the parties that are mainly active in Maharashtra (Shiv Sena and NCP) and ones that are in Bihar (JDU and RJD) engage significantly with the topic.

In this figure, while the BJP looks like it hovers around the median in terms of engagement, its actual influence is much greater, since it boasts far more politicians, and dominates the total number of tweets on the subject. Since it is a national party with a presence throughout the country, the share of total tweets is relatively lower than for the parties in Maharashtra and Bihar. However, the influential leaders in BJP have had a more important hand in what has happened online. Table 1 shows the hashtags for the time periods marked in figure 8.

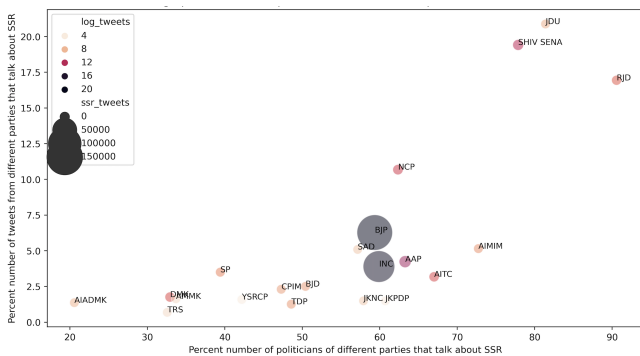
We made two sets of accounts to examine this. To create the first set, we filtered out the accounts that had at least one hashtag linked to the case and then considered only the top 500 accounts with



**Table 2: Table with the  $\chi^2$  test showing statistical dependence of accounts that talk about Rajput with the political parties in India. Null hypothesis (H0): Accounts are not related to the political parties; Alternate hypothesis (H1): Accounts are related to the political parties. Our  $\chi^2$ -test results indicate a p-value of  $4.73 \times 10^{-38}$  ( $<.05$ ) and  $\chi$ -value of 171.88 which implies that the null hypothesis (H0) is rejected i.e. accounts are dependent on the political affiliation.**

Accounts	BJP	INC	Regional	Total
Accounts that discuss Sushant Singh <i>Rajput</i> 's case	347 (69.4%)	93 (18.6%)	60 (12%)	500
Accounts that do not discuss Sushant Singh Rajput case	144 (28.8%)	262 (52.4%)	94 (18.8%)	500
Total	491	355	154	1000

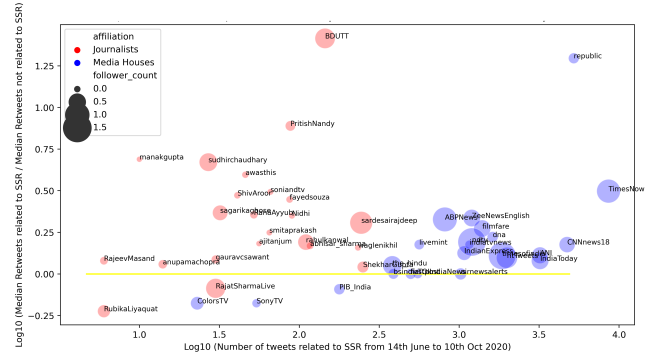
the maximum usage of such hashtags. We called this collection as the ‘Accounts that discuss Sushant Singh Rajput’s case’. For the second set, we removed accounts that contained more than 3 hashtags related to the case and then considered only the top 500 accounts with the maximum usage of hashtags not related to the case. We referred to this collection as ‘Accounts that do not discuss the Sushant Singh Rajput case’. From  $\chi^2$ -test (table 2), we find that the BJP leaders are far more likely to actively engage about Sushant Singh Rajput on Twitter.



**Figure 10: Visualisation of different states in India in relation to the response received to the Rajput case. Size of the bubble corresponds to the total number of tweets related to the case by a party. Shade of the bubble corresponds to the total number of tweets by a party in the time period considered. Amongst regional parties, JDU, Shiv Sena and RJD politicians are actively involved with a higher percentage share of politicians and tweets related to the case. BJP, INC and NCP are the national parties most relevant to the case in terms of the volume of their tweets, and the engagement share by their respective politicians.**

In case of media, they played a strong role in promoting the story through its repeated coverage. As we see in figure 5, media houses were already more aggressive in pushing the story on social media than individual journalists. Figure 11, gives us a different look at the contours of the coverage. We see for instance that Republic TV and TimesNow, the two most conservative leaning news channels, talked about the issue more than other channels. We also see that they were generally rewarded by the public, to the extent that retweets are an indicator, for their coverage.

In Figure 11, all the entities above the yellow line ( $y>0$ ) indicate that the median retweet rate earned on tweets related to the case



**Figure 11: Median Retweet Response of 50 most followed Journalists and Media Houses on Twitter. Size of the bubble corresponds to the absolute number of followers of the entity. The yellow line ( $Y = 0$ ) separates the actors which benefited from talking about the *Rajput*'s case from those who didn't. All the entities above this line got higher median retweets from tweeting about SSR than from tweeting about any other topic in the time period considered.**

exceed those compared with the median of other topics for the study period. The size of the bubble is proportional to the number of followers an account has. Significantly, more than 90 percent of the most followed journalists and media houses are rewarded with increased engagement when they discuss the case. Here, Republic TV stands out as the largest beneficiary, with more than 19× increase in the number of median retweets. In other words, while the media did inordinately cover this issue, the ‘market’ rewarded it for its coverage.

To sum up, this section outlined the political engagement in astroturfing. We see the role of political parties in engaging specific narratives at a surprising scale, and that they were able to bring enough shade to the Maharashtra police that a central investigation was ordered into the case. The engagement of media houses, specifically the outsize engagements of TimesNow and Republic, two of the largest English-language television channels in India, also highlight the ways that an audience had been built for this issue.

5.1.3 Framing.

. Media houses such as TimesNow and Republic TV received significant engagement from covering the case - and both engaged in speculative and incendiary reporting. This is evidenced in the framing of headlines in stories they published, as well as their engagement with key actors who were involved in astroturfing stories on Twitter. In figure 12 we observe ways in which channels used language that may incite users. In figure 12a TimesNow proposes that there were drugs and betrayal, and also posts a hashtag #IndiaForRheaArrest which proposes that it is the wish of the nation that that Rajput's partner be arrested.



Figure 12: Astroturfing by major media houses

In figure 12b, Republic TV provokes its viewers by presenting the position #BharatVsRheaPR. The hashtag is important for two reasons. First, its construction presents Rajput's partner Rhea Chakraborty as an antagonist to national interest (Bharat means India). Suggesting that she had a Public Relations machinery working on her behalf, undermining what the "rest of the nation" wants. Similarly, we see the use of aggressive, sensationalist language from TimesNow, stating "Massive Times Now Investigation Impact" and "First Drugs, then Dhokha" (betrayal), which helped propel a theory on social media that a larger drug conspiracy was the driver of the suicide.

These two Indian news channels, Republic Media Network and India Today, are evident outliers in Figure 11, because their Twitter channels are extremely vocal about the Rajput case, and they also receive high amounts of retweets for these contributions. As a result, the topical trends of their tweets hold significant insights about the information circulating around Twitter, and hence warrant a deeper analysis. There is a visible disparity in the kind of response and viewership they received on their social media platforms: Republic Media Network is far more successful with their discursive ventures, as compared with India Today. A qualitative examination of the themes at the centre of their coverage holds insights as to why this difference exists. While both channels covered the story aggressively, some of their strategies are helpful in understanding both the astroturfing and how the seeds of conspiracy are planted in the audience's mind. While a number of television channels started with coverage of mental health, which we also see on the Twitter patterns, Republic moved quickly to Bollywood nepotism, which introduced the idea of conspiracy.

Engagement by influencers were also important in framing the discourse around Rajput's case. We mapped out the cast of characters discussed every day on the titles of YouTube videos of the major news channels. One pattern we notice is that Television

channels used a strategy straight more commonly seen in drama television, of periodically introducing new characters, who had never been mentioned earlier in the coverage. For instance, initially, these subjects were people who had been friends or in relationships with the deceased. By late-July, the coverage became increasingly aggressive and antagonistic towards the film industry, fewer public figures were willing to be on television. At this point channels went after people who had worked for Rajput including his domestic staff, gym trainer and key-maker. People who made deliveries, or worked in security around the homes of the key people were also interviewed, sometimes forced on camera by aggressive interviewers. While key characters like Rhea and her family were targeted through trending hashtags that would suggest it was the key topic in India, even lesser characters were systematically attacked - Rajput's cook, who lost his livelihood when the actor passed away, was traced to his next workplace by Republic TV which was outed on the news. The channel released a news story suggesting he was part of the conspiracy, with a story headlined 'key suspect tracked down' and a suggestion that he had been employed at the behest of Rhea Chakraborty.<sup>4</sup>

The form factor of television news through this entire period was one that involved multiple guests on a single show, a format that generally favors loud and controversial behavior, adding further to the frenzy in the coverage. This point allows for a transition into talking about conspiracy, since the drivers of media coverage and the conspiratorial underpinnings of the content bear close examination.

## 5.2 Conspiracy

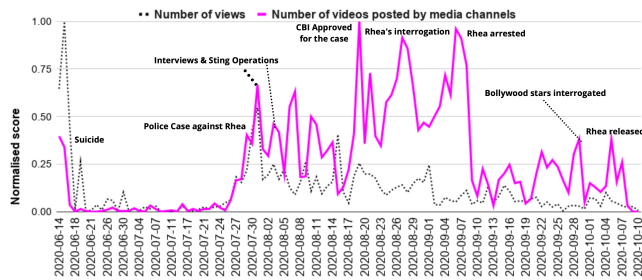
### 5.2.1 Framing.

. On comparing trends regarding the Rajput case on Twitter retweets and YouTube, we see that the same trends are relevant in both places. We see that while there was little evidence of dramatically different view-counts for videos posted on YouTube on Rajput for the first month, the situation changes in late July. By this point, eight YouTube channels of news sources we studied had curated playlists for the content they had on the Rajput case. Beginning with the filing of a case against Rhea Chakraborty, the view counts of stories about the case start to grow dramatically.

Figure 13 shows the comparison between views and the content posted on YouTube. Most of the content in the *Rajput's* case was posted between 27th July and 10th September by the news channels. As the story progresses, we find both aggressive journalism, but also evidence that this has an affective appeal. Thus, a deceptive interview of the late actor's physical trainer, followed by one of his cook were hugely popular, and even though these individuals had no established connection to the case, they were brought into its ambit by the coverage. Media houses started to use hashtags like #SushantWasMurdered and #ArrestCulpritsOfSSR without substantiating the claim with evidence from law enforcement, or that there were any actual "culprits". Media houses also used hashtags that presented innuendo including #WhoKilledSushant and #SushantDeathMystery which worked also as clickbait for stories published online. The push for a central agency investigation of the

<sup>4</sup><https://www.republicworld.com/entertainment-news/bollywood-news/sushants-cook-neeraj-singh-tracked-employed-by-actor-close-to-rhea.html>

case, claiming incompetence and political motivation on part of the Maharashtra government, was also relayed by the news, despite its initial push by BJP politicians.

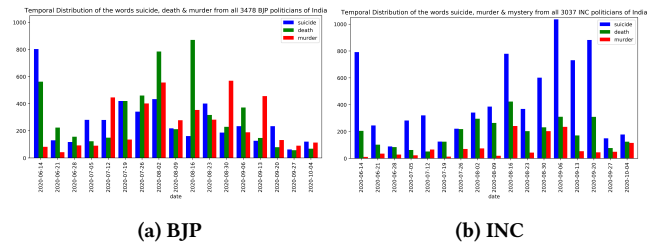


**Figure 13: Comparison of the number of views and the volume of content posted on YouTube by major news channels. The solid pink line chart denotes the number of YouTube videos posted by the media channels under consideration on a daily basis. This value has been normalised in the range of 0 to 1. Similarly, to measure the user’s response against these videos, we consider the maximum number of views for each day to these videos and then normalize it again from 0 to 1.**

Next, we considered how Twitter activity varied between parties and across states. The theme of ‘suicide’ has been the starting point of the entire case and was quite actively in discussion in the initial weeks. We selected the theme of ‘murder’ based on the initial word clouds which suggested that the term started appearing frequently from the second week after the actor’s demise. The term ‘death’ evolved from a somewhat neutral point of view and doesn’t convey any stance. Hence, these three terms help compare the different ideologies that prevailed on Twitter during the case. First, we analysed tweets of politicians to access their framing of the incident. Here words like ‘suicide’, ‘murder’ and ‘death’ are indicative of the imagery politicians tried to create to push a particular version of the story playing out in the media and on Twitter. We mapped the usage of these terms temporally in tweets of the two main parties to examine the ways in which the discourse has evolved over time.

Figures 14a and 14b show the temporal variation in the use of these terms for the BJP and INC. Evidently, the both parties used ‘suicide’ to refer to the incident in the first week, but the BJP shifted focus to use ‘murder’ as the conspiracy theories grew. On the other hand, the opposition INC continued to use ‘suicide’ in its references to the tragedy. Thus, rather than this being an outcome of general doubt about the case itself, the data would suggest either that politicians belonging to the BJP are more likely to propagate a narrative other than suicide.

Additionally, we examined more specific topical preferences of BJP and INC politicians individually, and over time. We followed the same LDA methodology we used in Section 5 and found the highest coherence score of topic clusters at sizes 12 and 8 respectively for BJP & INC. We plotted the distribution of the most relevant words in each topic in figures 15. Figure 16 shows the topics grouped into the themes discussed previously in the context of Figure 4. From both these figures, it can be observed that while the BJP discusses topics surrounding both suicide and murder, INC’s discussions only



**Figure 14: Comparison of the tweets containing ‘Suicide’/‘Death’/‘Murder’ amongst BJP & INC politicians in India**

center around the suicide aspect. Though INC uses the term *murder* in their tweets, topics based on murder do not emerge from LDA. Further, we note that INC tweets exclusively on media related issues, while BJP evades the topic throughout. To quantify the difference in topical preferences of both parties, we use Shannon’s entropy in our analysis [101]. Shannon’s entropy quantifies the diversity of elements in a dataset – the higher the entropy, more the elements of a dataset take higher values. In our context, higher entropy of a theme indicates pervasive use of tweets related to the theme, over the time period considered. We find that the Shannon entropy of INC’s suicide theme (32.4) is more than double that of BJP’s suicide theme (15.5). This is because, as Figure 16 shows, INC tweets about suicide throughout the time period whereas BJP tweets about suicide only in the beginning, post which its politicians primarily build a narrative around murder. Related, we find that the entropy of BJP’s theme on murder (36.6) is also more than double that of its theme on suicide (14.5).

We also plotted the temporal evolution of hashtags used by politicians from Bihar and Maharashtra. We find that in both states, there are calls for a CBI probe and attacks directed at the Maharashtra Government, but in Maharashtra, only from the opposition BJP. In Bihar, the issue became increasingly important since it was a state election year, and even if politicians were unsupportive of the conspiracy theories, they had to address them, usually in antagonistic tone against their fellow state of Maharashtra. A number of hoardings from the BJP came out in support of Sushant Singh Rajput, using the one we see in Figure 17, using a lemniscate suggesting he is infinitely with his supporters, with text highlighting that he will neither be forgotten, nor will the perpetrators be allowed to forget. The same slogans were also distributed as stickers [104].

The Bihar police also brought Rhea Chakraborty to the center of the conversation when the head of the police there spoke disparagingly of her on television, on a video that subsequently went viral online. But the case also made clear the incredibly complex set of relationships between the various actors and their positioning of themselves and what they stood for.

For instance, we observe a coalescence between conspiracy theory and hate speech, as a series of misogynistic hashtags started appearing accusing Rhea of black magic. The conversation also developed around her being Bengali, with a series of related hashtags and messages disparaging Bengali women doing their rounds.[64]. This in turn became an issue between Bihar and the neighbouring

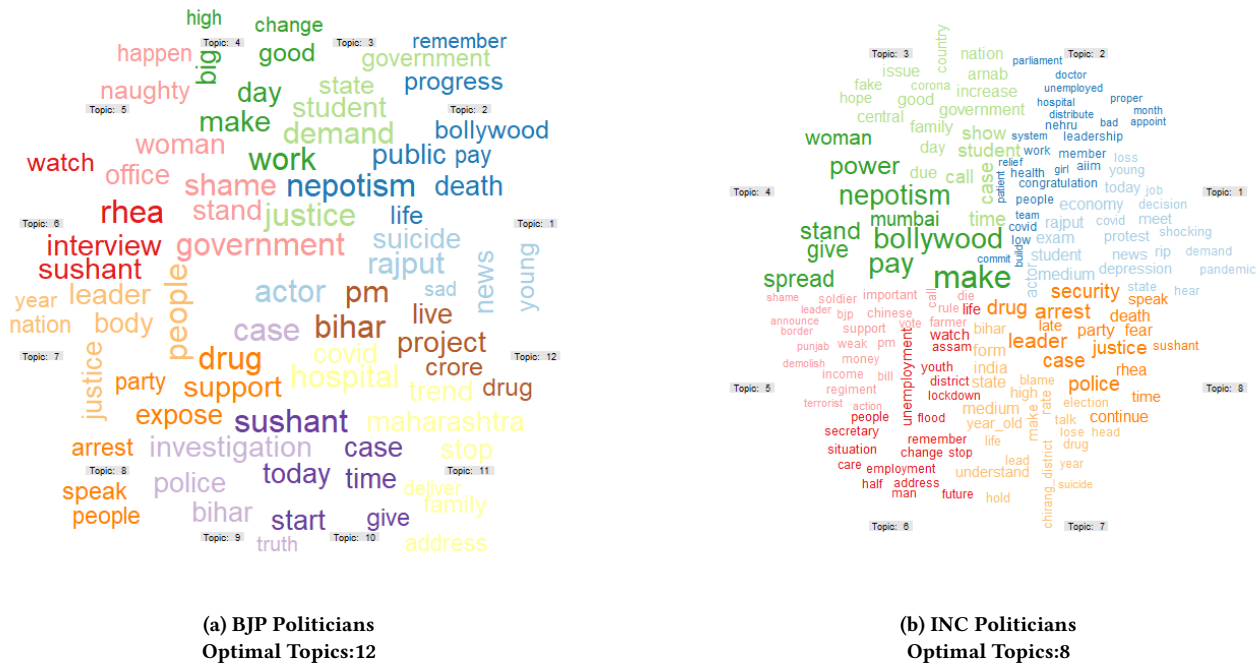


Figure 15: Wordclouds of the topics obtained from BJP and INC Politicians' tweets. The different colors represent distinct topics

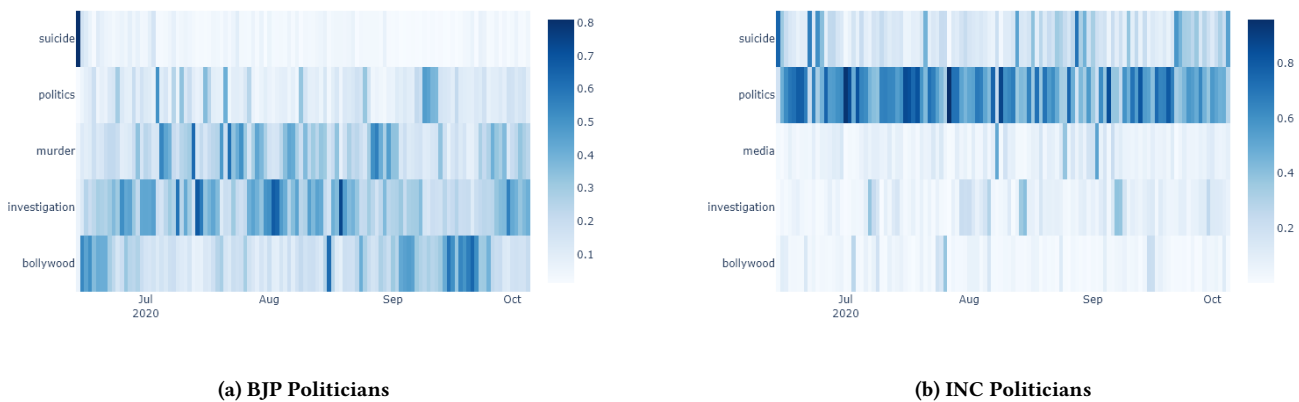


Figure 16: The two heatmaps show the topical preferences by Politicians of BJP and INC respectively.

West Bengal, with Bengali INC politicians jumping into the fray for on behalf of Rhea, against Bihar [110].

Finally, we look at some of the misinformation circulating during the issue. Interestingly, there was less misinformation floating about than would be proportionate to the coverage in the news [76]. Studies of the COVID-19 related news cycle just preceding this showed much higher rates of weekly debunked misinformation [5]. This can partly be attributed to the mainstream media coverage being so aggressive and loaded with innuendo that it ate into the

space for the kinds of misinformation that fact-checkers typically debunked - forwarded conspiracy theories.

One strategy we observed in the news cycle was the use of click-baiting that either involved names of people, including some of those consistently targeted through this case, or speculations about the contents, often alongside hashtags and graphics stating 'Breaking news'. The early few debunked stories included misinformation on some of the more regularly trolled persons in public life including INC leader Rahul Gandhi, which claimed he had referred





**Figure 17: Figure showing the visual posters created and circulated to bring people together for the campaign**

to Rajput as a cricketer, and subsequent parody misinformation about Aaditya Thackeray, another frequent target of trolls. Such misinformation follows a more consistent trend of anything on the news cycle being used as a means to attack a few individuals who have become common political targets.

The second and more insidious form of misinformation drew from the COVID-19 cycle. In the months preceding COVID-19, there were a number of stories doing rounds on social media demonizing Muslims, a trend which accelerated once India went into lockdown, as Muslims were increasingly blamed for the health crisis. [5, 10]

The trends of conspiracy theories against Muslims alongside ultra-nationalist rhetoric continued into the discourse around the Rajput case. A widely circulated piece of misinformation that did its rounds on WhatsApp was an image of film stars Deepika Padukone and Ranveer Singh at a social event with Pakistan-based gangster Dawood Ibrahim as seen in figure 18a. The reference here is to being anti-national, while the story is not directly about Rajput, it underlines what is presented as the kinds of people he had to work with in the industry. Much of the misinformation that circulated through this period was about others in the film industry. These aim to cement the narratives of Rajput being an outsider in an industry that is fundamentally degenerate, and in cahoots with the murky underworld.

To sum up, this section highlighted the framing of conspiracy theories that align well with the existing work on conspiracy theories. We see the use of commonly targeted political actors, tapping into peoples' existential fears by presenting a conspiracy by major actors such as global mafia, and the crushing of the little guy – all of which have emotional appeal. We also see here that the two largest parties have entirely different profiles of how they talk about the issue. This at once points to the value seen by political antagonists on this issue, but also the ability that parties have to move a discourse online.

### 5.2.2 Actors.

A few individual figures were important in their propagation of innuendo. BJP Parliamentarian Subramanian Swamy and actor Kangana Ranaut were both central to the discussion of the case. Swamy, one of the most influential voices on social media in India with over 10 million followers on Twitter, has in the past also been

known to promote falsehoods earlier during the COVID crisis,<sup>5</sup> tweeted several times on the issue. On July 9, 2020 (Figure 19), the politician proposed that the case needed legal consideration for examination, and put out the handle of a lawyer<sup>6</sup>.

By putting this out there, Swamy did not make an explicit claim of wrongdoing, but churned the rumour mills. Swamy's engagement of the lawyer made him one of the key leaders of the *Rajput* case movement, along with others who were mobilized. Swamy also released a long list of reasons proposing why he was convinced it was murder, carefully curating it with reasons why it may be also be considered suicide, with a clinical hypothesis testing tone. The message included assertions about the body and its condition, the length of the rope, the furniture in the home that could be used for suicide, as well as a series of propositions about the body language of friends, the reactions from Bollywood stars, his apparent lack of financial problems etc. as reasons for why it was not suicide.<sup>7</sup>

Outside of Swamy, the majority of politicians who tweeted about the case were mid- to low- level party functionaries like Manoj Tiwari, Ravi Tewari (Figure 19) and Prashant Patel, who nonetheless had significant online following. From among those who are public figures, these included less known actors Shekhar Suman and Payal Rohatgi, who made incendiary statements and claims around the case. These celebrities, presenting themselves as outsiders themselves to a core cabal of Bollywood insiders. These stars, despite not being among the top stars, had sufficiently loud voices and following on social media, and had in the past aligned themselves with ultra-nationalist causes. Alongside them, there were a small number of journalists – most significantly Pradeep Bhandari and Arnab Goswami, who were champions of the cause on social media and television respectively.

A case in point is Pradeep Bhandari's message from August 7 (Figure 20), in which he proposes that an emoticon used by Disha Salian, which Rhea Chakraborty also uses. This trope, of using an innocuous coincidence as grounds for suspicion is a textbook technique for conspiracy theories [114].

Another case of an insidious message promoting a conspiracy theory is that of Kangana Ranaut's message on July 30. The message, filled with innuendo, uses a slur, "baby penguin" to refer to Aaditya Thackeray, the son of the Maharashtra Chief Minister Uddhav Thackeray was involved in the case. Ranaut uses herself as a prop, suggesting that if she is found hanged, Thackeray would be responsible. The message is multilayered, because she uses homophobic undertones, by connecting Bollywood producer Karan Johar, one of the earliest targets of the campaigns, with Thackeray. The message taps into a widely circulated conspiracy theory that Thackeray was connected to the case, which was why Mumbai police wanted to prove it was a suicide (Figure 20). However, despite the conspiracy theories aimed at various others, the locus of attention, even among politicians, stayed on *Rajput's* partner Rhea Chakraborty, who featured in a total of 9.8% of the total tweets from politicians.

<sup>5</sup><https://timesofindia.indiatimes.com/life-style/health-fitness/health-news/is-the-indian-covid-19-strain-weaker/articleshow/74823660.cms>

<sup>6</sup>Name not included since he is not a public figure

<sup>7</sup><https://m.dailyhunt.in/news/india/english/crowdwisdom360-epaper-cwisdom/4+main+conspiracy+theories+on+sushant+rajput+s+death-newsid-n203068136>



(a) Fake claim linking Sushant Singh Rajput's suicide to Dawood Disha Salian and late actress Jiah Khan's then boyfriend Sooraj Pancholi (source: India Today)



(b) Fake claim suggesting link between Sushant Singh's Ex manager Pancholi

Figure 18: Some examples of misinformation stories spread on social media



Figure 19: Politicians (Ravi Tiwari Bihari & Subramaniam swamy) leading the narrative around mid July for CBI



Figure 20: Tweets by public figures in media and television presenting conspiracies in the Sushant death

To sum up, we see that a number of influencers, including leading national politicians, were spreading innuendo or misinformation, and projected themselves as seekers of the truth in doing so.

## 6 DISCUSSION AND CONCLUSION

In this study, we analysed tweets of politicians, media houses, journalists, and online videos of news networks in the context of the

Sushant Singh Rajput case. We considered topical aspects and temporal variation in tweets posted by politicians and media houses. Moreover, we found that there were four major incidents of collaborative motivated propagation of 'SSR' related hashtags when the number of tweets rose substantially but the number of hashtags remained constant, indicating a coalescing around a select few hashtags. We then considered the media's astroturfing on the issue, with hashtags like '#IndiaForRheaArrest' and '#BharatVsRheaPR', and the role that actors and influencers played in promoting the cause. Addressing the conspiratorial aspects of the case, we looked at the different framing used by India's two main political parties. While the INC mostly called the incident as a suicide, the BJP consistently used terms like 'murder', 'conspiracy' and 'investigation' when tweeting about the subject. Moreover, groups sympathetic to the online SSRian community posted morphed and doctored images, falsely implying connections between Bollywood celebrities and mafia. Lastly, the data also show that misinformation propagated when key influencers, such as actor Kangana Ranaut engaged it. In turn, influencers who were virtually unknown prior to the SSR case, such as lawyer Ishkaran Bhandari, gained social media virality following their tweeting about the issue in a tone that allied with conspiracy theories.

The events following the death of Sushant Singh Rajput offer much insight into the complex social and media environment of India. Elements of regionalism emerged quickly out of the case, with the sparring first between Maharashtrians and Biharis of the investigation, and then between Biharis and Bengalis over Rhea Chakaborty, Rajput's Bengali partner. Before long, political parties were involved, attacking each other, and about as swiftly, aspects of class, and caste crept into the discussions. Rajput, as his name indicates, was a Thakur-caste man, and important in the political

climate of Bihar with an upcoming election. To an extent, even those politicians who would have eschewed the case had no choice but to get involved once the media had thrown the gauntlet.

But perhaps the most important defining factor of the case was the framing of Rajput as an outsider. The young man was a migrant from a small town in the Hindi-speaking heartland who made it to stardom in an entertainment industry that is run on networks and nepotism. This concept could well be at the heart of what made him a social media hero. Despite being a movie star, he was projected as an underdog, someone voiceless, much like the social media users themselves who spoke up for him. It teases out the notion of a political enemy [5]. This enemy is what one themselves is not, it is that which defines the distinction between the authentic and the illegitimate – it is the archetype of the nebulous system of elites that controls everything. The Bollywood elites who were initially targeted in small bits, were by far the main targets after a few months of the case breaking. One perspective may be that this was coming for a while. A number of entertainers in recent months, especially after the large scale student riots and amendments to citizenship laws, tweeted in support of protesters. This had already set the stage for painting them in poor light, and the story rapidly devolved into a free for all in which a range of entertainers with no connection to the case, were dragged into the discourse.

## 6.1 Conspiracy

The case of Rajput is a case of both existential and social exposure to conspiracy theory. The timing of the case is undeniably important. While there were actual conspiracy theories around the death of Sushant Rajput as driven by his involvement in COVID-related patent <sup>8</sup>, there was also significant coverage of the timing of the actor's death, and what this meant for Indians' news consumption at the peak of COVID lockdowns <sup>9</sup>. The case broke when there was much paranoia over COVID in India, the first wave of an extremely draconian lockdown had recently ended, and the country was mired in one of its worst migrant crises with the catastrophic job losses throughout cities. The story tapped into middle class Indians' existential fears about an uncertain future. The people consuming the television and internet content about the case were not India's poor, but rather the middle-income urban populations. The last several years have seen tens of thousands of farmer suicides out of poverty, even suicides that were explicitly acts of protest, none has had even a small fraction of the impact of this case. Indeed, as our data show, television channels were consistently rewarded through higher retweets and higher engagement with web content for taking this story forward.

The notion of a 'crippled epistemology' also emerges in the deafening cacophony of television coverage. Even the most avid and partisan watchers of television news often admit to embarrassment at the kind of drama hosts indulge in, but that is the reality of most television, across the ideological spectrum. The crossover of incendiary hashtags and ideas from television to the internet and vice-versa serve as a grim window into a muddled media environment [46, 81]. Viewership rose sharply with clearly problematic

coverage of hapless bystanders to the tragedy including Rajput's trainer, cook, key maker, and a range of security guards and even passers by. Speculative material, including the linking of the case with Disha Salian's death found high viewership online. The arrest of Rhea Chakraborty saw widespread jubilation.

We also see the social aspect of conspiracy theory acceptance in the way that a nationalism got enmeshed into the politics of attack, with the intersection of the BJP's nationalist rhetoric and the *SSRian* movement. Members create an identity for themselves here, using normative terms around justice and revolution. Their acceptance of conspiracy theories or misinformation is in part a reaffirmation that their social identities are intact, valid, and part of a community.

## 6.2 Astroturfing

The elements of astroturfing we have seen here are also a sign of things to come [53, 59]. Subramanian Swamy's tweet on the subject are an important indicator of how quickly an online army can be brought alive. That the *SSRians* were consistently able to trend hashtags, and engage sufficiently with mirrored television content on YouTube to make it worthwhile for media houses to keep at the story, says a lot about how coordinated campaigns can work around an issue that a small group of dedicated followers choose to promote. The recurrent use and coordinated trending of hashtags that used nationalistic hyperbole such as '#NationAgainstRhea', '#NationWithSSR' etc. presented a spectre of widespread sympathy with the cause of the *SSRians*. They use the figure of the vilified partner as an intended object of derision ties in with the larger and gendered anti-Bollywood rhetoric [61].

While it was widely reported in the Indian news that there was a great deal of bot activity in the tweeting around the issue <sup>10</sup>, it is also clear that this does not capture the entirety of messaging on the matter. What we see here is a heady mix of extreme fandom alongside an existential quest for space and voice [27]. Not unlike in the recent past, successful narratives of other outsiders on one or another aspect of India's feudal institutions have found appeal. The most prominent of these is probably the prime minister Narendra Modi himself. Empathizing with Rajput is rooting for the underdog.

The astroturfing undoubtedly had an effect on the ground – the repeated use of 'murder' and 'mystery' over suicide, driven by politicians and a small number of media houses, undoubtedly moved the pendulum of public opinion away from the initial concerns over mental health to a raging search for a villain [20]. While Rhea Chakraborty emerged as undoubtedly one of the most viciously witch-hunted individuals in decades, a lot more would tumble over as reputations of the police, of politicians, and eventually, of some of the top entertainers of the country would be dragged through the dirt.

In a campaign so intense that there are pitched battles over his Wikipedia entry, <sup>11</sup> there is much for Indians to take out of this affair. There is little doubt that the weaponization of social media that has worked exceptionally well for politicians carrying out hack

<sup>8</sup><https://www.indiatoday.in/fact-check/story/fact-check-conspiracy-theory-claims-sushant-was-killed-for-a-corona-testing-patent-1714587-2020-08-24>

<sup>9</sup><https://theprint.in/opinion/pov/rhea-chakraborty-hathras-delhi-riots-and-covid-all-these-have-something-in-common/520142/>

<sup>10</sup><https://www.livemint.com/industry/media/ssr-death-case-cyber-experts-find-over-1-lakh-suspicious-twitter-accounts-11604454842844.html>

<sup>11</sup><https://thewire.in/tech/sushant-singh-rajpur-death-wikiped-page-battle>



jobs on their rivals in the past may be lurking around the corner to bite them, as the cult of *SSRians* takes on a life of its own [37].

In conclusion, there is also an unmistakable gendered aspect to this. A number of female actors have taken their own lives over the years. Not only did none of these stories garner the same attention, most ended with some form of victim blaming. The headlines on Republic TV, screaming out some variant of the 'NationAgainstRhea' was in fact an apt description of the horrific hounding and eventual incarceration of a woman, dealing with her own tragedy. As the coverage devolved into allegations about drugs and Bollywood, again it was a number of female stars who found themselves accused of crimes. The Sushant Singh Rajput case will eventually go away with time, but the articulation of misogyny at its heart will haunt Indians much longer.

## REFERENCES

- [1] 2018. Methodology for fact checking. <https://www.altnews.in/methodology-for-fact-checking/>
- [2] 2019. Khoj. <https://services.tattle.co.in/khoj/dashboard/>
- [3] Ali Ahmad, Muhammad Rashid Hafeez, and Muhammad Shahbaz. 2020. Sell-outs, fadsos or whores?" representation of politically active Pakistani women on social media. *Pakistan Social Sciences Review* 4, 1 (2020), 40–50.
- [4] Wasim Ahmed, Josep Vidal-Alaball, Joseph Downing, and Francesc López Seguí. 2020. COVID-19 and the 5G conspiracy theory: social network analysis of Twitter data. *Journal of Medical Internet Research* 22, 5 (2020), e19458.
- [5] Syeda Zainab Akbar, Anmol Panda, Divyanshu Kukreti, Azhagu Meena, and Joyojeet Pal. 2021. Misinformation as a Window into Prejudice: COVID-19 and the Information Environment in India. *Proceedings of the ACM on Human-Computer Interaction* 4, CSCW3 (2021), 1–28.
- [6] M Athar Ali. 1995. The use of sources in Mughal historiography. *Journal of the Royal Asiatic Society* 5, 3 (1995), 361–373.
- [7] Rakesh Ankit. 2018. Caste politics in Bihar: In historical continuum. *History and Sociology of South Asia* 12, 2 (2018), 115–136.
- [8] Robert J Antonio. 2019. Ethnoracial Populism: An Alternative to Neoliberal Globalization? *Social Epistemology* 33, 4 (2019), 280–297.
- [9] Priya Arora. 2020. Sushant Singh Rajput, Bollywood Star Dies at 34. *NYTimes* (Jun 2020). <https://www.nytimes.com/2020/06/14/world/asia/sushant-singh-rajput-death.html>
- [10] Shakuntala Banaji and Ram Bhat. 2020. Disinformation against Indian Muslims during the COVID-19 pandemic. <https://blogs.lse.ac.uk/mediase/2020/09/24/disinformation-against-indian-muslims-during-the-covid-19-pandemic/>
- [11] Joanne Barkan. 2012. Hired guns on astroturf: How to buy and sell school reform. *Dissent* 59, 2 (2012), 49–57.
- [12] Michael Barkun. 2013. *A culture of conspiracy: Apocalyptic visions in contemporary America*. Vol. 15. Univ of California Press.
- [13] Anil Bilgihan and Youcheng Wang. 2016. Technology induced competitive advantage: a case of US lodging industry. *Journal of Hospitality and Tourism Technology* (2016).
- [14] James Bingaman. 2020. "Dude I've Never Felt This Way Towards a Celebrity Death": Parasocial Grieving and the Collective Mourning of Kobe Bryant on Reddit. *OMEGA-Journal of death and dying* (2020), 0030222820971531.
- [15] David M Blei, Andrew Y Ng, and Michael I Jordan. 2003. Latent dirichlet allocation. *Journal of machine Learning research* 3, Jan (2003), 993–1022.
- [16] outlook web bureau. 2020. AIIMS Panel Rules Out Murder In SSR Death Case: Report. *Outlook India* (2020). <https://www.outlookindia.com/website/story/india-news-according-to-sources-aiims-panel-rules-out-murder-in-ssr-death-case/361402>
- [17] Priyank Chandra and Joyojeet Pal. 2019. Rumors and Collective Sensemaking: Managing Ambiguity in an Informal Marketplace. In *Proceedings of the 2019 CHI Conference on Human Factors in Computing Systems*. 1–12.
- [18] Wei-Chu Chen and Staša Milojević. 2018. Interaction or Segregation: Vaccination and Information Sharing on Twitter. In *Companion of the 2018 ACM Conference on Computer Supported Cooperative Work and Social Computing* (Jersey City, NJ, USA) (CSCW '18). Association for Computing Machinery, New York, NY, USA, 301–304. <https://doi.org/10.1145/3272973.3274082>
- [19] Anupama Chopra. 2007. *King of Bollywood: Shah Rukh Khan and the seductive world of Indian cinema*. Grand Central Publishing.
- [20] Laurenz A Cornelissen, Lucia I Daly, Qhama Sinandile, Heinrich de Lange, and Richard J Barnett. 2019. A computational analysis of news media bias: A South African case study. In *Proceedings of the South African Institute of Computer Scientists and Information Technologists 2019*. 1–10.
- [21] Barry Coward and Julian Swann. 2017. *Conspiracies and conspiracy theory in early modern Europe: from the Waldensians to the French revolution*. Taylor & Francis.
- [22] Priya Deshingkar, Sushil Kumar, Harendra Kumar Chobey, and Dhananjay Kumar. 2006. The role of migration and remittances in promoting livelihoods in Bihar. *Overseas Development Institute, London* (2006), 1–47.
- [23] India Today Web Desk. 2018. Sridevi to Bal Thackeray: How Mumbai said goodbye to its icons. *India Today* (2018). <https://www.indiatoday.in/movies/celebrities/story/sridevi-funeral-photos-mumbai-bal-thackeray-1179534-2018-02-2>
- [24] Karen M Douglas, Robbie M Sutton, and Aleksandra Cichocka. 2017. The psychology of conspiracy theories. *Current directions in psychological science* 26, 6 (2017), 538–542.
- [25] Susan T. Dumais. 2004. Latent Semantic Analysis. *Annual Review of Information Science and Technology (ARIST)* 38 (2004), 189–230. <https://www.learntechlib.org/p/97537>
- [26] Prabhaskar K Dutta. 2020. Sushant Singh Rajput's death: The politics and the probe. *India Today* (Jul 2020). <https://www.indiatoday.in/news-analysis/story/sushant-singh-rajput-death-politics-and-probe-1706465-2020-07-31>
- [27] Brianna Dym, Cecilia Aragon, Julia Bullard, Ruby Davis, and Casey Fiesler. 2018. Online Fandom: Boldly Going Where Few CSCW Researchers Have Gone Before. In *Companion of the 2018 ACM Conference on Computer Supported Cooperative Work and Social Computing*. 121–124.
- [28] Asbjørn Dyrendal. 2016. Conspiracy Theories and New Religious Movements. *The Oxford Handbook of New Religious Movements* 2 (2016), 198–211.
- [29] Gunn Enli. 2017. Twitter as arena for the authentic outsider: exploring the social media campaigns of Trump and Clinton in the 2016 US presidential election. *European journal of communication* 32, 1 (2017), 50–61.
- [30] Hamid Foroughi, Yiannis Gabriel, and Marianna Fotaki. 2019. Leadership in a post-truth era: A new narrative disorder? *Leadership* 15, 2 (2019), 135–151.
- [31] John Frow. 1998. Is Elvis a God? Cult, culture, questions of method. *International journal of cultural studies* 1, 2 (1998), 197–210.
- [32] Katie Z Gach, Casey Fiesler, and Jed R Brubaker. 2017. "Control your emotions, Potter" An Analysis of Grief Policing on Facebook in Response to Celebrity Death. *Proceedings of the ACM on Human-Computer Interaction* 1, CSCW (2017), 1–18.
- [33] Kiran Garimella, Michael Mathioudakis, Gianmarco De Francisci Morales, and Aristides Gionis. 2016. Exploring Controversy in Twitter. In *Proceedings of the 19th ACM Conference on Computer Supported Cooperative Work and Social Computing Companion* (San Francisco, California, USA) (CSCW '16 Companion). Association for Computing Machinery, New York, NY, USA, 33–36. <https://doi.org/10.1145/2818052.2874318>
- [34] R Kelly Garrett, Daniel Sude, and Paolo Riva. 2020. Toeing the Party Lie: Ostracism Promotes Endorsement of Partisan Election Falsehoods. *Political Communication* 37, 2 (2020), 157–172.
- [35] Rachel K Gibson. 2015. Party change, social media and the rise of 'citizen-initiated' campaigning. *Party politics* 21, 2 (2015), 183–197.
- [36] Ted Goertzel. 1994. Belief in conspiracy theories. *Political psychology* (1994), 731–742.
- [37] Anatolij Gruzd, Jenna Jacobson, Philip Mai, Evelyn Ruppert, and Dhiraaj Murthy. 2016. Introduction to the 2016 International Conference on Social Media and Society. In *Proceedings of the 7th 2016 International Conference on Social Media & Society*. 1–3.
- [38] Liu Hailong. 2019. *From cyber-nationalism to fandom nationalism: The case of Diba expedition in China*. Routledge.
- [39] Richard Hanna, Andrew Rohm, and Victoria L Crittenden. 2011. We're all connected: The power of the social media ecosystem. *Business horizons* 54, 3 (2011), 265–273.
- [40] Jenine K Harris, Sarah Moreland-Russell, Bechara Choucair, Raed Mansour, Mackenzie Staub, and Kendall Simmons. 2014. Tweeting for and against public health policy: response to the Chicago Department of Public Health's electronic cigarette Twitter campaign. *Journal of medical Internet research* 16, 10 (2014), e238.
- [41] Libby Hemphill and Andrew J. Roback. 2014. Tweet Acts: How Constituents Lobby Congress via Twitter. In *Proceedings of the 17th ACM Conference on Computer Supported Cooperative Work & Social Computing* (Baltimore, Maryland, USA) (CSCW '14). Association for Computing Machinery, New York, NY, USA, 1200–1210. <https://doi.org/10.1145/2531602.2531735>
- [42] Hindustantimes. 2020. Sushant Singh Rajput death case: Supreme Court orders CBI investigation. *Hindustan Times* (Aug 2020). <https://www.hindustantimes.com/india-news/supreme-court-orders-cbi-investigation-in-sushant-singh-rajput-s-death-case/story-faDVyVENasV2bsp8u1kQ8l.html>
- [43] Mitchell Hobbs, Hannah Della Bosca, David Schlosberg, and Chao Sun. 2020. Turf wars: Using social media network analysis to examine the suspected astroturfing campaign for the Adani Carmichael Coal mine on Twitter. *Journal of Public Affairs* 20, 2 (2020), e2057.



- [44] Matthew J Hornsey, Matthew Finlayson, Gabrielle Chatwood, and Christopher T Begey. 2020. Donald Trump and vaccination: The effect of political identity, conspiracist ideation and presidential tweets on vaccine hesitancy. *Journal of Experimental Social Psychology* 88 (2020), 103947.
- [45] IANS. 2020. Sushant's father files FIR against Rhea for abetment to suicide. *National Herald India* (Jul 2020). <https://www.nationalheraldindia.com/india/sushants-father-files-fir-against-rhea-for-abetment-to-suicide>
- [46] Joshua Introne, Ania Korsunski, Leni Krsova, and Zefeng Zhang. 2020. Mapping the Narrative Ecosystem of Conspiracy Theories in Online Anti-vaccination Discussions. In *International Conference on Social Media and Society*. 184–192.
- [47] Shanto Iyengar, Yphtach Lelkes, Matthew Levendusky, Neil Malhotra, and Sean J Westwood. 2019. The origins and consequences of affective polarization in the United States. *Annual Review of Political Science* 22 (2019), 129–146.
- [48] Shilpa Jamkhandikar. 2020. Actor's suicide sparks debate about insularity in Bollywood film industry. *Reuters* (Jun 2020). <https://www.reuters.com/article/us-india-bollywood/actors-suicide-sparks-debate-about-insularity-in-bollywood-film-industry-idUSKBN23N13E>
- [49] Brian C Keegan and Jed R Brubaker. 2015. 'Is' to 'Was' Coordination and Commemoration in Posthumous Activity on Wikipedia Biographies. In *Proceedings of the 18th ACM Conference on Computer Supported Cooperative Work & Social Computing*. 533–546.
- [50] Franziska B Keller, David Schoch, Sebastian Stier, and JungHwan Yang. 2017. How to manipulate social media: Analyzing political astroturfing using ground truth data from South Korea. In *Eleventh International AAAI Conference on Web and Social Media*.
- [51] Franziska B Keller, David Schoch, Sebastian Stier, and JungHwan Yang. 2020. Political Astroturfing on Twitter: How to coordinate a disinformation Campaign. *Political Communication* 37, 2 (2020), 256–280.
- [52] Faisal M. Lalani, Ramaravind Kommiya Mothilal, and Joyojeet Pal. 2019. The Appeal of Influencers to the Social Media Outreach of Indian Politicians. In *Conference Companion Publication of the 2019 on Computer Supported Cooperative Work and Social Computing* (Austin, TX, USA) (CSCW '19). Association for Computing Machinery, New York, NY, USA, 267–271. <https://doi.org/10.1145/3311957.3359484>
- [53] Zhicong Lu, Yue Jiang, Cheng Lu, Mor Naaman, and Daniel Wigdor. 2020. The government's dividend: complex perceptions of social media misinformation in China. In *Proceedings of the 2020 CHI Conference on Human Factors in Computing Systems*. 1–12.
- [54] Karen Lumsden and Heather M Morgan. 2018. Cyber-trolling as symbolic violence. *The routledge handbook of gender and violence* (2018), 121–132.
- [55] Marta Marchlewska, Aleksandra Cichocka, Filip Lozowski, Paulina Górska, and Mikolaj Winiewski. 2019. In search of an imaginary enemy: Catholic collective narcissism and the endorsement of gender conspiracy beliefs. *The Journal of social psychology* 159, 6 (2019), 766–779.
- [56] Alice Marwick and Rebecca Lewis. 2017. Media manipulation and disinformation online. *New York: Data & Society Research Institute* (2017).
- [57] Rishabh Mehrotra, Scott Sanner, Wray Buntine, and Lexing Xie. 2013. Improving LDA Topic Models for Microblogs via Tweet Pooling and Automatic Labeling. In *Proceedings of the 36th International ACM SIGIR Conference on Research and Development in Information Retrieval* (Dublin, Ireland) (SIGIR '13). Association for Computing Machinery, New York, NY, USA, 889–892. <https://doi.org/10.1145/2484028.2484166>
- [58] Yelena Mejova and Kyriaki Kalimeri. 2020. COVID-19 on Facebook ads: competing agendas around a public health crisis. In *Proceedings of the 3rd ACM SIGCAS Conference on Computing and Sustainable Societies*. 22–31.
- [59] Filippo Menczer. 2016. The spread of misinformation in social media. In *Proceedings of the 25th international conference companion on world wide web*. 717–717.
- [60] Nivedita Menon. 2020. Hindu Rashtra and Bollywood: A New Front in the Battle for Cultural Hegemony. *South Asia Multidisciplinary Academic Journal* 24/25 (2020).
- [61] Pratiksha Menon. 2018. *Whose Feminism Is It Anyway? The 'Empowered Woman' in Bollywood*. Ph.D. Dissertation.
- [62] Sumeet Mhaskar. 2020. Will the 'new outsider' revive nativist politics in Mumbai? (2020).
- [63] Lucy Miller. 2020. "Wolfenstein II" and MAGA as fandom. *Transformative Works and Cultures* 22 (2020).
- [64] Chandrajith Mitra. 2020. Black magic and Bengalis: The Wicked Narrative Against Women. *The Federal* (Aug 2020). <https://thefederal.com/the-eighth-column/black-magic-and-bengalis-the-wicked-narrative-against-women/>
- [65] Sreya Mitra. 2020. Trolled, body-shamed and slut-shamed: the desecration of the contemporary Bollywood female star on social media. *Celebrity Studies* 11, 1 (2020), 101–115.
- [66] Tanushree Mitra, Scott Counts, and James W Pennebaker. 2016. Understanding anti-vaccination attitudes in social media. In *Tenth International AAAI Conference on Web and Social Media*.
- [67] Tanushree Mitra, Graham P. Wright, and Eric Gilbert. 2017. A Parsimonious Language Model of Social Media Credibility Across Disparate Events. In *Proceedings of the 2017 ACM Conference on Computer Supported Cooperative Work and Social Computing* (Portland, Oregon, USA) (CSCW '17). Association for Computing Machinery, New York, NY, USA, 126–145. <https://doi.org/10.1145/2998181.2998351>
- [68] Alfred Moore. 2018. Conspiracies, conspiracy theories and democracy. *Political Studies Review* 16, 1 (2018), 2–12.
- [69] Jonathan Scott Morgan, Cliff Lampe, and Muhammad Zubair Shafiq. 2013. Is News Sharing on Twitter Ideologically Biased?. In *Proceedings of the 2013 Conference on Computer Supported Cooperative Work* (San Antonio, Texas, USA) (CSCW '13). Association for Computing Machinery, New York, NY, USA, 887–896. <https://doi.org/10.1145/2441776.2441877>
- [70] Meredith Ringel Morris, Scott Counts, Asta Roseway, Aaron Hoff, and Julia Schwarz. 2012. Tweeting is Believing? Understanding Microblog Credibility Perceptions. In *Proceedings of the ACM 2012 Conference on Computer Supported Cooperative Work* (Seattle, Washington, USA) (CSCW '12). Association for Computing Machinery, New York, NY, USA, 441–450. <https://doi.org/10.1145/2145204.2145274>
- [71] Kevin Munger, Mario Luca, Jonathan Nagler, and Joshua Tucker. 2020. The (null) effects of clickbait headlines on polarization, trust, and learning. *Public opinion quarterly* (2020).
- [72] David Neiwert. 2017. *Alt-America: The rise of the radical right in the age of Trump*. Verso Books.
- [73] Ryan Neville-Shepard. 2018. Paranoid style and subtextual form in modern conspiracy rhetoric. *Southern Communication Journal* 83, 2 (2018), 119–132.
- [74] ET Online. 2020. Mumbai Police grills Rhea Chakraborty for 9 hrs, actress admits she fought with Sushant S Rajput. *Economic Times* (Sep 2020). <https://economictimes.indiatimes.com/magazines/panache/mumbai-police-grills-rhea-chakraborty-for-9-hrs-actress-admits-she-fought-with-sushant-singh-rajput/articleshow/76460166.cms?from=mdr>
- [75] Anmol Panda, A'ndre Gonawela, Sreangsu Acharyya, Dibyendu Mishra, Mugdha Mohapatra, Ramgopal Chandrasekaran, and Joyojeet Pal. 2020. NivaDuck - A Scalable Pipeline to Build a Database of Political Twitter Handles for India and the United States. In *Proceedings of the 11th International Conference on Social Media and Society* (Chicago, IL, USA) (SMSociety '20). Association for Computing Machinery, New York, NY, USA, 15 pages.
- [76] Anmol Panda, Ramaravind Kommiya Mothilal, Monojit Choudhury, Kalika Bali, and Joyojeet Pal. 2020. Topical Focus of Political Campaigns and its Impact: Findings from Politicians' Hashtag Use during the 2019 Indian Elections. *Proceedings of the ACM on Human-Computer Interaction* 4, CSCW1 (2020), 1–14.
- [77] Munish Pandey. 2020. ED files money laundering case against Rhea Chakraborty. *India today* (2020).
- [78] Christopher Partridge. 2018. Popular Music, Conspiracy Culture, and the Sacred. In *Handbook of Conspiracy Theory and Contemporary Religion*. Brill, 180–206.
- [79] Michael A Peters. 2020. Trump's nationalism, 'the end of globalism', and 'the age of patriotism'. *The Far-Right, Education and Violence: An Educational Philosophy and Theory Reader Volume IX* (2020), 10.
- [80] Hannah Ellis Petersen. 2019. India strips Kashmir of special status and divides it in two. *The Guardian* (Oct 2019). <https://www.theguardian.com/world/2019/oct/31/india-strips-kashmir-of-special-status-and-divides-it-in-two>
- [81] Shruti Phadke, Mattia Samory, and Tanushree Mitra. 2021. What Makes People Join Conspiracy Communities? Role of Social Factors in Conspiracy Engagement. *Proceedings of the ACM on Human-Computer Interaction* 4, CSCW3 (2021), 1–30.
- [82] David Phillips and Philip Young. 2009. *Online public relations: A practical guide to developing an online strategy in the world of social media*. Kogan Page Publishers.
- [83] Victor Pickard. 2019. The violence of the market. *Journalism* 20, 1 (2019), 154–158.
- [84] Joseph M Pierre. 2020. Mistrust and misinformation: A two-component, socio-epistemic model of belief in conspiracy theories. *Journal of Social and Political Psychology* 8, 2 (2020), 617–641.
- [85] Peter Plenta. 2020. Conspiracy theories as a political instrument: utilization of anti-Soros narratives in Central Europe. *Contemporary Politics* (2020), 1–19.
- [86] Karl Popper. 2006. The conspiracy theory of society. *Conspiracy theories: The philosophical debate* (2006), 13–16.
- [87] Helen Regan. 2019. India passes controversial citizenship bill that excludes Muslims. *CNN World* (Dec 2019). <https://www.cnn.com/2019/12/11/asia/india-citizenship-amendment-bill-intl-hnk/index.html>
- [88] Eugenia Ha Rim Rho. 2019. Quality of Democratic Discourse in the Age of Political Hashtags and Social Media News Consumption. In *Conference Companion Publication of the 2019 on Computer Supported Cooperative Work and Social Computing* (Austin, TX, USA) (CSCW '19). Association for Computing Machinery, New York, NY, USA, 80–83. <https://doi.org/10.1145/3311957.3361852>
- [89] Julie Ricard and Juliano Medeiros. 2020. Using misinformation as a political weapon: COVID-19 and Bolsonaro in Brazil. *The Harvard Kennedy School Misinformation Review* (2020).
- [90] Andrew Ridgeway. 2020. Affective Economies of White Nationalism: Tracing the Right-Wing Populist Rhetoric of Brexit and Trump 2016. In *Kairos: A Journal of Critical Symposium*, Vol. 5. 9–31.

- [91] Andrew Roback and Libby Hemphill. 2013. "I'd Have to Vote against You": Issue Campaigning via Twitter. In *Proceedings of the 2013 Conference on Computer Supported Cooperative Work Companion* (San Antonio, Texas, USA) (CSCW '13). Association for Computing Machinery, New York, NY, USA, 259–262. <https://doi.org/10.1145/2441955.2442016>
- [92] John Robison. 2014. *Proofs of a Conspiracy against all the Religions and Governments of Europe, carried on in the secret meetings of Freemasons, Illuminati and Reading Societies*. Wermod and Wermod Publishing Group.
- [93] Michael Röder, Andreas Both, and Alexander Hinneburg. 2015. Exploring the Space of Topic Coherence Measures (WSDM '15). Association for Computing Machinery, New York, NY, USA, 399–408. <https://doi.org/10.1145/2684822.2685324>
- [94] Andrew S Ross. 2019. Discursive delegitimation in metaphorical# second-civilwarletters: an analysis of a collective Twitter hashtag response. *Critical Discourse Studies* (2019), 1–17.
- [95] Robert C Rowland. 2019. The Populist and Nationalist Roots of Trump's Rhetoric. *Rhetoric and Public Affairs* 22, 3 (2019), 343–388.
- [96] Niranjan Sahoo. 2020. Mounting Majoritarianism and Political Polarization in India.
- [97] Cornel Sandvoss. 2013. Toward an understanding of political enthusiasm as media fandom: Blogging, fan productivity and affect in American politics. *Participations* 10, 1 (2013), 252–296.
- [98] Michael Shermer. 2020. Why People Believe Conspiracy Theories. *Skeptical (Altadena, CA)* 25, 1 (2020), 12–18.
- [99] Ellen Simpson. 2018. Integrated & Alone: The Use of Hashtags in Twitter Social Activism. In *Companion of the 2018 ACM Conference on Computer Supported Cooperative Work and Social Computing* (Jersey City, NJ, USA) (CSCW '18). Association for Computing Machinery, New York, NY, USA, 237–240. <https://doi.org/10.1145/3272973.3274064>
- [100] Simpreet Singh. 2015. The Emergence of the Migrant as a Problem Figure in Contemporary Mumbai: Chronicles of Violence and Issues of Justice. *R. Samaddar, Migrant and the Neoliberal City* (2015), 147–169.
- [101] Ian F Spellerberg and Peter J Fedor. 2003. A tribute to Claude Shannon (1916–2001) and a plea for more rigorous use of species richness, species diversity and the 'Shannon–Wiener' Index. *Global ecology and biogeography* 12, 3 (2003), 177–179.
- [102] Dominic Spohr. 2017. Fake news and ideological polarization: Filter bubbles and selective exposure on social media. *Business Information Review* 34, 3 (2017), 150–160.
- [103] Abhishek Srivastava, Kalika Bali, and Monojit Choudhury. 2020. Understanding Script-Mixing: A Case Study of Hindi-English Bilingual Twitter Users. In *Proceedings of the The 4th Workshop on Computational Approaches to Code Switching*. 36–44.
- [104] Buzz Staff. 2020. BJP Floats 'Justice for Sushant' Campaign Posters in Bihar, Faces Flak from Opposition and Twitter. *News 18 Buzz* (Sep 2020). <https://www.news18.com/news/buzz/bjp-floats-justice-for-sushant-campaign-posters-in-bihar-faces-flak-from-opposition-and-twitter-2853559.html>
- [105] Kate Starbird. 2017. Examining the alternative media ecosystem through the production of alternative narratives of mass shooting events on Twitter. In *Icwsn*. 230–239.
- [106] Anni Sternisko, Aleksandra Cichočka, and Jay J Van Bavel. 2020. The dark side of social movements: Social identity, non-conformity, and the lure of conspiracy theories. *Current opinion in psychology* 35 (2020), 1–6.
- [107] Cass R Sunstein and Adrian Vermeule. 2009. Conspiracy theories: Causes and cures. *Journal of Political Philosophy* 17, 2 (2009), 202–227.
- [108] Joyeeta Mitra Suvarna. 2020. Sushant Singh Rajput Death Investigation: Mumbai Police records YRF chairman Aditya Chopra's statement. *India TV* (Jul 2020). <https://www.indiatvnews.com/entertainment/celebrities/sushant-singh-rajput-death-investigation-mumbai-police-records-yash-raj-films-chairman-aditya-chopra-statement-635151>
- [109] timesofindia. 2020. Sushant Singh Rajput case: Narcotics Control Bureau registers a case to probe drug conspiracy. *Times of India* (2020). <https://timesofindia.indiatimes.com/entertainment/hindi/bollywood/news/sushant-singh-rajput-case-narcotics-control-bureau-registers-a-case-to-probe-drug-conspiracy/articleshow/77765797.cms>
- [110] TNN. 2020. 'Bengalee Brahmin lady' is now a poll issue for Congress. *Times of India* (Sep 2020). <https://timesofindia.indiatimes.com/india/bengalee-brahmin-lady-is-now-a-poll-issue-for-congress/articleshow/78050056.cms>
- [111] Hubert Tvorzecki. 2019. Poland: A Case of Top-Down Polarization. *The ANNALS of the American Academy of Political and Social Science* 681, 1 (2019), 97–119.
- [112] Joseph E Uscinski, Joseph M Parent, and Bethany Torres. 2011. Conspiracy theories are for losers. In *American Political Science Association Annual Conference*.
- [113] Nikki Usher, Jesse Holcomb, and Justin Littman. 2018. Twitter makes it worse: Political journalists, gendered echo chambers, and the amplification of gender bias. *The international journal of press/politics* 23, 3 (2018), 324–344.
- [114] Reine C van der Wal, Robbie M Sutton, Jens Lange, and João PN Braga. 2018. Suspicious binds: Conspiracy thinking and tenuous perceptions of causal connections between co-occurring and spuriously correlated events. *European Journal of Social Psychology* 48, 7 (2018), 970–989.
- [115] Jan-Willem van Prooijen. 2019. An existential threat model of conspiracy theories. *European Psychologist* (2019).
- [116] Jan-Willem van Prooijen, B Rutjens, and M Brandt. 2018. Populism as political mentality underlying conspiracy theories. *Belief systems and the perception of reality* (2018), 79–96.
- [117] Jan-Willem van Prooijen and Mengdi Song. 2020. The cultural dimension of intergroup conspiracy theories. *British Journal of Psychology* (2020).
- [118] Xuerui Wang and Andrew McCallum. 2006. Topics over Time: A Non-Markov Continuous-Time Model of Topical Trends (KDD '06). Association for Computing Machinery, New York, NY, USA, 424–433. <https://doi.org/10.1145/1150402.1150450>
- [119] Muhammad Bilal Zafar, Parantapa Bhattacharya, Niloy Ganguly, Saptarshi Ghosh, and Krishna P. Gummadi. 2016. On the Wisdom of Experts vs. Crowds: Discovering Trustworthy Topical News in Microblogs. In *Proceedings of the 19th ACM Conference on Computer-Supported Cooperative Work & Social Computing* (San Francisco, California, USA) (CSCW '16). Association for Computing Machinery, New York, NY, USA, 438–451. <https://doi.org/10.1145/2818048.2819968>
- [120] Yiannis Zaimakis. 2018. Football fan culture and politics in modern Greece: the process of fandom radicalization during the austerity era. *Soccer & Society* 19, 2 (2018), 252–270.

## APPENDIX

The appendix section in the paper provides further explanation of the figures in Section 5. This has been done to provide the reader with a more comprehensive understanding of the case study and its analysis:

### Figure 3a

In Figure 3a we see that topics 3,5 and 6 relate to electoral issues and campaigning and hence we group them under the broad theme of 'Politics'. Topic 1 has words like 'loss', 'shocking', 'rip' indicating tweets around the initial reactions to the case and hence we categorize it as 'Suicide'. Topics 4 and 8 call for 'Investigations' by the police, and topic 2 is centred around 'Bollywood'. Topic 7 relates to tweets suspecting 'Murder' in the case.

### Figure 3b

In figure 3b we see topics 1,5,6 and 8 relating to the Bihar elections, the politics around Maharashtra government's handling of the case and a few other electoral cases like farmer's issues and COVID and hence we categorize them under 'Politics'. Topic 11 has words relating to the initial reporting around the 'Suicide' and Topic 7 has words for the speculations around Sushant's family. The other topics center around 'Bollywood' and call for 'Investigations' in the case.

### Figure 4

Figure 4 shows how topical preferences also vary temporally in the Twitter activity of politicians and media houses. These topical preferences with their window sizes were interpreted using the LDA methodology as defined in the section 4.2 of analysis. We also found some separate broad themes like 'Murder' and 'Family and Friends' which was talked about by politicians and media houses respectively. For politicians, the themes of 'Suicide' and 'Murder' revolve around framing Rajput's death as suicide or as murder respectively, while the theme of 'Investigation' specifically pertains to the logistics of the case's investigation by various policing agencies.

For media houses, however, the tweets discussing the investigation and murder were closely related, and hence we combined them into the 'Investigation' category. We see also in the data that mainstream news channels talk substantively with Rajput's friends and family. This piece of data also needs to be considered critically in the context of the subsequent stage-setting for personality-centric media coverage that would follow.

The 'Bollywood' theme alludes to call-outs and allegations of insider behaviour in the Hindi film industry. Early in the news coverage, there were insinuations that Bollywood 'nepotism' was one of the causes of Rajput's death.<sup>12</sup> We also observed a significant amount of tweets that discuss aspects of this episode and its investigation to broader election agendas and political allegations, which we labelled as 'Politics'. It can be observed that the initial tweets posted by both groups revolved around Rajput's death, as expected. However, while the media houses tweet almost exclusively about the suicide and investigation of the case for the first month (June 2020), we see here that politicians begin associating it with nepotism and other issues related to Bollywood in the same initial period. Further, we observe that the media links all issues related to Bollywood with the investigation and hence the high density for the investigation category.

### Figure 5

The first peak, in late June, comes with allegations of outsider targeting, when another actor from Bihar began asking for justice and claiming foul play. As we see at this point, there is little interest from politicians. The second peak, driven by politicians, comes in late July 2020, when the BJP leaders target the Shiv Sena-led

Maharashtra government in a coordinated fashion, in part claiming the Mumbai police is biased, and that the intervention of CBI is vital. The underlying political dynamics behind these demands are evident: the CBI reports to the BJP-controlled central government in India, and generally takes on cases of federal significance, while the Mumbai police reports to the Shiv Sena-led state government. Corroborating this observation, we find in Figure 4b that the density of topics related to politics is high in the same time period. In the weeks immediately following the political tweet spike in late July, we see a consistently high amount of tweets by media houses espousing the idea of a controversy, and this activity endures into the second week of August. The third peak appears in the third week of August, when the CBI takes over the case. The fourth peak is at the end of August, when the media houses start discussing a drug cartel. Around this time, demands for the arrest of Rhea Chakraborty, *Rajput's* former partner, soar. The fifth peak occurs in the second week of September, when Rhea Chakraborty is arrested. Unlike the two previous peaks that were primarily driven by high activity from media houses, this one results from inordinately high activity from journalists and politicians. The sixth peak occurs in late September, and is driven by media houses and their chatter surrounding drug use and abuse in Bollywood. The final peak, at the end of the first week of October, has high engagement from journalists and politicians, since this is the week when stories

<sup>12</sup><https://www.hindustantimes.com/bollywood/sushant-singh-rajput-s-death-puts-nepotism-in-spotlight-again-industry-divided-on-the-debate/story-hN2Mkch2CQnwpCcR1ENe1O.html>.

about Twitter bots and underlying political influence in the media coverage broke in the news.