# 1AC

## 1AC

### Modi

#### Greater exposure to media campaigns drastically increases the likelihood of voting for Modi and the BJP – litany of factors

Verma and Sardesai 14, Rahul Verma, Fellow at the Centre for Policy Research (CPR). He is also Visiting Assistant Professor in the Department of Political Science, Ashoka University. His research interests include voting behavior, party politics, political violence, and media. He is a regular columnist for various news platforms and has published papers in Asian Survey, Economic & Political Weekly, and Studies in Indian Politics. His book co-authored with Pradeep Chhibber, Ideology and Identity: The Changing Party Systems of India (OUP: New York, 2018) develops a new approach to defining the contours of what constitutes an ideology in multi-ethnic countries such as India. He has a PhD in Political Science from the University of California at Berkeley, US. His doctoral dissertation examines why do some political families flourish, and others decline quickly. He completed his MPhil in Political Science from Delhi University, MA in Development Studies from Tata Institute of Social Sciences (TISS), Mumbai, and BA from Kirori Mal College, Delhi University, Shreyas Sardesai, Research Associate, Lokniti, Centre for the Study of Developing Societies, Delhi, India, 9-27-2014, “Does Media Exposure Affect Voting Behaviour and Political Preferences in India?”, Economic &Political Weekly, <https://www.jstor.org/stable/24480739?seq=1#metadata_info_tab_contents> // sosa + ella

Media Exposure and Vote Choice The 2014 elections result confirmed that Modi's campaign team delivered on the strategy that had been devised to reach out to voters.? The BJP's extensive media campaign kept gaining strength as the election approached, and regular viewers and readers of news were influenced by it. Table 2 (p 85) reflects the increasing popularity of the BJP and Modi in the run-up to the elections. The BJP's popularity was the highest among those who regularly saw television and read newspapers. In July 2013, the BJP's lead over the Congress in terms of votes was just 3 percentage points among those who saw rv news regularly (daily or sometimes). This increased steadily in the next nine months to 20 percentage points in May 2014. Similarly, the BJP's lead over the Congress among regular readers of newspa- pers increased from 7 percentage points to 20 percentage points, and among internet users from 13 percentage points to 26 percentage points. Modi's lead over Rahul Gandhi as the preferred choice for prime minister also increased during this period. His lead increased from 9 percentage points to 25 per- centage points among regular TV news viewers, from 11 per- centage points to 27 percentage points among regular newspaper readers, and from 14 percentage points to 35 percentage points among frequent internet users. The data in Table 2 lays bare a very important fact. In these nine months, there was a comparable increase in Modi's and the BJP's popularity even among those who were either remote- ly or not exposed to news. That means the BJP's media cam- paign was certainly effective, but it was only one of many fac- tors as other papers in this volume demonstrate. Media outlets were just another platform for the BJ and Modi to attack the Congress government for non-performance. The time-series NES data indicates that voters with higher media exposure gen- erally tend to be more educated, are wealthier, live in urban areas, belong to higher castes, and are younger in age. There is enough evidence to suggest that this is essentially the BJP's con- stituency (Chhibber 1997; Hansen and Jaffrelot 1998; Heath 1999). In simple words, the BJP tends to draw more votes from these segments than from those who are less educated, poor, from rural localities, from the lower castes, and elderly (Yadav 2004; Yadav and Palshikar 2009). The time-series NES data also confirms that the greater the exposure of a voter to the media, the greater her or his chances of voting for the BJP (Figure 4). To estimate the unbiased effect of media exposure on vote choice in 2014, we used two logistic regression models, controlling for socio-demographic factors. For both models, the dependent variable is vote choice for the BJP (BJP-1, Oth- ers=0). However, the main independent variable differs in both models. In the first model, we use an index of media exposure, that is, we combine the frequency of exposure to TV news, news- paper readership and internet access for news." In the second model, we use a separate category of frequency of exposure to Tv news, newspaper readership and internet access for news. The independent variables in this model for TV and newspaper have been clubbed with the language in which they are watchedor read. The results in these two models are broadly similar for socio-demographic factors (Table 3, p 86). Respondents who were from a higher economic class, were younger in age, and were highly educated were more likely to vote for the BJP. The upper castes, Other Backward Classes (OBCs), scheduled castes (scs), and scheduled tribes (srs) were more likely to vote for the BJP, whereas Muslims were less likely to vote for it. In essence, the BJP managed an umbrella social coalition in this election due to an unprecedented consolidation of the upper-caste and OBC vote, with many sc and srs sup- porting it as well. Respondents' place of residence was statistically insignificant - rural voters were equally likely to vote for the BJP as urban residents. Similarly, there was no difference in male and female voting 2 points) patterns after holding other variables constant. As far as the main independent variables are con- cerned, in the first model, media exposure is positively correlated with the likelihood of voting for the BJP, and it is statistically significant even after holding socio- demographic factors constant. In the second model, we find that with reference to respondents who watch Tv news very rarely or do not watch at all, those who frequently watch the news in English are no more or less likely to vote for the BJP. Those who watch news in Hindi are more likely to vote for the BJP , and those who watch in regional languages are less likely to do so. Interestingly, daily Hindi newspaper readers and regional language newspaper readers are more likely to vote for the BJP compared to those who do not read newspapers or read it very rarely. Internet usage to access news makes no difference to the likelihood of voting for the BJP. We calculated the predicted probability of voting for the BJP by media exposure categories and plotted it graphically. Figure 5 depicts the increasing probability of a BJP vote with higher media exposure (calculated from the first regression model), and we have drawn a linear forecast line to show how the probability of voting for the BJP increases with higher media exposure. Figure 6 shows the predicted probability of voting for the BJP (calculated from the second regression model) is highest among respondents who watch or read news in Hindi. This graph well illustrates why the BJP along with its allies virtually swept the Hindi heartland by winning 201 of the 225 seats in it. Media Exposure and Political Attitudes What explains the correlation between media exposure and a respondent's likelihood of voting for the BJP in 2014? The first and foremost reason is that the BJP's traditional voter base - urban, upper caste, more educated, and wealthy - is more exposed to the media than those of its counterparts. Second, due to increasing media exposure, in the last decade, the BJP has had a much larg- er catchment pool of electors. While these two reasons are true, they do not explain why Modi succeeded in rallying voters with higher media exposure behind the BJP in such large numbers.1 Till very recently, the literature on voting behaviour did not consider media exposure to have a sizable effect on election out- comes. Only a few among the early studies on voting behaviour considered media impact and campaign effort to be a predictor of vote choice as they assumed that partisan attachments were built over a long period of time and were rather stable. These studies suggested that media exposure and campaign efforts in an elec- tion cycle could not change strong partisan ties. However, later works adopted "the minimal effects" perspective, assuming that campaign and media coverage do have some influence on voters' preference (Lazarsfeld, Berelson and Gaudet 1944; Klapper 1960). The findings of these researches suggest that exposure to campaigns only activates voters' prevailing partisan attitudes rather than changing their vote choice (Lazarsfeld and Katz 1955). At the turn of the century, election campaigns in most parts of the world evolved into nationally coordinated, personalised, capital-intense, and media-oriented demonstrations; famously referred to as the "Americanisation of election campaigns" (Norris 2001). As a result of structural changes (declining partisanship attachment; proliferation of media sources; and the professionali- sation of campaign communications), curiosity about campaign effects began increasing, and the minimal effects hypothesis began losing its central position in political communication (Finkel 1993). The development of more sophisticated theoretical frame- works and methodological approaches enabled scholars tofind that campaign strategies and events, and the media's coverage of them, influence voter preferences and shape election outcomes, particularly in close elections (Box-Steffensmeier, Darmofal and Farrell 2009). The research on campaign effects in general and the role of media in particular began seeking a broader perspective for multiple effects beyond the activation of partisan loyalties, such as the indirect cognitive effects of campaigns (lyengar and Kinder 1987; McCombs and Shaw 1972); the role of campaigns on knowledge of candidates and issues (Alvarez 1998; Freedmanet al 2004; Gelman and King 1993); and the effects of campaigns on voter turnout (Ansolabhere and lyengar 1995; Finkel and Geer 1998; Freedman and Goldstein 1999). Now there is enough evidence to suggest media sources may influence the public not only through the slant of a particular report (DellaVigna and Kaplan 2007), but also by choosing what to cover (George and Waldfogel 2006). Largely, there is a consensus among scholars that the media shapes the public's political knowledge, attitudes and behaviour (Besley and Burgess 2002; Hamilton 2003). In these elections, Modi's campaign team pushed his message on Gujarat as a model of economic development, and the analysis suggests that a substantial section of voters leaned towards the BJP because they perceived Gujarat to be doing well on develop- ment indicators. Many commentators have noted that they were perplexed by Modi's campaign speeches in which he stressed the economy and development more than the BJP's plank of Hindutva, or social conservatism (Varshney 2014). In his speech- es, Modi repeatedly highlighted his plans to improve infrastruc- ture, address unemployment, and fight poverty. He chanted a slogan of "minimum government and maximum governance" in his speeches. We claim that Modi managed to connect to voters with higher media exposure with his promise of reducing the role of the state in the economy and his image as a pro-business reformer. We hypothesise that voters with higher media exposure were more likely to support economic reform, and this was the reason why media exposure had such a large effect on the choice of the BJP in 2014. We argue that this effect of media exposure was independent of the BJP's traditional vote base, and this leads to our second hypothesis - media exposure had no independent effect on a respondent's likelihood of supporting a social con- servative agenda. We tested for these two variables, and the in- dices on economic reform and social conservatism are identical to the one used by Chhibber and Verma (2014) in this volume. 10 Table 4 reports the results of os regression models using social conservatism and economic reforms as the dependent variable. We find support for our hypothesis in the regression models. The result shows that media exposure has no effect on social conservatism, that is, it is statistically insignificant, while it is positively correlated with economic reforms when holding socio-demographic factors constant. Not surprisingly, thedata presented in the table suggests that social conservatism is posi- tively correlated with caste-community variables, whereas wealthier respondents and those who live in urban areas are more likely to support economic reforms. Why is media expo- sure positively correlated with economic reforms and not with social conservatism? While we do not have a definitive answer at this stage, we suggest that opinions on social issues are reflections of a long-term ideological divide in Indian politics, and media exposure, being only a proximate cause, does not seem to make a difference here. In the case of economic re- form, voters are not so ideologically locked in, and it is possible that this may explain why this is more malleable and easily affected by media exposure. This is where Modi's image of a pro-market leader helped the BJP in winning a larger portion of voters with high media exposure. Our findings corroborate the conclusions in previous work such as Politics after Television by Arvin Rajagopal (2004), which explored the connection be- tween the role of the media, support for economic liberalisa- tion, and the tendency of voters to lean towards the BJP.

#### Modi destroys Indian democracy - vague terror laws, surveillance, destroying objective media

Bag 3-4 Shamik Bag, independent journalist based in Kolkata, 3-4-2022, "The Security Playbook Used To Erode Democracy In Modi’s India & How The Tide Might Turn — Article 14," No Publication, [https://article-14.com/post/the-security-playbook-used-to-erode-democracy-in-modi-s-india-how-the-tide-might-turn-62208c605b96a //](https://article-14.com/post/the-security-playbook-used-to-erode-democracy-in-modi-s-india-how-the-tide-might-turn-62208c605b96a%20/) ella

Domestic and international opprobrium about the treatment of “the BK-16” has grown as news trickled out suggesting the lengths the Modi government had gone to to silence and punish critics—even, according to an international expert assessment, planting the evidence upon which the entire case rests. Behind the headlines, the Bhima Koregaon case is a bellwether episode in understanding how a potent national security playbook of anti-terror laws, digital surveillance technology, and national-interest narratives has been weaponised and executed to jail hundreds of civil society critics and stifle free speech in India since Narendra Modi’s government came to power in 2014. What’s at stake in the world’s largest democracy, is democracy itself. 1. GUILTY UNTIL PROVEN INNOCENT ‘They are not innocent. They are intelligent persons’ Though it was the first time he had been arrested, Rona Wilson was no stranger to prison, nor the Indian security laws that allow the state to put away citizens for years without trial almost regardless of the evidence against them. As a founding member of the Committee for the Release of Political Prisoners (CRPP), Wilson would regularly be seen in the dank corridors of Delhi’s Tihar jail, providing counsel and legal aid to those accused of being terrorists. Now, he himself stood accused. On the morning of 6 June 2018, in south Delhi’s crowded Munirka village, neighbours were woken by the urgent ringing of a doorbell and a large posse of policemen outside his door. He knew they might come. They had confiscated his electronics and documents on an earlier visit. The Maharashtra state police picked up four more citizens in coordinated raids across India that day: lawyer Surendra Gadling, women’s rights activist and literature lecturer Shoma Sen, forest rights activist Mahesh Raut, and Elgaar Parishad organiser Sudhir Dhawale of the Kabir Kala Manch. On 28 August 2018, another round of raids led to the arrest of trade unionist and lawyer Sudha Bharadwaj, human rights activist and writer Gautam Navlakha, workers rights activist Vernon Gonsalves, lawyer and prisoner rights activist Arun Ferreira, and poet Varavara Rao. Thirteen letters the police said they had found in the homes of the accused were leaked to the press. By this point the case was no longer just about speeches given at the Elgaar Parishad. The police were investigating a conspiracy that, based on the letters, went something like this. The electoral success of Modi was threatening the Maoists. The jungle-based revolutionaries were depending on these lawyers, writers and poets, for money, weapons, recruitment, and logistics. The group was operating internationally, including a meeting in Paris, and involving the Chinese and Russians. In doing so, the secretive group members were exchanging explicitly incriminating messages with each other using their real names or initials. A letter purportedly found in Rona Wilson’s house referenced “another Rajiv Gandhi type incident” (India’s former Prime Minister was assassinated in a 1991 bomb attack), and the need to procure M-4 assault rifles. “Please destroy the letter after you have read it. Be careful that it should not fall in the hands of the enemy,” said a letter purporting to be from Maoist leadership that, according to the police, Rona Wilson, the would-be assassination plotter, had saved onto an external hard drive the police were able to take in the raid. Even in the interim period between the first and second tranche of arrests, Maoist leadership apparently continued to send more letters, using real names, to Rao. The ageing poet was, the police believed, procuring arms from Nepal. Ferreira was recruiting young people to Maoism through his photo exhibition of lynchings by mobs. Not only that, he was using “creative methods” like humour with the intention of “penetrating Maoist thoughts” into students. Maharashtra public prosecutor Ujjwala Pawar said the accused were members of the Communist Party of India (Maoist) but also constituted an “anti-fascist front”. “The aim of the front is to overthrow the government, and they want to establish this front all over India,” said the public prosecutor. “They are not innocent. They are intelligent persons,” All the accused denied the veracity of the letters, but it didn’t matter. They were the latest of hundreds of activists to be thrust into a multi-year odyssey of incarceration without bail, of fruitless hearings, and uncertainty. That this is possible in India because of a law called the Unlawful Activities (Prevention) Act (UAPA), 1967, often employed alongside a 150 year old colonial-era sedition law, section 124A of the Indian Penal Code, 1860. ‘A perfect way of silencing citizens’ “The use of the UAPA has been normalised now where general law is used less and less,” said veteran Supreme Court Advocate Rebecca John. “The state used the argument of having an anti-terrorism law, but when you look, it is largely used against non-violent citizens.” Over four years to 2019, more than 5,105 people were arrested under the UAPA, the number of cases rising 72% over this period, according to government data (submitted to Parliament in February 2021.) Between 2014 and 2020, 10,552 UAPA cases were filed but only 253 were convicted, according to this analysis of National Crime Records Bureau (NCRB) data. A comparison with three years preceding this period is not possible because NCRB records make no mention of the UAPA. The other law indiscriminately used, and against Supreme Court guidelines, is sedition, or spreading disaffection against the State. An Article 14 database records more than 800 sedition cases against about 13,000 Indians between 2010 and 2021, rising more than a quarter each year since Modi took office in 2014. “Where are the instances of the security of the state being threatened?” asked John. “A large majority against whom the law is being used are people who have a different point of view.” She described the UAPA as “a perfect way of silencing citizens”. This is because the UAPA defines “terrorism” vaguely. Individuals or groups can be designated as terrorists, and no objective criteria guide the designation. The accused has no opportunity to explain their position; they are presumed guilty. Their properties and assets can be seized. A series of vague offences, such as “conspiring in acts preparatory to commission of a terrorist act”, or “associating” or “supporting” a terrorist group, can land you in prison for 10 years. Almost any causing of injury or property damage can be labelled terrorism. Police can pursue you for attending a meeting with purported intent. You must wait for court before you can disprove that intent, but reaching court can take years. 180 days of custodial interrogation is permitted without producing a charge sheet. Extensions of the same period are easily granted on producing even minor evidence, often creating a recurring loop. And in the interim, you will likely languish in jail without bail. This is because, to grant bail, the court has to come to a finding there is no “prima facie” (the Latin legal term meaning “at first sight”) case against the accused. “That’s a difficult finding—how does a court come to that certification?” asked John. “To make matters worse, the Supreme Court (in its Watali judgement) has virtually limited the powers of the court to grant bail. It’s a terribly-worded judgement and as draconian as the law itself.” This Watali judgement interpreted UAPA as meaning that the court cannot scrutinise the evidence and materials the police have gathered, and must only consider the allegation. For the Bhima Koregaon accused this meant that in bail hearing after bail hearing the police cited the content of outlandishly incriminating letters not even entered in evidence, and the judge ruled against bail. ‘Even in the absence of a link to a specific terrorist act’ How did this seldom-used 1967 law become the legal basis for Modi’s government to pursue the Bhima Koregaon accused and hundreds of others as “terrorists”? It’s well known that after the Mumbai terror attack of November 2008, when Pakistani Muslim terrorists killed over 170 people, the then-United Progressive Alliance (UPA) government hurriedly passed two landmark pieces of legislation. One was the National Investigation Agency Act, 2008, which in empowering a counter-terror task force to over-ride the authority of state police to investigate terror-related crimes came “perilously close to crossing constitutional limits” of federalism. The other was an amendment to the UAPA that doubled the period of custodial interrogation, broadened the definition of terrorism, and introduced a presumption of guilt (when certain evidence is produced). Less well known is the role the international community and an influential but little-known Paris-based intergovernmental organisation played in encouraging further reforms that would, in time, empower Modi’s hardline Indian government to transform civic space in India. The Financial Action Task Force (FATF) had been an innocuous inter-governmental organisation based in Paris focused on countering money laundering. Then, in the post 9/11 days, terrorism and terrorist financing became the focus, and the influence of the FATF mushroomed. On 1 October 2001 it issued its Special Eight Recommendations (one more was subsequently added) to counter terrorist financing. India had been trying to gain full FATF membership since 1998. The potential rewards were clear. Compliant members profit from becoming a more attractive destination for foreign investments, ratings agencies and banks, said Vanja Skoric, program director for the European Center for Not-For-Profit Law (ECNL). Get a bad rating, and the country “will be shamed and lose credit ratings and investment”. But the FATF is a selective club. All its 49 recommendations must be met. It was also a time when the G-8 countries felt India could be a vital ally in the US-led war on terror, but their intelligence agencies had become used to what they called in one Wikileaks cable “India's famous go-it-alone outlook” on terrorism prevention. In meetings with Indian officials in 2008, documented in Wikileaks, US assistant secretary O’Brien emphasised that the focus of the FATF mutual evaluation of India will be effectiveness. “...It behooves the [Government of India] to emphasize concrete actions it is taking in supervision and enforcement to demonstrate robust implementation of their [Anti-money-Laundering/ Combating financing of terrorism] regime,” he said. In 2010, India gained membership based on the assurance that the country would “make suitable amendments” by 31 March 2012. That’s what the Indian government sought to do as it amended UAPA once more. A cross-party 160th Report—no longer available online but a copy of which is with Article 14—on the UAPA amendment bill 2011 shows how the home ministry was guided by the FATF while formulating far-reaching changes to India’s primary anti-terror law. Non-compliance with India’s commitment to the FATF would lead to “diminution in the stature of the country”, the home secretary stated on 1 March 2012. He “apprised the members that the proposed amendment in the principal Act is meant to comply with the guidelines of the Financial Action Task Force (FATF)”. Some of those guidelines seemed to fly in the face of conventional notions of the rule of law. For example, recommendation 5 states that countries should criminalise not just the financing of terrorist acts “but also the financing of terrorist organisations and individual terrorists even in the absence of a link to a specific terrorist act or acts.” This is echoed in recomendation 4, which says countries should confiscate property it believes linked with terrorism “without requiring a criminal conviction”. The resulting 2012 amendments to the UAPA expanded the definition of an accused “person” to include “an association of persons or a body of individuals, whether incorporated or not”. Any person could be charged merely on contacting a suspect. It also widened the definition of “terrorist act”—including any action that threatens the economic security of India. As global watchdog Human Rights Watch was in 2012 calling the beefed up UAPA a “dangerous tool in the hands of officials,” India was being lauded by the FATF. In its 2013 Mutual Evaluation Report (MER) of India the body commended “implementation of effective confiscation and provisional measures through amendments to the PMLA and the UAPA”. However, in one area India remained non compliant: NGOs. Indian officials believed the risk of terror financing through NGOs was low. The FATF disagreed. It is stated, on the FATF website, that the body “works to generate the necessary political will to bring about national legislative and regulatory reforms.” The UPA government, like most international governments in the post 9/11 era, had certainly not been shy to pass potentially draconian measures. But a new government was soon to come to power in India, one which had pioneered an intensely authoritarian style in Gujarat, and was not lacking in “political will” to tighten the screw on civil society actors. ‘Gujarat has shown the way’ Narendra Modi had only been the state’s chief minister for one year when the Gujarat riots broke out, the latest and worst of a series of deadly riots the state had suffered since 1969. On 27 February 2002, a busy train went on fire, killing over 60 people. Many of the passengers were Hindu pilgrims. Modi declared it an attack by terrorists. In days of brutal violence that followed, up to 2,000 mostly Muslims were killed in retribution, and 150,000 people became refugees. “Gujarat has shown the way to the country,” said Pravin Togadia, then Modi’s colleague, describing a “Hindu awakening”. The BJP’s senior spokesperson at that time, JP Mathur, called it a “reaction of nationalist forces”. The police commissioner of Ahmedabad conceded the involvement of those meant to protect. “Police were not insulated from the general social milieu,” he said. Some thought Modi’s response and the subsequent bloodshed could finish his political career. Instead, the model wouldThe politics of Hindutva-fuelled polarisation yielded immediate electoral dividends. In the elections that quickly followed the 2002 riots, despite huge losses prior to the riots, Modi and his party eventually romped home, winning 79 of the 102 seats from the 13 worst riot-affected Gujarat districts. As chief minister Modi began to take steps that he would later take to the national stage. He sought to alter the Gujarat legal framework to allow more repressive law enforcement and surveillance technology. Extra judicial and encounter killings became common, often reported as Muslim “terrorists” with a brief to assassinate Modi, and sometimes proved fake. Modi aligned with corporates who, in pursuit of profit, were willing to overlook the many controversies associated with his rule. One of these was the targeting of civil society critics. NGOs that worked with victims of Gujarat Riots, or were seen to debunk Gujarat’s model of development, were targeted and hounded. Running for PM in 2014, Modi pitched this Gujarat Model as something for the rest of India to aspire to. ‘You have voted me to rid the country of these diseases’ Soon after coming to power in 2014, Prime Minister Modi’s new Hindu nationalist government was presented with a classified document from the Intelligence Bureau (IB) that identified several foreign-funded NGOs as “negatively impacting economic development” by as much as 2-3% of the country’s gross domestic product (no basis for this calculation was included.) If one paragraph about the modus operandi of NGOs was familiar to Modi, that was because it was plagiarised from a speech he had delivered in 2006. A massive crackdown on NGOs and civil society organisations followed. “My friends, you have voted me to rid the country of these diseases”, said Modi in 2016, claiming a civil society conspiracy against him. Between 2015 and 2019, the registration of 16,683 non-government organisations (NGOs) were cancelled, a fivefold increase in cancellations compared from the four years prior to Modi’s election: 14,500 NGOs were barred from receiving foreign funds. Funding dropped by 90% from 2018 to 2019. This, when the income of the poorest 20% of Indian households has halved since 2016. In 2020 the Modi government, having asked states to monitor NGOs for “anti national activities”, also passed The Foreign Contribution (Regulation) Amendment Act, 2020, further tightening the government’s hold on the foreign-funded non-profit sector, scaling up rules that restrict, monitor and surveil its operations. As for the FATF, it has never made any critical statements about the targeting of activists through the laws it encourages in India. “Good practice guidelines” to Non-Profit Organisations (NPOs) to ensure FATF compliance is provided in the 2020 Act’s annexure. “Excellence in investigation by investigating officers” By January 2020, there seemed some hope for those accused in the Bhima Koregaon case. A commission of inquiry into the violence in Pune was making progress. Modi’s party, the BJP had lost control of Maharashtra state to a coalition, and the new state administration wanted answers about the BK case. It was reported that in a meeting with law enforcement, new deputy chief minister Ajit Pawar said the letters and evidence against the imprisoned activists must be substantiated within 15 days, or the state government would appoint a special investigation team to investigate the case and its handling. However, it was then that another controversial security law, The NIA Act 2008, was brought into play. Two years on from the arrests, with an inquiry threatening to derail the case against the activists, the National Investigation Agency (India’s equivalent of the FBI) unilaterally took over the case from the state. The powers meant that a special NIA security court would be responsible, with witnesses protected from public scrutiny. It caused an outcry, but to no avail. The commission of inquiry into the violence was suspended due to Covid, but under the NIA, arrests continued. Anand Teltumbde and Hany Babu were arrested in April and July respectively (Gautam Navlakha was arrested a second time). Babu was a professor of linguistics at Hyderabad. Teltumbde, a public intellectual. was the brother of a Maoist fugitive (who was killed in 2021) but described himself as a bureaucrat who had published work critical of Maoists. He was arrested on the 129th anniversary of his grandfather-in-law Dr Ambedkar’s birth. The basis for Teltumbde’s arrest was the mention of a “Comrade Anand” in one of the letters found in the electronic devices of the other accused, and that phone records showed he had been in contact with some of them. The NIA said he was also the convenor of the Elgaar Parishad. Babu was propagating “Naxal” activities and Maoist ideology. The case involved alleged incitement that “promoted enmity between various caste groups and led to (Bhima Koregaon) violence, resulting in loss of life & property and state-wide agitation in Maharashtra", the NIA said. That July, the NIA officer leading the BK case inquiry received a union home minister’s medal for excellence, “with the objective to promote high professional standards of investigation of crime”. ‘No Hindu can be a terrorist’ As the scope of the Bhima Koregaon violence—Maoist nexus was again stretched by the NIA, the case against Hindutva leaders Sambhaji Bhide and Milind Ekbote had stalled. Ekbote was out on bail, while Bhide had never even been questioned. No UAPA offences were filed. “If Ekbote and Bhide are also accused of instigating the violence, why weren’t similar charges pressed against them?” Retired Justice B J Kolse Patil had asked back in 2018. Preferential treatment of Hindus is baked into the substance of the UAPA. The Bhima Koregaon accused were accused of being part of CPI (M), one of the 32 terrorist organisations specifically listed in the First Schedule of UAPA. Communist, Khalistani, and separatist organisations figure on a list, which is dominated by Islamic organisations. No extremist or militant Hindu right-wing organisations are named. Even when Hindutva extremists have been accused of the most serious terrorist crimes under UAPA, they have often been treated very differently. For example, between 2006 and 2008, India was rocked by four major acts of terrorism. They targeted areas of large Muslim gathering, killing scores and injuring hundreds. NIA investigations led to a web of far-right, extremist Hindutva groups. In 2014, after Modi took power and gained control of NIA, the special prosecutor in 2006’s Malegaon bombings case, Rohini Salian, said she was asked to “go soft” on the Hindutva accused by an official of NIA. She was soon denotified. Claiming the initial probe was dubious, the NIA softened charges on all accused, and sought to exonerate the prime accused, Pragya Thakur. The court refused the exoneration and framed charges against her under UAPA. However, out on bail, UAPA charges didn’t stop Thakur from joining the BJP and winning 2019’s Bhopal parliamentary constituency election as the party’s candidate—the first time in India’s history that an alleged terrorist entered India’s Parliament. “No Hindu can ever be a terrorist, and if he is a terrorist, he can never be a Hindu," said Modi, reacting to a question following Thakur’s claim that Nathuram Godse, the Hindu who killed Mahatma Gandhi, was a patriot. ‘The process is the punishment’ Meanwhile, as Covid cut through India’s dire, overcrowded jails in 2020, the older Bhima Koregaon accused suffered. Rao, by now aged 81 and a cardiac patient with intestinal ulcers, was vomiting and feeble. Shoma Sen, who cited her history of hypertension and osteoarthritis, was told the fact she had “some disease” didn’t mean she should be released. Sudha Bharadwaj developed a heart condition, in prison, to add to her diabetes, blood pressure and history of pulmonary tuberculosis. Bharadwaj later got bail on a technicality and Rao on medical grounds. For some of them it was not even the first time they’d been accused under UAPA. Gonsalves was imprisoned for five years in a different case, before being acquitted. Ferreira, accused in 2007, was tortured and suffered in jail for years before acquittal. Rao was found innocent in 20 cases against him. According to government data, only 2.2% of those charged under UAPA between 2016-2019 ended up convicted. This shows how the UAPA has been designed, according to the senior Supreme Court advocate John, to make “the process as the punishment”. ‘They wanted me out of the way’ On the morning of 8 September 2020, Manch member Jyoti Jagtap’s prediction of more than two years earlier finally came true. She was arrested by the Maharashtra Anti-Terrorism Squad (ATS) while she stopped on her motorcycle at a traffic signal. Her husband Ramesh Gaichor was taken in the previous day with bandmate Sagar Gorkhe. After they were arrested, a pre-recorded video by Gorkhe and Gaichor was released on Facebook. In it, they alleged the investigating agency had sought to force them to turn witness against those previously arrested, to avoid arrest themselves. They had refused. Jesuit priest Stan Swamy, an activist who had spent much of his life advocating for detainee and tribal rights, had also been raided and interrogated by the NIA. On 6 October, knowing the inevitable was coming, he too issued a video statement. He spoke of the issues facing tribal society in Jharkhand, of displacement, land alienation due to mining, factories, dams, and of minimal compensation and state unaccountability. He spoke of co-founding the Persecuted Prisoners Solidarity Committee for providing legal recourse to those thrown in jail for claiming their rights. Representing around 3,000 young jailed Adivasis (a collective name for the indigenous people of India), Swamy filed a case against the Jharkhand state. “This became a bone of contention with the state and they wanted to put me out of the way. One easy way was to implicate me in some serious cases,” said Swamy. On 8 October 2020, the 84 year old was arrested in the Bhima Koregaon case. It was a place he’d never been to. “They don’t want any dissent from civil society and if you put some leaders behind bars, it will have a chilling effect on the rest,” said his lawyer, Mihir Desai. Desai himself faces that risk. While going through the affidavit filed by the investigative agency against his client, he noticed something. His organisation, India’s biggest human rights organisation, the People’s Union of Civil Liberties (PUCL), was cited—“Front organisation of the CPI (Maoist)”. “They are creating a situation where I could be arrested too,” said Desai. He engaged with this risk, but he never saw his client freed. Stan Swamy had Parkinsons. At one point, press reports suggest he waited for more than 20 days in prison to get access to a straw and sipper to drink. His health deteriorated. By May 2021, he had been imprisoned for nine months, and was being treated in hospital. As Swamy told judges in an unsuccessful interim bail hearing: “When I came to Taloja [jail], whole systems of my body were very functional, but during these eight months there has been a steady slow regression of whatever my body functions were... Eight months ago, I would eat by myself, do some writing, walk, I could take bath by myself, but all these are disappearing one after another. So Taloja jail has brought me to a situation where I can neither write nor go for a walk by myself. Someone has to feed me.” On the afternoon of 5 July 2021, Swamy passed away while in judicial custody at a Mumbai hospital after contacting Covid and suffering a heart attack. At 84, he was the oldest Indian to be accused of terrorism under the UAPA law. He was not once interrogated in custody by the NIA. Like the other accused, Swamy was imprisoned on the basis of documents the police said they had taken from his computer, documents he continuously said he “denied and disowned”. “These extracts were all interpolations put into my computer,” he had said. Reports released by a US forensic consulting firm suggested he and the other imprisoned activists were right. 2. WHAT DO THEY HAVE TO HIDE? ‘Trojan Horse’ At 5.04 pm on 11 January 2018, 11 days after the Bhima Koregaon violence, some files were saved onto Rona Wilson’s hard drive. They included incriminating details of Maoist action, those that the police would sensationally share with the media after his arrest, and which formed the basis of the case against the activists. But, while it was Rona Wilson’s hard drive, it wasn’t him that moved the files. A remote device was responsible, installed via a sophisticated Trojan horse called Netwire. His laptop had been compromised back in June 2016. The source was someone using his co-accused Varavara Rao’s account. A total of 32 documents were planted. They included the letter reportedly written by Wilson discussing a Maoist assassination plot. The files were never accessed or opened by any users of Wilson’s computer. Further back, in July 2017, the attacker was active on Gadling and Wilson’s computers only 20 minutes apart. This was when a document about funding of Maoist groups was put into both. Gadling’s computer was infected with Netwire nearly two years before he was arrested, when in February 2016 he received an email full of malware. He was one of 14 recipients. Among them was Stan Swamy. Anyone who opened the mail would be left with powerful malware, a type that could not only monitor, but control their computers. These were the discoveries of a small US digital forensics firm called Arsenal Consulting, who had been assessing copies of the hard drives of some of the arrested activists, and detailed their findings in a series of reports in 2021. New findings by the US cybersecurity firm SentinelOne disclose that Wilson was targetted by two different groups of cyber criminals, one of which is known for its cyber-espionage campaigns against India’s enemies, Pakistan and China, while the activities of the other “aligns with Indian state interests”. It was only the latest controversial news to emerge about the use of surveillance technology to target India’s citizens. ‘Your reliable partner and trusted advisor to effectively prevent and investigate terror and crime’ Back in 2013, Citizen Lab published a report asserting that India was among 25 countries where servers of FinSpy, a spyware widely criticised for aiding authoritarian governments in targeting opposition and dissidents, were located. Privacy International suggested that the spyware, sold by a company called Finfisher, was able to perform potent surveillance operations. Finfisher—“your reliable partner and trusted advisor to effectively prevent and investigate terror and crime” says its website—had grown within a burgeoning post 9/11 surveillance tech industry. From “next to nothing” in 2001, the year of the attack, surveillance is now a shadowy $5 billion global industry, growing at 20% annually, according to Ilia Siatitsa, PhD, of Privacy International. Her organisation found 528 surveillance companies operating globally, selling secret products to government agencies from behind closed-door arms fairs. One country emerged as the leader in this industry, one with close ties to India, and through one of its companies, to its persecuted activists. ‘Going to the beach with friends’ In July 2017, after a three day diplomatic visit to Israel, Modi and Israeli then-counterpart Benjamin Netanyahu were pictured paddling together in Olga Beach in the northern coastal city of Haifa. “There’s nothing like going to the beach with friends,” tweeted Netanyahu afterwards. It’s a friendship based on the trade of deadly arms. India is by far Israel’s biggest arms customer, from 1950 to 2020 accounting for 23 percent of its total arms exports. However, recently Israel has become a central player in the business of surveillance. The country, which itself runs a surveillance state in Gaza (which has been described as the world’s largest open-air prison since blockades that started in 2006), nearly doubled its surveillance technology sales from 2018 to 2019, with snooping tech now accounting for 14% of all “defence” exports. Jamal Khashoggi/WIKIMEDIA COMMONS Cyber security was one of the key areas to be discussed with Narendra Modi ahead of Modi’s 2018 visit. India and Israel signed a pact on cyber security during the visit, where Modi and Netanyahu held extensive talks on “identifying role of non-state actors in promoting terror”. Israel’s intelligence services, considered among the most well trained in the world, and the country’s status as a “start-up state”, ensures a conveyor belt of former operatives set up private security-focused tech companies with advanced tools for sale. The NSO Group, whose technology played a role enabling the grisly murder of Saudi journalist Jamal Khashoggi and has since been sued by Facebook and Apple, is the most notorious. ‘Used exclusively by government intelligence and law enforcement agencies to fight crime and terror’ Rupali Jadhav makes some money by selling t-shirts printed with the image of some of the Indian progressive icons she venerates. On the surface, she seems an unlikely target for some of the world’s most technologically advanced spy technology. But she also runs social media for different progressive organisations in India, including the Kabir Kala Manch. This, she thinks, made her a target. In October 2019, her mobile phone number figured on a database of the NSO group, which uses its Pegasus spyware to infiltrate mobile smartphones and conduct remote surveillance on targets. Research done by Citizen Lab, which accessed the database, revealed that Jadhav’s number was among at least two dozen phone numbers surveilled in the run-up to 2019’s Indian general elections. They included Indian lawyers, journalists, Dalit and cultural activists, professors and intellectuals. Among them were a host of other individuals linked to the Bhima Koregaon accused. These interpolations could, theoretically, have come from anywhere. Except, NSO claims its “products are used exclusively by government intelligence and law enforcement agencies to fight crime and terror”. “The state will do its work” It would later become clear that the mobile phone surveillance net was cast far wider than just Modi’s critics. In July 2021, Indian news website The Wire, which was part of The Pegasus Project, a collaboration of 17 international media organisations helmed by the Paris-based Forbidden Stories, came out with further damning revelations of Pegasus’ infiltration across 50 countries in the world, including India, involving 50,000 compromised phones. After initially revealing names of 40 Indian journalists, the India list was expanded to 161 names. Connected to the Bhima Koregaon case, these include eight of the accused (Hany Babu, Rona Wilson, Vernon Gonsalves, Anand Teltumbde, Shoma Sen, Gautam Navlakha, Arun Ferreira, Bharadwaj), but also their wider network: Varavara Rao’s daughter, Surendra Gadling’s wife and also his lawyer, Bharadwaj’s lawyer, a friend of Anand Teltumbe, and another of Mahesh Raut. And Kabir Kala Manch member Jadhav. A file photo of Sudha Bharadwaj from the time she was practising in the High Court in Bilaspur, Chhattisgarh/COURTESY SUDHA BHARADWAJ It suggested that the Bhima Koregaon accused and their associates had been wrapped in a web of phone surveillance. Pegasus offers unlimited access to mobile devices–locations, call details, encrypted communication, files, photos, videos, contacts, calls, real time screen capture. But the list went far further. Pegasus surveillance did not target just the Bhima Koregaon accused, or even just activists. The long list included politicians, including the head of India’s main opposition party and union cabinet Ministers, Supreme Court judges, an Election Commissioner, lawyers, academics, scientists, industrialists, CBI officials, lobbyists, national security figures, diplomats, Tibetan activists, Kashmiri and Northeastern dissidents, even a cricket administration official. The cost of this comprehensive spyware is high. If Pegasus was used since 2016 on 300 phone numbers in India, the cost estimated by The Indian Express is $7.5 million. Back in Pune, Jadhav wondered why, going by 2016 rates, the government would want to spend Rs 50 lakh (approximately $67,000) to spy on her phone. “They could have spent that amount on the health and education of children in India,” she said. “The state will do its work,” she said. “We have to keep doing our work.” ‘An elitist concern’ The Modi government’s reaction has been ambivalent on the question of buying and deploying Pegasus. Legal experts and opposition figures have pointed towards the 10-fold increase in the National Security Council Secretariat’s budget under the new head “Cybersecurity and Research & Development”—up to Rs 300 crore (about $40 million). The NSCS advises the Prime Minister on strategic and security issues and reports to the national security advisor, Ajit Doval. All NSO group contracts state that their products must only be used lawfully to stop terrorists, and it is to the law that minister of state for home affairs G Kishan Reddy demurred when refusing to deny the government had bought Pegasus. He cited section 69 of the Information Technology Act, 2000, which “empowers the Central Government or a State Government to intercept, monitor or decrypt or cause to be intercepted or monitored or decrypted any information generated, transmitted, received or stored in any computer resource in the interest of the sovereignty or integrity of India”, The NewsMinute reported. The ministry also cited section 5 of the Indian Telegraph Act, 1885, which authorises specific individuals to view messages in the case of a public emergency or in the interest of public safety. In August 2021, following the Pegasus spyware revelations, 11 leading global civil and human rights organisation alleged violation of the Right to Privacy judgement and called upon Indian authorities to independently and credibly probe the government’s alleged role. Their basis was a 2017 landmark Puttaswamy judgement—as it is called—where a nine-judge bench ruled the right to privacy was a fundamental right of all citizens, discounting the government argument that privacy was “an elitist concern”. The organisations noted that “since then, the government, instead of overhauling the surveillance law framework and enacting robust data protection mechanisms, has used public safety and national security arguments in court and in parliament to deflect concerns about violations of privacy rights”. Contrary to protecting the privacy of citizens, after the Personal Data Protection Bill (PDP) was tabled in Parliament on 11 December 2019, Justice (retired) B N Srikrishna, who headed the panel which drafted the original PDP bill, described the version tabled by the Modi government as “dangerous” and likely to transform India into “an Orwellian state”. Using “national security” as the basis for an all-encompassing exemption, the bill, which is now being analysed by a Joint Parliamentary Committee, gives blanket authority to the state to access citizens’ personal data without requiring their consent. In 2008, according to a classified document available on WikiLeaks, Indian law enforcement did not have the capacity to trace cell phone calls beyond the transmitting tower. Now, legal under these laws, a shadowy mesh of high tech surveillance and biometric systems pervade–all justified and driven by security language. ‘An authoritarian, anti-dissident state’ “We are turning into an authoritarian, anti-dissident police state”, said Divij Joshi, a lawyer-legal researcher and tech policy fellow at Mozilla. He set up the AI Observatory. A look through the AI systems installed by governmental authorities in India, especially law enforcement agencies, shows a growing dependence on facial recognition technology (FRT). Increasingly, it has been found tracking and identifying participants during the anti citizenship and farm laws protests, according to Joshi. Home minister Amit Shah stated that 1,922 people had been identified in the 2020 Delhi riots case based on facial recognition software using data from voters ID, and driving licence and others. Recently, the home ministry has also announced the Automated Facial Recognition System (AFRS), which would be fed by multiple government digital databases and records. This is despite the fact that, through Delhi police’s own submission before the Delhi High Court, its facial recognition software provided merely 2% accuracy and sometimes mixed up genders of those being identified. India is already home to the Aadhaar project, the world’s largest biometric identification system, alleged by many to be a surveillance engine. Around 1.3 billion Indians enrolled with a 12-digit unique identification number. The germ of the idea came from a security crisis, 1999’s Kargil war, and focused on illegal immigration. While it came to be cast as a matter of welfare delivery, former Intelligence Bureau chief and current National Security Advisor, Ajit Doval told Tehelka magazine in 2009 that the original idea of a unique identity was “to wash out aliens and unauthorised people”, later “projected as a development-oriented initiative, lest it ruffle any feathers”. “Aadhaar has completely morphed into a mass surveillance mechanism,” contends Gupta, who had served as a counsel on the Supreme Court’s Right to Privacy and the constitutional challenge against Aadhaar cases. Indeed, section 33 of 2016’s Aadhaar act clearly articulates the government’s right to obtain information on any person for the sake of national security, and 2020’s FCRA law amendment made providing Aadhaar details mandatory for the senior management of NGOs. “The very root of fascism [is] where a totalitarian society expects individuals to completely invest themselves and be completely transparent towards public authorities,” said Gupta. “Because, it is reasoned, what do they have to hide?” “Distortion of facts” While the Pegasus / NSO group revelations made waves around the world, at base they involved the use of technology to surveill and gather information, a practice used by all governments, to varying extents and in different forms. The Arsenal consulting revelations concerning the Bhima Koregaon accused, which suggested the use of technology to plant evidence against state critics, were of a whole different order. “Please keep in mind that ultimately you do not need to take our word for anything we have shared in Reports I or II, as our findings can be replicated by competent digital forensics practitioners with access to the same electronic evidence,” said Spencer, head of Arsenal Consulting. However, citing forensic analysis they claimed was done by a science lab in Pune, the Indian government said anything else was “distortion of facts”. (The regional science laboratory had, according to the record, not responded to questions of evidence tampering). “We do not take cognisance of reports from private labs,” an NIA spokesperson told Article 14 at the time. The Bombay High Court also rejected pleas by lawyers of both Sen and Wilson based on Arsenal’s findings. The matter was already sub judice, they said. Police had throughout the case said that they had more than just the electronic evidence against the BK16. But nothing substantive ever materialised. An independent organisation was saying the basis of their case was a sham and a set-up. It was making the analysis available for anyone else to scrutinise. The Arsenal findings called into question the integrity of the justice system, the Pune police and the NIA. It was reported in local and international press, and critiqued by international organisations. And yet, the Indian government was saying it didn’t care. For the Bhima Koregaon accused, still awaiting trial, the revelations have made no difference. 3. IN THE NATIONAL INTEREST “Myth-making, before our very eyes” “All that will remain in public memory will be the narrative that a bunch of urban Naxals were responsible for the violence, and the actual perpetrators of the violence will be forgotten,” said Susan Abraham, the wife of accused Vernon Gonsalves, quoted in the press on the stalled inquiry into the violence. “It is myth-making, happening in front of our eyes.” From the very start, when the story changed from one of Hindutva provocateurs instigating a riot against Dalits, to Maoist “urban naxals” inciting violence as part of a plan to overthrow the state, the Bhima Koregaon case has been about narratives, and the attempts of Modi’s government and supporters to use the power of the state to control what citizens believe. The much vaunted Bhima Koregaon Modi assassination plot, parroted to the media by police from 2018, never even made it into the NIA’s 17 draft charges two years on. But that doesn’t matter if the recurring narrative of Modi’s life being under threat was nonetheless perpetuated. In the same way, when the Bhima Koregaon case eventually reaches trial, whatever the outcome is, the state narrative will endure: activists and government critics are “anti-national” threats to India. That was where the conflict over the Elgaar Parishad event first started back in late 2017, with Hindutva critics trying to ban the event, deeming the Dalit organisers, their different understanding of history, their competing narrative of the country’s past and present that equated current rule with that of the Peshwas defeated at Bhima-Koregaon, as “anti-national”. In Modi’s India, narratives of “national interest” are frequently invoked, and violence against minority groups, whether through the state or its ideological proxies, very often follows. “The National Interest” On 24 February 2020, Faizan, a Muslim tailoring shop assistant, went to pick up his mother from the site of an anti-Citizenship Amendment Act protest in Delhi after violence broke out. Caught in the crossfire, the 22-year-old was reportedly beaten by the police. A video recording of the incident showed Faizan, along with four others bloodied in tattered clothes, lying on the ground as surrounding policemen prodded them with sticks. As a policeman is seen filming with a mobile phone, one of the injured is forced to sing the Indian national anthem for the camera. Instead of a hospital, the injured Faizan was taken into police lockup, where further torture allegedly took place. Two days later, he passed away. That a bloodied and injured man was forced to sing the national anthem by law enforcement shows the power of the nationalist narrative that underpins Modi’s security playbook. Faizan/COURTESY FAMILY The clampdown on thousands of foreign-funded NGOs was undertaken so that “foreign funds don’t affect the national interest”. The abrogation of special status of Jammu & KashmIr, India’s only Muslim-majority state, was in the national interest to “end terrorism”. The National Register of Citizens (NRC), as well as the Citizen’s Amendment Act, the protests against which led to Faizan losing his life, was necessary “in the interest of the nation”. Laws clashing with the pluralist and secular tenets of the Indian Constitution like Love Jihad criminalising Hindu-Muslim interfaith marriages, were passed citing greater common good. Policy decisions like 2016’s high-denomination currency note cancelling Demonetisation, which left scores dead, millions jobless and the economy in shambles, were taken to stop terror-funding and weed out black money—in the national interest, Modi reminded India. To ensure that “national interest” is a 360 degree undertaking, the government aggressively pushed Aadhaar, despite the Supreme Court ruling against making it mandatory and experts voicing concern on its data-leaking and mass surveillance characteristics. It was in the national interest. When in February 2022 journalist Fahad Shah of Kashmir was arrested under UAPA following reporting of a deadly police raid, it was for “uploading anti-national content”. The nationalist narrative, seen in these and the Bhima Koregaon case, is circular and goes like this. That there is a tremendous and enduring threat facing the state. Anything the government says it does to counter this threat, no matter how extreme, is in the “national interest”. Anyone who speaks against the government is an “anti-national” enemy. They pose a tremendous and enduring threat to the state. And so on. ‘A good lesson’ In Modi’s India, who those anti-national enemies are was defined long ago. In his 2008-published Gujarati language book, Jyotipunj, a biographical sketch of 16 people who inspired him, he dedicated the longest chapter to M S Golwalkar, the second sarsanghchalak (chief) of the Rashtriya Swayamsevak Sangh (RSS), and considered the ideological font and moral guide of the BJP. According to Golwalkar’s writings, Hindu hegemony over Indian nationhood is preordained and irrefutable. All others are subordinate. The three major internal threats to Hindustan were Muslims, Christians, and Communists. The man who Modi described as Pujniya Shri Guruji (Guru Worthy of Worship), praised a previous situation where nationalist narratives were leveraged for electoral success, the supremacy of one group was elevated, critics were purged, national institutions were captured, certain groups were scapegoated for national issues. For Indians, the Nazi purge of Jews was, he wrote, “a good lesson for us”. The mob lynching and persecution of Muslims is encouraged by Hindutva ecosystem individuals and groups who promote narratives of national threat to Hindus due to demographic changes. But violence against other minorities is also growing. RSS head Mohan Bhagwat in a December 2021 speech warned Hindus about religious conversions in areas of high Christian population. Violent attacks of Christians and churches followed. A BJP legislator called for an India “free of veil wearing Muslims and Christian priests”. At rallies against “conversions”, BJP grandees have watched as far right leaders urge attendees to “arm themselves with axes” and call for beheadings. Far right Hindu religious congregations have openly called for genocide against Muslims. Let alone invoking the UAPA, little punitive action has been taken against the offenders. Mohan Bhagwat/RSS Internally, the vilification of minorities and critics, the triumphalism of Hindu nationalism, and the constant identification of the “anti-national” enemy, Modi’s India in 2022 represents the culmination of Hindutva’s majoritarian dream. ‘The mother of all democracies’ On 24 September 2021, when Modi was granted a visit to President Joe Biden at the White House, the message was very different. In the usual exchange of pleasantries, Biden told him that Gandhi’s “message of non-violence, respect, and tolerance matters today maybe more than it ever has”. According to the official White House readout, among other things, they “reaffirmed that the United States and India stand together in a shared fight against global terrorism”, they “welcomed opportunities to develop counterterrorism technologies", and even called for the release of political prisoners—albeit in Myanmar. According to the readout, Biden didn’t mention the Bhima Koregaon 16, some of whom had by now been in prison for over three years, or any of the other thousands similarly imprisoned in India. In his speech to the United Nations the next day, Modi highlighted that “the world faces the threat of regressive thinking and extremism”. He called India: “the mother of all democracies.” ‘Democracy will not survive in this country’ Yet maintaining the national interest narrative has required reorienting India’s democracy beyond recognition, far beyond the squashing of critics like the BK16 and NGOs. US agency Freedom House in its 2021 report downrated India to “partially free democracy”. Swedish organisation V-dem describes India as an “electoral autocracy”. According to the inter-governmental think tank International IDEA, India is among the top three democratic backsliders in the world. Democratic institutions that could hold the executive accountable and stem the tide have been co-opted. The Enforcement Directorate(ED), the Election Commission(EC), the Central Bureau of Investigation (CBI), the NIA, the National Human Rights Commission and Reserve Bank of India have all kowtowed to the government’s political agenda. Four senior sitting judges of the Supreme Court of India—the most powerful judicial institution of the land—held a landmark press conference raising “doubts about the integrity of the institution”. They told the country: “unless this institution is preserved and it maintains its equanimity, the democracy will not survive in this country.” The NGO crackdown has continued, and may worsen. In December, national security adviser Ajit Doval, addressing a passing out parade at the National Police Academy, said civil society organisations represent “the new frontiers of war” and could be “manipulated” to “hurt the interests of the nation”. He told the probationers that they had to ensure these interests were “fully protected”. Particularly intransigent media houses, editors and journalists have faced intimidation, coercion, online threats issued by professional troll armies of the ruling party, largescale arrests, and even murder. One of Modi’s senior ministers coined the derogatory term “presstitute”. India is “one of the world’s most dangerous countries for journalists”, according to Reporters Without Borders, whose 2021 Press Freedom Index places India 142nd out of 180 countries. Large sections of India’s mainstream media have remained devoted and unquestioning about the government’s agenda, some reliant on the Modi government’s astonishing Rs 700 crore annual expenditure on advertising. Other pro government outlets have amplified and exacerbated Hindutva’s hyper-nationalist and divisive hate campaigns. A 2018 sting by investigative outlet Cobrapost, showed through video how senior executives of dozens of Indian media houses were willing to push the BJP’s communally-polarising Hindutva poll plank for money. Some influential national and regional outlets have, or have had, a direct association to the ruling BJP through owners or founders. Bhima Koregaon lines were repeated, without editorial scrutiny, by large sections of the establishment-leaning, mainstream media, now allied with the government and ruling party. In seven years as Prime Minister, Modi has not once answered questions in a press conference. Meanwhile, the government was recently found restricting the media from reporting proceedings of the Indian Parliament. And when the government deems that a subset of citizens still have too much access to information, like in Jammu and Kashmir, they can just switch off the internet. India has the ignominious record of enforcing the most internet shutdowns of any country, 109 of 155 globally in 2020. It is only one way in which the Internet can be controlled in favour of the government narrative. ‘Troll farms’ An image of Modi hugging Mark Zuckerberg in California in 2015 emphasised the importance of the colossal Indian market to Facebook. It is the app’s largest user base. But social media is also essential to Modi’s allies to promote and control narratives. As then BJP president and current Indian home minister, Amit Shah, was heard telling the BJP’s social media volunteers in Rajasthan in 2018, the party is capable of delivering any message to the public, whether true or fake. Disinformation or misinformation has become a form of state violence. According to author Paranjoy Guha Thakurta, who wrote “The Real Face of Facebook in India'”, Whatsapp, with 400 million users, has been weaponised. “WhatsApp (part of Facebook platforms) is the vehicle for hateful speech. It is not neutral or agnostic and it has been complicit in promoting Modi and the RSS well before 2014,” he said. “Behind every major communal conflict in India, WhatsApp messages and FB posts have been misused”. 2021 revelations from whistleblower Frances Haugen confirm Facebook knew about the deadly impact of their technology in India, and did little in response. Relative to the US, a country India dwarfs, it devoted almost no resources to classifying misinformation. Its technologies were not refined for the Indian context. Frances Haugen/FRANCESHAUGEN.COM According to the Wall Street Journal, even in 2018 amid a carnival of anti Muslim violence, when it had identified two key sources of Islamophobia, a senior Facebook India official, a Modi sympathiser, refused to punish hate speech violations by BJP politicians as it would damage the company’s business prospects in the country. It’s clear what the possible consequences are, even for hugely powerful social media companies, if they don’t tow the line in India. Twitter labelling the forged tweet of a ruling party spokesperson as “manipulated media” triggered a police raid on the American microblogging platform’s India offices. The Ministry concerned called it an attempt by Twitter to defame India. And despite Facebook’s policy of appeasement, Modi’s government has forced the removal of Facebook posts unfavourable to the ruling party and threatened expulsion from the country if the new Information Technology Rules, 2021, which allow for the prising open of end-to-end encryption, are not followed. Through these different forms of control, narratives can be built and maintained in tandem by the pro-government mainstream media and the political establishment, often using dubious evidence, then accelerated by social media—sometimes with deadly outcomes. 'Is it that easy to prosecute people?' By the time Banojyotsna Lahiri saw the gun held near the stomach of her partner, it was too late. The assailant had pulled the trigger Luckily for Umar Khalid, said Lahiri, the bullet didn’t release. It was late 2018, anti-Muslim violence was raging across the country, and Facebook and Whatsapp were filled with hate speech. Khalid, then a PHD student, had become a known target as one of nine students charged with sedition and raising anti-national slogans after the JNU incident in February 2016, where an annual leftist anti capital punishment protest led to televised clashes. He was out on bail. The attacker and an accomplice—both claimed to be cow vigilantes—claimed the killing of Khalid would have been an Independence Day gift to the country and punishment for the “mad dogs (the JNU gang) that is making the country weaker.” Later released on bail, the attacker was rewarded with a ticket to contest Haryana state elections by the Shiv Sena, then a BJP ally. “I’m still alive alright, but I’m no longer free as before,” Khalid told me, six months later. Sometimes in public, strangers would hurl abuse at him for being a traitor and anti-national. He avoids the metro and sleeper trains for his safety. The reality of the JNU incident was heavily distorted through social media and partisan news. Then Union Home Minister, Rajnath Singh, cited a tweet from a fake account to establish a link between JNU protesters and a Pakistan-based terrorist organisation. An aide of the then union HRD Minister, Smriti Irani, tweeted a doctored video of the JNU event. A Delhi government magisterial probe found the key video aired by Hindi news channel, Zee News, claiming anti-India slogans were shared at JNU, was manipulated. Two other videos aired on prime time television were found to be edited with audio added. An English news channel cited an Intelligence Bureau report to claim Khalid was linked to another Pakistan-based terror outfit. This was subsequently refuted by the IB. Some channels claimed Khalid had been to Pakistan, when in reality, “he didn’t possess a passport”, according to Lahiri. A news website cited an unnamed report that claimed Umar Khalid’s group stuck naked pictures of gods and goddesses to vitiate JNU’s atmosphere He was declared “more dangerous to the country than Maoist terrorists” by a “nationalist” news anchor. Umar Khalid/SANDEEP YADAV FOR KARWAN E MOHABBAT “He was particularly singled out, and a special kind of propaganda went on around him because of his religion” said Lahiri. “They wanted to show through Umar that Muslims are quintessentially anti-national”. In January 2018, a report was registered against him by Pune Police for inciting speech in the Bhima Koregaon violence, though it wasn’t pursued. A Delhi court also granted him bail in a Indian Penal Code case related to the Delhi riots while noting that Khalid can’t remain behind bars on the basis of “such a sketchy material against him.” It was the 2019 UAPA amendment that finally got him. Khalid, with many other students and activists charged in the Delhi Riot case, has now been in jail for over a year without bail or trial. He is accused of being one of the main conspirators involved in the Delhi violence, where days of communal rioting resulted in at least 53 deaths and large-scale destruction of property. The police alleged that Khalid had delivered provocative speeches at two different places appealing to people to come out on the streets and block roads during US President Donald Trump’s visit to India to spread propaganda internationally. On 23 August 2021, during Khalid’s bail petition before a Delhi court, it came to light through his lawyer, Senior Advocate Trideep Pais, that the Delhi Police based its evidence on a truncated, edited 30 second video from Khalid’s 20 minute speech at Maharashtra’s Amravati on 17 February, 2020. In it, he promised that during Trump’s visit “we will say that the Prime Minister and the government of India are trying to divide the country”. He exhorts people to the streets. In the rest of the speech, however, as reported in this Quint report, he explicitly says “we won’t respond to violence with violence”. “If they fire bullets, then we will hold the Constitution. If they jail us, we will go to jail singing, “Saare Jahaan Se Acha Hindustan Hamara”—better “than the entire world, is our Hindustan”. Khalid’s lawyer informed the court that “Delhi Police had nothing but Republic TV and News18 for the case.” The channel said the clip actually came from a tweet by BJP member, Amit Malviya, the national in-charge of the BJP’s Information Technology department. Regarding the prosecution’s allegation that Khalid had conspired with others on 8 January 2020 to create riots during President Trump’s visit, the ministry of external affairs didn’t even announce the visit until February, Pais told the court. Calling the UAPA chargesheet “fabricated” and “a joke” before the court set the next date of hearing, Pais was heard asking the judge, “Is it that easy to prosecute people?” ‘Vested interests’ Behind all this, the “national interest” narrative has proved to be very lucrative for some of India’s capitalists. On the day Modi was travelling from Gujarat to Delhi to take oath as Prime Minister of India in May of 2014, photos showed him climbing onto an aircraft with ‘Adani’ inscribed on its body. As PM, Modi soon stopped the tradition of inviting the Indian press corps on diplomatic foreign visits. Instead, he took Gautam Adani to as many as 18 countries to sign business deals. Adani was a corporate ally who stood by Modi when some other industrialists raised uncomfortable questions related to the Gujarat Riots and communal harmony. Critics like Teesta Setalvad contend that, following the rights based legislation of the previous UPA government, on forest rights, land rights, and food security, “vested interests were deeply affected and didn’t like that”. In her view, they colluded to help Modi become Prime Minister. In power, Modi’s government has shown a strong pro-capitalist, pro corporate agenda. The Bhima Koregaon accused had opposed this in different ways. For decades, Stan Swamy’s indigenous rights and pro-people activism had focused on Jharkhand, an eastern state blessed with 40% and 29% of India’s mineral and coal reserves respectively. He fought against dilution of the law that guaranteed autonomy to indigenous communities. He critiqued the government’s indifference towards the Supreme Court’s 1997 Samatha judgement that provided safeguards against mineral excavation on adivasi land. He challenged Jharkhand’s erstwhile BJP government’s inaction towards implementing forest rights laws, and perceived favouring of private or corporate motives. Corporate interests suffered with the wider social empowerment and resistance he helped foment. More recently, he went against one of Modi’s closest allies, Gautam Adani, questioning how land at discounted rates was acquired while getting easy environmental clearances for a Jharkhand power plant by Adani Power. Swamy, by many accounts, made powerful enemies. “We are seeing a three-headed project,” said former bureaucrat and social activist Harsh Mander. “First is to divide us almost irretrievably on the basis of religion. Second, to crush every dissenting voice cruelly. And the third is the handing over of our resources and agriculture to corporations, even doing away with the little bit of labour protections we had.” Harsh Mander/SANDEEP YADAV FOR KARWAN E MOHABBAT Tribal rights linked other members of the Bhima Koregaon 16. Sudha Bharadwaj, Prof G N Saibaba, Rona Wilson, Saibaba’s counsel Surendra Gadling, and journalist Gautam Navlakha—all interlinked through upholding the common cause of tribal rights against rampant corporatisation of natural resources. Labour activism was the primary reason behind the UAPA arrest of five contract workers with Reliance Energy inc in January 2018. The last of the five got bail recently after spending 1185 days in custody. They had earlier fought for the rights of contract workers hired by the company and had scored some big successes on their behalf. Article 14 reported that the workers linked the timing of their arrests to the takeover of Reliance Energy by Adani Transmission in December 2017, their arrests coming two months later. The police charged them under 10 UAPA sections, claiming the contract workers were linked to the outlawed CPI (Maoist) and a “Bhima Koregaon poster” was found on them. The workers denied the first charge, though admitted visiting the Bhima Koregaon event as Dalits. In effect, by connecting their arrests to the Bhima Koregaon event and the CPI(Maoist) the narrative was set for the subsequent arrest of the BK-16. While granting bail after 3.2 years to the last of the five workers, the Bombay High Court judge ruled that prima facie the material against the accused did not indicate offences committed. “That contract workers can be implicated in terror laws for their union work is the most shocking aspect of this case,” advocate Susan Abraham, who helped the workers get bail, told Article 14. It shows the distance traveled by the UAPA—from Ajmal Kasab, Pakistani terrorist charged under section 16 of the UAPA for being directly responsible for the killing of 72 persons and injuring 130 during the 26/11 attacks in 2008, to ordinary citizens charged for carrying posters, attending meetings, speaking out, even just singing. 4. MILLIONS ARE THE BIRDS OF FREEDOM ‘Where there is oppression, rebellion should break out’ The Kabir Kala Manch are mentioned in the Bhima Koregaon charge sheet as singing a particular song, the lyrics cited as evidence of incitement to violence: “Jab zulm ho to baghawat honi chahiye shahar men, agar baghawat na ho to, behtar ho ke, yeh raat dhalne se pahle shahar jal kar raakh ho jaye". It translates as “When there is oppression, rebellion should break out in [the] city.” In India, it feels like that’s what is happening. Hemmed in from all sides, and with little recourse to redressal, Indians in cities across the country have taken to the streets in protest to protect their rights. If cases like Bhima Koregaon were intended to intimidate activists, they seem rather to have galvanised them. On 19 November last year, protest and civil society won their biggest victory in the Modi era. Farm protests rose five times between 2017 and 2021, opposing three new agricultural laws hastily passed by the NDA government which are felt to prioritise corporate interests over that of farmers. Protestors had the whole Modi playbook thrown at them. But still they came in their millions. With the Modi government forced to repeal the three farm laws, their success is only the latest sign of the impact of mass civil action. Protests across India have forced the government to shelve plans of the nationwide rollout of the communally and ethnically-sensitive National Register of Citizens and has stopped it from operationalising the Citizenship Amendment Act close to two years after it was passed in parliament. Earlier in Modi’s tenure, rising protests against proposed amendments to the land acquisition law compelled Modi to announce its withdrawal. Smaller but influential protests by writers and artists returning their government awards demurring against the killing of public intellectuals allegedly by Hindu rightwing groups, saw a scaling down of such incidents. The largely urban, civil society-organised #NotInMyName protests against the tide of mob violence and dozens of beef-related lynchings saw Modi, for the first time, condemn cow vigilantism—“killing people in the name of gau bhakti is unacceptable”, he said. “You only have to lose your fear of going to jail” “If they call us traitors, anti-national, unconstitutional or Naxals, so be it,” Nodeep Kaur asserted over the phone. “Despite any tag they use on us, the truth will be told.” After spending over 40 days in jail, the 25-year-old Dalit female labour union organiser from Haryana is currently out on bail. On 12 January 2021, Kaur, spokesperson and member of Mazdoor Adhikar Sangathan (MAS), or Workers’ Rights Organisation, was arrested while mobilising workers near a site of the ongoing farmers protest in Delhi. She was working at forming solidarity between industrial workers and farmers “since the farm laws will affect us all”, said Kaur. Nodeep Kaur. The farm protests may have been successful, but she still faces prison. The police filed three cases against her, including attempt to murder and extortion. Her story connects to a critical component that has been at the heart of the resistance to Modi government’s policies and Hindutva politics in India—women protesters rising to the forefront of oppositional politics. Student-activists Safoora Zargar, Devangana Kalita, Natasha Narwal and Gulfisha Fatima; the 19-year-old journalism student hauled up for shouting “Long live Pakistan” even though she also hailed India and other neighbouring countries, Amulya Leona Noronha; and the 22-year-old environmental activist Disha Ravi, for uploading an activists’ toolkit on Google; have all braved jail terms on charges of terrorism and sedition for acting on their outrage at the citizenship and farmers’ laws. Disha Ravi. While the Modi government showcased the passing of the Triple Talaq law, which criminalises the Muslim practice of instant divorce, as an act safeguarding Muslim married women’s rights, Muslim grandmothers took the initiative to organise mass sit-in peaceful protests in Delhi’s Shaheen Bagh. The dadis (the Shaheen Bagh grandmothers) ignited protests across India. One of them, Bilkis, was named one of Time magazine’s 100 Most Influential People of 2020 list. Bilkis Bano/COURTESY FAMILY At one of the longest running women’s protests Shaheen Bagh inspired, at Kolkata’s Park Circus, I heard a Muslim woman teaching her audience of largely Muslim women how to raise slogans: “I will say, ‘NRC ko, NPR ko tod ke dikhaya hai (We have destroyed the NRC and NPR)’, and you will say, ‘Desh ki mahilayon ne rasta dikhaya hai (The country’s women have shown the way).’” The chorus was instantly picked up and with a deafening roar. A well-known public interest lawyer and civil rights activist, Prashant Bhushan, had told Article 14: “You only have to lose your fear of going to jail.” The women had done that. While the protest forced a government retreat from its stated position on implementing the CAA-NRC-NPR system, police cracked down hard on Delhi protesters under the cover of the Covid 19 lockdown. A large number were charged under sections of UAPA. Most continue to be in jail. “Silence is going to save you is a misnomer people have,” said Teesta Setalvad, reflecting on how she had stayed out of jail over the years. She cited the crucial role of alternative media, and also NGO solidarity. “We always spoke for others who were under attack in the wider human rights fraternity." ‘India should not get a good rating’ Yet India’s size and significance means that most countries have publicly turned a blind eye to the deterioration of its democracy in favour of good political and economic relations. “We can’t fight India on civil society, but we can leverage pressure on the FATF,” said Katerina Hadzi-Miceva Evans, executive director of the European Centre for Not-for-Profit Law and a member of the civil society umbrella pressure-group, the Global NPO Coalition on FATF. The coalition has gained the ears of FATF seniors at the body’s Paris headquarters through advocacy aimed at mitigating “the unintended consequences of countering the financing of terrorism (CFT) policies on civil society”. The body has been increasingly responsive, publicly warning countries like Serbia against the misuse of its recommendations to target civil society. The FATF and Modi’s government seem to remain close. Recently, a working group for a new national policy to regulate civil society organisations was announced “following directions from the Prime Minister’s Office”. It will include high level FATF participation. The FATF says this is necessitated by reports of violations of regulations, including of the FCRA, and to ensure that the Indian government complies with the FATF guidelines. “We will inform the FATF that this country is misusing your language and goals not to fight terrorism but to fight civil society, and you have to consider this while evaluating the country. “India should not get a good rating and should be regarded as non-compliant,” Evans said. “The country should not be rewarded if its misusing FATF’s goals.” ‘We can’t take away basic fundamental rights of citizens’ Lawyers continue to take the fight to the court with public interest litigation seeking to strike down the laws that underpin the oppression, with signs emerging of judges being more receptive. In June this year, while granting bail to student activists arrested under UAPA for their alleged role in the Delhi protests, Justices Siddharth Mridul and Anup Jairam Bhambani of the Delhi High Court wrote in an order granting bail: “In its anxiety to suppress dissent, in the mind of the State, the line between the constitutionally guaranteed right to protest and terrorist activity is getting blurred. If this mindset gains traction, it would be a sad day for democracy”. “The phrase ‘terrorist act’ cannot be permitted to be casually applied to criminal acts or omissions that fall squarely within the definition of conventional offences…” the order read. The Supreme Court subsequently stayed “the effect of the high court order”. It would not be considered precedent. However, in recent months, since Justice N V Ramana took over as the 48th Chief Justice of India, it has shown signs of playing a stronger role as protector of human rights. ‘Millions are the birds of freedom’ For the Bhima Koregaon accused and others like them, four years on from Elgaar Parishad, now numbering 15 after the death of Stan Swamy, time is still passing. As of February 2022, only two of them, Varavara Rao and Sudha Bharadwaj are out on bail. While in prison and with his health declining, Swamy, who never stopped advocating for indigenous people, had said, “a caged bird can still sing”. When I spoke to Deepak Dengle, a Kabir Kala Manch singer, in Pune, he recited the lines of a poem he had written while himself in jail under UAPA. ‘How many will you imprison? Millions are the birds of freedom, how many will you imprison? They will fly away with the cage and you won’t even get to know.’

#### Indo-Pak escalation on the brink because of Modi - goes nuclear

Sood 21 Rakesh Sood, former Indian diplomat, columnist, writer and expert on foreign affairs and member of APLN, 9-25-2021, "India-Pakistan Nuclear Dynamics," Nautilus Institute, <https://nautilus.org/napsnet/napsnet-special-reports/india-pakistan-nuclear-dynamics/> // ella

The long-standing conflict between India and Pakistan took on a sharper edge with wider regional and even global implications when both countries announced their emergence as nuclear weapon states in 1998. Any expectations that this would lower tensions were soon belied. The nuclear discourse has been dominated by Western analysts. And, since both the Indian and Pakistani strategic communities were familiar with it, it provided the dominant framework for understanding the new nuclear relationship. It made dialogue easier even though the underlying politics and geography bore little resemblance to the ideology-driven Cold War-world. For Pakistan, the Western attribution that the India-Pakistan theater was a “nuclear flashpoint” was also politically convenient as it kept Western attention focused on Kashmir. This paper seeks to unpack the India-Pakistan nuclear dynamics by taking an empirical look at the different crises beginning from the late 1980s. The first section deals with the origins of the India-Pakistan conflict and how the changing internal political dynamics have influenced and shaped the nuclear dynamic. The second section compares the nuclear doctrines of both countries as well as the current nuclear capabilities and future plans for their nuclear arsenals. Since neither country has released official figures about its arsenal, the estimates of capabilities are drawn from the Global Nuclear Database published by the U.S.‒based Bulletin of Atomic Scientists. The third section covers the numerous crises since the late 1980s with relevant references to domestic political drivers. Two of these pertain to the pre-1998 and the rest to the post-1998 period. The fourth section shows the role of external actors and how India and Pakistan drew different conclusions from the crises. The fifth and final section concludes the essay by outlining steps that can be taken, unilaterally, bilaterally, and globally, to lengthen the nuclear fuse and to ensure that the nuclear threshold is not crossed. One could certainly suggest unilateral measures that, on the one hand, India could take to restore normalcy in the state of Jammu and Kashmir or, on the other, that the civilian government in Pakistan could take to reduce the role of the military in policymaking. However, these are beyond the scope of this paper as they entail taking a deep dive into domestic politics of both countries. In any case, the prospect that either would take such actions in current times are about as likely as global elimination of nuclear weapons. This paper accordingly focuses on the more realistic scenario, based on the assumption of continued hostile relations between the two neighbors, but also on the assumption that there is a shared convergence in seeking to prevent inadvertent escalation that might lead to unintended consequences and, ultimately, to nuclear war. 1. Origins of a troubled relationship India and Pakistan have been locked into a conflictual relationship since they both became independent in 1947, arising out of the partition of British India. The British rulers divided India, creating Pakistan as a separate homeland for the Muslims of the Indian sub-continent, on the grounds that Hindus and Muslims constituted two separate nations—the concept of the “two nation theory.”[1] Within months, India and Pakistan were locked in a conflict over the state of Jammu and Kashmir, which had legally acceded to India but was claimed by Pakistan on the grounds that it was a Muslim majority state. After four inconclusive wars in 1947-48, 1965, 1971, and 1999, the state of Jammu and Kashmir remains a disputed territory with India in possession of roughly two-thirds of the erstwhile state and the remaining under the control of Pakistan. The 740 km boundary in the state of Jammu and Kashmir is called the Line of Control, while the remaining 2,400 km border between the two countries is the “international boundary,” which is not disputed. Today, however, it is clear that Kashmir is not the only source of conflict. Nor can the conflict be explained in terms of a continuation of the “two nation theory” because there are more than 170 million Muslims in India accounting for 14.2 percent of India’s population, up from less than 10 percent in 1951. In comparison, Pakistan’s population is 210 million; Hindus account for less than 2 percent of its population, down from 12 percent in 1951 because many Pakistan Hindus, finding themselves reduced to second class citizens, have either converted or migrated. Moreover, when the glue of religion proved unable to hold East Pakistan and West Pakistan together, leading to its eastern wing emerging as Bangladesh in 1971 after a brutal suppression widely described as “genocide,” the “two nation theory” was unambiguously controverted.[2] As a new state, Pakistan consciously turned its back on its sub-continental civilizational roots that it shared with India and sought to redefine its identity anew, in the name of Islam. However, Pakistan found it difficult to reconcile the notion of a modern state with its founding ideology. The Muslim clergy represented by Jamaat e Islami, led by Maulana Maudoodi, had an uneasy relationship with the Muslim League, the political party led by Mohammed Ali Jinnah that had spearheaded the call for a separate homeland of the Muslims of the Indian sub-continent. The clergy suspected the League of using religion for political ends while actually desiring a modern state rather than one based on Islamic law (shariah). The desire for a national identity rooted in religion became the first source of divergence with India whose leaders sought to create a secular, plural, and democratic state. The second source of divergence came with the decline of political parties in Pakistan, leading to long periods of military dictatorship. From 1958 to 1971, from 1977 to 1988, and from 1999 to 2008, Pakistan was under army rule, taking its toll on political parties and weakening institutions like the judiciary and media. Even with the restoration of democracy in 2008, the military still plays a leading role, especially where security, defence, and foreign policy are concerned. Repeated involvement of the military in governance has led to a militarization of the state. Perpetuating a hostile relationship with India has become necessary for the military to retain its role in the country’s political life. Further, like authoritarian rulers in other countries, the military rulers often sought to legitimize their coups by presenting themselves as defenders of not just the frontiers of the state but also guardians of Pakistan’s Islamic ideology. The military rulers relied on the street power of the mullahs (Islamic religious leaders), a technique that was effectively used by General Zia ul Haq. It cast the hostility with India into a “jihad,” a fight between the Muslim and the infidel, deepening the divide. Defining an identity by negating its subcontinental civilizational roots and making it “non-Indian” has remained Pakistan’s dilemma. The military-mosque nexus shifted it from non-Indian to “anti-Indian,” changing the historical narrative and locking not just the state but also the people into a relationship of hostility.[3] On 6 February 2020, Pakistan’s retired military officer, Lt. Gen Khalid Kidwai (who headed the Strategic Plans Division or SPD from 2000 to 2013 and is an adviser to Pakistan’s Nuclear Command Authority) spoke at the International Institute of Strategic Studies in London on strategic stability. He identified four drivers of Indian policy as Hindutva philosophy, seeking to erase the “sense of humiliation of a Hindu nation of a thousand years of Muslim rule;” restoration of the perceived glory of Hindu India, going back to 300 BC; India’s “quest for regional domination,” particularly in relation to Pakistan; and finally, a “self-delusional one way competition with China,” by aligning with the United States as an Indo-Pacific power.[4] Lt. Gen (retd) Kidwai’s thinking is not new; it is reflected in official military writings in Pakistani training institutions and has played a major role in defining Pakistan military’s strategic culture. It is therefore unsurprising that the army felt threatened by, and quickly stymied the few attempts by elected civilian leaders to improve relations with India (by Prime Minister Benazir Bhutto in 1989 and Prime Minister Nawaz Sharif in 1999). Four key themes may be identified in the Pakistani military’s strategic culture, of which three directly affect its relationship with India and the fourth does so indirectly. First, the Pakistani army considers the partition to have been an unfair process and therefore it considers it “incomplete.” This view explains their obsession with Kashmir as well as the role of the army as the “guardian of Pakistan’s ideological frontiers.” Linked to this factor is the conviction that India remains implacably opposed to the “two nation theory,” has never accepted partition, and does not accept the existence of an independent, sovereign Pakistan. Proof of this proposition to the Pakistani military is India’s role in the 1971 war that led to the break-up of Pakistan, with East Pakistan seceding to declare itself as independent Bangladesh. The third theme is that India is a hegemon and poses an existential threat to Pakistan because it seeks to impose a regional security and economic structure on South Asia with the goal of converting its smaller neighbors into satellite states. In their view, such Indian ambitions must be thwarted. The fourth theme has to do with Afghanistan, which has never accepted the Durand Line as the border with Pakistan. In the past, Pakistan sought “strategic depth” in Afghanistan. It has become increasingly paranoid about Indian presence in Afghanistan and the possibility of collusion between India and Afghanistan to destabilize Pakistan’s Pashtun and Baloch borderlands.[5] Pakistan has sought to compensate for its disparity with India in terms of size, population, and economy by resorting to asymmetric warfare and seeking alliances. Having been a frontline state in the United States’ covert war against the Soviet Union in Afghanistan from 1979 to 1989, Pakistan’s Inter-Services Intelligence (ISI) successfully weaponised “jihad” as the instrument to radicalize groups to undertake terrorist strikes and low-intensity conflict. Pakistan was no stranger to asymmetric warfare, having previously supported insurgencies in India that included the Naga insurgency from East Pakistan in the 1960s, Sikh militancy in the 1980s, and, since 1990, by waging a proxy war through the training, equipping, and infiltration of terrorists into Kashmir in the name of “jihad.” During the Cold War, Pakistan was a member of two U.S.‒led military alliances—SEATO (South East Asia Treaty Organisation)[6] and CENTO (Central Treaty Organisation).[7] Since the 9/11 attacks in the United States in 2001, after which the United States and other countries became more concerned with the global implications of jihadi terrorism, Pakistan has strengthened its ties with China. In addition to the cooperation in conventional, nuclear, and missile sectors, China has also emerged as by far the largest source of foreign investment in Pakistan. The strategic underpinning between the two is apparent since India and China have an unresolved boundary dispute and fought a war in 1962. In 2020 the situation worsened, leading to clashes between these two great powers that caused casualties for the first time in 45 years. In May 1998, both India and Pakistan conducted a series of nuclear tests, declaring themselves nuclear weapon states and adding a new dimension to their hostile relationship. Many would argue that the nuclear shadow over the relationship existed even earlier. Some would go back to January 1972 when, after the creation of Bangladesh, Prime Minister Zulfikar Ali Bhutto convened Pakistan’s nuclear scientists exhorting them that the only guarantee for ensuring Pakistan’s territorial integrity was to develop nuclear weapons. Or, even earlier after the unsuccessful 1965 war when he famously declared “we will eat grass if we have to, we will make the nuclear bomb.”[8] Others would link the nuclear shadow to India undertaking a peaceful nuclear explosion (PNE) in 1974, or the U.S. attempt at coercive nuclear diplomacy by bringing in the aircraft carrier USS Enterprise into the Bay of Bengal during the 1971 war, or even earlier to 1964, when China announced its entry onto the world’s nuclear stage, after having inflicted a humiliating defeat on India in the border conflict in 1962.[9] The India-Pakistan nuclear rivalry is just another dimension of the more deep-seated hostility between the two countries. What this hostility means is that resolving the Kashmir conflict would not normalize the relationship because Pakistan sees India as an existential threat and this perception is not going to change easily, certainly not as long as the military continues to dominate its security and foreign policymaking, and perhaps even beyond that because a new historical narrative has taken root in Pakistan. Some of the recent Hindutva-tinted rhetoric from the Bharatiya Janata Party (BJP) in India only serves to convince the Pakistan military that India’s secularism was always a sham and that it is just a matter of time until the liberal-secular urban elite in India will be marginalized and yield to the majoritarian Hindu impulse. 2. Evolving nuclear doctrines The only use of nuclear weapons occurred when the United States was the sole possessor of nuclear weapons. By the time the former Soviet Union exploded its nuclear device in 1949, the Cold War had already begun, as reflected by the division of Germany and Europe into East and West. The North Atlantic Treaty Organisation (NATO), a U.S.-led military alliance for the defence of Western Europe, was created in 1949 and a Soviet-led Warsaw Pact came into being in 1955 following West Germany’s induction into NATO in 1953. The United States and the former Soviet Union were soon locked into a qualitative and quantitative nuclear arms race. This political, economic, and military competition based on the threat of nuclear annihilation between two nuclear superpowers has shaped the growth of a nuclear theology.The nature of warfare changed fundamentally when the United States dropped the first atomic bomb on Hiroshima on 6 August 1945, followed by a second attack on Nagasaki three days later. It was clear then that the sheer destructive power of nuclear weapons was qualitatively different from any other weapon system. This remains true today. The biggest conventional bomb is the GBU Massive Ordnance Air Blast with an explosive yield of 11 tonnes of TNT equivalent; in comparison, the Hiroshima bomb was 15 kilotons (kt) or 15,000 tonnes. Today, the nuclear arsenals of many states contain weapons with yields in the megaton range and even the tactical nuclear weapons have yields of 0.5 kt or more. This realization contributed to the nuclear taboo, a term referring to the moral force behind the fact that nuclear weapons have not been used since 1945. though there were numerous instances during the Cold War when the taboo was close to being breached. Two schools of deterrence theory soon emerged in the United States. One was led by Bernard Brodie, a political science professor who had served at the U.S. Department of the Navy during World War II and later spent nearly two decades at RAND Corporation. Brodie held that deterrence is automatic and ensured through retaliation because the one who initiates the nuclear attack cannot be certain that the adversary’s entire nuclear arsenal has been eliminated. The following idea is attributed to Brodie: “Thus far the chief purpose of our military establishment has been to win wars. From now on, its chief purpose must be to avert them. It can have almost no other purpose.” The other school was led by Albert Wohlstetter, a mathematics major with a strong focus on modelling economic and business cycles, who had worked at the U.S. War Production Board during World War II and who, like Brodie, later moved to RAND. Although he too believed in massive retaliation, he felt that ensuring second strike capability needed larger arsenals and survivability to prevent a nuclear Pearl Harbor. He used modelling studies based on weapon yields, bomber ranges, accuracies and reliabilities of systems, and blast resistance in what became the classic basing studies for the U.S. Strategic Air Command. For Brodie, the risk of retaliation was an adequate deterrent while for Wohlstetter, it was the certainty of retaliation with large numbers that was necessary for deterrence to work. Given that the nuclear arms race led to the two nuclear superpowers accumulating more than 65,000 nuclear weapons at its peak, it is clear that Wohlstetter carried the day.[10] Acceptance of Wohlstetter’s approach gave rise to new concepts of flexible response, escalation dominance, countervalue and counterforce, survivability, compellence and “prevalence” (implying an extension of compellence when deterrence has broken down, by ensuring control of limited use at each step to prevail). It is counterfactual to enquire whether this conceptual evolution contributed to a stable deterrence posture between the United States and its allies on the one hand, and the former Soviet Union on the other. It certainly ensured, however, that the nuclear arms race continued because the two countries were engaged in an all-out rivalry in political, economic, and conventional and nuclear military dimensions. During the best documented nuclear crisis, that is, the Cuban Missile Crisis in 1962, the United States had an arsenal of 25,540 bombs whereas the former Soviet Union had only 3,346. Despite this imbalance, deterrence clearly worked. It nevertheless established the ground rule of mutual vulnerability as the basis for deterrence. As the former Soviet Union achieved numerical equivalence in its arsenal, the concept of managing the nuclear arms race by introducing equivalent strategic capabilities through arms control gained prominence. Deterrence stability was underwritten by “parity” and “mutual vulnerability.” The latter was codified by the 1972 Anti-Ballistic Missile (ABM) Treaty. Eventually, the United States withdrew from the ABM Treaty in 2002. But for most of the Cold War, the two nuclear superpowers sought to restrain the nuclear arms race and to preserve strategic stability through arms control agreements like SALT, START, and INF, the last in the sequence being New START in 2010. Finally, they tried to manage crises through hotlines, nuclear risk reduction centers, and early warning systems. It is important to recall that during the 1970s and 1980s, nuclear stability did not appear to be assured and many believed the Cold War was unlikely to end peacefully or that the nuclear taboo would last as long as it has. Documents declassified after the end of the Cold War also indicate there were some tense occasions, some inadvertent, and some a result of misperception arising out of system glitches. In these cases, it was pure luck, and not arms control measures, that ensured that nuclear weapons were not launched. The trinity of deterrence stability, arms race stability, and crisis management stability formed the vocabulary of nuclear arms control, the essence of the nuclear theology referred to above. The prism of U.S.‒Soviet bipolarity, however, does not help much in understanding Indian and Pakistani nuclear doctrines and their mutual security crises, although Western analysts tend to view it through this prism. The key difference is that the United States and former Soviet Union reflected a degree of symmetry in terms of their arsenals and doctrinal approaches, relying on mutual vulnerability and assured second strike capability, once the Soviet Union had caught up with the United States. Further, given their position as nuclear superpowers, it was possible to look at the United States‒Soviet Union equation as a standalone nuclear dyad. In contrast, the India‒Pakistan relationship is marked by asymmetry in terms of doctrinal approaches, as elaborated below. Secondly, since India declared itself a nuclear weapon state in 1998, it has maintained that its capability was intended as a deterrent against both Pakistan and China whereas Pakistan defines its capability as India-specific. Given these differences, it is not possible to see the India-Pakistan equation in terms of a dyad. The geopolitical shift from Euro-Atlantic to the Indo-Pacific also shows the presence of many more nuclear actors in an increasingly crowded geopolitical space. It includes the Democratic People’s Republic of Korea (DPRK) and the return of major power rivalry, with the United States, Russia, and China added into the mix of multiple rivalry equations as well as the United States’ treaty allies—Japan and South Korea. The region therefore hosts multiple nuclear dyads, but each dyad may be linked to other nuclear actors, creating a loosely linked “nuclear chain.” The creation of a nuclear chain has made the search for nuclear stability in today’s world more elusive at a time when the old arms control agreements are being discarded in response to changing political realities. India first laid out the elements of its nuclear doctrine in a paper titled “Evolution of India’s Nuclear Policy,” tabled by then Prime Minister Atal Behari Vajpayee in parliament shortly after the 1998 nuclear tests. The paper made it clear that India did not see nuclear weapons as weapons of war fighting, but in a more limited role, intended to address nuclear threats through deterrence. The prime minister’s speech and the paper were followed by another draft paper prepared by a newly constituted National Security Advisory Board and circulated in 1999 to elicit wider discussion. A more succinct and authoritative text was released in 2003 following a meeting of the Cabinet Committee on Security.[11] The key elements of the doctrine were: Building and maintaining a credible minimum deterrent, based on a triad that includes land-based, sea-based, and airborne delivery systems. Sustaining a posture of nuclear no-first-use vis-à-vis nuclear armed states and non-use of nuclear weapons vis-à-vis non-nuclear weapon states. Ensuring nuclear retaliation in response to a nuclear attack on Indian territory or on Indian forces anywhere, inflicting massive and unacceptable damage. Retaining the option of nuclear retaliation in response to a chemical or biological weapons attack. Continuing the moratorium on nuclear explosive testing. Remaining ready to join Fissile Material Cut-off Treaty negotiations. Ensuring strict export controls on nuclear and missile-related materials and technologies. Continuing commitment to the goal of a nuclear weapons-free world through global, verifiable, and non-discriminatory nuclear disarmament. Since India’s doctrine makes clear that its nuclear weapons are only to deter a nuclear threat or attack, India needs additional capabilities to deal with threats of sub-conventional and conventional conflicts. By eschewing a warfighting role for nuclear weapons, India is able to duck the temptations of a nuclear arms race with Pakistan or China. Given the short distances between India and these two potential adversaries that compress time available for decision-making, India believes that it is not possible to make a distinction between “tactical” and “strategic” nuclear weapons or their use. This reflects another departure from the United States‒Soviet approaches that provided a 25-minute interval for a missile launched from the mainland to reach a target on the adversary’s mainland. In the U.S.‒Soviet arms control vocabulary, long-range vectors were considered “strategic” and systems with ranges below 5,500 km were further divided into intermediate, medium, and short-range systems. Extended deterrence assurances to allies in Europe and Asia also introduced political compulsions for forward deployment of U.S. and Soviet weapons that were attributed tactical or battlefield roles. Such distinctions undoubtedly contributed to the arms race but do not exist in South Asia. Pakistan has chosen to give its nuclear weapons a different role. It prefers to retain a degree of ambiguity claiming that it strengthens deterrence while maintaining that its nuclear capability is India-specific, and, consequently, its size will be determined by India’s arsenal. Although Pakistan states that it maintains a minimum credible deterrent (sometimes also called a minimum defensive deterrent), its role is not just to deter nuclear use by India but also to act as an equalizer against India’s conventional superiority. Pakistan therefore rejects the idea of a no-first-use policy. In 2002, it had first declared “four red lines that could trigger a nuclear response: occupation of a large part of Pakistan territory by India, destruction of a large part of Pakistan’s military capacity, attempt to strangulate Pakistan’s economy, and creating political destabilization.”[12] Pakistan’s doctrine has since evolved to “full spectrum deterrence” as Pakistan has added short- range nuclear armed systems for tactical use (60 km range Hatf IX or Nasr ballistic missile) and is also adding a number of cruise missile systems with dual capability. The Nasr was flight tested in 2011 and, according to a statement by the Inter-Services Public Relations (ISPR) Directorate,[13] it “adds deterrence value to Pakistan’s Strategic Weapons Development Programme at shorter ranges.” The Nasr could carry “nuclear warheads of appropriate yield with high accuracy” and is a quick response system with shoot and scoot capabilities (which can fire and then quickly relocate). According to Lt. Gen (retd) Kidwai, Pakistan’s range of nuclear weapons provide “full spectrum deterrence, including at strategic, operational, and tactical levels.” By deliberately lowering the nuclear threshold, Pakistan believes it strengthens deterrence and as Lt. Gen (retd) Kidwai explains “it is the Full Spectrum Deterrence capability of Pakistan that brings the international community rushing into South Asia to prevent a wider conflagration.”[14] Neither India nor Pakistan have made any official statements regarding the sizes of their nuclear arsenals. Analysts are therefore left to derive estimates based on fissile material production capacities, occasional press releases about missile launches, and other indicators about likely inductions of new delivery systems. According to the Stockholm International Peace Research Institute’s database on World Nuclear Forces, India is estimated to have produced approximately 156 warheads by January 2021.[15] These are currently distributed over seven delivery platforms and increasing at the rate of about ten warheads every year. The delivery platforms include two aircraft (Mirage 2000 and Jaguar, both originally deployed in the 1980s), four land-based ballistic missiles (Prithvi II, Agni I, Agni II, and Agni III, each capable of carrying a single warhead with ranges from 350 km to 3,000 kms) and one submarine-launched ballistic missile (K-15 Sagarika with a range of 700 kms) for its nuclear-powered submarines (SSBN). Given these ranges, the Indian triad is still an exercise in the making. India’s stockpile of weapons-grade plutonium (its arsenal is entirely plutonium-based) is considered adequate for 200 warheads, but plutonium production could increase depending on how its Prototype Fast Breeder Reactor project develops.[16] The Indian land-based missile program was launched in the mid-1980s but the Prithvi II was inducted only in 2003. The Agni-series of land-based missiles are solid-fuelled systems and road or rail-mobile. Two land-based systems, Agni IV and Agni V, are currently under development with ranges of 4,000 and 5,000 km respectively. There is speculation that Agni V may carry Multiple Independently-targetable Re-entry Vehicles (MIRVs), but it would mean reducing range and, unless China develops a missile defence system, there would be little military need for MIRVs on Agni V. MIRVs may become more likely once India develops missiles with ranges over 8,000 km. The indigenous SSBN programme has suffered long delays and only one SSBN has completed sea trials. Another SSBN is expected to be commissioned next year and India is likely to build three or four more SSBNs. The K-15 has a limited range of 700 km. Such a short range only enables India to target southern Pakistan. To target coastal China, the submarine would need to get to South China Sea. Another SLBM K-4 with a range of 3,500 km is being tested and will eventually replace the K-15. India is also developing a ground-launched cruise missile that was finally flight-tested up to 700 km in 2017 after numerous failures. There are rumours that this missile may be dual-capable (it can serve in both conventional and nuclear roles) though there are no official statements to indicate this. Table 1: India’s Nuclear Forces Source: SIPRI; Bulletin of Atomic Scientists; Centre for Strategic and International Studies. Pakistan’s nuclear stockpile is estimated at 165 warheads[17] as of January 2021, and estimated to grow to 220 to 250 warheads by 2025[18] in view of an ambitious expansion of both its uranium enrichment and plutonium production capacities. In addition to the Kahuta enrichment plant, another has been built at Gadwal, and three plutonium production reactors have been added at the Khushab complex during the last decade. In 1998, Pakistan reportedly tested both types of devices, based on highly enriched uranium and plutonium. It is estimated that Pakistan’s fissile material inventory of 3,400 kg of highly enriched (90 percent) uranium and about 280 kg of plutonium is enough to produce between 236 and 283 warheads. Pakistan’s delivery platforms include Mirage III/V and F-16 aircraft, and there are reports that the withholding of additional aircraft supplies by the United States and France emerging as a key Indian strategic partner, Pakistan would in future rely on the JF-17, jointly developed with China for a nuclear role, possibly using Ra’ad, an air launched cruise missile. It has six operational land-based ballistic missile systems Abdali (Hatf-2) range of 200 kms, Ghaznavi (Hatf-3) range of 300 kms, Shaheen 1 (Hatf-4) range of 750 kms, Ghauri (Hatf-5) range of 1,250 kms, Shaheen 2 (Hatf-6) range of 1,500 kms, and the most recent Nasr (Hatf-9) with a range of 60 kms. All are solid-fuelled except for the Ghauri, which is liquid-fuelled and is a variant of the DPRK’s Nodong missiles that Pakistan acquired in the 1990s in exchange for sharing nuclear enrichment technology. Shaheen 1 is based on the Chinese M-9 missile supplied in the 1990s. Pakistan has also tested Shaheen 3 with a range of 2,750 kms. In 2017 it also tested Ababeel, a new missile with MIRV capability. Hatf 2,3,4, and 9 are dual-capable, in keeping with Pakistan’s policy of ambiguity, and are deployed in garrisons close to the Indian border. Pakistan has also developed a ground launched Babur (Hatf-7) and the air-launched Ra’ad (Hatf-8), both nuclear-capable cruise missiles. Currently, efforts are underway to improve their ranges. Babur was originally tested at 350 kms. More recent tests indicate the range has been nearly doubled. Ra’ad was also deployed with a range of 350 kms, but its newer versions indicate a range of 550 kms. A sea-launched version of Babur with a range of 450 kms has been tested both from surface and underwater launch platforms. It will eventually be deployed on the diesel-electric Agosta submarines or the newer Yuan class Type 041 submarines being acquired from China. Table 2: Pakistan’s Nuclear Forces Source: SIPRI; Bulletin of Atomic Scientists; Centre for Strategic and International Studies. Pakistan’s development of battlefield and dual-capable systems has generated widespread concerns. In the 2018 Threat Assessment, U.S. Director of National Intelligence Daniel Coats said, “Pakistan continues to produce nuclear weapons and develop new types of nuclear weapons, including short range tactical weapons, sea-based cruise missiles, air launched cruise missiles, and longer-range ballistic missiles. These new types of nuclear weapons will introduce new risks for escalation dynamics and security in the region.”[19] In the 2017 South Asia Strategy issued by the White House, the Trump administration had urged Pakistan to stop sheltering terrorist organizations and emphasised the need “to prevent nuclear weapons and materials from coming into the hands of terrorists.”[20] Pakistani officials have rejected these concerns indicating that Pakistani missiles are in stored separately from warheads and are only put together at the eleventh hour. 3. Crises under a nuclear shadow Given the sources of insecurity and the doctrinal asymmetry, it is hardly surprising that India and Pakistan have very different interpretations of the crises that have raised concerns about nuclear escalation. The first case of nuclear signalling can be dated to the Operation Brasstacks crisis in 1987. India had undertaken a large-scale military exercise on the Pakistan border leading to apprehensions in Pakistan that India was preparing to launch a major attack. In late January, A. Q. Khan, widely considered the father of Pakistan’s nuclear bomb, gave a surprise interview to a visiting Indian journalist Kuldip Nayar during which he admitted that Pakistan possessed a nuclear bomb and would not hesitate to use it in case of war with India.[21] Given Khan’s high-level security clearance in Pakistan’s nuclear weapons program at the time, it is reasonable to assume the interview had been cleared by the Pakistani military authorities. There is widespread conviction in Pakistani security circles that the nuclear threat worked, and India backed down. Indian observers maintain the crisis had peaked days earlier and de-escalation was under way before Khan made his statement. The second crisis occurred in May 1990 when there was an uprising in Kashmir, and India stepped up the presence of its security forces amid rumours that Pakistan’s military might try to take advantage of the situation. Based on satellite imagery, the United States concluded that Pakistan was preparing to move its nuclear weapons and dispatched deputy national security advisor Robert Gates to Delhi and Islamabad in a bid to defuse the situation. The crisis subsided and Foreign Secretary level talks resumed the following month. Both these incidents took place before Pakistan acknowledged possession of nuclear weapons and consequently the signalling was indirect. The situation changed after the 1998 nuclear tests and nuclear signalling became more explicit in the crises thereafter. If there was any expectation that the overt nuclear situation might bring about some stability by introducing an element of restraint, it was soon dispelled. Barely had the ink dried on the forward-looking Lahore Declaration and the related Memorandum of Understanding on nuclear confidence building measures—signed during Prime Minister Atal Behari Vajpayee’s historic visit to Lahore in February 1999—when the Kargil conflict erupted. In a pre-emptive move, Pakistan intruded across the Line of Control (LoC) to occupy certain heights that threatened Indian access into the Ladakh region. It was a brazen attempt to alter the territorial status quo. India mounted an uphill assault and deployed the air force but in a restrained manner as the aircraft were directed not to cross the LoC. Widespread international concern at such reckless behavior and heavy casualties eventually forced Pakistan to withdraw and retreat across the LoC. It later emerged that the Pakistani political leadership had not been fully briefed about the pre-emptive move by the army generals. Growing internal differences eventually contributed to the ouster of the civilian government in a military coup in October 1999, which led to a decade of military rule. Clearly, Pakistan saw its nuclear capability as a shield under which it could seek to alter the territorial status quo, confident in its assessment that Indian retaliation would be deterred as it believed had happened in the earlier crises. The next crisis was precipitated by an attack on the Indian parliament in December 2001 by two internationally proscribed terrorist groups based in Pakistan—Lashkar e Taiba (LeT) and Jaish e Mohammed (JeM). India responded by mobilizing its army along the border in early 2002. In an address to the nation on 12 January 2002, General Pervez Musharraf sought to defuse the situation by condemning the “terrorist attack” and announcing a ban on five jihadi organizations, including LeT and JeM. He declared that no organization would be allowed to carry out terrorist strikes within Pakistan or anywhere else. Before matters could stabilize, tensions escalated again in May when three Pakistani fedayeen (suicide attacker) attacked an army camp at Kaluchak killing 34 Indian soldiers and their family members. As Indian rhetoric sharpened, in June, General Musharraf warned that if India attacked, Pakistan retained the option of first-use of nuclear weapons. Consequently, the United States, Russia, France, Japan, and the United Kingdom engaged in active diplomacy to mediate a de-escalation of the crisis. The United States needed Pakistani military cooperation on the Pakistani-Afghan border in its war against Al Qaeda and the Taliban, and eventually tensions eased when Pakistan began to dismantle the terrorist training camps and the launch pads close to the LoC. Finally, a ceasefire across the LoC was announced in November 2003 that lasted for five years. However, according to Lt Gen (retd) Kidwai, India’s coercive exercise had failed as the Indian military had “lost the advantage of relative asymmetry in conventional forces because of Pakistan’s nuclear equalizer.” The five-year ceasefire laid the grounds for a promising backchannel dialogue. The peace was broken in November 2008 by an audacious strike by LeT terrorists who arrived by boat and simultaneously attacked a number of targets in Mumbai. There was credible evidence that the ISI was involved in the attacks. The newly elected democratic government in Pakistan initially promised to cooperate in the investigation, even offering to send the ISI chief to India though the offer was subsequently withdrawn. It sparked a debate in India, however, about the utility of the no-first-use doctrine that was somewhat misguided because nuclear weapons were never intended to deter terrorists. That requires a different set of capabilities, which India did not possess. India therefore relied on international pressure on Pakistan since the Mumbai attack was widely seen as India’s “9/11” moment. There was strong universal condemnation of the attack, especially because foreign citizens had also been killed; at the same time India’s strategic restraint was appreciated by the international community. However, it also exposed the lack of kinetic options available to India. Nuclear strategic analysts, already unfamiliar with asymmetric nuclear dyads, were now saddled with the additional challenge of thinking through nuclear deterrence with respect to non-state actors that enjoyed covert state support. In 2014, Prime Minister Narendra Modi came to power and promised a more muscular counterterrorism policy, both domestically and against Pakistani-aided cross-border infiltration. The first incident after the current government came to power was a terrorist attack in September 2016 by four JeM fedayeen terrorists against an army brigade headquarter in Uri (in Kashmir), in which seventeen Indian soldiers were killed. Later in the month India announced that it had carried out retaliatory surgical strikes destroying the launch pads across the LoC and killing terrorists who were present there waiting to be sent across, normally done under covering fire by Pakistani forces. Pakistan denied that there were any surgical strikes, and the situation did not escalate. Prime Minister Modi successfully projected the surgical strikes as a sign of newfound Indian determination that it would not be deterred by Pakistan’s first use threat or tactical nuclear weapons. In the official briefings, it was described as “target specific, limited calibre, counter-terrorist operations across the LoC.” Clearly, the Modi government wanted to show that it was not averse to raising its coercive rhetoric. The time for “strategic restraint” that had characterized India’s approach after the Mumbai attack was over. At the diplomatic level, the SAARC (South Asian Association for Regional Cooperation) summit was postponed, and SAARC has been in limbo ever since. On February 14, 2019, an Indian Kashmiri militant drove an explosive-laden SUV into a convoy transporting paramilitary forces in Pulwama (Kashmir), killing 46 troops. JeM claimed responsibility for the strike. With general elections less than two months away, the Modi government vowed retaliation. Twelve days later, Indian aircraft bombed a JeM training camp at Balakot in Khyber-Pakhtunkhwa. Pakistan undertook an air attack the following day and as Indian fighters scrambled, in the ensuing dogfight, an Indian pilot ejected from his damaged aircraft landing in Pakistan territory. He was returned within 48 hours with the United States, Saudi Arabia, and United Arab Emirates (UAE) claiming to have intervened to ensure safe and early return of the captured pilot. Pakistan maintained that there was no training camp at Balakot and that the Indian aircraft had dropped their ordnance on a hillside. Pakistan’s counterattack the following day showed its resolve to defend its sovereignty, and the prompt return of the captured pilot exemplified its responsible behavior. A few weeks later, both sides withdrew their High Commissioners and these positions have not been restored since. In the official briefing the day following the Indian air strike, India’s focus was on downplaying the escalation by pointing out that it was a non-military terrorist target and a pre-emptive strike as it had advance intelligence, and the Indian operation was now terminated. The rhetoric through media channels emphasized, however, that India had called Pakistan’s nuclear bluff and created a new normal, in sharp contrast to the official briefing. Lt. Gen (retd) Kidwai maintains that this was yet another attempt by India to “induce strategic instability” and Pakistan’s calibrated response had “restored strategic stability and no new normal was allowed to prevail.” He suggests that “Pakistan has ensured seamless integration between nuclear strategy and conventional military strategy, in order to achieve the desired outcomes in the realms of peacetime deterrence, pre-war deterrence and also in intra-war deterrence.” Table 3: Timeline of India-Pakistan Crises under the Nuclear Shadow 4. Roles of external actors In the preceding section, seven instances were examined—two relating to the pre-1998 period, and the rest after both countries had declared themselves to be nuclear weapon states. The pre-1998 cases can be described as reflecting a situation of “recessed deterrence”—that is, as some Indian analysts stated, a form of deterrence arising from the existence of their nuclear weapons but not yet declared by the two possessor states. This posture was overtaken in 1998 when nuclear weapons began to play an explicit role. It is useful to see what lessons may be drawn from the five instances after 1998 and the role of the major powers, particularly those of the United States and China. Has anything changed over the last two decades in this regard, and if so, what? It is possible to discern five distinct levels of conflict between India and Pakistan: Sub-conventional conflict or attacks by terrorist groups that are based in Pakistan and have an established modus vivendi with the Pakistani authorities, as in their attacks on the Indian parliament in 2001 or Mumbai in 2008. Hybrid sub-conventional conflict employing both militant groups and regular troops but trying to deny the role of the latter as in the case of Kargil in 1999. Conventional conflict below the nuclear threshold. Conventional conflict escalating to the use of tactical or battlefield nuclear weapons. Full-scale conflict with large scale use of nuclear weapons. The five instances under examination fall in the first two categories. The unmistakable message to India is that possession of nuclear weapons will not deter such attacks. In each instance, India faced the challenge of finding appropriate retaliation that could combine both deterrence by denial and deterrence by punishment while keeping it below the nuclear threshold in line with its nuclear doctrine of no-first-use. Since the Kargil crisis involved Pakistan changing the territorial status quo, the Indian objective was modest but clear—restoration of the status quo ante. In this, it had the support of the entire international community as Pakistan’s action was seen as provocative. High-level Pakistani visits by Prime Minister Nawaz Sharif and by Chief of Army Staff General Musharraf to Beijing to seek Chinese support elicited quiet rebuffs and provided space for the United States to play the key diplomatic role in the resolution of the crisis. The attacks in 2001 and 2008 by Pakistan-based terrorist groups also witnessed the United States playing a diplomatic role. In the first instance, the Indian army had mobilized on the border and both armies were face-to-face. However, the United States needed Pakistan to redeploy its forces to the Pakistan-Afghan border as it had just embarked on its operations in Afghanistan after 9/11. The crisis took time to defuse until India was satisfied with Pakistani assurances that it would take action against groups like LeT and JeM. The 2008 attack in Mumbai created a dilemma for Indian decision makers. The confessions by one of the terrorists who had been captured alive and mobile telephone intercepts of conversations between the terrorists and their handlers made it evident that Pakistani authorities had been involved. The attack exposed weaknesses in India’s coastal security and was a rude reminder that it lacked appropriate kinetic options. Since the victims included nationals of other countries, however, India had to be content with international condemnation and pressure. Pakistan concluded that it was nuclear deterrence that stymied Indian kinetic retaliation. It began to develop tactical nuclear weapons so that the space for the third category of conflict, namely conventional war below the nuclear threshold, could be constricted and that Indian kinetic retaliation would rapidly escalate matters to the fourth level, involving tactical nuclear weapons. The Modi government that came to power in 2014 and was re-elected in 2019 sought to dispel the notion that the threat of tactical nuclear weapons would deter it from kinetic retaliation in response to a cross-border terrorist attack. According to retired military officers, India had undertaken retaliatory cross-border operations earlier in response to certain attacks but without much fanfare. This policy of “restraint” was discarded in 2017 when the Modi government declared that it had conducted “surgical strikes” across the LoC. Pakistan denied that any such attempt had been made and claimed that India had merely indulged in artillery firing across the LoC. These conflicting assertions enabled both countries to satisfy domestic constituencies while providing an avenue for de-escalation, without the involvement of any external actor. The 2019 Pulwama terrorist attack followed by the Balakot air strike introduced the element of unintended consequences. Elections in India were due in two months creating a more febrile political environment. Limiting response to non-kinetic retaliation was not an option. India mounted an air strike against a JeM terrorist training camp at Balakot. Aircraft crossed over into Pakistan for the first time since 1971. Further, Balakot was in Khyber Pakhtunkhwa province and not in the contested part of Kashmir under Pakistani control. Both actions were a step up from the 2017 surgical strikes. Indian media was quick to claim that Pakistan’s nuclear bluff had been called. The unexpected happened the following day when in an aerial dogfight between the two, an Indian plane was shot down. The pilot ejected and landed in Pakistani territory. Amidst rising rhetoric, external actors again stepped in. U.S. President Donald Trump claimed credit for defusing the situation, as did Saudi Arabia and the UAE. Pakistan claimed “air-superiority” and then took credit for “responsible behavior” by promptly announcing the return of the captured Indian pilot. Notwithstanding shrill political rhetoric, the military authorities were cautious and measured in their statements during 2017 and 2019, taking care not to cross each other’s red lines. On both occasions, the Indian side emphasised that the limited objective of the retaliation had been met, the target was non-military, and the action was pre-emptive as there was reasonable intelligence about an imminent attack by terrorists gathering at the targeted location. The statements by the military authorities were carefully worded because notwithstanding the chest-thumping that is the staple of TV talk shows and the loose rhetoric employed by politicians, the military on both sides is conscious that military options available on both sides are limited, given current capabilities. If Pakistan had developed a comfort zone that India would be deterred from kinetic retaliation in response to a cross-border terrorist strike, the Modi government’s actions were a signal that this would not be so. The age of paralyzing restraint was over and India would seek to expand the envelope for a level three conflict. Naturally, the Indian response would depend on the scale of terrorist attack and the visibility of ISI involvement, as well as Pakistan’s response in terms of either cooperating or engaging in denial. Significantly, the Modi government’s action has ensured that any future Indian government will now be pushed to undertake some form of kinetic action in response to a cross-border terrorist strike, however limited or modest.

#### Even limited Indo-Pak nuclear war causes extinction.

Trevithick and Rogoway ’19 [Joseph and Tyler; February 27; Military Analyst, M.A. in Conflict Resolution from Georgetown University, B.A. in the History and Policy of International Relations at Carnegie-Mellon University; Defense Journalist; The Drive, “Yes, India And Pakistan Could End The World As We Know It Through A Nuclear Exchange,” <https://www.thedrive.com/the-war-zone/26674/yes-india-and-pakistan-could-end-the-world-as-we-know-it-through-a-nuclear-exchange>] brett

A global threat

India and Pakistan's nuclear arsenals are tiny compared to those of the [United States and Russia](http://thedrive.com/the-war-zone/26013/russia-says-its-own-new-weapons-are-exempt-after-accusing-u-s-of-violating-nuclear-arms-deal), and these weapons are focused primarily on deterring each other, but that does not mean they're purely regional threats. Unlike conventional weapons, nuclear weapons create lasting and far-reaching effects that scientists have posited could upend life on Earth if warring parties were to use them in sufficient numbers.

[In 2012](http://climate.envsci.rutgers.edu/pdf/RobockToonSAD.pdf), Alan Robock, a distinguished professor in the Department of Environmental  Sciences and Associate Director of the Center for Environmental Prediction at Rutgers University, and Owen Brian Toon, a professor in the Department of Atmospheric and Oceanic Sciences and a research associate at  the Laboratory for Atmospheric and Space Physics at the University of Colorado, Boulder, argued that it might not take a large amount of nuclear weapons to create a scenario commonly known as "[Nuclear Winter](https://en.wikipedia.org/wiki/Nuclear_winter)."

In general, this hypothesized event occurs when smoke and soot from nuclear explosions block significant amounts of sunlight from reaching the earth's surface, leading to a precipitous drop in temperatures that results in mass crop failure and widespread famine.

Robcock and Toon summarized their findings, which were based in part on their previous work, in an article in the Bulletin of The Atomic Scientists, [writing](http://climate.envsci.rutgers.edu/pdf/RobockToonSAD.pdf):

"Even a 'small' nuclear war between India and Pakistan, with each country detonating 50 Hiroshima-size atom bombs – only about 0.03 percent of the global nuclear arsenal's explosive power – as airbursts in urban areas, could produce so much smoke that temperatures would fall below those of the [Little Ice Age](https://en.wikipedia.org/wiki/Little_Ice_Age) of the fourteenth to nineteenth centuries, shortening the growing season around the world and threatening the global food supply. Furthermore, there would be massive ozone depletion, allowing more ultraviolet radiation to reach Earth's surface. Recent studies predict that agricultural production in parts of the United States and China would decline by about 20 percent for four years, and by 10 percent for a decade.

The bomb the United States dropped on Hiroshima Japan, known as [Little Boy](https://en.wikipedia.org/wiki/Little_Boy), was an inefficient and essentially experimental design with a yield of around 15 kilotons. The reported results from [Indian](https://en.wikipedia.org/wiki/List_of_nuclear_weapons_tests_of_India) and Pakistani nuclear testing indicate that both countries can meet this threshold and both countries' weapons programs have almost certainly matured in the decades since.

In previous studies, Robcock, working with others, postulated that temperature changes could begin within 10 days of a limited nuclear exchange and the effects from the detonations of 100 nuclear weapons in the 15-kiloton class would directly result in the deaths of [at least 20 million people](http://www.nucleardarkness.org/warconsequences/fivemilliontonsofsmoke/). The second order impacts would be even worse in the years that followed.

In 2014, Michael Mills and Julia Lee-Taylor, both then working at the federally-funded National Center for Atmospheric Research's (NCAR) Earth System Laboratory, authored another paper with Robcock and Toon. This [study concluded](https://web.archive.org/web/20140308191334/http:/acd.ucar.edu/~mmills/pubs/2014_EarthsFuture_Mills_et_al.pdf) again that detonation of 100 15-kiloton yield bombs in a purely regional conflict would result in "multi-decadal global cooling" and "would put significant pressures on global food supplies and could trigger a global nuclear famine."

It is important to note that[critics have questioned](https://en.wikipedia.org/wiki/Nuclear_winter#Critical_response_to_the_more_modern_papers) whether the Nuclear Winter concept relies on too many assumptions and would ever actually occur. At the center of many of these rebuttals are debates about whether the nuclear explosions would truly create the amount of smoke and soot necessary for major climate change, as well as the specific conditions for those particles to remain in the atmosphere for a prolonged period of time.

The studies here do indicate significant impacts based on a relatively limited number of nuclear detonations of smaller yield devices, though. But even if the impacts are less pronounced than projected in this particular scenario, they could be far more severe if India and Pakistan were to use a larger number weapons and/or ones of higher yields, which both belligerents readily have.

In addition, Nuclear Winter is just one of the potential things that might happen following a nuclear exchange between the longtime foes. A detonation of dozens of nuclear weapons, even small ones, would throw hazardous nuclear fallout [into the air](http://thedrive.com/the-war-zone/19450/u-s-training-for-arctic-nuclear-satellite-disaster-amid-russian-weapons-developments) that, depending on the weather pattern, could carry that material [far and wide](https://futureoflife.org/background/us-nuclear-targets/?cn-reloaded=1#nukemap), causing both near- and short-term health impacts. The various [ground zeroes](https://nuclearsecrecy.com/nukemap/) themselves would be irritated and potentially hazardous for many years to come.

Depending on where the detonations occur, a nuclear exchange could potentially cut people off from critical water and food supplies, putting increased and potentially unsustainable strains on uncontaminated areas.  After the Chernobyl nuclear power plant, situated in Ukraine, [melted down and exploded](https://en.wikipedia.org/wiki/Chernobyl_disaster) in 1986, authorities established a 1,000 square mile restricted access "[exclusion zone](https://en.wikipedia.org/wiki/Chernobyl_Exclusion_Zone)" that remains in place today.

There would also be a major danger of second-order "spillover" effects, as individuals fled affected areas, putting economic and political strains on neighboring regions. This could inflame existing tensions not directly related to the inter-state conflict between India or Pakistan or lead to all new and potentially violent competition for what might already be limited resources. India has already threatened to [weaponize water access](https://www.nytimes.com/2019/02/21/world/asia/india-pakistan-water-kashmir.html) in its latest spat with the Pakistanis.

Any serious impacts on food and water supplies, or other economic upheavals as a direct or indirect result of the conflict, would have cascading impact across South Asia and beyond, as well. The very threat of a potential India-Pakistan war of any kind already caused [some negative reactions](https://www.cnbc.com/2019/02/27/indian-air-force-plane-crashes-in-kashmir-says-indian-police-official.html) in regional financial markets. Those markets would certainly collapse after an unprecedented nuclear exchange actually occurred, and that is before the long-term physical impacts of such an event would even manifest themselves.

Overall, we are talking about a sudden and dramatic geopolitical, financial, and environmental shift that would change our reality in a matter of hours. Even then, the darkness, both figuratively and literally, that could propagate over the weeks, months, and years would be far more damaging.

How great is the risk?

So far, India and Pakistan have not made any clear indications that the fighting is close to crossing their nuclear thresholds. Pakistan's warnings about the [risks of escalation](http://thedrive.com/the-war-zone/26642/pakistan-promises-retaliation-makes-nuclear-threats-after-indian-jets-bomb-its-territory) seem more calculated to try and prompt India to back down.

India itself has a so-called "no first use" policy, which means it has publicly pledged to use its nuclear weapons only in retaliation to a nuclear strike. However, experts have increasingly called into question whether this is truly the case and whether India might be developing delivery systems more suited to a first strike should there be a need to shift policies.

Pakistan, however, does not have a no first use policy and has insisted on its right to employ nuclear weapons to defend itself even in the face of purely conventional threat. Pakistani officials have, in the past, [specifically cited this policy](https://www.cfr.org/event/promoting-us-pakistan-relations-future-challenges-and-opportunities) as way of deterring India, which has a much larger and in some cases more advanced conventional force, and preventing larger wars.

The concern, then, is that this policy appears to have failed, at least to some degree, with India's strike on undisputed Pakistani territory on Feb. 26, 2019. India, however, did not target Pakistani forces in that instance and exchanges between the two countries have been limited, at least so far, to the disputed Jammu and Kashmir region, where violent skirmishes occur semi-regularly without precipitating a larger confrontation.

We can only hope that the two countries will find a diplomatic solution to this latest conflict and avoid any further escalation. If things were to spiral out of control and lead to the use of nuclear weapons, it would be something that would threaten all of humanity.

### Democracy

#### Biased reporting that advocates for the government undermines Indian democracy and leads to populism and backsliding – objectivity is key to hold politicians accountable

**Mohan***, Jahani* **2021** *Media bias and democracy in india • stimson center*. Stimson Center. (2021, July 2). Retrieved March 4, 2022, from https://www.stimson.org/2021/media-bias-and-democracy-in-india/ // sosa

As the COVID-19 pandemic rages out of control in India, many are rightly focusing on the content of stories on the death toll and months of lockdown. The lack of journalistic integrity behind some of the stories deepens this grim situation. In April, [reports emerged](https://www.medianama.com/2021/04/223-twitter-mp-minister-censor/) that, at the request of the Indian government, Twitter censored 52 tweets criticizing the government’s handling of the pandemic. Meanwhile, pro-government TV channels [blamed](https://www.dw.com/en/covid-why-is-india-censoring-media-during-public-health-crisis/a-57353096) the farmers’ protests for limited oxygen supplies for COVID-19 patients, though supplies were [actually scarce](https://www.npr.org/sections/goatsandsoda/2021/05/05/989461528/why-is-india-running-out-of-oxygen) due to poor public health infrastructure. This reporting is not only misleading and traumatic to those affected by the pandemic, but also poses a major threat to India’s vibrant democracy.

Even before the pandemic, media bias in India existed across the largest newspapers throughout the country, and political forces shape this bias. For example, funds from the government are critical to many newspapers’ operations and budgets, and the current Bhartiya Janata Party (BJP) government has previously [refused to advertise](https://www.reuters.com/article/india-media-idINKCN1TT1R6) with newspapers that do not support its initiatives. This pressure leads media to endorse government policies, creating unbalanced reporting where media bias can affect political behavior in favor of the incumbent. Many media outlets enjoy a symbiotic relationship with the government, in turn receiving attention, funding, and prominence. These trends damage India’s democracy and also put journalists critical of the government in danger, threatening their right to physical safety.

While the COVID-19 pandemic has exacerbated media bias in India, it is hardly a new phenomenon. A [study](https://globalgiants.com/archives/2019/05/21/) of 30 Indian newspapers and 41 Indian TV channels with the largest viewership rates in the country confirms the existence of rampant media bias during a two-year period from 2017 to 2018.[1](https://southasianvoices.org/media-bias-and-democracy-in-india/#easy-footnote-bottom-1-14657)

The study relies on rating editorial articles that focus on religious, gender, and caste issues as either liberal, neutral, or conservative; and then compiling these scores by each newspaper to find the overall bias in each outlet. The results unsurprisingly and unfortunately show the consistent existence of media bias—for example, except for eight newspapers, the papers all express biases far from neutral. And this bias consistently correlates with viewers in India expressing similarly biased social, economic, and security attitudes.

What this suggests is either that biases in the media shape viewer attitudes or Indians are viewing outlets that align with their pre-existing views. Meanwhile, political parties capitalize on this bias to influence public attitudes and further their own power. The BJP [spends](https://factly.in/the-central-government-spent-10000-crore-on-publicity-in-the-last-16-years/) almost USD $140 million on publicity per year, with 43 percent of this expenditure focusing specifically on print ads in newspapers. Government advertisements serve as a financial lever for influencing media content and public opinion. For example, during the year leading to the 2019 elections, newspapers that received more advertisement revenue from the BJP were likelier to espouse more conservative ideology and to have more conservative readers.

This ability of media bias to influence political support in India can contribute significantly to democratic backsliding by harming journalists, preventing freedom of expression and government accountability, and influencing voters. Media bias in itself causes democratic backsliding because the media neither holding the government accountable nor informing the public about policies that strengthen the incumbent’s power can increase authoritarian practices.

In addition, government efforts to constrain the media harms journalists, undemocratically violating citizens’ rights and physical safety. Freedom House [rates](https://freedomhouse.org/country/india/freedom-world/2021) India as only two on a four-point scale for whether there is a “free and independent media,” because of “attacks on press freedom…under the Modi government.” In fact, the government [imprisoned several journalists](https://www.theguardian.com/global-development/2020/jul/31/india-arrests-50-journalists-in-clampdown-on-critics-of-covid-19-response) in 2020 who reported critically on Prime Minister (PM) Narendra Modi’s response to the pandemic. The crackdown on journalists engendered an unsafe environment for free reporting, a feature of many authoritarian states.

A biased media also prevents citizens from receiving information that might be essential to public wellbeing by filtering information through a lens that supports government interests first. When the BJP cracked down on coverage of COVID-19 last year, journalists were [unable to disseminate](https://thediplomat.com/2020/05/covid-19-and-shrinking-press-freedom-in-india/) critical information to Indians. This included where migrants suffering from the sudden lockdown could receive necessities—information that could save lives. Notably, these crackdowns also meant an absence of reporting criticizing the government’s response to the pandemic. In a democratic society, a critical press is essential for holding the government accountable for its actions and motivating it to change its practices.

Finally, media bias plays an influencing role at the voting booth as propaganda can skew voter decisions and perceptions of what is true. During India’s 2014 general elections, the BJP advertised more than the Congress Party and voters exposed to more media were [likelier](https://www.jstor.org/stable/24480739?seq=1#metadata_info_tab_contents) to vote for the BJP. To influence voters, media bias often utilizes inflammatory messaging to convince more people to vote, selective information to bias what voters believe about the efficacy of the candidates, and appeasement to convince voters that they will personally benefit from voting a certain way. For example, a TimesNow interview of PM Modi before the 2019 elections [made it seem](https://scroll.in/article/865942/fact-check-what-narendra-modi-told-timesnow-and-what-the-data-actually-shows) that Modi’s economic policies—widely criticized as ineffectual—were successful.

#### A declining free press is the biggest threat to global democracy

Repucci 19 Sarah Repucci, Senior Director for Research and Analysis, 2019, "Media Freedom: A Downward Spiral," Freedom House, [https://freedomhouse.org/report/freedom-and-media/2019/media-freedom-downward-spiral //](https://freedomhouse.org/report/freedom-and-media/2019/media-freedom-downward-spiral%20/) ella

In some of the most influential democracies in the world, populist leaders have overseen concerted attempts to throttle the independence of the media sector. While the threats to global media freedom are real and concerning in their own right, their impact on the state of democracy is what makes them truly dangerous. Experience has shown, however, that press freedom can rebound from even lengthy stints of repression when given the opportunity. The basic desire for democratic liberties, including access to honest and fact-based journalism, can never be extinguished. The fundamental right to seek and disseminate information through an independent press is under attack, and part of the assault has come from an unexpected source. Elected leaders in many democracies, who should be press freedom’s staunchest defenders, have made explicit attempts to silence critical media voices and strengthen outlets that serve up favorable coverage. The trend is linked to a global decline in democracy itself: The erosion of press freedom is both a symptom of and a contributor to the breakdown of other democratic institutions and principles, a fact that makes it especially alarming. According to Freedom House’s Freedom in the World data, media freedom has been deteriorating around the world over the past decade, with new forms of repression taking hold in open societies and authoritarian states alike. The trend is most acute in Europe, previously a bastion of well-established freedoms, and in Eurasia and the Middle East, where many of the world’s worst dictatorships are concentrated. If democratic powers cease to support media independence at home and impose no consequences for its restriction abroad, the free press corps could be in danger of virtual extinction. Experience has shown, however, that press freedom can rebound from even lengthy stints of repression when given the opportunity. The basic desire for democratic liberties, including access to honest and fact-based journalism, can never be extinguished, and it is never too late to renew the demand that these rights be granted in full. Attacks on Press Freedom in Democracies In some of the most influential democracies in the world, large segments of the population are no longer receiving unbiased news and information. This is not because journalists are being thrown in jail, as might occur in authoritarian settings. Instead, the media have fallen prey to more nuanced efforts to throttle their independence. Common methods include government-backed ownership changes, regulatory and financial pressure, and public denunciations of honest journalists. Governments have also offered proactive support to friendly outlets through measures such as lucrative state contracts, favorable regulatory decisions, and preferential access to state information. The goal is to make the press serve those in power rather than the public. The problem has arisen in tandem with right-wing populism, which has undermined basic freedoms in many democratic countries. Populist leaders present themselves as the defenders of an aggrieved majority against liberal elites and ethnic minorities whose loyalties they question, and argue that the interests of the nation—as they define it—should override democratic principles like press freedom, transparency, and open debate. Among Free countries in Freedom House’s Freedom in the World report, 19 percent (16 countries) have endured a reduction in their press freedom scores over the past five years. This is consistent with a key finding of Freedom in the World—that democracies in general are undergoing a decline in political rights and civil liberties. It has become painfully apparent that a free press can never be taken for granted, even when democratic rule has been in place for decades. Viktor Orbán’s government in Hungary and Aleksandar Vučić’s administration in Serbia have had great success in snuffing out critical journalism, blazing a trail for populist forces elsewhere. Both leaders have consolidated media ownership in the hands of their cronies, ensuring that the outlets with the widest reach support the government and smear its perceived opponents. In Hungary, where the process has advanced much further, nearly 80 percent of the media are owned by government allies. \* Cultivation of progovernment media is spreading to neighboring states. The leader of the far-right Freedom Party of Austria, until recently part of that country’s ruling coalition, was caught on video attempting to collude with Russians to purchase the largest national newspaper and infuse its coverage with partisan bias. Score declines linked to economic manipulation of media—including cases in which the government directs advertising to friendly outlets or encourages business allies to buy those that are critical—were more common across Europe over the past five years than in other parts of the world. Such tactics of influence and interference are a relatively recent phenomenon on the continent, which has generally displayed strong support for press freedom since the fall of the Berlin Wall 30 years ago. In Israel, one of the few democracies in the Middle East, Prime Minister Benjamin Netanyahu has repeatedly excoriated investigative reporters and now faces corruption charges for allegedly offering regulatory favors to two major media firms in exchange for positive coverage. Although Netanyahu has resisted efforts to formally indict and try him on these charges, the evidence suggests that the prime minister was willing to sacrifice press freedom in order to maintain political power. Many voters apparently accepted this tradeoff in the April 2019 elections, putting Netanyahu’s party and its allies in a position to form a new ruling coalition. India, the world’s most populous democracy, is also sending signals that holding the government accountable is not part of the press’s responsibility. The ruling Bharatiya Janata Party has supported campaigns to discourage speech that is “antinational,” and government-aligned thugs have raided critical journalists’ homes and offices. The media have become widely flattering of Prime Minister Narendra Modi, who won reelection last month, amid allegations that the government issues directives on how the press should cover his activities and intimidates journalists who push back. The government has also been selective in the allocation of television licenses, effectively excluding unfriendly outlets from the airwaves. In perhaps the most concerning development of recent years, press freedom has come under unusual pressure in the United States, the world’s leading democratic power. Although key news organizations remain strong and continue to produce vigorous reporting on those in office, President Donald Trump’s continual vilification of the press has seriously exacerbated an ongoing erosion of public confidence in the mainstream media. Among other steps, the president has repeatedly threatened to strengthen libel laws, revoke the licenses of certain broadcasters, and damage media owners’ other business interests. The US constitution provides robust protections against such actions, but President Trump’s public stance on press freedom has had a tangible impact on the global landscape. Journalists around the world now have less reason to believe that Washington will come to their aid if their basic rights are violated. Fueling a Global Decline The breakdown of global press freedom is closely related to the broader decline of democracy that Freedom House has tracked for the past 13 years. Although the press is not always the first institution to be attacked when a country’s leadership takes an antidemocratic turn, repression of free media is a strong indication that other political rights and civil liberties are in danger. Assaults on media independence are frequently associated with power grabs by new or incumbent leaders, or with entrenched regimes’ attempts to crush perceived threats to their control. Over the past five years, countries that were already designated as Not Free in Freedom House’s Freedom in the World report were also those most likely to suffer a decline in their press freedom scores, with 28 percent of Not Free countries experiencing such a drop. Partly Free countries were almost equally likely to experience a gain as a decline in press freedom, reflecting the volatility of these middle performers and the complex forces influencing their trajectory. The worsening records of Not Free states, combined with the negative trend among Free countries, have driven the overall decline in global press freedom. While populist leaders in democracies seek to secure and build on their gains by taming the press, established autocratic governments continue to tighten the screws on dissenting voices, as any breach in their media dominance threatens to expose official wrongdoing or debunk official narratives. In Russia in 2018, authorities moved to block the popular messaging application Telegram after the company refused to hand over its encryption keys to security officials. The government in Cameroon shut down internet service in the restive Anglophone region for most of last year, a heavy-handed reaction to protests and a nascent insurgency stemming from long-standing discrimination against the large Anglophone minority. In Myanmar, two Reuters journalists were sentenced to seven years in prison after a flawed trial in which the court ignored plain evidence that they had been entrapped to halt their investigation of military atrocities against the Rohingya minority; although they were recently pardoned, they were not exonerated.

#### Backsliding undermines institutional checks on Indo-Pak escalation. The level of democracy matters for conflict risks.

Alizada & Boese et al. 21 [Nazifa Alizada, Dr. Vanessa Boese, Prof. Staffan Lindberg, Martin Lundstedt, Natalia Natsika, and Shreeya Pillai – University of Gothenburg, Varieties of Democracy Institute: V-Dem Policy Brief, No. 30, May 2021. “Does Democracy Bring International and Domestic Peace and Security?” <https://www.v-dem.net/media/filer_public/1a/98/1a98c2d0-887e-4857-8f0d-3a0f4139f564/pb30.pdf>] brett

A large body of scientific evidence demonstrates that human security, as well as international and domestic peace are strongly and positively related to democracy. The democratic peace axiom – that democracies do not fight wars against each other, and that the spread of democracy reduces armed disputes and wars – is soundly confirmed by a wealth of rigorous studies (e.g., Altman et al., 2020; Hegre et al., 2020; Hegre, 2014; Hegre, 2008). A recent study using the V-Dem democracy indices shows that there is no case of a war in any pair of states whose democratic level was above 0.61 on the V-Dem electoral democracy index (Altman et al., 2020).

Being part of a region with high levels of democracy also matters. Two states located in a region with low levels of democracy are 70% more likely to have a fatal armed conflict than a pair of states placed in a region with high levels (Altman et al., 2020). Consequently, the current wave of autocratization should be expected to lead to a world with more international conflicts, with devastating consequences for human security.

Hegre et al. (2020) demonstrate that vertical (free and fair multiparty elections), horizontal (institutional constraints on the executive), and diagonal (civil society) accountability mechanisms all contribute to lowering the risk of interstate war. For example, this means that after India turned into an electoral autocracy (Alizada et al., 2021), the statistical odds of a militarized dispute with at least one death between **India and Pakistan** is now 3 times higher than 10 years ago.

A series of scientific studies demonstrate that democracies are also less prone to civil war and domestic volatility compared to autocracies, especially long-term, institutionalized democracies. The key is that democracies are better at absorbing and channeling discontent through legal institutional means and accountability mechanisms that in turn lower the risk of domestic conflict (Fjelde et al., 2021; Hegre et al., 2001; Hegre, 2014).

#### Yet, it is vital to recognize that semi-democracies and countries with recent transitions tend to be more volatile with a higher risk of civil and international conflict. Such a regime is around four times more likely to experience domestic unrest compared to a well-established democracy. In addition, the risk of civil war in a regime transitioning from an autocracy to a semi-democracy is nine times higher compared to before the transition (Hegre et al., 2001). That is why long-term strategies toward stabilizing and improving the quality of newly established democracies are critical.

#### Independently, populism leads to extinction through lack of cooperation

Leigh 21 Andrew Leigh, the author of What’s the Worst That Could Happen? Existential Risk and Extreme Politics, and a member of the Australian Parliament. This article was first published by MIT Press Reader and has been republished here with permission., 7-11-2021, "Populism Is Not Good for the Planet”, The Wire Science, <https://science.thewire.in/environment/populism-is-not-good-for-the-planet/> // ella

Humanity is running an unprecedented experiment with Earth’s atmosphere. The last time atmospheric carbon levels were as high as they are now was in the Pliocene epoch, three to five million years ago. Back then, rhinos lived in North America. Crocodiles and alligators lived in Europe. Trees grew in the Arctic. Ocean levels were 75 feet higher. To put it into context, a 75-foot increase in sea levels puts many of the world’s major cities underwater, including London, Miami, Tokyo, Manila, New York, Amsterdam, Stockholm, Jakarta, Dhaka and Shanghai. In the past 500 million years, the planet has experienced five mass extinction events, each of which wiped out most of the species on the planet. Only one was caused by an asteroid, with the other four being driven by greenhouse gases. Studying the carbon cycle changes that led to these extinction events, geophysicist Daniel Rothman concludes that the threshold for a sixth extinction event is when more than 310 gigatonnes of carbon are added to the oceans. On a business-as-usual trajectory, human carbon emissions are currently on track to add 500 gigatonnes by 2100.Extreme meteorological events are bumping up against the limits of existing weather scales. Following record-breaking heat in 2013, the Australian Bureau of Meteorology added two new colors to its temperature maps, raising the top temperature from 50º C to 54º C. After Hurricane Harvey, the US National Weather Service added two new shades of purple to its rainfall maps, raising the upper limit from 15 to 30 inches. Meteorologist Jeff Masters proposes that the existing five-category hurricane scale be expanded by including a category six hurricane – what he described as a “black swan” storm. In Glasgow, countries are confronting the reality that their announced measures will not come close to meeting the Paris climate targets. According to an assessment by the nongovernmental organisation Climate Action Tracker, only a handful of nations have implemented climate policies that are consistent with 2º C of warming, while a few (such as the European Union) would come close. Most countries’ policies, the body says, are “insufficient”, “highly insufficient” or “critically insufficient.” There is a strong economic case for climate action. Once installed, wind and solar provide energy at almost zero marginal cost. Averting dangerous climate change avoids the costly impact of heatwaves that cause premature deaths and restrict outdoor work, hurricanes and wildfires that take lives and damage property, destruction of coastal property and reduced agricultural yields. If these benefits sound good, they should appear doubly attractive when the prospect of averting a global catastrophe is added to the picture. If future lives matter as much as ours, it is callous not to reduce carbon emissions. The case for decisive action is strengthened still further by recognising that much of the problem has been created relatively recently. As journalist David Wallace-Wells has observed, “The majority of the burning has come since the premiere of Seinfeld.” Climate change is not solely a problem bequeathed to us by our ancestors. Many of those responsible for the carbon emissions that are causing the planet to warm are still alive today. Yet focusing on catastrophic risk – in climate change and other areas – is hampered by the growth of populist politics. Not every populist is a climate denier, but virtually all climate deniers are populists. One analysis of the 21 largest right-wing populist parties in Europe found that one-third were outright climate deniers, while many others were hostile to climate action. Right-wing populists make up 15% of the European Parliament, but their votes account for around half of all those voting against climate and energy resolutions. A recent study in the UK identified voters who held populist beliefs about politics. These populist voters were significantly less likely to agree that global warming is caused by human action and less likely to support measures to protect the environment. Populism is on the rise. From 1990 to 2018, the number of countries with populist leaders increased from four to 20. The best known was President Donald Trump, who once claimed that climate change is a “hoax”, and asserted that “global warming was created by and for the Chinese in order to make US manufacturing non-competitive.” In the current Congress, 52% of House Republicans and 60% of Senate Republicans are climate deniers. In Brazil, President Jair Bolsonaro has loosened controls over land clearing in the Amazon. This has led farmers to accelerate deforestation by logging and burning. In mid-2019, satellite analysis of major fires in the Amazon showed that an area the size of Yellowstone National Park had been burned. At this pace, this additional deforestation could push the Amazon rainforest towards a tipping point. Populists view politics as a contest between a pure mass of people and a vile elite. Right-wing populists often include scientists in their characterisation of the elite. This has led to a spate of clashes between populist leaders and scientists. Dutch far-right leader Thierry Baudet rails against “climate change hysteria”. Allies of Hungary’s leader Viktor Orbán included scientists on a list of people it brands as “mercenaries” of billionaire philanthropist George Soros. By throwing petrol on the political flames, populism makes cooperation harder. California’s 2006 cap-and-trade emissions reduction program was passed by a Democratic legislature and signed into law by Republican governor Arnold Schwarzenegger. Yet today, two-fifths of Republican voters and Democratic voters think their political opponents are evil, and one-sixth regard them as animals. That’s hardly conducive to encouraging representatives to reach across the aisle.

### Solvency

#### Thus, the plan: In the Republic of India, a free press ought to prioritize objectivity over advocacy.

#### Indian press should prioritize the principle of objectivity- here’s what that looks like

**Sharma**, M. (**2020**, May 2). *Opinion: Journalism, the crumbling pillar of Indian democracy*. Youth Ki Awaaz. Retrieved March 5, 2022, from https://www.youthkiawaaz.com/2020/04/journalism-the-crumbling-pillar-of-indian-democracy/ // sosa

Print journalism dates back to 17th Century Germany, but the practice of the distribution of news was practiced in the Roman era in 59 B.C. where it was recorded in Acta Diurna through which news was hung in the city center every day for the consumption of the people. In this day and age of capitalism and Information Technology, commercialization of journalism and the abundance of fake and unreliable information are some of the predominant issues eroding the industry in India.

The principle of ‘[objectivity](https://www.youthkiawaaz.com/2019/11/ownership-issues-in-media-hindrance-in-objective-reporting/)‘ is one of the foremost lessons in journalism, and it was considered of prime importance by Lichtenberg (1996:225) especially in liberal democracies. The term ‘objectivity’ is a comprehensive term and implies a ‘rational’ perspective on any given situation, and Westerstahl’s model defines it to include several components like truth, facts, and impartiality as well. Objectivity and truth are always considered at the top of the journalistic ethos.

In addition, autonomy and neutrality have become equally important to reiterate the first principle of objectivity and truth. If a media house is not autonomous, it would eventually end up losing objectivity for either political or commercial gains. In light of these events, neutrality and autonomy became two very important pillars of the industry. Commercialization along with political pressures has threatened the freedom and autonomy of the industry in this era of capitalism.

While these threats were non-existent during the nascent stage of the industry, there was immense political pressure which prevented newspapers or journalists from reporting on parliamentary actions, criticism of the king/government/ruler, and any form of rebellious speech or language. It was with the onset and dissemination of the enlightenment principles of Liberty, Equality, and Fraternity that the industry became much more autonomous and free of the political shackles. Today, [freedom](https://www.youthkiawaaz.com/2020/04/security-situation-for-indias-media-to-have-improved-the-world-press-freedom-index-2020/) is one of the inevitable prerequisites for practicing serious and substantial journalism.

Over the last 5 centuries, journalism has become a medium to change the world, a medium to share knowledge, ideas, and has played an extraordinary role in revolutions and movements across the world. To rejig our memories, it is important we understand journalism through the most effective outcomes that have been achieved in different parts of the world where journalism challenged and even changed the status quo.

#### An objective press overcomes the barriers and leads to democratic reforms

Jha 16 Ravi Jha, Toronto-based senior Public Policy & Governance Administrator, journalist and member of a free press advocacy group, 6-22-2016, "India's Free Press Problem: Politics and Corporate Interests Invade Journalism," CJFE | Canadian Journalists for Free Expression, [https://www.cjfe.org/indias\_free\_press\_problem //](https://www.cjfe.org/indias_free_press_problem%20/) ella

The media in South Asian countries like India, Pakistan and Bangladesh has never been more obedient to corporate and political forces as it is today. As these countries are scrutinized for human rights violations and atrocities committed against minority groups, the freedom of journalists to objectively report is ceasing to exist, with governments and legal systems failing to protect or rescue them. Every day, journalists battle for autonomy, fight for their rights to speak out freely, protect media pluralism and counter the ills of monopolies. While Pakistan and Bangladesh have been well-known press freedom battlefields in recent years, with many journalists and bloggers killed, wounded or sued for speaking the truth, the surprising entry to this list is India. This is a country of 1.2 billion people where the media was until recently deemed “free [and] fair with equal access”—a Fourth Estate to the world’s largest democracy. Today, prominent Indian politicians and corporate entities are making increasingly underhanded investments in news media, and the press is failing to serve as a potent, unbiased tool to inform public perception. In this way, it is also increasingly unable to provide an arena for public debates where issues of shared interest can be represented and discussed. Unlike many democracies, where political and corporate entities are ostensibly supposed to be prohibited from holding news media broadcasting and publishing rights, media outlets in India are openly owned and controlled by political and business conglomerates, which are using the media to undermine the relevance of their opponents with scant regard for overall national interest. The main casualty has been the ability of the citizen to find out the objective truth, as different media outlets divide into camps on any major issue, polarizing the reporting and their readerships. This has become so evident that in a report to the government, India’s regulatory body, Telecom Regulatory Authority of India (TRAI), recommended legislation to empower journalists for free and fair expression. “Instances of irresponsible reporting and sensationalization are common these days when controversial news stories are bandied in the public domain through media outlets,” the report reads. It suggests Indian journalism, with its lack of freedom and self-regulation, cannot be trusted now—it is currently known for manipulation and bias. Subir Ghosh, co-author of Sue The Messenger, a book about how corporate ownership and legal harassment by powerful business houses are shackling reportage and undermining democracy, states, “If writing and reportage are shackled, it is democracy which gets undermined. It is the people who lose their unfettered right to know.” Ghosh said the reality on the ground is that the editorial policies of most media outlets are affected by corporate entities, either through influence or by the heft commanded by advertising and revenue generation. Leading Indian newspapers like the Times of India are increasingly market-driven, and have long diluted editorial authority. India’s biggest TV network, CNN-IBN and the Eenadu group of regional language channels, is directly controlled by one of the world’s richest business tycoons, Mukesh Ambani. Ambani is the chairman, managing director and largest shareholder of Reliance Industries Limited (RIL), a US $100 billion asset and Fortune Global 500 company with interests in energy, petrochemicals, textiles, natural resources, retail and telecommunications. RIL, which owns businesses across India, also has stakes in several other media entities. Ambani’s brother Anil runs Reliance Big Broadcasting and has stakes in numerous publications and TV channels, including American film production label DreamWorks. Other prominent media houses—New Delhi Television (NDTV) and India Today, for instance—also have corporate investments, which are significantly influenced by political preferences. TRAI points out that the primary motivation for a media company to have a presence in multiple media segments, i.e. to have cross media holdings, is to maximize its reach to consumers in different demographics with varying media consumption patterns. This translates into higher economic gains for these media owners. “Media pluralism is getting restricted with entities having cross media holdings occupying dominant positions in different media sectors,” said journalist Naveen Upadhyay, a political editor with a Delhi-based Indian English language daily. Ghosh also writes that readers need to understand that persecution is fast becoming the norm for Indian journalists. “What was earlier intermittent is now increasingly taking the shape of a distinct trend in the targeting of journalists. While more journalists want to expose corporate corruption and crony capitalism, it is increasingly being seen that corporations are openly intimidating writers and journalists.” In this environment, how can journalists not be forced—or feel compelled for the sake of job security—to report in ways that reflect the political opinions and corporate interests of shareholders? This trend of interference also extends to political actors having close ties to news media. For example, News 24 is owned by Annuradha Prasad, the wife of opposition Congress Party leader Rajeev Shukla, whose name surfaced in corruption and spot-fixing scandals in the Indian Premier League. As journalists are intimidated for attempting to expose corruption, it is extremely worrisome when politicians accused of corruption have such close and personal ties to those in charge of the media. TRAI, in addition to recommending the need for regulations of media ownership, has stated that “media influences ideas and therefore can swing opinions. It is, therefore, important that an arm’s length distance is ensured between the media and organs of governance, political institutions and other entities which have a profound sway over public opinion. It is, thus, essential in the public interest, as a guarantee of the plurality and diversity of opinion.” Such alarming observations about corporate and political interference are made when several top Indian journalists are themselves becoming politically active, queuing up to become Members of Parliament in the Upper House and lobbying for political parties that often make compromises to serve their own interests. In one instance, Zee News editor Sudhir Chaudhary was arrested in 2012 for allegedly trying to extort US $15 million from former Congress MP and industrialist Naveen Jindal. And not long ago, NDTV’s top editor Barkha Dutt, along with many other journalists like former Hindustan Times editor Vir Sanghvi, were caught “political lobbying” in the infamous Nira Radia tapes controversy, when conversations allegedly between Radia, an influence peddler and journalists were recorded, revealing their intention of promoting money laundering and tax evasion. Writing about the controversy, TV commentator Rajdeep Sardesai said, “The robust Indian tradition of adversarial journalism has been mortgaged at the altar of cozy networks.” This scandal revealed that these journalists served as power brokers for a deal considered to be among India’s biggest ever political scams. Where else has the line between journalism and politics been blurred? Jaya TV in southern India is controlled by Tamil Nadu State Chief Minister Jayalalithaa Jayaram. Sun TV is led by former TeleCommunications Minister Dayanidhi Maran. Shobhna Bhartia, Chairperson and Editorial Director of the Hindustan Times, was a Congress Party Parliamentary member. A popular national TV news channel is owned by editor Rajat Sharma, who is open about his lobbying interests and support for the ruling political party Bharatiya Janata Party (BJP). Chandan Mitra, the editor of Pioneer newspaper in Delhi, and veteran Indian journalist and author M. J. Akbar, are members of BJP. Arun Shourie, former editor of the Indian Express newspaper, is a public BJP sympathizer. Journalists are free to pursue political careers and actions, but the potential for conflicts of interest are high, with no regulations to prevent them from using their positions in the media to promote personal political agendas. For a truly free press, they must ensure that political aspirations do not affect their objective news reporting in the meantime.

### Framework

#### The standard is maximizing expected wellbeing. Pleasure and pain are intrinsic value and disvalue – everything else regresses – robust neuroscience.

Blum et al. 18 Kenneth Blum, 1Department of Psychiatry, Boonshoft School of Medicine, Dayton VA Medical Center, Wright State University, Dayton, OH, USA 2Department of Psychiatry, McKnight Brain Institute, University of Florida College of Medicine, Gainesville, FL, USA 3Department of Psychiatry and Behavioral Sciences, Keck Medicine University of Southern California, Los Angeles, CA, USA 4Division of Applied Clinical Research & Education, Dominion Diagnostics, LLC, North Kingstown, RI, USA 5Department of Precision Medicine, Geneus Health LLC, San Antonio, TX, USA 6Department of Addiction Research & Therapy, Nupathways Inc., Innsbrook, MO, USA 7Department of Clinical Neurology, Path Foundation, New York, NY, USA 8Division of Neuroscience-Based Addiction Therapy, The Shores Treatment & Recovery Center, Port Saint Lucie, FL, USA 9Institute of Psychology, Eötvös Loránd University, Budapest, Hungary 10Division of Addiction Research, Dominion Diagnostics, LLC. North Kingston, RI, USA 11Victory Nutrition International, Lederach, PA., USA 12National Human Genome Center at Howard University, Washington, DC., USA, Marjorie Gondré-Lewis, 12National Human Genome Center at Howard University, Washington, DC., USA 13Departments of Anatomy and Psychiatry, Howard University College of Medicine, Washington, DC US, Bruce Steinberg, 4Division of Applied Clinical Research & Education, Dominion Diagnostics, LLC, North Kingstown, RI, USA, Igor Elman, 15Department Psychiatry, Cooper University School of Medicine, Camden, NJ, USA, David Baron, 3Department of Psychiatry and Behavioral Sciences, Keck Medicine University of Southern California, Los Angeles, CA, USA, Edward J Modestino, 14Department of Psychology, Curry College, Milton, MA, USA, Rajendra D Badgaiyan, 15Department Psychiatry, Cooper University School of Medicine, Camden, NJ, USA, Mark S Gold 16Department of Psychiatry, Washington University, St. Louis, MO, USA, “Our evolved unique pleasure circuit makes humans different from apes: Reconsideration of data derived from animal studies”, U.S. Department of Veterans Affairs, 28 February 2018, accessed: 19 August 2020, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6446569/>, R.S.

**Pleasure** is not only one of the three primary reward functions but it also **defines reward.** As homeostasis explains the functions of only a limited number of rewards, the principal reason why particular stimuli, objects, events, situations, and activities are rewarding may be due to pleasure. This applies first of all to sex and to the primary homeostatic rewards of food and liquid and extends to money, taste, beauty, social encounters and nonmaterial, internally set, and intrinsic rewards. Pleasure, as the primary effect of rewards, drives the prime reward functions of learning, approach behavior, and decision making and provides the basis **for hedonic** theories of reward function. We are attracted by most rewards and exert intense efforts to obtain them, just because they are enjoyable [10]. Pleasure is a passive reaction that derives from the experience or prediction of reward and may lead to a long-lasting state of happiness. The word happiness is difficult to define. In fact, just obtaining physical pleasure may not be enough. One key to happiness involves a network of good friends. However, it is not obvious how the higher forms of satisfaction and pleasure are related to an ice cream cone, or to your team winning a sporting event. Recent multidisciplinary research, using both humans and detailed invasive brain analysis of animals has discovered some critical ways that the brain processes pleasure [14]. Pleasure as a hallmark of reward is sufficient for defining a reward, but it may not be necessary. A reward may generate positive learning and approach behavior simply because it contains substances that are essential for body function. When we are hungry, we may eat bad and unpleasant meals. A monkey who receives hundreds of small drops of water every morning in the laboratory is unlikely to feel a rush of pleasure every time it gets the 0.1 ml. Nevertheless, with these precautions in mind, we may define any stimulus, object, event, activity, or situation that has the potential to produce pleasure as a reward. In the context of reward deficiency or for disorders of addiction, homeostasis pursues pharmacological treatments: drugs to treat drug addiction, obesity, and other compulsive behaviors. The theory of allostasis suggests broader approaches - such as re-expanding the range of possible pleasures and providing opportunities to expend effort in their pursuit. [15]. It is noteworthy, the first animal studies eliciting approach behavior by electrical brain stimulation interpreted their findings as a discovery of the brain’s pleasure centers [16] which were later partly associated with midbrain dopamine neurons [17–19] despite the notorious difficulties of identifying emotions in animals. Evolutionary theories of pleasure: The love connection BO:D Charles Darwin and other biological scientists that have examined the biological evolution and its basic principles found various mechanisms that steer behavior and biological development. Besides their theory on natural selection, it was particularly the sexual selection process that gained significance in the latter context over the last century, especially when it comes to the question of what makes us “what we are,” i.e., human. However, the capacity to sexually select and evolve is not at all a human accomplishment alone or a sign of our uniqueness; yet, we humans, as it seems, are ingenious in fooling ourselves and others–when we are in love or desperately search for it. It is well established that modern biological theory conjectures that **organisms are** the **result of evolutionary competition.** In fact, Richard Dawkins stresses gene survival and propagation as the basic mechanism of life [20]. Only genes that lead to the fittest phenotype will make it. It is noteworthy that the phenotype is selected based on behavior that maximizes gene propagation. To do so, the phenotype must survive and generate offspring, and be better at it than its competitors. Thus, the ultimate, distal function of rewards is to increase evolutionary fitness by ensuring the survival of the organism and reproduction. It is agreed that learning, approach, economic decisions, and positive emotions are the proximal functions through which phenotypes obtain other necessary nutrients for survival, mating, and care for offspring. Behavioral reward functions have evolved to help individuals to survive and propagate their genes. Apparently, people need to live well and long enough to reproduce. Most would agree that homo-sapiens do so by ingesting the substances that make their bodies function properly. For this reason, foods and drinks are rewards. Additional rewards, including those used for economic exchanges, ensure sufficient palatable food and drink supply. Mating and gene propagation is supported by powerful sexual attraction. Additional properties, like body form, augment the chance to mate and nourish and defend offspring and are therefore also rewards. Care for offspring until they can reproduce themselves helps gene propagation and is rewarding; otherwise, many believe mating is useless. According to David E Comings, as any small edge will ultimately result in evolutionary advantage [21], additional reward mechanisms like novelty seeking and exploration widen the spectrum of available rewards and thus enhance the chance for survival, reproduction, and ultimate gene propagation. These functions may help us to obtain the benefits of distant rewards that are determined by our own interests and not immediately available in the environment. Thus the distal reward function in gene propagation and evolutionary fitness defines the proximal reward functions that we see in everyday behavior. That is why foods, drinks, mates, and offspring are rewarding. There have been theories linking pleasure as a required component of health benefits salutogenesis, (salugenesis). In essence, under these terms, pleasure is described as a state or feeling of happiness and satisfaction resulting from an experience that one enjoys. Regarding pleasure, it is a double-edged sword, on the one hand, it promotes positive feelings (like mindfulness) and even better cognition, possibly through the release of dopamine [22]. But on the other hand, pleasure simultaneously encourages addiction and other negative behaviors, i.e., motivational toxicity. It is a complex neurobiological phenomenon, relying on reward circuitry or limbic activity. It is important to realize that through the “Brain Reward Cascade” (BRC) endorphin and endogenous morphinergic mechanisms may play a role [23]. While natural rewards are essential for survival and appetitive motivation leading to beneficial biological behaviors like eating, sex, and reproduction, crucial social interactions seem to further facilitate the positive effects exerted by pleasurable experiences. Indeed, experimentation with addictive drugs is capable of directly acting on reward pathways and causing deterioration of these systems promoting hypodopaminergia [24]. Most would agree that pleasurable activities can stimulate personal growth and may help to induce healthy behavioral changes, including stress management [25]. The work of Esch and Stefano [26] concerning the link between compassion and love implicate the brain reward system, and pleasure induction suggests that social contact in general, i.e., love, attachment, and compassion, can be highly effective in stress reduction, survival, and overall health. Understanding the role of neurotransmission and pleasurable states both positive and negative have been adequately studied over many decades [26–37], but comparative anatomical and neurobiological function between animals and homo sapiens appear to be required and seem to be in an infancy stage. Finding happiness is different between apes and humans As stated earlier in this expert opinion one key to happiness involves a network of good friends [38]. However, it is not entirely clear exactly how the higher forms of satisfaction and pleasure are related to a sugar rush, winning a sports event or even sky diving, all of which augment dopamine release at the reward brain site. Recent multidisciplinary research, using both humans and detailed invasive brain analysis of animals has discovered some critical ways that the brain processes pleasure. Remarkably, there are pathways for ordinary liking and pleasure, which are limited in scope as described above in this commentary. However, there are **many brain regions**, often termed hot and cold spots, that significantly **modulate** (increase or decrease) our **pleasure or** even produce the opposite of pleasure— that is disgust and fear [39]. One specific region of the nucleus accumbens is organized like a computer keyboard, with particular stimulus triggers in rows— producing an increase and decrease of pleasure and disgust. Moreover, the cortex has unique roles in the cognitive evaluation of our feelings of pleasure [40]. Importantly, the interplay of these multiple triggers and the higher brain centers in the prefrontal cortex are very intricate and are just being uncovered. Desire and reward centers It is surprising that many different sources of pleasure activate the same circuits between the mesocorticolimbic regions (Figure 1). Reward and desire are two aspects pleasure induction and have a very widespread, large circuit. Some part of this circuit distinguishes between desire and dread. The so-called pleasure circuitry called “REWARD” involves a well-known dopamine pathway in the mesolimbic system that can influence both pleasure and motivation. In simplest terms, the well-established mesolimbic system is a dopamine circuit for reward. It starts in the ventral tegmental area (VTA) of the midbrain and travels to the nucleus accumbens (Figure 2). It is the cornerstone target to all addictions. The VTA is encompassed with neurons using glutamate, GABA, and dopamine. The nucleus accumbens (NAc) is located within the ventral striatum and is divided into two sub-regions—the motor and limbic regions associated with its core and shell, respectively. The NAc has spiny neurons that receive dopamine from the VTA and glutamate (a dopamine driver) from the hippocampus, amygdala and medial prefrontal cortex. Subsequently, the NAc projects GABA signals to an area termed the ventral pallidum (VP). The region is a relay station in the limbic loop of the basal ganglia, critical for motivation, behavior, emotions and the “Feel Good” response. This defined system of the brain is involved in all addictions –substance, and non –substance related. In 1995, our laboratory coined the term “Reward Deficiency Syndrome” (RDS) to describe genetic and epigenetic induced hypodopaminergia in the “Brain Reward Cascade” that contribute to addiction and compulsive behaviors [3,6,41]. Furthermore, ordinary “liking” of something, or pure pleasure, is represented by small regions mainly in the limbic system (old reptilian part of the brain). These may be part of larger neural circuits. In Latin, hedus is the term for “sweet”; and in Greek, hodone is the term for “pleasure.” Thus, the word Hedonic is now referring to various subcomponents of pleasure: some associated with purely sensory and others with more complex emotions involving morals, aesthetics, and social interactions. The capacity to have pleasure is part of being healthy and may even extend life, especially if linked to optimism as a dopaminergic response [42]. Psychiatric illness often includes symptoms of an abnormal inability to experience pleasure, referred to as anhedonia. A negative feeling state is called dysphoria, which can consist of many emotions such as pain, depression, anxiety, fear, and disgust. Previously many scientists used animal research to uncover the complex mechanisms of pleasure, liking, motivation and even emotions like panic and fear, as discussed above [43]. However, as a significant amount of related research about the specific brain regions of pleasure/reward circuitry has been derived from invasive studies of animals, these cannot be directly compared with subjective states experienced by humans. In an attempt to resolve the controversy regarding the causal contributions of mesolimbic dopamine systems to reward, we have previously evaluated the three-main competing explanatory categories: “liking,” “learning,” and “wanting” [3]. That is, dopamine may mediate (a) liking: the hedonic impact of reward, (b) learning: learned predictions about rewarding effects, or (c) wanting: the pursuit of rewards by attributing incentive salience to reward-related stimuli [44]. We have evaluated these hypotheses, especially as they relate to the RDS, and we find that the incentive salience or “wanting” hypothesis of dopaminergic functioning is supported by a majority of the scientific evidence. Various neuroimaging studies have shown that anticipated behaviors such as sex and gaming, delicious foods and drugs of abuse all affect brain regions associated with reward networks, and may not be unidirectional. Drugs of abuse enhance dopamine signaling which sensitizes mesolimbic brain mechanisms that apparently evolved explicitly to attribute incentive salience to various rewards [45]. Addictive substances are voluntarily self-administered, and they enhance (directly or indirectly) dopaminergic synaptic function in the NAc. This activation of the brain reward networks (producing the ecstatic “high” that users seek). Although these circuits were initially thought to encode a set point of hedonic tone, it is now being considered to be far more complicated in function, also encoding attention, reward expectancy, disconfirmation of reward expectancy, and incentive motivation [46]. The argument about addiction as a disease may be confused with a predisposition to substance and nonsubstance rewards relative to the extreme effect of drugs of abuse on brain neurochemistry. The former sets up an individual to be at high risk through both genetic polymorphisms in reward genes as well as harmful epigenetic insult. Some Psychologists, even with all the data, still infer that addiction is not a disease [47]. Elevated stress levels, together with polymorphisms (genetic variations) of various dopaminergic genes and the genes related to other neurotransmitters (and their genetic variants), and may have an additive effect on vulnerability to various addictions [48]. In this regard, Vanyukov, et al. [48] suggested based on review that whereas the gateway hypothesis does not specify mechanistic connections between “stages,” and does not extend to the risks for addictions the concept of common liability to addictions may be more parsimonious. The latter theory is grounded in genetic theory and supported by data identifying common sources of variation in the risk for specific addictions (e.g., RDS). This commonality has identifiable neurobiological substrate and plausible evolutionary explanations. Over many years the controversy of dopamine involvement in especially “pleasure” has led to confusion concerning separating motivation from actual pleasure (wanting versus liking) [49]. We take the position that animal studies cannot provide real clinical information as described by self-reports in humans. As mentioned earlier and in the abstract, on November 23rd, 2017, evidence for our concerns was discovered [50] In essence, although nonhuman primate brains are similar to our own, the disparity between other primates and those of human cognitive abilities tells us that surface similarity is not the whole story. Sousa et al. [50] small case found various differentially expressed genes, to associate with pleasure related systems. Furthermore, the dopaminergic interneurons located in the human neocortex were absent from the neocortex of nonhuman African apes. Such differences in neuronal transcriptional programs may underlie a variety of neurodevelopmental disorders. In simpler terms, the system controls the production of dopamine, a chemical messenger that plays a significant role in pleasure and rewards. The senior author, Dr. Nenad Sestan from Yale, stated: “Humans have evolved a dopamine system that is different than the one in chimpanzees.” This may explain why the behavior of humans is so unique from that of non-human primates, even though our brains are so surprisingly similar, Sestan said: “It might also shed light on why people are vulnerable to mental disorders such as autism (possibly even addiction).” Remarkably, this research finding emerged from an extensive, multicenter collaboration to compare the brains across several species. These researchers examined 247 specimens of neural tissue from six humans, five chimpanzees, and five macaque monkeys. Moreover, these investigators analyzed which genes were turned on or off in 16 regions of the brain. While the differences among species were subtle, **there was** a **remarkable contrast in** theneocortices, specifically in an area of the brain that is much more developed in humans than in chimpanzees. In fact, these researchers found that a gene called tyrosine hydroxylase (TH) for the enzyme, responsible for the production of dopamine, was expressed in the neocortex of humans, but not chimpanzees. As discussed earlier, dopamine is best known for its essential role within the brain’s reward system; the very system that responds to everything from sex, to gambling, to food, and to addictive drugs. However, dopamine also assists in regulating emotional responses, memory, and movement. Notably, abnormal dopamine levels have been linked to disorders including Parkinson’s, schizophrenia and spectrum disorders such as autism and addiction or RDS. Nora Volkow, the director of NIDA, pointed out that one alluring possibility is that the neurotransmitter dopamine plays a substantial role in humans’ ability to pursue various rewards that are perhaps months or even years away in the future. This same idea has been suggested by Dr. Robert Sapolsky, a professor of biology and neurology at Stanford University. Dr. Sapolsky cited evidence that dopamine levels rise dramatically in humans when we anticipate potential rewards that are uncertain and even far off in our futures, such as retirement or even the possible alterlife. This may explain what often motivates people to work for things that have no apparent short-term benefit [51]. In similar work, Volkow and Bale [52] proposed a model in which dopamine can favor NOW processes through phasic signaling in reward circuits or LATER processes through tonic signaling in control circuits. Specifically, they suggest that through its modulation of the orbitofrontal cortex, which processes salience attribution, dopamine also enables shilting from NOW to LATER, while its modulation of the insula, which processes interoceptive information, influences the probability of selecting NOW versus LATER actions based on an individual’s physiological state. This hypothesis further supports the concept that disruptions along these circuits contribute to diverse pathologies, including obesity and addiction or RDS.

#### Extinction outweighs

Todd 17 [Ben has a 1st from Oxford in Physics and Philosophy, has published in Climate Physics, once kick-boxed for Oxford, and speaks Chinese, badly. "The case for reducing extinction risk." <https://80000hours.org/articles/extinction-risk/>] brett

In this new age, what should be our biggest priority as a civilisation? Improving technology? Helping the poor? Changing the political system? Here’s a suggestion that’s not so often discussed: our first priority should be to survive. So long as civilisation continues to exist, we’ll have the chance to solve all our other problems, and have a far better future. But if we go extinct, that’s it. Why isn’t this priority more discussed? Here’s one reason: many people don’t yet appreciate the change in situation, and so don’t think our future is at risk. Social science researcher Spencer Greenberg surveyed Americans on their estimate of the chances of human extinction within 50 years. The results found that many think the chances are extremely low, with over 30% guessing they’re under one in ten million.3 We used to think the risks were extremely low as well, but when we looked into it, we changed our minds. As we’ll see, researchers who study these issues think the risks are over one thousand times higher, and are probably increasing. These concerns have started a new movement working to safeguard civilisation, which has been joined by Stephen Hawking, Max Tegmark, and new institutes founded by researchers at Cambridge, MIT, Oxford, and elsewhere. In the rest of this article, we cover the greatest risks to civilisation, including some that might be bigger than nuclear war and climate change. We then make the case that reducing these risks could be the most important thing you do with your life, and explain exactly what you can do to help. If you would like to use your career to work on these issues, we can also give one-on-one support. Reading time: 25 minutes How likely are you to be killed by an asteroid? An overview of naturally occurring existential risks A one in ten million chance of extinction in the next 50 years — what many people think the risk is — must be an underestimate. Naturally occurring existential risks can be estimated pretty accurately from history, and are much higher. If Earth was hit by a 1km-wide asteroid, there’s a chance that civilisation would be destroyed. By looking at the historical record, and tracking the objects in the sky, astronomers can estimate the risk of an asteroid this size hitting Earth as about 1 in 5000 per century.4 That’s higher than most people’s chances of being in a plane crash (about one in five million per flight), and already about 1000-times higher than the one in ten million risk that some people estimated.5 Some argue that although a 1km-sized object would be a disaster, it wouldn’t be enough to cause extinction, so this is a high estimate of the risk. But on the other hand, there are other naturally occurring risks, such as supervolcanoes.6 All this said, natural risks are still quite small in absolute terms. An upcoming paper by Dr. Toby Ord estimated that if we sum all the natural risks together, they’re very unlikely to add up to more than a 1 in 300 chance of extinction per century.7 Unfortunately, as we’ll now show, the natural risks are dwarfed by the human-caused ones. And this is why the risk of extinction has become an especially urgent issue. A history of progress, leading to the start of the most dangerous epoch in human history If you look at history over millennia, the basic message is that for a long-time almost everyone was poor, and then in the 18th century, that changed.8 Large economic growth created the conditions in which now face anthropogenic existential risks This was caused by the industrial revolution — perhaps the most important event in history. It wasn’t just wealth that grew. The following chart shows that over the long-term, life expectancy, energy use and democracy have all grown rapidly, while the percentage living in poverty has dramatically decreased.9 Chart prepared by Luke Muehlhauser in 2017. Literacy and education levels have also dramatically increased: Image source. People also seem to become happier as they get wealthier. In The Better Angels of Our Nature, Steven Pinker argues that violence is going down.10 Individual freedom has increased, while racism, sexism and homophobia have decreased. Many people think the world is getting worse,11 and it’s true that modern civilisation does some terrible things, such as factory farming. But as you can see in the data, many important measures of progress have improved dramatically. More to the point, no matter what you think has happened in the past, if we look forward, improving technology, political organisation and freedom gives our descendants the potential to solve our current problems, and have vastly better lives.12 It is possible to end poverty, prevent climate change, alleviate suffering, and more. But also notice the purple line on the second chart: war-making capacity. It’s based on estimates of global military power by the historian Ian Morris, and it has also increased dramatically. Here’s the issue: improving technology holds the possibility of enormous gains, but also enormous risks. Each time we discover a new technology, most of the time it yields huge benefits. But there’s also a chance we discover a technology with more destructive power than we have the ability to wisely use. And so, although the present generation lives in the most prosperous period in human history, it’s plausibly also the most dangerous. The first destructive technology of this kind was nuclear weapons. Nuclear weapons: a history of near-misses Today we all have North Korea’s nuclear programme on our minds, but current events are just one chapter in a long saga of near misses. We came near to nuclear war several times during the Cuban Missile crisis alone.13 In one incident, the Americans resolved that if one of their spy planes were shot down, they would immediately invade Cuba without a further War Council meeting. The next day, a spy plane was shot down. JFK called the council anyway, and decided against invading. An invasion of Cuba might well have triggered nuclear war; it later emerged that Castro was in favour of nuclear retaliation even if “it would’ve led to the complete annihilation of Cuba”. Some of the launch commanders in Cuba also had independent authority to target American forces with tactical nuclear weapons in the event of an invasion. In another incident, a Russian nuclear submarine was trying to smuggle materials into Cuba when they were discovered by the American fleet. The fleet began to drop dummy depth charges to force the submarine to surface. The Russian captain thought they were real depth charges and that, while out of radio communication, the third world war had started. He ordered a nuclear strike on the American fleet with one of their nuclear torpedoes. Fortunately, he needed the approval of other senior officers. One, Vasili Arkhipov, disagreed, preventing war. Thanks to Vasili Arkhipov, we narrowly averted a global catastrophic risk from nuclear weapons Thank you Vasili Arkhipov. Putting all these events together, JFK later estimated that the chances of nuclear war were “between one in three and even”.14 There have been plenty of other close calls with Russia, even after the Cold War, as listed on this nice Wikipedia page. And those are just the ones we know about. Nuclear experts today are just as concerned about tensions between India and Pakistan, which both possess nuclear weapons, as North Korea.15 The key problem is that several countries maintain large nuclear arsenals that are ready to be deployed in minutes. This means that a false alarm or accident can rapidly escalate into a full-blown nuclear war, especially in times of tense foreign relations. Would a nuclear war end civilisation? It was initially thought that a nuclear blast might be so hot that it would ignite the atmosphere and make the Earth uninhabitable. Scientists estimated this was sufficiently unlikely that the weapons could be “safely” tested, and we now know this won’t happen. In the 1980s, the concern was that ash from burning buildings would plunge the Earth into a long-term winter that would make it impossible to grow crops for decades.16 Modern climate models suggest that a nuclear winter severe enough to kill everyone is very unlikely, though it’s hard to be confident due to model uncertainty.17 Even a “mild” nuclear winter, however, could still cause mass starvation.18 For this and other reasons, a nuclear war would be extremely destabilising, and it’s unclear whether civilisation could recover. How likely is a nuclear war to permanently end civilisation? It’s very hard to estimate, but it seems hard to conclude that the chance of a civilisation-ending nuclear war in the next century isn’t over 0.3%. That would mean the risks from nuclear weapons are greater than all the natural risks put together. (Read more about nuclear risks.) This is why the 1950s marked the start of a new age for humanity. For the first time in history, it became possible for a small number of decision-makers to wreak havoc on the whole world. We now pose the greatest threat to our own survival — that makes today the most dangerous point in human history. And nuclear weapons aren’t the only way we could end civilisation. How big is the risk of run-away climate change? In 2015, President Obama said in his State of the Union address that:19 “No challenge  poses a greater threat to future generations than climate change” Climate change is certainly a major risk to civilisation. The graph below shows estimates of climate sensitivity. Climate sensitivity is how much warming to expect in the long-term if CO2 concentrations double, which is roughly what’s expected within the century. Does climate change pose an existential risk? Wagner and Weitzman predict a greater than 10% chance of greater than 6 degrees celsius of warming. Image source The most likely outcome is 2-4 degrees of warming, which would be bad, but survivable. However, these estimates give a 10% chance of warming over 6 degrees, and perhaps a 1% chance of warming of 9 degrees. That would render large fractions of the Earth functionally uninhabitable, requiring at least a massive reorganisation of society. It would also probably increase conflict, and make us more vulnerable to other risks. (If you’re sceptical of climate models, then you should increase your uncertainty, which makes the situation more worrying.) So, it seems like the chance of a massive climate disaster created by CO2 is perhaps similar to the chance of a nuclear war. Researchers who study these issues think nuclear war seems more likely to result in outright extinction, due to the possibility of nuclear winter, which is why we think nuclear weapons pose an even greater risk than climate change. That said, climate change is certainly a major problem, which should raise our estimate of the risks even higher. (Read more about run-away climate change.) What new technologies might be as dangerous as nuclear weapons? The invention of nuclear weapons led to the anti-nuclear movement just a decade later in the 1960s, and the environmentalist movement soon adopted the cause of fighting climate change. What’s less appreciated is that new technologies will present further catastrophic risks. This is why we need a movement that is concerned with safeguarding civilisation in general. Predicting the future of technology is difficult, but because we only have one civilisation, we need to try our best. Here are some candidates for the next technology that’s as dangerous as nuclear weapons. In 1918-1919, over 3% of the world’s population died of the Spanish Flu.20 If such a pandemic arose today, it might be even harder to contain due to rapid global transport. What’s more concerning, though, is that it may soon be possible to genetically engineer a virus that’s as contagious as the Spanish Flu, but also deadlier, and which could spread for years undetected. That would be a weapon with the destructive power of nuclear weapons, but far harder to prevent from being used. Nuclear weapons require huge factories and rare materials to make, which makes them relatively easy to control. Designer viruses might be possible to create in a lab with a couple of biology PhDs. In fact, in 2006, The Guardian was able to receive segments of the extinct smallpox virus by mail order.21 Some terrorist groups have expressed interest in using indiscriminate weapons like these. (Read more about pandemic risks.) In fact, in 2006, The Guardian was able to receive segments of the extinct smallpox virus by mail order. Relevant experts suggest synthetic pathogens could potentially pose a global catastrophic risk. Who ordered the smallpox? Credit: The Guardian Another new technology with huge potential power is artificial intelligence. The reason that humans are in charge and not chimps is purely a matter of intelligence. Our large and powerful brains give us incredible control of the world, despite the fact that we are so much physically weaker than chimpanzees. So then what would happen if one day we created something much more intelligent than ourselves? In 2017, 350 researchers who have published peer-reviewed research into artificial intelligence at top conferences were polled about when they believe that we will develop computers with human-level intelligence: that is, a machine that is capable of carrying out all work tasks better than humans. The median estimate was that there is a 50% chance we will develop high-level machine intelligence in 45 years, and 75% by the end of the century.22 Graph of expert prediction from Grace et al: The median estimate was that there is a 50% chance we will develop high-level machine intelligence in 45 years These probabilities are hard to estimate, and the researchers gave very different figures depending on precisely how you ask the question.23 Nevertheless, it seems there is at least a reasonable chance that some kind of transformative machine intelligence is invented in the next century. Moreover, greater uncertainty means that it might come sooner than people think rather than later. What risks might this development pose? The original pioneers in computing, like Alan Turing and Marvin Minsky, raised concerns about the risks of powerful computer systems,24 and these risks are still around today. We’re not talking about computers “turning evil”. Rather, one concern is that a powerful AI system could be used by one group to gain control of the world, or otherwise be mis-used. If the USSR had developed nuclear weapons 10 years before the USA, the USSR might have become the dominant global power. Powerful computer technology might pose similar risks. Another concern is that deploying the system could have unintended consequences, since it would be difficult to predict what something smarter than us would do. A sufficiently powerful system might also be difficult to control, and so be hard to reverse once implemented. These concerns have been documented by Oxford Professor Nick Bostrom in Superintelligence and by AI pioneer Stuart Russell. Most experts think that better AI will be a hugely positive development, but they also agree there are risks. In the survey we just mentioned, AI experts estimated that the development of high-level machine intelligence has a 10% chance of a “bad outcome” and a 5% chance of an “extremely bad” outcome, such as human extinction.22 And we should probably expect this group to be positively biased, since, after all, they make their living from the technology. Putting the estimates together, if there’s a 75% chance that high-level machine intelligence is developed in the next century, then this means that the chance of a major AI disaster is 5% of 75%, which is about 4%. (Read more about risks from artificial intelligence.) People have raised concern about other new technologies, such as other forms of geo-engineering and atomic manufacturing, but they seem significantly less imminent, so are widely seen as less dangerous than the other technologies we’ve covered. You can see a longer list of existential risks here. What’s probably more concerning is the risks we haven’t thought of yet. If you had asked people in 1900 what the greatest risks to civilisation were, they probably wouldn’t have suggested nuclear weapons, genetic engineering or artificial intelligence, since none of these were yet invented. It’s possible we’re in the same situation looking forward to the next century. Future “unknown unknowns” might pose a greater risk than the risks we know today. Each time we discover a new technology, it’s a little like betting against a single number on a roulette wheel. Most of the time we win, and the technology is overall good. But each time there’s also a small chance the technology gives us more destructive power than we can handle, and we lose everything. Each new technology we develop has both unprecedented potential and perils. Image source. What’s the total risk of human extinction if we add everything together? Many experts who study these issues estimate that the total chance of human extinction in the next century is between 1 and 20%. For instance, an informal poll in 2008 at a conference on catastrophic risks found they believe it’s pretty likely we’ll face a catastrophe that kills over a billion people, and estimate a 19% chance of extinction before 2100.25 Risk At least 1 billion dead Human extinction Number killed by molecular nanotech weapons. 10% 5% Total killed by superintelligent AI. 5% 5% Total killed in all wars (including civil wars). 30% 4% Number killed in the single biggest engineered pandemic. 10% 2% Total killed in all nuclear wars. 10% 1% Number killed in the single biggest nanotech accident. 1% 0.5% Number killed in the single biggest natural pandemic. 5% 0.05% Total killed in all acts of nuclear terrorism. 1% 0.03% Overall risk of extinction prior to 2100 n/a 19% These figures are about one million times higher than what people normally think. In our podcast episode with Will MacAskill we discuss why he puts the risk of extinction this century at around 1%. In his his book The Precipice: Existential Risk and the Future of Humanity, Dr Toby Ord gives his guess at our total existential risk this century as 1 in 6 — a roll of the dice. Listen to our episode with Toby. What should we make of these estimates? Presumably, the researchers only work on these issues because they think they’re so important, so we should expect their estimates to be high (“selection bias”). But does that mean we can dismiss their concerns entirely? Given this, what’s our personal best guess? It’s very hard to say, but we find it hard to confidently ignore the risks. Overall, we guess the risk is likely over 3%. Why helping to safeguard the future could be the most important thing you can do with your life How much should we prioritise working to reduce these risks compared to other issues, like global poverty, ending cancer or political change? At 80,000 Hours, we do research to help people find careers with positive social impact. As part of this, we try to find the most urgent problems in the world to work on. We evaluate different global problems using our problem framework, which compares problems in terms of: Scale – how many are affected by the problem Neglectedness -how many people are working on it already Solvability – how easy it is to make progress If you apply this framework, we think that safeguarding the future comes out as the world’s biggest priority. And so, if you want to have a big positive impact with your career, this is the top area to focus on. In the next few sections, we’ll evaluate this issue on scale, neglectedness and solvability, drawing heavily on Existential Risk Prevention as a Global Priority by Nick Bostrom and unpublished work by Toby Ord, as well as our own research. First, let’s start with the scale of the issue. We’ve argued there’s likely over a 3% chance of extinction in the next century. How big an issue is this? One figure we can look at is how many people might die in such a catastrophe. The population of the Earth in the middle of the century will be about 10 billion, so a 3% chance of everyone dying means the expected number of deaths is about 300 million. This is probably more deaths than we can expect over the next century due to the diseases of poverty, like malaria.26 Many of the risks we’ve covered could also cause a “medium” catastrophe rather than one that ends civilisation, and this is presumably significantly more likely. The survey we covered earlier suggested over a 10% chance of a catastrophe that kills over 1 billion people in the next century, which would be at least another 100 million deaths in expectation, along with far more suffering among those who survive. So, even if we only focus on the impact on the present generation, these catastrophic risks are one of the most serious issues facing humanity. But this is a huge underestimate of the scale of the problem, because if civilisation ends, then we give up our entire future too. Most people want to leave a better world for their grandchildren, and most also think we should have some concern for future generations more broadly. There could be many more people having great lives in the future than there are people alive today, and we should have some concern for their interests. There’s a possibility that human civilization could last for millions of years, so when we consider the impact of the risks on future generations, the stakes are millions of times higher — for good or evil. As Carl Sagan wrote on the costs of nuclear war in Foreign Affairs: A nuclear war imperils all of our descendants, for as long as there will be humans. Even if the population remains static, with an average lifetime of the order of 100 years, over a typical time period for the biological evolution of a successful species (roughly ten million years), we are talking about some 500 trillion people yet to come. By this criterion, the stakes are one million times greater for extinction than for the more modest nuclear wars that kill “only” hundreds of millions of people. There are many other possible measures of the potential loss–including culture and science, the evolutionary history of the planet, and the significance of the lives of all of our ancestors who contributed to the future of their descendants. Extinction is the undoing of the human enterprise. We’re glad the Romans didn’t let humanity go extinct, since it means that all of modern civilisation has been able to exist. We think we owe a similar responsibility to the people who will come after us, assuming (as we believe) that they are likely to lead fulfilling lives. It would be reckless and unjust to endanger their existence just to make ourselves better off in the short-term. It’s not just that there might be more people in the future. As Sagan also pointed out, no matter what you think is of value, there is potentially a lot more of it in the future. Future civilisation could create a world without need or want, and make mindblowing intellectual and artistic achievements. We could build a far more just and virtuous society. And there’s no in-principle reason why civilisation couldn’t reach other planets, of which there are some 100 billion in our galaxy.27 If we let civilisation end, then none of this can ever happen. We’re unsure whether this great future will really happen, but that’s all the more reason to keep civilisation going so we have a chance to find out. Failing to pass on the torch to the next generation might be the worst thing we could ever do. So, a couple of percent risk that civilisation ends seems likely to be the biggest issue facing the world today. What’s also striking is just how neglected these risks are. Why these risks are some of the most neglected global issues Here is how much money per year goes into some important causes:28 Cause Annual targeted spending from all sources (highly approximate) Global R&D $1.5 trillion Luxury goods $1.3 trillion US social welfare $900 billion Climate change >$300 billion To the global poor >$250 billion Nuclear security $1-10 billion Extreme pandemic prevention $1 billion AI safety research $10 million As you can see, we spend a vast amount of resources on R&D to develop even more powerful technology. We also expend a lot in a (possibly misguided) attempt to improve our lives by buying luxury goods. Far less is spent mitigating catastrophic risks from climate change. Welfare spending in the US alone dwarfs global spending on climate change. But climate change still receives enormous amounts of money compared to some of these other risks we’ve covered. We roughly estimate that the prevention of extreme global pandemics receives under 300 times less, even though the size of the risk seems about the same. Research to avoid accidents from AI systems is the most neglected of all, perhaps receiving 100-times fewer resources again, at around only $10m per year. You’d find a similar picture if you looked at the number of people working on these risks rather than money spent, but it’s easier to get figures for money. If we look at scientific attention instead, we see a similar picture of neglect (though, some of the individual risks receive significant attention, such as climate change): Existential risk research receives less funding than dung beetle research. Credit: Nick Bostrom Our impression is that if you look at political attention, you’d find a similar picture to the funding figures. An overwhelming amount of political attention goes on concrete issues that help the present generation in the short-term, since that’s what gets votes. Catastrophic risks are far more neglected. Then, among the catastrophic risks, climate change gets the most attention, while issues like pandemics and AI are the most neglected. This neglect in resources, scientific study and political attention is exactly what you’d expect to happen from the underlying economics, and are why the area presents an opportunity for people who want to make the world a better place. First, these risks aren’t the responsibility of any single nation. Suppose the US invested heavily to prevent climate change. This benefits everyone in the world, but only about 5% of the world’s population lives in the US, so US citizens would only receive 5% of the benefits of this spending. This means the US will dramatically underinvest in these efforts compared to how much they’re worth to the world. And the same is true of every other country. This could be solved if we could all coordinate — if every nation agreed to contribute its fair share to reducing climate change, then all nations would benefit by avoiding its worst effects. Unfortunately, from the perspective of each individual nation, it’s better if every other country reduces their emissions, while leaving their own economy unhampered. So, there’s an incentive for each nation to defect from climate agreements, and this is why so little progress gets made (it’s a prisoner’s dilemma). And in fact, this dramatically understates the problem. The greatest beneficiaries of efforts to reduce catastrophic risks are future generations. They have no way to stand up for their interests, whether economically or politically. If future generations could vote in our elections, then they’d vote overwhelmingly in favour of safer policies. Likewise, if future generations could send money back in time, they’d be willing to pay us huge amounts of money to reduce these risks. (Technically, reducing these risks creates a trans-generational, global public good, which should make them among the most neglected ways to do good.) Our current system does a poor job of protecting future generations. We know people who have spoken to top government officials in the UK, and many want to do something about these risks, but they say the pressures of the news and election cycle make it hard to focus on them. In most countries, there is no government agency that naturally has mitigation of these risks in its remit. This is a depressing situation, but it’s also an opportunity. For people who do want to make the world a better place, this lack of attention means there are lots high-impact ways to help. What can be done about these risks? We’ve covered the scale and neglectedness of these issues, but what about the third element of our framework, solvability? It’s less certain that we can make progress on these issues than more conventional areas like global health. It’s much easier to measure our impact on health (at least in the short-run) and we have decades of evidence on what works. This means working to reduce catastrophic risks looks worse on solvability. However, there is still much we can do, and given the huge scale and neglectedness of these risks, they still seem like the most urgent issues. We’ll sketch out some ways to reduce these risks, divided into three broad categories: 1. Targeted efforts to reduce specific risks One approach is to address each risk directly. There are many concrete proposals for dealing with each, such as the following: Many experts agree that better disease surveillance would reduce the risk of pandemics. This could involve improved technology or better collection and aggregation of existing data, to help us spot new pandemics faster. And the faster you can spot a new pandemic, the easier it is to manage. There are many ways to reduce climate change, such as helping to develop better solar panels, or introducing a carbon tax. With AI, we can do research into the “control problem” within computer science, to reduce the chance of unintended damage from powerful AI systems. A recent paper, Concrete problems in AI safety, outlines some specific topics, but only about 20 people work full-time on similar research today. In nuclear security, many experts think that the deterrence benefits of nuclear weapons could be maintained with far smaller stockpiles. But, lower stockpiles would also reduce the risks of accidents, as well as the chance that a nuclear war, if it occurred, would end civilisation. We go into more depth on what you can do to tackle each risk within our problem profiles: AI safety Pandemic prevention Nuclear security Run-away climate change We don’t focus on naturally caused risks in this section, because they’re much less likely and we’re already doing a lot to deal with some of them. Improved wealth and technology makes us more resilient to natural risks, and a huge amount of effort already goes into getting more of these. 2. Broad efforts to reduce risks Rather than try to reduce each risk individually, we can try to make civilisation generally better at managing them. The “broad” efforts help to reduce all the threats at once, even those we haven’t thought of yet. For instance, there are key decision-makers, often in government, who will need to manage these risks as they arise. If we could improve the decision-making ability of these people and institutions, then it would help to make society in general more resilient, and solve many other problems. Recent research has uncovered lots of ways to improve decision-making, but most of it hasn’t yet been implemented. At the same time, few people are working on the issue. We go into more depth in our write-up of improving institutional decision-making. Another example is that we could try to make it easier for civilisation to rebound from a catastrophe. The Global Seed Vault is a frozen vault in the Arctic, which contains the seeds of many important crop varieties, reducing the chance we lose an important species. Melting water recently entered the tunnel leading to the vault due, ironically, to climate change, so could probably use more funding. There are lots of other projects like this we could do to preserve knowledge. Similarly, we could create better disaster shelters, which would reduce the chance of extinction from pandemics, nuclear winter and asteroids (though not AI), while also increasing the chance of a recovery after a disaster. Right now, these measures don’t seem as effective as reducing the risks in the first place, but they still help. A more neglected, and perhaps much cheaper option is to create alternative food sources, such as those that be produced without light, and could be quickly scaled up in a prolonged winter. Since broad efforts help even if we’re not sure about the details of the risks, they’re more attractive the more uncertain you are. As you get closer to the risks, you should gradually reallocate resources from broad to targeted efforts (read more). We expect there are many more promising broad interventions, but it’s an area where little research has been done. For instance, another approach could involve improving international coordination. Since these risks are caused by humanity, they can be prevented by humanity, but what stops us is the difficulty of coordination. For instance, Russia doesn’t want to disarm because it would put it at a disadvantage compared to the US, and vice versa, even though both countries would be better off if there were no possibility of nuclear war. However, it might be possible to improve our ability to coordinate as a civilisation, such as by improving foreign relations or developing better international institutions. We’re keen to see more research into these kinds of proposals. Mainstream efforts to do good like improving education and international development can also help to make society more resilient and wise, and so also contribute to reducing catastrophic risks. For instance, a better educated population would probably elect more enlightened leaders (cough), and richer countries are, all else equal, better able to prevent pandemics — it’s no accident that Ebola took hold in some of the poorest parts of West Africa. But, we don’t see education and health as the best areas to focus on for two reasons. First, these areas are far less neglected than the more unconventional approaches we’ve covered. In fact, improving education is perhaps the most popular cause for people who want to do good, and in the US alone, receives 800 billion dollars of government funding, and another trillion dollars of private funding. Second, these approaches have much more diffuse effects on reducing these risks — you’d have to improve education on a very large scale to have any noticeable effect. We prefer to focus on more targeted and neglected solutions.

### UV

#### 1AR theory is legit – anything else means infinite abuse – drop the debater – 1AR is too short to make up for the time trade-off – no RVIs – 6 min 2NR means they can brute force me every time – competing interps – otherwise the 2NR could drown the aff in arguments while playing defense

#### Our study is best—Reisner et al is garbage - they simulated a blast in Atlanta not dense urban cities—they also don’t share their methodology so their results aren’t duplicable

- Mills, Badlan, Glasstone and Dolan, Cotton, Penner, Small and Heikes, Pausata with different models produced same results as Toon and Robock

- Playgrounds in Atlanta are not dense urban cities lol

- fuel load in Reisner too small for a fire storm, Reisner doesn’t – answers their ev indicts

Toon et al 19 [Owen B. Toon, Physics at Cornell; Charles G. Bardeen, Atmospheric Chemistry Observations and Modeling Laboratory, National Center for Atmospheric Research; Alan Robock, Department of Environmental Sciences, Rutgers University, New Brunswick] “Comment on “Climate Impact of a Regional Nuclear Weapon Exchange: An Improved Assessment Based on Detailed Source Calculations” by Reisner et al.” 10-19-19 RE rc ella

Reisner et al. (2019, hereafter Reisner et al.) revisit a study we had done (Mills et al., 2014) modeling the climate impacts of a nuclear war between India and Pakistan, in which fires started by 100 15‐kt atomic bombs would produce 5 Tg of soot injected into the upper troposphere. When Reisner et al. repeated our climate model simulations with a 5‐Tg soot injection, they reproduced the same climate response. Similar results have also been reported using different models (Mills et al., 2008; Pausata et al., 2016; Robock et al., 2007). However, using results from their simulation of a mass fire in suburban Atlanta with HIGRAD‐FIRETEC, a model which is not available from them preventing others from recreating their calculations, Reisner et al. calculate that much less soot would be injected into the upper troposphere because the plumes from fires would not rise as high in the atmosphere, and therefore there would be less climate response. While we agree that this reduced smoke input would result in a much smaller climate response, we have serious concerns that the fire they modeled is not typical of the type of mass fire likely to result from a nuclear attack on densely populated cities in India and Pakistan and therefore their smoke estimate may significantly underestimate the amount of smoke likely to rise into the upper troposphere and lower stratosphere during a nuclear war. Reisner et al. state that they are simulating a mass fire, presumably of the sort that would be expected in an urban area after a nuclear explosion. However, it is clear that they did not simulate a firestorm such as occurred in Hamburg, Dresden, and Hiroshima during World War II. Without them demonstrating that their model can accurately simulate these actual firestorms, it is difficult to interpret conclusions from their simulations. Firestorms have strong inflowing winds so that they have little spread, extremely tall convection columns or smoke plumes, and burn for long durations until all the fuel within their perimeter is consumed (e.g., Glasstone & Dolan, 1977). Numerous studies of firestorms (e.g., Badlan et al., 2017; Cotton, 1985; Penner et al., 1986; Small et al., 1989; Small & Heikes, 1988) show smoke rising into the stratosphere from simulated firestorms, and explore the dependence of smoke altitude on fire intensity, atmospheric stability, moisture, fire size, wind speed, and other parameters. In a nuclear conflict over a large country involving a large number of weapons many of the fires would be expected to develop into firestorms. Glasstone and Dolan (1977) suggested, based on the experience with 69 mass fires in Japan and many others in Germany during World War II, that firestorms occur when the following criteria are met: a minimum burning area of about 1.3 km2; half the structures in the area are on fire simultaneously; a fuel load of at least 4 g/cm2; and ambient winds less than 3.6 m/s. Glasstone and Dolan (1977) and results from Reisner et al. show that, assuming flat topography, a 15‐kt weapon would ignite fires in a ~13‐km2 area including a majority of the structures within that area, thus fulfilling the first two criteria. However, the second two criteria were not met in the Reisner et al. study. The fuel load in Reisner et al. is too small to generate a fire storm. Mills et al. (2014) used smoke estimates from Toon et al. (2007), who calculate fuel loads ranging from 12.6 to 94.5 g/cm2 for the top 50 urban targets in India and Pakistan. These values are all significantly above the 4 g/cm2 threshold value needed to support a firestorm. In their paper, Reisner et al. do not provide either the target location or the fuel loads used in their fire model. Rather they state that they visually examined Google images of Indian and Pakistani cities and chose a similar area of Atlanta. In personal communications, Jon Reisner did connect us with the provider of their fuel loads, Joseph Crepeau of Applied Research Associates, Inc., so that we could assess these critical data. Their ground zero is near the East Lake Golf Club in suburban Atlanta (33.750°N, 84.305°W), more than 5 km east of downtown Atlanta. A Google Earth map of this region (Figure 1) shows that this suburban region with a golf course looks nothing like a city in India or Pakistan (e.g., Figure 2). From their fuel load maps, we were able to calculate the average burnable fuel load in the 13 km2 target area to be 0.14 g/cm2 and in the 10‐km × 10‐km domain of their model to be 0.91 g/cm2. Both of these values are well below the fuel load threshold for a firestorm, and the target area has 6 times less fuel density than the domain average. The fuel load for the target area is also well below the value calculated using maps of population density following Toon et al. (2007) of 0.87 g/cm2. Fundamentally Reisner et al. simply chose a target with very little fuel. The 0.14 g/cm2 value for the Reisner et al. target area is 15 to 110 times smaller than the top 50 targets in India and Pakistan which were considered in the Mills et al. (2014) study. Reisner et al. assume a wind profile with 6–8 m/s winds in the boundary layer, which they call “very calm,” but which are significantly above the threshold of 3.6 m/s for a firestorm. Toon et al. (2007) did not consider the effects of surface winds in assuming firestorm conditions. For the top targets in India and Pakistan, during May our own numerical simulations with the version of the WACCM model used by Mills et al. (2014) suggest that surface winds for likely targets would be expected to be above the firestorm threshold about 50% of the time, so assuming sufficient fuel loads, about half of the targets should develop into firestorms and half into conflagrations. Because of the choice of target location and wind speed, Reisner et al. simulated a weak conflagration rather than a firestorm. Furthermore, for their climate simulation they assume that all 100 targets have the same smoke emissions as this case. In Toon et al. (2007), targets were identified and smoke production scaled by population density and thus each location injected a different amount of smoke proportional to the population. Figure 5 of Reisner et al. shows that their fire is blowing downwind. Conflagrations were observed in World War II mass fires, and indeed were desired in order to burn the largest possible area. They are also commonly observed in modern forest fires. Reisner et al. state “As indicated below, the simulations include various worst case assumptions with regard to the specification of the fuel, weather conditions, and height of burst of the device. Therefore, they serve as upper bounds with regard to the expected outcome of an urban mass fire caused by a nuclear detonation.” We argue that the Reisner et al. simulation is clearly not a worst case. As we have already discussed Reisner et al. do not have a high fuel load, but one that is more than an order of magnitude smaller than even the lowest fuel loads in the urban areas of Pakistan and India considered in the Mills et al. (2014) study. Firestorms were also observed in World War II and lofted material to high altitudes (see Penner et al., 1986). Moreover, numerous conflagrations in forest fires with fuel densities similar to those assumed by Reisner et al. have produced smoke plumes that reached into the stratosphere (e.g., Peterson et al., 2018). In 2017 a fire in British Columbia produced a stratospheric smoke pall that was observed by satellites for 8 months (Yu et al., 2019). Aircraft studies have shown that debris from recent fires is common in the lower stratosphere (Ditas et al., 2018). Reisner et al. neither compared their simulation with previous studies of mass fires, nor listed the basic parameters that would allow comparisons with past or future studies. They claim they have validated their model against observed mass fires, referring to their Figure 1 and three references (Linn, Canfield, et al., 2012; Linn, Anderson, et al., 2012; Pimont et al., 2009). However, two of these references (Linn, Canfield, et al., 2012; Pimont et al., 2009) and their Figure 1 focus on line fires emitting smoke into the boundary layer, which is not relevant to urban mass fires. The third reference (Linn, Anderson, et al., 2012) focuses on 150 m × 150 m or smaller burn plots, also not representative of a mass fire. Unfortunately, Reisner et al. did not report where the fire they simulated was located, fuel loading, fraction of fuels burned, fire energy release, or energy release rate when simulations were terminated so their results could not be duplicated. They have subsequently provided us with the target location and fuel loads, which is an important first step to assessing their results and recreating their fire simulation in other models. Additionally, Reisner et al. chose several parameters for their fire model that could suppress the vertical development of fires including: a stable boundary layer, a dry atmosphere, and a short simulation time. A less stable boundary layer (such as a daytime convective boundary layer) would support more upward motion. Water vapor allows for latent heat release when clouds form. Numerous studies have shown that sensible and latent heat release is essential to lofting smoke in either firestorms (e.g., Penner et al., 1986) or conflagrations (Luderer et al., 2006). Reisner et al. stated “A dry atmosphere was utilized, and pyrocumulus impacts or precipitation from pyro‐cumulonimbus were not considered. While latent heat released by condensation could lead to enhanced vertical motions of the air, increased scavenging of soot particles by precipitation is also possible. These processes will be examined in future studies using HIGRAD‐FIRETEC.” By not considering pyrocumulonimbus clouds, which by the latent heat of condensation can inject soot into the stratosphere, they have eliminated a major source of buoyancy that would loft the soot. They seem to suggest that any lofting of soot would be balanced by significant precipitation scavenging, but there is no evidence for that assumption. In fact, forest fires triggered pyrocumulonimbus clouds that lofted soot into the lower stratosphere in August 2017 over British Columbia, Canada. Over the succeeding weeks, the soot was lofted many more kilometers, as observed by satellites, because it was heated by the Sun (Yu et al., 2019). This fire is direct evidence of the self‐lofting process Robock et al. (2007) and Mills et al. (2014) modeled before. It also shows that precipitation in the cloud still allowed massive amounts of smoke to reach the stratosphere. Reisner et al. stated that their fires were of surprisingly short duration, “because of low wind speeds and hence minimal fire spread, the fires are rapidly subsiding at 40 min.” However, they do not show the energy release rate so that we can tell if the fuel has been consumed within 40 minutes. And their claims of low wind speed are erroneous, as they choose wind speeds higher than typically observed in Atlanta. Real‐world experience with firestorms such as in Hiroshima or Hamburg during World War II or in San Francisco after the 1906 earthquake (London, 1906), and of conflagrations, such as after the bombing of Tokyo during World War II (Caidan, 1960), suggests that a 40‐minute mass fire is a dramatic underestimate; most of these fires last for many hours. A longer fire would make available more heat and buoyancy to inject soot to higher altitudes. If their fire had a short duration, and did not simply blow off their grid, it was likely due to the low fuel load assumed in their target area and combustion that did not consume all of the available fuel. The claim that observations and models of the effects of volcanic eruptions support their results is erroneous. They refer to a paper by Timmreck et al. (2010) who modeled the climate effects of the 74 BP Toba eruption, taking into account growth of sulfate aerosol particles due to large SO2 emissions. This process represents completely different physics than would apply to black carbon aerosols. Black carbon (soot) is black, and highly absorptive of sunlight, causing lofting to the upper stratosphere and prolonging the lifetime in the stratosphere by years. This was shown in all our modeling work and observed after the 2017 British Columbia pyrocumulonimbus event (Peterson et al., 2018; Yu et al., 2019). Soot aerosol particles grow as fractals, limiting the effects of mass on fall speed. Sulfate aerosols only weakly absorb sunlight, and their growth reduces their stratospheric lifetime. These differences do not support volcanic sulfate growth as an analog for soot in the stratosphere. In summary, Reisner et al. (2019) modeled a fire in an area with much different characteristics than considered in our studies including the following: targeting a sparsely populated suburb surrounding a country club, not a city center; having a fuel load that is more than an order of magnitude less than any of the 100 urban areas of Pakistan or India considered by Robock et al. (2007) and Mills et al. (2014); omitting factors known to be important to smoke lofting (e.g., latent heat release); and failing to model the full duration of the event. Because of these choices, they did not simulate firestorms, which would be expected in densely populated urban areas and are known to have high altitude smoke plumes. Critically, they have not shown that their model is capable of reproducing historic firestorms, thus making it impossible to interpret their failure to generate a classic firestorm. Reisner et al. do raise an important point that not all mass fires in a nuclear war will be firestorms; however, these mass fires cannot be assumed to be weak conflagrations, either. Accurate understanding of target locations, fuel loads, and the effects of meteorology on the fire and smoke injection heights are critical to understanding the climatic consequences of fires from a nuclear war. Fire models like HIGRAD‐FIRETEC can be valuable tools for studying these issues, but the case presented by Reisner et al. is not typical of the conditions that would be expected in a nuclear war between India and Pakistan and certainly does not represent an upper bound on these effects.

#### Only objectivity and neutrality solve- the public needs informing.

**Mohan***, Jahani* **2021** *Media bias and democracy in india • stimson center*. Stimson Center. (2021, July 2). Retrieved March 4, 2022, from https://www.stimson.org/2021/media-bias-and-democracy-in-india/ // sosa

Although government measures are exacerbating media bias, the media retains some agency and could work to limit the influence of politics on reporting. Currently, 36 percent of daily newspapers [earn over half](http://rni.nic.in/pdf_file/PIN2017-18/CHAPTER-06.pdf) of their total income from the government of India and most major TV stations have owners who served as politicians themselves or who had family members in politics. Although it would be difficult to convince larger outlets to participate since they benefit from their government backing, smaller independent outlets can start this movement towards neutrality. Many small outlets already eschew government funding and report with less biased views. These publications in India therefore deserve more attention and more support to reduce media bias.

While India has some of the [highest circulation](https://www.tni.org/es/node/11017#:~:text=The%20largest%2Dcirculated%20Indian%20daily,Bhaskar%20with%2044.9%20million%20readers.) of newspapers in the world, it also unfortunately has high media bias rates and one of the [lowest press freedom rankings](https://rsf.org/en/india) for democracies. This media bias can contribute to democratic backsliding and must be addressed by media outlets. Only then can media in India properly do its job—serving to inform, not influence the public.