

# The Ecology of Ethnic Violence: Attacks on Muslims of Ahmedabad in 2002

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**Abstract** Ethnic violence killed at least a thousand Muslims in Gujarat (western India) in 2002. The role of political elites in orchestrating attacks against Muslims for electoral gains was a conspicuous characteristic of the violence. Yet, as this article demonstrates, the political thesis was insufficient in explaining why neighborhoods, often contiguous, experienced different levels of violence. Alternative explanations, such as interethnic contact, were also found wanting. A unique research design allowing the comparison of neighborhoods in the same electoral ward in the city of Ahmedabad demonstrates the critical role of ecology in explaining microspatial variation in the violence. Even when attacks were politically orchestrated, attackers still acted with some regard to self-preservation in selecting which location to attack. Observational and testimonial evidence based on 22 months of ethnographic fieldwork reveals the importance of two ecological factors: the built environment and the population distribution of potential targets. Together, the two factors heavily shaped crowds' decisions to attack or escape, thus influencing the subsequent success or failure of the attack. Muslims were most vulnerable where they were concentrated in small numbers and on routes that afforded the attackers obstacle-free entry and retreat. Where the potential targets had an obstacle-free escape route to a large concentration of fellow Muslims, the outcome was looting and arson rather than killing. By implication, the course of politically orchestrated violence was complicated by the ecology of the targeted space.

**Keywords** Hindu-Muslim · Riots · Ethnic violence · Spatial configuration · Gujarat · India

February 28, 2002: Dawn. Muslim shop owners of two scrap markets in Ahmedabad city (western India) awoke to horrifying news. A train had been burned in Godhra, a nearby town, the day before, purportedly by a Muslim crowd, and “40 to 50” Hindu

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passengers were thought to be killed in the fire. For a city where petty altercations sufficed to set off a Hindu-Muslim riot, this was a trigger of astounding magnitude. Wary of reprisals, shop-owners in one market hastily visited their shops around 8 am, instructed the three Muslim watchmen to keep guard from within the market's colossal iron gates, and left for their homes. At 9 am, a crowd of Hindu attackers killed two of the watchmen, and looted the shops. At 10 am, the second scrap market—half a kilometer away—was targeted in an equally potent attack. Puzzlingly, the outcome of the attack made on the second market, which bore goods worth three times more than the first, turned out to be different – no killings or looting occurred here.

This article examines microspatial variation in Hindu-Muslim violence in Ahmedabad city of Gujarat in 2002.<sup>1</sup> That year Gujarat, a state in western India, witnessed some of the worst ethnic massacres in modern Indian history. Targets of this violence were largely Muslims, in attacks that began as a response to the train fire of February 27 in Godhra, which killed 59 Hindu *karsevaks* (volunteers for a religious cause) and was blamed on local Muslims (Commission of Inquiry 2008). Narendra Modi—the current Indian prime minister and Gujarat chief minister of the Hindu nationalist Bharatiya Janata Party (BJP) in 2002—characterized the attacks as a spontaneous reaction by outraged Hindus to the Godhra incident. At least a thousand Muslims were killed in the “post Godhra riots.” In 2011, 31 Muslims from Godhra were convicted for the killing of the *karsevaks* (Dasgupta 2011), even as the cause of the fire and subsequent investigations into the role of the BJP leadership in the post-Godhra attacks remain controversial (see Mitta 2014).

The government's spontaneity thesis was subsequently challenged in systematic studies of the violence. These studies described the “riot” as an anti-Muslim “pogrom,” which the Sangh Parivar (a network of Hindu nationalist organizations), with the help of its political affiliate, the BJP, had planned and executed, seeking electoral benefits (e.g., Dhattiwala and Biggs 2012; Spodek 2011). A macrosatial analysis of the violence revealed Muslims to be most vulnerable in places where the BJP faced the greatest electoral competition and less vulnerable where the BJP was weak or, paradoxically, dominant;<sup>2</sup> the violence, in turn, boosted the BJP's vote in the subsequent election (Dhattiwala and Biggs 2012). Macrolevel political machinations may not be sufficient to explain individual behavior (Kalyvas 1999; Toft 2003) but microlevel and macrolevel explanations need not be mutually exclusive. Subsequent investigations found that rioters had collaborated with politicians and the police even within neighborhoods of Gujarat's towns (e.g., Human Rights Watch 2002; Sreekumar 2010).

This article is based on ethnographic data collected over 22 months of fieldwork between 2010–2012 and 2015 from five neighborhoods of Ahmedabad, all of which experienced varying levels of violence. The primary objective of fieldwork was to test the hypothesis of political incentives: Could the presence or absence of political incentives explain difference in levels of violence? An alternative explanation—interethnic ties as a deterrent to politically motivated violence (Varshney 2002)—was also explored. However, a process of analytic induction (Glaser and Strauss 1967) over six months of fieldwork compelled me to widen

<sup>1</sup> The author received the Nuffield Sociology Doctoral Studentship from Nuffield College, University of Oxford.

<sup>2</sup> Had the violence been spontaneous, it would be correct to expect the most outraged people — and, subsequently, the worst violence — in places where the BJP was dominant. See also, Raheel Dhattiwala, “Deliberateness and spontaneity in violence”, *The Hindu*, 31 December 2013.

the scope of inquiry, based on respondents' repeated allusions to a third factor—ecology—that is, words like *naksha* (map), *sankhya* (count/population), or *bhugol* (geography), in respondent testimonies.<sup>3</sup> The functional role of existing spatial factors in influencing the occurrence, progression and outcome of attacks gradually became apparent. This could be seen, first, in the risk-averse behavior of attackers. Even if attacks were instigated by politicized networks, attackers still acted with some regard to protecting their own selves, at least in selecting which location to attack. Such action could not be explained without taking account of the situational factors or the ecology of the targeted space. Ecology also affected the consequences of an attack. Once a location had been targeted, ecological factors could influence ongoing strategic decisions. Targets were most vulnerable where ecological factors impeded their escape.

Here “ecology” frames the socio-spatial—abstract or measurable space denoting distance as well as concrete or visualized space containing meanings and symbolisms that people attribute to space. Informal or formal borders segregating Hindus from Muslims display ethnic hostility but could also function as “safe spaces,” in which occupants are protected from the intervention of authorities or opponents (Tilly 2000). More specifically, I draw upon Zhao (1998) to define ecology as the impact of the physical environment or design factors of the targeted space on attackers and targets and their reaction towards the environment.

There is some evidence in statistical studies of the functional role of space in target selection in riots (Baudains et al. 2012; Berk 1974; Kawalerowicz and Biggs 2015).<sup>4</sup> But far less is known about events that occur and thoughts that cross an actor's mind during an attack, possibly because attackers rarely admit participation in civilian riots (Tambiah 1997). The only explicit source of rioter testimonies in the Gujarat violence is the *Tehelka* tapes (Khetan 2007), a clandestine journalistic recording of detailed confessions of killings by rioters in the Naroda Patiya neighborhood studied here. Research ethics would not permit similar deception. After months of trust-building, seven Hindu rioters in my research sites admitted their participation in attacks. Together with detailed testimonies of 105 other respondents, access to these seven rioters provided a unique perspective on the violence, allowing a gradual comprehension of factors affecting the outcomes of violence. Thus, this article reconstructs the decisions of attackers indirectly by examining *where* they attacked.

Two ecological factors, conceptualized here as “spatial configuration,” were sources of opportunity or restraint: the built environment of the location of attack and the population distribution of the target group. If the built environment hindered mobilization and the target group was judged strong enough to repel an attack with a counterattack—in other words, if the spatial configuration impeded attack—an attack was likely to fail. Conversely, the target group was most vulnerable to a lethal attack if the spatial configuration facilitated attackers and impeded an escape for the targets. In the illustration at the beginning of this article, respondents called the first market an “easy” target; perpetrators had assessed the negligible threat of a counterattack. This was unlike the second market where, during the attack, a countermobilization by local Muslims affected the outcome of the attack. The key argument I make is based on the Simmelian idea that socioeconomic relations lead to a certain spatial relation, but once the spatial relation is formed, it can act functionally as a social structure, influencing the emergence and progression of collective action (Spykman 2009).

<sup>3</sup> Transcripts are translations from Gujarati, Hindi or Urdu. Respondent names are pseudonyms; place names are unchanged. Verbatim words of respondents are italicized.

<sup>4</sup> See also Grimshaw 1960; Martin et al. 2009; Schelling 1963.

While this article takes prevalent antagonisms into account, it does not explain the motivations of attackers to mobilize; rather, it focusses on ongoing spatial strategies of attackers (and targets), mobilized through various processes and motivations, that contributed in an explanation of different outcomes of attack.

## Space and Violence

In existing literature, spatial relations are perceived to reflect social relations, such as in class studies (e.g., Molotch 1979); the effect of spatial segregation on Hindu-Muslim violence and of violence on the nature of existing segregated spaces (Jaffrelot and Thomas 2012; Rajagopal 2010); and street networks influencing racial composition (Grannis 1998, 1559)—people are more likely to segregate by race along residential street networks so as to be “down the street” rather than geographically distant “as the crow flies.”

But how do existing spaces influence collective action? Social movement research recognizes that space is a constituent element of contentious collective action. Based on a “practical consciousness” (Giddens 1986), actors exert power through the active manipulation, deployment, and exploitation of spatial contexts (Dochartaigh and Bosi 2010; Grannis 1998, 2009; Kalyvas 2006; Massey 1994; McAdam et al. 2001; Miller and Martin 2000; Nicholls et al. 2013; Park 1952; Sampson and Wikström 2008; Sewell 2001; Tilly 2000; Zhao 1998). In the Beijing student movement of 1989 the physical design of university campuses, rather than pre-existing social networks, was vital to the strategic calculations students made while initiating and steering the movement (Zhao 1998).

Space can influence both crowd mobilization and crowd behavior, after mobilization has occurred. There are instances, albeit fleeting, of how ecology guides complex contentious processes, such as violence. Examples include ecology influencing the possibility of violence: residents’ routine of spending leisure time on the streets facilitated race riots in American cities (Feagin and Hahn 1973) or the participation in violence, such as in Nigeria (Scacco 2009) and Rwanda (McDoom 2013); and, relevant to the present study, the outcome of violent mobilization—the Jallianwala Bagh’s built environment, with high walls and only two narrow exit gates—contributed to the magnitude of casualties during the Amritsar massacre of 1919 (Lloyd 2011).

Attackers in a crowd may appear to be out of control yet adopt rational calculation as part of their strategy even during a period of “forward panic”—a zone in time in which emotional impulses are overwhelming (Collins 2008, 121). Visceral motivations, certainly, can generate the dominant group’s perception of threat from the subordinate group, thereby encouraging people to join in attacks. What matters, post mobilization, is that the raw stimulus of anger or hatred is tempered by risk aversion, making attackers (a) strategic in their choice of target, and (b) adaptable during attack. While rioters do tend to take moderate risks, they can be moved from greater to less risk. Horowitz (2001, 527) argues that they rarely “miscalculate their own tactics and power, the intentions of the police, or the response of the targets, such that the rioters suffered more casualties than the targets did.” In Burma in 1938, following retaliatory violence from Indian targets, Burmese attackers used superior force and avoided the

police deployed on main roads, by attacking in side streets and remote areas; Indian resistance evaporated (Horowitz 2001, 384). As crime pattern studies further show, individuals are often informed by an understanding of their ecological setting (e.g., Bernasco 2014; Coleman 1989; Newman 1996).

### Spatial Configuration

Two significant factors that enabled large-scale massing in the Beijing student movement were the physical proximity of the university campuses and the emotional effect of public spatial massing (Zhao 1998). Based on such observations, I conceptualize “spatial configuration” as a combination of the physical environment and the population distribution of the target group. This configuration helps determine whether rioters can attack targets in a specific location with minimal risk to themselves. I argue that rioters will attack a location only if two conditions are met. Firstly, the target group must be present in sufficiently small numbers to be outnumbered by the attackers. Secondly, the spatial configuration must provide an alternative exit route for the attackers, separate from the point of entry. Attackers will be averse to entering an enclosed space without such a potential exit route, in case their point of entry is subsequently blocked either by the police or by targets massing for a counterattack. In Ahmedabad in 2002, of course, collusion by the police in several instances ensured that attackers only needed to be concerned about their exit being blocked through a counterattack by targets. The availability of such an exit route depends on population distribution as well as on physical environment. If a lane passes through a neighborhood where the target group resides in large numbers, it will not serve as an exit route for the attackers.

While the spatial configuration informs the choice of location to attack, it also shapes the consequence of that attack. Fatalities will occur where targets have no escape route. Again, the availability of an escape route for the target depends on population distribution as well as on physical environment: escape can be blocked by a neighboring concentration of the attacking group. I use the term “optimal” to denote routes which present minimal risks to the attacker during target selection and after the attack is made, and to the target in the course of escape.

Spatial configuration is not fixed, of course. When a riot is threatened, people can rapidly alter the physical environment, for example, by blocking up doors or altering the population distribution. The population distribution of the target group is especially malleable, because the threat of a riot often leads potential victims to flee. Their flight makes the remaining individuals more vulnerable to being outnumbered by rioters.

Note that population distribution signals how an attacker perceives space. It does not merely indicate the numerical strength of the target group—a large assemblage of people clustered together can sometimes be more vulnerable than isolated individuals who can escape by hiding (see Grimshaw 1960). In general, fewer members of the target group can seem less intimidating, and this can inform target selection for an attacker because physical vulnerability of the target group assumes primacy in an act of violence (Collins 2008; Horowitz 2001; Jackson-Jacobs 2013; Klusemann 2010). But the outcome of an attack depends on the interplay between population distribution and the built environment—factors that enable the attackers, as the attack progresses,

to gauge their own level of risk and the target group's vulnerability, and for the target to gauge an optimal escape route.

Using these concepts I demonstrate that, notwithstanding visceral motivations, attackers in Ahmedabad were sensitive to cost-benefit considerations—assessed from the target's situational factors. Potential targets also employed spatial strategies to create credible threats of a counterattack.

## Field Setting

In the aftermath of the Godhra train fire incident, the worst anti-Muslim attacks across towns and villages of Gujarat occurred in the first 3 days—February 28, March 1, and March 2—continuing intermittently until the end of the year. In Ahmedabad, violence began on February 28 as the BJP, ignoring warnings of imminent repercussions, brought the charred corpses of the *karsevaks* to the city, 160 km from Godhra (*Times of India*, 28 February 2002). Two working class neighborhoods bore the brunt of attacks; at least 97 Muslims were killed in Naroda Patiya and 70 in Chamanpura on February 28.

Ahmedabad's long history of troubled ethnic relations includes major riots in 1969, 1985 and 1992 and scores of intermittent minor riots. The horrific triggering event at Godhra amplified existing prejudice and lent the appearance of legitimacy to anti-Muslim aggression, which provided potential Hindu attackers with raw stimulus for mobilization. Perpetrators moved in crowds of at least a hundred, often taking hours or an entire day to loot, burn or kill (Engineer 2003; Mann 2005). Despite the scale and intensity of the violence, 22 of 43 municipal wards in Ahmedabad were completely peaceful, and several neighborhoods within those wards, fluctuated between states of peace and lethal or non-lethal violence.

## Methods and Data

The tradition of explaining violence by comparing peaceful and violent spatial units (e.g., Greer 1935; Myers 1997; Strauss 2008) is a recent methodological addition to the study of Hindu-Muslim violence in India (Berenschot 2011; Brass 2003; Varshney 2002; Wilkinson 2004), reducing potentially spurious inferences drawn from studying only violent places (King et al. 1994). Based on this methodology, I compare four (core) neighborhoods, located in a single municipal ward—Behrampura. All four neighborhoods experienced different levels of violence and lay within two kilometers of each other: Ram Rahimnagar or RRN was completely peaceful; Santoshnagar or STN experienced arson and looting; and Parikshitlalnagar, or PN, witnessed killings.<sup>5</sup> Within half a kilometer of PN lay two “kabadi” or scrap markets, KM2 and KM3; KM2 experienced lethal violence and KM3 was looted and burnt. Four people were killed in PN and two in KM2. For analytical convenience, I consider KM2 and KM3 as a separate case study (the fourth neighborhood). Increased segregation after 2002 had only altered the spatial distribution of the population by religion when fieldwork commenced in 2010.

<sup>5</sup> One-third of PN overlapped with a different ward, Danilimda, though the identical political configuration of Behrampura and Danilimda in 2002, made them comparable.

**Table 1** Overview of the five neighborhoods in Ahmedabad in 2002

Neighborhood	Total population <sup>1</sup>	%Hindu-Muslim, 2002	Level of violence	Municipal ward	Ruling gov't in ward
Ram Rahimnagar (RRN)	9,000	40–60	Complete peace	Behrampura	Congress
Santoshnagar (STN)	3,800	70–30	Arson, looting	Behrampura	Congress
Parikshitlalnagar (PN)	3,500	40–60	Four killed (2 Hindus, 2 Muslims)	Behrampura + Danilimda	Congress
Kabadi Markets 2 and 3 (KM2, KM3)	401 shops	1–2 shops Hindu owned	Two Muslims killed	Behrampura + Danilimda	Not applicable
Naroda Patiya	3,700	Side X: 5–95 Side Y: 40–60	97 Muslims killed	Naroda Road	Congress

<sup>1</sup> Total population of RRN and STN sourced from the Census of India, 2001 (2004); PN from respondent conversations; Naroda Patiya estimated from Common Judgment (Special Court) 2012. Data on religious groups at the ward level is not publicly released by the Indian government; therefore, Hindu-Muslim percentages in all neighborhoods are estimated from respondent conversations

Emerging testimonies mentioning ecological factors encouraged me to examine the fifth neighborhood of Naroda Patiya in Naroda Road ward, 10 km. from Behrampura, to test the generalizability of the findings. If ecological factors influence strategic decision-making processes, would they differ between neighborhoods with large-scale massacres, such as Naroda Patiya, ostensibly an outcome of greater mobilization, as opposed to those with isolated deaths? Although I use only five cases, by holding the electoral configuration of neighborhoods constant the research design enables identification of alternative factors influencing the violence. (See Table 1 for an overview of the neighborhood-level data).

I obtained police records on 708 accused individuals in attacks in the core neighborhoods. Because of the partisan nature of the violence, these records were incomplete. Despite the practical impossibilities of presenting “objective” accounts of events (Brass 1997, 8), ethnography helped to decrease some of the ambiguity surrounding events. The first step involved mapping the neighborhoods: objective maps that I drew and cognitive maps that a group of Hindu and Muslim respondents offered to draw, which gave a sense of their own perception of position in the given space (Wood 2006). For Naroda Patiya, in addition to respondent testimonies, I made use of a location sketch provided by an advocacy group; the topographical description of the neighborhood in the Common Judgment (Special Court) (2012), a landmark court verdict in the Naroda Patiya case; and police videography of the spatial setting.<sup>6</sup>

The second step was constructing a detailed chronology of the events by date and time. This was done using respondent testimonies; English language newspapers, namely *The Times of India*, *Indian Express* and *The Hindu*; police first information reports (FIR); hospital records; police arrest records and *panchnamas* (crime

<sup>6</sup> Videography of riot-affected areas, Naroda Patiya. Case no. 100, Naroda Police Station.

verification documents); judicial verdicts; and human rights reports. Ongoing judicial inquiries prompted me to use free-flowing discussions to avoid evasive responses (Hamill 2011; Varese 2001; Wood 2006), which also allowed me to adapt the data-gathering process to ideas that emerged in later stages. I had spontaneous conversations with 82 core and 30 secondary respondents, whom I met briefly during extended meetings with the core group.<sup>7</sup>

## Description of Neighborhoods

**Ram Rahimnagar (RRN)** The slum neighborhood of RRN became an exemplar of interethnic harmony during riots in 1969, 1985, 1992, and again in 2002 for maintaining peace (e.g., Berenschot 2011; Malekar 2009). Upon threat of a riot, a group of Hindu and Muslim residents would stand guard at the neighborhood's three entrances, closing them off to outsiders. In 2002, individuals from outside RRN who were suspected of disrupting peace in RRN were beaten up by a vigilante group of residents. Respondents believed the vigilantes' success depended on the authority of the neighborhood's four-decades-old self-governing "Mandal" or committee, a body of 21 like-minded Hindu and Muslim "elders," who shared a belief in communal integration. Puzzlingly, although there was complete peace in RRN in 2002, there were instances of rioting outside RRN by the slum's Hindu residents.<sup>8</sup> RRN's main entrance was marked by a narrow road, formidable to vehicular traffic. The road ran along half a kilometer inside the slum, opening out into a central circular area. Twenty-nine lanes housing Hindu and Muslim homes flanked the central area, the former mostly aligned along the bank of Ahmedabad's non-perennial Sabarmati River. The other end of the central area connected a narrow road leading into Santoshnagar (Fig. 1).

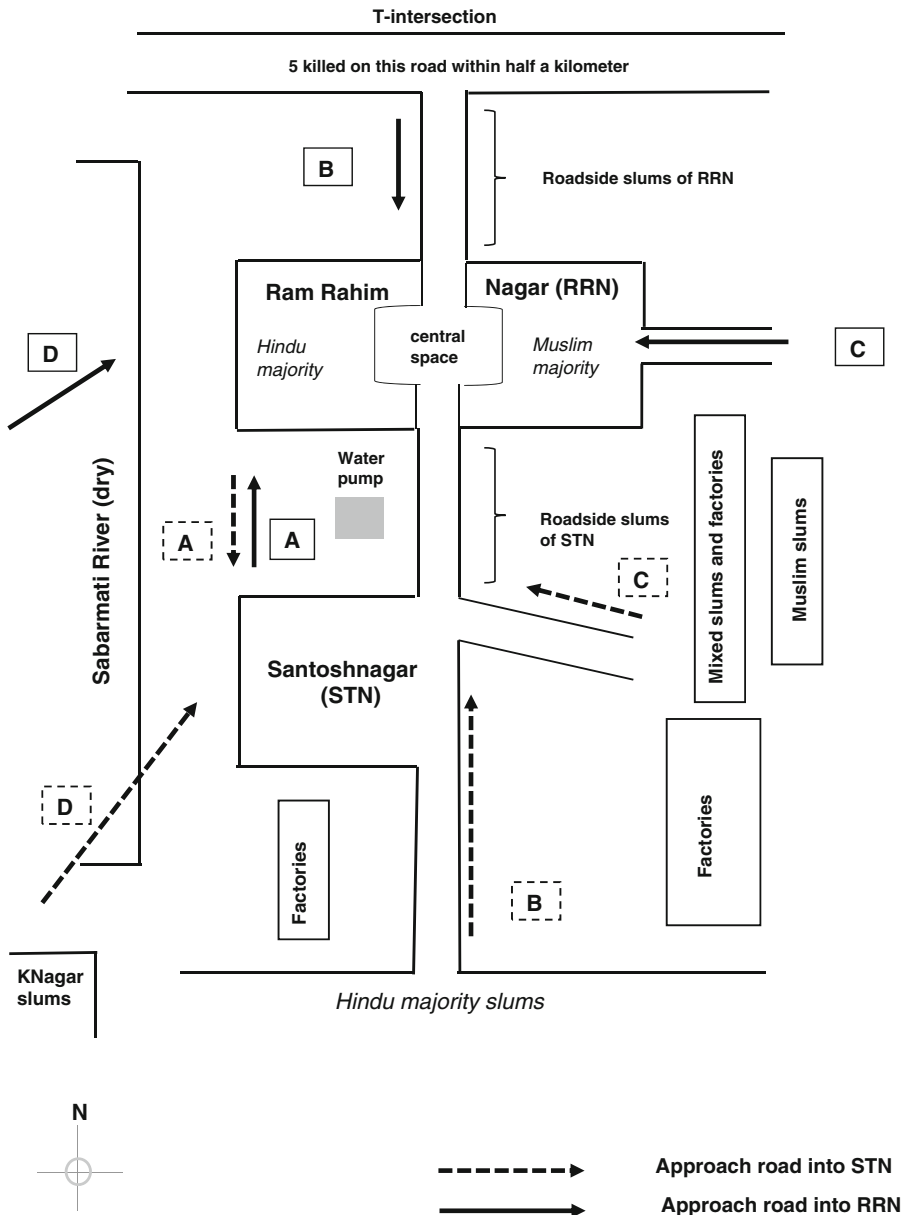
**Santoshnagar (STN)** The slum neighborhood of STN was attacked twice: on March 1 and April 14. A few Muslim men sustained injuries, but no killings occurred; violence was limited to arson and looting.<sup>9</sup> This was the first time STN had faced attacks in a riot, which respondents attributed to the size of rioting groups that year. "We had never seen so many people with weapons earlier... they tried to kill us but, with Allah's grace, we all managed to escape," reported Khairunnisa, a Muslim woman whose husband sustained injuries on March 1. In the administrative ward map, STN could easily be distinguished from its neighbor RRN. In reality the demarcation was fuzzy. Encroachments had blurred visual dividers between the two slums that showed where one began and the other ended. But to their inhabitants, each slum was still distinct. Pointing to a municipal water pumping station during my earlier visit to the slum, an STN inhabitant's observation was instructive, "Do you see this pumping station here? You could say that STN ends here and RRN begins." (Fig. 1).

<sup>7</sup> Core respondents included Hindus (33), Muslims (48) and one Christian. This group included rioters (7), targets and witnesses of attacks (25), elected politicians and political party members (12), police (4) and other residents (34).

<sup>8</sup> On March 1 and May 11 respectively, the police charged two Hindu men from RRN for arson and looting in neighborhoods within two kilometers of RRN.

<sup>9</sup> A Muslim man found dead on March 1 on the road leading into STN had "staggered in" following injuries sustained outside STN. Police record his death as a result of "grievous hurt," not "murder," unlike other riot deaths.





**Fig. 1** Spatial configuration of Ram Rahimnagar (RRN) and Santoshnagar (STN)

**Parikshitlalnagar (PN)** In the slum settlement of PN, violence did not occur as an attack on one ethnic group but, instead, was a two-way confrontation between Hindus and Muslims. Confrontations began on February 28 and continued until August, with major clashes on February 28, March 1 and May 5; two Hindus and two Muslims were killed. The unique distribution of PN’s architecture across 31 “Quarters,” each Quarter accommodating either 24 or 32 houses, made it easier for respondents to remember most locations of violence. These confrontations occurred across the “Wagah border”—a 10-foot-long unpaved road (marked by

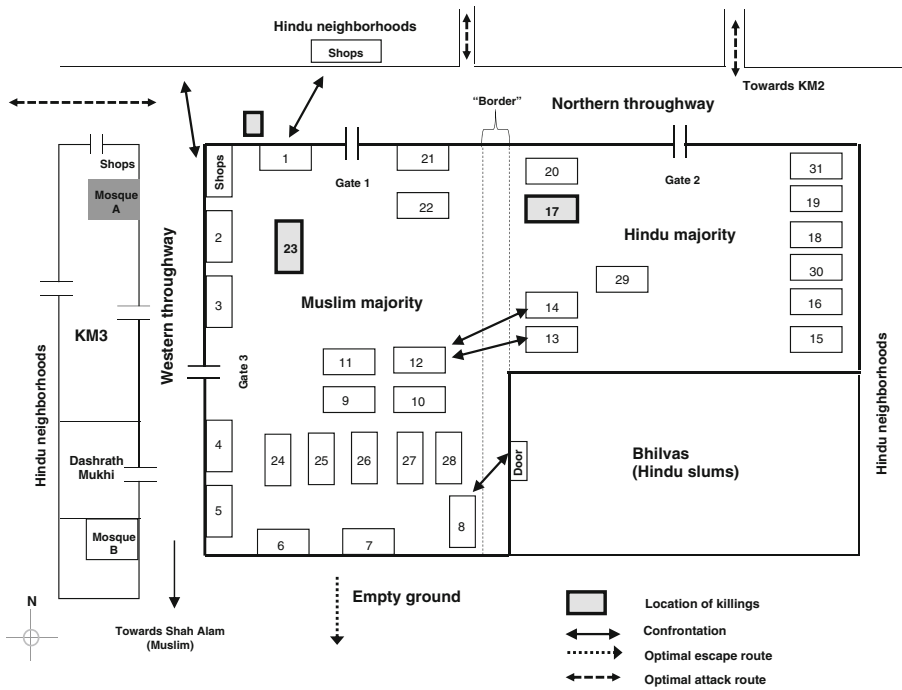
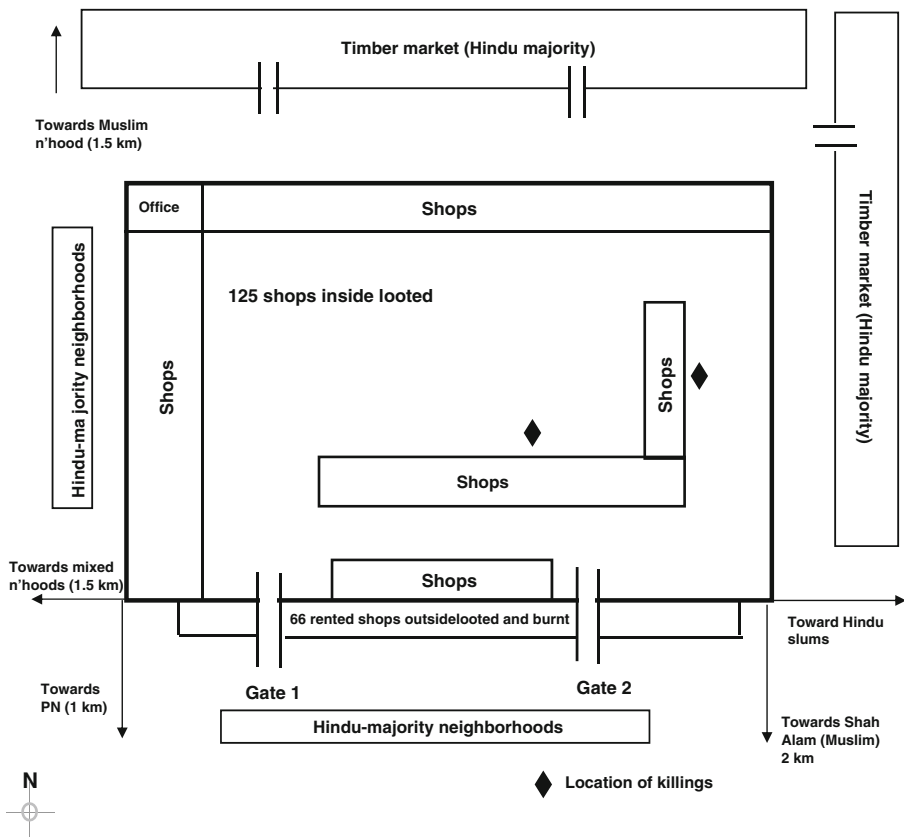


Fig. 2 Spatial configuration of Parikshitlalnagar (PN)

the dashed parallel lines in Fig. 2) segregating Hindu from Muslim Quarters.<sup>10</sup> The “border” had existed before 2002 and residents had made use of the natural boundary to create their community-specific spaces over time. Confrontations were most intense between Quarter 8 (Muslim) and Bhilvas (Hindu slums contiguous to PN) followed by those between Quarter 12 (Muslim) and Quarters 13 and 14 (Hindu). A Hindu man died on March 1 in Quarter 17 (Hindu); a Muslim man died on May 5 in Quarter 23 (Muslim) “fighting rioters and police;” another Muslim man from PN with stabbing injuries sustained “in a group clash” died in a hospital (location of stabbing uncertain); a Hindu boy died in a stampede of “thousands of rioters” on a throughway near Quarter 1 (a mixed Quarter with a Hindu majority) on May 5. Yatin, a Hindu rioter from Bhilvas excitedly recalled his experience on March 1: “On the first day the [Muslim] *bandiyas* won! (*Bandiya*, referring to circumcision, is a common slur used in Ahmedabad for Muslim men) They killed one of our men in Quarter 17. We had to give it back to them, so next day onwards we joined in pelting stones on them. We won that day! That’s how it went on for weeks.”

**Kabadi “scrap” Markets #2 and #3 (KM2 and KM3)** KM2 and KM3, the subjects of my illustration at the beginning of this article, were Muslim-owned scrap markets in the vicinity of PN. The lethal attack on KM2 occurred at 9 am on February 28, half an hour before the market, which housed 191 shops, had begun the day’s trading. Munaf, a Muslim shop-owner in KM2 recalled: “All of the shop-owners decided to leave, but asked the security guards to stay... we had no idea their lives could be in danger. In 1969 and 1992, the market

<sup>10</sup> The colloquial use of the English word “border” or “Wagah border” in conflict-ridden cities such as Ahmedabad implies the Indo-Pak border.

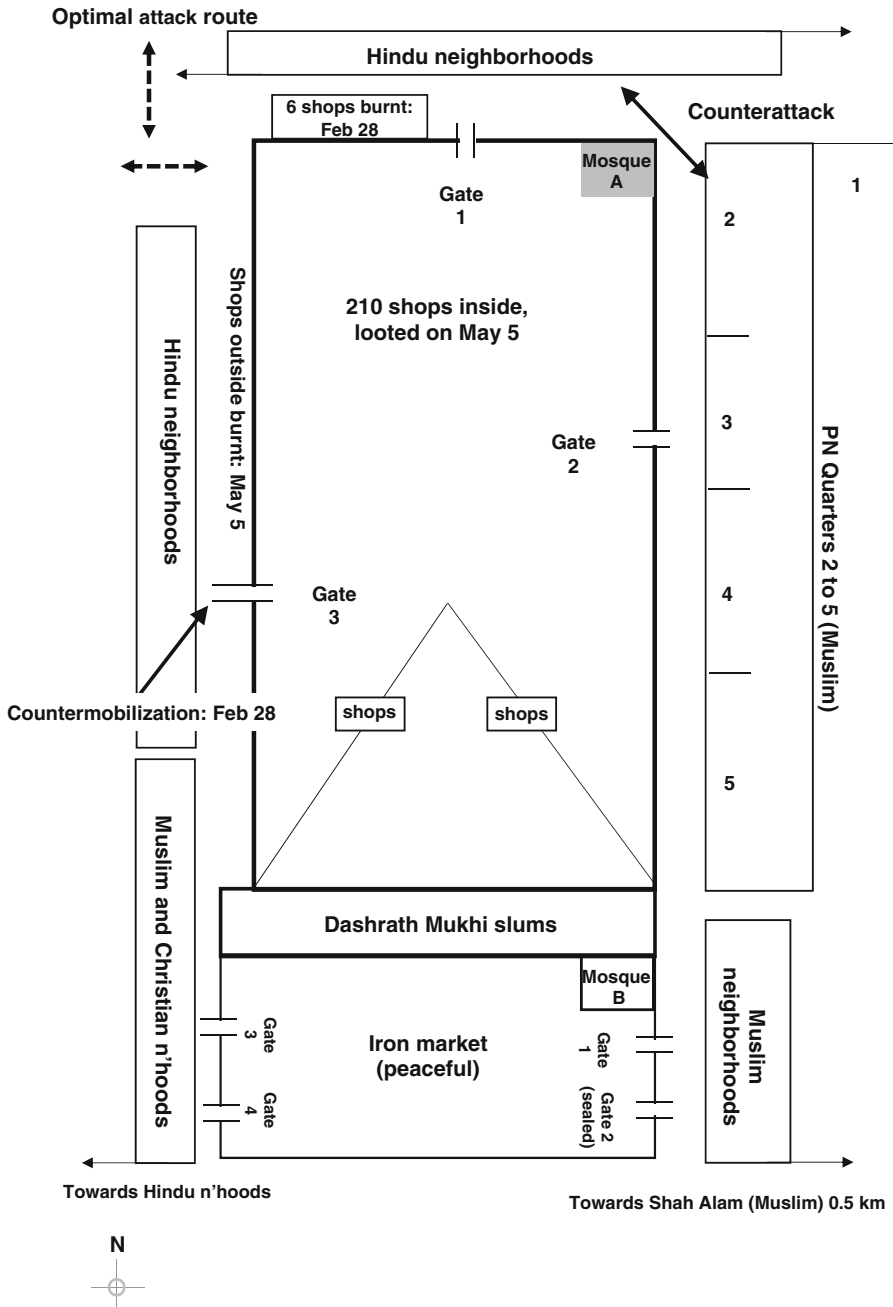


**Fig. 3** Spatial configuration of Kabadi Market No. 2 (KM2)

was attacked only on the outside. We did not anticipate so many rioters.” KM3, accommodating 210 shops, was attacked on the same day at 10 am, half an hour after the day’s trading had begun, then again at 1:35 pm on May 5. In the first attack on KM3, perpetrators did not enter the market, even though the value of the automobile machinery in KM3 was higher than that of the agricultural appliances in KM2; only six shops on the outside of KM3 were damaged in arson.<sup>11</sup> In the second attack on KM3, perpetrators entered the market and looted the shops. Figures 3 and 4 show the spatial structures of KM2 and KM3, respectively.

**Naroda Patiya** This was the collective name for a cluster of around 20 slums. A main thoroughway cut across the cluster, dividing them into two halves of about 10 on either side. Side X, as I will call it for convenience, was almost exclusively Muslim and side Y was intermixed (Fig. 5). Side X slums ran adjacent to a high-walled state transport (S.T. workshop) building on one side and shared a common wall with the State Reserve Police (SRP) building on the other side. All 97 Muslims massacred here on February 28 were side X residents, killed within various locations inside the slums (marked by dark lines in Fig. 5). No killings occurred in attacks on side Y. Victims were disproportionately comprised of women (35) and children

<sup>11</sup> Fifteen shops lined on the inside of KM3 were harmed when the six shops were burnt.



**Fig. 4** Spatial configuration of Kabadi Market No. 3 (KM3)

(36) (*Times of India*, 2 September 2012). The first attack by a 15,000–17,000 strong Hindu crowd (Common Judgment (Special Court) 2012) was made on the Noorani mosque—the square in Fig. 5. Shocking atrocities including murder and gang rape, followed soon after (*Times of India*, 1 March 2002).

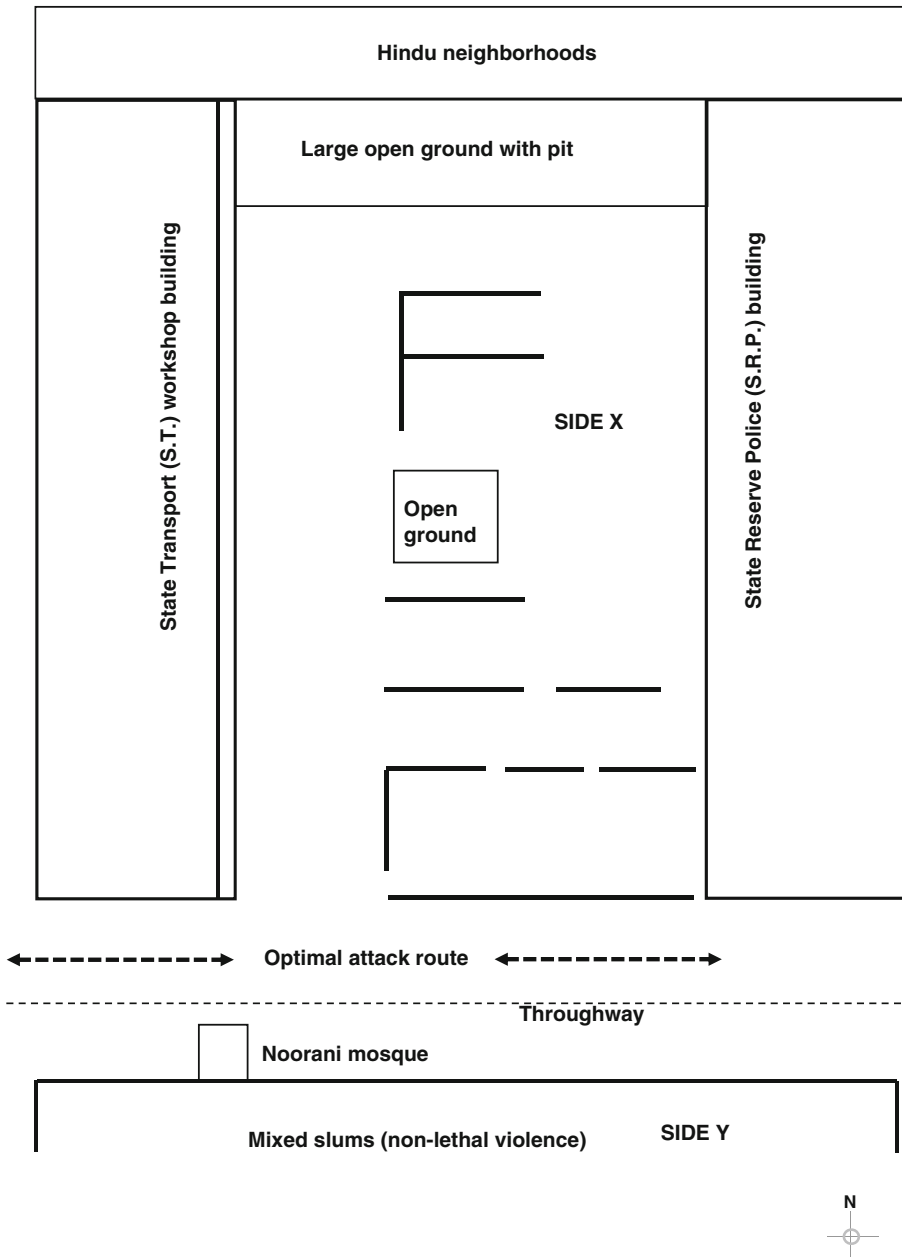


Fig. 5 Spatial configuration of Naroda Patiya

### Findings

The process of analytic induction meant working through a limited number of hypotheses and reformulating them when confronted with negative cases (Glaser and Strauss 1967). The following sections lead the reader sequentially through the process of induction in the field,

which led to the reformulation of the initial hypotheses of politicized networks and interethnic contact explaining microspatial variation in the violence and the eventual conceptualization of ecological factors.

## Political Incentives

Until the 28th, Hindus here were unaware that the government and the police had given them a free hand to kill Muslims. Soon they realized this and from 9 am to 2:30 pm, members of the Bajrang Dal (a Sangh Parivar affiliate) began attacking in large numbers. -Munna, Muslim respondent in PN, recalling the March 1 attack

Electoral incentive structures for a political party are best understood in close electoral races where political parties temporarily increase the salience of ethnic issues favoring the party to mobilize target voters (Wilkinson 2004). Inciting violence is a tempting strategy for an antiminority party whose near political future depends upon target voters at risk of voting for main rival parties. The violence of 2002 effectively revived the waning electoral prospects of the ruling BJP in Gujarat (Dhattiwala and Biggs 2012).

The logic of political incentives depends on affecting outcomes at the aggregate level (constituencies or wards). But it is at the microspatial level that politicized networks of attackers, aided by state police, engage in actual violence that is targeted at minority neighborhoods to consolidate majority votes. In all three wards of Behrampura, Danilimda, and Naroda Road, the BJP had lost the municipal election of 2000, prior to the 2002 violence and stood to gain power in the aftermath of the violence (Table 2). Respondents in all neighborhoods affirmed the active role of elected political leaders and the police in encouraging anti-Muslim attacks. This included RRN where Hindus were “provoked” by members of the Sangh Parivar “calling us cowards for not attacking the Muslims.” In the worst massacres of Naroda Patiya, an elected BJP politician, Maya Kodnani, was sentenced to life imprisonment for conspiring with rioters. Notwithstanding similar electoral incentives operating across these neighborhoods, levels of violence varied.

A more micro-analytical approach to explaining neighborhood-level variance in violence, wherein RRN is compared with an anonymized violent neighborhood in Ahmedabad, examines patronage systems of governance to disentangle how politicized networks operate (Berenschot 2011). The central argument predicts the behavior of potential voters to participate or refrain from engaging in violence on the basis of the characteristics of “intermediaries”—local politicians, social workers, criminals or state officials—who act as conduits for access to public resources. The credible authority of RRN’s intermediaries (the Mandal elders) in

**Table 2** Electoral configuration in the neighborhoods in 2002

Neighborhood	Municipal ward in 2002	Vote % in previous municipal election in 2000		
		Congress	BJP	Others
RRN, STN, part PN	Behrampura	38.3	22.8	38.9
part PN	Danilimda	41.2	27.2	31.6
Naroda Patiya	Naroda Road	42.3	26.8	30.9

mobilizing the vigilante groups, argues Berenschot, was dependent on the elders' ability to broker between RRN and the local municipal Congress government, winning civic amenities in exchange for residents' votes. RRN residents had little reason to engage in violence because unlike the BJP that benefited from the violence in 2002, the Congress did not. Whereas clientelistic or patronage systems of governance can explain voting behavior (e.g., Stokes and Stokes 2007), efforts to explain collective violence by conflating it with voting behavior are problematic. Whereas both phenomena present the possibility of opportunistic defection in the Olsonian sense (Olson 1971), preventing defection requires a 100 % compliance of actors in an event of violence, unlike voting. In volatile situations, positive feedback suggests even small changes can lead to unexpected effects (Biggs 2003). RRN Hindus had rioted outside; a single instance of stone-pelting in RRN could trigger a full-blown riot. Further, without specifying the political configuration of the neighborhoods under study or holding their political configuration constant, it is hard to know the prior reputation of a patron—whether the support of a party was on basis of previous rewards or a consequence of violent ethnic mobilization.

Whereas BJP complicity would explain the extraordinary mobilization in the neighborhoods, the different levels of violence across the neighborhoods remains unexplained.

### Interethnic Engagement

Contact theory predicts a reduction in prejudice towards potentially disliked groups with an increase in social interaction with those groups (Allport 1954). The theory is widely supported in several contexts (e.g., Ford 1973; McLaren 2003). Varshney (2002) extended its scope to argue that the presence of strong civic and associational ties between Hindus and Muslims deter ethnic riots. How influential, then, were “friendly,” “trustworthy,” or “cordial” relations between Hindus and Muslims in explaining the variation in violence across neighborhoods?

While violence in STN could be explained by the lack of contact and tangible mistrust between Hindu and Muslim neighbors there, explanations for the other three neighborhoods were not so straightforward. Interethnic harmony in RRN resulted more from meticulously cultivated ties, mainly between Mandal elders (such as exchanging greetings and food during religious festivals), than from naturally occurring social interaction. For the RRN residents, pride in harmony was inextricably coupled with prejudice towards the other ethnic group — Muslim neighbors were “cruel and cold;” Hindu neighbors were “perpetual liars.” Interethnic contact was more obvious in PN than in STN. On February 28, anticipating trouble, Hindu and Muslim “friends and neighbors” within PN and Bhilvas staged a symbolic peace demonstration on the “Wagah border”:

There were 10–12 of us sitting on the *border*. At 10:30 that night, the police began a *lathi charge*, hitting Hindus and women too... as if to incite violence. We remained seated to signal we did not mean to provoke violence, but things did not look good. Next morning, 50–60 Hindus from nearby slums entered PN through Gate 2. I called up the police commissioner's office from my landline phone at 11 am...there was no response.  
-Bhikhabhai (PN, Hindu)

Similar quotidian ties between Muslims of KM2 and their Hindu neighbors had prevented Sajid, one of the two watchmen killed on February 28, from staying away from work on the

27th. He had little reason to be afraid, his wife told me: “In the riots of 1985, neighboring “rabaris” provided him with food and water for a month when he could not return home.<sup>12</sup> In 1992, policemen helped him to safety. He assumed this too would pass.”<sup>13</sup> In Naroda Patiya, although in some cases Hindu neighbors helped Muslims (Common Judgment (Special Court) 2012, 1454), several other Muslims trusted neighbors who then turned on them (1235). Considering the extraordinary scale of mobilization, Muslim respondents in Naroda Patiya considered their Hindu neighbors’ hesitation to help “understandable.”

The different levels of violence in the five neighborhoods suggest ambiguous relationships among interethnic contact, “cordial” relationships, and the conditions in which neighbors would attack one another. Even if living in close proximity increases opportunity for contact (Festinger et al. 1950), it does not guarantee “friendship potential,” a necessary condition for optimal contact (Pettigrew 1998).

### Spatial Configuration in Field Sites

I now discuss empirical evidence demonstrating the role of spatial factors in explaining levels of violence.

**RRN** An attacker could access RRN from four approaches: (A) South: a road contiguous with STN. (B) North: a T-intersection where five persons were killed on the throughway, within half a kilometer of RRN’s entrance (C) East: a road cutting through Muslim-majority slums (D) West: a road that cut across the riverbank (Fig. 1). RRN’s vigilantes were active at all times of day and night yet attackers could have easily entered through road (A) following riots in STN on March 1 when a crowd of “500 to 600” Hindu attackers engaged in arson. Roads (B) and (D) were also convenient entry points, with the Sabarmati River dry at that time of year.

Attackers took (D) to enter STN but did not enter RRN, possibly because they were deterred, as some respondents suggested, by the “famous *sangathan* (unity).” “We were all keeping vigil on the banks...Hindus and Muslims. Potential attackers would be afraid because everyone in our vicinity knew that our people would never betray their own” (Nilesh, Hindu). The norms of “good behavior” cultivated through the credible authority of the Mandal elders were likely to have evoked voluntary cooperation in a few individuals. But norms alone are rarely sufficient to instill total cooperation, as it is likely that some individuals will ignore them (Ostrom 1990). Rioting by two RRN Hindus in neighboring locations had concerned other residents. On February 27, a few Muslims fled to nearby Muslim slums; “to strengthen our numbers,” it was important to prevent others from doing the same. Under the leadership of a local Muslim resident, feared for conducting extra-legal activities in the neighborhood but also respected for being able to successfully mediate with the Congress for amenities, residents devised a unique method to deter fleeing by Muslims. On February 28 and March 1, a group of young Muslims applied a second lock on already locked houses of RRN Muslim residents who had fled. Salman said, “If Muslims fled, we would become vulnerable. If they returned

<sup>12</sup> The “Rabaris” are a Hindu caste group notified under Other Backward Classes (OBC) in Gujarat, a term used in the Indian Constitution for socially and educationally disadvantaged caste groups to receive affirmative action benefits.

<sup>13</sup> Associational interethnic ties resulting from economic interdependence in both markets were negligible. Hindus refrained from engaging in the business that involved storing the scrap machinery for several years. The Islamic practice of “riba” discouraged economic gain from appreciation of the goods, a practice “commercially unviable” for Hindus.



to their double-locked houses, we would ensure they promised not to do this again and made them pay for the second lock! This of course did not apply to the Hindus... it did not matter to us if they fled.”

Respondents from PN and STN affirmed that the high proportion of Muslims in RRN, along with its built environment, was an important deterrent; together, the two factors limited the potential for attackers to retreat. “RRN’s *naksha* is intimidating. Even if you managed to enter, going back would be tough... the Muslims would surround you,” Vrajesh, a Hindu rioter from PN said. After the first 3 days of violence, 15–20 Muslim residents hired cars to “defend” Muslims in neighborhoods towards the north.

**STN** Like RRN, STN had four approaches: (A) the road in the north coming from RRN, (B) the main road to the south, (C) a side-road passing through intermixed slums on the east, and (D) the riverbank road on the west (dashed arrows in Fig. 1). Attackers primarily arrived from Hindu-majority K Nagar slums, through (D). K Nagar’s 6000-strong Hindu population (Census of India 2001) meant that their disproportionate representation among attackers would not be surprising. It is notable, however, that a few Hindu attackers residing in the intermixed slums on the east also chose to attack from the riverbank side. Shankar, a Hindu BJP worker from STN, said, “The eastern slum attackers could not have managed to return the same way because of a large number of Muslims on the eastern side.” Attackers therefore avoided the high risk of retreating from the east of STN. The low concentration of STN Muslims signaled vulnerability. But an escape route for targets into RRN or the eastern slums inhibited lethal attacks.<sup>14</sup> Muslim respondent Zebunnisa explained: “I ran towards RRN on February 28 itself when we heard something terrible had happened. There was no one to guard my house and it got looted and burnt. At least I lived.”

**PN** The attacker had to first select the road of entry into PN’s vicinity and then the entry points to access PN Quarters. The PN Quarters could be imagined as an inverted L-shaped block, the vertical L part being Muslim-majority and the horizontal Hindu-majority. In the corner was Quarter 1, bordered by thoroughways on the north and the west. The northern thoroughway connected with Hindu-majority neighborhoods on the north and the western coursed towards Muslim-majority Shah Alam, a kilometer southwards. To the west of PN lay KM3, which was bounded on its northern and southern end by two mosques, A and B in Fig. 2, the latter flanking the Hindu-majority Dashrath Mukhi slums. The mosques are important evidence, for B was completely unaffected whereas A was burned. Mobilization of attacks in PN’s vicinity was exceptionally strong on the northern thoroughway. For an attacker, entering or retreating along the southern route towards Shah Alam was likely to have met with a Muslim counterattack, ensuring mosque B was unharmed. Arvind, a Hindu rioter, participated in one such attack. Motivated by “my family to defend our honor” and “the food, weapons, country liquor, and 5000 rupees given by a political activist to one of our people,” Arvind had ensured he was not alone on March 1. “We phoned family and friends living a kilometer away, to join us,” he said. Even as pre-existing social networks strengthened mobilization, Arvind and his family, anticipating the risk involved, had moved to Bhilvas from their residence in Dashrath Mukhi for five days. “It was easier to attack PN from Bhilvas. No one dared to participate in the attacks while staying in Dashrath Mukhi... they would be trapped between Muslims on

<sup>14</sup> Police first information report. Danilimda police station, Ahmedabad, 18 March 2002.

either side! It goes without saying that we knew what routes to take if things got dangerous... we hid weapons in crevices of walls at the far end of Bhilvas, so we could escape towards Hindu residences on the east if something went wrong,” he said.

Accessing PN Quarters was possible from all the three gates, but attackers accessed only Gates 1 and 2 towards the north and not Gate 3 in the west which could lead to a counterattack from the south. Muslims in intermixed Quarters 1 and 21, bordering the northern throughway, were most vulnerable. During these attacks, a counterattack by Muslims had begun to take shape on the “border” after the peacekeeping attempt had failed. On May 5, the attempt of a few attackers who had breached Gate 1 to target Muslims in Quarter 1 was thwarted by counterattack. The death of the Muslim man in Quarter 23 was an outcome of one such clash. From March 2, Quarter 7 (Muslim) to the south became an access route for Muslims of Shah Alam to join PN Muslims in counterattacks.

PN’s maze-like narrow lanes deterred vehicular entry, but encouraged surreptitious attacks and counterattacks. “RRN has the dual benefit of good leaders and good *bhugol*. In PN, there are so many lanes and by-lanes that attackers can flee” (Munna, Muslim). Illegal rooms constructed on the mezzanine floors of Quarters 9 and 12 (both Muslim) connected with each other and, subsequently, created a pathway for inhabitants of Quarter 12 to make a quick escape to Quarter 9, while fighting the attack from Quarters 13 and 14. Yet, attacks on Quarters 9 and 12 posed a greater risk of injury than those on Quarter 8. “From the ground level of Bhilvas it was safer to attack Quarter 8. To attack Quarters 9 and 12, we had to climb up the terraces of Quarters 13 and 14 to avoid getting injured,” Arvind said.

After the attacks on May 5, PN Hindus constructed a large iron door at an intersection between Hindu and Muslim houses. “Things calmed down after we made this door. It was *psychology*...worked as a barrier for both of us. It could have been brought down by them (Muslims), but they knew this was a territory they were not supposed to enter any longer” (Naresh, Hindu).

**KM2 and KM3** The different outcomes of attacks on KM2 and KM3 were significant, given their identical architecture and given that both attacks were made within the span of 1 h on February 28. KM2 (Fig. 3) could be accessed from the south by two iron gates, facing Hindu-majority residences. Watchman Rashid—the only survivor of the three—witnessed attackers climbing over the gates using their pillars as footholds: “The attackers then let in thousands of others who feared nothing from the three of us inside.” With no escape route for two kilometers, Rashid hid in a dark corner of KM2 until March 3, when a police patrol rescued him. “The market was looted repeatedly over the next 3 months. There was no one to stop them because there were no Muslims around,” he explained. News of the attacks on KM2 reached KM3 shop-owners around 9:30 am. It was half an hour past opening time and 30 shop-owners were inside the market, preparing to open their shops. Many of the attackers approached from the north, possibly coming from the KM2 attack. As attackers approached KM3 (Fig. 4), a counterattack by PN Muslims began to gain strength near Gate 3, facilitated by a local Hindu Congress politician, whose patronage of Muslim voters in the vicinity was well known. “Attackers came armed with iron-cutters to break in, yet could not breach the market. They had not anticipated our defense... they fled after managing to burning the six shops outside and the mosque to the north (mosque A),” Rauf, a Muslim respondent from PN who had participated in the counterattack, recalled. On May 5, a second attack was made on KM3. This time shops could be burnt and looted because “the area was under police curfew and no one was present to countermobilize.”

**Naroda Patiya** Attacks in Naroda Patiya raise two questions: why did slums on side Y not witness killings? Why was the death count on side X so high? The first attacks began on side Y around 9:30 am on February 28; the Noorani mosque was burnt. Respondents believed side Y was vulnerable because “there were fewer Muslims relative to the other side.” An immediate counterattack by Muslims from both sides compelled the attackers to disperse. “Within 15 min we could see the crowds returning, this time with the police and *Mayaben* (Kodnani),” said a Muslim witness who testified in the court against the BJP leader. “We could do nothing.” But the attack was successful only on side X. Side Y slums had lanes narrower than those on X, forcing the attackers to load kerosene from a tanker parked near the mosque (Common Judgment (Special Court) 2012) on handcarts, set the carts alight, and pull them inside the lanes of Y. “The fire was meant to smoke us out through the other direction, towards the Hindu slums, where we could be cornered. Unfortunately for them, the handcarts got stuck in the lanes. Neither could they enter nor could we move out” (Ajmal, Muslim). “So it occurred to us to keep the fire on the handcart burning to prevent the attackers from entering. It worked. A few Hindu neighbors at the other end helped by staying silent. Then on March 2, a police patrol took us to the Shah Alam relief camp. Now that our houses were empty, they could be looted and burned” (Shakila, Muslim).

Slums on side X could not replicate the strategy “because our lanes are wider and we could not block the entrances.” Escape was difficult. The closest Muslim-majority neighborhood was over two kilometers away to the south. Fleeing meant first climbing over a tall concrete wall, and then running a fair distance. Altaf, a Muslim survivor from side X said, “Among those who could escape were mostly men because women were not used to physical exertion and a few of them were carrying infants and escorting children.” The presence of a large empty pit towards the northern end of side X contributed to the magnitude of killings (Fig. 5). Babu Bajrangī, a key conspirer in the killings, had gloated in the *Tehelka* tapes in 2007 how, more than weapons, the pit ensured a larger number of victims:

We collected 23 guns. But nobody died of gunshots...What happened was this: we chased them (Muslims) and were able to scare them into a huge *khadda* (pit). There we surrounded them and finished everything off... It was a huge pit... You could enter it from one side but you couldn't climb out at the other end. Khetan, Ashish 2007

Table 3 summarizes the outcome of attacks for all neighborhoods in terms of the interaction between the built environment and the population distribution of the target group.

## Discussion and Conclusions

First, it is important to acknowledge the limitations of this research. Incomplete police records and ongoing judicial inquiries posed the methodological problem of inaccessibility to participants in lethal attacks in the five neighborhoods making it difficult to know the local origin of the attackers—whether, for instance, the crowd that attacked KM2 overlapped with attackers of KM3. The research design mitigates this problem, by focusing on subjects in neighborhoods located within two kilometers. Although a few respondents blamed the violence on “outsiders,” perpetrators were unlikely to have travelled far. Blaming outsiders, as Jeffery and Jeffery note (in Heitmeyer 2009, 111) is “clearly too conveniently aimed at removing responsibility from the shoulders of all locals and encouraging a return to ‘normal’ life which does not look too closely at local causes.” There is now substantive evidence in the London

**Table 3** Summary of ecological factors for each neighborhood

Neighborhood	1. Political incentives		2. Interethnic engagement		Built environment		Population distribution (target)	Outcome of attack
	a. Attack route (rioter)	b. Escape route (target)	a. Attack route (rioter)	b. Escape route (target)	a. Attack route (rioter)	b. Escape route (target)		
Ram Rahimnagar (RRN)	Present	Not applicable	High: <i>intentionally created</i>	Absent: <i>alternative exit lacking</i>	Optimal: <i>towards east</i>	High: <i>Muslims prevented from fleeing</i>	Peaceful	
Santoshnagar (STN)	Present	Not applicable	Low	Optimal: <i>alternative exit towards south</i>	Optimal: <i>towards RRN and east</i>	Low	Looting and arson	
Parikshitlalnagar (PN)	Present	Not applicable	Medium	Optimal: <i>alternative exit towards east</i>	Optimal: <i>towards south</i>	Medium: <i>Increased by neighboring Muslims after March 2</i>	Two-way confrontation: three killed towards north; arson towards south	
Kabadi Market 2 (KM2)	Not applicable	Not applicable	Medium	Optimal: <i>alternative exit towards south</i>	Absent	Low	Two killed	
Kabadi Market 3 (KM3)	Not applicable	Not applicable	Medium	Absent: <i>alternative exit blocked</i>	Optimal: <i>towards west, east</i>	High: <i>Increased by neighboring Muslims</i>	Looting and arson	
Naroda Patiya	Present	Present	Side X: Absent Side Y: Medium	Side X: Optimal Side Y: Absent: <i>entry blocked</i>	Side X: Absent Side Y: <i>entry blocked</i>	Side X: High Side Y: Absent	97 killed on side X; looting and arson on side Y	

riots of 2011 of rioters targeting locations closer to home, at a median distance of two kilometers (Baudains et al. 2012; Kawalerowicz and Biggs 2015). Indeed, legal documents of attacks in Naroda Patiya state that convicts were “born, brought up or have their business places in the area of Naroda Patiya” and lived or worked “at the distance of 200 to 400 m from the S.T. Workshop wall [adjacent to side X]” (Common Judgment (Special Court) 2012, 420).

Endogeneity is another potential counterpoint. Were the different levels of violence an outcome of spatial strategies by actors, as I argue, or did awareness of the space during the riots in 1969 and 1992, lead attackers to select targets that were, based on historical experience, the most vulnerable? There is little doubt about the respondents’ keen knowledge of their space and their exploitation of its architectural strengths and weaknesses. But situational aspects need not be mutually exclusive of dispositional aspects. Growing up in crime-prone environments whose architectural conditions increase vulnerability to crime can teach children to adopt criminal decisions and to maximize opportunities for crime by rational action (Coleman 1989). In the London riots, private spaces such as Canary Warf were less attractive to loot because of high levels of surveillance and security, unlike the “typical” high street (Morrell et al. 2011, 37). KM2 illustrates opportunity maximization whereas in KM3, targets exploited existing spatial contexts that transformed the proposed outcome of an action. More significantly, the mobilization of attacks in Ahmedabad in 2002 was “unprecedented.” Recall KM2’s shop-owner, Munaf, who blamed their misjudgment of the numerical strength of attackers for the loss of the two watchmen. RRN’s Muslims devised the sanctioning mechanism of double-locking Muslim houses to prevent their residents from fleeing only after a few had fled; in previous violence, residents had not resorted to these strategies because they were not required. Previous experience would not obscure the fact that people do possess the cognition to reach decisions rapidly, even if their reasoning is inaccurate (Raiffa 1970).

This article has focused on the post-mobilization behavior of actors engaged in collective violence. In a comparison of five neighborhoods of Ahmedabad, with varying levels of violence during the anti-Muslim pogrom of Gujarat in 2002, I argue that, even when they were motivated by ethnic hatred, attackers were strategic and acted with some regard for self-preservation. Attackers assessed the risk involved by the target’s situational factors, which are conceptualized here as “spatial configuration,” that combines two factors: (1) the built environment and (2) the population distribution of the target group. Population distribution indicates the perceived power of space. A low population distribution of the target group signals vulnerability of the target and therefore low risk for the attacker, which, in turn, influences target selection. But the eventual outcome of an attack depends on how actors—attackers as well as targets—exploit features of their physical environment, including the built environment which provides means of either opportunity or constraint. The spatial configuration can be altered; to prevent an attack, people can flock together to gain safety in numbers whereas attackers can modify their strategy during an attack, gauging the vulnerability of the target group in the context of their physical space. In 2002, Ahmedabad witnessed an extraordinary mobilization of attackers, who were armed and often moving around in trucks and cars. However, the physical environment of locations where attacks occurred sometimes impeded movement by vehicles; narrow lanes compelled attacks on foot, increasing risk aversion. Muslim residents of PN could transform a potentially one-sided attack into a two-way clash by exploiting their spatial setting in a way that increased their emotional dominance over the attack, unlike targets in Naroda Patiya, who were killed in large numbers despite their potentially intimidating numerical strength.

Attackers were supported and mobilized by political leaders and the police, but the places attacked experienced different outcomes. One explanation does not necessarily contradict the other; political complicity with rioters in 2002 was tangible and could explain the high scale of mobilization, but ecological factors complicated the progression and outcome of such mobilization. The presence of interethnic engagement was also insufficient to explain violence in neighborhoods where respondents professed “friendly” ties with neighbors.

These findings suggest areas to explore in future research. Firstly, a systematic understanding of the relationship between spatial proximity and positive intergroup contact is in order. A second research agenda would be to explore spatial patterns associated with different forms of collective violence. For instance, greater risk aversion could be expected from attackers engaged in largely spontaneous group clashes, such as in the London riots, but statistical evidence suggests that distinct spatial patterns in violence had emerged even during the London riots, as a result of interactions between rioters and the police (Baudains et al. 2012; Kawalerowicz and Biggs 2015). Ethnographic insight of actors engaged in different forms of collective violence would deepen our understanding of the process, progression, and outcomes of collective violence.

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## References

- Allport, Gordon. 1954. *The nature of prejudice*. Cambridge: Addison-Wesley.
- Baudains, Peter, Alex M. Braithwaite, and Shane D. Johnson. 2012. Spatial patterns in the 2011 London riots. *Policing* 7(1): 21–31.
- Berenschot, Ward. 2011. The spatial distribution of riots: Patronage and the instigation of communal violence in Gujarat, India. *World Development* 39(2): 221–230.
- Berk, Richard. 1974. A gaming approach to crowd behavior. *American Sociological Review*.
- Bernasco, Wim. 2014. Crime journeys: Patterns of offender mobility. In *Oxford Handbooks Online in Criminology and Criminal Justice*, ed. Michael Tonry. Oxford: Oxford University Press. Accessed December 2, 2015. <http://www.oxfordhandbooks.com/view/10.1093/oxfordhb/9780199935383.001.0001/oxfordhb-9780199935383-e-49>.
- Biggs, Michael. 2003. Positive feedback in collective mobilization: The American strike wave of 1886. *Theory and Society* 32(2): 217–254.
- Brass, Paul. 1997. *Theft of an idol: Text and context in the representation of collective violence*. Princeton: Princeton University Press.
- Brass, Paul. 2003. *The production of Hindu-Muslim violence in contemporary India*. Seattle: University of Washington Press.
- Census of India. 2001. *Slum population, Gujarat: District census handbook, series 25, part XII A&B: Ahmadabad district, village and town directory*. Delhi: Controller of Publications.
- Coleman, Alice. 1989. Disposition and situation: Two sides of the same crime. In *The geography of crime*, eds. D.J. Evans and D.T. Herbert, 109–134. Routledge.
- Collins, Randall. 2008. *Violence: A micro-sociological theory*. Princeton: Princeton University Press.
- Commission of Inquiry. 2008. *Report of Justice GT Nanavati and Justice Akshay H Mehta, part-I, Sabarmati Express train incident at Godhra*, 18 September. Accessed December 2, 2015. <http://www.home.gujarat.gov.in/homedepartment/downloads/godharaincident.pdf>.

- Common Judgment (Special Court). 2012. *The state of Gujarat versus Naresh Agarsinh Chhara (and others)*. Exhibit 2671, August 31. Accessed December 1, 2015. <http://www.cjponline.org/gujaratTrials/narodapatiya/NP%20Full%20Judgmt/Naroda%20Patiya%20-%20Common%20Judgment.pdf>.
- Dasgupta, Manas. 2011. '31 convicted, 63 acquitted in Godhra train case', *The Hindu*, February 23.
- Dhattiwala, Raheel, and Michael Biggs. 2012. The political logic of ethnic violence: The anti-Muslim pogrom in Gujarat, 2002. *Politics and Society* 4: 483–516.
- Dochartaigh, Niall, and Lorenzo Bosi. 2010. Territoriality and mobilization. *Mobilization* 4: 405–424.
- Engineer, Asghar Ali (ed.). 2003. *The Gujarat carnage*. New Delhi: Orient Longman.
- Feagin, Joe R., and Harlan Hahn. 1973. *Ghetto revolts: The politics of violence in American cities*. New York: Macmillan.
- Festinger, Leon, Stanley Schachter, and Kurt Back. 1950. *Social pressures in informal groups*. Stanford: Stanford University Press.
- Ford, Scott W. 1973. Interracial public housing in a border city: Another look at the contact hypothesis. *American Journal of Sociology* 78(6): 1426–1447.
- Giddens, Anthony. 1986. Time, space and regionalization. In *The constitution of society: Outline of the theory of structuration*, ed. Anthony Giddens, 110–145. University of California Press.
- Glaser, Barney G., and Anselm L. Strauss. 1967. *The discovery of grounded theory*. Chicago: Aldine.
- Grannis, Rick. 1998. The importance of trivial streets: Residential streets and residential segregation. *American Journal of Sociology* 6: 1530–1564.
- Grannis, Rick. 2009. *From the ground up: Translating geography into community through neighbor networks*. Princeton: Princeton University Press.
- Greer, Donald. 1935. *The incidence of the terror during the French Revolution: A statistical interpretation*. Cambridge: Harvard University Press.
- Grimshaw, Allen D. 1960. Urban racial violence in the United States changing ecological considerations. *The American Journal of Sociology* 66(2): 109–119.
- Hamill, Heather. 2011. *The Hoods: Crime and punishment in Belfast*. Oxford: Princeton University Press.
- Heitmeyer, Carolyn. 2009. "There is peace here": Managing communal relations in a town in central Gujarat. *Journal of South Asian Development* 4(1): 103–120.
- Horowitz, Donald. 2001. *The deadly ethnic riot*. London: University of California Press.
- Human Rights Watch. 2002. "We have no orders to save you": State participation and complicity in communal violence in Gujarat 14 (3C). Accessed December 1, 2015. <https://www.hrw.org/reports/2002/india/>
- Jackson-Jacobs, Curtis. 2013. Constructing physical fights: An interactionist analysis of violence among affluent, suburban youth. *Qualitative Sociology* 36: 23–52.
- Jaffrelot, Christophe, and Charlotte Thomas. 2012. Facing ghettoisation in "riot-city": Old Ahmedabad and Juhapura between victimisation and self-help. In *Muslims in Indian cities: Trajectories of marginalisation*, eds. L. Gayer and C. Jaffrelot, 43–80. HarperCollins.
- Kalyvas, Stathis N. 1999. Wanton and senseless? The logic of massacres in Algeria. *Rationality and Society* 11(3): 243–285.
- Kalyvas, Stathis N. 2006. *The logic of violence in civil war*. Cambridge: Cambridge University Press.
- Kawalerowicz, Jutta, and Michael Biggs. 2015. Anarchy in the UK: Economic deprivation, social disorganization, and political grievances in the London Riot of 2011. *Social Forces* 94(2): 673–698.
- Khetan, Ashish. 2007. "After killing them, I felt like Maharana Pratap": Transcript of Babu Bajrangji, *Tehelka*, 1 September. <http://www.tehelka.com/after-killing-them-i-felt-like-maharana-pratap/?singlepage=1>. Accessed 6 October 2014.
- King, Gary, Robert Keohane, and Sidney Verba. 1994. *Designing social enquiry: Scientific inference in qualitative research*. Princeton: Princeton University Press.
- Klusemann, Stefan. 2010. Micro-situational antecedents of violent atrocity. *Sociological Forum* 25 (2): 272–295.
- Lloyd, Nick. 2011. *The Amritsar massacre : The untold story of one fateful day*. London: I.B. Tauris.
- Malekar, Anosh. 2009. Ram-Rahim Nagar: Oasis of peace. *Infochange News & Features*. <http://infochangeindia.org/agenda/intercultural-dialogue/ram-rahim-nagar-oasis-of-peace.html>. Accessed 6 November 2015.
- Mann, Michael. 2005. *The dark side of democracy: Explaining ethnic cleansing*. Cambridge: Cambridge University Press.
- Martin, Andrew W., Clark McPhail, and John D. McCarthy. 2009. Why targets matter: Toward a more inclusive model of collective violence. *American Sociological Review* 74(5): 821–841.
- Massey, Doreen. 1994. *Space, place and gender*. Minneapolis: University of Minnesota Press.
- McAdam, Doug, Sidney Tarrow, and Charles Tilly. 2001. *Dynamics of contention*. Cambridge: Cambridge University Press.
- McDoom, Omar Shahabudin. 2013. Who killed in Rwanda's genocide? Micro-space, social influence and individual participation in intergroup violence. *Journal of Peace Research* 50(4): 453–467.

- McLaren, Lauren. 2003. Anti-immigrant prejudice in Europe: Contact, threat perception and preferences for the exclusion of migrants. *Social Forces* 3: 909–937.
- Miller, Byron, and Deborah Martin. 2000. Missing geography: Social movements on the head of a pin? In *Geography and social movements*, ed. Byron Miller, 1–38. University of Minnesota Press.
- Mitta, Manoj. 2014. *The fiction of fact-finding: Modi and Godhra*. India: Harper Collins.
- Molotch, Harvey. 1979. Capital and neighborhood in the United States. *Urban Affairs Review* 14: 289.
- Morrell, Gareth, Sara Scott, Di McNeish, and Stephen Webster. 2011. *The August riots in England: Understanding the involvement of young people*. National Centre for Social Research. [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/60531/The\\_20August\\_20Riots\\_20in\\_20England\\_20\\_pdf\\_201mb\\_20pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/60531/The_20August_20Riots_20in_20England_20_pdf_201mb_20pdf). Accessed 6 November 2015.
- Myers, Daniel J. 1997. Racial rioting in the 1960S: An event history analysis of local conditions. *American Sociological Review* 62: 94–112.
- Newman, Oscar. 1996. *Creating defensible space. Institute for community design analysis*: U.S. Department of Housing and Urban Development. <http://www.defensiblespace.com/book.htm>. Accessed 23 December 2011.
- Nicholls, Walter, Byron Miller, and Justin Beaumont. 2013. Introduction: Conceptualizing the spatialities of social movements. In *Spaces of contention: Spattalities and social movements*, ed. Walter Nicholls, Byron Miller, and Justin Beaumont, 1–23. Farnham: Ashgate.
- Olson, Mancur. 1971. *The logic of collective action: Public goods and the theory of groups*. Cambridge: Harvard University Press.
- Ostrom, Elinor. 1990. *Governing the commons: The evolution of institutions for collective action*. Cambridge University Press.
- Park, Robert E. 1952. *Human communities: The city and human ecology*. Glencoe: Free Press.
- Pettigrew, Thomas F. 1998. Intergroup contact theory. *Annual Review of Psychology* 4(9): 65–85.
- Raiffa, Howard. 1970. *Decision analysis*. Reading, Massachusetts: Addison-Wesley.
- Rajagopal, Arvind. 2010. Special political zone: Urban planning, spatial segregation and the infrastructure of violence in Ahmedabad. In *Gujarat beyond Gandhi*, ed. N. Mehta and M. Mehta, 63–90. New Delhi: Routledge.
- Sampson, Robert J., and Per-Olof Wikström. 2008. The social order of violence in Chicago and Stockholm neighborhoods: A comparative inquiry. In *Order, conflict, and violence*, ed. Stathis N. Kalyvas, Ian Shapiro, and Tarek Masoud, 97–119. Cambridge: Cambridge University Press.
- Scacco, Alexandra. 2009. *Who riots? Explaining individual participation in ethnic violence*. New York: Columbia University Press.
- Schelling, Thomas. 1963. *The strategy of conflict*. New York: Oxford University Press.
- Sewell, William H. 2001. Space in contentious politics. In *Silence and voice in the study of contentious politics*, ed. Ronald R. Aminzade, 51–88. Cambridge: Cambridge University Press.
- Spodek, Howard. 2011. *Ahmedabad: Shock city of twentieth-century India*. Bloomington: Indiana University Press.
- Spykman, Nicholas John. 2009. *The social theory of Georg Simmel*, 3rd ed. New Jersey: Transaction Publishers.
- Sreekumar, R.B. 2010. “Suggestions to the Special Investigation Team (SIT) for further action on the enquiry on Mrs. Jafri’s complaint and other riots cases.” Affidavit RBS/COM/327C/2010, 3 September.
- Stokes, Susan C., and Susan C. Stokes. 2007. Political clientelism. In *The Oxford handbook of comparative politics*, ed. Charles Boix, 604–627. Oxford: Oxford University Press.
- Strauss, Scott. 2008. Order in disorder: A micro-comparative study of genocidal dynamics in Rwanda. In *Order, conflict, and violence*, ed. Stathis N. Kalyvas, Ian Shapiro, and Tarek Masoud, 301–320. Cambridge: Cambridge University Press.
- Tambiah, Stanley. 1997. Friends, neighbors, enemies, strangers: Aggressor and victim in civilian ethnic riots. *Social Science and Medicine* 45(8): 1177–1188.
- Tilly, Charles. 2000. Spaces of contention. *Mobilization* 2: 135–159.
- Toft, Monica Duffy. 2003. *The geography of ethnic violence*. Princeton University Press.
- Varese, Federico. 2001. *The Russian Mafia: Private protection in a new market economy*. Oxford: Oxford University Press.
- Varshney, Ashutosh. 2002. *Ethnic conflict and civic life: Hindus and Muslims in India*. New Haven: Yale University Press.
- Wilkinson, Steven I. 2004. *Votes and violence: Electoral competition and ethnic riots in India*. Cambridge: Cambridge University Press.
- Wood, Elisabeth J. 2006. The ethical challenges of field research in conflict zones. *Qualitative Sociology* 29: 373–386.



Zhao, Dingxin. 1998. Ecologies of social movements: Student mobilization during the 1989 prodemocracy movement in Beijing. *American Journal of Sociology* 6: 1493–1529.

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