"Cologne changed everything"—The effect of threatening events on the frequency and distribution of intergroup conflict in Germany

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Abstract

In this paper, I study the role that threatening events play in shaping both the occurrence and the distribution of intergroup conflict. Using the case of anti-refugee attacks in Germany, the study finds that the 2015 New Year's Eve (NYE) sexual assaults leads to a dramatic surge in the daily rate of violence, far surpassing the more short-lived effect of domestic and European terrorist attacks. Importantly, this event also changed the distribution of violence: while the New Year's Eve event does increase violence throughout Germany, its effect is strongest in districts with low prior levels of anti-refugee hostility and far-right support. Together, these findings reveal that threatening events may not only change the amount, but also hold the capacity the reshape the very ecologies of conflict.

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1 Introduction

In the midst of the refugee crisis in 2015, German chancellor Angela Merkel proclaimed: Wir schaffen das! (We can do it!). Her message was directed at the German public, amidst increasing opposition to the sudden surge of immigration. By the end of that year, an estimated 890,000 asylum seekers had made their way into the country—marking the largest influx in the history of the Federal Republic (BMI, 2016). Though some viewed this as evidence of the country's 'Willkommenskultur', domestic resentment against the new arrivals formed quickly. Most notably, violence escalated alongside the immigration, with attacks against refugee shelters increasing 18–fold between 2013 and 2015 (BAMF 2017).

This hostility culminated in the aftermath of the 2015/16 New Year's Eve (NYE) celebrations, during which hundreds of individuals were robbed, harassed, and sexually assaulted by perpetrators later described as individuals of 'North African and Middle Eastern' origin (Frank 2017, Shuster 2016). The event sparked an outcry among the public: anti-immigrant protest groups took to the streets, blaming the recent refugees for the assaults, while politicians from both sides of the political spectrum came forward demanding a rethinking of Germany's immigration policy. Yet, despite this public outrage and seeming increase in anti-immigrant hostility following the event, the question of whether the New Year's Eve sexual assaults fuelled violence against refugees and asylum seekers has yet to be examined.

More generally, while the structural determinants of intergroup violence have frequently been analysed (e.g. Braun & Koopmans 2010, Dancygier 2010, Dhattiwala & Biggs 2012, Falk et al. 2011, Jäckle & König 2016, Koopmans 1996, Koopmans & Olzak 2004, Kriesi 2012, Krueger & Pischke 1997, Marbach et al. 2018, Müller & Schwarz 2019, Olzak 1990, 1994, Piopiunik & Ruhose 2017, Ziller & Goodman forthcoming), less attention has been payed to the effect that threatening events, such as the New Year's Eve sexual assaults, have on such violence. Recent studies have begun addressing this gap by examining whether threatening events spark periods of increased aggression (e.g. Disha et al. 2011, Jäckle &

¹welcome culture

König 2018, King & Sutton 2013) but they often focus only on one singular event and do not examine how subsequent violence is distributed.

In this paper, I examine the extent to which the New Year's Eve sexual assaults triggered anti-refugee attacks in Germany by comparing its impact to those of all domestic and European terrorist attacks of the same period, and examining where this resulting backlash violence occurred. Notably, while previous studies generally assume that the impact of threatening events is homogeneous, equally affecting violence throughout the country, I explore whether the New Year's Eve event had a bigger impact in some areas in Germany over others.

Results of the multi-level logistic regression reveal that, net of structural determinants, contagion dynamics, and seasonal fluctuations, violence increased most following the New Year's Eve sexual assaults. The NYE event incited a wave of xenophobic violence in its immediate aftermath, more than tripling a district's probability of experiencing an attack in the first week alone. The effect of domestic and European terrorist attacks, by comparison, is much more short-lived, with most having no discernible impact on anti-refugee aggression.

Importantly, the study also shows that the New Year's Eve event changed the geographic distribution of subsequent violence. Following NYE, attacks against refugees increased disproportionately in districts with *low* prior levels of hostility and far-right support. In other words, although violence increased everywhere, it did so especially in communities that previously exhibited little to no enmity towards immigrants.

Together, these findings suggest that the New Year's Eve event not only led to a surge in the absolute number of attacks, but also mobilised new, previously peaceful communities to become violent towards local refugee populations. While previous studies generally assume that events equally affect intergroup hostility throughout the country, this paper argues that reactions may differ, depending in part on a community's history of intergroup violence.

2 The New Year's Eve sexual assaults

During the course of New Year's Eve 2015/16 in Cologne, groups of young men gathered on the square between Cologne Cathedral and the central train station and began throwing fireworks into the crowds, leading to chaos among the celebrators nearby. Over the course of the next few hours, victims were robbed and intimidated, and numerous bystanders were sexually assaulted (Baumgärtner et al. 2016, Eddy 2016). This event was particularly notable because of the number of people involved, with initial crowd estimates ranging anywhere between 1,000 to 2,000², (NRW Landtag 2017, Staudenmaier 2016) and the unprecedented number of crimes committed. By September 2016, the police had registered more than 1,200 criminal complaints in Cologne for that day alone, of which close to half were sexual offences (NRW Landtag 2017, Staudenmaier 2016).

In the days following the event, many victims came forward describing assailants as being of 'North African and Middle Eastern appearance' (Baumgärtner et al. 2016, Eddy 2016). This sparked an outcry among the general population, and dominated subsequent political and public discourse: attacks were immediately blamed on refugees who had entered the country during the recent migration influx. Within days, anti-immigrant groups took to the streets and transformed *Refugees Welcome* signs, thitherto symbols of the country's 'Willkommenskultur', into banners reading *Rapefugees Not Welcome*. Negative reactions, however, extended far beyond the fringes of the extreme right (Bielicki 2019). Local politicians referred to the NYE sexual assaults as a 'completely new dimension of crime' (Connolly 2016), while the event itself initiated an EU emergency meeting on the 'Recent attacks against women in European cities' at the Council of Europe (Gunnarsson 2016). Despite its resonance within public discourse and the outrage that followed, the impact of the New Year's Eve sexual assaults on intergroup relations in Germany is still poorly understood.

²It is important to note that the number of perpetrators is likely considerably lower than this—by September 21st, 2016, 299 individuals were suspected by the Cologne police of having committed a criminal offence during the NYE event (NRW Landtag 2017). However, most sources in the immediate aftermath of the event referred to these inflated crowd estimates.

3 Threatening events and intergroup conflict

The idea that intergroup tensions rise in the wake of threatening events is nothing new. Already in 1958, Herbert Blumer (1958, 6) argues that events which lead to the perception of an out-group as a threat are crucial to forming ethnic prejudice, so that '[t]he definition of these events is chiefly responsible for the development of a racial image and of the sense of group position.' This theoretical conjecture has been underlined by studies on the effect of terrorist attacks on attitudinal change, showing that threats heighten in-group solidarity while increasing bias towards out-group members. Hopkins (2010) uses panel data to demonstrate that perceptions of immigrants in the United States worsened in the immediate aftermath of September 11 (see also Kam & Kinder 2007). Similar work on Israel has found that terrorist attacks decrease political tolerance (Peffley et al. 2015) and increase negative perceptions of minority groups (Bar-Tal & Labin 2001). Others suggest that the impact of terrorism can even transcend national boundaries. Schüller (2016) applies a difference-in-differences approach to survey data to show that anti-immigrant attitudes in Germany flourished following 9/11. Legewie (2013) focuses on the impact of the 2002 Bali bombings and, using a natural experiment, similarly finds that the event negatively affected individuals' attitudes towards immigrants across several European countries.

Such survey and experimental research designs provide convincing causal evidence of the attitudinal impact of terrorist attacks, but do not explore how 'the effect of events on attitudes may propagate to actual behavioural outcomes' (Legewie 2013, 1233). Concretely, increasing negative sentiment towards a particular out-group does not necessarily translate into more violent behaviour. Threats, however, not only incite intolerance, but also motivate retaliation against the threatening group (Hubby et al, 2002). Lickel et al. (2006) propose a set of mechanisms through which threatening events also provoke the desire for violent retribution: following initial acts of aggression by individual out-group members that instil

³More recently, findings by Castanho Silva (2018) and Larsen et al. (2019) also suggest that the terrorist attacks in Paris in 2015 and in Berlin in 2016 had no impact on anti-immigrant attitudes, and argue that the effect of events may be declining in recent years.

threat, fear, and harm among the in-group, an out-group as a whole can become the target of retributive attacks. Such triggering events increase hostility and aggression by priming individuals on the potential threats and prior sources of conflict associated with the threatening group. Events that are highly publicised, harm in-group pride and are easily attributable to a specific community are therefore particularly potent triggers of retributive conflict. Despite this broad definition of what constitutes a triggering event, studies that measure a behavioural impact usually examine only terrorist attacks, showing for instance that hate crimes against Arabs and Muslims in the United States increase following September 11 (Disha et al. 2011, King & Sutton 2013).

The New Year's Eve event, however, also fits this definition of a threatening event (Lickel et al. 2006): refugees and asylum seekers were blamed for (or at least brought in connection with) the incident within the media, while the event itself generated nationwide outrage and political debate. Yet, its impact on violence and intergroup relations remains understudied. Focusing on attitudinal change, Czymara & Schmidt-Catran (2017) find that public acceptance of immigrants in Germany decreased somewhat between two survey waves in April 2015 and January 2016, and suggest that the sexual assaults on New Year's Eve may have contributed to this decline.⁴ However, the substantial nine-month gap between both samples, during which the country experienced the largest increase in refugee immigration, does not allow the authors to conclusively attribute this decrease to any event in particular. Jäckle & König (2018, 5) attempt to take the impact of the New Year's Eve sexual assaults into account by grouping it into a broad category consisting of 58 acts of 'violence committed by refugees and asylum seekers'. Grouping the event together into a single variable with 57 much more minor and less reported crimes, however, does not account for the unique public and political uproar following the sexual assaults.

Despite the lack of systematic analyses, there is reason to believe that the New Year's Eve event influenced anti-refugee violence in Germany, and that its effect supersedes that of

⁴The overall decline refers to 0.24 points on a seven-point Likert scale.

other, more frequently-studied terrorist attacks that occurred during the same time period (including attacks in Paris, Berlin, Brussels and other cities). Firstly, subsequent media reporting and political debates associated the NYE event with the asylum-seeking population in Germany, thus increasing threat perceptions against this group in particular.⁵ Islamist terrorist attacks, on the other hand, may increase threat perceptions of Muslim communities more generally, but are not as directly tied to any one specific out-group (but see Legewie 2013). Secondly, while the immediate threat following a terrorist attack is often resolved (with perpetrators committing suicide or being captured by the police) the New Year's Eve event involved multiple perpetrators and led to few convictions.⁶ Lastly, government and police officials were heavily criticised for their slow and uncoordinated response, leading to a loss of trust in the police' capabilities to curb criminality (Bielicki 2019). While terrorist attacks have been shown to induce a 'rally round the flag' effect, temporarily increasing support for government and security forces (Hetherington & Nelson 2003, Mueller 1970), the NYE event arguably had the opposite effect and signalled shortcomings of the state and police to the German public. This lack of (perceived) institutional efficacy and erosion of trust can, in turn, further provoke vigilante violence (see Ziller & Goodman forthcoming).

Accordingly—in order to assess the relative importance of each threatening event—the first question this study explores is whether the New Year's Eve sexual assaults led to an increase in xenophobic violence in Germany and how this effect compares to the more frequently-studied impact of domestic and European terrorist attacks of the same period.

3.1 The distributional impact of a threatening event

In addition to this comparative examination, the study also places specific attention on where retaliatory violence occurs. Currently, the majority of research on threatening events and

⁵Figure A.1 in the appendix illustrates this by visualising the number of newspaper articles in Spiegel Online, one of Germany's most widely-read news websites, mentioning both the German words for 'crime' and 'refugee'. The Figure shows that refugees were immediately brought in connection with the events on New Year's Eye.

⁶As of December 2017, there have been 36 convictions related to the New Year's Eve event (Lauter 2017).

ethnic conflict assumes that the effect of events is homogeneous, only changing the amount but not the distribution of attacks. Disha et al. (2011, 21) lend credence to this assumption: finding no difference in the structural determinants of hate crime in the year before and year after 9/11, they conclude that while threatening events may 'incite retaliation and set off a wave of hate crime offending, (...) the location of these crimes is likely to remain consistent'.

However, a threatening event may affect certain communities more so than others, depending on the extent to which that community was originally predisposed to feeling threatened. Research within social psychology underlines this hypothesis, showing that individuals' reactions to threatening events depend on their previous beliefs about minority groups. Sniderman et al. (2004, 36) examine how 'predisposing factors and situational triggers in combination shape reactions to ethnic minorities', and suggest that threatening events may have a galvanising effect, disproportionately affecting those already concerned about a particular problem by reinforcing these existing fears and local tensions. In this vein, studies have shown that attitudes change disproportionately among right-wing voters and those with pre-existing grievances towards a particular out-group following a terrorist attack(Jungkunz et al. 2019, Peffley et al. 2015).

On the other hand, threatening events may primarily provoke violence among less hostile areas, mobilising new communities to lash out against immigrant populations. According to recent findings, the terrorist attacks in France and the UK primarily increased anti-immigrant attitudes among left-leaning and educated individuals, and most strongly in countries with more positive views on immigration (Brouard et al. 2018, Ferrín et al. 2019, Van de Vyver et al. 2016). Ferrín et al. (2019) follow a Bayesian-like rationale and hypothesise that the process of 'disconfirmation' evokes these sudden attitudinal and behavioural shifts: while individuals with pre-existing negative views about out-groups see their views simply confirmed by a sudden threat, those with positive prior beliefs are more shocked by the event, evoking new feelings of threat and thus leading to stronger reactions.⁷

⁷A similar argument is made by Brouard et al. (2018).

Applying these individual-level insights to this ecological research, the paper explicitly examines whether the New Year's Eve event had a heterogeneous effect, triggering more violence in some places than others. Following the hypothesis of a galvanising effect, the NYE event should primarily intensify violence among communities that, prior to the event, already exhibited high levels of hostility and intergroup contention. According to a mobilising effect, however, the event should disproportionately spark conflict in areas with little prior violence. Together, this paper thus explores the impact of the New Year's Eve sexual assaults on both the amount and the distribution of anti-refugee attacks in Germany.

4 Data & Methods

To analyse the factors influencing intergroup violence in Germany, I make use of a list of all attacks against asylum seekers and their housing between 2014 and 2016, jointly collected by two NGOs (the Amadeu Antonio Foundation and PRO ASYL) and consolidated into a user-friendly and well-maintained dataset by Benček & Strasheim (2016). I update this dataset by web-scraping the Amadeu-Antonio-Foundation's 'chronicle of anti-immigrant attacks in Germany', and include all retrospectively added cases. Information on each attack is based on parliamentary inquiries, official statistics, newspaper articles, and police reports, and was classified into four groups according to type of offence: anti-immigrant demonstrations, arson attacks, miscellaneous attacks against refugee shelters, or assaults. Demonstrations were excluded from the analysis, leaving a total of 5,333 attacks over a period of three years. Since immigration to Germany increased steadily starting in 2014, escalated mid-2015, and was reduced back to a low constant rate in early 2016 (bpb 2018), the period of analysis captures intergroup hostility before, during, and after the large migration influx. While German police statistics on violence against refugees and asylum seekers are aggregated at

⁸I webscraped the chronicle on November 12th, 2018. The Amadeu-Antonio Foundation confirmed via email that it is unlikely that new data points will be retrospectively added to the list for the years 2014 to 2016 after that date, given that police statistics have already been published for these years and additional clarifying inquiries have been made.

state-level and reported annually, the geo-referenced dataset I employ offers information on the precise location and exact date of each incident. This allows the analysis to assess how these attacks fluctuate both across space and over time.

To illustrate the importance of the New Year's Eve event, Figure 1 visualises the number of anti-refugee attacks across Germany in the two months before and after the sexual assaults. Following the event, anti-refugee violence increased drastically and instantaneously, surging from four to more than 18 attacks per day on average. This rise in violence is astonishing, especially considering that in the years 2014 and 2015, the daily rate averaged at only 0.9 and 3.4 attacks, respectively. While this is a profound increase in hostility, Figure 1 does not elucidate how this impact compares to terrorist attacks of the same period, net of underlying temporal dynamics, and whether its effect is homogeneous or affect some localities more than others. To answer these two questions, this study employs a logistic regression model at the district-day level. This model takes into account the effect of structural determinants, temporal dynamics, and different threatening events on the probability of anti-refugee violence.

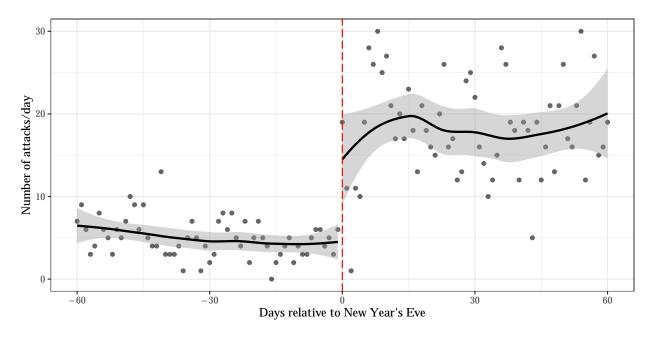


Figure 1: Daily anti-refugee attacks in Germany in the two months before and after January 1st, 2016

Note: Local regression estimates with 95% confidence intervals.

4.1 Methodology

Germany is comprised of 401 districts. In two cases, the data does not differentiate between adjacent counties, leaving 399 districts across three years. As it is in this paper's interest to closely examine temporal fluctuations in anti-refugee violence, the unit of analysis is district-days, amounting to 437,304 observations. In only very few cases did more than one attack occur in the same district on the same day, with the maximum number of attacks in a single day being six. A dichotomous dependent variable was therefore chosen, coded one if a district experiences one or more attacks on a given day, and zero otherwise, leaving 4,873 non-zero units.

 $^{^9{}m Observations}$ were merged for districts Kassel Stadt and Kassel Landkreis, as well as Spree-Neise Landkreis and Cottbus Stadt.

4.1.1 New Year's Eve Assaults & Terrorist Attacks

The first component of this paper is to examine the impact of the New Year's Eve sexual assaults on subsequent anti-refugee violence and to compare its effect to European terrorist attacks of the same period. I include terrorist attacks that were committed by Muslim- or jihadi-inspired extremists (or were otherwise brought in connection with Islamist terrorist groups) that were listed by both the Global Terrorism Database (START 2018) and the German Federal Office for the Protection of the Constitution (2019). To ensure media visibility, only events that claimed at least one victim were included in the analysis, reducing the number of fatal European terrorist attacks to 11 cases.¹⁰

I estimate the probability of at least one anti-refugee attack occurring in a district on a given day using the following formula:

$$\ln\left(\frac{Pr(Y_{it}=1)}{1 - Pr(Y_{it}=1)}\right) = \alpha + \beta X_i + \gamma Z_t + \delta D_t + \zeta_i + \epsilon_{it}$$
(1)

where Y_{it} indicates whether a district experiences an attack on a given day, X_i a set of district-level structural determinants, Z_t a set of time-variant country-level variables, and ζ_i represents district-level random intercepts. To estimate the impact of different threatening events, I include a list of weekly binary variables (D_t) , which examine whether the probability of an attack increases in the 7 days following each event, and, if it does, for how many weeks this effect lasts for. Accordingly, δ_{NYE} identifies the effect of the NYE sexual assaults on the probability of anti-refugee violence in subsequent weeks.

¹⁰The following attacks were included in the analysis: Brussels (May 24th, 2014; March 22nd, 2016), Paris (January 7th-9th, 2015; April 19th, 2015; November 13th, 2015), Copenhagen (February 14th, 2015), Saint-Quentin-Fallavier (June 26th, 2015), Glasgow (March 24th, 2016), Magnanville (June 13th, 2016), Nice (July 14th, 2016), Saint-Étienne-du-Rouvray (July 26th, 2016), and Berlin (December 19th, 2016). The incidents in Brussels, Belgium, and Glasgow, UK, occurred within two days from each other. The weekly dummy variable estimating the impact of the Brussels event therefore captures the effect of both the terrorist attacks in Brussels and Glasgow on subsequent anti-refugee violence.

4.1.2 Time-variant controls

To isolate the effect of events from other underlying temporal dynamics, I control for the impact of time-variant factors that may be associated with anti-refugee violence: the number of asylum registrations, potential diffusion processes and systematic daily fluctuations in the probability of attacks.

To control for changes in the inflow of asylum seekers to the country over time, I use the logged number of monthly asylum registrations within Germany, and linearly interpolate these to obtain daily rates.¹¹ Upon arrival, asylum seekers are generally placed in short-term facilities, where they are registered into a central system before being transferred to a federal state and corresponding district.¹² The rate of refugee arrivals varies drastically between 2014 and 2016; in line with theories of intergroup threat, violence is assumed to be more likely during periods of heightened immigration.

I also add two variables to account for potential diffusion dynamics within the previous month: the number of anti-refugee attacks in all other districts and the number of previous attacks in the same district. The resulting distribution of the first variable is highly skewed, and so the square-root is taken.¹³ The assumption is that previous attacks can act as positive feedback for potential future events, despite no apparent exogenous changes (see Biggs 2005, Braun 2011, Granovetter 1978, Hedström 1994).

Lastly, to capture systematic temporal variation in the probability of violence, I include a set of dummy variables identifying the day of the week and add a linear time-trend.

$$D_{1it} = \sqrt{\sum_{k=t-28}^{t-8} a_{ik}}$$
 and $D_{2it} = \sum_{k=t-28}^{t-8} \sum_{j=1}^{J} a_{jk}$

where a_{ik} (a_{jk}) is a dichotomous variable coded one if there was an attack in district i (j) at time k, and zero otherwise. Thus, D_1 identifies attacks in the same district in the previous month, and D_2 identifies previous attacks in all other districts.

¹¹Results are robust to using monthly rates instead.

¹²See Marbach & Ropers (2018) for an elaborate explanation of the registration process.

¹³The two diffusion variables are specified as:

4.1.3 Structural determinants

An abundance of research has shown that the distribution of ethnic conflict depends in part on structural determinants (e.g. Braun & Koopmans 2010, Dancygier 2010, Dhattiwala & Biggs 2012, Falk et al. 2011, Jäckle & König 2016, Koopmans 1996, Koopmans & Olzak 2004, Kriesi 2012, Krueger & Pischke 1997, Marbach et al. 2018, Müller & Schwarz 2019, Olzak 1990, 1994, Piopiunik & Ruhose 2017, Ziller & Goodman forthcoming). In accordance with this body of work, this study takes the local variation of minority group size, economic instability, and political opportunity into account. To do this, district-level data on structural determinants was collected and combined from the German Federal Ministry of Statistics, the Federal Office for Migration and Refugees, the Federal Employment Office, the Federal Ministry of the Interior, the Yearly Police report, and the Bundeswahlleiter (see Table A.1 in the appendix for summary statistics). By incorporating the structural determinants of violence, it is also possible to examine how the interplay between local conditions and xenophobic attacks changes in the aftermath of the NYE event.

Studies on the relationship between minority group size and intergroup conflict build primarily on the two theories of contact and threat, which postulate opposite effects. Threat theory, proposed by Blumer (1958), argues that minority group size is positively associated with violence: as an ethnic group gains more members it threatens the dominant position of the majority population, increasing the probability of violent clashes. Contact theory, on the other hand, argues that violence is rooted in racial prejudice, so that increased interaction with out-group members reduces intergroup hostility (Allport 1958, Pettigrew 1998). To disentangle both theories, I differentiate between the effect of a district's share of asylum seekers and foreign population, and expect opposite dynamics. The German refugee crisis led to a sudden expansion in local refugee presence, which, I argue, intensified perceptions of threat while not allowing for contact. Meanwhile, the local foreign population grew more

 $^{^{14}}$ Data from 2015 was used for all structural determinants with the exception of election data (2014) and the share of local refugee presence, which varies considerably between 2014 and 2016 and was therefore linearly interpolated.

gradually, providing opportunities for regular intergroup exchange. Therefore, while I expect the local share of asylum seekers to be positively associated with violence, a district's share of non-EU foreigners should be negatively correlated with its probability of experiencing an attack.¹⁵

To examine the association between a district's far-right electoral support and its rate of xenophobic attacks, local strength of both the extreme-right NPD as well as the right-populist AfD was included in the model. The AfD drastically changed its political agenda since its inception in 2013, from being a single-issue Eurosceptic party to becoming the main right-populist anti-immigrant force in German politics. While I have attempted to account for this shift by using 2014 European Parliamentary election results rather than the 2013 federal vote share, local AfD votes in 2014 may not align with its current support base and may therefore not adequately capture anti-immigrant sentiment. Electoral strength of the neo-fascist NPD is therefore a more robust indicator of far-right electoral support and local levels of xenophobia more generally. Neo-fascist parties are also traditionally more anti-democratic and prone to violence than their right-populist counterparts (Golder 2003, Merkel & Weinberg 1998).

Finally, to operationalise economic threat and social anomie, I include districts' native unemployment rate and voting turnout in the 2014 European Parliament elections. Voting turnout serves as a proxy for general political engagement and is expected to decrease levels of violence, indicating more confidence in existing institutional structures (Braun & Koopmans 2010). Next to these factors, I also control for contextual variables that have been shown to be correlated with ethnic conflict. These are logged population size, homicide rate, logged income per capita, male-female ratio, and a dummy variable differentiating between city and rural districts. I also control for location in East Germany, in line with previous studies that have observed higher levels of xenophobia in the Eastern part of the country. This may be due to historical (Adam 2015), socialisation (Alesina & Fuchs-Schündeln 2007), or economic

¹⁵Results remain the same when using the share of all foreigners.

differences (Krueger & Pischke 1997), or due to the long history of ethnic homogeneity in East Germany during the Soviet Union (Jäckle & König 2016).

5 Results

Results of the logistic regression analyses are presented in Tables 1 and 2. For ease of interpretation, all continuous variables are divided by two standard deviations¹⁶, which allows for a comparison of the magnitude of continuous with binary coefficients (Gelman 2008), and are reported in odds ratios alongside robust standard errors. Since the probability of violence in a district on a given day is so low, odds ratios indicate by how much a one-unit increase in the independent variable would multiply the probability of an anti-refugee attack on a given district-day.

5.1 Comparing the effect of NYE to Terrorist Attacks

Model 1 depicts the impact of threatening events on inciting anti-refugee violence, controlling for structural determinants and temporal variation. Specifically, it examines how the probability of violence changes in the first week after the New Year's Eve sexual assaults, and how this effect compares to the impact of domestic and European terrorist attacks.

Among the structural determinants, population size, location in East Germany, unemployment rate, and electoral support for the NPD and AfD are all positively associated with anti-refugee attacks, though the latter two coefficients do not reach conventional levels of statistical significance. The coefficients for foreign population and voting turnout point in the opposite direction, in line with contact and social anomie arguments. There is also considerable temporal variation in anti-refugee violence: the diffusion parameters show that attacks in other districts as well as a district's own experience of violence strongly influence the probability of future attacks. Violence is also more likely during months of heightened

¹⁶With the exception of the time variables in Models 3–5, which are unstandardised and centred around the NYE event.

refugee influx to Germany, generally increases over time, and occurs most frequently on weekends.

Model 1 reveals considerable heterogeneity in the impact of threatening events on rates of xenophobic violence. Of the twelve events included in the model, only two lead to a statistically significant increase in attacks in the following week: the New Year's Eve sexual assaults and the terrorist attacks in France in January 2015, during which 17 people were killed.¹⁷ All other terrorist incidents, meanwhile, cause no significant uptake in violence in the following 7 days. The size of the effect also differs substantially between the two events: in the first week following New Year's Eve, a district's probability of experiencing an attack triples, compared to a more modest increase of 66% following the attacks in France.

To examine the extent to which these impacts persist over time, Model 2 includes 7-day dummy variables for each additional week during which a statistically significant effect was observed. Note that the two diffusion parameters absorb a considerable amount of the increase in violence following an event, particularly in later weeks. The coefficients of the weekly dummy variables will therefore, by design, provide only a conservative estimate of the total growth in violence following an event. Despite this, the NYE event leads to a significant and strongly positive increase in anti-refugee aggression during the subsequent four weeks, while the positive effect of the Paris attacks abates after only two. In addition to the length of the effect, the magnitude of the NYE event also far exceeds that of all terrorist attacks: in the first four weeks of January, the probability of violence is multiplied by 3.3, 5.4, 2.3, and 1.2 respectively. In fact, the impact of the New Year's Eve event not only dwarfs the effect of terrorist attacks, but is also greater than all other parameters in the model, including structural determinants of intergroup conflict.

 $^{^{17}\}mathrm{p}{<}.001$ (NYE 2015, week 1) and p<0.1 (Paris 2015, week 1), respectively.

	Mode	el 1	Mode	el 2	
_	OR	Rob. SE	OR	Rob. SE	
Refugee share	1.06	0.12	1.11	0.11	
Monthly arrivals	1.48***	0.06	1.43***	0.06	
East	1.60**	0.26	1.59**	0.26	
Unemployment rate	1.23^{*}	0.12	1.22^{*}	0.12	
Non-EU Foreign pop.	0.49^{***}	0.06	0.47^{***}	0.06	
Voting turnout	0.80**	0.06	0.80**	0.06	
AfD Strength	1.11	0.08	1.12	0.09	
NPD Strength	1.20	0.13	1.21^{+}	0.13	
Attacks in district (4 weeks)	1.09**	0.03	1.09**	0.03	
Attacks elsewhere (4 weeks)	2.74***	0.11	2.79***	0.11	
log(Population)	3.91***	0.31	3.93***	0.31	
NYE 2015 (W1)	3.05***	0.40	3.29***	0.44	
NYE 2015 (W2)			5.35***	0.52	
NYE 2015 (W3)			2.30***	0.26	
NYE 2015 (W4)			1.24^{*}	0.13	
Paris Jan 2015 (W1)	1.66^{+}	0.44	1.76*	0.47	
Paris Jan 2015 (W2)			2.39***	0.59	
Paris Jan 2015 (W3)			1.01	0.29	
Brussels 2014 (W1)	0.56	0.33	0.59	0.35	
Copenhagen 2015 (W1)	0.74	0.35	0.78	0.37	
Paris Apr 2015 (W1)	0.84	0.30	0.90	0.32	
St Quentin 2015 (W1)	0.86	0.23	0.93	0.25	
Paris Nov 2015 (W1)	0.81	0.13	0.89	0.14	
Brussels/Glasgow 2016 (W1)	1.14	0.12	1.18	0.12	
Magnanville 2016 (W1)	1.03	0.15	1.07	0.16	
Nice 2016 (W1)	1.17	0.18	1.22	0.19	
St Étienne 2016 (W1)	1.25	0.18	1.30^{+}	0.19	
Berlin 2016 (W1)	0.91	0.15	0.95	0.15	
sd(district)	0.42***	0.03	0.42***	0.03	
Controls	√		√		
Observations	4261		426132		
AIC	447	72	44487		

Table 1: The effect of the NYE event and terrorist attacks on anti-refugee violence. Note: OR: Odds Ratios, Rob. SE: Robust Standard Errors. $^+$ p<0.1, * p<0.05, * p<0.01, * **p<0.001.

Previous work suggests that the effect of threatening events can vary, depending on whether an event occurs domestically or abroad (e.g. Davis 2007). Thus, perhaps it is the

location in Germany more generally, rather than the sexual assaults on New Year's Eve in particular, that explain the jump in violence following the event. Although Table 1 already includes the impact of the Berlin 2016 terrorist attacks on levels of violence, I test for this further by including domestic terrorist attacks that led to no fatality. I also test whether the large increase in violence following New Year's Eve is due to unobserved time trends by including a dummy variable for the week leading up to the NYE event. Accordingly, if it is not the event itself but a more general increase in hostility that is driving the results, one would already expect higher rates of violence in the week prior to New Year's Eve.

Figure 2 reports the estimated coefficients for all threatening events, including the newly added domestic terrorist attacks.¹⁸ Two out of the four domestic incidents, namely a bombing attack in Essen and two terrorist incidents within the same week in Würzburg and in Ansbach lead to an increase in the probability of violence in the following week. Both effects, however, abate within one to two weeks and have a notably smaller impact than the NYE event. Meanwhile, the point estimate of the pre-NYE variable is close to zero and statistically insignificant. Thus, the probability of anti-refugee violence only increases once the event has occurred, strengthening the causal argument that the drastic surge in violence in the first weeks of January follows in direct response to the New Year's Eve sexual assaults.

Finally, I run a series of separate country-level regression discontinuity models for each threatening event across varying bandwidths¹⁹, where I calculate the immediate impact of each event on the daily rate of anti-refugee attacks in the country. Results in Table A.4 in the appendix confirm the findings above: of all threatening events, the NYE sexual assaults provokes the biggest increase in anti-refugee attacks.²⁰

¹⁸The attacks in Nice and Saint-Étienne-du-Rouvray occurred only a few days before and after the terrorist attacks in Würzburg and Ansbach, and were therefore excluded to avoid overlapping weekly dummy variables.

¹⁹including 21, 28, and 35 days before and after each event, respectively.

²⁰See Appendix A.5 for a summary of the methodology and results.

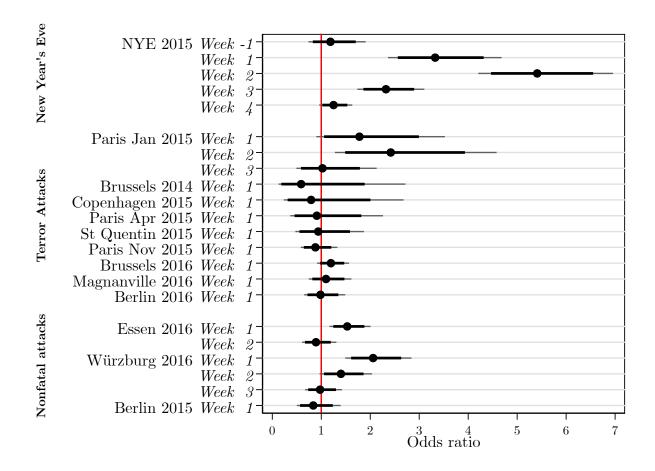


Figure 2: Coefficient plot of the effect of threatening events on anti-refugee violence Note: Point estimates with 95% and 99% confidence intervals.

Together, these findings highlight the dramatic and unprecedented impact of the NYE event on anti-refugee violence: while some few domestic and European terrorist attacks also lead to a brief increase in hostility, their effect pales in comparison to native backlash following New Year's Eve.²¹

²¹I run various robustness checks to examine the validity of the findings. In particular, I repeat the analysis above using district fixed effects (see Table A.5), use district-week as the unit of analysis (see Table A.7), exclude Berlin as a potential outlier, only include significant events, and control for the rate of violence in the two weeks leading up to each event. Throughout all these specifications, the impact of the NYE sexual assaults exceeds that of other events, and remains statistically and substantively significant. These differences also do not seem to stem from differences in the amount of media coverage each event received (see Figure A.2).

5.2 The effect of the NYE event on the distribution of violence

Thus far, however, the analysis has treated the effect of the NYE event as homogeneous, where the underlying assumption of each model is that news of the New Year's Eve sexual assaults provoked similar levels of outrage and violence across the country. Therefore, having established the unique impact of the event, the second part of the analysis focuses more closely on examining where this increase in violence occurs. I begin by extending equation 1, including a binary variable NYE_t and interacting it with time trend t, where NYE_t differentiates between the period before and after New Year's Eve 2015. This yields the following equation:

$$\ln\left(\frac{Pr(Y_{it}=1)}{1 - Pr(Y_{it}=1)}\right) = \alpha + \beta X_i + \gamma Z_t + \delta_1 t + \delta_2 NY E_t + \delta_3 (NY E_t * t) + \zeta_i + \epsilon_{it}$$
 (2)

where δ_2 signifies the immediate impact of the NYE sexual assaults on the level change in a district's probability of violence, and δ_3 indicates a change in time slope in the period after the event.²²

To test whether the impact of the NYE event varies across areas in Germany—depending on the area's history of intergroup violence—I differentiate between 'hostile' and 'not hostile' districts, with hostile districts defined as exhibiting a rate of violence within the top 10th percentile prior to 2016.²³ I include this binary variable in equation 2 and interact it with the time trends and the NYE dummy. Following the hypothesis of a galvanising effect, this interaction is expected to be positive, indicating that backlash violence is especially pronounced in communities with strong prior anti-refugee aggression. According to the mobilising hypothesis, on the other hand, the interaction should be negative, where violence increases most strongly among previously peaceful areas. Finally, to ensure that it is the

²²The time trend t is centred around the NYE event, so that t=0 on January 1st, 2016.

²³The number of attacks differs considerably between both types: in the years 2014 and 2015, a hostile district witnesses 21 anti-refugee attacks on average, compared to only 2 for not hostile districts.

district's violent past and not geographic proximity to Cologne that is driving these results, the analysis controls for each of the district's distance to Cologne before and after the event.

	Model 3		Model 4		Model 5	
-	OR	Rob.SE	OR	Rob.SE	OR	Rob.SE
Days before	1.00***	0.00	1.00**	* 0.00	1.00***	* 0.00
NYE	4.59***	0.52	5.85**	* 0.64	4.85***	* 0.50
Days after	1.00***	0.00	0.99**	* 0.00	0.99***	0.00
Hostile			2.85**	* 0.31		
Hostile x Days before			1.00	0.00		
Hostile x NYE			0.43**	* 0.06		
Hostile x Days after			1.00	0.00		
NPD Strength	1.21^{+}	0.13	1.16	0.12	1.82***	* 0.26
NPD Strength x Days before					1.00	0.00
NPD Strength x NYE					0.51***	0.05
NPD Strength x Days after					1.00	0.00
sd(district)	0.42***	0.03	0.33**	* 0.03	0.39***	* 0.03
Controls	\checkmark		\checkmark		\checkmark	
Observations	426132		426132		426132	
AIC	4441	.1	441	59	4426	5 9

Table 2: The impact of the NYE event on the distribution of attacks. *Note:* OR: Odds Ratios, Rob. SE: Robust Standard Errors. +p<0.1, *p<0.05, **p<0.01,

***p<0.001.

Model 3 in Table 2 begins by estimating the overall effect. In accordance with the findings above, the impact of the NYE event is strongly positive, more than quintupling a district's probability of an attack in its aftermath. Figure 3 illustrates this effect, plotting a district's predicted probability of experiencing an anti-refugee attack before and after the event.²⁴ While the likelihood of an attack increases marginally in the period leading up the New Year's Eve sexual assaults, from 0.1 to 0.5 per cent, it surges to 2.3 in the immediate aftermath of New Year's Eve.

 $^{^{24}}$ For the purposes of generating the predicted probabilities, all other independent variables are set to their mean value.

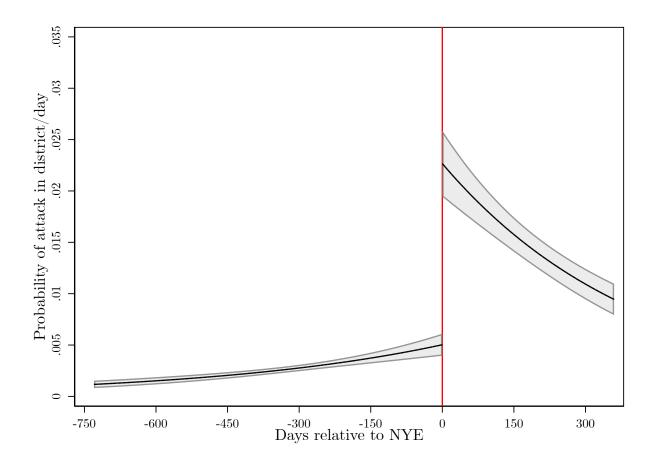


Figure 3: Predicted probability of violence before and after NYE Note: Point estimates and 95% confidence intervals.

Model 4 then includes the interaction term to assess whether this positive effect is especially pronounced among previously hostile or peaceful districts. Results support the hypothesis of a mobilising effect: whereas violence is, as expected, more likely in hostile areas in the period leading up to New Year's Eve 2015, the interaction effect is negative, suggesting that anti-refugee attacks in response to NYE occur disproportionately among previously peaceful districts. Concretely, the impact of the NYE event leads to close to a 6-fold increase in the probability of violence across non-hostile districts, compared to a 2.5-fold increase in hostile areas. Figure 4 visualises these stark differences: while violence is significantly more likely in hostile districts in the period before the NYE event, the event has the strongest effect among peaceful communities. In fact, initial baseline differences in the rate of attacks

between hostile and peaceful districts disappear for the entire subsequent year following the 2015/16 New Year's Eve event, with both becoming similarly aggressive towards resident refugee populations for the remainder of 2016. These results remain unchanged when using the 80th or 50th percentile as alternative cut-off points (see Figure A.3 in Appendix).

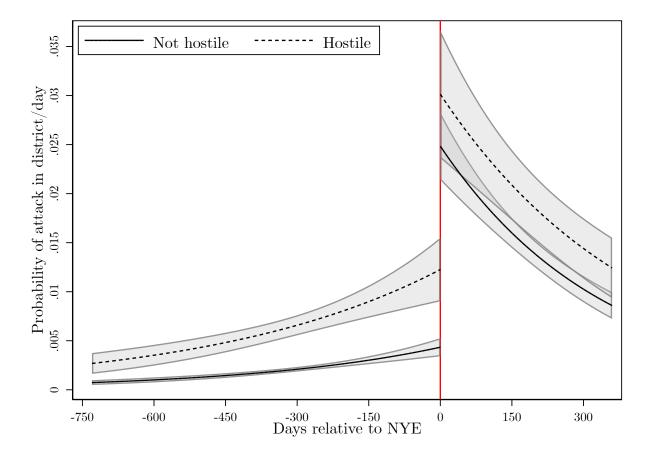


Figure 4: Predicted effect of NYE on violence in hostile and peaceful districts Note: Point estimates and 95% confidence intervals.

Model 5 scrutinises the consistency of this finding by examining whether the effect of the event also differs by far-right electoral support—another indicator of pre-existing local anti-immigrant tensions. Following the galvanising hypothesis, the impact should be strongest among communities with higher levels of out-group threat, and thus higher far-right sympathies. However, results once again run counter to this hypothesis: while anti-refugee attacks

are more likely in districts with higher NPD presence in the period prior to the event, back-lash violence following NYE is strongest in areas with the *least* NPD support. Figure 5 shows that the probability of an anti-refugee attack following New Year's Eve decreases with higher local far-right party presence. Although the NYE event increases the probability of an attack by more than 2% in districts with no far-right support, it has virtually no effect on violence in NPD strongholds.²⁵

Together, these findings suggest that the NYE event not only led to a drastic surge in criminality against asylum seekers, but also mobilised new communities to act aggressively towards local refugee populations. The New Year's Eve sexual assaults thus had a heterogeneous effect, increasing anti-immigrant violence in some parts of the country more so than in others. In particular, its effect was felt most strongly in previously peaceful districts. Areas which, in the absence of the event, would have exhibited little enmity towards refugees and asylum seekers reacted most aggressively and became just as violent as hostile districts for the entire subsequent year.

²⁵I repeat these analyses using district fixed effects (see Table A.6), using district-week as the unit of analysis (see Table A.8), and using 2013 federal election results. To predict the effect of the NYE dummy variable in Figure 5, all other independent variables are set to their mean value, and the time trend is set to zero.

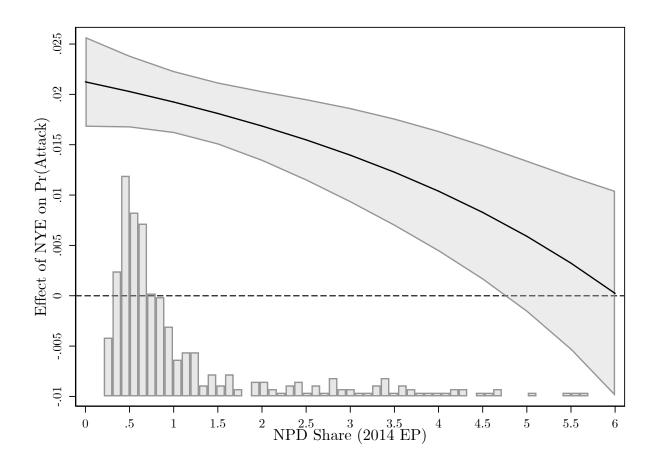


Figure 5: Predicted immediate effect of NYE by local far-right party strength *Note*: Point estimates and 95% confidence intervals, distribution of local far-right vote share.

6 Conclusion

The New Year's Eve sexual assaults were a shocking and widely-covered incident, during which hundreds of victims were robbed, intimidated, and sexually assaulted. Despite the apparent shock to German society, little work has been done to understand its impact on native-refugee interaction and conflict. This analysis has shown that the New Year's Eve event led to drastic and long-term consequences regarding refugees' and asylum seekers' safety in Germany. Following descriptions of perpetrators as men of 'North African and Middle Eastern' appearance, refugees throughout the country were blamed for the event and subsequently became targets for violent retribution. As a result, anti-refugee violence

sky-rocketed to unprecedented heights, with the rate of attacks not returning to pre-NYE levels for the remainder of 2016.

Whereas previous research has focused on terrorism as the main driver of intergroup conflict, this paper conducts a comparative analysis and clearly demonstrates that the New Year's Eve sexual assaults had by far the strongest impact on anti-refugee violence in Germany. While some domestic and European terrorist attacks also led to short-term increases in aggression, their effect pales in both magnitude and duration compared to the NYE sexual assaults. The paper has pointed to some unique features of the New Year's Eve event that may explain these differences, including the extent to which the refugee population was held responsible for the event, the perceived persistence of threat in its aftermath, and the strong criticism of governmental and police responses that followed. These insights can help guide future research on what to expect when assessing the impact of other 'non-terrorist' threatening events on intergroup conflict. However, the extent to which NYE affected antiimmigrant hostility suggests that other factors may have contributed to its dramatic impact that are more unique to this particular event. Notably, framing the event as a specific threat to women may have mobilised stronger anti-immigrant hostility. Although outside the scope of this analysis, future individual-level research should attempt to isolate to what extent each of these factors contributed to motivating xenophobic attitudes and behaviour.

Beyond pointing to the absolute effect of the NYE event, however, the paper makes a more important contribution. Comparing the distribution of violence before and after New Year's Eve, it shows that while NYE increased violence throughout Germany, its impact was felt most strongly in areas where anti-refugee aggression was, until then, far less present. Firstly, this finding challenges the current assumption that threatening events lead to a uniform increase of violence throughout the country, changing the overall amount but not the location of attacks. Instead, the NYE event not only caused a sudden surge in anti-refugee violence, but also altered the very structural conditions under which such violence emerges in the first place.

Secondly, this finding suggests that threatening events can not only intensify hostility, but also mobilise new communities to turn against out-groups: following the New Year's Eve sexual assaults, violence increased disproportionately in peaceful areas that, prior to the event, exhibited little or no enmity towards local refugee populations. This effect persists for the entire subsequent year, with the rate of violence between previously hostile and peaceful districts becoming indistinguishable following the sexual assaults. Following a Bayesian rationale, such a pattern can arise because individuals' prior beliefs matter in determining their reactions to threatening events: while those with pre-existing negative views about refugees and asylum seekers see those confirmed by new damaging information (and therefore do not drastically change their behaviour), those with no strong priors are shocked by news of a threatening event, leading to drastic behavioural change among more moderate communities. Such ecological findings will have to be corroborated by future individual-level analysis, and qualitative research on perpetrator motivations would be particularly relevant.

On January 9th 2016, CDU politician Volker Bouffier announced that 'Cologne has changed everything' (Hewitt 2016). As this paper has demonstrated, this was not just political rhetoric. While some terrorist attacks provoked short spikes in anti-refugee violence between 2014 and 2016, it was the New Year's Eve sexual assaults in Cologne that entailed lasting change—igniting a wave of hate against refugees and asylum seekers throughout the country that continued for months and, more notably, radicalised areas with little prior anti-refugee hostility.

Personal details

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References

- Adam, H. (2015), 'Xenophobia, Asylum Seekers, and Immigration Policies in Germany', Nationalism and Ethnic Politics 21(4), 446–464.
- Alesina, A. & Fuchs-Schündeln, N. (2007), 'Good-Bye Lenin (or Not?): The Effect of Communism on People's Preferences', *American Economic Review* **97**(4), 1507–1528.
- Allport, G. W. (1958), *The Nature of Prejudice*, A Comprehensive and Penetrating Study of the Origin and Nature of Prejudice, Addison-Wesley, Cambridge, Massachusetts.
- BAMF (2017), 'Chancen auf Asyl sind bundesweit einheitlich', Bundesamt für Migration und Flüchtlinge.
 - URL: https://www.bamf.de/SharedDocs/Pressemitteilungen/DE/2017/20170327-012-pm-studie-anerkennungsquoten.html
- Bar-Tal, D. & Labin, D. (2001), 'The effect of a major event on stereotyping: Terrorist attacks in Israel and Israeli adolescents' perceptions of Palestinians, Jordanians and Arabs', European Journal of Social Psychology 31(3), 265–280.
- Baumgärtner, M., Brauck, M., Dahlkamp, J., Diehl, J., Fichtner, U., Friedman, J., Geyer, M., Gude, H., Knaup, H., Kühn, A., Neufeld, D., Neukirch, R., Nezik, A.-K., Olbrisch, M., Popp, M., Repinski, G., Röbel, S., Schmid, B., Schmid, F., Ulrich, A. & Windman, A. (2016), 'Chaos and Violence: How New Year's Eve in Cologne Has Changed Germany', Spiegel Online.
 - **URL:** http://www.spiegel.de/international/germany/cologne-attacks-trigger-raw-debate-on-immigration-in-germany-a-1071175.html
- Benček, D. & Strasheim, J. (2016), 'Refugees welcome? A dataset on anti-refugee violence in Germany', Research & Politics 3(4), 1–11.

- Bielicki, J. (2019), Cologne's New Year's Eve Sexual Assaults: The Turning Point in German Media Coverage, in G. Dell' Orto & I. Wetzstein, eds, 'Refugee News, Refugee Politics: Journalism, Public Opinion and Policy Making in Europe', Routledge, New York.
- Biggs, M. (2005), 'Strikes as Forest Fires: Chicago and Paris in the Late Nineteenth Century', American Journal of Sociology 110(6), 1684–1714.
- Blumer, H. (1958), 'Race Prejudice as a Sense of Group Position', *The Pacific Sociological Review* 1(1), 3–7.
- bpb (2018), 'Zahlen zu Asyl in Deutschland', Bundeszentrale für Politische Bildung .

 URL: https://www.bpb.de/gesellschaft/migration/flucht/
- Braun, R. (2011), 'The diffusion of racist violence in the Netherlands: Discourse and distance', *Journal of Peace Research* **48**(6), 753–766.
- Braun, R. & Koopmans, R. (2010), 'The Diffusion of Ethnic Violence in Germany: The Role of Social Similarity', European Sociological Review 26(1), 111–123.
- Brouard, S., Vasilopoulos, P. & Foucault, M. (2018), 'How terrorism affects political attitudes: France in the aftermath of the 2015–2016 attacks', West European Politics 41(5), 1073–1099.
- Castanho Silva, B. (2018), 'The (Non)Impact of the 2015 Paris Terrorist Attacks on Political Attitudes', Personality and Social Psychology Bulletin 44(6), 838–850.
- Connolly, K. (2016), 'Cologne inquiry into 'coordinated' New Year's Eve sex attacks', The Guardian.
 - URL: https://www.theguardian.com/world/2016/jan/05/germany-crisis-cologne-new-years-eve-sex-attacks
- Czymara, C. S. & Schmidt-Catran, A. W. (2017), 'Refugees Unwelcome? Changes in the

- Public Acceptance of Immigrants and Refugees in Germany in the Course of Europe's 'Immigration Crisis", European Sociological Review 33(6), 735–751.
- Dancygier, R. M. (2010), *Immigration and Conflict in Europe*, Cambridge University Press, Cambridge, UK.
- Davis, D. W. (2007), Negative Liberty: Public Opinion and the Terrorist Attacks on America, Russell Sage Foundation, New York, NY.
- Dhattiwala, R. & Biggs, M. (2012), 'The Political Logic of Ethnic Violence', *Politics & Society* **40**(4), 483–516.
- Disha, I., Cavendish, J. C. & King, R. D. (2011), 'Historical Events and Spaces of Hate: Hate Crimes against Arabs and Muslims in Post-9/11 America', *Social Problems* **58**(1), 21–46.
- Eddy, M. (2016), 'Reports of Attacks on Women in Germany Heighten Tensions over Migrants', New York Times.
 - URL: https://www.nytimes.com/2016/01/06/world/europe/coordinated-attacks-on-women-in-cologne-were-unprecedented-germany-says.html
- Falk, A., Kuhn, A. & Zweimüller, J. (2011), 'Unemployment and Right-wing Extremist Crime', Scandinavian Journal of Economics 113(2), 260–285.
- Federal Office for the Protection of the Constitution (2019), 'Übersicht ausgewählter islamistisch-terroristischer Anschläge', https://www.verfassungsschutz.de/de/arbeitsfelder/af-islamismus-und-islamistischer-terrorismus/zahlen-und-fakten-islamismus/zuf-is-uebersicht-ausgewaehlter-islamistisch-terroristischer-anschlaege.
- Ferrín, M., Mancosu, M. & Cappiali, T. M. (2019), 'Terrorist attacks and Europeans' attitudes towards immigrants: An experimental approach', European Journal of Political Research pp. 1–26.

- Frank, J. (2017), 'Eine Chronik der Berichterstattung über die Kölner Silvesternacht', $K\"{o}lner$ Stadtanzeiger.
 - URL: https://story.ksta.de/2017/05/chronik-der-koelner-silvesternacht/
- Gelman, A. (2008), 'Scaling regression inputs by dividing by two standard deviations', *Statistics in Medicine* **27**(15), 2865–2873.
- Golder, M. (2003), 'Explaining Variation In The Success Of Extreme Right Parties In Western Europe', Comparative Political Studies 36(4), 432–466.
- Granovetter, M. (1978), 'Threshold Models of Collective Behavior', American Journal of Sociology 83(6), 1420–1443.
- Gunnarsson, J. (2016), Recent attacks against women in European cities the need for a comprehensive response, Parliamentary Assembly 13961, Council of Europe.
- Hedström, P. (1994), 'Contagious Collectivities: On the Spatial Diffusion of Swedish Trade Unions, 1890-1940', *American Journal of Sociology* **99**(5), 1157–1179.
- Hetherington, M. J. & Nelson, M. (2003), 'Anatomy of a Rally Effect: George W. Bush and the War on Terrorism', *PS: Political Science & Politics* **36**(1), 37–42.
- Hewitt, G. (2016), 'Cologne attacks' profound impact on Europe', BBC. $\mathbf{URL:}\ https://www.bbc.com/news/world-europe-35261988$
- Hopkins, D. J. (2010), 'Politicized Places: Explaining Where and When Immigrants Provoke Local Opposition', *American Political Science Review* **104**(01), 40–60.
- Jäckle, S. & König, P. D. (2016), 'The dark side of the German 'welcome culture': Investigating the causes behind attacks on refugees in 2015', West European Politics 40(2), 223–251.
- Jäckle, S. & König, P. D. (2018), 'Threatening Events and Anti-Refugee Violence: An Empirical Analysis in the Wake of the Refugee Crisis during the Years 2015 and 2016 in Germany', European Sociological Review 34(6), 728–743.

- Jungkunz, S., Helbling, M. & Schwemmer, C. (2019), 'Xenophobia before and after the Paris 2015 attacks: Evidence from a natural experiment', *Ethnicities* **19**(2), 271–291.
- Kam, C. D. & Kinder, D. R. (2007), 'Terror and Ethnocentrism: Foundations of American Support for the War on Terrorism', *Journal of Politics* **69**(2), 320–338.
- King, R. D. & Sutton, G. M. (2013), 'High Times For Hate Crimes: Explaining the Temporal Clustering of Hate-Motivated Offending', *Criminology* **51**(4), 871–894.
- Koopmans, R. (1996), 'Explaining the rise of racist and extreme right violence in Western Europe: Grievances or opportunities?', European Journal of Political Research 30(2), 185–216.
- Koopmans, R. & Olzak, S. (2004), 'Discursive Opportunities and the Evolution of Right-Wing Violence in Germany', *American Journal of Sociology* **110**(1), 198–230.
- Kriesi, H. (2012), *Political Conflict in Western Europe*, Cambridge University Press, Cambridge.
- Krueger, A. B. & Pischke, J.-S. (1997), 'A Statistical Analysis of Crime against Foreigners in Unified Germany', *The Journal of Human Resources* **32**(1), 182–209.
- Larsen, E. G., Cutts, D. & Goodwin, M. J. (2019), 'Do terrorist attacks feed populist Eurosceptics? Evidence from two comparative quasi-experiments', European Journal of Political Research 59(1), 182–205.
- Lauter, R. (2017), 'Kölner Silvesternacht : Zwei Jahre und 36 Verurteilungen später', Die Zeit.
 - URL: https://www.zeit.de/gesellschaft/zeitgeschehen/2017-12/koelner-silvesternacht-2015-sexuelle-uebergriffe-ermittlungen
- Legewie, J. (2013), 'Terrorist Events and Attitudes toward Immigrants: A Natural Experiment', *American Journal of Sociology* **118**(5), 1199–1245.

- Lickel, B., Miller, N., Stenstrom, D. M., Denson, T. F. & Schmader, T. (2006), 'Vicarious Retribution: The Role of Collective Blame in Intergroup Aggression', Journal of Personality and Social Psychology 10(4), 372–390.
- Marbach, M., Hainmueller, J. & Hangartner, D. (2018), 'The long-term impact of employment bans on the economic integration of refugees', *Science Advances* 4(9), 1–6.
- Marbach, M. & Ropers, G. (2018), 'Not in My Backyard: Do Increases in Immigration Cause Political Violence?', *IPL Working Paper Series* **18**(2), 1–36.
- Merkel, P. H. & Weinberg, L. (1998), Encounters with the Contemporary Radical Right, New Directions in Comparative Politics, Westview Press.
- Mueller, J. E. (1970), 'Presidential Popularity from Truman to Johnson', *The American Political Science Review* **64**(1), 18–34.
- Müller, K. & Schwarz, C. (2019), 'Fanning the Flames of Hate: Social Media and Hate Crime', SSRN.
- NRW Landtag, N. (2017), 'Drucksache 16/14450: Schlussbericht des Parlamentarischen Untersuchungsausschusses IV', **Drucksache 16/14450**, 1–1352.
- Olzak, S. (1990), 'The Political Context of Competition: Lynching and Urban Racial Violence, 1882-1914', **69**(2), 395-421.
- Olzak, S. (1994), The Dynamics of Ethnic Competition and Conflict, Stanford University Press, Stanford.
- Peffley, M., Hutchison, M. L. & Shamir, M. (2015), 'The Impact of Persistent Terrorism on Political Tolerance: Israel, 1980 to 2011', American Political Science Review 109(4), 817–832.
- Pettigrew, T. F. (1998), 'Intergroup Contact Theory', Annual Review of Psychology **49**(1), 65–85.

- Piopiunik, M. & Ruhose, J. (2017), 'Immigration, regional conditions, and crime: Evidence from an allocation policy in Germany', *European Economic Review* **92**, 258–282.
- Schüller, S. (2016), 'The Effects of 9/11 on Attitudes toward Immigration and the Moderating Role of Education', *Kyklos* **69**(4), 604–632.
- Shuster, S. (2016), 'Germany's Migrant Assault Scandal and Europe's Refugee Challenge', $Time\ Magazine$.
 - URL: https://time.com/magazine/south-pacific/4188475/february-1st-2016-vol-187-no-3-asia-europe-middle-east-and-africa-south-pacific/
- Sniderman, P. M., Hagendoorn, L. & Prior, M. (2004), 'Predisposing Factors and Situational Triggers: Exclusionary Reactions to Immigrant Minorities', American Political Science Review 98(01), 35–49.
- START (2018), 'Global Terrorism Database', National Consortium for the Study of Terrorism and Responses to Terrorism.

URL: https://www.start.umd.edu/qtd

- Staudenmaier, R. (2016), 'Report: Over 1,200 women assaulted in Germany on New Year's Eve', *Deutsche Welle*.
 - URL: https://www.dw.com/en/report-over-1200-women-assaulted-in-germany-on-new-years-eve/a-19391708
- Van de Vyver, J., Houston, D. M., Abrams, D. & Vasiljevic, M. (2016), 'Boosting Belligerence: How the July 7, 2005, London Bombings Affected Liberals' Moral Foundations and Prejudice', *Psychological Science* **27**(2), 169–177.
- Ziller, C. & Goodman, S. W. (forthcoming), 'Local Government Efficiency and Anti-Immigrant Violence', *The Journal of Politics*.

	Mode	el 1	Mode	el 2	
_	OR	Rob. SE	OR	Rob. SE	
Refugee share	1.06	0.12	1.11	0.11	
Monthly arrivals	1.48***	0.06	1.43***	0.06	
East	1.60**	0.26	1.59^{**}	0.26	
Unemployment rate	1.23^{*}	0.12	1.22^{*}	0.12	
Non-EU Foreign pop.	0.49^{***}	0.06	0.47^{***}	0.06	
Voting turnout	0.80^{**}	0.06	0.80^{**}	0.06	
AfD Strength	1.11	0.08	1.12	0.09	
NPD Strength	1.20	0.13	1.21^{+}	0.13	
Attacks in district (4 weeks)	1.09**	0.03	1.09**	0.03	
Attacks elsewhere (4 weeks)	2.74***	0.11	2.79***	0.11	
log(Population)	3.91***	0.31	3.93***	0.31	
NYE 2015 (W1)	3.05***	0.40	3.29***	0.44	
NYE 2015 (W2)			5.35***	0.52	
NYE 2015 (W3)			2.30***	0.26	
NYE 2015 (W4)			1.24^{*}	0.13	
Paris Jan 2015 (W1)	1.66^{+}	0.44	1.76*	0.47	
Paris Jan 2015 (W2)			2.39^{***}	0.59	
Paris Jan 2015 (W3)			1.01	0.29	
Brussels 2014 (W1)	0.56	0.33	0.59	0.35	
Copenhagen 2015 (W1)	0.74	0.35	0.78	0.37	
Paris Apr 2015 (W1)	0.84	0.30	0.90	0.32	
St Quentin 2015 (W1)	0.86	0.23	0.93	0.25	
Paris Nov 2015 (W1)	0.81	0.13	0.89	0.14	
Brussels/Glasgow 2016 (W1)	1.14	0.12	1.18	0.12	
Magnanville 2016 (W1)	1.03	0.15	1.07	0.16	
Nice 2016 (W1)	1.17	0.18	1.22	0.19	
St Étienne 2016 (W1)	1.25	0.18	1.30^{+}	0.19	
Berlin 2016 (W1)	0.91	0.15	0.95	0.15	
sd(district)	0.42***	0.03	0.42***	0.03	
Controls	√		√		
Observations	4261		426132		
AIC	447	72	44487		

Table 3: The effect of the NYE event and terrorist attacks on anti-refugee violence. Note: Multilevel logistic regression, OR: Odds Ratios, Rob. SE: Robust Standard Errors. $^+p<0.1$, $^*p<0.05$, $^{**}p<0.01$, $^{***}p<0.001$.

	Model 3		Model 4		Model 5	
_	OR	Rob.SE	OR	Rob.SE	OR	Rob.SE
Days before	1.00***	0.00	1.00***	0.00	1.00***	0.00
NYE	4.59***	0.52	5.85***	0.64	4.85***	0.50
Days after	1.00***	0.00	0.99***	0.00	0.99***	0.00
Hostile			2.85***	0.31		
Hostile x Days before			1.00	0.00		
Hostile x NYE			0.43^{***}	0.06		
Hostile x Days after			1.00	0.00		
NPD Strength	1.21^{+}	0.13	1.16	0.12	1.82***	0.26
NPD Strength x Days before					1.00	0.00
NPD Strength x NYE					0.51^{***}	0.05
NPD Strength x Days after					1.00	0.00
sd(district)	0.42***	0.03	0.33***	0.03	0.39***	0.03
Controls	\checkmark		\checkmark		\checkmark	
Observations	4261	32	42613	32	42613	32
AIC	4441	.1	4415	59	4426	69

Table 4: The impact of the NYE event on the distribution of violence Note: Multilevel logistic regression, OR: Odds Ratios, Rob. SE: Robust Standard Errors. $^+$ p<0.1, * p<0.05, ** p<0.01, *** p<0.001.