The Medieval Origins Of Anti-Semitic Violence In Nazi Germany

by Voigtländer and Voth (2012)

Alper Sukru Gencer

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Roadmap

- Voigtländer and Voth (2012): *"The Medieval Origins Of Anti-Semitic Violence In Nazi Germany"*
  - Puzzle
  - Literature
  - Theory and Hypotheses
  - Data
  - The Model and the Empirical Findings
  - Further Theoretical Implications

Puzzle: Cultural Norms and Violent Behaviors

- Puzzle:
  - When do cultural norms and beliefs persist? When are they malleable?
  - Through what mechanisms can norms affect individual behavior and persist over long periods?

Literature:

- Cultural norms: Continuities
  - Cultural norms are powerful determinants of individual behavior and that they can persist over long periods (Tabellini 2008; Bisin and Verdier 2001; Acemoglu, Jackson, et al. 2011)
    - Cultural and religious fragmentation with civil war, corruption, public goods (Alesina and La Ferrara 2005)
    - Fertility of immigrants' children is influenced by fertility rates in their parents' country of origin (Fernández and Fogli 2009)
    - Inherited trust and economic performance (Algan and Cahuc 2010)

Literature:

- Institutions:
  - Institutional arrangements in the distant past influence norms and preferences today
    - Slave trade in Africa leading to permanently lower levels of trust (Nunn and Wantchekon 2011)
    - Free cities and more trust (Guiso, Sapienza, and Zingales 2008)

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- Discontinuites:
  - Culture also change quickly (attitudes toward homosexuals, working women, and premarital sex) (Fernández-Villaverde, Greenwood, and Guner 2014)

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- Inter-group interaction:
  - Expectation: Through regular inter-group interactions, cultural norms and intergroup hatred persist
- Adoption of norms through socialization:
  - Expectation: Regardless of economic incentives, adoption of cultural norms through family/society socialization persists

Data:

- Data on anti-Semitism during two eras:
  - the Medieval Period (1348–50) and
  - the Interwar Period (1920–45)

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- **Medieval period** (1348–50)
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  - Widespread murders and pogroms during crusades
  - Jewish people were blamed for well poisoning during the Black Death
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  - Jewish people were blamed for well poisoning during the Black Death
    - Many pogroms against Jewish population and mass expulsions
  - Based on 'Germania Judaica,' 325 towns with a confirmed Jewish settlement and unambiguous information on pogroms
    - Of 325 observations, 235 (72%) recorded attacks.
    - Variation in pogroms across towns
    - Geographic heterogeneity in attacks (Reutlingen vs. Tubingen, Rottenburg vs. Horb)

Data: Interwar Period (1920–45)

- **Interwar Period** (1920–45)
  - Based on 1925 census, there were more than 560,000 Jews living in Germany
    - 2/3 of population living in six largest cities
    - Data on 325 cities mentioned above + an extended data with 1428 cities
  - After the Great War, Jews were portrayed as scapegoats, the rise myth of "stabbed in the back"

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  - Outcome Variables
    - Nazi Party vote share until 1928 (before moderation)
    - Widespread attacks on cemeteries and synagogues during the "Night of Broken Glass" in 1938
    - Readers' letters to the anti-Semitic Nazi newspaper 'Der Stürmer's editors
    - Deportation of Jews

Assumption - 1

- There is some significant correlation between medieval and interwar variables:

CORRELATIONS AMONG MAIN VARIABLES FOR MAIN SAMPLE

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
(1) POG^{1349}	1						
(2) POG^{1920s}	0.170***	1					
(3) $DVFP^{1924}$	0.105*	0.539***	1				
(4) $NSDAP^{1928}$	0.128**	0.444***	0.831***	1			
(5) $\%DEPORT$	0.230***	0.056	−0.065	−0.010	1		
(6) $STÜRMER/pop$	0.109**	0.0266	0.158***	0.225***	0.014	1	
(7) $SYNATTACK$	0.127**	0.001	−0.020	−0.020	−0.066	−0.039	1

Notes: Table is based on our main sample (including only cities with medieval Jewish communities and Jewish population in 1920–30). Appendix Table A.2 shows the equivalent statistics for the extended sample. POG^{1349} takes the value 1 if a pogrom occurred in the years 1348–50, and 0 otherwise. POG^{1920s} is an indicator variable for pogroms in each location during the 1920s; $NSDAP^{1928}$ is the vote share of the NSDAP in the May 1928 election and $DVFP^{1924}$ is the vote share for the Deutsch-Völkische Freiheitspartei in the May 1924 election; $\%DEPORT$ is the percentage of deportees from each locality (relative to Jewish population in 1933); $STÜRMER/pop$ is the number of anti-Semitic letters to *Der Stürmer* per 10,000 inhabitants; $SYNATTACK$ takes the value 1 if a synagogue was destroyed or damaged in the 1938 *Reichskristallnacht*, and 0 otherwise. * $p < .10$, ** $p < .05$, *** $p < .01$ (p-values for pairwise correlations, weighted by city population in 1933).

Figure 1: Correlated Anti-Semitism Outcomes

Assumption - 2

- Interwar settlements are not associated with whether they had pogroms before or not

TABLE III

CITY-LEVEL CONTROLS AND MEDIEVAL POGROMS

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	City pop growth							
	1300–1933	1750–1933	%Protestant 1925	%Jewish 1933	%Blue collar 1933	%Unemployed 1933	%Manufacturing 1933	%Retail & trade 1933
Panel A: Means by Pogrom in 1349								
$POG^{1349}=1$	2.38	2.06	46.8	1.44	41.1	17.0	35.2	22.0
	(1.20)	(0.97)	(33.3)	(1.48)	(10.8)	(7.8)	(12.6)	(10.3)
$POG^{1349}=0$	2.28	1.92	52.6	1.44	40.0	15.0	31.8	19.0
	(1.63)	(0.96)	(35.8)	(1.38)	(11.8)	(8.2)	(13.9)	(11.2)
Panel B: Regressions on POG^{1349}								
POG^{1349}	0.120	0.234	−6.887	0.169	−0.953	0.0443	1.000	0.123
	(0.534)	(0.251)	(4.520)	(0.165)	(1.131)	(0.758)	(1.367)	(0.958)
Observations	46	112	325	325	325	325	325	325
Adjusted R^2	0.075	−0.004	0.036	0.094	0.401	0.469	0.369	0.554

Notes: All regressions run by OLS for the main sample, including only towns with documented medieval Jewish settlement. In Panel A, standard deviation in parentheses; in Panel B, standard errors in parentheses (clustered at the county level). POG^{1349} takes the value 1 if a pogrom occurred in the years 1348–50, and 0 otherwise. All regressions include our standard set of control variables: ln(city population), %Protestants, and %Jewish (except for columns (3) and (4), which exclude %Protestant and %Jewish, respectively). City population corresponds to the year of the dependent variable: ln(city population) in 1300 in column (1), ln(City population) in 1750 in column (2), ln(City population) in 1925 in column (3), and ln(City population) in 1933 in columns (4)–(8). City population data for 1300 and 1750 are from Bairoch, Batou, and Chèvre (1988).

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Figure 2: No Endogeneous Settlement Pattern

Assumption - 3

- Cities with mediavel pogroms have higher average interwar anti-Semitism outcomes

TABLE IV

CONDITIONAL AVERAGE OF TWENTIETH-CENTURY OUTCOME VARIABLES

	Pogrom in 1349			
	No	Yes	All towns	Obs.
Pogrom in 1920s (% of towns)	1.1	8.2	6.3	320
NSDAP May 1928 (% of valid votes)	2.7	4.0	3.6	325
DVFP May 1924 (% of valid votes)	7.2	8.4	8.0	325
Deportations (per 100 Jews in 1933)	24.2	35.6	34.0	278
Stürmer letters (per 10,000 inhabitants)	0.59	0.86	0.82	325
Synagogue attack (% of towns)	79.1	93.8	90.3	278

Notes: All statistics based on the main sample, including only towns with documented medieval Jewish settlement. Of the 325 towns and cities, 235 (72%) had pogroms in 1348–50. The mean of deportations per 100 Jews and *Stürmer* letters is weighted by city population in 1933. The mean of synagogue attacks is calculated only for towns with synagogues or prayer rooms in 1933.

Figure 3: Monotonocity in the Expected Direction

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- Control matrix X includes city population, the percentage of the population that is Jewish, and the percentage that is Protestant.
  - OLS and Poisson MLE.
  - Propensity Score Matching
    - with the Control Covariates and
    - geographical proximity

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  - Outcome 4) "Readers' letters" to the anti-Semitic Nazi newspaper 'Der Stürmer' were more frequent,

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  - Outcome 5) Attacks on synagogues during the "Night of Broken Glass" in 1938 were more common, and

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TABLE VI
MAIN RESULTS

Dep. variable:	(1) 1920s pogroms OLS	(2) NSDAP 1928 OLS	(3) DVFP 1924 OLS	(4) Deportations ML	(5) *Stürmer* letters ML	(6) Synagogue attacks OLS
Panel A: Baseline regressions						
POG^{1349}	0.0607***	0.0142**	0.0147	0.142**	0.369**	0.124**
	(0.0226)	(0.00567)	(0.0110)	(0.0706)	(0.144)	(0.0522)
ln(Pop)	0.0390**	−0.00254	−0.00123	0.241***	0.848***	0.0498***
	(0.0152)	(0.00219)	(0.00418)	(0.0841)	(0.0419)	(0.0117)
%Jewish	0.0135	0.00174	0.00701	0.0743**	0.218***	0.0262**
	(0.0114)	(0.00190)	(0.00442)	(0.0348)	(0.0383)	(0.0132)
%Protestant	0.00034	0.00029***	0.00083***	−0.0039***	−0.0053**	0.00036
	(0.00042)	(0.000088)	(.00018)	(0.0012)	(0.0023)	(0.00060)
ln(# Jews 1933)				0.815***		
				(0.0822)		
Observations	320	325	325	278	325	278
Adjusted R^2	0.054	0.043	0.080			0.098
Panel B: Matching estimation[a]						
POG^{1349}	0.0744***	0.0133***	0.0203**	161.7***	2.386***	0.103*
	(0.0182)	(0.00486)	(0.0102)	(41.33)	(0.570)	(0.0553)
Observations	320	325	325	278	325	278
Panel C: Geographic matching[b]						
POG^{1349}	0.0819***	0.0116**	0.0238***	195.8***	2.864***	0.152**
	(0.0162)	(0.00456)	(0.00746)	(33.55)	(0.579)	(0.0677)
Median distance	20.4	20.0	20.0	21.9	22.2	23.7
Mean distance	23.4	23.1	23.1	28.3	32.6	27.6
Observations	320	325	325	278	325	278

Notes: All regressions run at the city level. Standard errors in parentheses, clustered at the county (Kreis) level. POG^{1349} takes the value 1 if a pogrom occurred in the years 1348–50, and 0 otherwise. City population is taken from the 1925 census in column (1) and from the election data for the respective year in columns (2) and (3); in columns (4)–(6), city population is from the 1933 census. %Jews is from the 1925 census for columns (1)–(3), and from 1933 census in columns (4)–(6). %Protestants is from the 1925 census. OLS = ordinary least squares estimation; ML = Poisson maximum likelihood estimation. [a]Matching estimation based on the same set of control variables as used in Panel A. Treatment variable is POG^{1349}. The average treatment effect for the treated (ATT) is reported, using robust nearest neighbor estimation with the four closest matches. [b]Matching estimation based on geography; the matching characteristics are longitude and latitude. Column (4) uses the city's Jewish population in 1933 as additional matching variable, and column (5) uses city population in 1933. Treatment variable is POG^{1349}. ATT is reported, using robust nearest neighbor estimation with the two closest matches. Distance (in miles) between each city and its two closest matches is reported. * $p < .10$, ** $p < .05$, *** $p < .01$.

Figure 4: Main Results

Empirical Results - 2

- Furthermore, a principal component analysis based on the six twentieth-century outcome variables.
  - All variables have positive factor loadings,
  - The first principal component explains 27% of the sample variance.
  - Medieval pogroms are found to have a strong and significant effect on anti-Semitism, with Black Death pogroms increasing the dependent variable by 0.25-0.32 standard deviations.
  - The results are similar
    - for both cities with confirmed Jewish settlements in the fourteenth century and
    - for all cities and towns for which information on twentieth-century outcome variables is available.

Empirical Results - 2

TABLE VII

DEPENDENT VARIABLE: FIRST PRINCIPAL COMPONENT OF SIX OUTCOME VARIABLES

	(1) OLS	(2) OLS	(3) ME[a]	(4) GeoMatch[b]	(5) OLS	(6) OLS	(7) ME[a]	(8) GeoMatch[b]
	Main Sample				Extended Sample			
POG^{1349}	0.290**	0.254*	0.264**	0.318***	0.333***	0.303**	0.274**	0.315***
	(0.132)	(0.135)	(0.127)	(0.0819)	(0.127)	(0.130)	(0.126)	(0.0808)
$JewCom^{1349}$					0.0158	−0.0378	mv	mv
					(0.105)	(0.109)		
ln(Pop 1933)	−0.0875	0.0532	mv		−0.191***	−0.0339	mv	
	(0.0646)	(0.0644)			(0.0421)	(0.0345)		
%Jewish 1933	0.0215	−0.200*	mv		0.154***	0.112***	mv	
	(0.0971)	(0.105)			(0.0439)	(0.0374)		
%Protestant 1925	0.284***	0.297***	mv		0.287***	0.282***	mv	
	(0.0757)	(0.0755)			(0.0411)	(0.0396)		
%Blue collar 1933		−0.367**				−0.109		
		(0.149)				(0.0874)		
%Industry employ.		0.0832				−0.0622		
		(0.156)				(0.0853)		
%Self-employed in retail & trade		0.169**				0.248***		
		(0.0725)				(0.0613)		
Observations	311	311	311	311	1035	1035	1035	1184
Adjusted R^2	0.052	0.099			0.124	0.206		

Figure 5: Main Results with Principal Component Analyses

Empirical Results - 3

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- For certain conditioning variables, the long-term transmission of hatred weakens,
  - cities with a strong tradition of long-distance trade (Hanseatic League),
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  - urban centers that grew rapidly after 1750 exhibit a weaker connection between medieval and modern-day anti-Semitism.

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  - urban centers that grew rapidly after 1750 exhibit a weaker connection between medieval and modern-day anti-Semitism.
- Moreover, the following factors do not have an effect on the persistence of anti-Semitism:
  - tradition of being governed by a bishop and
  - relative geographical isolation.

Empirical Results - 3

TABLE X

DIFFERENCES IN PERSISTENCE

	(1) Hanseatic	(2) Open city	(3) City growth	(4) Industrial	(5) Bishop	(6) Geographic isolation	(7)
POG^{1349}	0.311**	0.375*	0.257	0.777**	0.293**	0.384**	0.309*
	(0.141)	(0.198)	(0.225)	(0.312)	(0.134)	(0.165)	(0.187)
Hanseatic	−0.133						
	(0.175)						
Hanseatic × POG^{1349}	−0.444**						
	(0.208)						
Open		0.158					
		(0.128)					
Open × POG^{1349}		−0.298**					
		(0.148)					
PopGrowth			−0.131				
			(0.166)				
PopGrowth × POG^{1349}			−0.432**				
			(0.168)				
%Industrial				−0.00351			
				(0.00730)			
%Industrial × POG^{1349}				−0.0143*			
				(0.00859)			
Bishop					0.292		
					(0.371)		
Bishop × POG^{1349}					−0.185		
					(0.451)		
$\text{Isolated}_{1,\ 2}$						0.176	−0.0037
						(0.228)	(0.190)
$\text{Isolated}_{1,\ 2} \times POG^{1349}$						−0.268	−0.0438
						(0.260)	(0.237)
Observations	311	214	110	311	311	311	311
Adjusted R^2	0.060	0.063	0.081	0.068	0.047	0.048	0.046

Notes: Dependent variable is the first principal component (standardized) obtained from six proxies for twentieth-century anti-Semitism as described in the notes to Table VII. All regressions run by OLS, including the controls: ln(city population 1933), %Protestant 1925, %Jewish 1933 (all standardized). Standard errors in parentheses (clustered at the county level). POG^{1349} takes the value 1 if a pogrom occurred in the years 1348–50, and 0 otherwise. "Open" is an index, calculated as the sum of the following indicator variables: Free Imperial city, city incorporated in 1349, market rights in 1349, and located at a navigable river. The index is then standardized to obtain beta coefficients. The regression in column (2) includes only cities to the south of Cologne (the southern-most member of the Hanseatic League). "PopGrowth" is the (standardized) city's population growth between 1750 and 1933; population in 1750 is from Bairoch, Batou, and Chèvre (1988). "%Industrial" is the percentage of employment in industry and manufacturing in 1933. "Bishop" is a dummy variable set equal to 1 for Episcopal cities (and to 0 otherwise). "Isolated_1" is a dummy set to 1 for cities with above-median ruggedness (calculated within a 20 km perimeter); for cities located on a navigable river, this dummy is set to 0. "Isolated_2" is a dummy set equal to 1 if the nearest city with at least 10,000 inhabitants in 1750 is more than 31 miles (50 km) distant. * $p < .10$, ** $p < .05$, *** $p < .01$.

Figure 6: Mechanisms with Interaction Variables

Empirical Results - 4

- Local persistence of anti-Semitism partly reflects a lack of mobility among the population in small towns
  - Most towns in the study had a median population of no more than 9,000 inhabitants in 1933, and at most a few thousand in the Middle Ages

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  - With industrialization after 1820 came migration, and where immigration was massive the extent of persistence declined
  - Symbolic practices and festivals such as Passion plays and anti-Semitic sculptures and book printing may have helped perpetuate hostile beliefs

Empirical Results - 4

TABLE IX

POGROMS IN 1349, PRE-PLAGUE ATTACKS, AND PROXIES FOR ANTI-SEMITISM BETWEEN 1350 AND 1900

	(1) $\#POG^{pre\text{-}1347}$	(2) *Judensau*	(3) *Hep-Hep*
$POG^{1349} = 1$	0.481	0.055	0.060
$POG^{1349} = 0$	0.322	0	0.011
Difference	0.159*	0.055**	0.048*
p-value	0.09	0.02	0.06
Observations	325	325	325

Notes: Conditional means are reported for cities with and without Black Death pogroms (indicated by POG^{1349}) for our main sample. $\#POG^{pre\text{-}1347}$ is the number of attacks on Jewish communities in a city before 1347. All columns include cities with documented Jewish settlement prior to 1349. *Judensau* is a dummy set equal to 1 only for cities with such an adornment. *Hep-Hep* is a dummy for cities that recorded attacks on Jews during the riots in 1819. See Online Appendix III for more detail. * $p < .10$, ** $p < .05$.

Figure 7: Other Forms of Violence

Emplrical Results - 4

TABLE XI

NSDAP IN THE 1930S, RIGHT-WING PARTIES, AND VIOLENT CRIME

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	NSDAP	NSDAP	DNVP	KPD	KPD	Principal component[a]		
Dep. variable	1930	1933	1924	1924	1928	(county-level regressions)		
POG^{1349}	0.0137	−0.0113	−0.0267**	0.00915	0.0101	0.263**	0.252***	0.252***
	(0.0101)	(0.0125)	(0.0131)	(0.00873)	(0.00724)	(0.126)	(0.110)	(0.110)
ln(Pop)	−0.00816**	−0.0111***	−0.00505	0.0138***	0.0125***	−0.131	0.00111	−0.00260
	(0.00320)	(0.00359)	(0.00419)	(0.00305)	(0.00249)	(0.0702)	(0.0699)	(0.0701)
%Jewish	0.00240	0.0100***	−0.00337	−0.0077***	−0.00335	0.0118	0.0277	0.0315
	(0.00320)	(0.0038)	(0.00403)	(0.0023)	(0.00204)	(0.0794)	(0.0719)	(0.0721)
%Protestant	0.00128***	0.0023***	0.0020***	0.000035	0.00017*	0.209***	0.305***	0.304***
	(0.00015)	(0.0002)	(0.0002)	(0.00012)	(0.0001)	(0.0715)	(0.0662)	(0.0675)
Violent crime p.c. 1908–12							0.448***	0.431***
							(0.0961)	(0.109)
Simple theft p.c. 1908–12								0.0187
								(0.0657)
Observations	325	325	325	325	325	263	263	263
Adjusted R^2	0.219	0.426	0.372	0.102	0.103	0.041	0.215	0.212

Notes: All regressions run by OLS. Standard errors in parentheses (clustered at the county level in columns (1)–(5)). POG^{1349} takes the value 1 if a pogrom occurred in the years 1348–50, and 0 otherwise. The remaining dependent variables are explained in the text. [a]First principal component (standardized) as described in the notes to Table VII. * $p < .10$, ** $p < .05$, *** $p < .01$.

Figure 8: Other Vote Share Variables

Discussion

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