CULTURE, INSTITUTIONS, AND HISTORICAL PERSISTENCE[‡]

Married to Intolerance: Attitudes toward Intermarriage in Germany, 1900–2006[†]

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Marriage is one of the biggest decisions in life. In general, there is a tendency toward assortative mating—people marry others who are relatively similar to themselves. Intermarriage between different social, religious, and ethnic groups in most societies is relatively rare (Blossfeld and Timm 2003). Where it occurs, it is associated with more rapid assimilation (Meng and Gregory 2005). The frequency of intermarriage can therefore serve as a useful indicator of tolerant attitudes toward a minority, and of the desire to integrate (Bisin, Topa, and Verdier 2004).

In this paper, we analyze under which conditions intermarriage can be used as an indicator of tolerance, and whether such tolerant attitudes persisted in Germany during the last century. We combine information on individuallevel attitudes from the German social survey (GESIS) with historical data on marriage patterns. In Nazi Germany, marriages between Jews and "Aryans" were considered a major threat to the racial purity of the German people. The strong trend toward more intermarriage between Jews and gentiles that characterized the Weimar years came to an abrupt end after 1933 (Figure 1). The Nuremberg racial laws placed heavy restrictions on intermarriage (Burleigh and Wippermann 1991). The NS regime compiled

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[†] To view additional materials, and author disclosure statement(s), visit the article page at http://dx.doi.org/10.1257/aer.103.3.79.

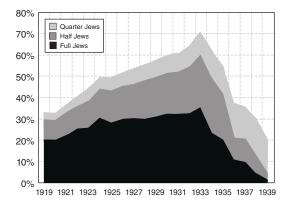


FIGURE 1. INTERMARRIAGE OF JEWS IN GERMANY, 1919–1939

Notes: The figure shows the share of marriages between Jews and gentiles, as a percentage of all marriages involving Jews, in percent. Following the terminology in the 1939 German Census, "Quarter Jews" had one Jewish grandparent; "Half Jews" had two Jewish grandparents, and "Full Jews" had three or four Jewish grandparents (or two Jewish grandparents and met other criteria, such as being a member of a Jewish congregation, etc.).

detailed statistics on the ethnic background of the population, classifying people as "full Jews," "half Jews," "quarter Jews." These records, created by the German authorities after 1933, can be used as a measure of past intermarriage.

We examine the extent to which a history of out-marriages in early twentieth century Germany predicts attitudes in the same location toward marrying a Jew almost a century later. The German Social Survey (ALLBUS) questioned a representative sample of German respondents in 1996 and 2006 about their attitudes toward Jews. One set of survey questions relates to preferences toward intermarriage with Jews. German levels of anti-Semitism today are broadly similar to those in other European

countries (Gabriel 2000). At the same time, distaste for intermarriage with Jews in modernday Germany is not low on average, and varies considerably from one location to the next. We exploit this variation to examine if in towns and cities with numerous offspring from "mixed" marriages in the period 1900–1940, modernday attitudes toward intermarriage are markedly more tolerant.

We find strong evidence for the persistence of tolerant attitudes. However, our empirical analysis also cautions against using intermarriage as a simple proxy for tolerance: The size of Jewish communities in the early twentieth century is an important confounding factor. In smaller communities, where in-group matches were difficult to find, intermarriage was more frequent. At the same time, small Jewish communities were typically located in smaller towns with less tolerant attitudes. Therefore, smaller communities show both more intermarriage and less tolerance; raw correlations suggest a negative relationship between intermarriage and tolerance today. To identify the historical tolerance component in intermarriage, we use detailed data on elections for anti-Semitic parties between 1890 and 1912. Where people voted less for the anti-Jewish parties, intermarriage was more common; this component of historical intermarriage shows a positive association with present-day attitudes toward marrying Jews.

I. Data

Before 1933, the only consistent source of information on the number of Jews in Germany was compiled by the registry offices, which kept track of the legal residence of everyone living in Germany. Jews were only counted as such if they were formally affiliated with the Jewish faith; converts were not considered. The Nazi authorities engaged in a large-scale data collection effort to assess the number of Jews overall. including converts and those of mixed ancestry. This was meant to remedy the problem that the earlier statistics did "not shed light on the invasion of Jewish blood into the body of the Volk" (Statistisches Reichsamt 1944). The culmination of this effort was a special questionnaire, administered as part of the 1939 census, which required all respondents to file detailed information on the race of their grandparents. Those with three or more Jewish grandparents

were classified as "Volljuden" (full Jews); those with two Jewish grandparents were "mixed of the first degree," and those with only one Jewish grandparent were classified as "mixed of the second degree" (Burleigh and Wippermann 1991).

According to the 1939 census, there were 442,000 Jews left in Germany; of these, 74.7 percent were fully Jewish, 16 percent were mixed of first degree, and a little less than 10 percent were mixed of second degree. There was substantial heterogeneity at the regional level: in Hesse, only 18 percent of all marriages were mixed, whereas in Hamburg, 44 percent. Since the beginning of the twentieth century, intermarriage had become much more common. Of those who married before 1914, only 21.5 percent of Jews were in a mixed marriage; by 1932, this had surged to 65.1 percent. As soon as the Nazis came to power in 1933, intermarriage in Germany plummeted. The Nuremberg Laws in 1935 were followed by an even steeper decline. By 1939, only 20.6 percent of new marriages involving Jews were mixed, even fewer than before World War I (see Figure 1).

To measure historical anti-Semitism, we use the average vote shares for anti-Semitic parties from six nationwide elections between 1890 and 1912, $ASVOTE^{19C}$. In combination, our historical city-level data comprise 759 observations—all cities with Jewish inhabitants in 1939 where anti-Semitic parties had put forward candidates in at least one of the six elections between 1890 and 1912.

We pair this historical data with the large-scale German social surveys (ALLBUS), using the two editions that collect data on attitudes toward Jews-1996 and 2006. In addition to several other questions ("Do Jews have too much influence in the world?"; "Should Jews have equal rights?," etc.), the survey also asks how people feel about the possibility of a Jew marrying into their family. On a scale from 1 (very disagreeable) to 7 (very agreeable), respondents are asked about their reactions. The modal response is neutral (4, given by 49 percent). Some 16.3 percent find the idea quite or very disagreeable (answering 1 or 2); 16.4 percent claim to be quite or very pleased with it (answering 6 or 7). There is substantial variation by region, especially when it comes to extreme responses.

¹ This dataset is from Ritter and Niehuss (1980).

In Lower Bavaria, 39 percent of respondents find the idea of a Jew marrying into their family either quite or very disagreeable. At the opposite end of the spectrum, in Hamburg, only 5.6 percent of people feel this way. Overall, we draw on data from 264 cities with 5,201 individuals with two generations of German ancestors.²

II. Results

We first analyze raw correlations between modern day attitudes and historical intermarriage rates, and then disentangle the underlying drivers.

Contrary to expectations, German towns and cities where "mixed marriages" were more common before 1939 show less tolerance toward intermarriage today. This basic pattern holds for both attitudes toward marrying a Jew (Table 1, columns 1 and 2) and intermarriage with ethnic minorities in general (columns 3 and 4). This is true if we use offspring with two Jewish grandparents as an indicator of intermarriage (MixedJew1st) or if we use all offspring with one or two Jewish grandparents (*MixedJew2*nd). In the regressions, we control for personal characteristics—age and education—as well as the wave of the survey. The basic correlation is particularly surprising because there is ample evidence that anti-Semitic attitudes in Germany are highly persistent, with medieval patterns of pogroms still having predictive power for behavior 600 years later (Voigtländer and Voth 2012). What can account for such a puzzling result?

Two factors contribute to intermarriage—the willingness to marry across ethnic lines and the possibilities for minority members to find a mate inside their own group. The first channel is affected by how tolerant the local German population is toward Jews. Where gentiles were more favorable toward their Jewish neighbors in the past, we expect more intermarriage—and more positive attitudes today. Where this channel operates, intermarriage reflects tolerance toward minorities. The second channel may confound this relationship. Smaller towns are typically less tolerant toward minorities, and they also host smaller Jewish communities.

TABLE 1—CORRELATION BETWEEN HISTORICAL JEWISH
INTERMARRIAGE AND TODAY'S ATTITUDES

	Jewish intermarriage 1996 + 2006		Intermarriage in general 1996 + 2006		
	(1)	(2)	(3)	(4)	
MixedJew1 st	-0.500*** (0.173)	k	-0.446** (0.129)	*	
MixedJew2 nd		-0.405*** (0.152)		-0.381*** (0.118)	
Individual controls	Yes	Yes	Yes	Yes	
Observations	4,735	4,538	4,715	4,520	
R^2	0.038	0.037	0.065	0.064	

Notes: Standard errors in parentheses, clustered at the municipality level. The dependent variable in columns 1 and 2 reflects attitudes toward intermarriage with Jews in 264 German municipalities in 1996 and 2006. The variable is the answer to the question "How agreeable or disagreeable would it be for you if a Jew married into your family?" on a scale from 1("very disagreeable") to 7 ("very agreeable"). MixedJew1st is the percentage of "mixed Jews" in 1939 of first degree, with two Jewish grandparents. MixedJew2nd is the percentage of "mixed Jews" of first or second degree, with one or two Jewish grandparents. The dependent variable in columns 3 and 4 reflects attitudes toward intermarriage in general, using the average response to the same question for Jews, Turks, Italians, ethnic German emigrants, and asylum seekers. Individual controls comprise dummies for high school and university degrees, age, age², and a dummy for the sample year 2006. All regressions include only subjects with German nationality and at least two generations of German ancestors.

- ***Significant at the 1 percent level.
- **Significant at the 5 percent level.
- *Significant at the 10 percent level.

Smaller groups, in turn, have a greater need to marry outsiders because suitable inside matches are harder to find (Banerjee et al. 2009). Thus, since smaller Jewish communities were located in less tolerant towns, this channel leads to a negative association between historical intermarriage and present attitudes. In other words, where local attitudes were hostile, and the Jewish community was small, intermarriage rates *may* have been higher simply because there were not enough feasible matches for individuals of marriageable age.³ If this second channel dominates, the overall relationship will have the

² Since we analyze the persistence of attitudes at the local level, we exclude first and second generation immigrants. Keeping these in the sample (yielding a total sample size of 6,643 individuals) does not substantially change our results.

³ Even if many inhabitants in a community were anti-Semitic, only one suitable match is required for the formation of a marriage. There are many dimensions in which marriage partners can be "compensated" (i.e., by finding a much more attractive or prosperous match); this implies that some match should be possible if the willingness to

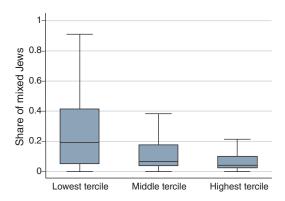


FIGURE 2. SHARE OF INDIVIDUALS FROM MIXED MARRIAGES, BY TERCILE OF JEWISH COMMUNITY SIZE

Notes: "Mixed Jews" are individuals with one or two Jewish grandparents, according to the 1939 German census. The "whiskers" show the range of the distribution from the zero to the one-hundredth percentile; the outer frame of the box indicates the twenty-fifth and seventy-fifth percentiles; and the line in the middle shows the median.

opposite of the expected sign. This can rationalize the results in Table 1.

Larger cities were more tolerant than smaller ones in several ways; in particular, they showed less anti-Semitism at the ballot box. At the same time, Jews could choose from a large number of co-religionists before having to consider gentiles as a possible match; intermarriage was correspondingly rare (Figure 2). Table 2 shows that out-marriage was particularly common in towns with small Jewish communities; as the number of Jews increased, intermarriage became increasingly rare. This pattern is true for both types of mixed marriages—those involving (in NS terminology) "full Jews" and "half Jews."

Table 2—Historical Determinants of Jewish Intermarriage

	Mixed	Jew1 st	MixedJew2 nd		
	(1)	(2)	(3)	(4)	
In(Size Jewish Comm.'39)	-0.0514*** (0.00703)	-0.0763*** (0.0132)	-0.0763*** (0.00897)	-0.0963*** (0.0129)	
ln(<i>Pop</i> .'33)	0.0393*** (0.00362)	0.0515*** (0.00680)	0.0501*** (0.00449)	0.0659*** (0.00702)	
ASVOTE ^{19C}	-0.102*** (0.0276)		-0.116*** (0.0440)		
POG^{1349}		-0.0368* (0.0200)		-0.0531** (0.0236)	
Observations	758	322	759	324	
R^2	0.309	0.296	0.337	0.357	

Notes: Standard errors in parentheses, clustered at the county level. The sample in columns 1 and 3 includes all German municipalities for which observations on "mixed Jews" are reported in the 1939 census. Columns 2 and 4 restrict the sample further to those municipalities that hosted Jewish communities before the Black Death in 1348–1350. MixedJew1st is the percentage of "mixed Jews" of first degree, with two Jewish grandparents. MixedJew2nd is the percentage of "mixed Jews" of first or second degree, with one or two Jewish grandparents. ASVOTE^{19C} is the average vote for anti-Semitic parties between 1890 and 1912. POG¹³⁴⁹ takes the value 1 if a pogrom against the local Jewish community occurred during the Black Death in 1348–1350, and 0 otherwise.

At the same time, all regressions suggest that larger cities are more tolerant toward intermarriage (after controlling for the size of Jewish communities). In addition, we find a consistent negative effect of deeply rooted anti-Semitism on intermarriage rates. We use two direct indicators—the electoral success of anti-Jewish parties, 1890–1912, and medieval pogroms for those locations with a Jewish settlement in the Middle Ages.⁶

In Table 3, we summarize the characteristics of localities by tercile of the share of "mixed Jews" in 1939. The higher the proportion of intermarriages, the smaller the town/city and its Jewish community; the lower the vote share

compromise is sufficiently high (Abramitzky, Delavande, and Vasconcelos 2011; Banerjee et al. 2009).

⁴ A regression of ASVOTE^{19C} on city size yields a strongly significant negative coefficient: A one percentage point increase in city size is associated with a 1.6 percent decrease in ASVOTE^{19C} (relative to a standard deviation of 14.4).

⁵The results reported in Table 2 are conditional on city size. When dropping city population from the regressions, the negative relationship with Jewish community size becomes even stronger. In addition, results are very similar when we use the size of Jewish communities in 1925 instead of 1939, i.e., before emigration had diminished the Jewish population in German cities (deportations began on a large scale only after 1939).

^{***}Significant at the 1 percent level.

^{**}Significant at the 5 percent level.

^{*}Significant at the 10 percent level.

⁶ When using data on pogroms in 1349, we restrict the sample to cities with documented medieval Jewish settlements. The data are from Voigtländer and Voth (2012).

Historical				Today			
MixedJ	Jew2 nd	Pop.	Size Jewish		% high	%	Jewish
Tercile	Value	1933	community	ASVOTE 19C	school	university	intermarriage
1	0.169	141,940	2,270	0.044	0.184	0.141	4.04
2	0.411	105,611	609	0.021	0.171	0.129	4.00
3	0.694	15,516	61	0.030	0.143	0.122	3.89

TABLE 3—CITY CHARACTERISTICS BY TERCILE OF HISTORICAL INTERMARRIAGE

Notes: MixedJew2nd is the percentage of "mixed Jews" of first or second degree in 1939, with one or two Jewish grandparents. ASVOTE^{19C} is the average vote for anti-Semitic parties between 1890 and 1912. The size of the Jewish community refers to the year 1939. Jewish intermarriage summarizes attitudes toward intermarriage with Jews in 264 German municipalities in 1996 and 2006, using the answer to the question "How agreeable or disagreeable would it be for you if a Jew married into your family?" on a scale from 1 ("very disagreeable") to 7 ("very agreeable").

for anti-Semitic parties; and the lower the educational level of the population today. These empirical regularities suggest that the basic relationship between mixed marriages in the past and attitudes toward intermarriage in Table 1 is not well-specified. Only one of the two determinants of intermarriage—attitudes among gentiles toward Jews—will reflect the hypothesized persistence of tolerant attitudes.

In Table 4, we examine this question empirically. Here, we use a two-stage-least-squares approach, predicting the share of mixed offspring in the Jewish population with voting results for the anti-Semitic parties in Germany, 1890-1912. In columns 1 and 2, in the first stage, votes for anti-Jewish parties are a (negative) predictor of intermarriage. The second stage demonstrates that more intermarriage before 1940, driven by less historical anti-Semitism, is associated with more tolerant attitudes toward marriages with Jews today. At the same time, we control for Jewish community size, which is strongly positively associated with favorable attitudes toward intermarriage today. This captures the fact that larger cities tend to be more tolerant toward minorities, and also hosted larger Jewish communities before World War II.8 To gauge magnitudes, we define a variable that can be more readily interpreted: A "tolerance dummy" indicating whether respondents had "quite favorable" or "very favorable" individual attitudes toward intermarriage with Jews. We then run the 2-stage specification from Table 4 (columns 1 and 2), using a Probit model for the second stage (not reported in the table). These estimates are also highly significant and indicate large effects: A one standard deviation increase of intermarriage via the tolerance channel predicts a rise in the share of Germans tolerant toward intermarriage with Jews from 15.7 percent to 25.2 percent.

In columns 3 and 4, we show that the second part of the variation in early twentieth century intermarriage behavior—driven by the need to marry outside one's own group—is strongly associated with *more negative* views of intermarriage today. ¹⁰ In other words, where Jewish communities were small and out-marriage was more of a need than a choice, its information value for attitudes among gentiles is low. Instead, more intermarriage due to smaller

Results are also very similar for ordered probit or logit regressions in the second stage, and when including dummies for German states (Bundesland). These results are available upon request from the authors.

 $^{^7}$ Note that $ASVOTE^{19C}$ does not decline continuously with each tercile of intermarriage. This is because the size of Jewish communities is a confounding factor: Intermarriage was higher in cities with less anti-Semitism and with smaller Jewish communities. However, $ASVOTE^{19C}$ was higher in smaller cities, with fewer Jews. Once we account for these opposing effects by including city size, Jewish community size, and $ASVOTE^{19C}$, the results are unambiguous (Table 2).

⁸ We obtain very similar results when controlling for both present city population and the size of Jewish communities.

⁹ Another way to calculate the effect is to look at a one standard deviation reduction in votes for anti-Semitic parties (i.e., a reduced form of our 2-stage estimates). This predicts a rise in the share of tolerant Germans from 15.7 to 17.5 percent.

¹⁰ We control for *ASVOTE*^{19C} in order to isolate the community size effect on intermarriage from the direct effect of historical anti-Semitism. The negative coefficient on *ASVOTE*^{19C} in columns 3 and 4 suggests that historical anti-Semitism is still associated with lower intermarriage today at the local level.

TABLE 4—HISTORICAL INTERMARRIAGE AND MODERN-DAY ATTITUDES

	19th Century anti-Semitism		Jewish community size in 1939	
	(1)	(2)	(3)	(4)
Second stage: Use MixedJew predic	ted by			
Predicted MixedJew1st	4.046** (2.047)		-1.743*** (0.395)	
Predicted MixedJew2 nd		3.217** (1.495)		-1.323*** (0.275)
ln(Size Jewish Community'39)	0.203**	0.215***		
ASVOTE ^{19C}	(0.0836)	(0.0829)	-1.482*** (0.486)	-1.446*** (0.480)
CONTROLS	Yes	Yes	Yes	Yes
Observations	4,524	4,538	4,524	4,538
First stage: Predicting <i>MixedJew</i> "Instrument" <i>ASVOTE</i> ^{19C}	-0.254* (0.148)	-0.312* (0.179)		
ln(Size Jewish Community'39)			-0.0348*** (0.00786)	-0.0471*** (0.00949)
R^2	0.168	0.223	0.139	0.188

Notes: Standard errors in parentheses, clustered at the municipality level. The dependent variable reflects attitudes toward intermarriage with Jews in 264 German municipalities in 1996 and 2006. The variable is the answer to the question "How agreeable or disagreeable would it be for you if a Jew married into your family?", on a scale from 1("very unpleasant") to 7 ("very pleasant"). MixedJew1st is the percentage of "mixed Jews" of first degree, with two Jewish grandparents. MixedJew2nd is the percentage of "mixed Jews" of first or second degree, with one or two Jewish grandparents. CONTROLS comprise dummies for high school and university degrees, age, age², and a dummy for the sample year 2006. The first stage regressions also include all controls used in the second stage. All regressions include only subjects with German nationality and at least two generations of German ancestors.

Jewish communities reflects less tolerant attitudes in smaller cities. As it happens, in Germany before 1939, locations with small Jewish communities—mostly rural towns—were more anti-Semitic. Today, these attitudes remain in the smaller towns, giving rise to a paradoxical relationship in the aggregate (Table 1).

III. Conclusion

When does frequent intermarriage indicate tolerance toward a minority? We examine the case of marriages between Jews and gentiles in early twentieth century Germany. Places where historical attitudes toward Jews were more negative—as reflected in higher vote shares for anti-

Semitic parties in the late nineteenth and early twentieth century—recorded fewer "mixed marriages." At the same time, locations hostile to Jews also had much smaller Jewish communities. For Jews approaching marriage age in these locations, there were few potential mates from within the community available; out-marriage rates were correspondingly higher. We document these patterns using official German statistics on "half Jews," "quarter Jews," etc. compiled by the Nazi authorities after 1933.

Remarkably, attitudes toward intermarriage are stable over more than half a century—in towns and cities where intermarriage rates between Jews and gentiles were high before 1939 because of positive attitudes among the

^{***}Significant at the 1 percent level.

^{**}Significant at the 5 percent level.

^{*}Significant at the 10 percent level.

German population, respondents today are much more comfortable with the idea of having a Jewish family member. In contrast, in places where out-marriage rates for Jews were high because the Jewish community was small, attitudes today are also sharply more critical—not least because the local population was often more hostile, reducing the number of Jews in a location.

The answer to our question—when does intermarriage reflect tolerance—is straightforward: Only the part of the variation driven by attitudes directly is valuable in explaining cultural preferences. The share of the variation reflecting the "tightness" of the marriage market can confound the result; in extreme cases—such as Germany before 1939—it may even induce an inverse correlation.

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