Und alles kam wie es kommen musste
Ultee, W.C.; Luijkx, R.

Publication date:
1996

Citation for published version (APA):
Und Alles Kam
Wie Es Kommen Musste
in Amsterdam, Berlin, Budapest, Frankfurt, Riga and Vienna?

WORC Paper 96.08.015/6

Wout Ultee
Ruud Luijkkx
UND ALLES KAM
WIE ES KOMMEN MUSSTE-
in Amsterdam, Berlin, Budapest,
Frankfurt, Riga, and Vienna?
Jewish-Gentile intermarriage 1900-1940

Wout Ultee
University of Nijmegen

Ruud Luijkx
WORC, Tilburg University

August 1996, revised version

---

Rub
v social rights
v Jews
m marriage
v religion
e Europe
t history

---

1 So many persons provided suggestions that we cannot thank each and everyone here personally. Address all correspondence to Wout Ultee, Department of Sociology, Faculty of Social Sciences, University of Nijmegen, P.O. Box 9104, 6500 HE Nijmegen, Netherlands; e-mail: w.ultee@maw.kun.nl.
Georg Hermann Borchardt, born in Berlin 1871 and died 1943 in Auschwitz, wrote a novel called Jettchen Gebert and a sequel entitled Henriette Jacoby. Published in 1906 and 1908 and bearing Borchardt's pen name Georg Hermann, both books became steady sellers and gained acclaim as finely-penciled bitter-sweet realism. The story they tell is set in Berlin 1839 and 1840. It is about the clash between two Jewish families over the marriage of Jettchen, who was raised by her uncle Salomon Gebert and his wife Rickchen Jacoby after the death of her father in 1815 in the war against France.

Jettchen's favorite uncle is the bachelor Jason Gebert. Jason wished to make his living as a painter, but his father objected. He was destined to become, like his grandfather, jeweler to the Prussian court. However, he was crippled in 1813 in the war against France, and was jailed as a demagogue in 1820. Since his release, he reads journals and puts down Hegel—humans are endowed with reason, but horses are more agreeable. Jason sees the Gebert's standing declining. His brother Ferdinand sells carriages, and his brother Salomon, who married the sister of his brother's wife, textiles. Ferdinand is a little more cultured than Salomon, and decidedly less so than Jason. Salomon praises the printing quality of a Moses Mendelssohn inherited from his father, Ferdinand laments that Nathan der Weise is not staged any more. According to Jason, only Jettchen still does honor to the Geberts. She borrows Walter Scott from the library rather than, as Aunt Rickchen would have it, Eugène Sue. However, Jason foretells that Jettchen will yield to the Jacobys.

After being introduced by Jason to Jettchen on Berlin's Königstrasse, and a dinner in Salomon's home, Friedrich Kössling—doctor of philosophy and contributor to periodicals—seeks Jettchen's hand in marriage. Then, as the seasons change, matters take their course. Jettchen's kin convenes. "He is nothing, and he has nothing." When Jason counters that

---

2 In Germany until 1934 Jettchen Geber sold 166,000 and Henriette Jacoby 102,000 copies. Jettchen Geber was translated into nine languages. An English version was published in 1924 under the title of Hetty Geybert by Allen and Unwin Ltd. in London and G.H. Doran Comp. in New York (Van Liere 1974). Jettchen Geber is currently available as a paperback from Rowohlt, Reinbek bei Hamburg.
love always has been a matter of consideration among the Geberts. Ferdinand retorts “I would rather that Jettchen does not marry, than that she takes a Christian.” Jason tells Kößling that the Geberts are proud of not having been baptized in return for a Von. Jettchen, who believes that people do not fully have it in their power to shape their own life, eventually agrees to marry the uncouth aspiring leather merchant Julius Jacoby, a cousin from Benschen in Posen who is not her cousin. At the end of Jettchen Gebert, she runs away from her wedding party, on the last pages of Henriette Jacoby she commits suicide.

To accent the condition transforming Jettchen Gebert into Henriette Jacoby, the story teller repeats the phrases “It happened, as it was bound to happen” and “And everything happened, as it was destined to happen.” In the final years of Imperial Germany, these phrases became bywords, and they remained so in the Weimar Republic. Then they sank into oblivion, to be unearthed in 1985 for an exhibition on the contribution of German Jewry to German culture since the 18th century (Grubel and Roters 1985). There it was added that during the 20th century so much happened that never should have happened.

SOCIOLoGY AND 20th CENTURY EUROPE: SUPPLEMENTING QUESTIONS ON CLASSES AND THE EXTENSION OF SOCIAL RIGHTS WITH QUESTIONS ON CULTURAL MINORITIES AND THE LOSS OF CIVIL RIGHTS

Sociology’s research on the recent past of European nations shows that the shift from voting privileges for the wealthy to universal suffrage and the ensuing power of left-wing parties (Lenski 1966), fostered the extension of social rights (Korpi 1989), smaller income disparities (Hewitt 1977), more open classes (Ganzeboom, Luijks, and Treiman 1989) and

According to Nussbaum (1987, p.410), the title of this exhibition - Jettchen Gebert's Children - turned Hermann's brain child into a symbol of the failed integration of German-speaking Jewry. The phrase “Es kam wie es kommen musste” also appears in the first chapter of Theodor Fontane's Effi Briest from 1895.
ultimately fewer strikes (Hibbs. Jr. 1978), lower labor union membership (Western 1995),
and less class-based voting (Lipset 1981, p. 505). For modern Europe, the Marxist idea of
history as strife between classes has not been upheld.

Other exceptions to the notion that recent European history is dominated by class
struggles, have received less attention from sociologists. Indeed, these occurrences support
the Hegelian idea that wars between nations decide the fate of individuals. If the study of
20\textsuperscript{th} century societies includes the relations between them, two wars stand out in which
millions of civilians and military were killed, and since societies consist of unequal classes
and of culturally central and peripheral groups, the lot of adherents to various religions
deserves attention. Early in the 20\textsuperscript{th} century, Armenians were sent on death marches
through the Ottoman empire. During World War II, Jews from all over the Continent were
deported to extermination camps built by Germany. At the end of the 20\textsuperscript{th} century, Serbs
cleansed Bosnia by executing Muslims.

In contrast to questions about the introduction of universal suffrage and the extension of
social rights, questions about the denial of civil rights to specific culturally peripheral
groups—religious, linguistic, or otherwise—received low priority in the study of
contemporary European societies.\textsuperscript{4} For example, little is known about the effects of
differences between the countries of the European Union in the legal status of immigrants
for the eventual integration of newcomers. And although research has shown that equal
political rights do not make for identical economic outcomes, discrepancies between \textit{de jure}
and \textit{de facto} positions are still something of an unproblem. For instance, sociologists
extensively studied the 1917 revolution in Russia which was supposed to do away with
merely formal freedoms, but they have written few of the existing books on the Gulag. In
addition, the explanation of the import of individual rights in industrial nations most

\textsuperscript{4} Sociology did answer questions about the denial of political rights to blacks in the United States.
As Jensen (1978) argued, the persistence of separate races in the United States is a cultural
phenomenon, since blacks and whites would have amalgamated without norms against marriages
between people differing in skin color.
influential in sociology. Marshall's (1949) theory on citizenship, suffers from several difficulties.

To begin with, Marshall's theory does not fare well in comparative research. It held that the rise of social rights in the United Kingdom after World War II was the latest phase in an evolution covering 250 years. First there were civil rights, which contributed to universal political rights, and these rights in their turn led to social rights. Yet, as Flora and Heidenheimer (1981) pointed out, social rights became established in Germany in the 1880s—that is, before political rights became universal. Secondly, Marshall supplemented the question of how rights expanded in the past, with the question of the limits beyond which the drive towards more individual rights cannot pass, but did not analyze legal reversals. A specific case was the gerrymandering in Northern Ireland from the 1920s to the 1960s which for Catholics to some extent rendered ineffective their right to vote (Whyte 1990). Lastly, Marshall's listing of civil rights appears uneven. Apart from the right to a fair trial, it includes economic rights—such as the right to own property and the freedom of occupation—plus various others. However, one civil right was not explicitly mentioned by Marshall. It is the right of a person of a certain denomination to marry a person of another faith. The 1935 Nuremberg Laws revoked that right by forbidding marriages between Jews and Gentiles.5

This paper is concerned with the right to marry someone irrespective of their religion. Its questions focus the extent to which this right remained unexploited or resulted in Jewish-Gentile marriages, and the factors influencing their incidence. To this end, time series for six European cities are studied. These towns—all but one capitals, each with a sizable proportion of Jewish inhabitants, and together varying in their timing of Jewish legal

5 Although restricting a right of Jews, this German law also limited an Aryan right. In 1967, in Loving v. Virginia, the Supreme Court of the United States of America declared that laws in 16 states prohibiting marriages between persons of different race were unconstitutional. Virginia's defense adduced an 1883 Supreme Court ruling that since both white and negro were equally punished, no discrimination took place. In 1967 the Supreme Court judged that measures which restrict the rights of citizens on account of race are unconstitutional (Time 1967).
emancipation—are Amsterdam in the Netherlands, Berlin and Frankfurt-on-the-Main in Germany, Budapest in Hungary, Riga in Latvia, and Vienna in Austria. Cross-tabulations of the faith of husbands and wives for all marriages concluded in one year, were taken from official statistics. The longest series pertains to Budapest in 1900-1943. The series for Berlin and Frankfurt continue into the period Hitler ruled as chancellor; those for Amsterdam and Vienna include some years of German occupation. The shortest series covers Riga in 1911-1938. Table 1 gives population numbers and percentages of Jewish inhabitants.

--- Table 1 about here ---

The background of this paper's research questions comprises two incompatible ideas, whose lineages were traced by Katz (1972, 1975, 1980). The first holds that the separation of Church and State and Jewish legal emancipation inexorably lead to full economic equality, social acceptance by Gentiles, and the eventual disappearance of Jewry. Voltaire, who was not so enlightened in Jewish matters, held this notion; so did Dohm, the Gentile who in 1781 coined the term Jewish emancipation, and Mendelssohn, a founder of the Haskalah. When dealing with the objection that changes were not fast and vast, this belief in an irreversible trend was supplanted with the hypothesis of gradually eroding anti-Semitic prejudices among the population at large.

The second background notion of this paper holds that resistance to Jewish emancipation in once-predominantly-Christian societies is inevitable, and that unsuccessful Gentile attempts to revoke legal equality for Jews necessarily provoke ever more tumultuous anti-Semitic outbursts. Acknowledging that anti-Semitism was not manifest in some European states, this idea was expanded by the proposition that the longer anti-Semitism remains latent in a country, the more violence will eventually occur. In 1896, Herzl evoked this belief of an immutable movement, and since the end of World War II, it has been held that

---

6 An advanced version of this opposition is formed by Goldscheider and Zuckerman's (1984) models of assimilation and transformation.
the signs of the final solution were there, in all European countries and from the beginning of Jewish legal emancipation, for anyone to see.

Although these views contradict one another, they agree that things happen as they are bound to happen. This paper studies time series bearing on both, what may be called predestinarian notions. However, it seeks a middle ground by stating hypotheses on conditions increasing or decreasing the chances of Jewish-Gentile integration and on circumstances modifying the strength and direction of trends in this likelihood. It probes these probabilistic propositions by taking the extent to which Gentiles and Jews marry each other as an indication of their integration. In this way, it addresses the question of the degree to which things always and everywhere did happen as they were bound to happen.

The following section of this paper reviews Jewish emancipation in 19th century Europe and Jewish exclusion in Europe in the first part of the 20th century. In subsequent sections, we outline probabilistic hypotheses on differences between and trends within cities and unify them by deriving them from a small number of assumptions; will present the data; and then, trends in the chances of Jewish-Gentile marriage are traced. In the last section, results are discussed by returning to the question of discrepancies between *de jure* and *de facto* positions.

---

7 From a logical point of view, these two ideas are not identical to Popper's (1957: 128) absolute trends - that is, unconditional prophecies - although there are similarities. The first idea sees legal emancipation as a condition making for economic equality and social integration, the second one sees Christianity as a ground for anti-Semitic prejudices and violence. However, both ideas deny that there are other conditions under which the trend they conditionally predict might be modified or reversed. In addition, the first one outlaws a reversal of legal emancipation, the second one forbids a demise of Christianity.
France was the first Continental country to proclaim that all its subjects have freedoms to be respected by the state. After the declaration of human rights in 1789, the question arose whether Jews were French citizens. It took two years to answer it in the affirmative (Badinter 1989). In Alsace, the debate was about the right of Jews to marry Jews. To limit the number of Jews, according to older Letters of Patent, Jews could only marry with the King's permission. Elsewhere in France, friends and foes of Jewish emancipation advocated mixed marriages (Szajkowski 1957). The full freedom to marry became legally ascertained with the *Code Civil* of 1804. It gave precedence to civil marriage above church marriage. Before 1789, Jews could not belong to guilds or occupy public office. A poll tax on Jews had been abolished in 1784.

Human rights came to the Dutch Republic in 1795. When its National Assembly debated the effects of their adoption, Amsterdam—the Dutch town with the highest percentage of Jewish inhabitants—argued against Jewish emancipation. In that city, where no barrier had been placed on the number of Jews that could marry and no Jewish tax was exacted, Jews had been excluded formally from guilds and public office. In the 1796 vote, Amsterdam lost. Another issue was whether Jewish emancipation had annulled the 1656 ban on marriages between Christians and Jews (Huussen Jr 1975, pp. 103-107). The 1796 answer was yes. In 1809, a translation of the *Code Civil* became law. Later laws, too, never regarded denominational differences as an impediment to marriage. In 1813, after the French left the Netherlands, Amsterdam's *parnassim* demanded restoration of the

---

8 Sources for the 19th century were *Jüdisches Lexikon* (1927) and *Encyclopaedia Judaica* (1972). They chart constitutions, and mostly omit laws which authorize marriages between Gentiles and Jews. The latter descriptions were taken from Ruppin (1934: 316-317). Dates of Anti-Jewish legislation in the 20th century were generally taken from the *Encyclopedia of the Holocaust* (1990).

9 In 1614, the Portuguese Jews of Amsterdam gained the right to their own graveyard on the condition that they would pay a certain amount of money for every Protestant church passed by a funeral procession. This tax was abolished in 1721.
ordinances in force before 1795. They were supported in this by the city of Amsterdam, but the request was rejected as contrary to the new constitution (De Leeuw 1987, 1988).

The Jews of Frankfurt-on-the-Main had gained equal rights in 1811, after the city's incorporation in Napoleon's Rhine Confederation. However, in 1815 the Vienna Congress affirmed the restoration of earlier anti-Jewish laws. In 1824, limits were re-imposed on the number of Jews that could marry other Jews and on the number of Jews in specific trades. Jews also remained excluded from public office. Nevertheless, no poll tax was re-instated. In 1836, occupational liabilities on Jews were removed. The revolution of 1848 failed. Jews remained barred from politics, and some constraints on marrying endured. In 1853, Jews gained the right to vote on the same terms as Gentiles, but not the right to be elected. Full emancipation was attained in 1864. Of all the cities considered here, Frankfurt was the only one to have known a ghetto in the legal sense. It was destroyed by French cannons in 1796 and officially abolished in 1824 (Heuberger and Krohn 1988).

In Prussia's capital Berlin, after Napoleon had defeated Prussia at Jena, Jews had gained equal rights in most matters. However, the 1812 edict postponed a decision about their right to public positions. After Napoleon's defeat at Waterloo, it was interpreted very narrowly. In 1822, Jews were explicitly excluded from public office. In addition, the 1812 edict did not apply to the whole of Prussia: in Posen older laws were valid. These forbade Jews to trade in leather, amongst other things. In 1833, a law was announced for Posen, dividing Jews into a small proportion of citizens and a large proportion of persons deprived of basic rights (Toury 1977). From 1812, Jews fought in the Prussian army. In the Prussian constitution of 1850, Jews gained the right to hold high positions in the army and the right to occupy other public posts. Jewish emancipation was part of the 1869 constitution of the North German Confederation and of Germany's 1871 constitution. The 1875 marriage laws of Germany, unlike the earlier ones of Frankfurt and Prussia, did not view religious differences as an impediment to marriage. In 1882, the Berliner Bewegung peaked in a petition pressing for the exclusion of Jews from public positions. It was signed by 250,000 people and rejected by parliament.
In Austria-Hungary during the 1780s, Emperor Joseph II issued various *Toleranzpatente*. They abolished a poll tax levied on Jews and limited the number of Jews that could live in Budapest and Vienna and the number of Jews that could marry in various parts of the empire; Jews also remained excluded from public office. Francis I re-introduced a poll tax on Jews. The Vienna Congress refused to upgrade the status of the Jewish population in Austria-Hungary. Restrictions on the settlement of Jews in Budapest were dropped in 1840, as well as limits on the freedom of occupation. The 1848 revolution abolished Jewish taxes in Austria-Hungary. A proposal allowing Jews to serve in public functions was adopted by the Hungarian parliament but rejected by the Hungarian King and Austrian Emperor. In Austria, the right of Jews to acquire property remained limited until 1867. That year's *Ausgleich* resulted in a new constitution for the whole of Austria-Hungary. It stated that the enjoyment of every civil and political right was not dependent on any religion whatsoever, and annulled each and every existing law incompatible with that stipulation. Hungary introduced civil marriage in 1895, thus making marriages between Christians and Jews a legal option. Until the *Anschluss* in 1938, Austrian law followed the principle of obligatory church marriage, and according to Paragraph 64 of the Austrian Civil Law marriages between Christians and non-Christians were not allowed. Although, this law did permit a *Notzivilehe*, involving at least one person with no religion.

From 1710 to 1917, Riga was part of Russia. In 1804, Czar Alexander I denied all Jews in annexed Poland the right to settle beyond the borders of former Poland. As Riga was outside the Pale of Settlement, its Jewish population remained small. In 1841, the first Jews officially settled in Riga. From 1860, Czar Alexander II granted Jews with useful occupations the right of residence throughout Russia. Jewish-Gentile marriages were forbidden. When Germany defeated Russia in World War I, Riga became the capital of independent Latvia. Jews now had equal legal status. In 1934, Ulmanis became dictator. He inclined toward Nazi Germany, curtailed the autonomy of Jewish schools, and restricted Jewish economic activity by a permit system (Bobe 1971, p. 72). In 1940, Latvia was invaded by the Soviet Union, in 1941 Germany occupied Latvia. The killing of Jews began at once—by the Germans and the Latvian Thunder Cross.
Hungary was the first European country where the legal status of Jews deteriorated during the 20th century. In 1920, a bill was passed limiting the percentage of Jews in institutions of higher learning to six. In 1929, after the League of Nations intervened, constraints were softened. In 1938, the so-called First Jewish Law restricted the percentage of Jews in certain occupations to 20, and the Second Law of 1939 to five. In 1941, the Third Jewish Law banned Jewish-Gentile marriages (Katzburg 1981). In March 1944, Germany invaded Hungary, and on March 22 a pro-German government was installed in Budapest. By early July 1944, half of all Hungarian Jews had been deported.

In Germany in 1933, shortly after Hitler became chancellor, a law was adopted authorizing the dismissal of non-Aryan civil servants. A law of September 15, 1935, deprived Jews of their status as citizens of Germany, and prohibited new marriages between Aryans and Jews. In 1938, Jews had to declare any wealth above the amount of 5,000 marks and this could be appropriated by the state to stimulate the economy. On July 1, 1943, Germany was declared judenrein. With Austria's Anschluss to Germany, marriages between Aryans and Jews became forbidden in Austria. Half of all German and two-thirds of all Austrian Jews migrated before World War II.

The Netherlands was invaded by Germany in May 1940. In Amsterdam in early March 1942, some 50 Jews were arrested who had notified the civil registrar of their intent to marry Gentiles. The Jewish Council stated in the Joodsche Weekblad of March 27, 1942 that it had been told by the German authorities concerned, that marriages between Jews and non-Jews were forbidden (Presser 1969). The first train to Auschwitz left on July 15, 1942.

One of the few cases in Nazi times of a successful protest by German Gentiles against anti-Semitic measures by their leaders, involved Jewish-Gentile marriages. On February 27, 1943, the last Jewish persons in Berlin were taken by the Gestapo and SS from their work places, and grouped according to Nazi categories. Jews married to Gentiles were locked into a building in the Rosenstrasse, to be deported to concentration camps. Word of this reached their Gentile spouses, who protested for several days in the Rosenstrasse by
yelling "Give us back our husbands." On March 6, 1943, Goebbels ordered the release of some 2,000 Jews in mixed marriages (Stoltzfus 1989).

--- Table 2 about here ---

Tables 2 summarizes this section. The first two columns pertain to the 19th century; column 1 gives the year of equal political rights, column 2 indicates the year in which people gained the right to conclude a religiously mixed marriage. The years mentioned should not be assumed to be big breaks; laws sometimes legalized already existing situations, and it is possible that they were applied gradually. However, there is no indication in any of the cities cited in this paper, that Jewish legal emancipation during the 19th century simply solemnized what had in any case already happened. To what degree people used their new right to conclude Jewish-Gentile marriages, is one of the research question in this paper, as is the occurrence of a drop in the number of Jewish-Gentile marriages before the introduction of laws forbidding them in the 20th century. Columns 3 and 4 of table 2 pertain to the 20th century. Column 3 lists the year in which the legal status of Jews began to deteriorate, column 4 gives the year in which laws against Jewish-Gentile intermarriage were introduced.

EXCLUSION AND ISOLATION, EMANCIPATION AND INTEGRATION

Given the previous section, it is obvious how some of the hypotheses to be presented in this section will run. We did not aim to formulate novel ones; we searched the literature for existing ones and interesting parallels. Instead of listing a number of disparate hypotheses, we molded what we found into one whole by deriving all our hypotheses from a limited number of assumptions. In this way, we will demonstrate that some current hypotheses only invoke certain kinds of factors. We also hope that in this way long-

---

10 Given the preponderance of historians in the literature on Jewish-Gentile relations, opportunity factors have received far less attention than motivational factors. Our systematization of current hypotheses seeks to remedy this.
standing statements may be somewhat improved. We begin with three hypotheses invoking the year in which certain laws were adopted; we then explain them as predictions on opportunities and barriers, and derive two additional hypotheses on the opportunities that people had to intermarry. Expanding the hypothesis that the behavior of individuals depends upon their opportunities into the hypothesis that inclinations are important too, we obtain two hypotheses on the aversions or wishes of Jewish persons to outmarry, and three on the desires or dislikes of Gentiles.\(^{11}\) At the end of this section, we say why we did not state certain current hypotheses. It should be clear that testing a high number of hypotheses on time series for six cities is difficult.

**The passage of time**

Our first hypothesis holds that the legal exclusion of Jews isolates them from Gentiles. This proposition seems trivial but has some substance. To begin with, the interpretation of prohibitions may alter. We will see later that Austrian marriage law after World War I was not what it seemed. In addition, it is not logically necessary that the Nuremberg laws were accompanied by a drop in the number of Jewish-Gentile marriages; perhaps these marriages were avoided before these laws were promulgated. Our *exclusion hypothesis* yields the falsifiable prediction that in the years shortly before the introduction of laws forbidding Jewish-Gentile marriages, the chances that these marriages would take place were well above nil, dropping only afterwards. They were also high before the legal status of Jews began to deteriorate otherwise.\(^{12}\)

According to another proposition, Jewish legal emancipation fosters the integration\(^{13}\) of Jews and Gentiles. Taking intermarriage as an indicator of integration and supposing that

\(^{11}\) By doing so, we execute the program of a rational-choice sociology.

\(^{12}\) Michman (1987, p.21) hints at the opposite hypothesis when stating that the Nuremberg laws “did not change much in the actually existing relations.”

\(^{13}\) We take integration and assimilation to be different phenomena. Integration involves the creation of ties of various kinds between groups (Durkheim 1897). Assimilation refers to the
it takes time before legal possibilities turn into options perceived as real by actors, it may be derived that the longer ago a city's Jews were emancipated, the more marriages between Jews and Gentiles will occur in this city. This hypothesis was assessed negatively by Katz (1973, pp. 202-205) for the 19th century. In the period after emancipation studied by Katz, even in countries where Jews were economically well-off, Jews stayed conspicuously separate, and when and where civil marriage was introduced, the chances of intermarriage remained small. However, up to now the phrasing of our hypothesis leaves open how quickly equal rights make for integration. The effect of emancipation on integration need not amount to a strong immediate off-on effect, nor need it increase evenly as time goes by. At first, the chances of integration may rise minimally, then substantially, to flatten out finally, not always at the point of full integration or random mating.\footnote{Of Hyman's (1991, p. 51) sample of 607 marriages involving at least one Jewish person concluded in various Alsacian towns during the first part of the 19th century, three were mixed. Hyman (1991, p. 4) holds that Jewish intellectuals and upwardly-striving \textit{bourgeois} were eager to integrate in society, whereas rank and file Jews were to be affected by emancipation much later. This finding tallies with general theories holding that social changes occur as silent revolutions (Inglehart 1977): long term changes in mass behavior and public opinion are the result of cohort replacement, not the outcome of period effects. Thus a more informative version of our \textit{emancipation hypothesis} holds that the impact of legal emancipation on intermarriage is strongest after some decades. It is worthwhile testing it on data for 1900-1940. It also may be wondered whether the short-term effects of emancipation will be weaker in countries where it came first and stronger in countries that adopted emancipation later.}

process of one group disappearing into another. We hold that assimilation may not only be viewed as the final phase of integration - as is often done - but sometimes (when laws forbid intermarriage) also as a preceding phase. Isolation is the opposite of integration.

\footnote{It is not logically necessary that intermarriage between a smaller and a larger group leads to the disappearance of the smaller. According to 1895 Hungarian law, persons agreeing to a mixed marriage are to state in advance the denomination of eventual children. If they did not do so, sons were given the faith of their father, daughters that of their mother.}
Yet another proposition highlights the time elapsed since Jewish-Gentile marriages became legally possible. From columns 1 and 2 in table 2, which may be said to provide the initial conditions for applying our emancipation hypothesis and our marriage-laws hypothesis, it is clear that these rankings do not coincide. If states leave marriage fully in the clerical jurisdiction—as it was at the beginning of modern times—and if the clergy refuses to marry persons of different denominations, then no religiously mixed marriage can be agreed upon. They can be contracted if states force the clergy to wed persons or if states begin concluding marriages themselves. Our marriage-laws hypothesis, already suggested by Ruppin (1934), says that the longer it has been legally possible in a city for a Jewish and a Gentile person to marry each other, the higher the chances of Jewish-Gentile marriages in this city will be.

All our statements up to now take a city as the prime unit–its laws have effects, its inhabitants are affected—and hence operate on the macro level. They may be derived from the individual proposition that persons do things they are allowed to do. If we generalize this into the hypothesis that the more opportunities people have to do something, the more likely they are to do it, and concretize this proposition again, we will arrive at two more hypotheses. They may be seen as detailing what goes on between de jure permission to intermarry and de facto changes in patterns of intermarriage.

Opportunities

According to Blau and Schwartz (1984) persons marry each other because of the opportunity they have to meet each other. Now, it is known that the Jewish inhabitants of a city tend to live in certain quarters, and Gentiles in others. Thus our hypothesis runs: the weaker the residential segregation of Jews and Gentiles is in a city, the more likely are Jews and Gentiles to intermarry. This residential-segregation hypothesis echoes the finding of Lieberson (1961) in ten big cities in the United States in 1930: an immigrant group's residential segregation limits its degree of intermarriage. If legal emancipation does not make for less residential segregation, intermarriage will not increase.
Our next hypothesis regards not only living closely together as a chance for people of different persuasion to meet and as a factor contributing to mixed marriages. The structure of a city's school system also forms a similar condition. This hypothesis puts forward that cities with separate schools for Catholics, Jews, Protestants, and pupils without a denomination, intermarriage will be less frequent than in cities with mixed schools only. In Britain, it has been held that comprehensive schooling fosters friendships between children from different social classes (Ford 1968). The almost universal nature of public schooling at the primary and secondary level in the United States supposedly heated the melting pot (Kennedy 1944). If, after emancipation, education remains de facto segregated, then, according to our educational-segregation hypothesis, Jewish-Gentile intermarriage does not increase.

Up to now, we have only considered the opportunities for persons with different denominations to marry each other. In a more elaborate theory on intermarriage, the strength of their desires or dislikes should be included (Hendrickx, Lammers, and Ultee 1991). By doing so, we adapt Katz' idea on the conditionality of the effects of legislation stipulating equal economic treatment of Jews for the occupations practiced by Jewish persons: "Legal permission may theoretically create new economic opportunities, but these must be both economically and socially attractive if motivation is to be initiated that will encourage [their] exploitation (Katz 1973, p. 182)." Thus, the hypotheses that follow specify the extent to which de jure changes have de facto effects.

Jewish tastes

Our most general hypothesis on Jewish motivation proposes that the stronger the inclination for a city's Jews to marry Gentiles, the higher the likelihood of Jewish-Gentile intermarriage.

---

15 This idea of Katz' adapts a notion of Weber's (1920). Weber held that an account of capitalism's rise is incomplete if it only involves the laws of free enterprise and free labor; the motivation of persons to use these freedoms is also important. Weber argues that this motivation in the 17th century was strongest among various Protestant sects.
intermarriage. This hypothesis only becomes interesting and testable when it is conjoined with more specific assumptions. Weber (1920, III, pp. 355 and 366) showed that parts of the *Tenach* from the period before the exile in Babylon disapprove of outmarriage less strongly than later texts. The *Halacha* also disapproves of mixed marriages. Within early 20th century European Judaism, at least two currents existed: a liberal and an orthodox tendency. In addition, apart from the Jews attending synagogues led by rabbis and prayer houses with their rebbes, there was indifferent Jewry. Assuming that orthodox opposition to intermarriage is stronger than liberal resistance and that indifferent Jewry was unconcerned about it, we derive our *orthodoxy hypothesis*: the stronger the orthodox tendency among the Jews of a city, the smaller the chances of Jewish-Gentile marriage.

Another hypothesis on Jewish desires and dislikes involves the contrast between endorsing and disfavoring Zionism. With the pogroms in Russia since 1881, the messianic utopia in Judaism became revitalized. In several parts of Europe, this led to a movement directed at the nearby return of the Jewish people to a *Judenstaat* in Palestine. Thus, the more Zionism has spread among the Jewish population of a city, the less prevalent marriages will be between Gentiles and Jews.16 We call this prediction our *Zionism hypothesis*.

**Gentile dislikes**

We have three hypotheses on Gentile likes and dislikes. The first assumes that a vote in favor of anti-Semitic parties indicates a dislike of Jews. It says that the more votes that anti-Semitic parties obtain in free elections within a city, the smaller the chances of Jewish-Gentile marriage. Paraphrasing our *anti-Semitism hypothesis*, in cities with a rising anti-Semitic vote the legal exclusion of Jews is foreshadowed in earlier lower chances of Jewish-Gentile marriage.

16 The link between Zionism and infrequent intermarriage may be tenuous. International Zionism never argued against intermarriage, although the Dutch Zionist Organization did so (Giebels 1975, p.177). The orthodox association of Frankfurt excluded from membership these Jews who were not ritually married (Heuberger and Krohn 1988, p.76).
Another hypothesis concerns the Protestant and Roman Catholic disapproval of Jews. Since Christianity provides grounds for anti-Semitism, in all our cities the likelihood of Jews and non-believers marrying each other will be higher than that of Catholics and Protestants marrying Jews. Inasmuch as Catholicism has a more elaborate belief system and more routines to police trespassers, the chances for Catholics and Jews to intermarry will be fewer than those for Protestants and Jews. Our *denominational differences hypothesis* does not deny that Luther wrote against Jews. It assumes that Catholicism practiced and justified the persecution of Jews more often than did Protestantism (Healey 1977). It does not treat all Christians alike (Lurie 1940) and details the view that Christianity was at the root of the plight of European Jewry.

Our last hypothesis on Gentile tastes and distastes pertains to the proportion of a city's population that is Catholic or Protestant. This *size hypothesis* says that in cities where Catholics (or Protestants) form a small minority, the desire of these believers to maintain their group will be strong, leading to fewer chances for intermarriage between Jews and Protestants (or Catholics). It was formulated by Karády for Protestant-Jewish intermarriage in Hungary (1987).

**Plus**

Our final hypothesis contrasts Jewish-Gentile intermarriage with Catholic-Protestant intermarriage. As a stepping stone, we state a proposition on the trend in Catholic-Protestant intermarriage. As far as we could determine, in all of this paper's cities during the 19th century marriages between Catholics and Protestants were legally possible. Analogous with our third hypothesis on laws and their year of introduction, we predict a gradual increase in Catholic-Protestant intermarriage during the first part of the 20th century. However, given the decrees of the Catholic hierarchy against outmarriage and similar rulings by Protestant synods, mating will not be random. Assuming that Catholic-Protestant intermarriage became legally allowed before Jewish-Gentile intermarriage, at any point in time the chances of Catholic-Protestant intermarriage are higher than those of
Jewish-Catholic and Jewish-Protestant intermarriage. We will call this our hypothesis comparing all religions.

**What not**

As indicated, our hypotheses must be seen as complementing each other. Although our first one taken on its own says that the longer ago Jewish legal emancipation occurred within a city, the more likely Jewish-Gentile marriages will be, this hypothesis assumes that the other factors of our theory do not change. For that reason, our theory does not predict a trend towards more mixed marriages: if residential segregation rises, the vote for anti-Semitic parties increases and Zionism spreads within a city, a trend towards less intermarriage might be found. In fact, our theory does not say anything on how these factors develop with the passage of time. It may be that technological change makes for less educational and residential segregation of Jews and Gentiles, or perhaps the opposite is true. Thus our theory remains silent on Goldscheider and Zuckerman's (1984, pp. 7-9 and pp. 80-81) question of the erosion or creation of conditions for Jewish solidarity by modern conditions.\(^{17}\)

Our theory bypasses several current hypotheses.\(^{18}\) One of them postulates an after-effect of the varying strength of Gentile opposition to Jewish legal emancipation, another long-term

---

\(^{17}\) Goldscheider and Zuckerman (1984, pp.84 and 92) misstate some of their findings when they favor the hypothesis of Jewish persistence. They speak of strong evidence for residential segregation, but do not make proper comparisons between cities and points in time. It will not do to downplay an increase in percent outmarriage by saying that, even in the 1930s, most Jews in Western and Central Europe married Jews.

\(^{18}\) Apart from those to be listed, we think of the hypotheses (1) that the more the occupational distributions of a city's Jews and Gentiles resemble each other, the higher the chances of Jewish-Gentile marriage (Karády 1985); (2) that if Jewish persons speak Yiddish at home, they are less likely marry a Gentile; and (3) that the longer ago a Jewish person's family has migrated to the city, the more likely this person is to marry a Gentile. These statements cannot be tested with the available data.
effect of the intensity with which Jews strove for emancipation. We do not think that the Jewish populations of our six cities differed that much in their support for equal rights. *Parnassim* would have been displeased to lose their power to discipline, tax, and dispense welfare. However, general Jewish animosity would have soon dissipated, since the rights to settle anywhere and take up any occupation are advantageous. Our hypothesis on the vote for anti-Semitic parties captures Gentile opposition to Jewish emancipation.

Michman (1989) asserts that the division of Dutch society into denominational pillars, makes for a relatively low Jewish-Gentile intermarriage rate in Amsterdam. We made this idea less abstract by postulating that cities differ in the prevalence of religiously segregated schools. Political parties with ties to denominations existed everywhere. Their effects, we hold, are mediated by the existence of religious schools.

A last and up to now unstated hypothesis, holds that cities where Jews form a smaller proportion of the population show a higher percentage of Jews married to Gentiles. We think this statement somewhat tautological: if the percentage of Jews is high, then that many Jews just cannot marry outside their group. This has been seen for a long time and has led to methods that discount the logical effects of group size. An older method compares actual frequencies of Jewish-Gentile intermarriage with frequencies expected on the assumption of random mating. However, this method has been criticized as failing its goal. Methods that attain their purpose involve computation of (log) odds ratios (Hout 1983). We remove the logical effects of group size on the percentage of intermarriage by applying such a method. The variable to be explained will be the odds of Jewish men marrying Jewish rather than Gentile women, compared to the odds of Gentile men marrying Jewish rather than Gentile women.

---

19 Tachauer (1913) urged this method, whereas Ruppin (1934), Goldscheider and Zuckerman (1984) and Michman (1989) spurned it, and fell back on simple percentages.
DATA

In this paper, we test our hypotheses on time series for six major European cities with a sizable proportion of Jewish inhabitants. We chose cities rather than countries on two grounds. To begin with, measures for intermarriage should refer to an actual “marriage market.” For persons seeking spouses, their city forms the pool of eligibles. In addition, the concentration of Jews in particular parts of a country makes data for a whole country less desirable. We chose major cities rather than smaller municipalities because Jews, in the countries and decades for which data are available, tended to live in big cities. We sought data for major cities with a sizable proportion of Jewish inhabitants; if they had few Jews, the statistics would be unreliable. We tried to obtain time series for as many cities as possible satisfying our requirements, but given the varying detail of their population registers, we settled for data from Amsterdam, Berlin, Budapest, Riga, and Vienna. We would have liked to include similar series for Bucharest, London, Paris, and Prague, but we did not find them. We limited our time series to the four decades before World War II, since data for a longer period were not available for most of our cities. We supplemented the Berlin numbers with data for Frankfurt-on-the-Main because the latter German city in the period we studied had a higher proportion of Jewish inhabitants than Berlin and because it was a large city.

--- Table 3 about here ---

Intermarriage statistics

Table 3 presents tables for marriages agreed upon in our six cities in 1931, crossing the denomination or religion of the husband against that of the wife. They were given the same format by collapsing confessions into four groupings: Catholic, Protestant, Jewish, Other (including no denomination). If population book-keeping is really reliable, data for Berlin 1901 include as a Jewish-Jewish marriage the union of Georg Hermann Borchardt

20 Della Pergola (1972) is the richest collection of data on Jewish-Gentile intermarriage that we know. It is not useful for our purposes since it omits for all cities (except Milan, Italy), the number of Gentiles marrying Gentiles. This collection also refers to data for Bucharest.
and Martha Heynemann. This paper's Appendix lists sources of religious intermarriage tables,\textsuperscript{21} as well as sources for explanatory variables discussed later on.

For some cities, certain tables are missing. Riga has the highest number of missing years. This series starts in 1911, skips 1919, and ends in 1938. It often pertains to periods of five years, but this is not as bad as it seems. The small number of Riga's inhabitants, might make a yearly series unreliable. A city with a somewhat lower number of missing years is Vienna. This city's tables are lacking for 1921-1926, 1930, 1933-1934, and the year of the \textit{Anschluss} (1938). The series for Vienna stops in 1941. The series for Berlin and Frankfurt show no interruptions. The Berlin series commences in 1900, and that for Frankfurt in 1901. For both cities the series end earlier than we would have liked, but the effects of Hitler's rise to power will show up in the series for Berlin which stops in 1938, and that for Frankfurt which ends in 1935 (with 1938 added). The series for Budapest breaks between 1917-1919.

Data for Amsterdam cover the full period 1911-1943. Data for 1900-1910 are estimates. For this period, data for the denomination of both spouses were not published in the format of table 3. It is known how many Jews married Jews, Protestants Protestants, etc., thus the frequencies for the various types of religiously homogeneous marriages in table 3 are known. However, in the published statistics, the number of Jewish males marrying Protestant females has been added to the number of Protestant males marrying Jewish females, etc. That is, two cell entries have been combined each time. To arrive at the frequencies for the separate cells, we took the full tables for 1911-1939 as our starting point. On the basis of the average of all 1911-1939 tables, we computed the ratio of the number of Jewish men marrying Protestant women and the number of Protestant men

\textsuperscript{21} S. XVII-XVIII of the 16th volume of the \textit{Beiträge zur Statistik der Stadt Frankfurt a.M.} says:

"Hierbei ist die verhältnismäßig hohe Zahl von 81 (Mischehen bei denen entweder der Mann oder die Frau der Konfession nach Juden waren) im Jahre 1933 bemerkenswert. Sie hängt offenbar zusammen mit Ehen, die in Erwartung rassenpolitischer Gesetze vorweg genommen worden sind. Erfreulich ist dann das starke Abfallen der Zahlen in den Folgenden Jahren auch schon vor den Nürnberger Gesetzen."

23
marrying Jewish women, etc. This ratio for the period 1911-1939 was applied to the available numbers for each year of the period 1900-1910. As a check, we applied our ratios to each available table for the period 1911-1939 and compared the trend in the actual 1911-1939 data with the trend in the estimated 1911-1939 data. These trends were virtually identical. This bestowed some credence upon our 1900-1910 numbers.

Table 3 indicates the denomination of persons at the time they married. This raises a question on what it tells about integration. It is clear that if, before marrying, persons changed their faith to correspond with that of their future spouse, this does not show up in the number of intermarriages. The same goes for those who adopted their partner's creed after they married. People convert to gain approval for their union, to avoid conflict when raising children, or for some other reason. When it is accepted that adhering to a certain religion is not necessarily a life-long trait and that religious freedom implies the right to convert, it is not worrisome that the frequencies for in- and outmarriage analyzed in this paper pertain to the time these marriages were agreed upon. On this account, it is possible that if an increase in intermarriage were to be found, intermarriage for a city has augmented only because inhabitants once converting before marriage no longer do so. However, we know of no theory that yields such a detailed prediction. Indeed, if people no longer convert before marrying, this change in itself indicates more integration.22

Whether the Viennese figures on religious intermarriage are useful for comparative research, is more difficult to answer. Given marriage laws embodying the principle of obligatory church marriage rather than obligatory civil marriage, could statistics for Vienna be likened to those for this paper's other cities? After all, if marriages between Christians and Gentiles are not allowed and people in Vienna not only convert for social but also for legal reasons, then the numbers for Vienna are off the mark to some extent. Given the legal possibility of a Notzivilehe, unions between Jews and persons without a

22 That is, mixed marriages do not indicate assimilation, but conversions do - irrespective of whether conversions occur in order to surmount legal barriers to mixed marriages or for other reasons. Honigmann (1989) shows that intermarriage figures are more stable than conversion statistics.
faith are probably marriages between Christians and Jews, and if people convert to the faith of their spouse in order to surmount legal barriers, the numbers for Gentile-Gentile and Jewish-Jewish marriages are too high.

However, the assertion that marriages in Austria between Christians and Jews were forbidden by law, should not be taken at face value. This is obvious from the pertinent numbers for 1931 Vienna in table 3: in cells where zero entries are expected, sizable frequencies are found. Indeed, this is the case in every table from 1915 onwards. As has been stated, Austria's law allowed for a Notzivilehe. Apparently, since that year, when a Christian and a Jew applied to be married under that paragraph, permission was more easily granted than before. In fact, Ruppin (1934, p. 317) states: “In Austria a mixed marriage can only take place in a roundabout way: either the Christian party to it has to leave the Church, or an official permit must be obtained, which, as a rule, is not difficult.” Ruppin does not say why it became easy to circumvent the law. However, commentaries on the Austrian Civil Law from the interbellum (Pisko 1934) make it clear that although Paragraph 64 stipulates that marriages between Christians and non-Christians cannot be concluded, this impediment to marriage is dispensable, and that according to Paragraph 83 municipal authorities decide on dispensations without interference from the judiciary. It is our conjecture that when the Social Democrats gained political power in Vienna at the start of World War I, dispensations for Jewish-Gentile intermarriage were given. We hold that the Vienna data for 1915 and later are comparable to those for this paper's other cities and may be used to ascertain integration. To some extent, the numbers for Vienna in the period 1900-1914 understate Jewish-Gentile integration.

23 That is, since 1915, in Vienna a Jewish-Gentile marriage without conversion was a real option. If couples kept following old ways around legal barriers, this does indicate a propensity to assimilate, but not a tendency to integrate. Honigmann (1989) criticized the argument that, because of higher chances of leaving their confession, Viennese Jewry assimilated faster than Berlin and Budapest Jewry. While agreeing that Viennese conversion figures are inflated because of marriage law, we hold that conversion indicates assimilation rather than integration. In this, we follow Ruppin (1934, p.334): in places and times where Jews are held in low esteem, their propensity toward conversion is strong and toward Jewish-Gentile marriages weak; when and
Residential segregation


We summarized our residential segregation data with dissimilarity indices. The higher this index, the more residential segregation; the lower, the more mixed housing. It is not prudent to compare dissimilarity indices for cities differing strongly in the number of districts (and the average percentage of a city's population living in a certain district). For that reason, we regrouped Amsterdam's 50 quarters into 11 districts. When the districts of a city became subdivided over the course of time (this happened in Budapest and Riga), we merged the new into the old ones; if a city's area increased (Frankfurt and Vienna), we deleted new districts. We corrected the 1906 Amsterdam figures by including the territory annexed in 1920.

where Jewish persons meet on equal terms, the inclination of Jews toward mixed marriages, but not toward conversion, is pronounced.

We follow the *Pax Duncana* (Massay and Denton 1988). The objections against dissimilarity indices are by now familiar, but no alternative is available for cases in which the number of districts vary from one city to another and a certain district in one city cannot be equated with a district in another city (Charles and Grusky 1995).

Our procedure for collapsing did not make much of a difference. A schema for collapsing Amsterdam's quarters into 21 districts used by Amsterdam's Bureau of Statistics in 1920, yielded for that year's Jewish-Gentile residential segregation a dissimilarity index of 53, as did our schema.
The district in Amsterdam with the highest percentage of Jews (35) was the Jodenhoek, and its quarters Jodenbreestraat, Uilenburgerstraat, and Waterlooplein were 90% Jewish. In Riga, the highest percentage (40) of Jews was found in the Maskavas, in Vienna in Leopoldstadt (30%), in Frankfurt in and around the old ghetto (Ostliche Nordstadt, 20%), in Berlin in the Mitte (including Alexanderplatz and Scheunenviertel) and in Wilmersdorf (each 10%), and in Budapest in Józsefváros (20%).

Dissimilarity indices for all cities and all years are given in table 4. All in all residential segregation was greatest in Amsterdam and least in Budapest. We rank cities after the extent Jews and Gentiles inhabit different districts in column 3 of table 5. To facilitate a test of our hypotheses against each other, columns 1 and 2 of table 5 restate data on Jewish emancipation and marriage laws from table 2. In the following, we add more columns to table 5.

According to table 4, the dissimilarity index for Amsterdam decreased. We regard the rise in 1941 as an effect of the inflow of some 10,000 Jewish fugitives from Germany into newly-built suburbs. Berlin's index rose steadily;26 Budapest's at first dropped, to stabilize in the 1920s, and to rise in 1941. We cannot ascertain a trend for Frankfurt since data for 1933 and 1939 are lacking, but a rather strong overall increase in the dissimilarity index seems likely. Riga's index increased somewhat.27 Its figure for 1920 is an unimportant

26 It is unlikely that the relocation order issued to Jews living in Berlin's wealthier quarters at the end of 1938, fully accounts for the rise in residential segregation between 1933 and 1939.
27 The index for Riga in 1935 is an estimate. In one respect, we could not bring Riga's 39 quarters for 1935 back to its earlier 12 districts. In effect the border between two districts had been redrawn in such a way that a part of a district with few Jews had been added to a district with a lot of Jews. By merging these two districts for all the years for which data were available and comparing the dissimilarity indices thus obtained with the original ones, we estimated that Riga's index for 1935 was not 49 as computed with not fully comparable districts, but 53.
exception. As a consequence of evacuations during World War I, Riga's population in 1920 was half of that in 1913. In Vienna, there was virtual stability until 1934 and a rise in segregation afterwards.

The increases or decreases in a city's residential segregation are compared in column 2 of table 6. Amsterdam shows the strongest decrease in separate living, Budapest the one but strongest. We decided to regard Frankfurt as the city where residential segregation increased most, with Berlin having the one but strongest increase. Column 1 of table 6 indicates whether the right to conclude a Jewish-Gentile marriage was introduced before 1900 or after it. The latter initial condition will be used to test a dynamic derivation from our marriage-laws hypothesis. This prediction says that in cities where people recently obtained the right to a religiously mixed marriage, the increase in Jewish-Gentile marriage in the period 1900-1940 is stronger than in a city where that right has been established for decades.

**Educational segregation**

Initial information on the segregation of pupils after their religion was taken from reference works. In Austria, Germany, and Hungary in the period studied here, most schools were religiously mixed. Catholics, Jews, and Protestants went to the same primary and secondary schools and there were special teachers for instructing pupils belonging to a certain denomination in that confession's lore. The Dutch and Latvian situation was different. In the Netherlands, until 1918, the state paid part of the costs for schools run by various denominations for their own flock, and after 1918 the full costs. In independent Latvia, the state paid for the schools of minorities such as Jews.

This evidence was checked against and somewhat expanded by school statistics (cf. Ruppin 1934, pp. 298-310, the Appendix to this paper gives the main statistical sources). In Berlin around 1900, there were no Jewish primary schools, one middle school for Jewish boys and one for Jewish girls. Later on an orthodox Jewish primary school was founded. We estimate their pupils for both periods as making up at most 15% of all
Jewish pupils in secondary education. The Philanthropin was a Jewish primary and middle school in Frankfurt, and before World War I it had some 600 pupils. There also was an orthodox primary and middle school with some 900 pupils (Arnsberg 1983, pp. 889-890). We estimate that about 30% of Jewish pupils went to Jewish schools. In Vienna at the end of the 1920s, there were some 400 municipal primary schools; in addition there were 26 Roman-Catholic, 6 Protestant, and 2 Jewish private primary schools. Of the Jewish pupils, around 5% went to a primary school of their own faith, of the Protestant pupils around 20% and of the Catholic pupils about 10%. No Jewish secondary schools existed in Vienna.

In Budapest in the early 1920s and at the end of the 1930s, of all Catholic primary school pupils some 5% went to a confessional—supposedly Catholic—school; of the Jewish pupils some 20% went to a denominational—we assume Jewish—school. However, about half of all Jewish schools were founded after 1920, so for the period before 1920, the percentage of Jewish pupils visiting Jewish schools should perhaps be put at about 10.

After Latvian independence, a school system arose with separate schools for Jewish pupils, financed by the state. This system was stipulated by clauses on minority rights in the Versailles Peace Treaty, to be supervised by the League of Nations. In the whole of Latvia, at the end of the 1920s some 85% of all Jewish primary school pupils went to Jewish schools. The language of instruction in somewhat less than half of all Jewish schools was Yiddish, one third Hebrew, one sixth German, and one twelfth Russian (Mendelsohn 1983, pp. 250-251). Although we lack details for the period that Latvia was part of Russia, we assume that Jews attended separate primary schools.

In Amsterdam in 1900, there were two Jewish primary schools and no Jewish secondary schools; in 1930 there were four Jewish primary schools and two Jewish secondary schools. We estimate that decidedly less than 10% of all Jewish pupils attended Jewish schools, and all others went to public schools. However, next to public schools that mixed the denominations, there existed in Amsterdam separate primary and secondary schools for Catholics and for Protestants. The percentage of primary school pupils attending these so-called special schools varied over the course of time. In 1880, it was 50, in 1890, it
dropped to 40, in 1900 to 30, in 1910 it remained at 30, and in 1920 it had fallen further to 25. Then, as a consequence of a new law that financed the full costs of special schools from state funds, the percentage of pupils in special primary schools rose again. In 1930, it was 40, and in 1940, it became 50. For this reason, the schools of Amsterdam were more segregated than those in Berlin, Budapest, Frankfurt, and Vienna. However, the extent of religious segregation decreased in Amsterdam during most of the period considered. Note, that because of a difference of some ten years between leaving primary school and marrying, most of the marriages studied in this paper will not show any of the presumed effects of the law that so strongly pillarized Dutch society. In column 4 of table 5, we rank the six cities of this paper after the extent to which their schools segregated or mixed Jewish and Gentile pupils.

Orthodoxy

We found no study comparing the strength of orthodoxy within Judaism in various European cities or states in the first decades of the 20th century. Breuer (1986, p. 6) has remarked that for Germany the percentage of Jewish persons that were orthodox or liberal, is not available. However, Lowenstein (1976, p. 48) pointed to substitutes such as the presence of a functioning mikve in a Jewish congregation and the number of orthodox rabbis in some regions as a percentage of all rabbis there. By focusing on the number of synagogues and the number of synagogue seats, we take our lead from Lowenstein's idea.

It is safe to assume that, of the cities considered here, orthodox Judaism was strongest in Riga. The influx of Hassidim from the Pale offset the effects of German liberalism. According to Vestermanis (1995, p. 25), there were in Riga in 1907, for some 25,000 Jews, six large synagogues and six prayer houses. In the 1930s, there were seven synagogues and 27 minyanim for 40,000 Jews.

Berlin Judaism was once the most liberal of Europe. Frankfurt Jewry was at one time commonly regarded as more orthodox than Berlin Jewry. The latter is corroborated by other indicators: of the fourteen synagogues belonging before 1933 to Berlin's Jewish
community, four were orthodox; for 170,000 Jews there were 21,000 seats, some 20% of these seats was in orthodox synagogues (Bendt, Galliner, Jersch-Wenzel, and Jersch 1987, pp. 94-152). In Frankfurt, two of the four communal synagogues were orthodox. These four synagogues held 4,000 seats for 28,000 Jews (Heuberger and Krohn 1988, p. 160). Half the seats in Frankfurt's communal synagogues were in orthodox ones.

In Berlin and Frankfurt, debates on rites fostered the formation of orthodox associational synagogues and private prayer houses as alternatives to communal synagogues. In Amsterdam, there were no separate orthodox and liberal synagogues. In 1900 (1938) the nine (seven) synagogues of Amsterdam totaled 4,800 (4,500) seats for 60,000 (70,000) Jews (Meijer 1969, p. 42). For Amsterdam, the number of Jews per communal synagogue seat was about 14, for Berlin 8, and for Frankfurt 7. We therefore ranked Amsterdam as less orthodox than Berlin. Although perhaps Berlin Jewry was the most liberal of Europe, Amsterdam Jewry, with its large proletariat, had become most distanced from orthodox Judaism. Note that the omission of associational synagogues and private prayer houses in our exercise barely affects our conclusion about Amsterdam Jewry compared with Berlin and Frankfurt Jewry. If the number of seats in Berlin and Frankfurt was higher than assumed, since Amsterdam had few non-communal places (Van Agt 1974), the differences between Amsterdam and these two cities become even larger.

In Vienna at the end of World War I, six of the seven communal synagogues were liberal. All the communal ones together held 5,000 seats (for 200,000 persons), or 40 persons per seat. Thus Vienna would appear less orthodox than Amsterdam. However, Vienna counted sixteen associational synagogues, three of them orthodox. It also had 81 private prayer houses, almost always orthodox. Associational synagogues were decidedly larger than private prayer houses. All in all, there were 10,000 liberal seats and a more or less equal number of orthodox places for the approximately 200,000 Jewish inhabitants of Vienna, or one seat per 10 Jewish persons. In 1936, there were 10,000 liberal and 19,000 orthodox places for 175,000 Jews, or one seat per six Jewish persons (Freidenreich 1991, pp. 119-120). These figures say that Vienna's Jews were more orthodox than Amsterdam's Jews.
Since a lot of Jews left Galicia during World War I, it is not surprising that in Vienna the proportion of orthodox Jews increased.

As already indicated, places in associational synagogues and private prayer houses were not included in the Berlin and Frankfurt frequencies. Therefore, to bring Vienna fully into our grading, our figures on the number of Jews per seat in Berlin and Frankfurt must be revised. Before the Kristallnacht, Berlin had somewhat less than 100 associational synagogues and private prayer houses (Bendt, Galliner, Jersch-Wenzel, and Jersch 1987, p. 92). Frankfurt had some forty private prayer houses and one (orthodox) associational synagogue, the latter holding 2,000 seats for an association comprising 15 % of all Frankfurt Jews (Heuberger and Krohn 1988, pp. 166-167). For Frankfurt, dividing its number of Jews by the number of seats in the four communal synagogues plus one associational synagogue, we arrive at a figure of 4. Assuming on average 100 places in the 100 non-communal synagogues in Berlin, we obtain a figure of 5. This leads us to regard the Jews of Vienna, with a figure of 6 or more Jews per seat, as less orthodox than the Jews of Berlin and Frankfurt.

Freidenreich (1991, pp. 117 and 121) estimated that a small 20 % of Viennese Jews were orthodox. The election returns for the Viennese Kultusgemeinde formed the basis for this guess. This percentage may be compared with that of about 30 for Frankfurt. After all, if there are 2,000 seats in an associational orthodox synagogue for 15 % of all Frankfurt Jews plus 2,000 seats in two communal orthodox synagogues, a total of 30 % cannot be far off the mark.

In 1869, the rabbis and laymen at the Jewish Congress of Hungary split into two groups of equal size. There were a few persons who did not want to choose between orthodoxy and what was termed neology; they were called the status quo. In 1920, almost 90 % of Budapest's Jews were neolog, and 10 % orthodox (László 1969, p. 142 and pp. 150-151). This makes Budapest Jewry less orthodox than Viennese Jewry. Our resolution to this effect is more or less confirmed by other figures: in 1925 Budapest, with the same number
of Jews as Vienna, officially had 14 synagogues and 25 prayer houses. Gruber (1994, p. 152) gives a total of 125 synagogues and prayer rooms for Budapest.

This leaves us to grade Amsterdam and Budapest Jewry after orthodoxy. If there were seven official synagogues and a couple of private prayer houses for 70,000 Jews in Amsterdam, and a total of 125 official and private places of worship for 215,000 Jews in Budapest, then Amsterdam may be regarded as less orthodox than Budapest. In column 5 of table 5, our six cities are ranked after the degree of orthodoxy of their Jewish inhabitants.

**Zionism**

To gauge Zionist support among Jews in Amsterdam, Berlin, Budapest, Frankfurt, Riga, and Vienna, we gathered for Austria, Germany, Hungary, and the Netherlands, the number of shekel payers to the World Zionist Organization in the early 1920s.\(^{28}\) Austria in 1922 (1924) had 28,230 (5,468) payers, Germany 18,145 (20,847), Hungary 600 (1,513), Latvia 11,608 (9,053), and the Netherlands 3,197 (1,784). Having scrutinized the numbers, we consider that the Hungarian ones deserve comment. Under the Friedrich Decree from 1921, the bylaws of any organization had to be approved by the authorities. After pressure from the World Zionist Organization, the Hungarian Zionist Organization gained this consent in 1927, but pending permission activity was at an ebb. In 1932 (1934) there were 1,750 (1,757) Hungarian shekel payers.

After collecting and checking these data, we divided the number of shekel payers in a country by its number of Jewish inhabitants. Latvia proved to be the state where Zionism

---

\(^{28}\) We did not chose figures from years before the First World War because Latvia at that time was part of Russia, which would make for missing data. We chose figures for the early 1920s because those for some countries in later years were quite fraudulent. For the same reason, we choose figures for off-Zionist Congress years. Michman (1989, p.13), when searching for indications of
was strongest, Hungary that where it was weakest. Dutch Zionism was weaker than German Zionism, and the latter weaker than Austrian Zionism.\textsuperscript{29} We assumed the ranking of our cities after their support for Zionism to be the same as that of the countries of which they are a part, and surmised Zionist support in Frankfurt to be stronger than in Berlin and weaker than in Vienna. Column 6 of table 5 contains this ranking.

\textbf{Anti-Semitism}

Jewish emancipation in Austria, Hungary, and Germany in the 1860s, caused a reaction (Katz 1980). Of our cities, the politics of Vienna before World War I was the most anti-Semitic. Although the Austrian emperor twice refused to appoint Lueger—who opportunistically opposed Jewry—as mayor of Vienna, he consented in 1897. Lueger stayed in power until his death in 1910.

During the first decade after World War I, anti-Semitism was strongest in Hungarian politics. Jews were held responsible for the Red Terror of 1919, and shortly after the White Terror. Jews were punished by a \textit{numerus clausus} for the universities. In the 1926 elections for the National Council, the party most in favor of this law got 18% of the Budapest vote. This percentage was 21 in 1931 and 26 in 1935. The successor to this party in the 1939 elections was the Party of Hungarian Life, and it gained 33% of the vote in support for Zionism, while repeating the usual criticism of the number of shekel payers, stops short of regarding the numbers of early 1920s shekel-payers as useful.

\textsuperscript{29} Our ranking of countries after the number of shekel payers in the first years after the first World War accords fairly well with the contribution to the Jewish National Fund per Jewish inhabitant of a country in 1910 and the first part of 1911 (and in the second part of 1911, 1912, and the first part of 1913): Austria 10.5 (18.9) German Pfennig, Germany 13.8 (33.2), Hungary 1.6 (1.8), and the Netherlands 8.4 (18.6) Pfennig.

34
Budapest. The more anti-Semitic Arrow Cross Party, which was forbidden to take part in the 1935 elections, polled 25% of the Budapest vote in 1939.\footnote{As a consequence of the Second Jewish Law, about half of all Budapest Jews lost the right to vote because they could not prove that they or their parents had been living continuously in Hungary since 1867 (Katzburg 1981, pp.158-159).}

Given the singularity of the Kristallnacht, which bypassed neither Berlin nor Frankfurt, political anti-Semitism in the 1930s was strongest in Germany. In 1923, the leader of the National-Socialist Party attempted a \textit{putsch} and failed. In the 1926 elections for the \textit{Reichstag}, this party obtained three percent of the vote, 18% in the 1930 elections, about 38% in those of July 1932, and some 32% in November 1932. The vote for the Swastika was stronger in Frankfurt than in Berlin. The ‘crooked cross’ in July 1932 took 29% of the Berlin vote and 39% of the vote in Frankfurt (Pulzer 1992, pp. 300 and 314).

In Austria during several \textit{Reichsrat} elections held in the 1920s, various pro-German parties gained some 15% of the vote. In Vienna in the 1930 \textit{Reichsrat} election, the sister party of the German National-Socialists obtained 10% of the vote, and in the \textit{Landsrat} elections of 1932 about 17%. This party, which campaigned against Jews and an existing international treaty forbidding Austria to join Germany, became outlawed in 1933. A \textit{putsch} by some of its members failed in 1934, but Chancellor Dollfuss was killed in it.

The early emancipation of Dutch Jewry provoked no political reaction. In the 1935 provincial elections in the Netherlands, a National-Socialist party gained eight percent of the nation-wide and 11% of the Amsterdam vote. It was the first time such a party had won seats. The elections for national parliament in 1937 gave this party four percent. In these elections, six percent of the vote in Amsterdam went to this party. In the 1939 provincial elections, it polled six percent of the vote in Amsterdam, and in the 1939 municipal elections in this city seven percent (De Jonge 1968, pp. 101, 127, and 153).

The 1922-1934 Latvian Parliament consisted of 100 deputies and some 20 parties. Laserson (1971, pp. 163 and 185) states that Ulmanis, when committing the 1934 \textit{coup}
d'état making him dictator, was Prime Minister and leader of the Farmers' Union. Its open and black anti-Semitism had been indicated in Latvian Parliament in 1928 by the Jewish representative Nurock. The German Bloc also had an anti-Semitic tendency (Laserson 1971, pp. 162 and 171). It may be supposed that the parties of the Right Wing were more anti-Semitic than the Farmers' Union. We estimated the anti-Semitic vote in Riga on the basis of the classification of party names in Bilmanis (1951, pp. 342-343) and the results for Riga of the four interbellum elections for Parliament. We arrived at 20% for the Right Wing plus the Farmers' Union plus the German Bloc. In 1927, a putsch by the fascist Thunder Cross failed (Laserson 1971, p. 143) and led to a ban on this movement.

Data on political anti-Semitism around 1930 are summarized in column 7 of table 5. Table 6, column 3 gives the ranking of our cities after the increase in the support for anti-Semitism the period from 1900 to 1940.

Catholic and Protestant minorities

From table 3 it may be gauged that Protestants formed a small minority in Budapest and Vienna only. In fact, in the period considered in this paper, about 20% of Budapest's and some five percent of the Viennese population were Protestant. Protestants were the majority in Amsterdam, Berlin, Frankfurt and Riga. In Berlin and Riga Catholics formed some ten percent of the population and constituted the majority in Budapest and Vienna.

JEWISH-GENTILE INTERMARRIAGE ASCERTAINED BY LOG ODDS RATIOS

To measure the degree of intermarriage, we computed (log) odds ratios. For a 2*2 table, cross-classifying the denomination of husbands (Jewish or Gentile) against that of their wives (Jewish or Gentile), the odds ratio is computed as the ratio of the odds of a Jewish man marrying a Jewish woman (a) instead of a Gentile woman (b) and the odds of a Gentile man marrying a Jewish woman (c) instead of a Gentile man (d). The log odds ratio
is then: \( \log\left(\frac{a/b}{c/d}\right) \). A log odds ratio of zero indicates, as far as denomination goes, random mating. We will present three-year averages of the log odds ratios. A lower figure in a table or a downward sloping line in a graph indicates more intermarriage, and a line that goes up or a higher figure indicates less intermarriage.\(^{31}\)

In order to test our hypotheses on Jewish-Gentile marriage as severely as possible, we determined trends in log odds ratios for Jewish-Protestant, Jewish-Catholic, and Jewish-Other weddings separately rather than trends in one overall measure. Figure 1 gives trends for Jewish-Protestant marriages, figure 2 for Jewish-Catholic, and figure 3 for Jewish-Other marriages. We deal with intermarriages in this order to shrink statistical quirks. In most cities, there are more Protestants than Catholics, and more Catholics than Others.

"Figures 1, 2, and 3 about here --"

The exclusion hypothesis

Our exclusion hypothesis holds that Jewish-Gentile intermarriage did not decrease before laws forbidding it were introduced in the 1930s or 1940s, nor before the legal position of Jews began to deteriorate otherwise. Its incidence only decreased afterwards. Columns 3 and 4 of table 2 give the relevant initial conditions for applying this hypothesis. The various years it stipulates, have been marked in table 7. This table gives the available log

\(^{31}\) No answer is possible to the question of how low or high the log odds ratio must be to say that there is little or much intermarriage. This question postulates unspecified points of reference. However, it may be useful to compare Jewish-Gentile intermarriage in the interbellum in Europe with black-white intermarriage in the contemporary United States. From Kalmijn (1993, p.131, table 2), it is possible to compute log odds ratios for 33 states reporting marriage license data to the National Center for Health Statistics in 1970-1974 and 1983-1986. These log odds ratios are 11 and 9 respectively. According to figures in Della Pergola (1972, p.40), the log odds ratio for Jewish-Gentile intermarriage in Milan for 1934-1936 is 6. For 1937-1940 it is 7, and for 1940-1945 it amounts to 8.
odds ratios for each of our six cities for each year in the period 1930-1943. These figures are not three-year averages, but actual ones for one specific year.\footnote{It may be asked how it is possible that Jewish-Gentile intermarriage occurred after it became forbidden (not all odds ratios for these years indicate complete closure). To begin with, the laws applied a racial definition of Jews and Aryans, whereas our tables apply a denominational definition. In addition, dispensations were granted (for instance in Budapest).}

In table 7, we see for Amsterdam no decrease in Jewish-Protestant marriage before the German occupation of the Netherlands, no decrease in 1940, and a strong decrease in 1941. Early 1942, Jewish-Gentile weddings became forbidden in Amsterdam, and Jewish-Protestant marriage decreased very strongly for 1942 and 1943. Jewish-Protestant marriage remained stable in Berlin in 1930-1933, but decreased drastically from 1934 on. In Frankfurt Jewish-Protestant marriage remained stable in 1930-1933, to fall sharply in 1934 and later years. Thus, intermarriage decreased before the introduction of the Nuremberg laws in 1935, but not before Hitler became Chancellor in 1933. The level of Jewish-Protestant marriage in Budapest was stable before the introduction of the First Jewish Law of 1938, and decreased from 1938 on, with a very severe decrease after Jewish-Gentile marriages were forbidden in 1941. In Vienna, Jewish-Protestant marriage began to decrease after the Anschluss, not before it. Jewish-Protestant marriage in Riga was stable.

Our hypothesis on actual Jewish-Gentile intermarriage shortly before and after the introduction of laws forbidding them, may also be tested against the figures for Jewish-Catholic intermarriage in table 7. In these instances, almost the same results are obtained. We find one difference: the extent of Jewish-Catholic intermarriage began to diminish in Amsterdam not in 1941, but in 1940. In addition, are the high figures for 1936 and 1939 statistical wobbles? The figures for Jewish-Other intermarriage in table 7, do not contradict these impressions, but strengthen them. All in all, the part of our exclusion hypothesis holding that Jewish-Gentile intermarriage did not decrease before the adoption
of laws forbidding it, must be rejected. The part stating that it did not diminish before the legal status of Jews began to decline in other respects, is upheld—the extent to which will be discussed later in this study.

The emancipation hypothesis and the intermarriage-laws hypothesis

We now move on to our hypotheses which proposes that Jewish emancipation in the 19th century occasioned a trend towards more Jewish-Gentile intermarriage, and predict a ranking of cities on the extent to which Jewish-Gentile intermarriage agrees with their ranking after the year Jews were legally emancipated. When testing these hypotheses, we disregard data for the years since the legal status of Jews first worsened in the 20th century.

Figure 1 shows that a trend towards more Jewish-Protestant intermarriage occurs in all of our cities. During World War I, a temporary increase in Jewish-Protestant intermarriage took place. In the period before this war, the trend towards more Jewish-Gentile intermarriage in Amsterdam, Berlin, Budapest, and Frankfurt appears stronger than in the period after it. The level of Jewish-Protestant marriage appears stable in Berlin in the 1920s. We add that it is not possible to represent in figure 1 the fact that there is complete closure (no Jewish-Protestant marriages at all) for Vienna in 1900-1914.

In figure 1, the log odds ratio for Amsterdam decreased from 9 to 5 and that for Budapest from 7 to 5. This measure for Berlin dropped from 7 to 6 and for Frankfurt from 8 to 7. For Riga, it decreased from 12 to 10, and for Vienna from complete closure to 8. The ranking of our cities from a strong to weak inclination to Jewish-Protestant intermarriage is Budapest-Berlin-Frankfurt-Amsterdam-Vienna-Riga. This grading carries one amendment: around 1930 more Jewish-Protestant intermarriage occurred in Amsterdam than in Frankfurt. We enter the ranking of our cities after the extent that Jews and Protestants marry each other, as column 1 into table 8.

-- Table 8 about here --
Figure 2, which depicts Jewish-Catholic intermarriage, again shows strong trends towards more mixing. There are two exceptions: Jewish-Catholic intermarriage numbers appear stable in Berlin and Frankfurt in the 1920s. The log odds ratio for Riga until some years after World War I is not represented in this figure, because there was complete closure for this period. The same goes for Vienna in 1900-1914. Amsterdam this time has a drop in the log odds ratio from 9 to 7, Berlin from 8 to 7, Budapest from 7 to 5, Frankfurt from somewhat above to a little below 8, Riga from complete closure to 11, and Vienna witnesses a fall from complete closure to 8. All in all, figure 2 furnishes the same ranking of cities as figure 1. From 1919 onwards, Amsterdam shows more Jewish-Catholic intermarriage than Frankfurt, and, after 1931, more than Berlin. The grading of our cities after the degree to which Catholics and Jews marry each other, is presented in column 2 of table 8.

Figure 3 for Jewish-Other intermarriage is a bit blurry. This is not surprising given the low percentage of Other persons in our cities. This percentage is lowest in Budapest; according to table 4, it still was a bit above two in 1931. This time the log odds ratio for Riga until some years after World War I is not represented. The line for Amsterdam presents a strong trend towards more marriage between Jewish and Other persons (the log odds ratio decreases from 9 to 6), that for Budapest a weaker one (this measure goes from 7 to 6). No trend can be discerned for Berlin and Frankfurt (both log odds ratios around 6). In Riga, Jewish-Other intermarriage increases (the log odds ratio drops from complete closure to 9). The line for Vienna indicates a trend towards less Jewish-Other intermarriage (the log odds ratio rises from 3 to 6). The last finding is not surprising given Austrian law on Jewish-Gentile intermarriage at that time. On the whole, Riga has the lowest intermarriage between Jews and Others. Amsterdam the lowest but one. Berlin, Budapest, and Frankfurt are more or less on a par. Of these cities, before World War I the chances of marriage between Jews and Others were lowest in Budapest and highest in Berlin. After World War 1, Budapest had the highest chances and Frankfurt the lowest. On the whole, Frankfurt had less Jewish-Other intermarriage than Berlin. Immediately before 1933, Jewish-Other intermarriage was more prevalent in Amsterdam than in Berlin and Frankfurt. We sort our cities after their overall extent of Jewish-Other marriages in column 3 of table 8.
Comparing columns 1 to 3 of table 8, the similarities are more striking than the differences. There are two exceptions, and these involve Jewish-Other marriages. The high incidence of this type of intermarriage in Vienna (compared with Catholic-Jewish and Jewish-Protestant intermarriage) can be accounted for by the special nature of Austrian marriage laws. We ascribe the relatively low incidence of Jewish-Other intermarriage in Budapest to the very low percentage of Other persons there. All in all we hold that figures 1, 2, and 3 provide similar pictures. Jewish-Gentile intermarriage was strongest in Budapest, less strong in Berlin, and even less strong in Frankfurt. Jewish-Gentile intermarriage in Amsterdam was weaker than in Frankfurt, weaker still in Vienna, and weakest in Riga. Jewish-Gentile intermarriage increased most in Amsterdam, in the early 1930s becoming more widespread than in Berlin and Frankfurt. We enter the rating of our cities after overall Jewish-Gentile intermarriage as column 8 into table 5. Table 6, column 4 compares our six cities after their increase or decrease in Jewish-Gentile intermarriage.

To test the ranking of cities predicted by our emancipation hypothesis, we compare columns 1 and 8 in table 5. Berlin, Frankfurt, Riga, and Vienna are predicted correctly, but Amsterdam and Budapest are three ranks off the mark. Thus, this hypothesis is not upheld. Does our marriage-laws hypothesis perform better? That hypothesis maintains that the ranking of our cities on their extent of Jewish-Gentile intermarriage coincides with their ranking on the year Jewish-Gentile marriages became legally possible. A comparison of columns 2 and 8 in table 5 provides a test. This time, only Riga and Vienna are predicted correctly, Berlin and Frankfurt almost correctly, and Amsterdam and Budapest three places off the mark. That is, our marriage-laws hypothesis predicts worse than our emancipation hypothesis.

The anti-Semitism hypothesis

Which of our other hypotheses does account for the Amsterdam and Budapest anomalies? In this respect, it will not do to invoke our anti-Semitism hypothesis as providing the capricious intervening factor. According to column 7 of table 5 Amsterdam had the lowest
anti-Semitic vote and relatively little Jewish-Gentile intermarriage, whereas Budapest experienced relatively strong anti-Semitism and a relatively strong propensity towards Jewish-Gentile intermarriage. In addition, if anti-Semitism is that important, Riga is way out off line. Our hypothesis on this Gentile dislike as an intervening factor fails.

The orthodoxy and the Zionism hypothesis

How do our hypotheses on Jewish preferences as intervening factors fare? Our orthodoxy and Zionism hypotheses do away with the exception of Budapest. After all, Budapest Jewry was least supportive of Zionism and one but least orthodox. However, according to columns 5 and 6 of table 5, Amsterdam remains an outlier on account of the ritual indifference and weak Zionism of its Jewish inhabitants. Amsterdam Jewry was the least orthodox of all our cities, and the city one but least in favor of Zionism. Predictions made with these hypotheses for our other cities, are less of the mark.

Segregation hypotheses

We hold that the best explanation of the according to our marriage-laws hypothesis unexpectedly limited Jewish-Gentile intermarriage in Amsterdam and the on account of this proposition surprisingly high Jewish-Gentile intermarriage in Budapest is provided by our residential-segregation hypothesis. Of our six cities, Amsterdam has the highest residential segregation and Budapest the lowest. The hypothesis that residential segregation is the most important factor intervening between the introduction of laws allowing for Jewish-Gentile marriages and the actual prevalence of these marriages, is confirmed by other information in table 5. Residential segregation was lowest but one in Berlin, and highest but two in Vienna and highest but one in Riga. Of the rankings in columns 3 to 7 in table 5, the ratings in column 3 (for residential segregation) and column 6 (for Zionism) accord most with the order in column 8 of this table.33 However, the Zionism hypothesis does not account for Amsterdam as an exception to out
intermarriage-laws hypothesis. Perhaps extensive Jewish-Gentile educational segregation in Amsterdam contributed to Amsterdam's exceptionally low Jewish-Gentile intermarriage, but educational segregation was weaker in Berlin and Vienna than in Budapest.

**Trends in intermarriage explained by residential segregation?**

Column 4 of table 6 ranks our six cities after the increase or decrease in Jewish-Gentile marriage in the period from 1900 until the early 1930s. Which of our hypotheses accounts for these changes? Does our *residential-segregation hypothesis* in this case yield to best fit between predictions and findings too?

We hold that the strong increase in Jewish-Gentile marriage in Riga and Vienna during the first three decades of the 20th century is to be explained by the recent introduction of laws allowing for this type of marriage (compare column 1 of table 6). To explain the - compared with Amsterdam and Budapest- weak and sometimes absent trend towards more Jewish-Gentile marriage in Berlin and Frankfurt in these thirty years, our anti-Semitism hypothesis might be invoked (column 3 of table 6). However, Berlin and Frankfurt are not only the cities with the strongest growth in political anti-Semitism, they also are the towns where residential segregation increased most (column 2 of table 6). In this case, two hypotheses finish ex aequo.

To decide between the anti-Semitism and the residential-segregation hypothesis, we look at the exact timing of changes. To begin with, political anti-Semitism was to rise in Berlin and Frankfurt in the second part of the 1920s only. This change cannot explain stability in Jewish-Gentile marriage in these cities during the first part of the 1920s. Our residential segregation hypothesis does so, since living in separate quarters increased in Berlin and Frankfurt between 1910 and 1925 (table 4). In addition, in Amsterdam residential segregation decreased in the 1920s (again table 4), with Jewish-Gentile marriage on the

---

33 We do not think it wise to present Spearman correlations nor Pearson correlations.
rise there in this interval. Finally, anti-Semitism increased in Budapest in the early 1920s, so if our anti-Semitism hypothesis is applicable to this city in this period, Jewish-Gentile intermarriage should have decreased. However, it increased, whereas residential segregation remained stable (once more table 4). These findings taken together make us prefer the residential-segregation hypothesis above the anti-Semitism hypothesis.

Three additional hypotheses

This leaves us to test three more hypotheses. For these purposes we present figure 4, depicting trends in Catholic-Protestant marriage by way of three-year moving averages. We also regroup the lines in figures 1 to 4 into six graphs, each with four lines for one city only. Those results are given in Figure 5.

Our denominational differences hypothesis says that the propensity towards Jewish-Catholic intermarriage is weaker than that towards Jewish-Protestant intermarriage, and the chances of Jewish-Protestant intermarriage lower than those of Jewish-Other intermarriage. We here assume that in our data, Other persons mostly are persons without a denomination.

According to figure 5, of the three types of intermarriage just mentioned, Jewish-Catholic marriage is least widespread in Amsterdam, Berlin, Frankfurt, and Riga; Jewish-Other marriage is strongest in Amsterdam, Berlin, Frankfurt, Riga, and Vienna. This more or less confirms our hypothesis. In Budapest, Jewish-Other marriage is least, and Jewish-Catholic marriage most prevalent; in Vienna Jewish-Protestant marriage occurs most infrequently.

Our size hypothesis says that if Protestants form a small minority in a city, the extent of Jewish-Protestant intermarriage will be smaller than in cities where Protestants constitute the majority. This hypothesis might explain the, according to our denominational
differences hypothesis, exceptionally low Jewish-Protestant intermarriage in Vienna. In addition, in Budapest Jewish-Protestant marriage is less prevalent than Jewish-Catholic marriage.

Our size hypothesis also maintains that if Catholics (Protestants) constitute a small minority, their tendency towards marrying Protestants (Catholics) will be smaller. We found some evidence for this in our data. Table 3 shows that Catholics are a smaller majority in Berlin than in Frankfurt. We have demonstrated that Catholics and Protestants were more likely to marry Jews in Berlin than in Frankfurt. In support of the size hypothesis, figure 4 makes it clear that Catholic-Protestant marriage is stronger in Frankfurt than in Berlin. In addition, of all our six cities, the percentage of Protestants is lowest in Vienna. According to figure 4, in Vienna Protestants and Catholics less likely marry each other than in our five other cities. Contrary to the size hypothesis, this type of intermarriage is most prevalent in Budapest.

Our hypothesis comparing all religions predicts a trend towards more Catholic-Protestant marriage. Figure 4 indeed suggests a trend towards more Catholic-Protestant intermarriage. However, it is not pronounced. Catholic-Protestant marriage gradually increases in Berlin, Budapest, Frankfurt, and Riga. In Berlin and Frankfurt it also grows during World War I. These findings fit. However, in Amsterdam the trend towards more Catholic-Protestant marriage stops after World War I, to be followed by a trend towards less intermarriage. In Vienna, Catholic-Protestant marriage decreases only after World War. Those results do not fully accord with our hypothesis comparing all religions.

Budapest has log odds ratios for Catholic-Protestant marriage below one, Frankfurt somewhat above 1, Berlin just under 2, Amsterdam above 2, Vienna between 3 and 4, and Riga around 5. These differences are robust; in figure 4 only the lines for Riga and Vienna cross one another. Figure 5 demonstrates that in all years and all places each form of Jewish-Gentile intermarriage is less widespread than Catholic-Protestant marriage. There is but one exception: Jewish-Other intermarriage is more widespread than Catholic-Protestant intermarriage until 1920 in Vienna. Given Austrian marriage laws, this finding
is not unexpected. These findings confirm our hypothesis which proposes that Jewish-Gentile marriage is less prevalent than Catholic-Protestant marriage.

CONCLUSION AND DISCUSSION: QUESTIONS ON JEWISH-GENTILE INTERMARRIAGE AND QUESTIONS ON THE DESTRUCTION OF EUROPEAN JEWRY

Maintaining firstly that religion was a dimension of stratification in various European countries in the first part of the 20th century, secondly that persons of Jewish denomination were more scorned than those of other faiths, and thirdly that intermarriage indicates integration, this paper analyzed data on Jewish-Gentile intermarriage for Amsterdam, Berlin, Budapest, Frankfurt, Riga, and Vienna in the years 1900-1940. In this way, it addressed the question of the extent to which in years when Jewish-Gentile marriages de jure were allowed these unions de facto occurred, and tested hypotheses explaining the extent to which the right of Jews and Gentiles to marry each other, one part of full Jewish and Gentile legal emancipation, actually was invoked.

To begin with, this paper found that until shortly before Nazism, marriages between Jewish and Gentile persons were on the increase. This result supports the idea that, after legal emancipation, integration in society was the destiny of Jewry. This corroboration is the stronger given the finding of a weaker increase in and sometimes stable chances of Catholic-Protestant intermarriage.

Secondly, the findings of this paper contradict the hypothesis that the longer ago the Jewish persons living in a city were legally emancipated, the more the inhabitants of that city were socially integrated. In this respect, the idea of integration as the destination of Jewry after emancipation was not confirmed. A factor that better accounts for differences between cities, is the extent of residential segregation within a city. A contributing factor is the support for Zionism within a city. Given debates in theoretical sociology about
opportunities and constraints versus desires and dislikes and about structure versus action, we deem this finding of some importance.

Thirdly, this paper detected meager support for the hypothesis that the chances of intermarriage decreased as the anti-Semitic vote rose. Although the Nazis first came to power in Germany, there was no indication that in Berlin and Frankfurt—the German cities with a large proportion of Jewish inhabitants—intermarriage was less probable than in cities with a sizable proportion of Jews outside of Germany. Intermarriage in Berlin and Frankfurt decreased after Hitler came to power, not during the years the percentage of the vote for the National Socialists increased. Jewish-Gentile intermarriage decreased in Vienna after the Anschluss, not before it. In Budapest, it dropped after the First Jewish Law of 1938, not earlier. Additionally, the likelihood of marriages between Jews and Gentiles in Amsterdam was stable during the 1930s.

Fourthly, we found some evidence on Jewish-Gentile intermarriage indicating that Germany was exceptional and that politics influences intermarriage. To begin with, since the early 1920 Jewish-Protestant marriage remained stable in Berlin and Jewish-Catholic marriage in Berlin and Frankfurt, while both types of intermarriage increased in Amsterdam, Budapest, and Vienna. In addition, in Amsterdam, Berlin, Budapest, and Frankfurt, Jewish-Gentile marriage began to decrease before these marriages became legally forbidden. However, in Berlin and Frankfurt Jewish-Gentile marriage did not decrease before Hitler became chancellor, nor during rise in the National Socialist vote.

Lastly, the distinction between de jure emancipation and de facto integration proved useful. The inhabitants of our cities differed in their actual chances of Jewish-Gentile marriage, and sometimes in unexpected ways. However, when stating and testing hypotheses on differences between cities on the extent to which the right to intermarry granted with legal emancipation is actually used, the limits of the available, at first sight quite rich, material became obvious. Some auxiliary data were poor, mostly those for Riga. Then, the data for the various cities were not always comparable. We could not use one particular indicator for the degree to which a city's Jews were orthodox, but had to
make do by shifting from one indicator to another. In addition, there arose a need to go from data pertaining to cities, to data for individuals. There is a difference between the hypothesis that more intermarriage occurs in cities with more religiously mixed schools, and the hypothesis that people who went to a city's religiously mixed schools were more likely to intermarry. The latter proposition says more than the former. This paper could not test the more informative statement, underlining Goldthorpe's (1991) thesis of an important difference between historical and sociological research.

Questions on Jewish-Gentile marriage belong to a range of logically related issues. We finish by outlining their place in it. Bauman (1986, 1989) holds that although the question of why the Holocaust occurred concerns sociology's central questions, it has received little attention from sociologists. Bauman rejects theories which explain the decimation of Jewry as an aberration on the path to modernity. These theories belittle the sociological import of the Holocaust, which was “a characteristically modern phenomenon that cannot be understood out of the context of cultural tendencies and technical achievements of modernity (Bauman 1989, p. xiii).” Modern societies' bureaucratic structures were necessary, though not sufficient, for this genocide. That opportunity was exploited by racism (Bauman 1989, pp. 17-18). This racism was a form of social engineering matching modern society's culture (Bauman 1989, p. 66).

We concur with Bauman's thesis that questions on 'the war that Hitler won,' are important sub-questions of sociology's main questions. Sociology is about inequalities and strife, and the Holocaust is the extreme example of the degradation of human beings and the use of violence. This paper addresses questions on the why's of the Holocaust in a roundabout way. It does so by viewing the killing of Jews during World War II as the final stage in a process of legal exclusion and social isolation, and by focusing an earlier phase in this process. In this stage, the extent of intermarriage between Jews and Gentiles might factually decrease without intermarriage being legally forbidden.

Despite this agreement, we think that Bauman's thesis that sociology neglected the Holocaust, is sometimes quite pertinent and sometimes not. It may apply to Elias' (1989)
assertion, that some queries on the Holocaust are more worthy of study than others, but Bauman's argument bypasses the exchange between Adorno and Popper on the 1961 convention of the German Society for Sociology. Of course, Bauman's thesis is not invalidated by recent sociological studies on genocide (Chalk and Jonassohn 1990; Fein 1990).

According to Elias, the main question raised by the mass murder in the name of the German nation on Jewish men, women and children, is not this murder as such, but its incompatibility with standards that are usually regarded as characteristic of contemporary developed societies (Elias 1989, p. 394). The question is not only why in the second quarter of the 20th century the standard of civilized conscience broke down in a highly civilized people. That question pertains to the short term. In the Ancient World, there were dozens of other instances of what now is called genocide (Elias 1989, pp. 45-46). The question sociologists should address is that of why people after World War II could not believe that such things had happened in a highly industrialized society (Elias 1989, p. 395). Elias says that the question he set himself was that of describing and explaining the development of a humanitarian standard that goes way beyond the standard of Antiquity and makes its adherents react with spontaneous abhorrence to reports of Nazi genocide (Elias 1989, p. 46). We agree with Bauman's implication that questions about what happened on the way to and within the concentration camps, deserve more credit than Elias appears to give them. How many people felt shame when Jewish-Gentile marriages were outlawed? Why did contemporary people do the inconceivable?

Yet Bauman's thesis that sociology neglected the Holocaust ignores something important. Popper's 1961 address to Germany's sociologists and Adorno's co-lecture were not on the method by which sociology should tackle its questions, but about these questions themselves. When depicting the difference between his position and that of Adorno, Popper said that he believes that the world we live in is the best that ever existed, whereas Adorno does not think so. Adorno (1962, pp. 141-142) replied that he indeed finds it difficult to believe that there has been no world better than that which gave birth to Auschwitz.
This stalemate is broken by returning to Popper (1945) and Horkheimer and Adorno (1947). One of Popper's hypotheses was that social theorists who postulate irreversible developments, are enemies of societies which accept that knowledge is fallible and that the best do not always rule, and which for that reason encourage free discussion. Another of Popper's hypotheses said that the acceptance in the 20th century of such ideas on historical destiny once propounded by Plato, Hegel, and Marx, had fostered the rise of the closed societies of Nazi Germany and Soviet Russia. Horkheimer and Adorno's book was steeped in Hegelianism and Marxism. One of its arguments was that Mythos arises in Enlightenment, and another maintained that anti-Semitism is part of this dialectic development. Popper backed up his hypotheses with a detailed analysis of specific social theories, Horkheimer and Adorno adorned theirs with obfuscating language. Perhaps, it was not all that surprising that Adorno's appeal to upgrade questions on World War II to a more important place in sociology did not have that much effect. Shortly after World War II, Popper presented a more thorough analysis of them than Adorno. This is omitted from the thesis that sociology overlooked the Holocaust.

With Bauman, we reject accounts of the Holocaust as an aberration on the path to modernity. Such a tale does not improve a current theory, but turns it into one that fits too easily. This is not to acquiesce to Bauman's theory that the Holocaust is a typical product of modernity. We hold that there is more to modernity than bureaucracy, and that racism is pre-modern social engineering.

The structure of contemporary societies display various features that, taken together, may be termed modern. One is bureaucracy, and Bauman's account of the Holocaust highlights this aspect. The separation of powers is another facet of modern social structure, and so is a bill of rights. Were Jews killed while they were citizens, and the powers of the state were

34 Bauman (1989, pp.152-153) effectively criticizes *The Authoritarian Personality*, but says that it was produced by a group of scholars headed by Adorno. Bauman here misses the point that Horkheimer and Adorno in 1947 posed the problem of the triumph of the Nazis not as a question of personalities, but as a question of trends in the development of ideas dominating societies.
separated? When the Nazi's took over in Germany, they did away with the separation of powers by introducing the *Fuhrer-Prinzip*, and one by one they withdrew rights from German citizens. When occupying other countries, Nazi-Germany abolished the separation of powers and deprived the Jewish inhabitants of these countries of their rights. However, individual rights, the separation of powers and wars followed by occupations, play a limited role in Bauman's theory that the Holocaust is a typical product of modernity.

As to the thesis that racism is a form of social engineering, with social engineering being part of modern culture, it is good to remember Popper's (1945) distinction. One type of social engineering first decides upon ultimate aims, and then employs the most efficient means to actualize this blueprint. Popper calls this utopian engineering and holds that it demands strong leadership making for a closed society. Another form focuses on concrete social wrongs to be abated. It allows for a choice of means and changes in priorities. Popper calls this piecemeal engineering and maintains that it thrives in societies with a separation of powers and inhabitants having a bill of rights, in modern or open societies. Bauman (1989, p. 66) says that "racism comes into its own only in the context of a design of the perfect society and intention to implement the design through planned and consistent effort." That is, racism is a form of utopian engineering and out of line with modern culture.

Bauman (1989, p. 108) does state that in the years leading to the Final Solution, the most trusted safeguards built into modern society's fabric had been put to a test, and that they all failed. This proposition does not become much more informative when Bauman (1989, p. 111) says that the original sin was the collapse or non-emergence of democracy. Is theory formation in sociology on the Holocaust to stop after acknowledging the importance of democracy? Bauman does not list checks and balances, nor explain why they failed. The legal exclusion and social isolation of Jews in Europe during the fourth and fifth decade of the 20th century went through several phases (Hilberg 1961), and these stages deserve separate and detailed study. Perhaps big stories cannot be told, but short...
stories do not have to be as fragmentary as Bauman's theory. Questions on the withdrawal of the right of Jews and Gentiles to marry each other, belong to questions on the fate of Jewry in 20th century Europe. One question on the transition from one stage to another, is to what extent a trend towards more Jewish-Gentile intermarriage increased the chances that Gentiles married to Gentiles voted for an anti-Semitic party. If such a question receives low priority, the notion that things happened as they were bound to happen may be strengthened. This paper unearthed some evidence of lower de facto Jewish-Gentile marriage before renewed de jure exclusion of Jews during the 20th century. One indication was not found: around 1930, in six major European cities with a high proportion of Jews, Jewish-Gentile intermarriage was as common in cities with strong as in those with weak anti-Semitism.

EPILOGUE

Anne Frank, borne 1929 in Frankfurt and died in Bergen-Belsen 1945, had been living since 1934 in Amsterdam when, in 1940, Germany occupied the Netherlands. In July 1942, she and her family—as Jews who did not accept things as they were bound to happen, left their native country, and now were not prepared to follow deportation commands—went into hiding. When underground, Anne kept a diary. It was published in 1947 as Het achterhuis.

Anne's November 10, 1942 entry, mentions a newcomer to The Back House, a man she names Alfred Dussel. Anne recounts that he is a dentist and has been living with a much younger Christian woman, to whom he probably is not married. Other entries make it clear that Dussel is a refugee from Germany and adheres more strongly than the Franks to Jewish rites. Several of Anne's entries refer in acrimonious terms to Dussel's behavior. That of May 1, 1943, mentions Dussel's birthday, notes that he received eggs, cognac, oranges, and chocolates from his Charlotte, and contains Anne's reproach that he does not share this food. On July 23, 1943, Anne surmises about the first activities of the inhabitants of The Back House upon leaving it when the Dutch are liberated. Anne says of
Dussel that he would know of nothing but his Charlotte. On June 5, 1944, Anne tells of flirtations between Dussel and Mrs. Daan, another person hiding in The Back House. Her June 16, 1944 entry says that Mrs. Daan is offended since Dussel barely responds to her advances.

Who were Dussel and Charlotte? Were they married or not? If married, why did Dussel go into hiding? The German occupiers of the Netherlands had exempted Jews in existing mixed marriages from deportation dictates—did Dussel believe that this pardon was merely temporary and that alertness implied going into hiding before the Germans once more sharpened their practices? Or did Dussel and Charlotte live together out of wedlock because the German occupiers had forbidden entry into Jewish-Gentile marriage?

Dussel's real name was Fritz Pfeffer, born 1889 in Giessen, Germany, and died 1944 in Neuengamme. In the 1920s, he married a Jewish woman; this marriage ended in 1932 in divorce. In 1938, shortly after the Kristallnacht, Werner Pfeffer, the by then eleven year old only child from this marriage, left Bremerhaven on a children's transport for Southampton, to be met by Ernst Pfeffer, a brother of Fritz. Fritz Pfeffer, who had taken care of his son after his divorce, did not take his son to the boat. That was considered too dangerous. Werner was seen off by Charlotte Kaletta, a Catholic woman whom his father had met in 1937 in Berlin, where both Fritz and Charlotte were living at that time. Fritz and Charlotte were fearing the things that were bound to happen in Germany, and they were wishing and planning for better times in a country whose citizens have more rights.

Charlotte Kaletta—born 1908 in Ilmengau, Germany; died 1985 Amsterdam—was divorced from the Jewish dentist Ludwig Löwenstein when she met Fritz Pfeffer. One child, a son called Gustaf, issued from this marriage. A week after her trip to Bremerhaven, Charlotte and Fritz were admitted to the Netherlands. There the Kristallnacht had resulted in 8,000 places for refugees from Austria and Germany. Charlotte's son stayed in Germany. She could not take him with her, since his name had been entered into his father's passport.
Charlotte Kaletta and Fritz Pfeffer tried to marry in the Netherlands, but failed. Charlotte held German nationality, and when such a person wished to marry in the Netherlands, according to a treaty concluded in 1908, German law applied. Since in Nazi-Germany German Aryans were forbidden to marry Jews, Fritz and Charlotte could not contract a marriage in the Netherlands. In June 1939, Charlotte went to Belgium, to a friend of Fritz that had gone from Berlin to Brussels, to find out what could be arranged there. She returned having achieved nothing. It was not legislation issued by the German occupiers of the Netherlands that prohibited a marriage between Charlotte Kaletta and Fritz Pfeffer. This marriage did not take place because of adherence to existing rules by Dutch authorities shortly before Germany occupied the Netherlands.

Charlotte Kaletta's first husband, like Fritz Pfeffer's first wife, did not survive World War II. Neither did Charlotte's son. Anne Frank's diary was staged in Amsterdam's Municipal Theater during the 1956/1957 season, and this play did not portray Dussel in a favorable light. Charlotte went to see it, as may be inferred from her personal belongings. These were found accidentally in 1987, on Amsterdam's once largely Jewish flea market the Waterlooplein, by a staff member of the Anne Frank Foundation. Amidst pictures of Charlotte and Fritz, was a copy of the play's program and a bundle of clippings on Anne Frank's diary. Charlotte Kaletta never spoke publicly about her life.36

36 The finding of Charlotte Kaletta's belongings was reported in the Dutch newspaper NRC-Handelsblad of November 7, 1987. Van der Zee (1990) constructs, on the basis of this finding and other materials, a visit to Charlotte Kaletta during which Charlotte tells the story of her life.
REFERENCES


Ganzeboom, Harry, Ruud Luijkx, and Donald Treiman. 1989. “Intergenerational Class Mobility in Comparative Perspective.” Research on Social Stratification and Mobility 9, 3-79.


References 2

References 3


References 4


APPENDIX ON DATA SOURCES

Data on denominational intermarriage:

Amsterdam
Statistisch jaarboek der gemeente Amsterdam, various years.

Berlin
Statistisches Jahrbuch der Stadt Berlin, various years.
Missing years for Berlin were taken from:
Die Geburten, Eheschliessungen und Sterbefälle im Freistaat Preussen während des Jahres 19xx, various years.\(^\text{37}\)

Budapest
Statistisch-administratives Jahrbuch der Haupt- und Residenzstadt Budapest, various years.
Missing figures for Budapest were obtained from:
Monatsheft des Budapester Kommunalstatistischen-Bureaus.

Frankfurt
Statistisches Handbuch der Stadt Frankfurt am Main, various years.
Tabellarische Übersichten betreffend den Zivilstand der Stadt Frankfurt am Main im Jahre 19xx, various years.

Riga
Statistisches Jahrbuch der Stadt Riga, various years.

Vienna
Statistisches Jahrbuch der Stadt Wien, various years.
Statistisches Handbuch für die Republik Österreich, various years.

\(^{37}\) We saw to it that the enlargement of the city of Berlin after World War I did not affect figures by taking data on the Stadtkreis rather than the Stadt Berlin from older sources

Appendix 1
Data on residential segregation:

Amsterdam


Berlin
*Statistisches Jahrbuch der Stadt Berlin,* various years.


Budapest
*Die fünfzigjährige Entwicklung Budapests 1873-1923.* Publicationen des Statistischen Amtes der Haupt- und Residenzstadt Budapest, nr. 53.

*Statistisches Jahrbuch der Haupt- und Residenzstadt Budapest,* various years.

Frankfurt
For figures on Frankfurt, see Gley (1936).

Riga
*Statistisches Jahrbuch der Stadt Riga,* various years.

Vienna
*Statistisches Jahrbuch für die Republik Österreich 1925* (figures for Vienna in 1923).

*Statistisches Jahrbuch der Stadt Wien,* various years.
Data on educational segregation:

Amsterdam
Statistisch Jaarboek der Gemeente Amsterdam, various years.

Berlin
Statistisches Jahrbuch der Stadt Berlin, various years.

Budapest
Statistisches Jahrbuch der Haupt- und Residenzstadt Budapest, various years.

Vienna
Statistisches Jahrbuch der Stadt Wien, various years.

Data on Jewish orthodoxy within a city:

Amsterdam
Verslag van den Toestand der Nederlandsch-Israëlitische Hoofdsynagoge te Amsterdam,
various years.
Jaarboek van 5674 (1913-1914) uitgegeven door de Centrale organisatie voor de religieuze en
moreele verheffing der Joden in Nederland.

Berlin
Jüdisches Jahrbuch für Gross-Berlin 1928.

Budapest
Statistisch-administratives Jahrbuch der Haupt- und Residenzstadt Budapest 1926, p. 431.

Vienna
Jüdisches Jahrbuch für Österreich 5693.

Time series on shekel payers:

Stenographisches Protokoll der Verhandlungen des XIX. Zionistenkongresses und der vierten
Figures on gifts to the Jewish National Fund:


Data on elections:

Budapest
The 1939 vote for the Arrow Cross Party in Budapest was found in:
Other election data were found in other installments of this yearbook.

Riga
Election data for Riga were taken from the statistical yearbook for this city.

Vienna
Various official publications provided the elections results for Vienna.
<table>
<thead>
<tr>
<th>City</th>
<th>Year</th>
<th>Number of inhabitants with Jewish denomination</th>
<th>Total number of inhabitants</th>
<th>Percentage of Jewish inhabitants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amsterdam</td>
<td>1899</td>
<td>59,065</td>
<td>510,853</td>
<td>11.6%</td>
</tr>
<tr>
<td></td>
<td>1909</td>
<td>60,970</td>
<td>566,131</td>
<td>10.8%</td>
</tr>
<tr>
<td></td>
<td>1920</td>
<td>68,758</td>
<td>683,166</td>
<td>10.4%</td>
</tr>
<tr>
<td></td>
<td>1930</td>
<td>65,558</td>
<td>768,409</td>
<td>8.7%</td>
</tr>
<tr>
<td></td>
<td>1941*</td>
<td>79,497</td>
<td>795,170</td>
<td>10.0%</td>
</tr>
<tr>
<td>Berlin</td>
<td>1900</td>
<td>108,044</td>
<td>2,481,084</td>
<td>4.4%</td>
</tr>
<tr>
<td></td>
<td>1910</td>
<td>144,043</td>
<td>3,734,258</td>
<td>3.9%</td>
</tr>
<tr>
<td></td>
<td>1925</td>
<td>172,672</td>
<td>4,024,165</td>
<td>4.3%</td>
</tr>
<tr>
<td></td>
<td>1933</td>
<td>160,564</td>
<td>4,242,501</td>
<td>3.8%</td>
</tr>
<tr>
<td></td>
<td>1939</td>
<td>78,713</td>
<td>4,321,521</td>
<td>1.8%</td>
</tr>
<tr>
<td>Budapest</td>
<td>1900</td>
<td>166,198</td>
<td>703,448</td>
<td>23.6%</td>
</tr>
<tr>
<td></td>
<td>1910</td>
<td>203,687</td>
<td>880,371</td>
<td>23.1%</td>
</tr>
<tr>
<td></td>
<td>1920</td>
<td>215,512</td>
<td>928,996</td>
<td>23.2%</td>
</tr>
<tr>
<td></td>
<td>1930</td>
<td>204,371</td>
<td>1,006,184</td>
<td>20.3%</td>
</tr>
<tr>
<td></td>
<td>1941</td>
<td>184,453</td>
<td>1,164,963</td>
<td>15.8%</td>
</tr>
<tr>
<td>Frankfurt</td>
<td>1900</td>
<td>21,974</td>
<td>288,989</td>
<td>7.6%</td>
</tr>
<tr>
<td></td>
<td>1910</td>
<td>26,228</td>
<td>414,576</td>
<td>6.3%</td>
</tr>
<tr>
<td></td>
<td>1925</td>
<td>29,385</td>
<td>467,520</td>
<td>6.3%</td>
</tr>
<tr>
<td></td>
<td>1933</td>
<td>26,158</td>
<td>555,857</td>
<td>4.7%</td>
</tr>
<tr>
<td>Riga</td>
<td>1897</td>
<td>21,679</td>
<td>255,879</td>
<td>8.5%</td>
</tr>
<tr>
<td></td>
<td>1913</td>
<td>33,096</td>
<td>497,586</td>
<td>6.6%</td>
</tr>
<tr>
<td></td>
<td>1920</td>
<td>24,887</td>
<td>185,137</td>
<td>13.4%</td>
</tr>
<tr>
<td></td>
<td>1925</td>
<td>39,443</td>
<td>337,699</td>
<td>11.7%</td>
</tr>
<tr>
<td></td>
<td>1930</td>
<td>41,844</td>
<td>377,917</td>
<td>11.1%</td>
</tr>
<tr>
<td></td>
<td>1935</td>
<td>43,558</td>
<td>385,063</td>
<td>11.3%</td>
</tr>
<tr>
<td>Vienna</td>
<td>1900</td>
<td>146,926</td>
<td>1,674,957</td>
<td>8.8%</td>
</tr>
<tr>
<td></td>
<td>1910</td>
<td>175,318</td>
<td>2,031,498</td>
<td>8.6%</td>
</tr>
<tr>
<td></td>
<td>1923</td>
<td>201,513</td>
<td>1,865,780</td>
<td>10.8%</td>
</tr>
<tr>
<td></td>
<td>1934</td>
<td>176,034</td>
<td>1,874,130</td>
<td>9.4%</td>
</tr>
<tr>
<td></td>
<td>1939</td>
<td>82,077</td>
<td>1,912,608</td>
<td>4.3%</td>
</tr>
</tbody>
</table>

* not denominational, but racial definition (full and three-quarter Jewish).

Sources: census as reported in the statistical yearbooks of the respective cities.
### TABLE 2

**THE LEGAL STATUS OF JEWS IN SIX EUROPEAN CITIES IN THE 19th AND THE FIRST PART OF THE 20th CENTURY**

<table>
<thead>
<tr>
<th>City</th>
<th>(1) Year of equal political rights</th>
<th>(2) Year of unrestricted Jewish-Gentile marriage</th>
<th>(3) Year in which the legal status of Jews began to weaken</th>
<th>(4) Year of introduction of laws against Jewish-Gentile marriages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amsterdam</td>
<td>1796</td>
<td>1809</td>
<td>1940</td>
<td>1942</td>
</tr>
<tr>
<td>Berlin</td>
<td>1850</td>
<td>1875</td>
<td>1933</td>
<td>1935</td>
</tr>
<tr>
<td>Budapest</td>
<td>1867</td>
<td>1895</td>
<td>1920 and 1938</td>
<td>1941</td>
</tr>
<tr>
<td>Frankfurt</td>
<td>1864</td>
<td>1875</td>
<td>1933</td>
<td>1935</td>
</tr>
<tr>
<td>Riga</td>
<td>1919</td>
<td>1919</td>
<td>1934</td>
<td>??</td>
</tr>
<tr>
<td>Vienna</td>
<td>1867</td>
<td>never (1914)</td>
<td>1938</td>
<td>1938</td>
</tr>
</tbody>
</table>

Sources: various encyclopedias.
TABLE 3
THE RELATION BETWEEN THE DENOMINATION OF BRIDES AND THE DENOMINATION OF GROOMS; NUMBERS FOR ALL MARRIAGES
CONCLUDED IN 1931 IN SIX EUROPEAN CITIES

| City       | Groom |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |         |
|------------|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Amsterdam  | 1,828 | 442     | 48      | 562     | 2,880   | 23,154  | 2,656   | 285     | 3,377   | 29,472  | 2,865   | 1,550   | 560     | 1,286   | 6,261   | 26,402  | 4,271   | 1,310   | 6,128   | 38,111  |
| Berlin     | 535   | 881     | 29      | 211     | 1,656   | 2,406   | 1,488   | 40      | 464     | 4,398   | 2,865   | 1,550   | 560     | 1,286   | 6,261   | 26,402  | 4,271   | 1,310   | 6,128   | 38,111  |
| Budapest   | 611   | 1,103   | 86      | 58      | 1,858   | 1,820   | 730     | 18      | 149     | 2,717   | 2,061   | 6,201   | 2,016   | 246     | 10,524  | 2,703   | 1,647   | 171     | 292     | 4,813   |
| Frankfurt  | 1,325 | 4,740   | 296     | 155     | 6,516   | 828     | 900     | 15      | 57      | 1,800   | 2,703   | 1,647   | 171     | 292     | 4,813   | 2,703   | 1,647   | 171     | 292     | 4,813   |
| Riga       | 82    | 225     | 1,623   | 13      | 1,943   | 22      | 4       | 133     | 9       | 168     | 43      | 133     | 11      | 20      | 207     | 33      | 13      | 5       | 77      | 128     |
| Vienna     | 43    | 133     | 11      | 20      | 207     | 33      | 13      | 5       | 77      | 128     | 43      | 133     | 11      | 20      | 207     | 33      | 13      | 5       | 77      | 128     |

Tables 3
**TABLE 4**

*Residential segregation of Gentiles and Jews in six European cities in the first part of the 20th century*

<table>
<thead>
<tr>
<th>City</th>
<th>1906</th>
<th>1920</th>
<th>1930</th>
<th>1941</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amsterdam</td>
<td>56</td>
<td>53</td>
<td>40</td>
<td>50</td>
</tr>
<tr>
<td>Berlin</td>
<td>1910</td>
<td>1925</td>
<td>1933</td>
<td>1939</td>
</tr>
<tr>
<td></td>
<td>38</td>
<td>41</td>
<td>42</td>
<td>46</td>
</tr>
<tr>
<td>Budapest</td>
<td>1900</td>
<td>1910</td>
<td>1920</td>
<td>1930</td>
</tr>
<tr>
<td></td>
<td>33</td>
<td>30</td>
<td>28</td>
<td>28</td>
</tr>
<tr>
<td>Frankfurt</td>
<td>1900</td>
<td>1910</td>
<td>1925</td>
<td></td>
</tr>
<tr>
<td></td>
<td>35</td>
<td>40</td>
<td>39</td>
<td></td>
</tr>
<tr>
<td>Riga</td>
<td>1913</td>
<td>1920</td>
<td>1925</td>
<td>1930</td>
</tr>
<tr>
<td></td>
<td>49</td>
<td>45</td>
<td>50</td>
<td>51</td>
</tr>
<tr>
<td>Vienna</td>
<td>1900</td>
<td>1910</td>
<td>1923</td>
<td>1934</td>
</tr>
<tr>
<td></td>
<td>45</td>
<td>44</td>
<td>43</td>
<td>43</td>
</tr>
</tbody>
</table>

Sources: see Appendix.
TABLE 5
OVERALL JEWISH-GENTILE INTERMARRIAGE IN THE FIRST THREE DECADES OF THE 20\textsuperscript{TH} CENTURY IN SIX EUROPEAN CITIES, AND MEASURES SUPPOSEDLY ACCOUNTING FOR IT

<table>
<thead>
<tr>
<th>City</th>
<th>(1) Equal political rights</th>
<th>(2) Right to Jewish-Gentile marriage</th>
<th>(3) Residential segregation</th>
<th>(4) Educational segregation</th>
<th>(5) Orthodox Judaism</th>
<th>(6) Zionism</th>
<th>(7) Political anti-Semitism</th>
<th>(8) Jewish-Gentile marriages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amsterdam</td>
<td>1</td>
<td>1</td>
<td>6</td>
<td>5</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Berlin</td>
<td>2</td>
<td>2-3</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>3</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>Budapest</td>
<td>4</td>
<td>4</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Frankfurt</td>
<td>3</td>
<td>2-3</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>4</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>Riga</td>
<td>6</td>
<td>6</td>
<td>5</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>Vienna</td>
<td>5</td>
<td>5</td>
<td>4</td>
<td>1</td>
<td>3</td>
<td>5</td>
<td>3</td>
<td>5</td>
</tr>
</tbody>
</table>

1 = longest, 1 = longest, 1 = least, 1 = least, 1 = least, 1 = lowest, 1 = highest, 6 = shortest period, 6 = shortest segregation, 6 = most, 6 = most segregation, 6 = most orthodoxy, 6 = highest frequency, 6 = lowest prevalence

Sources: see text and tables 2, 4, and 7.
**TABLE 6**

**Changes in Jewish-Gentile intermarriage in the first three decades of the 20th century in six European cities and measures supposedly accounting for them**

<table>
<thead>
<tr>
<th>City</th>
<th>(1) Jewish-Gentile intermarriage allowed before or after 1900</th>
<th>(2) Decrease in residential segregation</th>
<th>(3) Increase in political anti-Semitism</th>
<th>(4) Increase in Jewish-Gentile intermarriage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amsterdam</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Berlin</td>
<td>1</td>
<td>5</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Budapest</td>
<td>1</td>
<td>2</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Frankfurt</td>
<td>1</td>
<td>6</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Riga</td>
<td>2</td>
<td>4</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Vienna</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>2</td>
</tr>
</tbody>
</table>

1 = before, 1 = strongest decrease, 1 = weakest, 1 = strongest increase
2 = after 1900, 6 = strongest increase

Sources: see text and tables 2 and 4

Tables 6
TABLE 7

LOG ODDS RATIOS FOR JEWISH-PROTESTANT, JEWISH-CATHOLIC AND JEWISH-OTHER INTERMARRIAGE; SIX EUROPEAN CITIES 1930-1943

<table>
<thead>
<tr>
<th>City</th>
<th>1930</th>
<th>1931</th>
<th>1932</th>
<th>1933</th>
<th>1934</th>
<th>1935</th>
<th>1936</th>
<th>1937</th>
<th>1938</th>
<th>1939</th>
<th>1940</th>
<th>1941</th>
<th>1942</th>
<th>1943</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Jewish-Protestant intermarriage</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Amsterdam</td>
<td>6.3</td>
<td>7.0</td>
<td>6.4</td>
<td>6.6</td>
<td>6.4</td>
<td>6.3</td>
<td>7.0</td>
<td>6.2</td>
<td>6.1</td>
<td>6.2</td>
<td>6.4</td>
<td>8.0</td>
<td>11.1</td>
<td>∞</td>
</tr>
<tr>
<td>Berlin</td>
<td>6.2</td>
<td>6.5</td>
<td>6.3</td>
<td>6.4</td>
<td>8.1</td>
<td>8.7</td>
<td>12.2</td>
<td>12.7</td>
<td>12.6</td>
<td>∞</td>
<td>∞</td>
<td>∞</td>
<td>∞</td>
<td>∞</td>
</tr>
<tr>
<td>Budapest</td>
<td>4.8</td>
<td>5.0</td>
<td>4.9</td>
<td>5.0</td>
<td>5.0</td>
<td>4.9</td>
<td>5.4</td>
<td>5.0</td>
<td>5.7</td>
<td>6.3</td>
<td>6.2</td>
<td>8.4</td>
<td>8.0</td>
<td></td>
</tr>
<tr>
<td>Frankfurt</td>
<td>6.6</td>
<td>6.4</td>
<td>6.9</td>
<td>6.7</td>
<td>8.3</td>
<td>10.1</td>
<td>∞</td>
<td>∞</td>
<td>∞</td>
<td>∞</td>
<td>∞</td>
<td>∞</td>
<td>∞</td>
<td>∞</td>
</tr>
<tr>
<td>Riga</td>
<td>10.7</td>
<td>11.0</td>
<td>11.0</td>
<td>10.9</td>
<td>10.8</td>
<td>11.0</td>
<td>12.1</td>
<td>10.5</td>
<td>10.9</td>
<td>∞</td>
<td>∞</td>
<td>∞</td>
<td>∞</td>
<td>∞</td>
</tr>
<tr>
<td>Vienna</td>
<td>8.4</td>
<td>8.5</td>
<td>8.3</td>
<td>7.7</td>
<td>7.7</td>
<td>9.9</td>
<td>∞</td>
<td>9.2</td>
<td>∞</td>
<td>∞</td>
<td>∞</td>
<td>∞</td>
<td>∞</td>
<td>∞</td>
</tr>
</tbody>
</table>

| **Jewish-Catholic intermarriage** |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Amsterdam | 7.0  | 6.6  | 6.4  | 6.5  | 6.2  | 6.8  | 7.1  | 6.6  | 6.7  | 7.0  | 7.3  | 8.3  | 11.3 | ∞    |
| Berlin    | 6.7  | 7.4  | 7.0  | 7.0  | 8.7  | 9.0  | 12.1 | 12.4 | 13.7 | ∞    | ∞    | ∞    | ∞    | ∞    |
| Budapest  | 4.8  | 4.8  | 4.7  | 4.9  | 4.8  | 4.9  | 4.9  | 4.8  | 5.3  | 6.0  | 6.6  | 6.1  | 9.4  | 8.9  |
| Frankfurt | 7.6  | 7.6  | 7.8  | 7.1  | 8.8  | 9.2  | ∞    | ∞    | ∞    | ∞    | ∞    | ∞    | ∞    | ∞    |
| Riga      | ∞    | ∞    | 10.1 | ∞    | 11.5 | 11.4 | 10.4 | ∞    | 11.5 | ∞    | ∞    | ∞    | ∞    | ∞    |
| Vienna    | 8.0  | 7.6  | 7.7  | 7.5  | 7.6  | 12.5 | 12.9 | 12.1 | ∞    | ∞    | ∞    | ∞    | ∞    | ∞    |

| **Jewish-Other intermarriage** |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Amsterdam | 5.6  | 5.3  | 5.7  | 5.7  | 5.7  | 5.5  | 5.5  | 5.3  | 5.7  | 5.7  | 5.1  | 6.0  | 8.3  | 9.7  |
| Berlin    | 6.2  | 6.2  | 5.8  | 6.3  | 7.5  | 8.2  | 10.8 | 10.8 | 10.0 | ∞    | ∞    | ∞    | ∞    | ∞    |
| Budapest  | 5.4  | 5.4  | 5.5  | 5.0  | 6.0  | 5.1  | 5.8  | 5.8  | 5.4  | 6.5  | 6.5  | 6.8  | ∞    | 7.7  |
| Frankfurt | 7.8  | 5.4  | 5.7  | 6.5  | 7.6  | ∞    | ∞    | ∞    | ∞    | ∞    | ∞    | ∞    | ∞    | ∞    |
| Riga      | 10.8 | 10.5 | 9.8  | 8.5  | 8.6  | ∞    | 9.4  | 8.8  | 9.1  | ∞    | ∞    | ∞    | ∞    | ∞    |
| Vienna    | 5.7  | 5.7  | 5.7  | 5.4  | 5.1  | 4.9  | 10.0 | 10.1 | 9.6  | ∞    | ∞    | ∞    | ∞    | ∞    |

Legal position of Jews begins to deteriorate
- missing data
∞ complete closure

Jewish-Gentile intermarriage becomes forbidden

Sources: see Appendix
TABLE 8
THE RANKING OF SIX EUROPEAN CITIES AFTER THEIR EXTENT OF CATHOLIC-JEWISH, JEWISH-OTHER AND JEWISH-PROTESTANT INTERMARRIAGE IN THE FIRST THREE DECADES OF THE 20TH CENTURY

<table>
<thead>
<tr>
<th>City</th>
<th>(1) Jewish-Protestant intermarriage</th>
<th>(2) Catholic-Jewish intermarriage</th>
<th>(3) Jewish-Other intermarriage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amsterdam</td>
<td>4</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Berlin</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Budapest</td>
<td>1</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Frankfurt</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Riga</td>
<td>6</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Vienna</td>
<td>5</td>
<td>5</td>
<td>1</td>
</tr>
</tbody>
</table>

1 = highest, 6 = lowest prevalence.

Sources: see text and appendix.
Figure 1
Jewish-Protestant intermarriage 1900-1943

YEAR
1900 1905 1910 1915 1920 1925 1930 1935 1940

Log Odds ratio
0 2 4 6 8 10 12 14

Amsterdam
Berlin
Budapest
Frankfurt
Riga
Vienna
Figure 2
Jewish-Catholic intermarriage 1900-1943

YEAR

Log Odds ratio

Amsterdam
Berlin
Budapest
Frankfurt
Riga
Vienna
Figure 3
Jewish-Other intermarriage 1900-1943
Figure 4
Catholic-Protestant intermarriage 1900-1943

YEAR

Log Odds ratio

Amsterdam
Berlin
Budapest
Frankfurt
Riga
Vienna

1900 1905 1910 1915 1920 1925 1930 1935 1940
Figure 5a

Jewish-Gentile intermarriage Amsterdam

Figures 5
Figure 5b
Jewish-Gentile intermarriage Berlin

Figure 6
Figure 5c

Jewish-Gentile intermarriage Budapest

![Graph showing the trend of Jewish-Gentile intermarriage in Budapest from 1900 to 1940. The graph plots the log odds ratio against the year, with different lines representing different types of intermarriages: Jewish-Protestant, Jewish-Catholic, Jewish-Other, and Catholic-Protestant.]
Figure 5d
Jewish-Gentile intermarriage Frankfurt

![Graph showing Jewish-Gentile intermarriage in Frankfurt from 1900 to 1940](image)

- Jewish-Protestant
- Jewish-Catholic
- Jewish-Other
- Catholic-Protestant

Figures 8
Figure 5e
Jewish-Gentile intermarriage Riga

![Graph showing log odds ratio of intermarriage over years for different religious groups: Jewish-Protestant, Jewish-Catholic, Jewish-Other, Catholic-Protestant.](image)

Years: 1900 to 1940

Log odds ratio:
- Jewish-Protestant
- Jewish-Catholic
- Jewish-Other
- Catholic-Protestant

Figures 9
Figure 5f

Jewish-Gentile intermarriage Vienna

Log odds ratio

YEAR

1900 1905 1910 1915 1920 1925 1930 1935 1940

Jewish-Protestant
Jewish-Catholic
Jewish-Other
Catholic-Protestant

Figures 10