FOUR

Pretexts, Forms, and the Extent of Emigration and Persecution

> These laws are being changed with more ease than for example a mathematician replaces one system of axioms by another.
>
> —G. Szegö 1934[1]

This book gives priority to the topic of emigration of mathematicians, including the conditions of immigration in the host countries, especially the United States. The detailed picture of the circumstances in Germany and in German-occupied countries that led to emigration should rather be presented in a book on mathematics under National Socialism, since the behavior of the "unconcerned" colleagues would be of particular importance in such an investigation.[2] However, the two processes, expulsion from Germany and immigration in the host countries, cannot be neatly separated from each other, and therefore the fundamental conditions underlying those processes have to be discussed at least briefly. This necessity follows also from the fact that not all mathematicians expelled and persecuted by the Nazis succeeded with emigration, and that emigration itself can only be understood against the background of political oppression in its entirety.

There are detailed reports on the situation in those places most affected by the expulsions, particularly Berlin, Göttingen, Prague, Vienna, Hamburg, and Frankfurt.[3] Further accounts from the universities in Heidelberg and Munich, which were also strongly affected by the persecutions, give selected information but do not focus on the period of the Third Reich.[4] Publications on less affected places such as Aachen, Bonn, Freiburg,

[1]Szegö (Königsberg) on May 23, 1934, to the American Tamarkin (Szegö 1982, p. 4 [T]).

[2]For details see Segal (2003).

[3]See Brüning/Ferus/Siegmund-Schultze (1998), Knobloch (1998), Schappacher (1987), Siegel (1965), Maas (1991), and Einhorn (1985). On the expulsion of physicists and mathematicians from Göttingen see also Beyerchen (1977) and Sigurdsson (1996). Still unpublished is the preprint by Schwarz and Wolfart (1988). The most complete report on the conditions at the University of Prague is so far Pinl and Dick (1974).

[4]The fate of A. Rosenthal is well described in Mußgnug (1988). For Munich see Toepell (1996).

and Köln report on the fate of individual mathematicians.[5] Scattered biographical work on expelled and persecuted mathematicians complements the picture.[6] Until recently access to some of the archives of originally German universities (Wrocław-Breslau, Kaliningrad-Königsberg) has been difficult to obtain.[7] First reports on the total losses in personnel due to emigration are given by Schappacher and Kneser (1990) and Schaper (1992). The process of the political coordination (Gleichschaltung) of mathematics is well described by Mehrtens (1989) using the example of mathematical societies in Germany after 1933. A vivid description of the general atmosphere of terror and denunciation from the perspective of a contemporary mathematician in Münster can be found in the book by H. Behnke (1978), himself not persecuted. That atmosphere is also described in a report to the Rockefeller Foundation, compiled by Harald Bohr (1887–1951) and published as Appendix 3.1. The fate of one mathematician and Catholic political dissenter (P. Thullen) is revealed in his diaries for the period, reproduced in Appendix 6.

4.1. The Nazi Policy of Expulsion

The immediate and visible cause of the expulsions was of course the terror regime of National Socialism, with its firm ideological components, namely anti-Semitism, anti-Marxism, and anti-Communism. Contemporary observers and historians alike have often wondered why the Hitler regime could be so "shortsighted" as to deprive itself of its most capable scientists. The question cannot be answered other than in the total context of the regime's exertion of power. Preparing a nation for war requires "irrational" means and a strategy to bind individuals irrevocably to the system by entangling them in guilt and giving them small or big advantages over other persecuted persons. Even if pragmatic political motivations led sometimes to a curtailment of too blatant and self-destructive measures,[8]

[5]Brieskorn, ed. (1996) on F. Hausdorff, Remmert (1995) on A. Loewy, Butzer and Volkmann (2006) on Blumenthal. In Golczewsky (1988) the expulsion of H. Hamburger is described in detail.

[6]See the reference to biographical sources in the various lists of mathematicians given in Appendix 1.

[7]I am informed by Renate Tobies (Berlin) that access to the archives in Polish Wrocław is easy now. As to Russian Kaliningrad the situation seems unclear. I have chosen to make up for missing information by some documents in this chapter below (D), in particular an important letter by Szegö to Tamarkin.

[8]The ideological "Deutsche Mathematik" movement, spearheaded by L. Bieberbach, and the "Deutsche Physik" (Ph. Lenard) found less support by the regime in its later years. See Mehrtens (1989).

there was no way of casting doubt on the primacy of the dogma of anti-Semitism also in the international relations of the regime.[9] The coordination (Gleichschaltung) in the scientific-cultural domain also fulfilled a kind of ideological compensatory function in view of the fact that the Nazis did not attack the real foundations of German society, in particular the economic power structures—contrary to the socialist demagoguery of their program.[10] Moreover, one has to consider the relatively lesser—compared to today—importance of science, in particular mathematics and physics, to economics and warfare at that point in history. Finally, it has to be taken into account that the Nazis demagogically took advantage of certain structural problems in the German science system (overcrowding of universities, academic unemployment) that existed around 1930.

The form and concrete shape of the expulsions from the universities often corresponded with the seemingly chaotic and aimless methods of the Hitler regime. However, the latter methods aimed rather deliberately at destroying solidarity with the scapegoats, Jews and foreigners. They created subliminal guilt feelings among those who were privileged and not persecuted, while at the same time leaving nobody in perfect security. The pseudo-legalism of the new Nazi university laws, relying on the traditional submissiveness of the civil servants to the state, was complemented by an atmosphere of gratuitous accusation and denunciation, and by student boycotts,[11] thereby continuing the Nazification of the student body begun in the last years of the Republic of Weimar. The central pseudo-legal instrument used for the expulsions was the infamous Law for the Restoration of the Professional Civil Service of April 7, 1933 (henceforth called BBG, following the German short title, Berufsbeamtengesetz), which, together with the ordinance for its implementation from April 11, 1933, arbitrarily formed the notion of "non-Aryan descent."[12] The "law" did not show consideration for the religious confessions or political positions of the "non-Aryan" scientists, who had often converted to Christianity and even sometimes held German-nationalist positions in the First

[9]See Siegmund-Schultze (2002) for the effects of the Nazi rule on the international participation of German mathematicians.

[10]This is also astutely observed by the emigrant Hans Reichenbach, who in a letter to psychologist and early immigrant to the United States, Kurt Lewin (1890–1947), on February 23, 1933, wrote: "While the Nazis are impeded in the realization of their economic aims due to their alliance with Hugenberg [Alfred Hugenberg (1865–1951), leading German industrialist and right-wing politician], they will have their fling in the cultural domain" (translation of the German original as quoted in Hoffmann [1993], p. 396).

[11]See the Documents part of this chapter and Appendix 3.4 with the report by A. Rosenthal in Heidelberg.

[12]An English translation of the "Gesetz zur Wiederherstellung des Berufsbeamtentums" (BBG) and of its ordinance for implementation, which will be partly used here, can be found in Hentschel, ed. (1996), pp. 21–26.

World War as well as afterward in the Weimar Republic. The law stipulated in its central paragraphs 3, 4, and 6:

> § 3 (1) Civil servants who are not of Aryan descent are to be placed in retirement. . . .
>
> (2) No. 1 does not apply to officials who had already been in the service since the 1st of August, 1914, or who had fought in the World War at the front for the German Reich or for its allies, or whose fathers or sons had been casualties in the World War. . . .
>
> § 4 Civil servants who, based on their previous political activities cannot guarantee that they will always unreservedly support the national state can be dismissed from service. Their previous salary will be maintained for the duration of three months following their dismissal. From this time on they shall receive three-fourths of the pension. . . .
>
> § 6 To simplify administration, civil servants may be placed in retirement, even when they are not yet unfit for service. If civil servants are retired for this reason, their posts may not be refilled.

In the *First Ordinance on the Implementation* of the BBG one reads in the *Reichs Law Gazette* (*Reichsgesetzblatt*) of April 11, 1933:

> Re § 3 (1) Anyone descended from non-Aryan, and in particular Jewish, parents or grandparents, is considered non-Aryan. It is sufficient that one parent or one grandparent be non-Aryan. This is to be assumed especially when one parent or one grandparent had practiced the Jewish faith. . . .

On May 6, 1933, the BBG was extended in its range of application to Privatdozenten, who were not civil servants and usually received no salary except for student fees. The arbitrary "pseudo-legalism" of the Nazi laws is further underlined by such extensions and also by the fact that the authorities in many cases did not adhere to their own laws, but dismissed people in spite of the exemption clause in § 3, then reinstated them temporarily, and so forth. In the same vein, § 6 was often arbitrarily used to expel politically unwanted persons and/or to remove undesirable areas of research (D). By a cynical play with the different stipulations for pensions to which the dismissed were entitled according to §§ 3 and 4 of the BBG,[13] by arbitrariness in granting or refusing pensions for scientists who went abroad,[14]

[13]Since § 4 stipulated a reduction of the pension by one-fourth, scholars were sometimes dismissed according to this more severe paragraph by suitable construction of political "reasons," thus making dismissal according to the "Aryan" § 3 almost desirable for its victims. Otto Blumenthal in Aachen, for one, was dismissed in accordance with § 4 and was thus punished for his liberal views in the Republic of Weimar and for his contacts to Soviet science. See Butzer/Volkmann (2006).

[14]There was harassment in this respect against H. Hamburger in Köln (Golczewski 1988) and against Richard von Mises in Berlin (D). That the battle of the emigrants for their pensions

the Nazis reinforced anxious maneuvering and political lip service on the part of the scholars threatened with dismissal, which also led to weakened solidarity between them (D). The Nazi laws remained even partly effective after the war ended in 1945 and frequently served as a basis for decisions on compensation for the persecuted and dismissed.[15]

Students' boycotts of lectures complemented Nazi laws and were often, at least passively, tolerated by the Nazi authorities, and only seldom rebuked.[16] The student boycotts were often just as much motivated by racist as by political resentment, and—a fact that seems to have been typical for mathematics—were frequently directed against docents who were seen to be scholarly "too demanding" in the eyes of some students but who could not easily be dismissed according to Nazi laws. Such more politically and scientifically motivated boycotts are known at least in the cases of the mathematicians O. Blumenthal, H. Grötzsch, E. Landau, H. Liebmann, W. Prager, H. Reichenbach, K. Reidemeister, A. Rosenthal, and F. Willers.[17] The most widely known and infamous boycott was the one against number theorist Edmund Landau in Göttingen, who continued to practice his Jewish religion, but could not, as a prewar civil servant, be dismissed according to the BBG. By the concerted effort of the Nazi ministry and Nazi students, Landau was finally forced into "voluntary resignation." In the case of Landau there are also the most shocking documents attesting to the anti-Semitic blindness and fanaticism of students (O. Teichmüller) and the collaboration of colleagues (L. Bieberbach) with the Nazis (D).

After the promulgation of the BBG in April 1933, anti-Semitic legislation continuously tightened in the following years—something that only a few scientists realized at an early stage.[18] "Non-Aryan" students were exposed to ever more restrictive conditions for admissions and exams—beginning with the "Law against the over-crowding of German schools and universities" of April 25, 1933.[19] As a consequence of the Law on

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was not principally hopeless is evidenced by, for example, the fact that Hellinger's mother in Germany received money from his pension as late as 1940, one year after his emigration. In any case the pensions had to be spent in Germany and could not be transferred to foreign accounts.

[15]See chapter 11.

[16]Typical was the university rector's reaction to a student boycott against Rosenthal and Liebmann in Heidelberg, as documented in Appendix 3.4.

[17]See in these cases the bibliographical information given in the lists of Appendix 1, and D.

[18]Among the more prescient ones was R. von Mises, who left Berlin in 1933, although temporarily protected by the exemption clause of the BBG.

[19]This Nazi law restricted the portion of "non-Aryan" students to 1.5 percent of the student body. The percentage of women was set to be 10 percent at most. See Jarausch (1984), p. 177.

Figure 11 *Oswald Veblen, Edmund Landau, and Harald Bohr. In happier times, probably in Göttingen around 1930, the American Oswald Veblen and the half-Jewish Dane Harald Bohr take into their midst the famous German-Jewish number theorist Edmund Landau. Later on, Veblen and Bohr did much to help refugees from Germany, Landau's lectures were boycotted by Nazi students in 1933, and he died in his place of birth Berlin.*

German Citizenship (Reichsbürgergesetz) in September 1935—part of the infamous Nuremberg laws—the exemption clauses of the BBG were canceled. This implied that prewar civil servants and participants in the war were no longer protected against dismissal. The somewhat more restricted Nazi definition of "non-Aryan," according to the Nuremberg laws, was of no help to scholars who had been dismissed in 1933 but who may not have been affected in 1935. From 1937 on, the few remaining Jewish students who were German nationals lost their right to obtain a doctor's degree.[20] From that same year on, the "racial descent" of scientists' spouses was being increasingly scrutinized by the Nazi authorities, and loyalty to their relatives cost many scholars their jobs and drove them to emigration.[21] At about the same time, mathematicians were also being increasingly dismissed from nongovernmental or semigovernmental organizations and institutions such as the Deutsche Mathematiker-Vereinigung and the Preussische Akademie der Wissenschaften, often through the active participation of nonthreatened members (D). The annexations of Austria in 1938 and Czechoslovakia in 1938–39 caused new waves of persecution and emigration of German-speaking mathematicians, mainly from Vienna and Prague.[22]

The extent of emigrations and persecutions is documented in the three lists of Appendix 1, which are, however, presumably not complete. The geographic distribution was very uneven. For the special population of persecuted mathematicians, as defined in the previous chapters, the emigrations/persecutions were spread over various places as seen in the following table.[23]

[20]See Jarausch (1984), p. 180. The Nuremberg laws of 1935 had introduced a distinction between "citizens" ("Reichsbürger"), which Jews were no longer considered to be, and the lesser "members" of the Reich ("Reichsangehörige").

[21]In the lists of Appendix 1, mathematicians who were persecuted due to the racial descent of their spouses will be marked with "PR" (Partner of racially persecuted). They were officially called to be in "Jewish clan" ("jüdisch versippt"). At that time at least the word "versippt" probably sounded less disparaging than it appears to us today against the background of the historical experience of National Socialism.

[22]The situation in Czechoslovakia immediately after the Munich Dictate (sometimes euphemistically called the Munich agreement) of September 29, 1938, is described by Max Pinl in a letter to H. Weyl, reproduced and translated as Appendix 3.5.

[23]The first figure denotes the number of emigrants, the number after the slash denotes the total number of those expelled and persecuted, including emigrants. Some differences compared to the total number of those persecuted result from double counting of certain persons or from uncertainty as to the place of expulsion/persecution. As is generally the case in this book, only German-speaking mathematicians are included, which is important to note for Amsterdam (persecution of Freudenthal), Trieste (Frucht), and Stockholm (threat to Müntz). Places outside Germany, where Germans were persecuted, are set in parentheses.

Table 1
Places of expulsion/persecution

Aachen	1/2	Göttingen	24/28	Munich	4/5
(Amsterdam)	0/1	Graz	0/1	Münster	1/1
Berlin	41/62	Greifswald	0/1	Prague	5/13
Bonn	1/3	Halle	1/2	Rostock	0/1
Brunswick	1/1	Hamburg	4/4	Saarbrücken	0/1
Breslau	8/11	Heidelberg	4/5	Schweidnitz	0/1
Cologne	1/2	Karlsruhe	2/4	(Stockholm)	0/1
Dresden	0/1	Kassel	0/2	(Trieste)	1/1
Elsterwerda	0/1	Kiel	2/4	Tübingen	0/1
Essen	0/1	Königsberg	7/8	Vacha	0/1
Frankfurt	9/14	Landsberg	0/1	Vienna	20/27
Freiberg	0/1	Leipzig	2/2	(Warsaw)	0/1
Freiburg	4/6	Mansfeld	0/1	Würzburg	0/2
Gießen	0/2	Marburg	1/4	(Zurich)	0/1

It becomes clear that ninety out of a total of 145 emigrants, and 130 out of a total of 234 persecuted (including nonemigrants and killed) came from four cities: Berlin, Göttingen, Prague, and Vienna.

4.2. The Political Position of Mathematicians, Affected and Unaffected by Persecution

Because about 90 percent of those persecuted fell under the arbitrary Nazi definition of "non-Aryan,"[24] one is sometimes tempted to ignore the fact that the persecutions were also directed against politically undesirable scholars, in particular those—a clear minority—who had actively supported the "system of Weimar," greatly loathed by the Nazis. In order to understand the reactions to the Nazi policies on the part of the scholars,

[24]There are specific sociological reasons (strong intellectual traditions and the fact that Jews were pushed away into "free professions" outside the civil service) that cannot be discussed here and accounted for the high percentage of Jews in the fundamental, nonideological sciences such as mathematics.

Figure 12 *Karl Löwner (later Charles Loewner, 1893–1968). The noted specialist in function theory was expelled from Prague in 1939, from where he had reported on the conditions of his colleagues in Germany (Appendix 3.2). After the war, he was a professor at Stanford University in California.*

both by those affected and by those nonaffected by persecutions, and also in order to understand the later behavior of the emigrants in the host countries, it is imperative to consider the political positions of mathematicians and their history. However, it should not be forgotten that even the persecution of the apolitical "non-Aryan" scientists was a political act and fulfilled political purposes.

The traditionally "apolitical" and state-loyal attitudes of German university professors as civil servants had been temporarily shattered by the First World War and by the ensuing hyperinflation that destroyed the fortunes of the middle classes. Many scientists laid the blame for defeat in the war and its consequences on the leading politicians of the Republic of Weimar, who were often represented as compliant with the policies of unconditional fulfillment of the reparations and disarmament clauses of the Treaty of Versailles. Leading scientists such as Max Planck had a stronger loyalty to the prewar monarchy and the idea of restoring Germany's greatness than to the Republic of Weimar, which has therefore been drastically described as a "republic without republicans." Scholars such as the mathematician Richard Courant, who had shown republican tendencies immediately after the war, were forced into political silence and adaptation to the predominant opinion among academics.[25] The latter defined themselves as "apolitical," which did not rule out their tolerance and indirect support of outspoken anti-Republican actions such as the ones uttered by the mathematician Theodor Vahlen (1869–1945), the future Nazi functionary and president of the politically "coordinated" Prussian Academy of Sciences.[26] The conservative majority never went as far as the early National Socialists Vahlen and Philipp Lenard in openly obstructing governmental measures. In this respect they were really "apolitical," but they were usually inept at resisting the following Nazi pressure as well. The anti-Republican feelings of the clear majority of the professors, which were also shared by many Jewish scholars (D), gave growth to an early Nazification of greater parts of the student body. All these—resentment, nationalism, apolitical aloofness—were reasons for the relatively "unproblematic" political coordination of the German universities by the Nazis in 1933 and for the incredulous horror of many of those dismissed over what was being done to them by a purportedly "national" government.

However, one has to qualify this general judgment in view of the behavior of individual persons and with respect to different scientific disciplines

[25]See Reid (1976). Conversely, persons who did not adapt to the majority opinion, such as H. Reichenbach and, above all, Emil Julius Gumbel, were persecuted by their own colleagues during the years of Weimar.

[26]On Vahlen see Siegmund-Schultze (1984).

and different places of action in Germany and Austria. Regarding the later persecution in Austria—in spite of the political turmoil and increasing anti-Semitism and anti-Republicanism there before 1938—one has to consider the very different political traditions in the two countries, for example the stronger influence of social-democratic positions among some academics in Austria, particularly in Vienna. Also, among the mathematicians and physicists in Göttingen during the 1920s there were hardly any decidedly German-nationalist and revanchist positions to be found. This was obviously above all due to the highly internationalized research atmosphere (unlike the situation among Göttingen humanists). Such an internationalized atmosphere did not exist to the same degree in the German capital. Berlin mathematicians such as Ludwig Bieberbach, Richard von Mises, and Erhard Schmidt (1876–1959) openly opposed the International Congress of Mathematicians in Bologna in 1928 because the organizers had not, in their opinion, given satisfactory guarantees for the participation of German mathematicians on an equal par.[27] In the two leading mathematical cities of Germany, Göttingen and Berlin, liberal and republican feelings among students—at least with students of mathematics and physics—were not untypical.[28] Forman, in his very well known paper, goes as far as claiming that the "Weimar culture" was dominated by the much more nationalist and revanchist humanists and social scientists and that the natural scientists felt forced to adapt to these feelings.[29] Even the more liberal Göttingen scientists had to adapt to certain norms of apolitical attitude and of abstention from open pacifist or antimilitarist action. Among the few prominent scientists and mathematicians in Germany who abstained from living by this norm were Albert Einstein and Emil Julius Gumbel, the statistician who published material about anti-Republican undercover organizations and their connections to the military. Other mathematicians who were open sympathizers of the Republic of Weimar included Hans Rademacher, Emmy and Fritz Noether, and Felix Bernstein. The Nazis dismissed all of them in 1933—except for Rademacher they did not meet the Nazi standard of acceptable "race" either. The Freiburg

[27]Dalen (2005), pp. 587ff.

[28]This applied for instance to the supporters of the scientifically oriented philosopher L. Nelson (1882–1927) in Göttingen, whose works were brought to a partial completion in England by emigrant Grete Hermann. See Schappacher (1987). The future emigrant Ludwig Boll belonged to a group of communist students in Göttingen. In Berlin many students were gathering around H. Reichenbach and his Berlin Society for Scientific Philosophy. See Danneberg et al. (1994). See also Erhard Schmidt in "Ansprachen 1951," pp. 19–21, in his response to H. Freudenthal. Schmidt is reporting on actions of the mathematics students, which prevented a Nazi student boycott against his lectures at the University of Berlin in 1929.

[29]Forman (1971). Forman even sees cognitive consequences of this adaptation in the theories of the physicists, leaning to an abandonment of strict causality.

mathematics teacher Wilhelm Hauser and the mathematics student Ludwig Boll, then in Frankfurt, were persecuted by the Nazis for both political and racial reasons.[30] Liberally oriented young mathematicians such as C.-G. Hempel, R. Lüneburg, M. Zorn, who were not affected by the racist laws,[31] found a further stay in Nazi Germany unbearable or were driven out for political reasons. There were further dismissals and "voluntary" resignations because of political nonconformity, not necessarily in the sense of leftist deviation (Baule, Heesch, Mohr, Mahlo, Naas, Neugebauer, Pinl, Rembs, Romberg, Thaer, Thullen, Zermelo).

The reaction of nonpersecuted colleagues to the dismissals was often influenced by the devilish anti-Semitism of the Nazi ideology that produced the reassuring and egotistic feeling of not being concerned, of belonging to a privileged "race." Additionally, the traditional animosities of the scholars that have been mentioned above often made them ignore the brutal methods of the Nazis' exertion of power; sometimes they even realized an identity of interests based on the so-called successes in foreign policy by the Hitler regime (D). Some career chances that arose through the dismissals influenced the behavior not only of eligible younger scholars but also of their teachers who were eager to help them. Although a clear majority of scientists objected to the interference of the scientific discussion caused by racist pseudo-theories such as "Deutsche Mathematik" and "Deutsche Physik," these theories played their political role in supplying "reasons" for the dismissals (D).

The main reaction to the persecution on the part of the unaffected scientists was the anxious concern to maintain—despite political turbulence—the scientific enterprise and its institutions at all costs and to come to a compromise with the regime if necessary. Against this backdrop it is not surprising that there was almost no openly articulated protest against the dismissals. Van der Waerden's obituary of his teacher Emmy Noether in 1935—in which he avoided any political commentary on the circumstances of her emigration—was the most one could expect in the way of public statements against the system from mathematicians.[32] A courageous stand, similar to the public resignation of the Göttingen experimental physicist

[30]Not quite accidentally—for political reasons—Boll and Hauser went to East Germany (later to be the DDR) after the war.

[31]Regarding Lüneburg, the information in the history of the Göttingen University is ambiguous (Becker et al. 1987). I assume, in accordance with Beyerchen (1977), p. 32, and based on Courant's correspondence CPP that Lüneburg was not affected by the racist laws.

[32]Van der Waerden (1935). It is well known that van der Waerden resisted the regime nonpublicly at the faculty in Leipzig on various occasions, but also, that he compromised with the Nazis on other occasions. See Soifer (2004/5).

James Franck (1882–1964), who published a letter of protest in a newspaper, is not known from mathematicians, who reacted rather ambiguously to Franck's decision (D). Mathematicians occasionally tried to save their cherished colleagues and teachers from the worst by writing letters to the Nazi ministries. A case that became rather well known—even if only after the war—was a petition by twenty-eight friends and students of Courant's of May 1933 to the ministry of cultural affairs, defending Courant against "rumors . . . about his political position."[33] Another petition by twelve students of Emmy Noether's, also from 1933, paradoxically stresses Noether's "notion of the essence of mathematics that is very much in accordance with Aryan thinking."[34] Both petitions obviously tried to appeal to existing political prejudices. Also the new director of the mathematical institute in Göttingen, Helmut Hasse (1898–1979), felt the need to defend abstract algebra politically, though with little success. The English mathematician, Harold Davenport (1907–1969), wrote to Mordell on January 14, 1934 after a Hasse lecture: "The Rektor and the Studentenführer [Nazi student-leader] attended Hasse's sample lecture in Göttingen the other week and were not convinced by his arguments that abstract algebra etc. is the perfect expression of the Third Reich."[35] The political taboo of anti-Semitism caused both petitions in favor of Courant and Noether to fail. Not surprisingly, a petition for Kurt Reidemeister, who had been dismissed from Königsberg, was more successful. After all, Reidemeister was "Aryan" according to the Nazis.[36] The letter in favor of Reidemeister, reproduced in facsimile below in the document part D, was initiated by W. Blaschke in Hamburg, who on other occasions came to compromises with the Nazis. Several of these compromises were outrageous, because they were unnecessary and even aggravated the situation (D).

In some instances, for example in Reidemeister's case (D), there were attempts to mobilize foreign mathematicians for the cause of persecuted colleagues. However, this was a two-edged sword that could lead to even more political suspicion against the threatened colleagues in view of the regime's increasing international isolation.[37] Some reports and many of the letters sent abroad contain information about the situation in Nazi Germany and about the dismissed mathematicians (Appendices 3.1 and 3.2). In view of threats from the terror regime, the reports and letters were partly written anonymously or by visitors to Germany such as Karl Löwner, or partly sent from outside Germany.

[33]Reprinted in *Exodus Professorum* (1989), pp. 22–24. The quote is from page 24 (T).

[34]Reprinted in *Exodus Professorum* (1989), pp. 26–27, p. 27 (undated 1933) (T).

[35]Mordell Papers, Cambridge, 4.38.

[36]Oswald Veblen, in his letter of support for Reidemeister, expressly alludes to the fact that this case did not touch any of the Nazis' political taboos (D).

[37]This ambiguity in its consequences for the DMV is stressed in Mehrtens (1989).

4.D. Documents

4.D.1. The Pseudo-Legalism of the Methods of Expulsion

The mathematician from Königsberg, Gabor Szegö, who was threatened with dismissal, discussed in a letter on May 23, 1934, to the American Russian mathematician, J. D. Tamarkin, the arbitrary Nazi practices:

> I point to the many who have been placed in retirement recently, often without previous proceedings (for example Rademacher, late February this year), further placements into retirement for simplifying administration, however with the hidden goal to remove unwanted personalities, who otherwise are protected by the civil servant law. . . . With mathematics in Königsberg things are as follows. Reidemeister has been moved, a successor for him is not yet there. That's why they need me temporarily, because I am alone in a responsible position. But as soon as a successor appears . . . I do not believe that I will stay for long, although as a participant in the war and front officer I am purportedly not affected by the law. Anyway it was assumed last summer that the law had a time limit, such as sooner or later legal certainty would be restored. Since then the law has been extended twice already, and there are no restraints to extend it ad inf. In addition, even if the law should be lifted, there are a thousand other possibilities to make life here impossible for one. These laws are being changed with more ease than for example a mathematician replaces one system of axioms by another.[38]

4.D.2. Student Boycotts as a Means of Expelling Unwanted Docents

The leader of the student boycott in Göttingen, the brilliant mathematician Oswald Teichmüller (1913–1943),[39] wrote in a "letter of explanation," dated November 3, 1933, to his victim and teacher Edmund Landau, who had asked for reasons of the boycott:

> You stated the opinion yesterday that it had been an anti-Semitic demonstration. I held and continue to hold the view that an individual anti-Jewish action should rather be directed against anyone else than you. It is not about making life difficult for you as a Jew, but only about preventing German students of the second term from being taught precisely in differential and integral calculus by a racially totally foreign teacher. I would not dare more than any other to question your ability to teach international mathematics to suitable students of arbitrary descent. . . . However, the chance of you being able to communicate the

[38]Szegö (1982), p. 4 (T). The introductory heading in this chapter is taken from this letter.

[39]See also the document in Appendix 3.4 on the expulsion of H. Liebmann and A. Rosenthal in Heidelberg. K. Hohenemser, in a letter to me from December 23, 1997, reported on a student boycott against the newly appointed W. Prager in Karlsruhe 1933.

> essentials of mathematics to your listeners without your own national heritage being apparent is as unlikely as it is certain that a skeleton without flesh does not walk, but slumps rather and withers away.[40]

Rafael Artzy (born Deutschländer) on the reasons of the temporary dismissal of his teacher Kurt Reidemeister in Königsberg:

> In the years just before the Nazi takeover, the University students organized riots. . . . Reidemeister was furious, and in one of his classes he "proved," in his naive way, that the behavior of the students had not been logical. The result was his dismissal right after Hitler took over.[41]

4.D.3. The Racist "German Mathematics" (Deutsche Mathematik) of Ludwig Bieberbach as an Ideology Supportive of the Expulsions

Ludwig Bieberbach, full professor of mathematics at the University of Berlin, in April 1934 on the student boycott in Göttingen against Edmund Landau:

> A few months ago differences with the Göttingen student body put an end to the teaching activities of Herr Landau. . . . This should be seen as a prime example of the fact that representatives of overly different races do not mix as students and teachers. . . . The instinct of the Göttingen students was that Landau was a type who handled things in an un-German manner.[42]

4.D.4. Personal Denunciations as Instruments of Expulsion

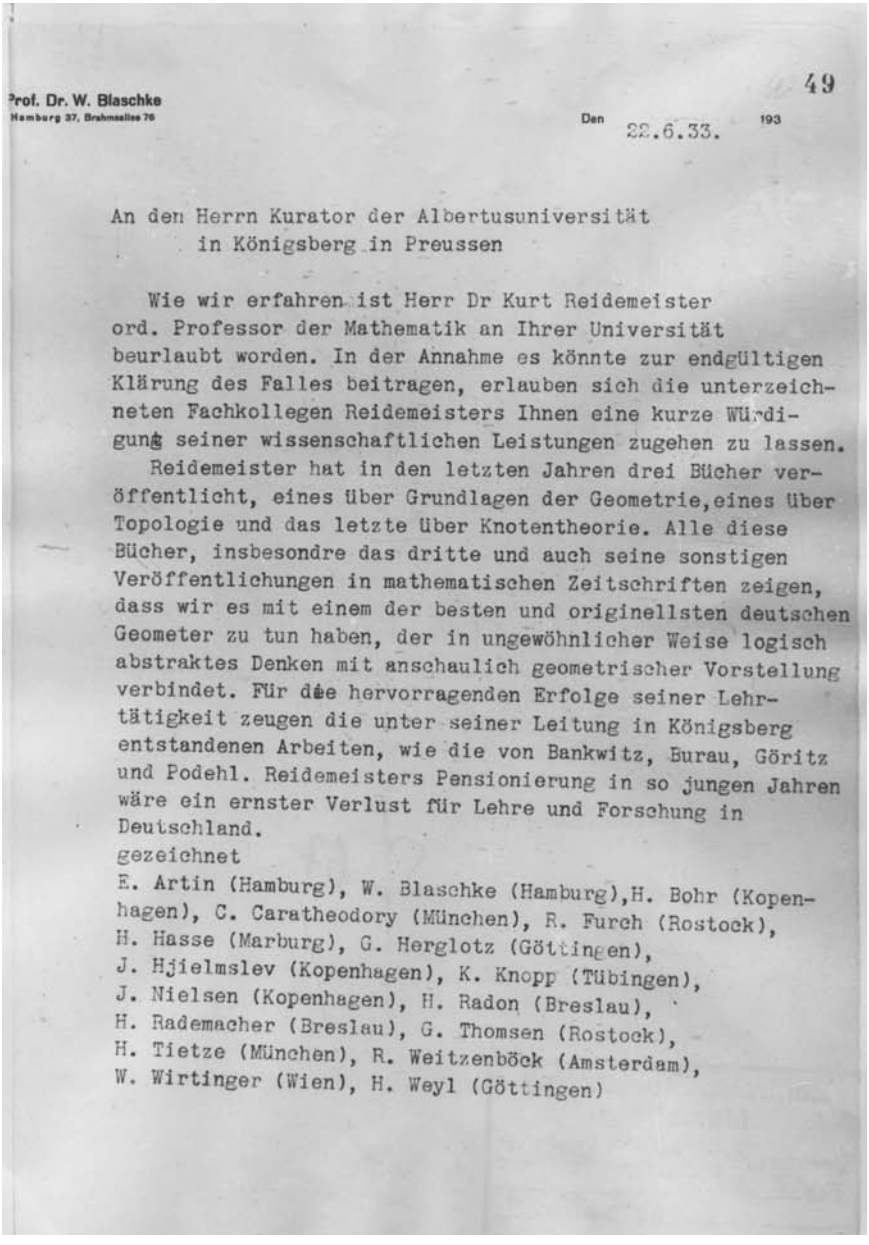
The escape of Hanna von Caemmerer, who was not Jewish, from Berlin after her 1936 state exam, was commented thus in 1980:

> When she was (rightly) suspected of being friendly to Jews, one of her professors at the University of Berlin made it impossible for her to continue there.[43]

The denunciation of the differential geometer and high school (Gymnasium) teacher Eduard Rembs is contained in a letter from February 13, 1936, written by the dean of the Philosophical Faculty at Berlin, Ludwig Bieberbach:

> My faculty received an application by Dr. Eduard Rembs for a habilitation in mathematics. He . . . writes in the questionnaire that he was a member of the

[40]Schappacher and Scholz, eds. (1992), pp. 29–30 (T).
[41]Artzy (1994), p. 2.
[42]Bieberbach (1934), p. 236 (T).
[43]*IBD* microfilm. The information is probably from B. H. Neumann, whom Caemmerer married after their joint immigration to England in 1938. Between 1936 and 1938 Caemmerer continued her studies in Göttingen.



49

Prof. Dr. W. Blaschke
Hamburg 37, Brahmsallee 76

Den 22.6.33. 193

An den Herrn Kurator der Albertusuniversität
in Königsberg in Preussen

Wie wir erfahren ist Herr Dr Kurt Reidemeister ord. Professor der Mathematik an Ihrer Universität beurlaubt worden. In der Annahme es könnte zur endgültigen Klärung des Falles beitragen, erlauben sich die unterzeichneten Fachkollegen Reidemeisters Ihnen eine kurze Würdigung seiner wissenschaftlichen Leistungen zugehen zu lassen.

Reidemeister hat in den letzten Jahren drei Bücher veröffentlicht, eines über Grundlagen der Geometrie, eines über Topologie und das letzte über Knotentheorie. Alle diese Bücher, insbesondre das dritte und auch seine sonstigen Veröffentlichungen in mathematischen Zeitschriften zeigen, dass wir es mit einem der besten und originellsten deutschen Geometer zu tun haben, der in ungewöhnlicher Weise logisch abstraktes Denken mit anschaulich geometrischer Vorstellung verbindet. Für die hervorragenden Erfolge seiner Lehrtätigkeit zeugen die unter seiner Leitung in Königsberg entstandenen Arbeiten, wie die von Bankwitz, Burau, Göritz und Podehl. Reidemeisters Pensionierung in so jungen Jahren wäre ein ernster Verlust für Lehre und Forschung in Deutschland.

gezeichnet
E. Artin (Hamburg), W. Blaschke (Hamburg), H. Bohr (Kopenhagen), C. Caratheodory (München), R. Furch (Rostock), H. Hasse (Marburg), G. Herglotz (Göttingen), J. Hjelmslev (Kopenhagen), K. Knopp (Tübingen), J. Nielsen (Kopenhagen), H. Radon (Breslau), H. Rademacher (Breslau), G. Thomsen (Rostock), H. Tietze (München), R. Weitzenböck (Amsterdam), W. Wirtinger (Wien), H. Weyl (Göttingen)

Figure 13 *Petition by Wilhelm Blaschke. A petition organized by the Hamburg mathematician Wilhelm Blaschke (1885–1962) dated June 22, 1933, directed against the dismissal of Kurt Reidemeister in Königsberg.*

> Social Democratic Party from 1919 until early 1933, furthermore of the study group of Social Democratic teachers from about 1926 until early 1933, of the German Peace Society [deutsche Friedensgesellschaft] for about one year (1930?), then of the German Peace Association [deutscher Friedensbund] until early 1933. In his curriculum vitae he reveals that he is still a senior teacher [Studienrat] at the Kantgymnasium in Spandau [part of Berlin]. I find this striking [auffällig] given his political history. I therefore ask to look into why Dr. Rembs is still in office as a senior teacher.[44]

Needless to say that Rembs's application for a habilitation came to nothing and that—quite the contrary—he was dismissed from his position as high school teacher.[45]

A similarly unbelievable and merciless act was the denunciation by Bieberbach that led to the dismissal of Issai Schur from the academic commissions of the Prussian Academy of Sciences.[46]

In March and early April 1938 mathematicians and physicists of the Academy who belonged to the academic commission for the edition of Karl Weierstrass's works signed a circular, beginning with the signatures by Erhard Schmidt and Issai Schur, who both wrote: "read" [gesehen]. The following signatures were [see facsimile below]:

29 March, Bieberbach: "I find it surprising that Jews are still members of academic committees"
30 March, Th.Vahlen: "I propose modification"
3 April, M. Planck, who was Secretary of the Academy: "I will take care of it."

In the respective file of the Academy, Schur's resignation from the academic commissions follows immediately. Half a year later Schur had to resign from the Academy altogether. In 1928 Bieberbach and Schur had, all the same, published a well-known joint article in the Proceedings of the Academy.[47]

[44]Partial estate L. Bieberbach, Oberaudorf (Germany) (T).

[45]The denunciation had consequences for the relationship between Berlin mathematicians after the war, especially within the Berlin Mathematical Society. Rembs left the BMS in 1953, after Bieberbach had been accepted as a member. See Knobloch (1998), p. 51.

[46]The incidence was first mentioned in Quaisser (1984), p. 38. See the facsimile below.

[47]"Über die Minkowskische Reduktionstheorie der positiven quadratischen Formen," *Sitzungsberichte der Preussischen Akademie der Wissenschaften* 1928, Physikalisch-mathematische Klasse, pp. 510–35.

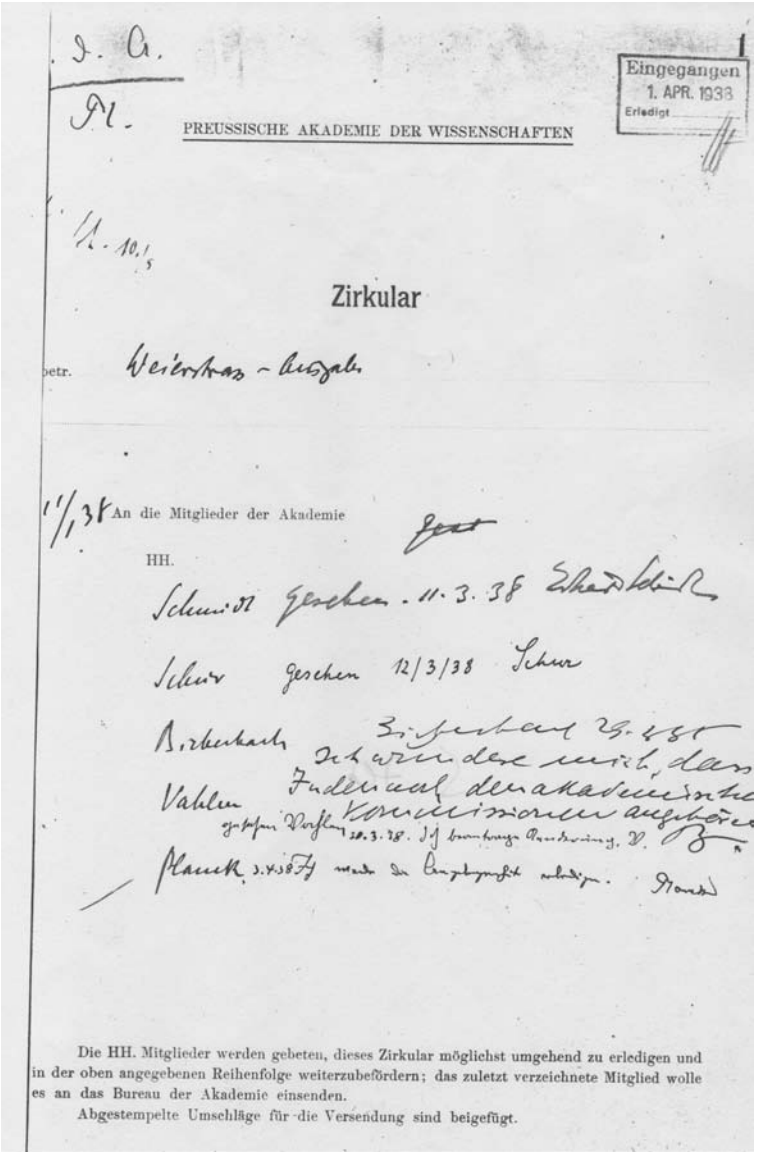


Figure 14 *Circular of the Weierstrass-Commission. Circular of the Weierstrass-Commission of the Prussian Academy of Sciences in Berlin March/April 1938, which shows the roles of Bieberbach, Vahlen, and Planck in sacking Issai Schur from the academic commissions.*

4.D.5. Political Reasons for Emigration beyond Anti-Semitism

Some emigrants, among them C.-G. Hempel, O. Neugebauer, W. Romberg, H. Schwerdtfeger, P. Thullen, and C.-L. Siegel, left Germany without immediate threat to themselves or to their relatives.

Werner Romberg, trained by the mathematical physicist Arnold Sommerfeld (1868–1951) in Munich and who, after his immigration to Norway, became known as a numerical analyst, wrote the following to me in 1998:

> I was close to the SAP [Socialist Workers Party] as it supported the joint fight of SPD and KPD against the Nazis. We were about 10–20 students and therefore known to the Nazis. In 1932 Sommerfeld formulated a prize competition for the University of Munich and suggested I should participate. I submitted the solution and received the following response: "The assignment was completely solved by the sender. However, the sender lacking the necessary maturity of mind [geistige Reife], the prize cannot be awarded." Sommerfeld suggested I submit it as a PhD and urged me to hurry. Accordingly I was able to pass the examination with magna cum laude in the summer of 1933.
>
> Sommerfeld had heard about requests for theoretical physicists from the USSR. By way of curing me of my leftist illusions, he recommended me.[48]

The specialist in function theory, Peter Thullen, did not want to return to Germany from Italy in 1934, even though he had offers of work. Immigration to Austria, which he considered for a moment, was out of the question for Thullen, although he was not Jewish. The differential geometer Adalbert Duschek then Privatdozent at the Technical University in Vienna, who—after the German annexation of Austria in March 1938—would himself be dismissed both for political reasons and due to his Jewish wife, wrote in November 1934:

> Quite confidentially, and in order to spare Mr. Thullen a disappointment, I want to remark that he has no prospects at all here, if he happens to be a Jew. To be sure they are not yet as rigid in this point as in the German Reich, but a certificate of baptism (not a recent one) and corresponding looks are also here a prerequisite.[49]

In New York City, Richard Courant wrote after the war:

> Thullen was a very active member of the German Catholic Youth Movement and from the outset a bitter foe of the Nazis. Although the German authorities

[48]W. Romberg to R. Siegmund-Schultze, October 1, 1998 (T).

[49]A. Duschek to "Herr Professor" (probably H. Behnke in Münster), November 11, 1934 (T), from Thullen's estate in the possession of his son Georg Thullen Genthod (near Geneva). On Duschek see Einhorn (1985), vol. 2, pp. 403–11, and OVP, cont. 30, f. Duschek, Adalbert, 1938–39.

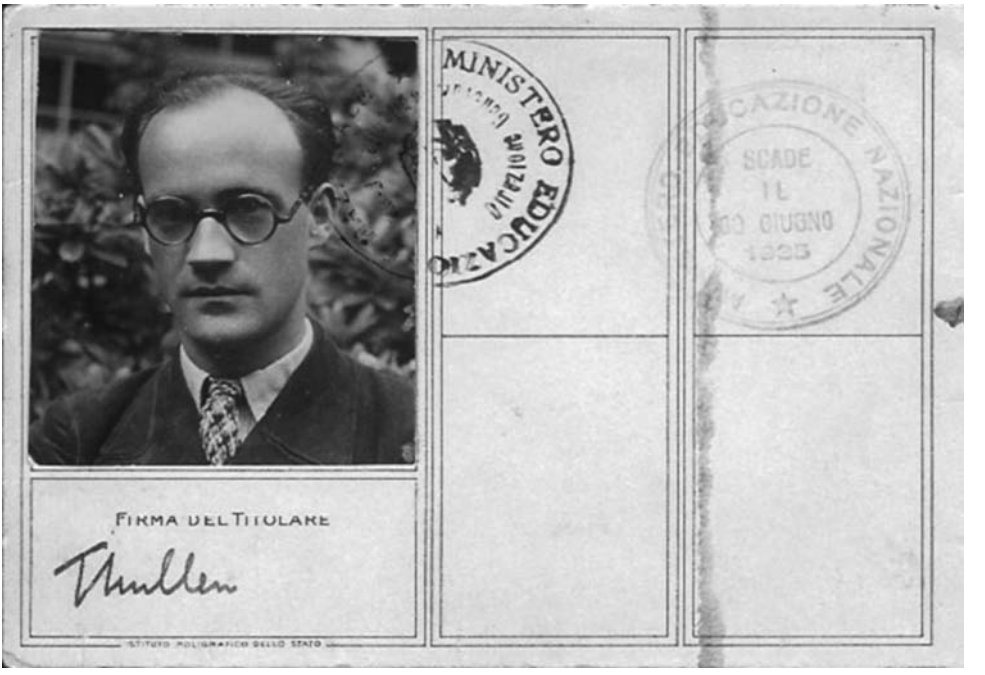


Figure 15 (a, b) *Peter Thullen (1907–1996). The talented function theorist and Catholic dissenter did not return to Germany from a research year in Italy, but immigrated instead to Ecuador. The images show the front and back of a legitimation for Thullen from the Italian Ministry of Education in the year XI of Fascist rule (1935).*

> built golden bridges for him he decided to leave Germany as soon as the Nazis took charge and went to Quito, Ecuador.[50]

The widow of Hans Schwerdtfeger mentions as the reason for his emigration "the clear conviction that Nazism would lead into disaster."[51] In 1937, Max Born, then in Edinburgh, wrote in a letter to Albert Einstein on Schwerdtfeger:

> Dr. Hans Schwerdtfeger: young mathematician from Göttingen. Lone wolf, earned his university education by doing factory and similar work. Pure "Aryan." Was not popular with Weyl and Courant, as he used to go his own way. I believe him to be talented, but lacking in self-criticism; his enthusiasm has up to now been greater than his achievement. Herglotz had a good opinion of him, but he does nothing for his people. . . . Schwerdtfeger was a violent opponent of the Nazis right from the beginning, and has therefore no chance of a position in Germany in spite of his "spotless" ancestry. It is people such as this we should help.[52]

The mathematics student Ludwig Boll, who had already received a topic for his dissertation from Hellinger in Frankfurt, was arrested due to his membership of the Communist Party on April 6, 1933 and interned for five weeks in the concentration camp Osthofen[53] near Worms. He succeeded in fleeing to the Netherlands in 1934, only to be interned again by the German occupiers in 1943 in the concentration camp Westerbork, from which he escaped deportation to Auschwitz again. He survived in Amsterdam, similar to the early emigrant Freudenthal.[54]

4.D.6. Cheating Emigrants out of Their Pensions

The Berlin mathematician Richard von Mises wrote to the ministry on December 21, 1933:

> In my application dated October 12, I requested acceptance of my resignation from the civil service according to the appropriate legal regulations. After twenty-four years of service I fail to see any reason for an explicit renouncement

[50]Courant's letter of recommendation to the Catholic University of America in Washington, DC, dated June 20, 1945. CIP New York, file: P. Thullen, 1944–48. Thullen's diary on his experiences in Germany immediately after Hitler's seizure of power is quoted below in Appendix 6. See also Thullen (2000) for the original German version of the diary, and Siegmund-Schultze (2000) for further commentary on it.

[51]Hanna Schwerdtfeger to the author, undated, received July 21, 1993.

[52]Born, ed. (2005), p. 124. Letter to Einstein, January 4, 1937. On Einstein's response to Born's letter see chapter 6.

[53]The camp is described by Anna Seghers as "Westhofen" in her famous novel *The Seventh Cross* (1942), made into a film with Spencer Tracy.

[54]Information based on an interview I had with Boll, August 29, 1983, and on Arnold (1986).

> on my part of claims to which I am entitled according to the law. I request a decision as soon as possible enabling me finally to accept the position offered to me in Turkey.[55]

Von Mises's application for a pension was turned down, although Theodor Vahlen, the old Nazi and mathematician in the ministry, had temporarily given hope to von Mises.[56]

4.D.7. Increasing Restrictions Imposed upon "Non-Aryan" Students

Even if in individual cases "non-Aryans" could go on to take their PhDs until 1937, the restrictions in admissions and other harassment induced many students to emigrate immediately after 1933. Otto Blumenthal in Aachen wrote on November 18, 1933 to his former colleague Theodor von Kármán in California about the diminishing chances for his daughter:

> Of my children Margarete continues to study in Köln, where she has made notable progress with her [Anglicist] dissertation. . . . She is in a hurry to complete it as nobody knows if and when non-Aryans will be barred from a PhD.[57]

Rafael Artzy's untimely departure from Königsberg without completing his PhD was also influenced by the transfer for disciplinary reasons of his teacher Kurt Reidemeister, which was mentioned above:

> During my sixth semester [third year], namely in 1932, Reidemeister informed me it was a good idea to give me a topic for a doctoral dissertation because "nobody knows what could happen to the Jews." Thus I began to work on the topic (on Gewebe [topological notion]). Then, immediately after Hitler's seizure of power, Reidemeister was dismissed. Since I had been very active in the Zionist movement a while back, I had decided to go to Palestine as soon as possible anyway; I also had a good knowledge of Hebrew.[58]

4.D.8. Political Position of Emigrants before 1933: German Nationalism, Illusions, and General Lack of Prescience

Alfred Barneck, who was dismissed from the Technical University in Berlin-Charlottenburg in 1933 due to his Jewish descent, had written in an obituary of his teacher Jahnke in 1922:

[55]GSA, Rep. 76 Va, Sekt. 2, Tit. IV, Nr. 68c, fol. 349 (T).

[56]On the consequences of this decision for von Mises after the war see chapter 11. On the role of Vahlen cf. Siegmund-Schultze (1984).

[57]Kármán Papers, Caltech, Pasadena, 3.10 (T).

[58]Letter by Artzy to me, January 11, 1998 (T). A similar case was Dov Tamari, then Berhard Teitler, who had to leave Frankfurt in 1933 before finishing his PhD with C. L. Siegel and left for Palestine because he had been active for Zionism before (Tamari 2007).

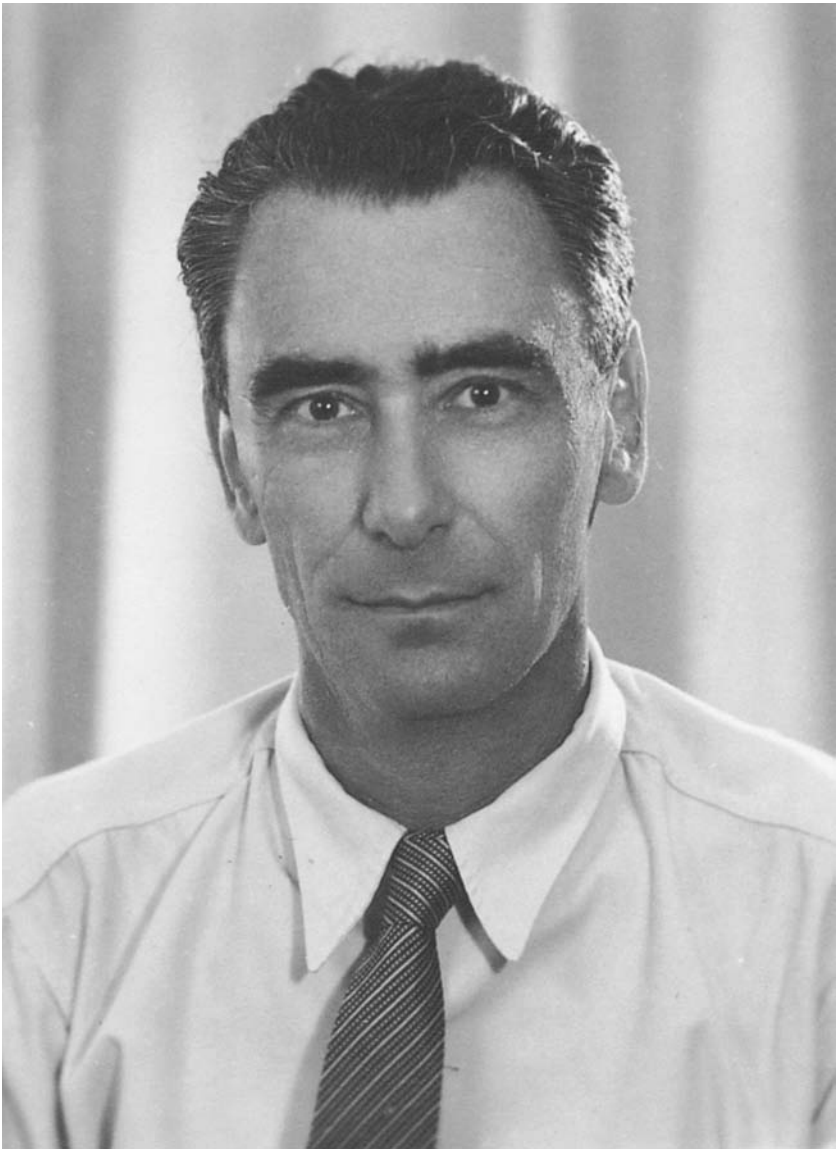


Figure 16 *Rafael Artzy (1912–2006). Rafael Artzy (then Rafael Deutschländer) had been active in the Zionist movement before 1933 and could not finish his PhD with Kurt Reidemeister in Königsberg due to the latter's dismissal in 1933. The geometer Artzy went to Palestine, was temporarily in the United States, and then lived in Haifa (Israel).*

> Eugen Jahnke, a marvelous, genuine through and through German patriot [kerndeutscher Mensch] has left us. . . . He felt the plight of our country deeply and tried to alleviate the problems where he could.[59]

The Jewish emigrant from Göttingen Kurt Mahler remembers in 1971:

> Needless to say that I was at this time [1923] and long into the 1930s still a very patriotic German![60]

The director of the Institute for Applied Mathematics and future emigrant Richard von Mises said in 1930 in his address before the University of Berlin:

> We remember with deep reverence the immeasurable procession of the dead [Zug von Toten], of those who fought in battle with us but did not return, who in braveness, in unshakeable discipline and loving enthusiasm helped to drive away the horrors of the war from the Rhineland, but who did not succeed in sparing it the heavy rigors of occupation by the enemy after the war. We remember in sorrow the lost and not yet liberated country, which even now we cannot enter.[61]

After a short stay in Germany, the early and temporary emigrant Eberhard Hopf reported in America about the political situation in Germany in 1932:

> We are amazed how many Germans voted for Hitler. . . . Most of the people who voted for Hitler are dissatisfied with the general and their own situation. They follow anybody who promises them impossible things.[62]

Hermann Weyl, 1932, to Einstein on a possible appointment at the Institute for Advanced Study in Princeton:

> The political conditions in Germany are becoming increasingly unpleasant (I should be in prison according to the National Socialists because of "defilement of the race" [Rassenschande]).[63]

On January 6, 1932, Weyl deplored in a letter to Oswald Veblen that he had gone from Zurich to Göttingen as Hilbert's successor and not straight to Princeton:

[59]Barneck (1922), p. 39 (T).

[60]Poorten (1991), p. 368.

[61]Mises (1930), p. 885 (T).

[62]Hopf to Tamarkin, May 1, 1932. Tamarkin Papers, BUA, box correspondence (A–H), f. E. Hopf.

[63]Einstein Papers, Jerusalem, 24098-1/2, June 22, 1932 (T). Weyl's wife Helene was "non-Aryan" according to the Nazis.

> For entering into an Aryan-Jewish marriage the National Socialists plan 15 years severe prison.[64]

Edmund Landau in 1932 after a councilor in the Prussian Ministry of the Interior had intimated to him that the Nazis planned a concentration camp in nearby Lüneburg Heath:

> In that case I had better reserve a room with a balcony, south view, as fast as possible.[65]

The applied mathematician of Darmstadt, Alwin Walther (1898–1967), began a letter to Courant who was about to leave for a trip to America in March 1932 with words that were obviously ironically paraphrasing Nazi slogans:

> Heil and Victory for America! [Heil und Sieg für Amerika][66]

In retrospect, the emigrant Wolfgang Wasow saw in 1986 an amazing lack of prescience on the part of the Austrian Jews shortly before the Nazi occupation [Anschluss] in 1938:

> It was then—and still is now—a mystery to me that most Austrian Jews were just as unprepared for what happened as the Jews in Germany had been five years earlier. Looking at the events in Germany, they should have taken as many of their possessions as possible abroad, while there still was time. Very few had done that. To get out with at least some of your money and to find a country that would let you in was much harder in 1938 than in 1933.[67]

4.D.9. First Reactions by the Victims: Readiness to Compromise and to Justify, Adoption of the Martyr's Role

In a letter to H. Kneser after his dismissal in 1933, Richard Courant defended his short engagement for the Republic of Weimar in the early 1920s: according to the letter it was Felix Klein who had encouraged him to join the Social Democratic Party, his membership was in the interest of the University of Göttingen and was meant to serve as a bulwark against Communism.[68]

[64]OVP, cont. 15A, file: Weyl. As the letter is written in the beginning of January and its prescience seems surprising, it cannot be ruled out that it was actually written in January 1933.

[65]According to Kluge (1983), p. 94 (T).

[66]Walther to Courant, March 14, 1932, CPP (T).

[67]Wasow (1986), p. 192. Among those who were prescient enough and saved their money from Austria was Richard von Mises, but he had the firsthand experience of Berlin in 1933.

[68]Courant to H. Kneser, April 28, 1933, CPP. A similarly apologetic passage from this letter is quoted in Beyerchen (1977), p. 22.

Figure 17 *Hans Rademacher (1892–1966). Rademacher was one of the few German professors before 1933 holding liberal, partly left-leaning political views. He was dismissed by the Nazis for that reason and went to the United States, where he brought "dormant number theory" back to life (Weyl). Until his retirement he was at the University of Pennsylvania.*

Courant to his friend James Franck, the Göttingen physicist, on March 30, 1933, reacting to Einstein's criticism of the Hitler regime from abroad:

> Even if Einstein does not regard himself as German, he has experienced a lot of good in Germany. So he should feel obligated to make amends for the trouble he has caused as far as he can. (CPP [T])

Hans Rademacher (Breslau) and Kurt Reidemeister (Königsberg) felt political pressure to justify themselves in order to avoid dismissal. Rademacher to the ministry of culture and science in Berlin, on December 17, 1933:

> Concerning information supplied in the questionnaire, I take the liberty of adding as an explanation that my membership in the League for Human Rights [Liga für Menschenrechte] was restricted to paying the membership fees. I never took part in meetings of that organization and did not pay much attention to it anyway. . . . Ever since my habilitation as Privatdozent in mathematics at the University of Berlin, I have devoted my energies exclusively to scientific research and academic teaching. My international relations are of a purely scientific nature stemming from the fact that mathematics transgresses the borders of language. As a Prussian civil servant I take great pains in fulfilling my duties to the people and to the state as conscientiously as possible.[69]

Reidemeister wrote to the Nazi ministry, on May 13, 1933:

> Above all I declare that I was never a member of a political party and that I was never (according to my notion of political activism) politically active. . . . I disapproved of the propagandistic advocacy of logistic philosophy and demonstrated this by preventing the formal participation of the Verein Ernst Mach in the meeting for exact philosophy in Königsberg. . . . Due to the introduction of practical exercises the wheat got separated from the chaff even more visibly, and some students who were to my knowledge barely average in their mathematical talent constituted a dissatisfied group. . . . When the negative position of the student body was openly expressed even among the mathematics students I resolutely retired from my professional guild lead [berufsständische Führerrolle].[70]

On August 30, 1935, Otto Toeplitz wrote in a letter to Courant in New York, writing from Arosa (Switzerland):

> It is my opinion that we have to hold out in the positions that they are still granting us until the last moment. Not because there is any improvement in sight—quite impossible—but because otherwise we will become, in one way or another, a burden for the whole of Jewry and deprive at least somebody of a position. I consider it a sacrifice to Jewry to hold out in this position. . . . I wanted to explain to you the basic principle . . . I could not have done it from Bonn—at the moment every letter from Bonn is opened under the pretext of "valuta problems." (CPP [T])

[69]GSA, Rep. 76 Va, Sekt. 4, Tit. IV, No. 5 1, fol. 3 96 (T).
[70]Szegö Papers, Stanford, SC 323, box 9, f. 15 (copy, 9 pages [T]).

The reactions of colleagues to James Franck's public retirement from the University of Göttingen were very different:[71] Hans Lewy to Franck (without date):

> There are still men!

The leading Göttingen aerodynamicist, Ludwig Prandtl, to Franck (April 19, 1933):

> With greatest consternation I read today in the newspaper that you relinquish your professorship! This must not be your last word.

Publisher Ferdinand Springer to Franck (April 19, 1933):

> Your letter will not fail to make an impression everywhere where there still is the capability to see things as they are.

4.D.10. The Partial Identity of Interests between the Regime and the "Unaffected" German Mathematicians

Emigrant Menahem Max Schiffer related at second hand the following discussion between dismissed Issai Schur and unaffected Erhard Schmidt in Berlin in the year 1938:

> When he complained bitterly to Schmidt about the Nazi actions and Hitler, Schmidt defended the latter. He said, suppose we had to fight a war to rearm Germany, unite with Austria, liberate the Saar and the German part of Czechoslovakia. Such a war would have cost us half a million young men. . . . Now Hitler has sacrificed half a million Jews and has achieved great things for Germany. I hope some day you will be recompensed but I am still grateful to Hitler.[72]

There are reported similar, if less drastic nationalistic remarks by Schmidt before and after 1933, and above all a certain lack of courage to stand up for colleagues who were threatened.[73] Yet Schmidt was known among colleagues as a critic of Bieberbach's racist "Deutsche Mathematik" and as an opponent of anti-Semitism. One Nazi activist, Werner Weber, wrote in a secret police report on Schmidt in 1938:

> I think that Schmidt shows little or no understanding of the Jewish question.[74]

[71]The following from the James Franck Papers, Chicago, Joseph Regenstein Library, box 7, f. 7 (T). Beyerchen (1977), p. 22, quotes from Courant's letter to H. Kneser, April 28, 1933, where Courant rejects the idea that he had supported Franck's action of "voluntary" retirement.

[72]Schiffer (1986/98), p. 180. Schiffer's quotation has to be judged very cautiously due to the great distance in time and the indirect report.

[73]For instance, experienced by H. Grunsky. See Siegmund-Schultze (2004a).

[74]University Archives Berlin, UAB, NS-Dozentenschaft, no. 222 (E. Schmidt), folio 9 (T).

There were even colleagues such as Karl Löwner who gained the impression, at least in 1933, that Schmidt tried to avert Schur's dismissal.[75]

In any case, the partial identity of interests between the regime and some "unaffected" German mathematicians was much more pronounced and publicly formulated by the geometer of Hamburg Wilhelm Blaschke (1885–1962). He had been born in Austrian Graz and welcomed the annexation of his country in 1938 (henceforth called "Eastern marches" [Ostmark]), as the fulfillment of a "dream from my younger years."[76] In a review of a volume of the American Mathematical Society devoted to the fiftieth anniversary of the Society, Blaschke criticized that the publication "is shamefully silent about the national [völkisch] origin of the representatives of American scholarship." On the same page Blaschke wrote, maybe not without feeling of envy and of anger about the flight of many emigrants from Germany:

> The most surprising thing is the mathematical large-scale enterprise [mathematische Großunternehmen] in the little Negro village of Princeton, where almost one hundred mathematical docents, with no students to speak of, are laying their golden eggs.[77]

It is against the backdrop of such utterances from Blaschke, which have been concealed or minimized by some mathematicians for a long time,[78] or compared with the even more extreme statements by Bieberbach (see above), that Erhard Schmidt's position appears relatively objective and exemplary. The early emigrant Hans Freudenthal, who survived the Nazi occupation of the Netherlands by remaining in hiding, said on the occasion of the celebration of Schmidt's seventy-fifth birthday in 1951 in Berlin:

> It is very easy to exert the honesty that mathematics demands within mathematics, because if one fails to do so it backfires very soon and bitterly. It is much more difficult to remain true, also among people and friends, to that characteristic to

[75]See Löwner's letter to Silverman in Appendix 3.2.

[76]Blaschke: *Geometrie der Gewebe*, Berlin 1938, p. vi (T).

[77]"Negro" was of course a code word for "Jew" here. *Jahresbericht Deutsche Mathematikervereinigung* 49 (1939): p. 81 (T). The AMS volume under review was volume 2 of *American Mathematical Society Semicentennial Publications in Two Volumes*, New York: AMS 1938.

[78]In a historical paper on the mathematical institute of the University of Hamburg from 1991, one finds, with direct reference to Blaschke's racist quotation, the following rather ambiguous and trivializing remark: "One can certainly not conclude from that quotation that he made propaganda for National Socialism. The relevant question here is not what Blaschke wanted to reach for National Socialism, but what he wanted to reach for himself (and for people around him and for his science) by his attitude to National Socialism" (Maas 1991, p. 1094 [T]).

Figure 18 *Kurt Reidemeister (1893–1971). The versatile researcher in the foundations of geometry, topology, and in number theory was transferred for disciplinary (political) reasons from Königsberg to Marburg, after conflicts with National Socialist students.*

which one was trained in numbers and figures. That we, on the outside, to whom Germany was closed and hostile, are aware of that and that we never had doubts about you, is demonstrated by the huge number of contributions which have reached the editor of the Festschrift from abroad.[79]

4.D.11. Reactions to the Expulsions from Abroad[80]

Oswald Veblen (IAS Princeton) wrote to the German ambassador in Washington on June 11, 1933, intervening for Kurt Reidemeister:

[79] *Ansprachen* 1951, p. 18 (T).

[80] Concerning this point there is a huge amount of documents: declarations of termination of membership in the DMV, etc. This discussion, however, lies beyond the scope of a book that is primarily oriented toward the process of expulsion itself. See also Appendix 4.2.

Dear Sir:
It has been suggested to me that it might be worth while to intercede with you on behalf of Professor Dr. K. Reidemeister who has recently been "beurlaubt" from his chair of mathematics at Koenigsberg although he is neither a Jew nor a member of any of the parties of the left. Under these circumstances it might be possible to secure a revision of his case without raising any question of general principle.

May I therefore say that Professor Reidemeister has written books and articles on pure mathematics which are well known to the mathematicians of America, and that he is regarded as one of the important mathematicians of Germany. We in Princeton are especially interested in him because of the close relationship between his work and that of our colleague, Professor Alexander.

Since you, of course, do not know who I am, may I say that I have many ties of friendship with Germany and that I have taken great pride in the marks of esteem I have received from German colleagues, the latest being an honorary doctorate conferred only a few months ago by Hamburg University? With this background I venture to suggest that German Science can ill afford to lose the services of men like Reidemeister after having been so severely injured as it has been by the expulsion of so many brilliant and valuable Jews.

Yours sincerely Oswald Veblen[81]

[81]GSA, Rep. 76 Va, I. HA, Sekt. 11, Tit. 4, Nr. 37, fol. 52.