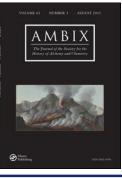


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Peter Debye: Nazi Collaborator or Secret Opponent?

JURRIE REIDING Nieuwegein, The Netherlands

In Ianuary 2006, the so-called "Debye Affair" emerged, triggered by the publication of a Dutch book on Einstein. Debye was accused of Nazi collaboration in his capacity as chairman of the German Physical Society when he requested, in December 1938, the remaining Jewish members to leave the society. Within a month, two Dutch universities deleted Debye's name from their research institute and scientific award, and this led, both nationally and internationally, to a heated discussion. The Dutch government commissioned the Netherlands Institute for War Documentation to investigate the case. In its final report, the accusation was toned down to 'opportunism'. This paper is based on new information. Above all, I have researched Debye's extensive American archive. This archive disclosed the correspondence (1940-1963) with his friend Paul Rosbaud, an important MI6 intelligencer in Berlin during the Nazi period. The correspondence, combined with information from other sources, suggests that Debye might have been one of Rosbaud's informants. Therefore, this paper also includes a powerful warning against hasty and definitive conclusions.

Introduction

Peter Debye (1884–1966) spent a substantial part of his life in Germany. For almost thirty years (between 1901 and 1940) he was immersed in German scientific tradition. This period was interrupted only by stays in Zürich (Switzerland), Utrecht (The Netherlands), and once more in Zürich. On 15 January 1940, he left Germany and Europe to settle in the USA, where he was appointed professor of chemistry at Cornell University in Ithaca (NY). He remained connected to this university until his death.

European history of the first half of the last century was marked by political and economic crisis and war. Debye had, as a prominent scientist and science manager, to confront this turmoil. He had to face several political dilemmas, which made him a refugee twice: first in 1920, when the chaotic aftermath of World War I made living conditions in Germany problematic and advanced research was hampered by lack of

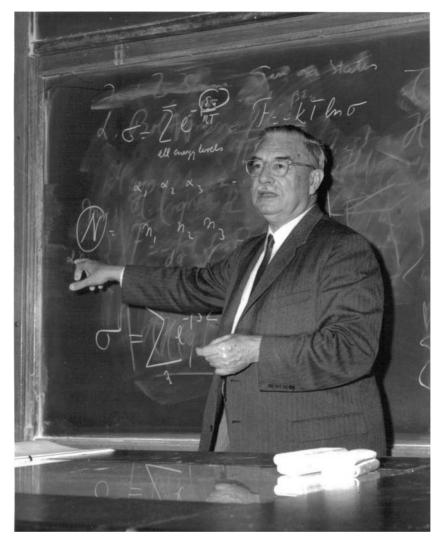


FIGURE 1 Debye lecturing while visiting professor at the University of Michigan (April to December 1960). Courtesy Regionaal Historisch Centrum Limburg, Debye archive, Maastricht.

material and human resources;¹ and second, by the end of 1939, when Debye definitively turned his back on Germany and German science.² The outbreak of World War II deprived him of his research facilities and possibly endangered his safety and that of his family.

- ¹ Debye in a letter (27 August 1919) to Ehrenfest: "I want to be able to work for myself and for others, and for that I need, first, the necessary means, and second, the proper environment. The latter I had not considered at all for some years, but now, after a fortunately endured physical hunger and an incorporeal hate-torture, I think differently." . . . "If I now will leave Germany, that is completely irrelevant to me" [Archive Paul Ehrenfest (APE), letters to and from P. J. W. Debye, Museum Boerhaave, Leiden] All unattributed translations from the German or the Dutch in this paper are the author's own.
- ² This does not at all mean that he forgot Germany and Europe. He paid several visits to Europe, in particular to Germany and The Netherlands. When he celebrated his eightieth birthday on 24 March 1964, he received

Debye's relatively long stay in Nazi Germany, and his prominent position in German science at that time, provoked, during the first months of 2006, a fierce discussion about his loyalty. In the third week of January 2006, a Dutch weekly published excerpts from a book³ in which Debye was accused of willingly helping the Nazis to aryanise the German Physical Society (DPG). Consequently, two Dutch universities shed any association with Debye's name and fame. The Dutch government became confused, and instructed the Netherlands Institute for War Documentation (NIOD) to investigate Debye's conduct during the years 1933–1940. The NIOD report was published by the end of 2007, and concluded that Debye was an "opportunist" with regard to the Nazis.⁴

Debye's life in Nazi Germany between 1933 and 1940 existed as an accumulation of facts completely independent of us and our descriptions. His professional and public life are well documented, his private life much less so, and he might have had — in view of the historical episode in question — a secret life too. By and large, a life as a Nazi collaborator should be detectable many decades afterwards, a possible secret life probably not.

The historian John V. H. Dippel wrote: "History is not so much a record of the past as a record of the records of the past — an interpretation of what was once known and written down and passed on."⁵ In exceptional times, such as the Nazi period, this wise lesson assumes growing importance. Much was never recorded, or not even known. And we may add: in Nazi Germany, things were frequently not quite what they seemed.

We may conclude that the story of Debye in Nazi Germany poses a troubling historical challenge. There are more questions than answers. Nevertheless, this story must be considered. In this paper, I try to do so, despite all the limitations, unresolved problems, and breaks in the records. I pick up some dangling threads and attempt to tie them together. This "picking up" and "tying together" made me a disbeliever in Debye's objectionable conduct. Recently, circumstantial evidence of his secret life as a determined and active opponent of the Nazis has been found.

Debye's career in Nazi Germany

Here, I summarise Debye's most important appointments and activities relevant to his years in Nazi Germany (1933–1940). In the mid-1930s, Debye reached the

² Continued

at least sixty-five messages of congratulation, twenty-nine from Germany (then West Germany and the German Democratic Republic) and thirteen from The Netherlands. Americans sent seventeen congratulations but, as a matter of course, many of his American friends and colleagues came personally to the birthday party. Source: Archive of the Regional Historic Centre Limburg (RHCL), section Debye, Box 5-B, folder 14. This archive was donated to Debye's native city of Maastricht, The Netherlands, after his death by Mrs. Debye, and roughly ordered in 1979 by Bruce R. Wheaton (University of California, Berkeley). The RHCL archive has temporarily been transferred to the central library of Utrecht University (section Special Collections).

- ³ Sybe Izaak Rispens, *Einstein in Nederland, een intellectuele biografie* (Amsterdam: Ambo, 2006).
- ⁴ NIOD report, written by Martijn Eickhoff, In naam der wetenschap? P. J. W. Debye en zijn carrière in nazi-Duitsland (Amsterdam: Nederlands Instituut voor Oorlogsdocumentatie, 2007) [English edition, In the Name of Science? P. J. W. Debye and His Career in Nazi Germany (Amsterdam: Aksant, 2008)].
- ⁵ John V. H. Dippel, *Two Against Hitler Stealing the Nazi's Best-Kept Secrets* (New York: Praeger, 1992), xiii.

pinnacle of his scientific career, exemplified by the award of the Nobel Prize for Chemistry in 1936.

Directorship of the Kaiser Wilhelm Institute for Physics

In November 1933, Max Planck, then the president of the Kaiser Wilhelm Gesellschaft (KWG), offered Debye the post of directorship of the new Kaiser Wilhelm Institute for Physics (KWIfP) in Berlin-Dahlem, which he accepted some weeks later.⁶ Debye explained his move from Leipzig to Berlin by stating that he was pleased to have more time for research.⁷

The construction of the new institute, and the director's house next to it, was delayed, mainly because the Rockefeller Foundation, which was asked to supply the necessary funds, faced a difficult decision, caused by the National Socialists, who had been in power since the end of January 1933.⁸ The foundation had redefined its policy with regard to Germany; they were "not prepared to approve new grants to German institutions directly connected with the government."⁹ The foundation's European headquarters in Paris stipulated that there should be "no probability that the grants may be warped from its original purposes, and become, or appear to become, a part of a political, partisan or militaristic effort."¹⁰

By the summer of 1934, the foundation learned of the appointment of Peter Debye. Its officer from the division of natural sciences in Paris spent an evening with Debye in Leipzig, and was apparently convinced that the latter was in a position to meet the conditions of the new policy. The KWG held the view that "also the prestige and independence of the KWG would be strengthened if a man of Professor Debye's reputation would enter the circle of scientists."¹¹

The grant came into effect in 1935, and Planck urged Debye to start planning for the building right away. By the beginning of 1937, the building was ready and open for work, and housed a tower with high-tension equipment (three million volts) for experiments on nuclear physics, a low-temperature laboratory, and X-ray equipment for Debye's deputy, Professor Max von Laue. With respect to scientific research, Debye's Berlin years were not very fruitful. Only one publication (from a total of fifty-one), dated 1934, was selected for Debye's *Collected Papers*,¹² and none from the period 1935–1941.

On 1 September 1939, Germany invaded Poland, and on 3 September, France and the UK declared war on Germany. Debye's position as director of the KWIfP became untenable, and he had to leave. In Debye's own words:¹³

¹¹ Macrakis, "The Rockefeller Foundation."

⁶ Horst Kant, "Peter Debye und das Kaiser-Wilhelm-Institut für Physik in Berlin," in *Naturwissenschaft und Technik in der Geschichte*, ed. Helmuth Albrecht (Stuttgart: GNT-Verlag, 1993).

⁷ Kristie Macrakis, "The Rockefeller Foundation and German Physics under National Socialism," *Minerva* 27 (1989): 33–57.

⁸ Macrakis, "The Rockefeller Foundation."

⁹ Macrakis, "The Rockefeller Foundation."

¹⁰ Macrakis, "The Rockefeller Foundation."

¹² The Collected Papers of Peter J. W. Debye (New York: Interscience Publishers, 1954).

¹³ See the introduction to Debye's *Collected Papers*, written by Raymond M. Fuoss. In the same introduction, Fuoss himself stated: "Debye rebelled: aside from his natural patriotism to the Netherlands, the whole philosophy of the Nazi regime was abhorrent to him."

At the time I accepted to go to Berlin I was still a Dutch citizen. According to the Dutch law a Dutch citizen can accept state positions in another state, without losing his citizenship, only with permission of the queen. I applied for this permission. It was granted. At the same time the German government conceded in a letter signed by the Minister of Education, Dr Rust, that in accepting the positions offered, I did not become and would not be asked to become a German citizen. The positions, as usual, were lifetime positions. During the time the laboratory was still under construction, I received an offer from Harvard University,¹⁴ which I declined because I did not feel free to quit before having finished what I had undertaken to do ... The war broke out and one day without previous warning I was informed by Dr Telschow from the Kaiser-Wilhelm-Gesellschaft that I could no longer enter the laboratory except by becoming a German citizen. I refused. I was advised by the Ministry of Education to stay at home and occupy myself by writing a book. Instead, I was able to overcome the difficulties put in my way by different German authorities and leave for the USA by way of Italy in order to give the Baker Lectures at Cornell University, to which I had been invited.

Did Debye foresee his problems? We do not know, but on 28 August 1939, only some days before the beginning of the war, he wrote a letter to Paul R. Austin, chairman of the Delaware Section of the American Chemical Society, who had invited Debye to give a talk, in which he expresses some uneasiness: "I hope to arrive in the States during the first week of February. Looking at the European situation, this time is especially bad for making arrangements. I try, however, to go on in the ordinary way, trusting that no undue interferences with my plans will occur."¹⁵

On about 11 January 1940, Debye wrote a letter to his deputy, Von Laue, who was then in Bavaria: "There is no question of giving up [Debye's institute]. By the way, I just received notice that my ship will sail with a delay of a week, in consequence the 23rd, instead of the sixteenth. Consequently I will be some days more in Berlin, I guess in any case no longer than 7 days."¹⁶

Professor at the Friedrich-Wilhelms-University

In addition to his directorship of the KWIfP, Debye was also appointed professor at the Friedrich-Wilhelms-Universität in Berlin, with no teaching duties. At the university, he had to confront the bureaucratic Nazi ideology, which was totally absent in his own institute until the outbreak of World War II.¹⁷ This difference between state and non-state institutes already became clear in April 1933, when Jewish university professors were dismissed summarily by the "Law for the Restoration of the German Civil Service." For example, in 1933 Lise Meitner lost her employment at the University of Berlin, but she continued her research in Hahn's Kaiser Wilhelm Institute for Chemistry until the summer of 1938.¹⁸

¹⁴ In August and September 1936, Debye made a trip of about a month to the USA, principally to Harvard university, to celebrate the 300th anniversary of Harvard's founding, and to receive the honorary doctorate. He left for the USA with permission of the ministry, and afterwards sent an interesting report to the same ministry [Archive Max-Planck-Gesellschaft (AMPG), III, 19, 1].

¹⁵ AMPG, III, 19, 46.

¹⁶ See: n. 6; and AMPG, III, 19, 499.

¹⁷ The Kaiser Wilhelm Institutes, unlike the universities, were principally funded and administered by industry, and sometimes by foreign foundations.

¹⁸ Ruth Lewin Sime, *Lise Meitner, A Life in Physics* (Berkeley: University of California Press, 1996), 138.

The university was, for Debye, a constant source of trouble. He was not allowed to import some books from France and Switzerland.¹⁹ He was instructed by the National Socialist university president to attend the annual meetings of the "day of national solidarity," which he counteracted by stressing his Dutch citizenship.²⁰ In October 1936, the university board stipulated that permission of the Reich Education Ministry was required for consultation work with foreign companies.²¹ By the end of 1937, he had to confirm or deny his membership of a freemasonry-like organisation.²² In February 1938, Debye received an order (strictly confidential), which told him to refer to people of German origin abroad as *Volksdeutscher* in communications, because they belonged, historically and culturally, to the German nation.²³

At the beginning of 1938, the university trustee requested information concerning Debye's professional history in order to confer on him the Treudienst-Ehrenzeichen, a Nazi decoration that was granted after twenty-five or forty years of state employment.²⁴ In May, the trustee repeated his request ("you have not yet answered"), and added that information must be provided if the person in question does not appreciate the decoration.²⁵ Whether or not Debye ultimately received the medal is not known.

Debye's Nobel Prize

The absolute culminating point in Debye's career, at least for outsiders, was his Nobel Prize for Chemistry in 1936. He delivered his Nobel Lecture on 12 December; it was entitled "Methods to Determine the Electrical and Geometrical Structure of Molecules." On 8 December, the Foreign Ministry in Berlin had refused to issue a visa for Debye, but he was already bound for Stockholm with permission from the KWG.²⁶

By an order from Hitler, dated 30 January 1937, the Nobel Prize in Germany had been replaced by the "National Prize for Art and Science." On 26 October of the same year, the dean of the science and mathematics faculty of the university, forwarded a confidential decree from the Ministry of Education informing that the orders from Hitler not only disallowed the acceptance of Nobel Prizes, but also cooperation with the Nobel Committee regarding the nomination of candidates.²⁷ The dean wanted to know whether the faculty members in question had already been consulted in these matters. Debye answered that he had been approached twice in the last eight months, but that he had decided not to respond, owing to the present circumstances. The situation was now clear to him, he stated, but the difficulty remained of how to answer if the committee approached him again, and how he could refuse without explaining his position. And then he added: "The situation is still tightened up,

- ²⁰ AMPG, III, 19, 1266.
- ²¹ AMPG, III, 19, 1266.
- ²² AMPG, III, 19, 1266.
- ²³ AMPG, III, 19, 1266.
- ²⁴ The "Faithful Service Medal" was founded on 30 January 1938, to reward civilians in the employ of public services.
- ²⁵ AMPG, III, 19, 1266.
- ²⁶ Eickhoff, In the Name of Science?
- ²⁷ AMPG, III, 19, 1267.

¹⁹ AMPG, III, 19, 112.

because Herr Prof. von Euler-Chelpin will, very probably, ask me for the nominations when I will meet him again in the near future during one of his visits to Germany. Under these circumstances, I am asking you to give an exact instruction how I have to answer on paper, and how I have to behave in verbal conversation."²⁸ Apparently, in order to shy away from responsibility, the university board sent the letter to the ministry. The answer from the ministry was forwarded to Debye, signed by the faculty dean and the university president. It stated that the answer to Debye's question as worded in his letter was "in view of the well-known Führer-decree self-evident."²⁹

Membership of Goering's German Academy of Aviation Research

In July 1936, the Reich Air Ministry founded the German Academy for Aviation Research, which was inaugurated by Hermann Goering, the commander-in-chief of the Luftwaffe and its first president. Goering insisted that German aeronautical research must reach the levels of leading foreign nations by 1938, and then take the lead.

In April 1937, Debye joined the German Academy for Aviation Research, and he was soon on the board.³⁰ As a member of the academy, Debye delivered at least two lectures, in February and December 1938, both of fundamental interest but devoid of anything new: "About the Nowadays Lowest Attainable Temperatures" and "The Structure of Metals." In Debye's opinion, the two papers must have been rather insignificant, but Goering could boast about them, as he did with works of art. Probably, his membership of this academy, and even more his board membership, presented occasions for Debye to meet Goering personally.

After his arrival in the USA on I February 1940, the Federal Bureau of Investigation (FBI) carried out several investigations of Debye. Information from Albert Einstein played an important role in the first FBI investigation, from September to December 1940.³¹ An FBI agent reported that Einstein told him that he had received a letter from Switzerland, which had been intercepted by British censors and given to him by a British agent. The gist of the letter was that Debye, while in Germany, knew Goering well, and that Debye might be a secret representative of the German government. The statement in the letter concerning the contacts with Goering was probably correct, as it can be confirmed by a second source.

After Debye's death in 1966, the Dutch physicist Evert Verwey wrote a biographical note on Debye for the yearbook of the Royal Dutch Academy of Sciences. He asked some people who had been acquainted with Debye to provide information.

²⁸ AMPG, III, 19, 1267. Hans von Euler-Chelpin (1873–1964) was a German-born biochemist (Nobel Prize 1929) who, after his study in Germany, lived and worked in Stockholm until his death.

²⁹ AMPG, III, 19, 1267.

³⁰ "the board of the Academy consisting of a vice-president, a chancellor and five regular members" (statutes of the Academy, *Jahrbuch 1936/1938 der Deutschen Akademie der Luftfahrtforschung*, 10). Also from the regulations: "The five regular members of the board of the Academy are appointed by the president. The board acts as a consultative body for the allocation of tasks to the members, for drawing up the budget of the Academy and for writing the annual business report. The board advises the president with regard to the appointment of new members proposed by the regular members" (12).

³¹ FBI file No. 62-2866 (10 October 1940). The declassified FBI reports, about two hundred pages, may be obtained from the National Archives Trust Fund (NATF), 8601 Adelphi Road, College Park, MD 20740, USA.

Cornelis Gorter, professor of physics at Leiden university, wrote that he had known Debye very well since 1934. Gorter was present at the annual meeting of the German Physical Society (DPG) in Baden-Baden, 11–16 September 1938. He observed in 1967: "Then I talked a lot with him about the political situation. In fact, he was not at all a Nazi-sympathizer but was apolitical. He had rather frequently contacted leading Nazis. Goebbels, he thought to be an impossible fanatic, but concerning Goering, it was possible to talk to him if you handled him in the right way. At that time he definitely did not want to give up his Dutch nationality." And then Gorter added: "The information in the preceding paragraph is obviously not intended for publication, but now you are broadening your knowledge on Debye's life, I feel the need to inform you of my experiences."³²

Chairman of the DPG

Bad Kreuznach is a medium-sized town in the western part of Germany not far from the left bank of the Rhine. From 19 to 24 September 1937, the DPG held its annual scientific meeting in that town. Biennially, the meeting had to elect a new chairman, and in 1937 Debye took up the post.

Debye's term was extremely eventful. In March 1938, the annexation of Austria made numerous Austrian members subject to the Nuremberg Laws, and in the summer of the same year Debye was ready to help Lise Meitner to leave the country. In November, the anti-Semitic pogrom, resulting in destruction of synagogues and Jewish property, arrests and murder, raised the political tension to a degree that had been foreseen by only a few. At the beginning of December 1938, Debye and the other members of the board of the DPG came, apparently, to the conclusion that the DPG membership of the few remaining Jews was no longer tenable. Before the transfer of power to Hitler, the DPG had about 1300 members, one-third of them abroad, including a total of some 120 of Jewish origin. At the beginning of December 1938, this number had, probably, decreased to less than ten. Finally, on 3 September 1939, war broke out, causing the cancellation of the annual DPG meeting, where a new chairman in succession to Debye had to be elected.

Stefan L. Wolff made a study of the numbers of resignations from the DPG of members who were in a demonstrable way victims, or potential victims, of racist or political discrimination; the large majority were undoubtedly Jews.³³ During 1933–1938, Wolff counted a total of 112 resignations, with peaks in the years 1933 (19), 1935 (29), and 1938 (47). These peaks can be explained by the Law for the Restoration of the German Civil Service (1933), the Nuremberg Laws (1935), the annexation of Austria, the pogrom, and an intervention by the DPG itself (1938).

During his term as president of the DPG, Debye had, politically, manoeuvred prudently. At the annual meeting of 1938 in Baden-Baden, for example, the usual toast to Hitler did not take place, and a former DPG chairman made the introductory speech instead of Debye.³⁴ However, by the end of 1938, the DPG had to submit

³² RHCL, Section Schotman, box 1, folder 2.

³³ Stefan L. Wolff, "Die Ausgrenzung und Vertreibung von Physikern im Nationalsozialismus. Welche Rolle spielte die Deutsche Physikalische Gesellschaft?," in *Physiker zwischen Autonomie und Anpassung*, ed. Dieter Hoffmann and Mark Walker (Weinheim: Wiley-VCH Verlag GmbH & Co. KGaA, 2007).

³⁴ Gerhard Simonsohn, "Die Deutsche Physikalische Gesellschaft und die Forschung," in Hoffmann and Walker, Physiker zwischen Autonomie und Anpassung.

to the inevitable, and on 9 December the following letter was sent to all members living in Germany:

Because of circumstances beyond our control the membership of German Jews as defined by the Nuremberg Laws in the German Physical Society can no longer be maintained. With the agreement of the executive board I therefore call upon all members who are affected by these measures to communicate their resignation from the society to me. Heil Hitler!

P. Debye, Chairman.35

The DPG regulations only permitted exclusion in the case of nonpayment of dues, and therefore the society needed cooperation from its Jewish members. Seven of them responded in the way that Debye had requested: Richard Gans, Emil Cohn, Georg Jaffé, Leo Graetz, Walter Kaufmann, Hans Adolf Boas, and Hartmut Kallmann.³⁶ There are no letters of protest available. Graetz died in 1941 in München at the age of 85 years, Boas, Gans, Kallmann and Kaufmann survived in Germany under special conditions and circumstances, and Cohn and Jaffé emigrated before the war to the USA and England respectively. Wolff judged that the intervention from the DPG formed the conclusion of a longer development, and did not have, in a quantitative respect, drastic impacts.

After the war, in March 1953, Karl Wolf and Max von Laue, who had endorsed the above-quoted letter, sent a message to some 120 former DPG members abroad, aiming at reestablishing relationships with them. They undertook this action as representatives of sections of the pre-war DPG (Germany was now divided into military zones). Many of the addressees had left Germany in the 1930s, and had then resigned from the DPG. At the same time, the message included a sort of apology for the, in their opinion, inevitable infringement of their rights in the Nazi period: "As long as possible (we) had exerted ourselves to refrain from the injury."³⁷ A good many responded positively, and nobody put the blame on the messengers or former DPG boards. Richard Gans wrote: "I can give you the assurance that I never felt bitterness about my elimination from the *Deutsche Physikalische Gesellschaft*, because I knew, that it was a matter of 'superior forces' against the will of the society."³⁸

The believers and the panicked

On 21 January 2006, the Dutch weekly *Vrij Nederland*³⁹ published an article entitled "Nobel Laureate with Dirty Hands." The article intended to promote the book

³⁵ AMPG, III, 19, 1014. The original German text reads: "Unter den zwingenden obwaltenden Umständen kann die Mitgliedschaft von reichsdeutschen Juden im Sinne der Nürnberger Gesetze in der Deutschen Physikalischen Gesellschaft nicht mehr aufrecht erhalten werden. Im Einverständnis mit dem Vorstand fordere ich daher alle Mitglieder, welche unter diese Bestimmung fallen, auf, mir ihren Austritt aus der Gesellschaft mitzuteilen." Translation from the German: Dieter Hoffmann and Mark Walker, "A typical scientist in an untypical time", DPG website: www.dpg-physik.de (2006).

³⁶ See n. 33.

³⁷ See n. 33.

³⁸ Quoted by Wolff, "Die Ausgrenzung." See also a letter from Gans to Wolf, 4 April 1953, Archiv Deutsche Physikalische Gesellschaft (ADPG), no. 20437.

³⁹ The periodical *Vrij Nederland* (Free Netherlands) was founded during the German occupation (1940–1945) as an underground resistance publication.

Einstein in Nederland,⁴⁰ which was published a week later. With that object, the article presented excerpts from only one chapter from the book: "Einstein en Debye."

In this chapter, the author brought the DPG letter from December 1938 to the public as his unique discovery in Berlin archives, which was totally unjustified, because the letter had been published before.⁴¹ He concluded: "De bijl is gevallen" (The axe has fallen).⁴²

The author is distorting Debye into a Nazi sympathiser, and is then trying to do some postmortem mind-reading. Referring to Debye's sailing to the USA, he remarks: "And, when the war, in fact, as Hitler prophesied, turned into a '*Blitzkrieg*', then he would be able to get busy rapidly again." "While the German armies already had overrun half of Europe, Debye longed to go back to his research institute." The author is hinting at some major honours dedicated to Debye in The Netherlands: the Debye Institute for Nanomaterials Science at Utrecht University, the Debye Award given by Maastricht university, and the bust of Debye in the town hall of his native city of Maastricht.

The two universities panicked, above all because almost all the Dutch media slavishly repeated the allegations. Extraordinarily harmful was an article in the Dutch daily newspaper *Trouw*, in which Peter Romijn, head of the research department of the NIOD, was quoted.⁴³ At the request of the publisher, Romijn read the chapter "Einstein en Debye" before publication, and concluded that the author "conducted thorough research and made accountable use of sources," thus providing scholarly approval.

On 26 January 2006, the president of Utrecht University wrote, at the same time on behalf of Maastricht university, a letter to the director of the NIOD.⁴⁴ His most important question was whether the DPG letter, signed by Debye in December 1938, could be authenticated. The president asked for his questions to be answered "in a time span as short as is possible."

The director of the NIOD confirmed the authenticity of the letter on 7 February, and gratuitously added: "In my opinion Mr Rispens has written a balanced chapter about Debye and Einstein."⁴⁵ In his last sentence, he hopes that both universities will show wisdom concerning their decisions. The NIOD director knew that the universities were in a hurry. Nevertheless, he neglected his duty as a scholar to warn the universities in a straightforward way not to take hasty decisions. He is hoping for "wisdom," but *he* should have been the source of wisdom.

- ⁴¹ See, for example, H. Rechenberg, "Vor fünfzig Jahren," *Physikalische Blätter* 44 (1988): 418–432. Rechenberg commented on the letter: "By the end of 1938 also the German Physical Society had to give up its resistance to this development."
- ⁴² Here the author is using a wording that evokes reminiscences of *bijltjesdag* (day of the axes), the day of reckoning with supposed Dutch Nazi collaborators during the first days after the end of World War II. Among the supposed collaborators were innumerable girls and women accused of amorous relations with German soldiers, captured by hysterical mobs, shaved bald, and besmeared: a witch-hunt in modern times.

- ⁴⁴ The letter is reproduced in a valuable book written in 2006 by Gijs van Ginkel, at that time senior managing director of the Debye Institute of Utrecht University: *Prof. Peter J. W. Debye (1884–1966) in 1935–1945 Brilliant Scientist, Gifted Teacher* (Maastricht: RIPCN De Ster, 2006). In his book, he disproved all the denunciations with regard to Debye in Rispens, *Einstein in Nederland*.
- ⁴⁵ Reproduction of the letter from the NIOD's director: Van Ginkel, *Prof. Peter J. W. Debye*.

⁴⁰ Rispens, *Einstein in Nederland*.

⁴³ *Trouw*, 23 January 2006.

A good seven days later, on 16 February, the two universities simultaneously published a press release.⁴⁶ Utrecht and Maastricht universities deleted Debye's name from their institute and award, respectively. The board of Utrecht University observed that the new facts were no longer compatible with Debye as a role model. Maastricht university added that Debye did not offer adequate resistance to the injury of academic freedom. Both universities referred to the NIOD's verification of sources, but agreed that there did not yet exist an overall picture of Debye in Nazi Germany.

Until the press releases from the universities, the "Debye affair" was limited to Dutch territory; to being a local event. The releases were sent out worldwide by Associated Press: "Schools strip Nobel Laureate's name from honors on reports of Nazi links." After about mid-February, the affair was echoed in, above all, Germany and the USA, the countries in which Debye's career had been concentrated. To mention only some examples here,⁴⁷ in the *Aachener Nachrichten* of 22 February, the author of *Einstein in Nederland* was interviewed, and repeated his accusations, which have a more sinister ring in German: Debye "assisted structurally in the 'Lösung der Judenfrage' within the Kaiser-Wilhelm-Gesellschaft and the Deutsche Physikalische Gesellschaft." *Chemical & Engineering News* (I March 2006) used the heading "Nobel Laureate Is Accused Of Nazi Collaboration," but also gave room to disbelievers.

The Otago Daily Times in New Zealand reported: "Research Giant's Record Blighted By Nazi Association."⁴⁸ The author of the article remarked: "But whenever Debye's name is mentioned in an undergraduate chemistry lecture, this story will be told."⁴⁹

The disbelievers

The Debye Institute for Nanomaterials Science forms a major department of Utrecht University, with about 250 research workers, including one hundred PhD students, and twenty to twenty-five full professors. From the beginning, the institute resisted the measures imposed by the university board. The institute's director, Leo Jenneskens,⁵⁰ and the senior managing director, Gijs van Ginkel, did their utmost to stop the perceived injustice, but their efforts were to no avail. On 17 February 2006,

⁴⁸ The Otago Daily Times, 3 April 2006.

⁴⁶ Reproduction of the press releases: Van Ginkel, Prof. Peter J. W. Debye.

⁴⁷ More examples are as follows: "Fallen from grace," *Science* 311, no. 5765 (2006): 96–103; "Nobelpreisträger mit schmutzigen Händen?," *Göttinger Zeitung*, 25 February 2006; Dieter Hoffman and Mark Walker, "Voreilige Konsequenzen," *Physik Journal* 5, no. 5 (2006): 7–8.

⁴⁹ Debye's grandson, Nordulf Debye, sent a letter of protest to the daily paper.

⁵⁰ Professor Jenneskens broached, among other things, the fate of Utrecht's Jewish professors during the German occupation. On Friday 22 November 1940, representatives of all Dutch universities were ordered to go to The Hague. There, they had a meeting with the Dutch senior official of (higher) education. The latter informed the representatives that the Jewish professors had to be "relieved of their office" by orders of the occupying power. The notices of dismissal had already been prepared. Only the representative of Leiden university refused to take delivery of the letters. The president of Utrecht University immediately sent the letters to the three professors Ornstein, Wolff and Roos. A number of other university officials of Jewish descent had to undergo the same fate. A chemical laboratory at the university campus bears the name of the university president in question.

Van Ginkel published a public letter in which he explained that the board's decision was a "miscarriage of management."⁵¹ Later on, he published a book independently.⁵²

The national and international protests against the decisions of the two Dutch universities were numerous. The *Nederlands Tijdschrift voor Natuurkunde*, the journal of the Dutch Physical Society, published papers in defence of Debye.⁵³ The municipality of Maastricht exercised the greatest care, and desisted from immediate measures. Debye's bust remained in the town hall.⁵⁴ On 3 March, Knut Urban, chairman of the DPG, sent a letter to the mayor of Maastricht, in which he distanced himself from the allegations against Debye. He concluded that the chapter in the book *Einstein in Nederland* on Debye cannot be considered a piece of truthful research. In March, Dieter Hoffmann⁵⁵ and Mark Walker⁵⁶ published an article on the website of the DPG: "Peter Debye: A Typical Scientist in an Untypical Time."

Héctor D. Abruña, chair of the Department of Chemistry and Chemical Biology, Cornell University, concluded in a press release⁵⁷ on 2 June that the university had not found evidence supporting the accusations that Debye was a Nazi sympathiser or collaborator, or that he held anti-Semitic views, and stated that they did not feel that a "rush to judgement" was in anyone's interest. Cornell believed that any action dissociating Debye's name from the Department of Chemistry and Chemical Biology would be unwarranted. The continuation of the Peter J. W. Debye Chair⁵⁸ of Physical Chemistry was ensured. Professor Abruña also referred to Debye's support of the US war effort, when he worked on polymers and synthetic rubber. The university had looked closely at the historical record during Debye's time in Berlin. Abruña's press release was based on a research report that had been composed in the preceding months with the help of Mark Walker. Walker had also delivered a lecture about the "affair" at Cornell. The American Chemical Society had reviewed the situation, and stated that it would continue to give out its Peter Debye Award; the Du Pont de Nemours Company reported that it was comfortable with its decision to continue to sponsor this prestigious award.59

In the summer of 2006, Debye's grandson Nordulf Debye⁶⁰ sent, on behalf of six close relatives of Debye, letters to both universities: "We were stunned to hear from

- ⁵¹ See also a paper written by Van Ginkel, "Afscheid van Debye door Utrecht: Een bestuurlijke dwaling," in *Fylakra* 50, no. 1 (2006), 16–21. *Fylakra* is the periodical of the Faculty of Physics and Astronomy of Utrecht University.
- 52 Van Ginkel, Prof. Peter J. W. Debye.
- ⁵³ Herman de Lang, "De 'Affaire Debye'," Nederlands Tijdschrift voor Natuurkunde, 72, no. 7 (2006): 220–26.
- ⁵⁴ In the spring of 1952, the municipal council of Maastricht decided to bestow the city's "Medal of Honour" on Debye. The medal is approximately equivalent to an Honorary Citizenship, and was presented to Debye on 8 June, Commencement Day at Cornell university, by the mayor of Maastricht, who had travelled to the USA.
- 55 Max Planck Institute for History of Science, Berlin.
- ⁵⁶ Union College, Schenectady, USA.
- ⁵⁷ The press release is reproduced in Van Ginkel, Prof. Peter J. W. Debye. Abruña also explained the position of Cornell university in a letter published in Chemical & Engineering News 84, no. 30 (2006), followed by a dissent by Roald Hoffmann.
- ⁵⁸ At present, the chair is held by Paul Houston, and professors emeriti are Paul J. Chirik and Fred W. McLafferty.
- ⁵⁹ News of the Week, *Science* 312, no. 5782 (2006).
- ⁶⁰ On 9 October 2009, we received the horrible news of Nordulf's tragic death. He died from leukaemia at the age of sixty-six years.

European friends and acquaintances that these two Dutch universities had expurgated the Debye name from their portfolios."⁶¹ "We believe you have done Peter J. W. Debye an injustice; have marred the Debye family name; and are on the verge of doing your well-known institution an enormous disservice. Did any of you know this man?" "But is this sensitivity to the politics of the day not exactly what universities must guard against to maintain their academic freedom and reputation? We trust that we have not heard the final verdicts from these universities."

The national and international response was, generally speaking, so contrary to the hasty decisions of the two Dutch universities that a reconsideration of their position became almost inevitable. The first move was initiated by the Ministry of Education, Culture and Science in the Hague, and was not devoid of particular interests: the ministry was worried about the portrait bust of Debye in the hall of its building.⁶² On 29 June 2006, the ministry commissioned the NIOD to carry out an investigation of Debye and his role and position in the Third Reich. The ministry offered €150,000 to carry out the research, and the report had to be completed within fourteen months. Some days later, the director of the NIOD sent a letter to the ministry stating that he considered the information in the book *Einstein in Nederland* to be trustworthy, but that there had not been a balanced picture, because it is about Einstein. He wrote that the minister "could be ascertained that the research will be executed in an absolute unprejudiced way, and will meet the standards as usual in my profession. Quite explicitly, I am adding that it will not be directed at the moral or political appreciation of Debye's behaviour. That type of judgement is not becoming for a historian as a historian, but belongs to the public debate."

The NIOD report provided the two universities with a possible escape from the painful situation. In May 2007, about half a year before the report came out, the universities jointly turned to the committee headed by Jan Terlouw, a former minister of economic affairs, in order to advise them regarding the name change, once the findings of the NIOD had been published.⁶³

The NIOD report

By the end of November 2007, the NIOD report had been made public.⁶⁴ It would contribute in no small measure to the existing confusion.⁶⁵ The verdict of "collaboration" had been toned down to "opportunism." This verdict was condensed at the end of the report's "Conclusion", and for the most part repeated in the "Summary." It needs to be analysed in detail, and reads in full:

⁶¹ In 1989, Utrecht University invited the Debye family to attend the celebration of the founding of the Debye Institute.

⁶² Personal information from Ernst Homburg, professor of history of science and technology, Maastricht university.

⁶³ The Terlouw Committee was composed of a physicist and former politician (Terlouw), a lawyer, and a historian. Now and then, the committee's assistance is called on when the Dutch government is facing crucial decisions or delicate public debates.

⁶⁴ Eickhoff, In naam der wetenschap?; Eickhoff, In the Name of Science?

⁶⁵ The prominent Dutch daily newspaper, NRC Handelsblad, headlined that Debye was "loyal to the Nazis." "Famous Physicist's Hands Not So Dirty," *ScienceNOW*, 28 November 2007.

On the basis of this report, the first for which both German, US and Dutch sources have been consulted, it can be stated that Debye was rightly called an opportunist after his arrival in the United States. We have seen that he showed himself to be loyal to the dominant political system, first in the Third Reich and then in the United States, while at the same time keeping the back door open: in the Third Reich by retaining his Dutch nationality, in the United States by attempting to secretly maintain some contacts with Nazi Germany via the Foreign Office. The latter was also motivated by his loyalty to his daughter, who had remained in Berlin. But Debye was more than just an opportunist: in the course of his career he linked the practice of science with various ideals — internationalism, Dutch and German nationalism, and the US war effort. This leads to the question of whether Debye as a scientist was genuinely fascinated by these ideals or whether he treated them primarily in a calculating way. A historian cannot give a wellfounded answer to this. Once again, the survival mechanism of ambiguity that Debye developed during the Third Reich produces its effect; combined with his great power of conviction, it enabled him to maintain his position in the Third Reich for a long time.⁶⁶

The first two sentences in this quotation state that Debye — after arriving in the USA — was rightly called an opportunist, because of his loyalty to the USA as well as to the Third Reich, by keeping at the same time a "back door open" to both of them. The author is referring here to informants in the USA, and there is, indeed, a striking similarity to the judgement given by Dr. Goudsmit to an FBI agent in June 1950: "He felt that Dr $Debye^{67}$ is an opportunist and full of intrigue for self-advancement ..., that Dr Debye always played 'both sides against the middle' and 'always left the back door open for an escape."⁶⁸

The first observation is that both Eickhoff and Goudsmit suggest here that for the "opportunist" Debye it did not matter whether he was "loyal" to the USA or to the Nazi regime. The same reasoning can be found on p. 125 of the NIOD report: "Debye's publicly declared involvement in the US war effort is a remarkable volte-face given his earlier refusal to conduct war-geared research in Germany." Why remarkable? Only those who are not able or do not want to understand Debye's intentions will judge this as an about-turn. Apparently, Debye *must* be portrayed as a person without moral and political standards in order to brand him as an opportunist.

The text continues by claiming that the retained Dutch nationality in the Third Reich was one of Debye's back doors, and this substantiates his "opportunism."

⁶⁶ Eickhoff, In the Name of Science, 148.

⁶⁷ In the FBI reports, the surnames are emphasised by the use of capital letters.

⁶⁸ FBI file, No. 116-16208, 8 August 1950. Between September 1940 and June 1952, the FBI and other US security agencies carried out at least five investigations of Debye. These investigations must have confused the FBI. Several dozens of people, many of them coming originally from Europe, had been interviewed during the course of more than ten years; their opinions were contradictory. The majority did not express any doubt concerning Debye's integrity, but some of those interviewed did. Nobody accused Debye of being an anti-Semite. Debye himself contributed in no small measure to the confusion. He had been interviewed by the FBI at least twice, but maintained a striking reticence. Finally, the FBI drew its conclusion: "Investigation, however, failed to reflect any espionage activity on the part of *Debye*" (FBI file No. 1A-530868, 16 May 1952). The complete failure to demonstrate any connection of Debye with the Nazi regime may also be concluded from Debye's timely US citizenship, granted in November 1946, shortly after the mandatory five-year residency requirement.

This implies that Debye would *not* have been an opportunist if he had submitted to the pressure of the Nazis and given up Dutch citizenship. We might wonder what the comments of the report would have been if Debye had given in to the Nazis. In effect, Debye's decision was an example of nonopportunistic conduct.

The quotation then continues with the claim that Debye's back door in the USA was formed by his secret contacts with Nazi Germany via the German Foreign Office. Logically, we have to know the nature of these contacts. We learn about them in the section "Contacts with Germany": it appears that this back door did not exist! On p. 119, a message from the German Auswärtige Amt in the USA to Berlin is quoted: "Professor Debye states that he is prepared at any time to resume the directorship of the institute under the previous conditions as soon as this is possible there." On p. 120, the report quotes from a letter from Debye to Telschow, the general secretary of the Kaiser Wilhelm Society in Berlin.⁶⁹ Debye states that he adheres to his earlier decision ("an meinem früheren Entschluss festhalte") and that the terms of his previous contract should be implemented ("Bestimmungen meines alten Vertrages zu gewährleisten"). Debye knew that the original agreement (including his Dutch citizenship) was still unacceptable, as Telschow wrote him several months before that he would be unable to resume his old position "for the duration of the war" (p. 118).

The verdict continues by inventing Debye's "various ideals," which he treated, according to the author, "primarily in a calculating way," as a result of his "survival mechanism of ambiguity." Apparently, this quibbling is aimed at substantiating Debye's presumed opportunism.

Ultimately, only one thing bothers the writer: that Debye maintained "his position in the Third Reich for a long time." Only this "long time" remains to prove Debye's opportunism. The above-quoted text from the "Conclusion" contradicts the statement in the introduction of the report (p. 10): "In practice, this means that the report does not contain a single paragraph in which a definitive moral balance is drawn up on Debye."

The NIOD's use of sources

The letter of December 1938, signed by Debye on behalf of DPG's board, and sent to the German members of the DPG, formed the central point in the "Debye affair." Therefore, the treatment of the context of this letter is of the utmost importance, and demands extreme care. The treatment of the letter presented by the NIOD report is, frankly, alarming.

Referring to the much-quoted letter, the first Dutch edition of the report⁷⁰ stated: "In reaction to the letter some resignations came in: Richard Gans, Emil Cohn, Georg Jaffe, Walter Kaufmann and Franz Boas. The remaining Jewish members were tacitly removed from the list of members. At an estimate some 120 persons were involved, nearly ten percent of the membership file." The author of the NIOD report

⁶⁹ Ernst Telschow (1889–1988) was the long-time general secretary of the Kaiser Wilhelm Society and a member of the Nazi Party.

⁷⁰ Eickhoff, In naam der wetenschap?

is referring here to a paper written by Dieter Hoffmann⁷¹ and a website regularly updated by Klaus Hentschel,⁷² which has to be considered the main source. Hentschel's website is a sequel to his book,⁷³ published in 1996, in which he compared the DPG's membership lists for 1938 and 1939. He concludes that 121 names do not reappear in the second year. The NIOD report mistook the 121 missing names for tacitly removed Jewish members. The NIOD author explicitly reported that he consulted Hentschel's updated website, where he could have read that the large majority of the "disappeared" were emigrants, foreign members, or dead through illness or age, and not expelled Jewish members.

The report missed at least a second opportunity to avoid the false statement mentioned above. Stefan Wolff pointed out in the already mentioned book edited by Hoffmann and Walker⁷⁴ that the number of 120 for tacitly expelled DPG members in December 1938 is a simple impossibility. This book appears in the report's notes and bibliography.

In the introduction (p. 15, Dutch edition) the NIOD assures the reliability of the report: "On the basis of analysis of the sources it presents descriptions, interpretations and explanations that are verifiable." The checking of sources contradicts this assurance.

In December 2007, the Terlouw Committee was, among other things, informed about the above-mentioned "mistake" in the first Dutch edition of the NIOD report.⁷⁵ In the English edition, which appeared later, the phrase concerning the "120 disappeared" had been corrected, and now reads: "The handful of remaining Jewish members were probably silently deleted from the list of members. The exact circumstances and the precise numbers are not known" (p. 85). This is a half-hearted correction. The author does not know — the qualification "probably" needs at least some indirect evidence — but nevertheless he draws conclusions. Originally, it was stated that some 120 Jewish members were expelled without their consent; now, they are a "handful."

In January 2008, the Terlouw Committee advised the boards of Utrecht and Maastricht universities to continue to use Debye's name for the chemistry and physics institute in Utrecht, and to continue awarding the science prize in Maastricht.⁷⁶ The committee emphasises the December 1938 letter, and concludes: "Since no bad faith on Debye's part has been demonstrated, his good faith must be assumed." Utrecht University decided to adopt the advice, while Maastricht university did not. Meanwhile, the Hustinx Foundation, which sponsors the Debye Award, will continue to distribute the award independently from Maastricht university.

The NIOD remains stubbornly entrenched in its position, which it has held from the beginning of the "Debye affair." The cover of the recent English edition of its

⁷¹ D. Hoffmann, Zwischen Autonomie und Anpassung: Die Deutsche Physikalische Gesellschaft im Dritten Reich, Reprint 192 (Berlin: Max-Planck-Institut für Wissenschaftsgeschichte, 2001).

⁷² http://www.cx.unibe.ch/~khentsch/dpg38-39.html

⁷³ K. Hentschel, ed., Physics and National Socialism. An Anthology of Primary Sources (Basel: Birkhäuser, 1996).

⁷⁴ See n. 33.

⁷⁵ Letter sent to the Terlouw Committee, signed by Jurrie Reiding, Herman de Lang, and Gijs van Ginkel.

⁷⁶ Terlouw Committee, "Continue using Debye's name." Press release, University of Utrecht: http://www.science. uu.nl/nieuwsenagenda/items/20080117/uk/

report states that "this book sheds new and disturbing light on Debye's socio-political worldview and his involvement in the Aryanisation of German science." This is facile judgement instead of reliable research by an institute in the role of public prosecutor.

The elusive Griffin

Recent research of the records from Debye's American period, filed in the voluminous archive mentioned above,⁷⁷ reveals the close friendship between Debye and Paul Rosbaud (1896–1963). Who was Paul Rosbaud?

In 1986, the physicist Arnold Kramish published a biography on Rosbaud.⁷⁸ The information given below is based on this biography. Paul Rosbaud, Austrian born, studied chemistry in Darmstadt and continued his studies at the Kaiser Wilhelm Institute in Dahlem, Berlin. He earned his doctorate on X-ray diffraction studies at the Technische Hochschule of Berlin-Charlottenburg. In 1933, Rosbaud became advisor to Springer Verlag, the publisher of *Naturwissenschaften*. Some time in the early 1930s, he had his first contact with a secret service officer from the British embassy in Berlin. Through his work at Springer Verlag, Rosbaud knew most of the scientific community in Germany and, under the cloak of his scientific activities, he collected secret information, which he passed on to the allies. Notwithstanding the maintained secrecy of the Rosbaud files, the most important issues of this intelligence have been reported by Kramish and other sources: jet aircraft, radar, VI and V2 rockets, and German attempts to develop a uranium-based atomic bomb.⁷⁹

On several occasions, Rosbaud posed as a Nazi. Possibly the most daring undertaking was his trip, in a Luftwaffe aeroplane and dressed as a German officer, to the underground in Oslo in June 1942. He must have had protectors in just the right places. One of them has been identified by Kramish: a leading member of the Nazi Party, and a high-ranking member of the Abwehr, the army counterintelligence unit.

Rosbaud's crusade against Hitler was a most private one. He was not a spy in the sense of a controlled and paid agent, but an ethical person acting from his own deeply felt need: to do his best to prevent Hitler from winning the war. In the USA, Kramish found only a single declassified memorandum of the Department of Justice, dated 26 April 1955, from which I quote: "Dr Rosbaud remained in Berlin during World War II for the purpose of obtaining certain technical intelligence for the United States and the United Kingdom. This information was extremely useful and invaluable for the allied cause and involved great risk on the part of Dr Rosbaud. His activities on behalf of the allied cause were successful and of such importance that even today they cannot be disclosed and are still highly classified."⁸⁰ After the war, in November 1946, Rosbaud wrote to his brother: "The last years have not passed without leaving marks upon me. There were too many in the underground who could

⁷⁷ See n. 2.

⁷⁸ Arnold Kramish, The Griffin — The Greatest Untold Espionage Story of World War II (Boston, Mass.: Houghton Miffin Company, 1986).

⁷⁹ See, for example, http://www.bindmans.com/index.php?id=318

⁸⁰ Kramish, *The Griffin*, 255.

not be saved and, at the end, only I slipped through by a hairsbreadth. My hatred of the Nazis has not diminished."⁸¹

After the war, he was silenced by British law. Rosbaud himself never sought recognition for his wartime work for the allied victory, and he destroyed, ever faithful to his sense of honour, most of his personal papers before he died. His own decision not to provide details of his activities contributed to the mystery of his life and that of his contacts in Nazi Germany.

On 16 December 2006, a headline in the British newspaper *The Times* read: "Family at War with MI6⁸² over Secret Files of Britain's Greatest Spy against the Nazis." Vincent Frank-Steiner, a historian from Basel, Switzerland, provoked a fierce legal tussle with the Investigatory Powers Tribunal.⁸³ Cherie Booth, wife of the former UK prime minister Tony Blair, rendered assistance to Frank-Steiner as a barrister. They were not successful, as the *Guardian* headlined on 22 September 2007: "Spy Left Out in the Cold: How MI6 Buried Heroic Exploits of Agent 'Griffin.'" "Griffin" was Rosbaud's code name, and Frank-Steiner is the nephew of Rosbaud's Jewish wife Hilde Frank. The last information concerns a closed hearing by the tribunal on 4 April 2008, at which only MI6 and its lawyers were present. MI6 (SIS) still insists that it can "neither confirm nor deny whether Rosbaud or anyone else was a SIS agent."⁸⁴

Rosbaud and Debye were already acquainted with each other in about 1930, when both were editors of scientific journals: Rosbaud of *Metallwirtschaft* and Debye of the *Physikalische Zeitschrift*.⁸⁵ Lise Meitner's escape to Holland further strengthened their relationship. Meitner worked with Otto Hahn at the Kaiser Wilhelm Institute of Chemistry, near Debye's physics institute in Berlin-Dahlem. She was Jewish, and in immediate danger after the Anschluss of Austria in March 1938. Without Austrian citizenship to protect her, Meitner was, like any other Jewish person in Germany, subject to official persecution.

According to Kramish: "Rosbaud took swift action through his Dutch friends. Peter Debye, the Dutch director of the Kaiser Wilhelm Institute of Physics in Dahlem, made the first move; he asked Dirk Coster at the University of Groningen to obtain permission from the Dutch government for Meitner to cross the border."⁸⁶ Coster arrived in Berlin on 11 July 1938, to fetch Meitner, and stayed in Debye's house. On 13 July, Rosbaud picked up Meitner and drove her in his Opel to the station, where Coster had taken up a concealed position. Kramish: "Meitner was tense, fearful, and Rosbaud had to use all his persuasive talents to get her aboard the train."⁸⁷ She was especially exposed to the danger of repeated controls by the SS in the trains going abroad. Time and again, people were arrested on the trains and brought back.

⁸⁴ http://www.telegraph.co.uk/news/1915413/Brief-encounters.html

- ⁸⁶ Kramish, The Griffin, 48, 49.
- ⁸⁷ Kramish, The Griffin, 48, 49.

⁸¹ Kramish, *The Griffin*, 215.

⁸² MI6 is also known as the Secret Intelligence Service (SIS).

⁸³ The Investigatory Powers Tribunal investigates complaints about conduct by public bodies, including the Intelligence Service.

⁸⁵ AMPG, III, 19, 1136.

The Rosbaud biography was written around the middle of the 1980s. In 1996, Ruth Sime published her biography on Meitner, and she devoted a whole chapter to Meitner's escape.⁸⁸ Here account is more complete and more detailed, and notes that Meitner had already contacted Rosbaud shortly after the Anschluss: "Lise turned to Paul Rosbaud, one of the few people she knew with reliable inside information." ... "He travelled widely for his work, and cultivated contacts among scientists in academia, industry, and the military ... he had also friends well placed within the regime, some with very low party numbers."⁸⁹ Kramish and Sime tell essentially the same story. Sime adds that Meitner's departure from Germany had been forbidden by Himmler himself. Rosbaud and Debye must have trusted each other's disdain for the Nazis sufficiently to be involved in the secret operation.⁹⁰

A well-guarded secret?

After his arrival in the USA, Debye received a letter from Rosbaud, dated 17 June 1940.⁹¹ Rosbaud introduces the letter to his "Sehr verehrter und lieber Herr Professor" in this way: "I am writing to you not so much to enquire about you and your son, for I hope and assume with certainty that you are all right. I am writing you more about how we and various acquaintances have fared." The letter is written in a way in which countless letters had been written during the Nazi period in Germany and occupied Europe: ostensibly superficial information about "Bekannten" (acquaintances), but very well understood, by both the writer and the reader, to have a concealed context. Without detailed information, Rosbaud announces "Gute Nachrichten" (good news) from one of the "Bekannten"; he also writes that another is "wieder im Lande" (back in the country), "die Arbeit" (the work) from others "geht ungestört weiter" (continues undisturbed). The passing away of some five "Bekannten" is reported without mention of how it happened.

The following communication in Rosbaud's letter is particularly puzzling: "I had written your wife a few lines for a particular reason; these did not end up in her hands. Bewilogua⁹² had seen the letter with the post and he called me immediately to inform me that your wife had left; that, accordingly, to forward the letter was pointless and I requested B. to destroy it." Obviously, Rosbaud had a certain objective in writing a letter to Debye's wife. This objective became pointless after her

⁹¹ Source: The Debye Family Archive, Kinderhook, New York.

⁸⁸ Sime, Lise Meitner.

⁸⁹ Sime, *Lise Meitner*, 186.

⁹⁰ The story as told in the NIOD report is very different: "In Debye's case we cannot speak of resistance to Nazism. There were moments of opposition, but they can be interpreted in different ways. They were connected with a survival mechanism of ambiguity that Debye had developed and were primarily motivated by the desire to maintain the interests of his German science network; in the end they also rendered his own position secure. Both his support in the struggle with the German Physics movement and his assistance to Jewish colleagues like Sack and Meitner who had been forced to emigrate are also to be explained from this perspective." Eickhoff, *In the Name of Science*?, 148. Until the emergence of the "Debye affair," nobody interpreted Debye's involvement in Meitner's escape in this way.

⁹² Bewilogua was one of Debye's research associates in Berlin. After the war, Professor Dr L. Bewilogua lectured at the university of Dresden. He was one of the friends and (former) colleagues who sent a message of congratulation when Debye celebrated his eightieth birthday in 1964 (see n. 2).

departure, and the letter had to be destroyed. Did the letter contain instructions on how to get out of the country?⁹³

On 3 May 1954, Debye replied to a telegram and a letter from Paul Rosbaud in London. Debye wrote: "I am sending enclosed a photograph, not the one you requested, but another one with a puzzle for you: 'Where is the cigar?'"⁹⁴ On 21 May, Rosbaud answered: "You have not changed much and I have managed to detect the cigar in your right hand. I shall have the photograph framed and it will occupy a place of honour in my gallery." And: "Everybody here is well and Angela remembers your silver wedding very well. She enjoyed enormous quantities of cake very much, as she ate too much as usual."⁹⁵ (Debye and his wife celebrated their silver wedding on 10 April 1938). Rosbaud's only child, Angela, born in August 1927, added, as "Pauli's secretary," her own reminiscences to the letter: "I have very lovely memories of you on your birthday in Dahlem and me coming to visit you to bring you a large cigar ... I often admire your lovely photograph in Pauli's office."

In July 1954, Debye was looking around for a director for the recently established Robert A. Welch Foundation.⁹⁶ One of the candidates was a British scientist, and Debye wrote a letter to Rosbaud in London in order to obtain information about this candidate: "I thought of you because I know from past experience that you know a lot of persons and that you are an excellent judge of character."⁹⁷ "Past experience" from where and when? Undoubtedly, from the period 1933–1940 in Nazi Germany.

Seven more letters appeared in 1962–1963.⁹⁸ On 6 April 1962, Rosbaud wrote that he was delighted that Debye would be in Munich: "How long is it since I last saw you? It must be twenty years."⁹⁹ Rosbaud then wrote that he would need Debye's help in Munich. He intended to publish a selection of the classical papers by Sommerfeld. He had already discussed this with Ewald and others. Ewald suggested a small meeting in Munich. There was only a collection compiled by Max Born. Rosbaud finished his letter with: "My daughter Angela — now Kathleen Lonsdale's secretary — will also be in Munich. She remembers very well your birthday in 1937 when she came to your house in Dahlem to congratulate you."

Debye answered that he would be happy with the Sommerfeld project, and emphasised the process of selection of the papers. Rosbaud then referred in a letter to

⁹³ Debye's wife Mathilde left Germany in March 1940, some two months after her husband's departure. She did not arrive in New York until January 1941, after a doubtless adventurous journey via Switzerland, France, Spain, Portugal, and Cuba.

⁹⁴ RHCL, box 29-R, folder 9. See n. 2 for the venue of the RHCL archive. Rosbaud's preceding telegram and letter are missing.

⁹⁵ RHCL, box 29-R, folder 9.

⁹⁶ The Welch Foundation is a legacy from the late Robert Alonzo Welch. The foundation, which has its office in Houston, is entitled to spend money for fundamental research in chemistry on behalf of Texan universities and institutes. Debye was, until his death in 1966, on the Scientific Advisory Board of the Foundation.

⁹⁷ RHCL, box 39-W, folder 1.

⁹⁸ RHCL, box 29-R, folder 8.

⁹⁹ Debye and Rosbaud attended the Krystallographen Tagung, the symposium in commemoration of the fiftieth anniversary of the discovery by Professor Max von Laue of the diffraction of X-rays by crystals, 25–28 July 1962. After this symposium, Debye travelled to Maastricht, where, on 4 August, he presented the first Hustinx Award for Chemistry and gave a lecture on the measurement of molecules. The Hustinx Award was afterwards changed to the Debye Award.

one of Debye's hobbies: "No doubt you will bring your fishing rod along and escape from the meeting to your old fishing waters, just as in the old days when you were in Berlin, and went to Bavaria."

On 23 February 1963, Angela Rosbaud gave Debye the sad news that her father had died in January from acute leukaemia, and added: "Perhaps you will one day come to England and we'll meet again." Debye sympathised with her in her grief, and wrote on 13 March 1963: "It was a shock and not expected in the least. In Munich I had such a good feeling in renewing the old friendship with your father. That I can look at a continuation of that friendship through you I consider a most happy compensation."

Incontestably, Rosbaud and Debye were close friends in Berlin during the Nazi period. At that time, they undoubtedly shared political experiences. However, neither of them referred explicitly to those events.

More questions than answers

At the age of nearly 56 years, on 15 January 1940, Debye left Germany with a couple of suitcases, not knowing how and when his family would be able to follow. He left some days earlier than he had scheduled. Why? His advanced departure was called "very likely an escape" by Van Ginkel, and, indeed, this can be concluded from a letter, dated 3 September 1940, written by Telschow in Berlin.¹⁰⁰ Telschow complained that he had made a verbal agreement concerning the transfer of Debye's physics institute, and that the written version merely needed to be signed. They settled on a date for signing, but Debye had already gone. Telschow wrote: "When two days before the planned date of the departure, at your suggestion, I wanted to visit you at the Institute I was informed that you left prematurely." Debye left Germany on Monday, 15 January 1940.¹⁰¹ Telschow did not meet Debye, so he visited the institute on 15 January, or shortly thereafter. Telschow also wrote that he made an appointment two days before Debye's departure. Consequently, Debye originally planned to leave on 17 January, or soon after this.

Was there any obviously compelling reason for Debye's advanced departure? Apparently, there was none, for he had to embark on the ship *Conte di Savoia* in Genoa on 23 January.¹⁰² Debye arrived in Milan in the evening of 16 January, and in Genoa on 18 January. Thus, he stayed two nights in Milan and had at least four days to spare in Genoa.

Debye was habitually punctual, and therefore there could have been an as yet unknown reason for his neglect. Indeed, a probably compelling reason has been found, which also reveals the fact that Debye did not inform Telschow, who was a member of the Nazi Party, about his early departure; for there is a striking coincidence with the intended invasion of The Netherlands, ordered by Hitler to take place on 17 January 1940, the first possible day of Debye's failed appointment with

¹⁰⁰ See: Van Ginkel, Prof. Peter J. W. Debye, 61; and Telschow's letter, Family Archive, Kinderhook, New York.

¹⁰¹ Van Ginkel, Prof. Peter J. W. Debye 119; Debye Diary, Family Archive, Kinderhook, New York.

¹⁰² Debye Diary.

Telschow. A document of the Oberkommando der Wehrmacht, signed by General W. Keitel, and sent to the combat troops on 11 January 1940, ordered the "Besitznahme des Kerns der Festung Holland vorzubereiten. A-Tag ist Mittwoch 17.1.40. X-Zeit 15 Minuten vor Sonnenaufgang in Aachen am A-Tag, 8.11 Uhr"¹⁰³ (To prepare the occupation of the heart of the fortress Holland, day of attack is Wednesday 17 January 1940, fifteen minutes before sunrise in Aachen at 8.11). The attack had to be postponed at the very last moment.¹⁰⁴ Did Debye have knowledge of the intended attack on his native country, which could endanger his position as a Dutch citizen? Was Rosbaud his informant, or did he have his own sources within the German government or armed forces? Did he fear that the Nazi government could, in the end, withdraw the permission for legal leave, or even worse? These are questions that cannot be answered with certainty.

An additional reason for Debye's apparently hasty departure might have been a more general concern. After the UK had declared war on Germany on 3 September 1939, the German Abwehr and secret police intensified their activities. We cannot exclude the possibility that Debye fled from likely arrest, fearing that his supposed secret contacts might be discovered.¹⁰⁵

There are, indeed, some indications that he was in possession of secret information. A number of striking remarks, recorded in the FBI files, have been overlooked by almost everyone. Samuel Goudsmit informed the FBI about a story he had heard, some time after Debye's arrival in the USA, from Roman Smoluchowski of Princeton university.¹⁰⁶ The FBI recorded:

Smoluchowski told *Goudsmit* that in a conversation with *Debye* the latter stated that during the Polish invasion he (*Debye*) obtained a list from the German government giving the whereabouts of various Polish scientists. *Smoluchowski* said that no one else could get this list outside of Nazis or persons very trusted by the Nazis, thus indicating that *Debye* had a very good standing with the Nazis. *Smoluchowski* also said that after *Debye* had told him regarding this list *Debye* had seemed to be perturbed because he had made such a statement to *Smoluchowski*. *Goudsmit* stated that *Smoluchowski* might be able to give further information regarding *Debye*.¹⁰⁷

A month later, a different FBI agent interviewed Smoluchowski, and the agent apparently did not ask questions about the list of Polish scientists. The agent wrote:

¹⁰⁵ Debye's grandson Norwig Debye-Saxinger stated in April 2009: "Debye's early departure was always, when mentioned by family members who had been in Germany or the Netherlands at that time, attributed to the 'fear' of being stopped and then prevented from leaving altogether. PJWD's entry in his 'Notizbuch', as he made it through customs at the Brenner Pass, suggests apprehension about making it out of Germany. The candles he lit ('Notizbuch') also suggest that he regarded his departure more like a successful escape, and all of this the beginning of a momentous family journey."

¹⁰³ L. de Jong, Het Koninkrijk der Nederlanden in de Tweede Wereldoorlog, vol. 2 (s-Gravenhage: Martinus Nijhoff, 1969). The Wehrmacht document is reproduced after 224.

¹⁰⁴ De Jong, Het Koninkrijk der Nederlanden in de Tweede Wereldoorlog, 226–34. According to De Jong, Hitler cancelled the operation on 15 January, the day of Debye's departure from Germany. The reason may have been an emergency landing of a Luftwaffe plane on 10 January, just beyond the Belgian border, containing all of the details of Fall Gelb, the attack on the Low Countries and France.

¹⁰⁶ Roman Smoluchowski was a Polish physicist who escaped in September 1939, after the German invasion, from Poland via Lithuania and Sweden to the USA.

¹⁰⁷ FBI report, file No. 62-1132, 19 September 1940.

"He stated, however, that from his conversations with *Debye* since *Debye*'s residence in the United States, he had learned *Debye* was on friendly terms with the Nazi Government and in his opinion knew much of the present military experimental work in Germany. He stated, however, that in his opinion, *Debye* was not an Agent of the Nazi Government because of the scientific nature of his work and his love for science in preference to anything political."¹⁰⁸

On the basis of an interview with Otto Stern,¹⁰⁹ the same agent noted down: "Dr *Stern* stated that it was the general opinion of the physicists that *Debye* was a member of the *Staatsrat* which means 'Advisor to the State', an organization which was composed of outstanding professional men of Germany, for the purpose of promoting the industrial phase of Germany's war. According to Dr *Stern*, *Debye* by virtue of his position, would have access to very important information concerning the German Government and for this reason, would surely be connected with the German Government in some capacity since the German Government allowed him to leave Berlin."¹¹⁰

The declarations suggest Debye's association with Nazi circles, which could provide access to important technological and political information. The three abovementioned scientists relate this information-gathering to interests of the Nazis or to Debye's personal interests. However, the statement concerning the whereabouts of Polish scientists does not fit with this interpretation. The German government was already in possession of the Polish documents, and it is very unlikely that Debye intended to visit Polish colleagues in wartime. Here, the interests of a third party (the Allies?) are more probable.

The author of the NIOD report consulted the FBI files but did not make any mention of these declarations by Goudsmit, Smoluchowski and Stern.¹¹¹

Conclusion

As already observed in the introduction, the story of Debye in Nazi Germany poses a troubling historical challenge. There is, to date, no room for definitive conclusions, but only for theories or hypotheses, eventually supported by circumstantial evidence. In the Nazi period, there were many secret lives. These lives are, for obvious reasons, very poorly documented. It is notable that both Rosbaud and Debye maintained an almost perfect reticence about their experiences in Nazi Germany. They did not even make mention of their involvement in Meitner's escape, which was only disclosed after her death in 1968, when her diaries became accessible.

¹⁰⁸ FBI report, file No. 62-1132, 19 September 1940.

¹⁰⁹ Otto Stern was a physicist of Polish origin; he studied and worked in Germany, and came to the USA in 1933.

¹¹⁰ FBI file No. 77-148, 19 September 1940.

¹¹¹ Concerning Goudsmit, the report only states that he triggered the first FBI investigation in the summer of 1940. Smoluchowski is quoted as calling Debye "extremely mercenary as a scientist." There is nothing in the report about declarations from Stern. The NIOD report attempts to portray Debye as a scientist cooperating with the Nazis for opportunistic reasons. The information from the three informants suggests a choice between two extremes: collaborator or spy.

Nevertheless, this paper presents — besides the Meitner story — some firm facts. First, Debye was unquestionably an ardent anti-Nazi.¹¹² This can also be concluded from the discovery of a close friend in Debye's network: Paul Rosbaud, a staunch anti-Nazi and secret agent, source of crucial intelligence to the allies, witness of all the ins and outs of Germany's academic and scientific life in the Nazi period, who gave Debye's photograph a "place of honour" in his office. This friendship would have been unimaginable if Debye had been a Nazi sympathizer or opportunist. Second, Debye moved, as a prominent scientist and science manager, in higher Nazi circles. He was on the board of the German Academy for Aviation Research and met Goering personally. Debye must have had thorough knowledge of German war technology, as testified by Goudsmit, Smoluchowski and Stern to the FBI.

These two main facts are obviously incompatible with Debye being an opportunist or collaborator. This contradiction disappears if it is assumed that Debye was somehow involved in intelligence. Therefore, the hypothesis that Debye was a secret informant for Rosbaud does not appear too bold.¹¹³ In historical science, an acceptable theory or hypothesis must provide maximal coherence to the different and diverging facts. My hypothesis meets this requirement and, we might add, it is also compatible with Debye's probably risky escape from Germany in January 1940.

Forms of opposition that are common in democratic societies became obsolete in Nazi Germany. Those opposing Nazism had only two choices: they could leave the country or, to the best of their ability, offer resistance within the Nazi state itself. Debye rejected the first option for as long as possible. Many believers, and some disbelievers too, wondered why Debye did not leave earlier. How could he live and work for so long in the Nazi state, where all standards of decency and humanity had been violated, and at the same time maintain his integrity and personal self-respect? Here we are approaching a point of ideological principle. Generally speaking, there are two points of view concerning opposition to Nazism. The first one is supported by, as we might call them, the *fundamental moralists*, and the second by the *ethical* pragmatists. The first point of view emphasises the principle: a position or action is judged in an academic way, isolated from the immediate practice and circumstances. Many intellectuals are apt to adhere to this individualistic view, because it is closely bound up with their position in society. Intellectuals normally had enough opportunities to leave Nazi Germany in the 1930s. One needed money and the prospect of a job abroad. There, in the country of choice, it is even more easy to tackle an issue in principle, and also by public statements. At the same time, one is shifting responsibility towards the millions who do not have the ability to leave. What could the laboratory worker, the hall porter of the institute or the woman cleaner do? Nothing more

¹¹² All members of the Debye family declared in 2006 and afterwards that Peter Debye held strong anti-Nazi convictions. On 13 February 2008, the Dutch weekly *Elsevier* published an interview with Mrs Siemens-Niël (1924), daughter of Debye's sister Caroline, entitled: "My Uncle Hated Nazis." Mrs Siemens was raised by Debye's parents in Maastricht, and declared that, in the late 1930s, Debye helped to spirit several endangered German citizens out of the country: "There were always Germans in the house. There was said to me, then, that they were relatives of aunt Hilde [Debye's wife Mathilde]. Surely, she must have many relatives, I thought. Some went by train via Charleroi to France, others via Rotterdam to England."

¹¹³ Rosbaud had many "innocent sources": scientists and engineers who gave, unconciously, classified information. Concerning Debye, this alternative is less probable. Their friendship was too close, their reticence after the war too extreme, and, what is more, Rosbaud would not have asked for Debye's photograph with the object of giving it "a place of honour" in his office.

than stay and make the best of it. The second view is pragmatic: what are the results of my action or the absence of action in the ongoing events of a given context? To be sure, it is much more convenient to remain true to an issue in principle than in terms of concrete responsibility.

Debye combined pragmatism with high moral standards. He was not tilting at windmills in the storm of Nazism. He fought, probably, a different fight, in which he had to make compromises, not bothering about individualistic preoccupations such as "self-respect" or "clean hands." Surely, those who did not leave, and assumed their responsibility in the very difficult situation, had to violate their own convictions on many occasions. The fundamental moralists suggest that they gave up their convictions; they are questioning someone's personal integrity. In Debye's case, they desperately hunted high and low for compromises that resembled submission to the Nazis, but in reality were strategic moves by a responsible man. All of the efforts to prove Debye's "opportunism" or "collaboration" failed.

Some have interpreted Debye's attitude as naivety, as an inability to understand political questions, which could easily be utilised by the Nazis or, even worse, could indicate a disposition to sympathise with them. However, Debye was not only a brilliant and original scientist, but also a wise and shrewd man of the world. He was not a mainstream scientist or intellectual. This can be explained by his upbringing. His father was a blacksmith, and his mother worked as a box-office girl in the city's theatre. He was, as it was called, of "low birth," and the municipality of Maastricht paid his school fees, because his parents were not able to do so. His youth made a lasting impression on him, giving him a deep sense of practical solidarity, friendship, and family values. He followed energetically the solitary path from a working-class family to world reputation. He learned in a hard school of social discrimination and adversity.¹¹⁴ This experience enabled him to keep a clear head in a sea of madness and moral degeneracy, for he guarded his knowledge of what is right and what is wrong. He acted in the delicate circumstances of crisis and war in his own way. He was guided by his own moral compass; he belonged to nobody.

Politics was definitely not Debye's vocation; he was dragged into it by the political turbulence of European history of the first half of the twentieth century. Wars are between states, but he only drew a distinction between good and bad people, and never extended his hatred of the Nazis to the German people or the German nation.

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¹¹⁴ In 1964, Debye wrote (in Dutch) his *Reminiscences of My School Time in Maastricht* for the celebration of the centennial of his secondary school: "My parents got from the city council exemption from school fees. Quite naturally, the other boys became aware of that. One of these boys was a son of people who lived in the East [present Indonesia, a former Dutch colony], and sent him and his brother to Holland in order to go to school here ... Probably as a consequence of his upbringing during his childhood in the Dutch East, the boy in my class decided, that I, because I did not pay the school fees, ought to be a sort of 'pariah'. He put it quite plainly, that he could not go around with me anymore, someone who belonged to a lower class of society." RHCL, box 26-N, folder 8.

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