The Rockefeller Foundation and German Physics under National Socialism

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IN 1930 the Rockefeller Foundation promised the Institut für Physik and Zellphysiologie of the Kaiser Wilhelm Gesellschaft the sum of \$655,000 to buy the land for two research institutes, to build them and to equip them. By 1933 only the Institut für Zellphysiologie had been built, while the building of the Institut für Physik had been delayed. Once the National Socialists seized power in January 1933, and their policies had become clear, the foundation faced a difficult decision.

In 1934 the Rockefeller Foundation had no precedent in policy regarding the support of science under dictatorships. It had, however, sought hitherto to be politically neutral in making its grants. By the end of the year its committee on appraisal and plan announced: "It [the foundation] has not considered the flags and frontiers which proclaim that we live in a world of separated states. We go where there is the largest opportunity of advancing human welfare. We are not deterred by the political or economic complexion of nations except as it may handicap what we desire to do . . ."¹ Although it had traditionally tried to act independently of governments, the coming into power of the National Socialists made the foundation's trustees and officers think about the political and moral issues which would be raised by the fulfilment of the promise made in 1930.

The officers of the Rockefeller Foundation, who were sensitive to the changes in German society, were against continuing with the project, but the executive committee of the foundation and its legal counsel voted to proceed. Moreover, there was considerable pressure from Max Planck, the president of the Kaiser Wilhelm Gesellschaft, to see the project through. The sum of \$655,000 promised in April 1930 was released in March 1935.

The Foundation and the Kaiser Wilhelm Gesellschaft after the First World War

The Rockefeller Foundation had begun to support institutions in Germany as part of its emergency programme in Europe soon after the First World War ended. It contributed to the cost of the acquisition of journals

¹ Rockefeller Foundation Archives (hereafter cited as RF, record group series, box, file). RF 900, Program and Policy, Reports, PRO-35, 21 December, 1934.

and medical literature, the provision of laboratory equipment and the awarding of resident fellowships. Its primary interest was to sustain medical education in German universities.

One of the foundation's first major institutional links with Germany in the 1920s was with the Notgemeinschaft der deutschen Wissenschaft, founded in 1920. By 1922 the foundation had begun to doubt the efficacy of merely providing journals and began a programme of fellowships to support young persons interested in medicine and its relations with physics and chemistry. Stimulated by Abraham Flexner's account of the situation of medical education in Germany, Richard M. Pearce, the director of the division of medical education of the foundation, wrote to Friedrich Schmidt-Ott, the president of the Notgemeinschaft der deutschen Wissenschaft, asking if it were true that younger men were not entering laboratories because of economic pressures. He invited Schmidt-Ott to take part in the Rockefeller Foundation's new programme of fellowships to train young men wishing to become teachers of medicine.²

In the autumn of 1922, Richard Pearce made Berlin his base for visits to Prague and Paris. Heinrich Poll, Fritz Haber and Friedrich Schmidt-Ott were among Pearce's acquaintances in Berlin. The first two had been advisers to Abraham Flexner when he was preparing his book, Medical Education in Europe. Pearce visited Haber's Kaiser Wilhelm Institut für physikalische Chemie und Elektrochemie and was also a guest at a dinner at Haber's home where Max von Laue, Max Planck, Walther Nernst, Friedrich Schmidt-Ott, Adolf von Harnack-then president of the Kaiser Wilhelm Gesellschaft-and Heinrich Poll were present. Four of the prominent physicists and chemists at the Kaiser Wilhelm institutes were Nobel prize-winners; this impressed Pearce.³ Pearce, Haber and Poll agreed to create a committee of German scientists to act as consultants for the Rockefeller Foundation in Germany. Haber later became the representative of the foundation at the Notgemeinschaft and considered the officers of the Rockefeller Foundation to be men of good will;⁴ but he remained in that capacity only until March 1923 when he resigned.

Although the foundation had hitherto been interested primarily in German medical education, particularly teaching, by 1925 Pearce—perhaps stimulated by his contacts in Berlin-Dahlem—began to take an interest in research centres such as Emil Kraepelin's institute in Munich and the Kaiser Wilhelm Institut für Hirnforschung in Berlin-Buch.

The building of the Deutsche Forschungsanstalt für Psychiatrie—a Kaiser Wilhelm institute—was the first major building project of a Kaiser Wilhelm

² Bundesarchiv (BA), Koblenz, Notgemeinschaft R 73. Richard M. Pearce to Friedrich Schmidt-Ott, 22 June, 1922. See also Rockefeller Archive Center, "Conference in Greenwich—May 9, 1922", George Vincent, Abraham Flexner and Richard Pearce, reported on in Richard Pearce's diary 1922.

³ RF, Richard M. Pearce's diary from 1-15 November, 1922.

⁴ BA, Notgemeinschaft R 73, Fritz Haber to Friedrich Schmidt-Ott, 8 November, 1922.

institute supported by a capital grant from the medical division of the Rockefeller Foundation. Emil Kraepelin's request for aid was initially refused by Dr George Vincent, then the president of the foundation, because he said its policies did not extend to "independent research institutes". When Dr Simon Flexner heard of the matter, he said the project should be investigated because the "institute might become a training centre for American psychiatrists".⁵

Although the Rockefeller Foundation, through the International Education Board, had supported the natural sciences in Germany since 1923, especially in Göttingen, where it had supplied the funds for the Institut für Mathematik and the Institut für Physik, for Richard Courant and Max Born respectively,⁶ their support for the Kaiser Wilhelm institutes was concentrated on the medical sciences until the appropriation was made for the Kaiser Wilhelm Institut für Physik in 1930.

Fortunately for the Kaiser Wilhelm Gesellschaft, the foundation underwent a major reorganisation in the late 1920s. In 1928, Raymond Fosdick, then a trustee and later president of the foundation, reorganised the institution into five divisions including a natural sciences division and a medical sciences division in which advancement of science was the goal. This new policy and its consequent programmes began to be put into practice from 1929.⁷

Friedrich Glum, the general director of the Gesellschaft, predicted that "in the course of the next few years" the Kaiser Wilhelm Gesellschaft would "enter into a closer collaboration with the Rockefeller Foundation, in particular in the areas of the various boards".⁸ At the time Glum had had many conversations with Alan Gregg, an officer in the medical sciences division, who wanted to learn more about the Gesellschaft. He told Glum that a change in direction of the policies of the foundation was about to occur. Gregg left the meetings with "favorable impressions of the Kaiser Wilhelm Gesellschaft and of Dahlem", and Glum hoped that "financial support" would come out of it.⁹

The two organisations shared a policy of supporting science of the highest quality. The Rockefeller Foundation was interested in the Gesellschaft because by supporting science there it would make the "high peaks higher", as the motto of the foundation proclaimed. Glum's predecessor as head of the Kaiser Wilhelm Gesellschaft, Adolf Morsbach,

⁹ Ibid.

⁵ RF 717A.9.54. Forschungsanstalt für Psychiatrie, Munich, Historical Record.

⁶ See Gray, George, Education on an International Scale: A History of the International Education Board, 1923–1938 (New York: Harcourt Brace, 1941).

⁷ For an analysis of the reorganisation of the boards see Kohler, Robert E., "A Policy for the Advancement of Science: The Rockefeller Foundation, 1924–29", *Minerva*, XVI (Winter 1978), pp. 480–515.

⁸ Bibliothek und Archiv zur Geschichte der Max-Planck-Gesellschaft (hereafter MPGA), Kaiser Wilhelm Gesellschaft, Generalverwaltung, Rockefeller Foundation, 1093, 1928–1932. Friedrich Glum to Felix Bernstein, 15 November, 1928.

considered its "foreign relations" with America as "especially warm"; they were "especially pleased" to have the support of the foundation.¹⁰

The Founding of the Institutes of Physics and Cell Physiology, 1929-33

Otto Warburg, the biochemist and Nobel Laureate, had close ties with the Rockefeller Foundation. As early as 1923 he had received a special fellowship as "an exceptionally promising scientist".¹¹ Warburg later recalled that, after he had given a lecture in Baltimore in the autumn of 1929 on "Enzyme Action and Biological Oxydations", the foundation offered to support his work in Dahlem. He suggested the building of a small institute of cell physiology and a large institute of physics under the direction of Max von Laue; these institutes would enable the two of them to co-operate in the field of radiation physics.¹² Warburg's studies in the metabolism of cancer cells had already gained wide recognition, and the close connection of cell physiology with medicine was enough to satisfy Pearce's criterion of medical relevance. Warburg had been sharing space with the genetics and botany divisions of the Kaiser Wilhelm Institut für Biologie and such accommodation was inadequate for his work.

The idea of creating an institute for physical research in Berlin shortly predates the founding of the Kaiser Wilhelm Gesellschaft in 1911. Philipp Lenard had written a memorandum in 1906, at the request of Friedrich Althoff, in which he set forth a detailed plan for a research institute where experimental research would be conducted on the lines of the Royal Institution in London.¹³ By 1911, however, this suggestion had been forgotten. In the spring of 1913 Planck and Walther Nernst went to Zurich to find out whether Albert Einstein would be willing to move to Berlin; they offered him a combination of posts—membership in the Preussische Akademie der Wissenschaften, a professorship at the University of Berlin with the right, but not the obligation, to teach, and the directorship of the institute of physics which they hoped would be established. Einstein liked the idea because he had had enough of teaching and wanted time to think.

It was not until 1914 that the physicists working in Berlin, Fritz Haber, Walther Nernst, Max Planck, Heinrich Rubens and Emil Warburg-Otto

¹⁰ Glum, Friedrich, "Die Auslandsbeziehung der Kaiser Wilhelm-Gesellschaft zur Förderung der Wissenschaften", *Forschungen und Fortschritte*, VII (1931), p. 316. See also Anon. "Auslandsbeziehungen der Kaiser Wilhelm-Gesellschaft zur Förderung der Wissenschaften", *Forschungen und Fortschritte*, VI (1931), pp. 15–16. Morsbach, Adolf, "Deutsche Wissenschaft und Ausland: Auslandsarbeit der Kaiser-Wilhelm-Gesellschaft", *Hochschule und Ausland*, IV (1931), p. 5.

¹¹ RF 717.2.9. From Alan Gregg's report on the Institut für Zellphysiologie, Berlin-Dahlem, Paris, 20 February, 1930. Warburg had a fellowship from 1923–25 for study in Germany.

¹² Warburg, Otto, "Max-Planck-Institut für Zellphysiologie in Berlin-Dahlem", Jahrbuch der Max-Planck-Gesellschaft zur Förderung der Wissenschaften e.V. (Göttingen: Max-Planck-Gesellschaft, 1961), pp. 817–821, esp. 817.

¹³ Staatsbibliothek Preussischer Kulturbesitz, Hugo Krüss Papers, File 122, Kaiser Wilhelm Institut für Physik. Denkschrift und Entwurf zu einem deutschen Institut für physikalische Forschung von Dr P. Lenard, Dezember 1906. Warburg's father—drew up a plan for the institute and made a proposal to the Prussian government, the Kaiser Wilhelm Gesellschaft, and the Koppel Stiftung in which the goal of the institute was stated to be the solution of important physical problems through mathematical analysis and experiments.¹⁴ Funds were supplied by the Koppel Stiftung and the Kaiser Wilhelm Gesellschaft to which the institute became legally affiliated on 1 October, 1917.

Support was requested from the minister of finance, but he refused to contribute because he thought the project should be realised in an entirely governmental institution without the support of the Gesellschaft and the Koppel Stiftung.¹⁵ When the First World War broke out, plans for constructing the institute were delayed; because the institute had some money but not enough for building, it began to support physicists in other centres in Germany. In order to administer the funds, a board of directors was set up in 1917 with Albert Einstein as director and Haber, Nernst, Friedrich Paschen, Planck and Emil Warburg as members. In 1921 Max von Laue was elected to the board. The institute supported, for example, many students of Max Born working in Göttingen on problems involving atomic physics and the interaction of radiation and matter. Several institutes in Germany received support from it for equipment such as diffusion pumps and electrical and spectroscopic measuring instruments. The institute also supported young scientists with fellowships.¹⁶

Although the Notgemeinschaft der deutschen Wissenschaft supplanted the grant-making activities of the institute, not until about 1926 was there further discussion about the construction of a building for the institute. Thus far the institute did not exist as a functioning research institute, which was an unusual feature of a Kaiser Wilhelm institute; nevertheless, it had already effectively supported the advancement of relativity and quantum theory. In the late 1920s, von Laue become acting director and took over Einstein's administrative duties. Over and above the financial and political difficulties, the delay in building an institute occurred partly in consequence of Einstein's lack of interest. By 1929 Einstein thought it a good idea for von Laue to become director as it was "a lack that de fakto [*sic.*] no K.W. Institut für Physik exists. How would it be if you would become the head of such an institute . . .?"¹⁷ In order to establish a Kaiser Wilhelm institute,

¹⁴ This document is reprinted in Kirsten, Christa and Treder, Hans-Jürgen, Albert Einstein in Berlin, 1913–1933 (Berlin: Akademie-Verlag, 1979), p. 201. The original is at ZStA Merseburg, 2.2.1 Nr 21289, Bl. 155–158; Inventar A Nr 225.

¹⁷ Deutsches Museum, 1964–6/20 (and Einstein Archive, Boston University). Albert Einstein to Max von Laue, 30 January, 1929.

¹⁵ Wendel, Günter, Die Kaiser Wilhelm Gesellschaft, 1911–1914: Zur Anatomie einer imperialistischen Forschungsgesellschaft (Berlin: Akademie-Verlag, 1975), p. 201. The institute was finally supported two thirds by the Kaiser Wilhelm Gesellschaft and one third by the Koppel Foundation.

¹⁶ For applications and grants see MPGA, Kaiser Wilhelm Institut für Physik, A 39, Korrespondenz, 1917–1933. See also the *Tätigkeitsberichte* of the Kaiser Wilhelm Gesellschaft in *Die Naturwissenschaften*.

however, a memorandum was needed where the goals, research programme and details of building were set forth. Glum complained, at a meeting of the scientific council of the Gesellschaft, that "the plan for a new building for the Institut für Physik had been pursued by us [the administration] since 1926. But it had not been possible to obtain a memorandum from Professor v. Laue".¹⁸ Finally, by March, the board of directors of the institute wrote a memorandum for Adolf von Harnack, the president of the Kaiser Wilhelm Gesellschaft, in which they argued that in the 12 years since the first memorandum in 1917, theoretical physics had developed in a manner without parallel in the history of the field; the memorandum went on to say that as an "exact" science physics was at the centre, a point from which, in the last 25 years, "the most light and the strongest stimulation for the activity of other areas radiated". Furthermore, no institutes for pure research in theoretical physics existed anywhere in Germany.¹⁹ The activity of Physikalische-Technische Reichsanstalt involved the measuring of physical constants and hardly advanced the study of the interaction between theory and experiment, an area that was the chief interest of the institute. Von Laue proposed work on molecular rays, molecular magnetism and pure theoretical research.²⁰

In the autumn of 1929, the first discussions began between Otto Warburg and the Rockefeller Foundation concerning his institute of cell physiology. By early 1930, Lauder W. Jones, the assistant director of the natural sciences division at the Rockefeller Foundation, visited Berlin and discussed the terms of the proposal for the Institut für Physik.

After the resolution was passed in April 1930 to support the two institutes within the Kaiser Wilhelm Gesellschaft, the projects matured along different lines. Otto Warburg knew what he wanted and the Institut für Zellphysiologie was completed by 1931. It had in the meantime received a generous bequest from a Mrs Gradenwitz who had died of cancer and wanted to support research on cancer; the bequest provided the institute with a fund for maintenance and support of its activities. The Institut für Physik, on the other hand, did not make an auspicious start. It had no definite building plans, had not obtained any assurance of continued financial support, and had problems in the recruitment of staff.

After the initial grant for the Institut für Physik was approved in 1930, von Laue and officers of the Rockefeller Foundation agreed it would be helpful to study American physics laboratories before building. Both von Laue and Rudolf Ladenburg received fellowships to visit Schenectady, Baltimore, Pasadena, Chicago and Cambridge in the autumn of 1930. They were impressed by many of the American institutions and von Laue

 ¹⁸ MPGA, KWG, Wissenschaftlicher Rat, 179, 3 June, 1929.
¹⁹ MPGA, KWG, Generalverwaltung, Kaiser Wilhelm Institut für Physik, Schriftverkehr vom 5 March, 1929–22 August, 1931, Hauptakten, 1650, 5 March, 1929. To Adolf von Harnack from Einstein, Haber, von Laue, Nernst, Paschen, Planck and E. Warburg.

²⁰ Ibid. Max von Laue to Adolf von Harnack, 4 February, 1930.

thought the group of theoretical physicists at Pasadena was very promising and would become as good as any in the world: "He emphasized the fact that theoretical physics in Europe had developed first of all because of lack of funds for experimental work after the war and particularly because of the influence exercised by Planck and the Quantum Theory."²¹ After this visit von Laue proposed that he build only a part of the laboratory and postpone the building for about a year because of the financial and political disturbances in Germany. There had been many reductions in the budget of the Kaiser Wilhelm Gesellschaft, in part, because of the Young Plan which had set reparation payments for many years and because of the depression of 1929.

By the beginning of 1931 there were beginning to be hints of problems in the selection of scientific staff. In the early negotiations, it was agreed to select outstanding younger physicists to be associated with von Laue and Einstein, but this had still not happened. Einstein was anything but an active director of the institute. His prestige had drawn the Rockefeller Foundation's attention to the institute and it was surely a disappointment for the foundation when it learned that Einstein had been invited to join the California Institute of Technology in Pasadena. When Lauder W. Jones, the officer in charge of the natural sciences division of the foundation, informed Glum that he had heard Einstein had been called permanently to Pasadena, Glum claimed not to have heard of the move and added that Einstein was "so erratic in his movements" and "difficult" in matters personal that "anything might be expected from him". Jones asked if Einstein would be intimately associated with the institute, to which Glum replied: "Einstein might move into the institute and find it a desirable place for his activities, or he might prefer to stay in his own home to think!"22

After some deliberation about the state of physics in Berlin, Max Planck, the president of the Kaiser Wilhelm Gesellschaft since 1930, decided that he wanted James Franck, an experimental physicist who had been a Privatdozent at the University of Berlin and a member of Haber's institute, to take over the directorship of the Institut für Physik. The plan was as follows: in the summer of 1931 Walther Nernst, who although a physical chemist had held the important professorship of physics at the University of Berlin, would retire. To persuade Franck to come to Berlin, Planck and Haber wanted to offer him the directorship of the institute and the professorship at the university. Franck, moreover, would not be required to teach at the university because Peter Pringsheim, who had been teaching

²¹ RF 717.2.9. HAS diary 15 December, 1930. The folder on the visit consists mostly of telegrams and business detail; see RF 717.13.113. For a detailed plan for the institute, stimulated by their experiences in the United States, see MPGA, KWG, 1650, Generalverwaltung, Kaiser Wilhelm Institut für Physik, Hauptakten, Schriftverkehr, 5 March, 1929-22 August, 1931. Ladenburg-von Laue 15 May, 1931. ²² RF 717.2.9. 2 and 5 January, 1931, L. W. Jones memorandum.

there would be professor of physics at the University of Berlin and would relieve Franck of such duties. As early as February 1931 Haber had written to Franck informing him that the Nernst successorship would be decided by the summer. "We are doing a lot of experiments", he added, "and we need you."23 In a lengthy conversation with Jones at the end of March. Haber asked for a delay in the construction of the building until they offered Franck the position.²⁴

It is not clear why von Laue was not named director. He had been effectively in charge since he had come to the institute in 1921 and, as noted earlier, he had made the trip to the United States to learn about laboratories there;²⁵ von Laue was clearly interested in the position. Planck, however, seems to have had other plans. He wrote to Laue in November 1931 encouraging him not to take any steps himself in relation to the Institut für Physik: ". . . You can answer the question of whether you will assume leadership of one of the departments in the institute of physics, once the offer is made to you." Planck hoped that the position would be made "attractive" and von Laue would finally be freed from his teaching duties. "The ball would start rolling", wrote Planck, when the ministry raised the issue to the philosophical faculty of the University of Berlin.²⁶

Perhaps it was thought that since yon Laue was already in Berlin with a professorship at the university there was no need to offer him more, and that the only way an outstanding physicist would be attracted to Berlin would be to offer him the leading position there. Planck wanted to keep Berlin a centre of physics and wished to use the opportunity of the chair recently vacated by Nernst to do this. The institute's shift of emphasis from a theoretical to an experimental research programme was a consequence of the director's interests, i.e., those of Franck, the intended director, rather than of the scientific developments in the field at the time; any subsequent shift would likewise depend on the director's interests.

The invitation to Franck to come to Berlin took some time because the matter first had to be brought before the ministry which in turn transmitted the suggestion to the faculty of the university. By the end of 1932 the official steps had been taken and Planck wrote to Franck reporting that the philosophical faculty had unanimously voted for the appointment of Franck as professor of experimental physics.

The only remaining obstacles to the formation of the institute were financial. Unlike the Institut für Zellphysiologie, the Institut für Physik still lacked enough money to cover the cost of its operation. Not until after

²³ James Franck Papers, University of Chicago, Fritz Haber to James Franck, 14 February, 1931.

²⁴ RF 717.2.9. Memorandum of L. W. Jones' discussion with Professor Fritz Haber on the institute of physics to be built in Berlin, p. 3.

²⁵ At least one of von Laue's students have suggested to me that von Laue might not have been suitable as an administrator. (Interview with Georg Menzer, Munich, February 1985.) E.g. RF 717.2.9. LWJ's log, Berlin 11 July, 1931, p. 28. ²⁶ Deutsches Museum, Munich, Max Planck to Max von Laue, 10 November, 1931.

the National Socialist seizure of power did Planck write to the Reich and Prussian ministries of finance about the call of Franck to Berlin and inform them of the grant offered by the Rockefeller Foundation five years earlier. The two main reasons for the delay, explained Planck, were decisions about appointments and the inability to obtain funds from the preceding governments.²⁷

On 7 April, 1933, the law for "the re-establishment of the professional civil service" was passed, which dismissed "non-Aryans" from governmental employment, including employment in the universities. This law frustrated Planck's plans for the institute. Although Franck would have been spared under the clauses which exempted veterans of the First World War; he refused to stand by while his colleagues and staff were dismissed, and he resigned in protest.

Planck and von Laue worked "tirelessly to change the laws".²⁸ Through the intervention of Hans Berckemeyer, a member of the Kaiser Wilhelm Gesellschaft, Planck finally gained an audience with Reichskanzler Adolf Hitler on 16 May in order to discuss the "personal affairs of the professors", and also relations with the Rockefeller Foundation, but he addressed deaf ears.²⁹

By the winter, Planck had found another director for the Institut für Physik. This time the choice of director reflected the recent developments in physics. During the 1920s atomic physics had made rapid progress; with the discovery of the neutron and positron in 1932, the way was open for a better understanding of the atomic nucleus. Planck chose Peter Debye, a Dutchman, who had been the director of the Institut für Physik at the University of Leipzig, to assume the directorship. Debye agreed to work on experimental problems and he thought the research institute would give him new opportunities for research and more time than he had at a university laboratory.³⁰

The Decision to Support the Kaiser Wilhelm Institut für Physik, 1934-35

The officers of the Rockefeller Foundation watched the course of events in Germany with alarm. Early in 1933, shortly after the seizure of power and the dismissal of Jews from their positions, Robert Lambert, a representative in Paris of the division of the medical sciences of the Rockefeller Foundation, visited Berlin and Oskar Vogt's Kaiser Wilhelm

²⁷ MPGA, KWG, Finanzielle Sicherstellung, 1933, 16 August, 1932–11 December, 1934. Max Planck to the Prussian state government, 15 March, 1933. Draft.

²⁸ James Franck Papers, Fritz Haber to James Franck, 15 May, 1933.

²⁹ MPGA, KWG, Finanzielle Sicherstellung, 1933, 16 August, 1932–11 December, 1934. Aktennotiz, 6 May, 1933, Cranack. See MPGA, KWG, 361, Hans Heinrich Lammers to Friedrich Glum, 9 May, 1933. Planck, Max, "Mein Besuch bei Adolf Hitler", *Physikalische Blätter*, III (1947), p. 143.

³⁰ MPGA, KWG, 1651, Kaiser Wilhelm Institut für Physik, 15 May, 1933–15 December, 1936. Peter Debye to Max Planck, 8 December, 1933.

Institut für Hirnforschung. Vogt related that Lambert asked him if there were any Jews in his institute who drew incomes from Rockefeller contributions. Vogt mentioned that two women received their salaries through the Notgemeinschaft's study of race supported by the foundation. He described Lambert's reaction: "He then said, in a quite excited tone, that the Rockefeller Foundation would withdraw completely from Germany if the two women were deprived of their employment in the institute."³¹ Shortly afterwards, Vogt raised the issue at a meeting of the Notgemeinschaft where a representative of the foreign office was present. The representative stated decidedly: "that in view of the respect with which the Rockefeller Foundation is regarded throughout the world, its decision to discontinue its activities in Germany must by all means be avoided."32 Bv the summer of 1933, Max Mason, the president of the Rockefeller Foundation, had studied the question.³³ He too visited Vogt's institute. Vogt asked if Mason would be willing to repeat the concerns to the ministry of the interior. Mason spoke to Dr Rudolf Buttman, one of the ministers, about the matter, and as a result non-Aryans who held Rockefeller fellowships were not dismissed and were to be allowed to go on with their work in the institute until the end of their fellowships.³⁴

However, more was at stake for the foundation than a handful of fellowships. The dismissals had forced many scientists to emigrate and the foundation began to receive many more requests for help in placing exiled German scientists in the United States than it did for support of scientific work in Germany. Among the foundation stipendiaries forced to emigrate was Fritz Haber. His institute had received support from the foundation for equipment: it was then taken over by the new government to work on chemical warfare; the government installed its own director without approval of the Kaiser Wilhelm Gesellschaft. Otto Hahn, the director of the Kaiser Wilhelm Institut für Chemie, was uneasy about the use for the government's purpose of equipment which had been paid for by the foundation, with the expectation that it would be used for exclusively scientific purposes. Anticipating the reactions abroad, he argued that it should be returned to the foundation:

Secrecy about the new activity here in Dahlem is totally out of the question and the repercussions abroad would be intolerable, if the impression is given that military work is undertaken here with foreign support which had been appropriated

³⁴ MPGA, 536, Niederschriften einer Besprechung über die Angelegenheit des Kaiser Wilhelm Instituts für Hirnforschung am 22 September, 1933.

³¹ MPGA, KWG, 536, Gesetz zur Wiederherstellung des Berufsbeamtentums. Kaiser Wilhelm Institut für Hirnforschung. Oskar Vogt to Friedrich Glum, 16 September, 1933. ³² Ibid.

³³ RF 717.7.36. Germany, Program and Policy. "Report on Rockefeller activities in Germany: Medical Sciences, Natural Sciences, Social Sciences" prepared by officers of the foundation in Paris for Mason. 22 June, 1933.

for wholly other goals. Not only would German science be damaged, but the entire German people would be damaged as well.³⁵

With the National Socialists in power in Germany, the Rockefeller Foundation began to find a new definition of its policy regarding Germany. The discussions were more active among the officers of the social science division than among those in the medical or natural sciences. The trustees of the foundation said they were "not prepared to approve new grants to German institutions directly connected with the government", because they "would be interpreted as at least a tacit endorsement of Nazi policies".³⁶ The foundation would support individual scholars if the project accorded with its general programme, but it was not willing to support institutions.

Max Mason instructed the officers of the foundation in Paris to support new projects if the person to whom a grant was to be awarded had "sufficient stability of position to insure the successful utilization of the fund"; that there was "no probability that the grant may be warped from its original purposes, and become, or appear to become, a part of a political, partisan or militaristic effort"; and that the recipient was not "highly politically minded".³⁷

Meanwhile Max Planck was still feverishly trying to obtain the operating expenses for the Institut für Physik from the government. He wrote to Reichsminister Joseph Goebbels, explaining that the foundation had given the Gesellschaft RM1.7 million for the building but nothing for the operating costs. He pointed out that construction could begin any day, but that he had not received the promised contribution of about RM150,000 a year from any of the preceding governments of the Reich. Although now the "Reichsministerium des Innern, in full appreciation of the scientific importance of the planned enterprise and its meaning for the fatherland, placed an appropriate amount in the budget of the Gesellschaft", the minister of finance refused his approval.³⁸

Planck explained to Goebbels that he had found a first-rate scientist to direct the institute and that under Peter Debye's leadership it was bound to make revolutionary innovations in atomic physics and in daily life that could not yet be foreseen, as was the case with X-rays and the wireless radio.³⁹

The refusal of the minister of finance hit the Gesellschaft even harder because as Planck saw, with all these delays the foundation might not continue to make the funds available and an opportunity would be missed;

³⁶ RF 717.7.36. Memorandum. "Research Aid to Grants in Germany", 31 January, 1934, Tracy B. Kitteridge to John van Sickle.

³⁸ MPGA, KWG, 1651, Kaiser Wilhelm Institut für Physik, Hauptakten, Schriftverkehr vom 15 May, 1931–15 December, 1936. Max Planck to Joseph Goebbels, 6 February, 1934. ³⁹ Ibid.

³⁵ MPGA, KWG, 541, Kaiser Wilhelm Institut für physikalische Chemie und Elektrochemie, 1933–1944. Otto Hahn to Max Planck, 16 October, 1933.

³⁷ RF 717.7.36. Max Mason to George Strode, 16 April, 1934.

"we cannot waste any more time."⁴⁰ Debye echoed Planck's views: "I also have the impression that the business should not be dragged out too much longer."⁴¹

By the summer of 1934, the foundation learned of the appointment of Peter Debye. Wilbur E. Tisdale, an officer from the division of natural sciences of the office in Paris, spent an evening with Debye in Leipzig, who reported to him that "Planck and representatives of the government had approached him to ascertain if he would be willing to take charge of the construction and later act as director" of the institute. Tisdale surmised that someone was trying to "stir up those concerned with the project, in order to have it completed".⁴² It is likely that this was Planck.

According to Tisdale, Debye had shown "backbone" because he had chosen an assistant in Leipzig based on his scientific abilities rather than a candidate "more active in Nazi policies". Indeed, Debye showed active dislike of the government and mocked Hitler by saying that he would "take a page from the book of the Führer and would be dictator in his own laboratory".⁴³

According to Debye, Tisdale promised that the Rockefeller Foundation's contribution would not be taken away because of the length of time in which a decision by the government had been pending. Debye wrote to Planck: "He [Tisdale] assured me that the Rockefeller Foundation would by all means keep its promise. He appears, however, to be a little amazed that the government is not advancing more energetically."⁴⁴

Shortly after Tisdale's visit, a meeting was arranged by the Gesellschaft with representatives of the Reichsministerium für Wissenschaft, Erziehung und Volksbildung and the Reichsfinanzministerium. At this meeting Planck discovered that the minister of finance had been reluctant to offer the operating costs for the institute because he thought it would be an "*erstatz-Institut*" for Haber's institute, which had been diverted to military purposes. When the minister learned that this was not the case and that the building of the institute was "*in the interests of creating employment and to bring in foreign exchange in the interests of the Reichsbank*", the yearly contribution could begin in 1936.⁴⁵ Planck urged the ministerial officials to remember that: ". . . it is important that nothing happens to German science soon which could worry the Americans because there is, without a doubt, a certain reserve towards Germany these days."⁴⁶ As we shall see the

⁴¹ MPGA, KWG, 1651, Kaiser Wilhelm Institut für Physik, Hauptakten, 15 May, 1931– 15 December, 1936. Peter Debye to Max Planck, 9 August, 1934.

⁴² RF 717.2.10. 12 June, 1934, W. E. Tisdale's notes on Peter Debye, Leipzig.

⁴³ Ibid.

⁴⁴ MPGA, KWG, 1651, Kaiser Wilhelm Institut für Physik, Hauptakten, 15 May, 1931– 15 December, 1936. Peter Debye to Max Planck, 9 August, 1934.

⁴⁵ BA, R 2/12542. Vermerk, 28 June, 1934. (Italics in original.) The Ministry's notes on this meeting on 22 June, 1934.

⁴⁶ Ibid. Aufzeichnung über eine Besprechung wegen des Kaiser Wilhelm-Instituts für

⁴⁰ Ibid.

"Americans" were worried that the Institut für Physik would also be taken over by the government or that promoters of *Deutsche Physik*, such as Johannes Stark or Erich Schumann, would seize power at the Kaiser Wilhelm Gesellschaft. In fact, Philipp Lenard and his confederates did not attempt to seize power at the Gesellschaft but they did seek to place their former pupils in important posts in it.⁴⁷

While Planck was in Berlin persistently trying to fulfil the conditions attached to the grant, intense discussions began in New York and Paris among the officers of the Rockefeller Foundation. By the end of July, Thomas B. Appleget, vice-president of the foundation, felt "so strongly on the matter that" he wrote a "personal note" to Mason from Paris where he had been discussing the Institut für Physik with Tisdale. He argued against transferring the funds until at least a year or two had passed. The three points he raised, which were elaborated by other members of the organisation later, referred to the political and economic situation in Germany. Appleget disapproved of the incumbent German government; furthermore the minister of finance had expressed an interest in the institute but had not made a definite pledge of support. Because the government was unstable and irresponsible, Appleget did not think the support should continue if a "new government (or chaos)" succeeded it. He then came to an issue that went beyond financial questions: "the problem of the attitude of present and future German governments toward pure science." He wondered what might happen to the Institut für Physik in five years because Haber's former institute was now working solely on chemical warfare and the institute in Munich was, he thought, "almost entirely dominated by projects in the field of 'race purification'." Finally, the economic situation was much worse in Germany than internationally. "How can a government which needs gold for food, afford gold for an increase in scientific research?"⁴⁸ Given these considerations Appleget recommended caution: "Eventually, I would like to see the institute built. But not now. We will know so much more in a year or so. Is it not possible to stall for more time?"49 He closed his appeal by reminding Mason that the trustees had disapproved of grants to Germany in their last meeting, and the events during the last month "must have shocked many of them". Perhaps the officers ought to consult them on this matter, he advised, or the foundation should make an effort to "defer the actual payment of the monev".50

Tisdale was also moved to write to Warren Weaver in New York soon

Physik am 22 Juni, 1934. From the Kaiser Wilhelm Gesellschaft's minutes of the meeting, p. 3. An unedited version is also at the MPGA, KWG, Kaiser Wilhelm Institut für Physik, 15 May, 1931–15 December, 1936.

⁴⁷ Kleinert, Andreas, "Lenard, Stark und die Kaiser-Wilhelm-Gesellschaft." *Physikalische Blätter*, XXXVI (1980), pp. 35–43.

⁴⁸ RF 717.2.10. Thomas B. Appleget to Max Mason, Paris, 30 July, 1934.

⁴⁹ Ibid.

⁵⁰ Ibid.

after his latest visit with Planck in Berlin. Despite his statement to Debye that the foundation would keep its promise, Tisdale echoed many of Appleget's points and also recommended caution. After discussing the issues with Planck, he reviewed the political, scientific and financial reasons for delay.

He described the unstable political situation—many observers of Germany were predicting that the regime could fall in a few months, thereby making it imprudent to accept any commitment the government might make to the Kaiser Wilhelm Gesellschaft for maintenance and support. It was a common notion at the time that the current political situation was like a thunderstorm and would soon pass away.⁵¹ On the other hand, if the "present regime continues to exist", the prospect was poor since all its recent actions in science and education had shown a disregard for true "scientific achievement".⁵²

Tisdale and the scientists in Berlin agreed that practically no physics was being done there. They agreed that there were, indeed, not many leading physicists left in Berlin in 1934. Not only had Erwin Schrödinger, Einstein, Haber, Leo Szilard, Peter Pringsheim and Walther Nernst emigrated. resigned or retired from the University of Berlin and the institutes of the Kaiser Wilhelm Gesellschaft, but a host of assistants had also left. Planck, therefore, thought that Debye could contribute to the maintenance of a high level of science. Otto Warburg believed that it would be good for the morale of the remaining scientists to release the funds because it would show confidence in the Kaiser Wilhelm Gesellschaft. Tisdale, however, did not believe that, under the existing regime, Debye "would have a free hand", although Planck assured him that "freedom of research is a thing beyond question; ... Debye will have authority which even the Gesellschaft cannot dispute". Referring to Haber's institute, Tisdale asked Planck if there were any possibility that the government would appropriate "this institute for its own use". Planck assured him this would not happen.⁵³

Finally, returning to the question of assured financial support, Tisdale doubted the Kaiser Wilhelm Gesellschaft could secure the operating costs of RM100,000 from the government then in power. Although Planck had spoken to the minister of finance, who had shown an interest in the project, there had been no definite commitment. When Planck was asked if he could secure a statement from the minister, "he threw up his hands" and said that negotiations with the government were impossible: "There are only politicians newly installed, unfamiliar with what they should do and [they] are unwilling to commit themselves." Negotiations went slowly, increasingly encountering indecision and red tape.⁵⁴

 $^{^{51}}$ Interview with Dr Ernst Telschow and Professor Dr Adolf Butenandt, Tutzing bei München.

⁵² RF 717.2.10. Wilbur E. Tisdale to Warren Weaver, 1 August, 1934, p. 4.

⁵³ Ibid., pp. 4, 5.

⁵⁴ Ibid., pp. 2, 5.

Aware of the situation, Appleget, George K. Strode, Daniel P. O'Brien and Tisdale agreed that they "should play for delays" until there was more stability in Germany, or until they could "definitely terminate the project".⁵⁵

Planck reiterated in writing what he discussed with Tisdale in July. As far as he was concerned, all the conditions for the payment of the grant had been fulfilled and he referred to the special meeting held for this purpose with the ministries of finance and education. Planck argued that Debye's freedom of research would be assured by the provision that he could select his co-workers. Planck now added "a personal word" where he explained his desire for the "realisation" of the institute, a project he had wished to see materialise ever since he had become president of the Kaiser Wilhelm Gesellschaft four years previously: "The successful development of the simultaneously founded Institut für Zellphysiologie under Otto Warburg always floated before my eyes as a model and I never doubted that equal success could be achieved in physics, especially in atomic research."⁵⁶ He added on a strong personal note: "If the whole plan failed now, after all the opposing difficulties have been happily removed and after coming so close to the goal, it would, of course, be an exceedingly painful disappointment for me."57

Planck took this opportunity to ask Tisdale to "exert" his "influence" so that a decision would be made by the autumn. He concluded: ". . . as a physicist you will understand that the future development of physical science in Germany depends very much on whether we succeed now in finally creating a first-rate modern institute of physics that we have painfully lacked in Germany for years."⁵⁸

Planck's appeal did not touch Tisdale, even though he knew the realisation of the institute was "very close to P.'s heart, and he must realize", continued Tisdale, "that his days as president of the KWG must soon end". "Quite wisely", Planck did not bring up the issue of his retirement and of his possible successor. Tisdale feared that Johannes Stark, the Nazi physicist, might succeed him, and then the "fat would be in the fire".⁵⁹

In fact, Planck's words left Tisdale "quite cold" when he reflected that because of racial prejudice some of the men who could have taken part in the project had been forced into exile; although this was "beside the point in [the] question of the Physics Institute", Tisdale could not disregard the background.⁶⁰

In New York, Warren Weaver, who was head of the division of natural sciences of the foundation, did not entirely agree with Tisdale's point of

⁵⁵ Ibid., p. 5.

⁵⁶ RF 717.2.10. Max Planck to W. E. Tisdale, Berlin 29 August, 1934, pp. 2, 3.

⁵⁷ Ibid. ⁵⁸ Ibid.

⁵⁹ RF 717.2.10. W. E. Tisdale to Warren Weaver, 4 September, 1934, p. 2.

⁶⁰ Ibid.

view; he wanted to wait until Appleget returned to New York. Weaver thought that Appleget's "fresher European viewpoint" would persuade New York that a delay was called for.⁶¹ Tisdale thought the Paris office's cautious attitude was influenced by a "rather close-up picture" and that perhaps the officers in New York could give a "broader perspective".⁶²

The conflicting views of the various officers of the Rockefeller Foundation culminated in a series of discussions in New York in the autumn. In preparation for a staff conference, Appleget and Mason discussed the Institut für Physik and noted that although the conditions of the grant had been met, the altered exchange rate could not buy the RM1,500,000 originally intended with the dollars available. In order to clarify matters, President Max Mason thought it was best to discuss the "legality of the situation" with Thomas M. Debevoise, the legal counsel to the trustees of the foundation.⁶³

The next day, on 11 October, 1934, Mason mentioned at the staff conference that when he was in Germany in 1933 he had "promised the appropriation would not be cut off because of lapse of time without further communication". The German government had offered the required support so the foundation was "apparently legally obligated" and there appeared "to be no way in which the RF" could "withhold its gift".⁶⁴ He also recalled that the foundation had never before failed to fulfil a promise when all the conditions required for an appropriation had been met.⁶⁵

After a week of deliberation, Mason called another staff meeting on 18 October to report on the status of the Institut für Physik. He outlined three courses of action the foundation could follow. The first was withdrawal of the promise to make the grant. The other two courses were compromises that would result in a grant if the conditions could be met. The justification for withdrawal rested on the following considerations: when the grant was made in 1930 the institute was "visualized as [an] outstanding link in international science". Because of the political situation in Germany and the nationalism prevalent there, such internationality in science could no longer be pursued. Furthermore, not only had scientists been dismissed from institutions already given support by the foundation, but there were no assurances that the scientists remaining would be "free from political control". With the devaluation of the dollar, it could no longer buy the amount of marks initially proposed. To Mason, the situation had changed so much that the grant would no longer be justified. The second alternative, which was also a compromise, was to give the grant if formal promises of governmental financial support and freedom from political pressure were

⁶¹ RF 717.2.10. Warren Weaver to W. E. Tisdale, 14 September, 1934.

⁶² RF 717.2.10. W. E. Tisdale to Warren Weaver, 24 September, 1934.

⁶³ RF 717.2.10. Excerpt from Thomas Appleget's diary of 10 October, 1934. I have found no minutes of this discussion.

⁶⁴ RF 717.2.10. Staff Conference, 11 October, 1934.

⁶⁵ See "The Foundation versus Japan", p. 1. RF RG 3/900.23.172.

obtained from the relevant ministries. Finally, as a third alternative, the foundation could point out that there was not enough money available to build the institute. The last two considerations recommended a conservative course of action.⁶⁶

Alan Gregg, who had by then become director of the division of medical sciences, had the closest ties—personal and professional—with members of the Kaiser Wilhelm Gesellschaft. He thought the grant "should be made as a matter of good faith", although the foundation should add a statement protesting about the situation in institutions to which they had already contributed. Mason observed that he had "full power to authorize payments" but not to retract the promise.⁶⁷ Apparently this was the advice of the legal counsel of the foundation.

The day after the meeting on 18 October, one of the participants, George Strode, at that time an officer of the International Health Board, later its director, wrote to Mason to clarify his thoughts. The gist of the letter was that the foundation should postpone the decision until the situation in Germany could be reassessed a year later. Strode hesitated either to withdraw the grant totally or to fulfil the promise completely. These had been the two courses of action seriously considered at the meeting. Strode argued that if the foundation sent a statement pointing out that, given the new conditions in Germany, the "intent of the project" as conceived in 1930 could not be realised, it would "militate against effective cooperation" with previous interests. Furthermore, wrote Strode, Germany would tell the foundation: "you've broken what we consider a moral obligation, you condemn the Nazi government before the world and we will have no more of you, get out bag and baggage." In other words, a withdrawal would be tantamount to a boycott of German science by the foundation which the foundation wanted to avoid. Highly critical of Germany's harsh withdrawal from the League of Nations, Strode felt the foundation was "dealing with a sick body-politic" and that they must "expect abnormal psychological reactions".68

Strode thought it would be "unfortunate" if, on the other hand, the foundation were to "keep its promise" because the "Nazi['s] will make capital of it, a considerable part of the world will not understand" and the initial objective would not be achieved. Strode disliked the implications of the two alternatives because, as is often the case with governments or large organisations, they wanted to avoid any accusation that they had been "faithless to a moral obligation"; nor did they want to lose "opportunities for cooperation in German science" in the future.⁶⁹

Like most of the officers up to this point, Strode chose the "middle course": "Call it procrastination, indecision, opportunism, it is, in the face

⁶⁹ Ibid.

⁶⁶ RF 717.2.10. Staff Conference, 18 October, 1934.

⁶⁷ Ibid.

⁶⁸ RF 717.2.10. George Strode to Max Mason, Cleveland, 19 October, 1934.

of the present situation in Germany realistically common-sense". He proposed that the foundation wait until the next summer to decide between the two alternatives.⁷⁰

By November, Mason had chosen to follow the conservative course; he wrote a cautious letter to Planck in which he asked for written assurances that funds for the costs of operation would be provided by the ministries of finance and education. He also pointed out that the Reichsbank had withdrawn the Rockefeller Foundation's privilege of buying registered marks. Finally, if conversion were allowed, the number of marks purchaseable with the dollars promised had been drastically reduced. He urged Planck to "study the situation" under the existing circumstances and said that he would be glad to have his opinion on the "desirable procedure".⁷¹

Meanwhile, Friedrich Glum, the general director of the Kaiser Wilhelm Gesellschaft, was becoming a little impatient because the foundation had not answered his letter of July 1934 about the Institut für Physik. He wrote to Alan Gregg, in a friendly vein, asking Gregg to tell him "confidentially" if the foundation had had second thoughts about the institute. He explained that it was Planck's "heart's desire" as a physicist, to witness the realisation of the institute because: "He has not been able to complete much building work during his presidency. Also the prestige and independence of the Kaiser Wilhelm Gesellschaft, would be strengthened if a man of Professor Debye's reputation would enter the circle of scientists."72

Planck, on the other hand, was pleased that the foundation was willing to make the grant and that now he had only two more hurdles to jump--the written statements from the ministries and a way to convert dollars into marks at the old rate. To achieve the latter goal he consulted with two members of the governing body of the Kaiser Wilhelm Gesellschaft, Albert Vögler, the steel industrialist, and Hjalmar Schacht, the president of the Reichsbank. By the end of December, Vögler received a statement from Brinkmann, a director of the Reichsbank, written at Schacht's request, whereby \$360,436,75 "IN CASH" would be converted to the old sum of RM1.5 million.⁷³ The grant was then made. Planck later thanked Vögler for his intercession: "That the Reichsbank agreed to exchange the dollar amount for the RM1.5 million was made possible through Vögler's intercession for which he [Planck] especially thanks him again."74 Because of Planck's skilful meeting of the conditions, Raymond B. Fosdick, then on the executive committee, was beginning to worry that the foundation

⁷⁰ Ibid.

⁷¹ RF 717.2.10. Max Mason to Max Planck, 1 November, 1934. On the top of the page, "approved by TMD" (Thomas M. Debevoise, the legal counsel to the foundation) is written in pencil.

RF 717.2.10. Friedrich Glum to Alan Gregg, 14 November, 1934.

 ⁷³ RF 717.2.10. Brinkmann to Albert Vögler, Berlin, 18 December, 1934.
⁷⁴ MPGA, KWG, 93, Verwaltungsausschuss, Niederschriften, 10 April, 1935, p. 3. The quotation is from the unedited version of the minutes; it is crossed out in pencil. The final version does not contain this sentence.

might in fact have to make the grant to the institute. Appleget, who was also somewhat worried himself, had always been against it, nevertheless the "Executive committee voted to go straight ahead". Fosdick hoped "every effort" would "be made to avoid a contribution" at that time.⁷⁵ The executive committee of the foundation was made up of nine persons and consisted of the president as chairman and some trustees including Fosdick. There is no written minute of this decision. The minutes of the executive committee consist simply of decisions of approval or rejection of proposed grants.

Finally, however, by the end of January 1935, Planck received official statements from the German government promising to cover the annual operating costs of the projected institute. He wrote to Mason enclosing copies of the relevant correspondence from Schacht and the ministries. Planck asked that the "promised dollar amount" be sent out as soon as possible so that the building could begin in the spring under Peter Debye.⁷⁶

The conditions had been fulfilled and Tisdale thought that if the officers were to release the grant it "should do much to counteract the opinion now prevalent in Germany that the R.F. has boycotted Germany". Tisdale wanted the reply to Planck to include a statement to the effect that the foundation was recognising "Germany's past leadership in Science" and that it did not consider the Institut für Physik to be "one of the achievements of the present regime".⁷⁷ About a month later, in March 1935, Mason congratulated Planck on his successful efforts "in behalf of this Institute".⁷⁸

The New York Times and Felix Frankfurter, 1936

It was not until about a year and a half later that the action of the foundation became publicly known. On 23 November, 1936, a reporter named Campbell from *The New York Times* appeared in the offices of the foundation and said that his paper had been informed that "The Rockefeller Foundation has just made a large grant to the Hitler government".⁷⁹ To mollify Campbell, Raymond Fosdick, the president of the foundation since 1 July, 1936, told him the facts in a "necessarily quite extemporaneous" manner and said that the "release" of the grant in 1935 was the fulfilment of a pledge in 1930. As far as Fosdick knew, the foundation had "never broken such a pledge; and elected to carry through this particular promise with full realization that there would undoubtedly be misunderstanding

⁷⁵ RF 717.2.10. Excerpt from Thomas Appleget's Diary from 4 January, 1935. In 1934 the executive committee consisted of: James R. Angell, Trevar Arnett, David L. Edsall, Raymond B. Fosdick, Jerome D. Greene, Max Mason (chairman), John D. Rockefeller, 3rd, Walter W. Stewart, Arthur Woods.

⁷⁶ RF 717.2.10. Max Planck to Max Mason, 12 February, 1935.

⁷⁷ RF 717.2.10. W. E. Tisdale to Warren Weaver, 14 February, 1935. Appleget has written in pencil "Careful!" next to the last statement.

⁷⁸ RF 717.2.10. Max Mason to Max Planck, 15 March, 1935.

⁷⁹ RF 717.2.10. Statement on Campbell visit, 23 November, 1936.

and criticism". Second, he pointed out that it tried to "apply uniform and objective criteria" to its projects without regard for race and politics; moreover, it had been careful to "avoid the fact and the appearance of political criticism" because that was not the function of the foundation. Fosdick and Weaver wondered what kind of public explanation they could give that would state the facts and "avoid political criticism".⁸⁰

On 24 November, 1936, the day after Campbell's visit, an article appeared in *The New York Times* under the headline, "Rockefeller Gift Aids Reich Science". It pointed out that while the German government had not been involved in the earlier negotiations, by 1934 the minister of finance had agreed that the German government would "fulfil parts of the agreement for which the institute was responsible".⁸¹ While it is true that in the negotiations of 1929–30 the government had not been involved, shortly afterwards Planck attempted to interest successive governments in the project with no success. Planck reported that although the budget of the institute "was not covered by the previous regime the National Socialist government now approved it".⁸²

Fosdick, expressing his internationalist outlook and drawing on his experience in working for international organisations,⁸³ was quoted in the article as justifying the fulfilment of the pledge by these words: "The world of science", he proclaimed, "is a world without flags or frontiers." He added, "It is quite possible, however, that the Foundation would not have made the grant if it could have foreseen present conditions in Germany."⁸⁴

Felix Frankfurter, then professor at Harvard University Law School, promptly wrote to Fosdick asking: "Is Nazi Germany such a world of science?" He admitted he could not say whether the foundation was "bound" to give the gift by the "relevant canons of morality", but "it was not necessary also to adulterate the spiritual coinage of the world". Frankfurter said that he was astonished that Fosdick had not been reading *Nature* and *Science* where the "Nazi control of science" had been reported. Perhaps, he wrote sarcastically, science is merely apparatus.⁸⁵

Fosdick replied to Frankfurter; he restated his position and hoped that the foundation did not "adulterate the spiritual coinage of the world" by carrying out the pledge, but it had a difficult decision to make and finally decided to keep the promise "which to some people may seem like eccentric

⁸⁰ Ibid. More detailed statement by Fosdick or Weaver on what they said to Campbell, 1 December, 1936 (?).

⁸¹ The New York Times, 24 November, 1936. Also reported in Science, 11 December, 1936, p. 526.

⁸² MPGA, KWG, 93, Verwaltungsausschuss, Niederschriften, 10 April, 1935, p. 3.

⁸³ For biographical material on Fosdick as an internationalist see Revoldt, Daryl L., "Raymond B. Fosdick: Reform, Internationalism, and the Rockefeller Foundation", University of Akron, unpublished dissertation, 1982. Fosdick was the under secretary general at the League of Nations for a year.

⁸⁴ The New York Times, 24 November, 1936.

⁸⁵ RF 717.2.10. Felix Frankfurter to Raymond Fosdick, 24 November, 1936.

conduct in dealing with a country like Nazi Germany".⁸⁶ Frankfurter had not objected to the "punctilious fulfilment of a pledge antedating the Nazi regime"; however, he did object to the justification of the gift with the statement that "the world of science is a world without flags or frontiers" because that meant nothing in Nazi Germany, a world in which the "untainted and relevant criteria of science" were not respected. Frankfurter characterised the world of the 1930s as a contest "between reason and anti-rationalism, between democracy and dictatorship". As a believer in reason and democracy, Frankfurter thought one "ought to be as firm and uncompromising and valorous in acting on our faith as those who challenge everything we hold dear".⁸⁷

The foundation was also accused of subsidising racial prejudice because of its contributions to the Deutsche Forschungsanstalt für Psychiatrie an institute of the Kaiser Wilhelm Gesellschaft—where studies of "race" were undertaken by some of the staff. Bruce Bliven, editor of *The New Republic* wrote to the foundation that a "would-be contributor" had said that funds were going to the institute in Munich which had "largely lost its scientific character" and had become a "center for Nazi propaganda".⁸⁸ The building of the institute had indeed been constructed with funds from the Rockefeller Foundation, but the two men currently supported—Felix Plaut, who was Jewish, and W. Spielmeyer—were not Nazis.⁸⁹

The support of the Kaiser Wilhelm Institut für Anthropologie, menschliche Erblehre und Eugenik seems to have escaped public attention. The institute had been awarded a grant of \$9,000 in 1932 for three years for research on twins and the effects of poisons on the germ plasm. The foundation could not have known that Otmar von Verschuer, the head of the division for research on twins, would divert his work from research on the relative effect of nature and nuture.⁹⁰ Joseph Mengele, who later became infamous for his research at Auschwitz, was von Verschuer's assistant.

The Formulation of a Policy towards Germany

The contributions the Rockefeller Foundation made to German scientists and institutions had decreased by 1934. The reason, Fosdick explained, was that the "German Government" tried to "impose a uniform ideology" and that this had "destroyed the possibility [of] objective and disinterested scholarship". He emphasised that grants had declined not because the

⁸⁶ RF 717.2.10. Raymond B. Fosdick to Felix Frankfurter, 7 December, 1936.

⁸⁷ RF 717.2.10. Felix Frankfurter to Raymond B. Fosdick, 9 December, 1936.

⁸⁸ RF 717.9.54. Bruce Bliven to the Rockefeller Foundation, 20 December, 1933.

⁸⁹ On the role of scientists in the destruction of the Jews and of Ernst Rüdin's and Eugen Fischer's parts in it, see Müller-Hill, Benno, *Tödliche Wissenschaft: Die Aussonderung von Juden, Zigeunern und Geisteskranken, 1933–1945* (Hamburg: Reinbek, 1984).

⁹⁰ See RF 717.10.13. Kaiser Wilhelm Institut für Anthropologie, 1932–1935, and from the Paris Office, RG 6.1/1.1.4.46. 1933.

foundation disapproved of the "totalitarian philosophy, but because that philosophy" made "impossible the kind of scientific research" they wanted to support. In human knowledge, he said, "there is no essential significance to flags or boundary lines or forms of government". The foundation had worked in other "fascist" countries and "these matters" had "no relationship to the particular form of government that happens at the moment to be in power". Sometimes, however, the government intrudes so much into scientific fields that "work of a fundamentally impartial nature becomes impossible".91

By the end of 1937, the foundation had settled its policy towards totalitarian countries. With regard to Germany, Italy, Russia and Japan the "main criterion" seems to have been: "Where the Foundation has found too many obstacles in the way, it has curtailed its work." The destruction of Nankai University in Japan raised the question, yet again, of support to countries "whose political and social policies seem to clash with those widely accepted in this country".⁹² With the rise of totalitarianism in the 1930s there were "new international barriers", and although "knowledge cannot be nationalized" objective scholarship had been ruined because thought was no longer free. Therefore, the foundation was "stopped at some frontiers" when it was "profitless to go where [they] formerly went". In his annual report for 1937, Fosdick wrote about "new international barriers" which blocked the foundation's rule to "maintain" its work on "an international plane without consideration of flags or political doctrines or creeds or sects".93

The foundation decided that it had to consider the question: "To what extent does a contribution by the Foundation imply an endorsement of an existing political regime?"⁹⁴ This was the sort of question that the public would be apt to raise and the foundation's deliberations usually had an eve to avoiding public criticism. Fosdick's conclusion was that, although the political regime in question "might exploit a contribution" as an endorsement of itself, in "responsible quarters" this accusation would be unlikely to occur. They would "approach opportunities" with their usual caution and while their "motives may occasionally be misunderstood", they would probably not be in danger of going wrong.95

Between 1934 and 1937, the foundation limited itself to grants-in-aids and fellowships. In 1934 seven grants-in-aid and six fellowships were made to German scientists. By 1937 not more than two grant-in-aids were expected to be made. Several of the scientists who received financial assistance seem to have been participants in the foundation's new pro-

⁹⁵ Ibid.

⁹¹ RF 717.7.36. Raymond B. Fosdick to Mr Johnstone, 21 October, 1937.

⁹² RG 3 RF 900.23.172. Staff Conference, 3 December, 1937. Policy towards totalitarian states. The title of the excerpt from a confidential report for the trustees October 1937 is The Foundation versus Japan", p. 2. (Italics in original.) ⁹³ Rockefeller Foundation, Annual Report (New York: Rockefeller Foundation, 1937).

⁹⁴ RG 3 RF 900.23.172. Policy towards totalitarian states, pp. 4, 5.

gramme in experimental biology under the direction of Warren Weaver. For example, Alfred Kühn, then at Göttingen and who became director of the Kaiser Wilhelm Institut für Biologie in 1936, received aid from 1934 to 1936 for his work on genetics and embryology. In 1935 and 1936, Hans Bauer and Georg H. M. Gottschewski, both geneticists from the Kaiser Wilhelm Institut für Biologie, were awarded fellowships to study with Thomas H. Morgan at the California Institute of Technology. Adolf Butenandt received both a grant-in-aid and a special fellowship to visit centres of hormone research in America.⁹⁶ Most of the grants, therefore, fell into the current programme, which emphasised experimental biology; they were either given to assistants to study in America or to outstanding scientists who might not otherwise have been able to pursue their research.

The Fate of the Max Planck Institut

As soon as Planck heard that the foundation agreed to make the grant in 1935, he urged Debye to start planning for the building right away. By 1936, construction of the building was under way, although it was behind schedule because of the "very serious shortage of all sorts of building and other materials in Germany".⁹⁷ The Institute was designed to include a circular tower which would house high-tension equipment with a three million volt capacity for work on nuclear physics, low-temperature laboratory for Debye's work on low-temperature physics as well as X-ray equipment for von Laue's work on X-ray interference.⁹⁸

Debye had been appointed professor at the University of Berlin with no teaching duties and had been allowed to choose his assistants without "any government restrictions". By the beginning of 1937, the building was ready and open for work. It was not formally dedicated until 1938 because there had been official trouble concerning its name. Over the front entrance of the building the name, "Das Max Planck Institut für theoretische und experimentelle Physik", was inscribed. In the entrance hall a plaque inscribed to Planck was covered with cloth. Apparently Philipp Lenard and Johannes Stark, the Nazi physicists, had written letters to the Minister "insisting that Planck was not great enough a physicist to warrant having the Institute named after him". Debye, however, was not troubled by the circumstances because "the institute was open to scientific research, which

⁹⁶ RF 717.7.36. Information from 2 February, 1937, Grant-in-aid and fellowship activity, 1935, 36 and 3 March, 1937, memo. W. E. Tisdale to Warren Weaver.

⁹⁷ RF 717.2.10. Harry M. Miller, Berlin 22-23 October, 1936.

⁹⁸ For Debye's description of the recently built institute, see Debye, Peter, "Das Kaiser Wilhelm-Institut für Physik", *Die Naturwissenschaften*, XVII (1937), pp. 257–260. For a history of the Kaiser Wilhelm Institut für Physik, see Heisenberg, Werner, "Das Kaiser-Wilhelm-Institut für Physik, Geschichte eines Institut", *Jahrbuch der Max-Planck-Gesellschaft* zur Förderung der Wissenschaften, e.V. (Göttingen: Generalverwaltung der Max-Planck-Gesellschaft, e.V., 1971), pp. 46–89. On the period after Debye left see Rechenberg, Helmut, "Werner Heisenberg und das Kaiser-Wilhelm-(Max-Planck) Institut für Physik", *Physikalische Blätter*, XXXVII (1981), pp. 357–364.

was his only concern". The institute appeared to be thriving and Debye planned to "combine the techniques of high voltage with those of low temperatures". The cryogenic plant had been completed and Debye optimistically believed he could "go below a temperature of 0.004 absolute by a factor of 1000", and he used the magnetic cycle method for going below the temperature of liquid helium.⁹⁹

When the war broke out in the autumn of 1939, the Heereswaffenamt, under the direction of Kurt Diebner, took over the institute in order to study the military use of nuclear fission. Debye later recalled that "one Saturday, after I had built the whole institute and was just beginningand that was quite nice . . . the administrator comes in and tells me he was very sorry but I could not go in the institute anymore if I did not become a German citizen!"¹⁰⁰ (Debye was still a Dutch citizen.) Dr Ernst Telschow, the general director of the Kaiser Wilhelm Gesellschaft, told Debye that he [Telschow] was "forced" to do this "after a conference of Telschow, Rudolf Mentzel and some men from the Heereswaffenamt". Debye found out that Telschow "took the steps on his own initiative and that the president of the Gesellschaft R.[obert] Bosch was not informed". A few weeks later, Debye spoke to Mentzel at the ministry who told him that the ministry could no longer contribute financially for research at the institute unless it was military research and the staff were German citizens. Mentzel suggested Debye could give seminars at the Physikalische Institut of the University of Berlin or write a book. As Debye already had received an invitation to become the George Fisher Baker lecturer at Cornell University in the first half of 1940, he proposed taking leave and extending it until the situation changed.¹⁰¹ Debye wrote to Tisdale at the Rockefeller Foundation that: "Owing to the now prevailing conditions in this country, the Max Planck Institute will have to enter a new phase of its existence . . . until now the Institute has been dealing with purely scientific research only. I have been informed that the government itself from now on wants to decide the kind of questions to be treated."¹⁰²

Conclusion

Why did the Rockefeller Foundation think that it had to redeem its pledge of 1930 after the drastic political changes had occurred in Germany? It is my impression that the foundation was forced reluctantly to do so. There had, of course, been a resolution passed by the trustees in 1930 to vote the funds. This did constitute an obligation for the foundation which

⁹⁹ RF 717.2.10. Warren Weaver's interviews, Berlin, 21 January, 1938.

¹⁰⁰ Sources for the History of Quantum Physics, American Institute for Physics, New York and Office of History of Science, University of California, Berkeley, transcript of interview with Peter Debye.

¹⁰¹ Deutsches Museum, Munich, Sommerfeld Papers, 1977-28 (A, 61(18. Peter Debye to Arnold Sommerfeld, 30 December, 1939).

¹⁰² RF 200 D, Cornell University. Peter Debye to W. E. Tisdale, 7 October, 1939. Copy also in the Peter Debye Papers at the MPGA.

its trustees and officers were reluctant to disavow. It would probably have preferred that Planck could not meet the conditions set forth by the foundation. If this had occurred, it could have avoided the onus of failure to meet an obligation undertaken in 1930 and could then have also avoided providing support, even if only indirectly, for National Socialist Germany. When faced with the alternatives of withdrawal or payment of the grant, most of the officers preferred to delay action. Max Mason, on the other hand, had promised Planck that the grant would be made, despite the delay.

Increasingly, after 1933, the Rockefeller Foundation spent more time dealing with requests for refugee scientists than with the support of scientific work in Germany. The dismissal of foundation-supported assistants on "racial" grounds had angered some members of the foundation.

When the Rockefeller Foundation was chartered in New York in 1913 it declared that its objective was "the well-being of mankind *throughout the world*". That remained its aim, but a fanatical nationalism made it impossible for the foundation to pursue an internationalist policy in a country with a regime entirely antithetical to that ideal.