

THE BRITISH ROOTS
OF THE
MAX-PLANCK-GESELLSCHAFT

by

OTTO GERHARD OEXLE

GERMAN HISTORICAL INSTITUTE LONDON

Note on the Author

Otto Gerhard Oexle is Director of the Max-Planck Institute for History in Göttingen and Honorary Professor of Medieval and Modern History at the University of Göttingen. He is a member of the Göttingen Academy of Sciences, and a Corresponding Fellow of the Royal Historical Society. His publications include studies on the social history of the Middle Ages and the history of science.

London 1995

German Historical Institute London
17 Bloomsbury Square
LONDON WC1A 2LP

Tel: 0171 404 5486

Fax: 0171 404 5573

ISBN 0 9521607 6 5

The sequence of events which transformed the Kaiser-Wilhelm-Gesellschaft into the Max-Planck-Gesellschaft is well-known.¹ After the death of Albert Vögler, the then President of the Kaiser-Wilhelm-Gesellschaft, Max Planck, who had been President from 1930 to 1937, informed the Institutes' Directors from Göttingen on 24 July 1945 that he was temporarily taking over the office of President. He also sought their approval for the appointment of Otto Hahn, at that time interned in England, as the future President. Hahn eventually returned to Germany and took office on 1 April 1946. In the meantime it had become known that the Allied Control Council in Berlin had decided to dissolve the Kaiser-Wilhelm-Gesellschaft. Preparations were under way, with the active support of the British occupation power, for the founding of a successor organization in the British zone. This came into being on 11 September 1946 in Bad Driburg under the name of the 'Max-Planck-Gesellschaft zur Förderung der Wissenschaften in der Britischen Zone'. It initially had thirteen institutes, with its head office in Göttingen. Otto Hahn was elected President and Dr Ernst Telschow, administrator of the Kaiser-Wilhelm-Gesellschaft, became its chief executive.

Next on the agenda was to get approval from the Americans at least for the new Max-Planck-Gesellschaft to expand its area of activity. This was granted in the course of 1947. On 24 February 1948 the Max-Planck-Gesellschaft in the British zone was dissolved, to be replaced two days later in Göttingen by a new bizonal Max-Planck-Gesellschaft. It was founded as an 'association of free research institutes, which belong neither to the state nor to industry'. Otto Hahn was again elected President. Finally, on 8 July 1949 this Max-Planck-Gesellschaft was recognized by all three Western occupation powers, which enabled the Kaiser-Wilhelm Institutes in the French zone to join the new society. Since the decision by the Allied Control Council to dissolve the Kaiser-Wilhelm-Gesellschaft was never implemented, it eventually dissolved itself in June 1960.

Such a bald presentation of historical facts, viewed with the luxury of hindsight, could give the impression that all this was an automatic, virtually inevitable process. What it does not show, however, is that those involved in all this between 1945 and 1948 could certainly not have foreseen how things would turn out. For their aspirations and plans, their conceptions of what should be, what was in a sense for them a 'present future' is at most only partially identical with what to

us, looking back, seems to be the 'future present' of those years. But the historian's interest should not only be in the future present of a certain period. He should also examine the present future of those involved at the time, since this, after all, is what determined their actions. The historian must always try to get away from the broad perspective of historical distance and adjust to the lower eye-line of contemporaries.²

I

If we bear all this in mind and then ask how and why the Max-Planck-Gesellschaft came into being in Göttingen, there is one very clear and fundamental answer: in the beginning was Telschow. Dr Ernst Telschow was a chemist who had studied with Otto Hahn and became Secretary-General of the Kaiser-Wilhelm-Gesellschaft in 1937. He proved his excellent administrative and organizational abilities when things were on the point of collapsing in the winter of 1944/45. Most of the large institutes in Berlin-Dahlem had been evacuated to the southwest in 1943/44. The Institutes for physics and chemistry, led by Werner Heisenberg and Otto Hahn, had been moved to Hechingen and Tailfingen in Württemberg, but the administrative section was not allowed to leave Berlin, even though it had become increasingly difficult to maintain contact with all these institutes. Telschow, however, managed to find a loophole, which also prepared the ground very effectively for the new beginning after the collapse.³ He set up a branch of the administration in Göttingen, which had been spared the effects of the bombing, and where suitable accommodation was at hand in the shape of the Kaiser-Wilhelm Institute for Flow Research and the building of the Aerodynamic Research Institute, also closely linked with the Kaiser-Wilhelm-Gesellschaft. In February 1945 the Society's most important administrative personnel were transferred, unnoticed by the German authorities, from Berlin to Göttingen. In the autumn of 1944 Telschow had already distributed a donation from the 'Fördergemeinschaft der Deutschen Industrie' amongst the individual institutes as a so-called Emergency Fund. In addition, he had managed to park a second donation in a Göttingen account at the beginning of 1945, so that financial resources would be available later on. What is more, Telschow had been given full powers of attorney by the then President, so that the Society could continue to work in the event of his death. By doing all

this, Telschow laid the foundations for rebuilding the Kaiser-Wilhelm-Gesellschaft.

An equally significant event occurred in the spring of 1945 when Max Planck, who was already 87 years old, moved under very dramatic circumstances to Göttingen.⁴ This came about thanks to the American astrophysicist Gerard P. Kuiper, who was employed by the Alsos Mission, the Anglo-American secret service group closely connected with the Manhattan Project. The Alsos Mission tried to provide information on German work in the field of nuclear energy, to intern those scientists engaged in this work, and to confiscate their diagrams and equipment. While Kuiper was investigating the Göttingen physicists, Max Planck, seriously ill and emotionally shattered by the murder of his son Erwin in Berlin-Plötzensee by the Nazis, was destitute and living in miserable conditions in a farmhouse in Rogätz on the Elbe. In mid-May, shortly before the area was handed over to the Soviet occupation force, Kuiper carried out a daring coup. He brought Planck to Göttingen, where Planck's forefathers had worked as professors of theology, and where he and his wife were taken in by close relatives.

At Telschow's request Planck, who commanded great authority as a scientist and a former President of the Kaiser-Wilhelm-Gesellschaft, agreed to assist in the preservation and reconstruction of the Society.⁵ By July 1945 Telschow had already worked out a concept for this reconstruction, and in August he visited the institutes in the American and French zones. He also had discussions with German and Allied departments, backed by a letter from Planck asking for their co-operation in the attempt to 'preserve the Kaiser-Wilhelm-Gesellschaft in its entirety'. As mentioned earlier, on 24 July Planck had already informed the Directors that he was preparing for the election of a new President. On the following day he offered the job to Otto Hahn. His letter did not reach its addressee until eight weeks later, after a detour via the Royal Society, the British Academy of Science. More of this later.

By the end of 1945 it was already quite clear that the enterprise started by Planck and Telschow to preserve and reconstruct the Kaiser-Wilhelm-Gesellschaft was receiving all sorts of outside help. First and foremost was the exceptional support of the British occupation power. A major role was played here by Brigadier-General Frank Spedding, head of the Research Branch in the Economic Sub-Commis-

Max-Planck-Gesellschaft

sion of the British Military Government (Control Commission for Germany/British Element), and, above all, by his colleague, the chemist Colonel Bertie Blount. Time and again in the files there is evidence of Blount's extraordinary efforts on behalf of the Kaiser-Wilhelm and the Max-Planck-Gesellschaft. The unavoidable conclusion is that without this support from the British there would be no Max-Planck-Gesellschaft today.

This sort of support was, of course, absolutely vital to the people in Göttingen since in Berlin there were other ideas. At the beginning of July 1945, Otto Winzer, a member of the so-called Ulbricht Group had just arrived from Moscow. He was head of the Amt für Volksbildung of the new Berlin city council and was therefore responsible for universities and science. Winzer had appointed a new 'head' of the Kaiser-Wilhelm-Gesellschaft. This was Dr Robert Havemann, the famous scientist, who had been imprisoned by the Nazis in Brandenburg lunatic asylum and had narrowly escaped the death sentence. Havemann interpreted his appointment to mean that he was to 'exercise the rights and duties of the President of the Kaiser-Wilhelm-Gesellschaft in full, according to the constitution'.⁶ His first step was therefore to revoke all powers of attorney 'accorded by the former President of the Kaiser-Wilhelm-Gesellschaft or its former Secretary-General'. Havemann had all the Society's real estate at his disposal, including the Institute buildings in Berlin-Dahlem, which were still largely intact. But clearly only a handful of scientists were still working here. The major problem, however, was that Havemann's appointment was not constitutionally correct. Soon there were objections from those directors, department heads, and members of staff who had remained in Berlin. Havemann was under even greater constraint once the American sector was set up. Nonetheless, he made determined and energetic efforts to reorganize the Kaiser-Wilhelm-Gesellschaft in his own way. He started by revoking all powers of attorney over the bank accounts in the Western zones of occupation. In the autumn of 1945 this led to a dramatic battle for these accounts, which Telschow eventually won – though only, of course, with the help of the British.

Otto Hahn was released from internment in England at the beginning of 1946, returned to Germany and took up the office of President on 1 April. Apart from the on-going problem of financing the Institutes, Hahn had two immediate priorities: to establish the Kaiser-

Wilhelm-Gesellschaft securely in the British zone, and then to extend it further afield.⁷ The first step was achieved to some degree with the founding of the Max-Planck-Gesellschaft in the British zone. It was then a question of persuading the Americans to support the Kaiser-Wilhelm-Gesellschaft, or at least a new society that would take its place. The American Military Government firmly rejected both these proposals. So in March 1947 there was a 'lively discussion' on the matter, in the presence of Brigadier-General Spedding, between Otto Hahn and Dr Carl H. Nordstrom, responsible for German science as 'civilian' head of the Research Control Branch (Economics Division) of the American Military Government. Nordstrom urged Hahn to inform the Institutes that in the American zone the Kaiser-Wilhelm-Gesellschaft no longer existed and that there was 'no further interest' in this or any other organization. Hahn refused, and announced that he was going to ask the Minister-Presidents of the *Länder*, and the German Nobel Prizewinners, to intercede with the three Western Commanders-in-Chief in support of the Society.

This plan to involve the Minister-Presidents of the *Länder* failed because the *Land* of Bavaria refused to co-operate. However, a telegram was sent by the Nobel Prizewinners, although the reactions it brought forth were quite diverse.⁸ From the French General Koenig there was no reply at all. The response from Britain's Sir Brian Robertson was, as might be expected, encouraging. General Clay's reply was friendly in tone, but the American position had not changed. Hahn then asked for a private discussion with Clay, which took place on 4 August 1947. Hahn remarked that Clay was 'very reticent': 'I talk a great deal, he very little'. Clay pointed out that the Kaiser-Wilhelm-Gesellschaft had been dissolved by the Control Council. Hahn wanted to have this in writing – he could not dissolve the Society because the scientists, who had put their trust in him, would not understand it. In the end Clay promised at least to review the situation.

After a few weeks of uncertainty Colonel Blount let it be known confidentially in Göttingen that he had heard from the Americans, and things looked good. Then on 10 September a representative of the Research Control Branch appeared in Göttingen and congratulated Hahn: they were now prepared to support a bizonal organization. This was, he said, the result of Hahn's visit to Clay. Of course there would still be many difficulties, but the road was now open. And so it was.

II

It is quite clear that the successful outcome of these negotiations was due in no small measure to Otto Hahn, his scientific authority, his powers of persuasion and his winning personality. What is also clear, however, is that without the support of the British right from the start this outcome could never have been achieved. The question therefore arises as to the motives behind such a supportive attitude on the part of the British where the 'to be, or not to be' of the Kaiser-Wilhelm- or Max-Planck-Gesellschaft was concerned. Why were the British in the Control Council initially against the dissolution of the Kaiser-Wilhelm-Gesellschaft? And why were they so unwaveringly determined that a scientific society should exist, that they deliberately frustrated the declared objective of the other two Western occupation powers, namely to dissolve the Kaiser-Wilhelm-Gesellschaft by means of a Control Council directive and not to replace it?

There have been various answers to these questions. The British, so it was said quite recently, were 'not entirely altruistic' in all this: they wanted 'to have German fundamental research under their control so that they could share in the results'.⁹ Another opinion says just the opposite: the British were no longer interested in German fundamental research since they already knew all its secrets and also knew that German science was no longer a danger to Allied security.¹⁰ Or perhaps the British attitude was the result of a 'liberal position', along the lines that 'restricting science could prevent the reconstruction of an economically sound and democratic Germany'.¹¹ All these answers are, for different reasons, unsatisfactory. But must we therefore conclude that there is no 'really clear answer', as has recently been suggested?¹²

III

I shall now attempt to find such an answer, using a different approach.* The path I intend to tread starts with a source which had remained Top Secret until 1992 and was not published until 1993, namely the so-called

*I should like to thank my colleague Eckart Henning, Director of the historical archive of the Max-Planck-Gesellschaft in Berlin, for the great service he rendered me in my official investigations. Amongst other things, he allowed me to be the first to see Otto Hahn's diaries which, along with the rest of his papers, will be accessible to the public under the thirty-year rule in 1998.

Farm Hall Transcripts.¹³ These are records and summaries of conversations held between ten German physicists while they were interned in Farm Hall, a small country house near the village of Godmanchester, outside Cambridge, from 3 July 1945 to 3 January 1946. The group consisted primarily of directors and staff-members of the Kaiser-Wilhelm Institute for Physics, amongst them the Nobel Prizewinners Werner Heisenberg and Max von Laue, as well as Erich Bagge, Horst Korsching, Carl Friedrich von Weizsäcker and Karl Wirtz. Also present was the director of the Kaiser-Wilhelm Institute for Chemistry, Otto Hahn, the man who discovered nuclear fission. These conversations were bugged and summarized in weekly reports. The officer responsible for what was called 'Operation Epsilon' sent these to the appropriate department of the British Military Secret Service in London. The enterprise was controlled by an Anglo-American Secret Service Committee, in which the British Secret Intelligence Service pulled the strings. It was headed, in London, by Lieutenant Commander Eric Welsh, a chemist who had played a major part in various spectacular British Secret Service operations during the war in the field of science, and whose primary objective had been to observe German activities in nuclear research.¹⁴ In overall command of the group from the beginning of May onwards, and later on the spot, was Major T.H. Rittner.

Most of the internees were captured on 23 and 25 April 1945 in Hechingen and Tailfingen, by a special unit of the Alsos Mission. The scientists were taken in great secrecy past the advancing French units via Heidelberg, Reims, and Versailles to the Paris area and then – after various other scientists had joined the group – on to Belgium and eventually, on 3 July, to Farm Hall.

By April it had already become clear in Hechingen that the German scientists were not working on an atom bomb, but on a 'uranium machine', in other words, a reactor. So in fact the main question had already been answered. Nonetheless, the British were still interested in details of the German work with uranium and also in information on the political role of these scientists in Nazi Germany. What is more, they wanted to prevent the French, and even more so the Russians, from getting their hands on it. And they also had some other questions, for example the internees' attitude to the Russians and the western Allies, and how they felt about the possibility of co-operating with

British and American scientists. Farm Hall was like a sort of chemical experiment, the results of which were written down in transcripts. As we shall see, however, the British here pursued quite different interests from the Americans, and also behaved quite differently towards the German scientists.¹⁵ They were, from the start, much more benevolent than the Americans would have been, and indeed than the Americans would have allowed, had they known. The details of all this are still largely unknown, particularly the remarkable way in which Major Rittner interpreted his orders to keep the internees 'in a good frame [of mind]',¹⁶ but I cannot go into that here.

From the start Otto Hahn was the leader and spokesman of the group of scientists. As Heisenberg later put it, he was 'trusted by every individual in the group because of the force of his personality and his calmness in difficult situations'.¹⁷ And very soon, if not right away, he was also trusted by the other side. Rittner's assessment of him, as recorded in the *Farm Hall Transcripts*, was: 'A man of the world. He has been the most helpful of the professors and his sense of humour and common sense has saved the day on many occasions. He is definitely friendly disposed to England and America'.¹⁸

IV

On the day of Hiroshima, 6 August 1945, the people of 'Operation Epsilon' made the internees listen to radio announcements reporting the events. The internees were most agitated by this information. Barely had this agitation abated, when there was further upset amongst the group over a quite different matter, sparked off by letters that now started to arrive and, above all, by visitors.

On 8 August, only two days after Hiroshima, the *News Chronicle* published an interview on the subject of Otto Hahn with the prominent English nuclear physicist Sir Charles Darwin (a grandson, incidentally, of the famous biologist; 1887-1962), at that time Director of the National Physical Laboratory in London. He praised Hahn as a 'pioneer' of science, stressed his completely irreproachable political stance during the Nazi period ('certainly not a Nazi'), and asked what had happened to him. Four days later came a lecture by Darwin on the English radio, in which Hahn was again revered as the discoverer of nuclear fission and as 'a friend and pupil of Rutherford'. Ten days later, Sir Charles suddenly appeared at Farm Hall, accompanied by Com-

mander Welsh, to talk to Hahn and Heisenberg.¹⁹ This was, he stressed, a 'purely private' visit, which of course was not the case – on the contrary. This is already clear from the fact that Sir Charles handed Otto Hahn the British White Paper on the atomic bomb (*Statements relating to the Atomic Bomb*). A conversation took place with Hahn and Heisenberg regarding the German work with uranium. Then in the evening there was a 'general discussion', instigated by Darwin, as to what the German physicists 'were going to do about things in the light of the atomic bomb'. They talked about politics, science and science policy. The next morning Heisenberg summarized his impressions, saying that 'people like Darwin' were clearly considering 'the state of Europe in four years time and how gradually to return to peace conditions'. These people obviously also intended to allow the Farm Hall internees to 'play some part in it in the long run. They seem to be thinking along the lines of a United States of Europe and say to themselves: "The German scientists are among the most important people as they have a certain amount of influence in Germany and because, in addition, they are sensible people with whom one can discuss things"'. Heisenberg's assessment of British intentions was quite accurate. His second assumption, however, that these people were 'not in any hurry' to put such plans into operation, was, of course, quite wrong.

At the end of August news arrived for the first time at Farm Hall, via American officers, about the condition of the Institutes in Berlin-Dahlem.²⁰ There was also news from Göttingen for the first time: that Max Planck and Telschow had taken the initiative to reconstruct the Kaiser-Wilhelm-Gesellschaft and that Hahn was being talked of as the future President. This news, which at first was still fairly vague, sparked off conversations at Farm Hall about the Institutes, the future of the Kaiser-Wilhelm-Gesellschaft and, in addition, about the possibility of reorganizing science in Germany.²¹

On 8 September, again accompanied by Commander Welsh, another visitor came to Farm Hall.²² This was the nuclear physicist Patrick Blackett who was likewise introduced as a private person, as an 'old friend' of Heisenberg. This was not untrue, but on the other hand it was certainly not the whole truth. For, as the transcripts show, Blackett had come for talks 'about the future of German science'. He had individual discussions with Heisenberg, Hahn and von Laue.²³ Patrick M. S. Blackett (1897-1974)²⁴ had become famous through his work with

the Wilson cloud chamber, carried out in Rutherford's laboratory in Cambridge in the early 1930s. This had confirmed Rutherford's hypotheses and was to earn Blackett the 1948 Nobel Prize for Physics. Blackett was indeed an old friend of Heisenberg's from the time they had spent together in Göttingen with James Franck in 1924 and 1925. These professional facts were about all the Germans at Farm Hall knew about him, but the topics of conversation he introduced, and above all the way he dealt with them, were enough to show that he was someone who had political influence.

Blackett had two long conversations with Heisenberg²⁵ and in response to the question of what was going to happen to science in Germany replied that the British were still 'in a pretty bad mess'. They were 'probably better prepared for war than ... for peace'. In America and England they were going through 'a formative period ... in which we are really trying to think out what is practical politics'. As far as science was concerned 'all kinds of different ideas have been put about by different people'. He himself, of course, had 'a perfectly clear idea' of his own and could say that 'a great majority of English scientists agree'. He also thought that most of the internees 'should go back [to Germany] reasonably soon', to the British zone, for example to Göttingen. He did not think that there was 'any danger in working in nuclear physics, provided that no great uranium or [other sorts of] plants' were built. He was also 'quite sure ... that the rest of physics and science' in Germany would be clear for Heisenberg 'within a reasonable time', and this was also the opinion of 'most scientists' in England. They were already thinking about what was to happen to science in Germany, but it would 'take some time to get finally settled'. He himself could and would influence the situation, even though he had only been put in the relevant position to do this three days ago. As far as the fate of the internees was concerned, the decision rested, ultimately, with the Americans and would be taken in Washington; in this the British were 'very much junior partners'. But still, since Hiroshima everything had become less complicated because there was no longer any need for 'extreme secrecy'. Now it was 'quite possible to outline a reasonable policy' – to the Americans – 'and push for it'.

Blackett went on to say that as regards German science in principle there were, of course, differences of opinion. Some thought all scientists were dangerous. But this attitude was becoming obsolete. The

phrase 'scientists are dangerous' should be replaced by 'the application of science is dangerous and wants control'. Then it would be possible to find 'individual ways of sorting the practical difficulties', not the least of which was the problem of the various zones of occupation and relations with Russia. But he, Blackett, was convinced 'that the future of Germany is extremely important for Europe', and that Heisenberg was 'one of the people who could help to get things going again'. 'Go back', Blackett said to Heisenberg, 'and be as good as you can and do your very, very best to build up a new Germany'.

Blackett spoke in similar vein during a long conversation with Hahn on 9 September.²⁶ In the Allied Control Council, he said, there were certain 'differences of opinion about German science'. But he, Blackett, had 'no doubt at all that the view of the majority of English scientists and the sensible people is that ordinary academic and pure and fundamental physics will be completely uncontrolled. There may conceivably be some bar on nuclear physics'. In any case, Hahn's 'reputation is very well known over here because of your fine record as an anti-Nazi. It is very much appreciated'. He said much the same to Max von Laue: 'I feel that you are one of the people who should, in my own personal view, be back there helping to re-build academic and scientific life. Your reputation is very high as a wise man who has taken a very good line and you are respected enormously'.²⁷

V

Despite various hints, those who were talking to Blackett on 8 and 9 September remained in the dark as to the context of these conversations in terms of science policy. They were similarly unaware of Blackett's actual official position in the controversies of the summer and autumn of 1945 over what British science policy in Germany should be.²⁸ Plans had been formulated in the summer of 1944, specifically for the handling of German industry after the war. Of great significance here was the fact that at the suggestion of Lord Cherwell (the Oxford physicist F.A. Lindemann), Churchill's scientific adviser, prominent scientists had been involved in these discussions from the beginning.²⁹ One of them was the physicist and Nobel Prizewinner Sir George P. Thompson (1892-1975).³⁰ In August 1944 Anthony Eden appointed the German Science and Industry Committee to look into the economic, technical and scientific aspects of handling German industry after the

war. On 10 May 1945 this committee presented a report stating that in the opinion of the experts all restrictions and prohibitions on scientific research were, in practice, ineffectual and in any case were basically undesirable. Controls should not be applied to research, but to its results. This was also the opinion expressed by Blackett at Farm Hall.

This view, which was based on making a distinction between fundamental and applied research, was also supported by the British military command, namely the Deputy Chiefs-of-Staff in London.³¹ They considered the Americans' far more radical ideas (prohibition of all research activities; closure of all research establishments; new beginning only under strict control) to be unworkable and impossible to implement. The liberal approach was opposed, however, by the Planning Department, and the Research Branch in the Economic Sub-Commission of the British Military Government under Brigadier-General Spedding, in March and again in June 1945.³² Their recommendation, which overlapped with the American view, was that all German research should be restricted and monitored in principle, in order to smother at birth any conceivable application of research results for the purposes of war. 'The Control Commission was determined to use this unique opportunity, which had fallen to Britain as a result of winning the war, to prevent Germany, long-term, from ever becoming a danger again by means of research'.³³ But this was precisely what the scientific experts of the German Science and Industry Committee refused to accept.

So there were two diametrically opposed opinions, as Blackett indicated in his conversations at Farm Hall. To overcome these controversies an interministerial body, the Economic and Industrial Planning Staff, working under the Foreign Office, was asked in July 1945 to draw up the ultimate directive for British science policy in Germany. This was the situation at the time Blackett first talked to the internees at Farm Hall.

Blackett himself played an important role in the process of making this decision.³⁴ Since the late 1930s and during the war Blackett had been involved in a great variety of projects involving the co-ordination of politics, science and technology. He was a member of the so-called Thomson or Maud Committee, chaired by Sir George P. Thomson, which, since the German invasion of Norway and Denmark in 1940, had been looking into the possibilities of developing a British atom

bomb.³⁵ Its findings had led to co-operation with the Americans in the Manhattan Project. Blackett was also involved in the organization of British coastal and air defence, and in the development of radar. Since 1942 he had been Director of Operational Research at the Admiralty. Above all, however, he was scientific adviser to the Labour Party (which he continued to be until the mid-1960s, until he was elected President of the Royal Society). Since the return of the Labour government in July 1945 he had thus been very close to the seat of power where decisions were made.

Now, in the late summer of 1945, Blackett set discussions in motion amongst the scientists at Farm Hall about the future of German science. He also reported on these discussions to British scientists, politicians and the military. On 24 September the German scientists were asked to put down their ideas for the future in a memorandum. The document was discussed for two days, formally approved, signed and handed over on the 28th.³⁶ At just the same time the internees started to receive letters from Germany.³⁷ Hahn was informed that Planck and Telschow wanted him to become President of the Kaiser-Wilhelm-Gesellschaft. 'It would be awful for me', commented Hahn, 'since I'm neither a politician nor a public speaker. I hope it's not true'. Two days later he was given Planck's letter of 25 July, in which, as we know, Hahn was invited to accept this task. From other letters he learned about the fate of individual institutes, about Havemann's energetic initiatives in Berlin, about the protests against them, and much more. Hahn felt that all this information and the requests for his opinion were too much for him. These were 'all sorts of things and questions' which he was 'in no position to decide here'.

But external pressure for a decision now began to mount. On 1 October Hahn, Heisenberg and von Laue received an unexpected invitation to a meeting with British scientists, already scheduled for the afternoon of the following day in London. The theme was announced (according to Hahn's note of the evening before) as: 'Important things – German science, institutes, etc.'

VI

The venue for this meeting between the three German scientists and their British counterparts on 2 October 1945 was, in itself, significant. It was none other than the Royal Institution building in Albemarle

Street, home of the British learned society for the promotion of science. But of even greater significance was the choice of British scientists to attend this meeting. Some of them we already know quite well, for example Patrick Blackett and Sir George P. Thomson, winner of the Nobel Prize for Physics in 1937. The others were Sir William Laurence Bragg (1890-1971), Nobel Prize for Physics 1915; Sir Henry H. Dale (1875-1968), then President of the Royal Society and Resident Director of the Royal Institution, Nobel Prize for Medicine 1936; Sir Archibald V. Hill (1886-1977), Nobel Prize for Medicine 1922. So these discussions were basically a meeting of past and (as in the case of Hahn and Blackett) future Nobel Prizewinners.³⁸

There are no minutes of this meeting,³⁹ but the following summary of the discussions, taken from Otto Hahn's precise and incisive diary entry of that evening, will do just as well:

After a gin, we went for tea and talked in a small group for an hour and a half, until quarter to six, about German science and the possibility of gradually rebuilding it, about our Institutes, the difficulties in the zones of occupation etc. etc. Our main problem is this. The Americans will probably not allow us – Heisenberg, Wirtz etc. and me – to return to Hechingen to work, because occupied by the French. But the United States have said that we may return to Germany. So what is supposed to happen? The British are obviously better at organizing things in Germany than the USA. So it would obviously be a good idea for us to try and move, as a point of crystallization, so to speak, to somewhere in the British zone, preferably a university town. Göttingen would be the most suitable place.

Hahn's diary entry goes on to say that a probable American objection to Göttingen was anticipated, because of its proximity to the Russian zone. From this point of view Bonn or Hamburg would have been better. And another difficulty in choosing the place from which to rebuild German science was 'that it must also revitalize the humanities.' For that, apart from the universities, **the academies were best suited**. **There was one academy in the British zone, which happened to be in Göttingen. And again:** 'Come what may, the British must help us, which they will certainly be more inclined to do than the Americans, who are not so interested in Germany, except where the uranium bomb is concerned'. And then the final sentence which sums up the whole conversation: 'The general impression, on a human level, was of particular

2 October 1945

goodwill, perhaps even recognition [on the part of] the English participants and their desire to help German science as far as possible'.

This meeting of Nobel Prizewinners was of decisive importance for the formulation of British science policy in occupied Germany and the role of the Kaiser-Wilhelm-Gesellschaft. This is evident in Heisenberg's very brief report to his colleagues at Farm Hall: 'The idea is that some central organization is to be set up which will somehow arrange the reconstruction of German science. Göttingen was mentioned in this connection, as, first of all, the Kaiser-Wilhelm-Gesellschaft has been evacuated to Göttingen and, secondly, the Academy is there and, thirdly, on account of the university'.⁴⁰

Something else was significant about this meeting, which the German participants were certainly not aware of. The British contingent were not only prominent scientists. During the war they had also held key positions in co-ordinating science, technology, politics and war conduct. Patrick Blackett and Sir George Thomson we already know about. But the same also applied to the others.⁴¹ Hill and Dale, for example, were members of the War Cabinet's Scientific Advisory Committee, Dale as chairman. The responsibility of this small circle of scientists was subsequently formalized, so that on 2 May 1946 a Scientific Committee for Germany was appointed to advise the government in matters of German science and science policy in Germany. Sir Henry Dale was chairman of this body, whose members also included Sir Charles Darwin and Sir George P. Thomson.⁴²

Incidentally, it was Dale who saved the day in the summer of 1946 when the British objected to the name 'Kaiser-Wilhelm-Gesellschaft'. He suggested simply dropping this name, which had rather compromising historical associations, and in future calling the whole thing the 'Max-Planck-Gesellschaft'.⁴³

VII

The significance of the meeting on 2 October 1945 is also demonstrated by its outcome. Things started to speed up. Hahn, Heisenberg and von Laue had been asked by the British contingent to talk through any outstanding problems with their colleagues at Farm Hall. This they did on 3 October, and on 4 October, as requested, they reported the results of their conversation to Blackett.⁴⁴ They agreed that a place must be found 'within the Anglo-American zone of occupation', which would

Max-Planck-Gesellschaft

make it possible to 'resume work in accordance with the former scientific tradition and thus provide a suitable starting-point for the rebuilding of science as a whole'. They all agreed that 'as far as natural science is concerned, the Kaiser-Wilhelm-Gesellschaft would be a suitably central organization' and that for the humanities this role should fall to the Academies.⁴⁵ On 4 October Hahn also wrote to Max Planck telling him that despite 'serious reservations' about his suitability, and with a 'heavy heart' he was prepared to take over the office of President, since it was obvious that at this point he could not 'reject [Planck's suggestion] in principle'. He only hoped that he would be able 'to hand over this office to someone more suitable as soon as possible'.

On the British side matters were nearly settled. Admittedly at the end of October the British Commander-in-Chief, Montgomery, was still expressing the opinion of the Control Commission when he said that he would only accept the interned scientists in the British zone if they were 'confined and under close surveillance'.⁴⁶ But the final decision went the other way. On 29 October the Economic and Industrial Planning Staff produced its directive; on 16 November it was approved by a cabinet committee led by Foreign Secretary Ernest Bevin and six days later passed on to the British Commander-in-Chief in Germany.⁴⁷ The purpose of having control over German research, it said, could *not* be to exact revenge, but only to prevent it from being used to create weapons, and to turn it towards peaceful activities. It was not, however, desirable to restrict research fields. It was therefore necessary to make a distinction between fundamental and applied research and to deal with them differently. Fundamental research could only be controlled with great difficulty, but with applied research it was much easier. In any case it was applied research that could cause problems of security. It was therefore in Britain's best interests to impose controls and restrictions on specific spheres, namely those that could have a military application. Otherwise German research should be allowed to develop freely:

Finally, we have thought it in the best interests of this country to limit our program of prohibitions and controls to the specified fields which we consider to be dangerous ... and to allow German research free play over the remainder of the field, at the same time encouraging the publication of the results of research and the restoration of channels of communication between German science and the outside world.⁴⁸

At the same time, that is in October and November 1945, this message was conveyed to the British public. Articles on Hahn, whose whereabouts were still unknown, appeared in the British press. On 13 October 1945, *The New Statesman and Nation* wrote that Hahn – ‘an old friend and associate of Lord Rutherford’ – admittedly had known how to produce the bomb, but, as an opponent of Nazism, had kept it secret: ‘Hahn was not only a great scientist, but a good internationalist, who might have won the war for the Nazis if he had been willing to work for them’. He should therefore not only be given the Nobel Prize for Chemistry, but also the Nobel Peace Prize: ‘He seems to have gone on doing scientific work, but to have refused to further the military development of his researches. If this is a true report the Nobel Committee should confer its Peace Prize as well as its Science Prize on Otto Hahn’.⁴⁹ As we know, Hahn did not, in fact, receive the Peace Prize on 16 November 1945, but he was given the Nobel Prize for Chemistry, an event which, given the political context, was most remarkable and indeed well noted. It is not difficult to guess who brought external influence to bear on this decision.⁵⁰

Although the internees did not know it, their time at Farm Hall was now drawing to an end. ‘Commander’ Welsh had gathered the opinions of prominent non-German scientists and had, for example, travelled to Copenhagen to hear the views of Niels Bohr regarding the future of German science. On 22 November he appeared at Farm Hall again. His announcement, which was met with general astonishment, was that a return to Germany was on the cards. He told Hahn and Heisenberg that at that time ‘only the English have sympathy with German science’ and that therefore its reconstruction with the help of the Kaiser-Wilhelm-Gesellschaft was only possible in the British zone. But, as Hahn noted that evening, ‘it is now up to us ... our task will be to get German science going again and to find the places where work can restart’.

On 2 January 1946 another meeting took place at the Royal Institution between Hahn, Heisenberg and von Laue, and most of those who had been present on 2 October. It was as if the Germans were saying farewell to their god-parents. ‘Friendly talk’, wrote Hahn, ‘repeated wishes for the reconstruction of German science which we must now take in hand’. In the evening Brigadier-General Frank Spedding appeared at Farm Hall. The next day he was to accompany the internees

on their flight to Bückeberg and help them settle into new quarters at Alswede, near Minden. In his first conversation with Hahn on German soil, on 3 January 1946, even Spedding, now following the British government's line on science policy, stated what his 'orders' and his 'wishes' were: 'To get German science going again, especially the Kaiser-Wilhelm-Gesellschaft'.

Here, on 3 January 1946, is where I stop the detailed account of events. I could go on to say, however, that Hahn immediately responded to these British 'orders' and 'wishes', which were constantly repeated. He did not wait until 1 April 1946, the day when he officially took office as President of the Kaiser-Wilhelm-Gesellschaft, but assumed office *de facto* from the moment he landed in Germany, and with increasing vigour after he moved to Göttingen on 12 January. He had formulated what he wanted to achieve. 'The most important point', as he put it, was: 'the Kaiser-Wilhelm-Gesellschaft in all three zones', starting with Göttingen. And in a conversation about the future of the Kaiser-Wilhelm-Gesellschaft at the end of January 1946 he pointed out that at that time science was surely 'Germany's only asset'.

VIII

So now we know how the foundations were laid for British science policy in Germany in the summer and autumn of 1945. We know which scientists were involved on the British side, which Germans they wanted as their partners to help realize this policy, and which instrument was to be used. The decisive factor in all this was that on the British side prominent scientists, outstanding representatives of fundamental scientific research, were involved in formulating science policy. This led, on both sides, to co-operation between scientists who recognized, and acted upon, their responsibilities, not only in the field of science, but also in the political sphere.

Another equally decisive factor was that this group of top international scientists consisted of men who could work together, who knew each other well and whose mutual basis of trust had not been destroyed by the world war unleashed by Germany. Here, as in other cases, a significant role was played by the so-called 'Rutherford Family', the close ties between the friends, colleagues and pupils of Ernest Rutherford.⁵¹ Sir Charles Darwin and Patrick Blackett were members, as indeed was Otto Hahn.⁵²

Officially, then, the Max-Planck-Gesellschaft was founded on 26 February 1948 in Göttingen. In a broader historical sense, however, it could be said to have been founded not in Göttingen, but in London, on 2 October 1945, in the building of the Royal Institution – where else?

In conclusion, I should just mention that the story did not really end on 26 February 1948 but – again in a broader historical sense – not until 23 April 1948, the day of the commemorative celebrations for Max Planck who had died on 4 October 1947. He would have been ninety on 23 April 1948. The celebrations in Göttingen, organized jointly by the new Max-Planck-Gesellschaft, Göttingen University, the Göttingen Academy of Sciences and the Deutsche Physikalische Gesellschaft were the final chapter in the story, reflecting once again all the most important elements.

In the great hall of the university Max von Laue, Werner Heisenberg and Richard Becker paid tribute to Planck's scientific achievements. Otto Hahn read out a memorial by Albert Einstein in English and German, also on behalf of the National Academy of Sciences of the USA. Sir Charles Darwin spoke for the Royal Society, to whose 'small and carefully guarded body ... of Foreign Members' Planck belonged – along with Leibniz, Huyghens, Euler, Laplace, Gauß, Fresnel, Helmholtz, Gibb and Boltzmann – and whose highest award, the Copley Medal, he had received. Darwin declared that Planck's constant and Newton's gravitational constant were the two fundamental scientific discoveries that had opened the two great epochs of modern natural science. In so doing, he linked the celebrations for Planck in Göttingen with those for Newton held by the Royal Society in London in the summer of 1946, at which Planck had been the only German guest and representative of the 'other Germany'.⁵³ Darwin also recalled the 'many signs of respect and friendship' accorded Planck in London.

In May 1948, a prominent journal, *Nature*, published a report informing the international scientific public about the founding of the new society, which now bore Planck's name.⁵⁴ This was written by the English physicist Edward Neville da Costa Andrade who, with another physicist, Sir Robert Watson-Watt, had represented the University of London at the celebrations in Göttingen. Andrade also paid tribute to the role played by Ernst Telschow, 'who was a prominent figure at the discussions that took place', and by Bertie Blount, 'who had carried out a difficult task with equal tact and efficiency'. The report con-

Max-Planck-Gesellschaft

cluded by naming all the numerous American, English and German scientists who had attended the celebrations in Göttingen and confirmed once again the 'friendly' atmosphere of the occasion, 'so that it might have been a gathering of scientific friends at a German university before the First World War'.

To mark the fiftieth anniversary of D-Day, on 6 June 1994, the English historian and journalist Timothy Garton Ash published an article in a German daily newspaper entitled 'Väter und Söhne' ('Fathers and Sons').⁵⁵ Here he said that 'the specific British contribution, not only to liberating Germany from Nazism, but also to the reconstruction of what was to become West Germany after 1945', and the fact that Britain had a 'policy for Europe' in 1944/45, seemed to him to be 'a chapter of history that ... has faded almost completely from German memory'. If this is the case, then the chapter of Anglo-German history entitled 'The British Roots of the Max-Planck-Gesellschaft' certainly contains ample food for thought.

Translated by Jane Rafferty

References

- 1 Eckart Henning and Marion Kazemi, *Chronik der Kaiser-Wilhelm-Gesellschaft zur Förderung der Wissenschaften* (Berlin, 1988); id., *Chronik der Max-Planck-Gesellschaft zur Förderung der Wissenschaften unter der Präsidentschaft Otto Hahns (1946-1960)* (Berlin, 1992); Thomas Stamm, *Zwischen Staat und Selbstverwaltung. Die deutsche Forschung im Wiederaufbau 1945-1965* (Cologne, 1981), pp. 85 ff.; Rudolf Vierhaus and Bernhard vom Brocke (eds), *Forschung im Spannungsfeld von Politik und Gesellschaft. Geschichte und Struktur der Kaiser-Wilhelm-/Max Planck-Gesellschaft* (Stuttgart, 1990).
- 2 Hans Günther Hockerts, 'Zeitgeschichte in Deutschland. Begriff, Methoden, Themenfelder', in Ilko-Sascha Kowalczyk (ed.), *Paradigmen deutscher Geschichtswissenschaft* (Berlin, 1994), pp. 136-163, here pp. 150-51.
- 3 Cf. Erika Bollmann et al., *Erinnerungen und Tatsachen. Die Kaiser-Wilhelm-Gesellschaft zur Förderung der Wissenschaften Göttingen – Berlin 1945/46* (Stuttgart, 1956), pp. 9 ff.
- 4 Armin Hermann, *Max Planck* (Reinbek, 1973), pp. 103 ff., 114 ff.
- 5 Manfred Heinemann, 'Der Wiederaufbau der Kaiser-Wilhelm-Gesellschaft und die Neugründungen der Max-Planck-Gesellschaft (1945-1949)', in Vierhaus and vom Brocke (eds), *Forschung im Spannungsfeld*, pp. 407-70, here pp. 409 ff., 421 f.
- 6 Heinemann, 'Der Wiederaufbau', pp. 425 ff.
- 7 Ibid., pp. 428-32.
- 8 Ibid., pp. 436 f.
- 9 Ibid., p. 423.
- 10 Peter Alter, 'Die Kaiser-Wilhelm-Gesellschaft in den deutsch-britischen Wissenschaftsbeziehungen', in Vierhaus and vom Brocke (eds), *Forschung im Spannungsfeld*, pp. 726-46, here p. 744.
- 11 Ibid., p. 744.
- 12 Ibid., p. 743.
- 13 *Operation Epsilon: The Farm Hall Transcripts. Introduced by Sir Charles Frank, OBE, FRS* (Bristol and Philadelphia, 1993).
- 14 Cf. Reginald Victor Jones, *The Wizard War. British Scientific Intelligence 1939-1945* (New York, 1978), passim; Thomas Powers, *Heisenberg's War. The Secret History of the German Bomb* (New York, 1993), passim.

- 15 Klaus-Dietmar Henke, *Die amerikanische Besetzung Deutschlands* (Munich, 1995), pp. 742 ff.
- 16 *Farm Hall Transcripts*, p. 26.
- 17 Werner Heisenberg, *Der Teil und das Ganze. Gespräche im Umkreis der Atomphysik* (Munich, 1969), p. 262.
- 18 *Farm Hall Transcripts*, p. 26.
- 19 *Ibid.*, pp. 140 ff.
- 20 *Ibid.*, pp. 169 ff.
- 21 *Ibid.*, pp. 170 ff.
- 22 *Ibid.*, pp. 174 ff.
- 23 Cf. Helmut Rechenberg, 'Farm-Hall-Berichte. Die abgehörten Gespräche der 1945/46 in England internierten deutschen Atomwissenschaftler. Ein Kommentar', *Naturwissenschaftliche Rundschau*, Supplement 1-3, January-March 1994, pp. 65 ff.
- 24 Cf. Harold Oxbury (ed.), *Great Britons. Twentieth-Century Lives* (Oxford and New York, 1985), pp. 37 f.; Tyler Wasson (ed.), *Nobel Prize Winners* (New York, 1987), pp. 100 ff.
- 25 *Farm Hall Transcripts*, pp. 174 ff., 180 ff.
- 26 *Ibid.*, pp. 186 f.
- 27 *Ibid.*, pp. 187 ff.
- 28 Jürgen Brautmeier, *Forschungspolitik in Nordrhein-Westfalen 1945-1961* (Düsseldorf, 1983), pp. 13 ff; Alter, 'Die Kaiser-Wilhelm-Gesellschaft', pp. 744 ff. For the different contexts of policy and mentalities cf. Lothar Kettenacker, *Krieg zur Friedenssicherung. Die Deutschlandplanung der britischen Regierung während des Zweiten Weltkriegs* (Göttingen, 1989); id., "'Unconditional Surrender" als Grundlage der angelsächsischen Nachkriegsplanung', in Wolfgang Michalka (ed.), *Der Zweite Weltkrieg* (Munich and Zurich, 1989), pp. 174-88; Anne Deighton, *The Impossible Peace. Britain, the Division of Germany and the Origins of the Cold War* (Oxford, 1990), pp. 11 ff; Vera and Ansgar Nünning, 'Autoritätshörig, unpolitisch und opportunistisch. Englische Vorstellungen vom deutschen Nationalcharakter am Ende des Zweiten Weltkriegs', *Geschichte in Wissenschaft und Unterricht*, 45 (1994), pp. 224-39.
- 29 Brautmeier, *Forschungspolitik*, pp. 14 f.
- 30 Cf. Wasson (ed.), *Nobel Prize Winners*, pp. 1053 f.
- 31 Brautmeier, *Forschungspolitik*, pp. 13 f.
- 32 *Ibid.*, pp. 16 ff.

- 33 Ibid., p. 18.
- 34 Cf. note 24.
- 35 Margaret Gowing, *Britain and Atomic Energy 1939-1945* (London and New York, 1964), pp. 45 ff.; ead., 'Britain, America and the Bomb', in Michael Dockrill and John W. Young (eds), *British Foreign Policy, 1945-56* (London, 1989), pp. 31-46.
- 36 *Farm Hall Transcripts*, pp. 214 ff., text pp. 218 ff.
- 37 Ibid., p. 216.
- 38 Cf. Oxbury (ed.), *Great Britons*, pp. 45 f., 92, 164 f.; Wasson (ed.), *Nobel Prize Winners*, pp. 137 ff., 240 ff., 464 ff.
- 39 Cf. Alter, 'Die Kaiser-Wilhelm-Gesellschaft', p. 745, note 59.
- 40 *Farm Hall Transcripts*, p. 220.
- 41 In 1935, Blackett and Hill became members of the famous Committee for the Scientific Survey of Air Defense (Tizard Committee). During the war Hill served on a number of scientific committees concerned with the war effort. In 1940 he worked as Attaché at the British Embassy in Washington, as 'a kind of unofficial roving ambassador of British science' (R. Watson-Watt), 'as part of a move to establish liaison with American scientists prior to America's entry into the war' (Oxbury (ed.), *Great Britons*, p. 164); cf. Sir Robert Watson-Watt, *Three Steps to Victory* (London, 1957), p. 107ff., 291 ff.
- 42 Brautmeier, *Forschungspolitik*, p. 187, note 51.
- 43 Alter, 'Die Kaiser-Wilhelm-Gesellschaft', pp. 745 f.
- 44 *Farm Hall Transcripts*, pp. 222 ff.
- 45 Ibid., pp. 225, 227.
- 46 Cf. *ibid.*, p. 228.
- 47 Brautmeier, *Forschungspolitik*, pp. 19 ff.
- 48 Text in *ibid.*, p. 19.
- 49 *The New Statesman and Nation*, 13 October 1945, p. 241.
- 50 Cf. the entry in Erich Bagge's diary in Erich Bagge, Kurt Diebner and Kenneth Jay, *Von der Uranspaltung bis Calder Hall* (Hamburg, 1957), p. 67.
- 51 Cf. Klaus Hoffmann, *Schuld und Verantwortung: Otto Hahn – Konflikte eines Wissenschaftlers* (Berlin etc., 1993), pp. 64 ff.
- 52 After his visit to Farm Hall, Sir Charles Darwin sent Otto Hahn the new biography of Rutherford (A.S. Eve, *Rutherford. Being the Life and Letters of the Rt. Hon. Lord Rutherford, O.M.*, Cambridge,

Max-Planck-Gesellschaft

1939), with an edition of the correspondence between Rutherford and Hahn.

53 'His character was modest, kindly and blameless and amid the trials of distressful times and through many personal sorrows he preserved his integrity and his quiet courage'.

54 *Nature*, 161 (15 May 1948), pp. 751 ff.

55 Timothy Garton Ash, 'Väter und Söhne. Fünfzig Jahre nach D-Day', *Frankfurter Allgemeine Zeitung*, 6 June 1994.

PUBLICATIONS OF THE GERMAN HISTORICAL INSTITUTE LONDON

- Vol. 1: Wilhelm Lenz (ed.), *Archivalische Quellen zur deutsch-britischen Geschichte seit 1500 in Großbritannien; Manuscript Sources for the History of Germany since 1500 in Great Britain* (Boppard a. Rh.: Boldt, 1975)
- Vol. 2: Lothar Kettenacker (ed.), *Das "Andere Deutschland" im Zweiten Weltkrieg. Emigration und Widerstand in internationaler Perspektive; The "Other Germany" in the Second World War. Emigration and Resistance in International Perspective* (Stuttgart: Klett, 1977)
- Vol. 3: Marie-Luise Recker, *England und der Donauraum, 1919-1929. Probleme einer europäischen Nachkriegsordnung* (Stuttgart: Klett, 1976)
- Vol. 4: Paul Kluge and Peter Alter (eds), *Aspekte der deutsch-britischen Beziehungen im Laufe der Jahrhunderte; Aspects of Anglo-German Relations through the Centuries* (Stuttgart: Klett-Cotta, 1978)
- Vol. 5: Wolfgang J. Mommsen, Peter Alter and Robert W. Scribner (eds), *Stadtbürgertum und Adel in der Reformation. Studien zur Sozialgeschichte der Reformation in England und Deutschland; The Urban Classes, the Nobility and the Reformation. Studies on the Social History of the Reformation in England and Germany* (Stuttgart: Klett-Cotta, 1979)
- Vol. 6: Hans-Christoph Junge, *Flottenpolitik und Revolution. Die Entstehung der englischen Seemacht während der Herrschaft Cromwells* (Stuttgart: Klett-Cotta, 1980)
- Vol. 7: Milan Hauner, *India in Axis Strategy. Germany, Japan, and Indian Nationalists in the Second World War* (Stuttgart: Klett-Cotta, 1981)
- Vol. 8: Gerhard Hirschfeld and Lothar Kettenacker (eds), *Der "Führerstaat": Mythos und Realität. Studien zur Struktur und Politik des Dritten Reiches; The "Führer State": Myth and Reality. Studies on the Structure and Politics of the Third Reich* (Stuttgart: Klett-Cotta, 1981)
- Vol. 9: Hans-Eberhard Hilpert, *Kaiser- und Papstbriefe in den Chronica majora des Matthaeus Paris* (Stuttgart: Klett-Cotta, 1981)

- Vol. 10: Wolfgang J. Mommsen and Gerhard Hirschfeld (eds), *Sozialprotest, Gewalt, Terror. Gewaltanwendung durch politische and gesellschaftliche Randgruppen im 19. und 20. Jahrhundert* (Stuttgart: Klett-Cotta, 1982)
- Vol. 11: Wolfgang J. Mommsen and Wolfgang Mock (eds), *Die Entstehung des Wohlfahrtsstaates in Großbritannien und Deutschland 1850-1950* (Stuttgart: Klett-Cotta, 1982)
- Vol. 12: Peter Alter, *Wissenschaft, Staat, Mäzene. Anfänge moderner Wissenschaftspolitik in Großbritannien 1850-1920* (Stuttgart: Klett-Cotta, 1982)
- Vol. 13: Wolfgang Mock, *Imperiale Herrschaft und nationales Interesse. 'Constructive Imperialism' oder Freihandel in Großbritannien vor dem Ersten Weltkrieg* (Stuttgart: Klett-Cotta, 1982)
- Vol. 14: Gerhard Hirschfeld (ed.), *Exil in Großbritannien. Zur Emigration aus dem nationalsozialistischen Deutschland* (Stuttgart: Klett-Cotta, 1982)
- Vol. 15: Wolfgang J. Mommsen and Hans-Gerhard Husung (eds), *Auf dem Wege zur Massengewerkschaft. Die Entwicklung der Gewerkschaften in Deutschland und Großbritannien 1880-1914* (Stuttgart: Klett-Cotta, 1984)
- Vol. 16: Josef Foschepoth (ed.), *Kalter Krieg und Deutsche Frage. Deutschland im Widerstreit der Mächte 1945-1952* (Göttingen and Zurich: Vandenhoeck & Ruprecht, 1985)
- Vol. 17: Ulrich Wengenroth, *Unternehmensstrategien und technischer Fortschritt. Die deutsche und britische Stahlindustrie 1865-1895* (Göttingen and Zurich: Vandenhoeck & Ruprecht, 1986)
- Vol. 18: Helmut Reifeld, *Zwischen Empire und Parlament. Zur Gedankenbildung und Politik Lord Roseberys (1880-1905)* (Göttingen and Zurich: Vandenhoeck & Ruprecht, 1987)
- Vol. 19: Michael Maurer, *Aufklärung und Anglophilie in Deutschland* (Göttingen and Zurich: Vandenhoeck & Ruprecht, 1987)
- Vol. 20: Karl Heinz Metz, *Industrialisierung und Sozialpolitik. Das Problem der sozialen Sicherheit in Großbritannien 1795-1911* (Göttingen and Zurich: Vandenhoeck & Ruprecht, 1988)

- Vol. 21: Wolfgang J. Mommsen and Wolfgang Schwentker (eds), *Max Weber und seine Zeitgenossen* (Göttingen and Zurich: Vandenhoeck & Ruprecht, 1988)
- Vol. 22: Lothar Kettenacker, *Krieg zur Friedenssicherung. Die Deutschlandplanung der britischen Regierung während des Zweiten Weltkrieges* (Göttingen and Zurich: Vandenhoeck & Ruprecht, 1989)
- Vol. 23: Adolf M. Birke and Günther Heydemann (eds), *Die Herausforderung des europäischen Staatensystems. Nationale Ideologie und staatliches Interesse zwischen Restauration und Imperialismus* (Göttingen and Zurich: Vandenhoeck & Ruprecht, 1989)
- Vol. 24: Helga Woggon, *Integrativer Sozialismus und nationale Befreiung. Politik und Wirkungsgeschichte James Connollys in Irland* (Göttingen and Zurich: Vandenhoeck & Ruprecht, 1990)
- Vol. 25: Kaspar von Greyerz, *Vorsehungsglaube und Kosmologie. Studien zu englischen Selbstzeugnissen des 17. Jahrhunderts* (Göttingen and Zurich: Vandenhoeck & Ruprecht, 1990)
- Vol. 26: Andreas Wirsching, *Parlament und Volkes Stimme. Unterhaus und Öffentlichkeit im England des frühen 19. Jahrhunderts* (Göttingen and Zurich: Vandenhoeck & Ruprecht, 1990)
- Vol. 27: Claudia Schnurmann, *Kommerz und Klüngel. Der Englandhandel Kölner Kaufleute im 16. Jahrhundert* (Göttingen and Zurich: Vandenhoeck & Ruprecht, 1991)
- Vol. 28: Anselm Doering-Manteuffel, *Vom Wiener Kongreß zur Pariser Konferenz. England, die deutsche Frage und das Mächtesystem 1815-1856* (Göttingen and Zurich: Vandenhoeck & Ruprecht, 1991)
- Vol. 29: Peter Alter (ed.), *Im Banne der Metropolen. Berlin und London in den zwanziger Jahren* (Göttingen and Zurich: Vandenhoeck & Ruprecht, 1993)
- Vol. 30: Hermann Wentker, *Zerstörung der Großmacht Rußland? Die britischen Kriegsziele im Krimkrieg* (Göttingen and Zurich: Vandenhoeck & Ruprecht, 1993)

- Vol. 31: Angela Schwarz, *Die Reise ins Dritte Reich. Britische Augenzeugen im nationalsozialistischen Deutschland (1933-1939)* (Göttingen and Zurich: Vandenhoeck & Ruprecht, 1993)
- Vol. 32: Johannes Paulmann, *Staat und Arbeitsmarkt in Großbritannien: Krise, Weltkrieg, Wiederaufbau* (Göttingen and Zurich: Vandenhoeck & Ruprecht, 1993)
- Vol. 33: Clemens Picht, *Handel, Politik und Gesellschaft. Zur wirtschaftspolitischen Publizistik Englands im 18. Jahrhundert* (Göttingen and Zurich: Vandenhoeck & Ruprecht, 1993)
- Vol. 34: Friedrich Weckerlein, *Streitfall Deutschland. Die britische Linke und die "Demokratisierung" des Deutschen Reiches, 1900-1918* (Göttingen and Zurich: Vandenhoeck & Ruprecht, 1994)
- Vol. 35: Klaus Larres, *Politik der Illusionen. Churchill, Eisenhower und die deutsche Frage 1945-1955* (Göttingen and Zurich: Vandenhoeck & Ruprecht, 1995)
- Vol. 36: Günther Heydemann, *Konstitution gegen Revolution. Die britische Deutschland- und Italienpolitik 1815-1848* (Göttingen and Zurich: Vandenhoeck & Ruprecht, 1995)
- Vol. 37: Hermann Joseph Hiery, *Das Deutsche Reich in der Südsee (1900-1921). Eine Annäherung an die Erfahrungen verschiedener Kulturen* (Göttingen and Zurich: Vandenhoeck & Ruprecht, 1995)

STUDIES OF THE GERMAN HISTORICAL INSTITUTE LONDON – OXFORD UNIVERSITY PRESS

Eckhard Hellmuth (ed.), *The Transformation of Political Culture: England and Germany in the Late Eighteenth Century* (Oxford, 1990)

Ronald G. Asch and Adolf M. Birke (eds), *Princes, Patronage, and the Nobility. The Court at the Beginning of the Modern Age c. 1450-1650* (Oxford, 1991)

Rolf Ahmann, Adolf M. Birke and Michael Howard (eds), *The Quest for Stability. Problems of West European Security 1918-1957* (Oxford, 1993)

FURTHER PUBLICATIONS OF THE GERMAN HISTORICAL INSTITUTE LONDON

Wolfgang J. Mommsen and Wolfgang Mock (eds), *The Emergence of the Welfare State in Britain and Germany* (London: Croom Helm, 1981)

Wolfgang J. Mommsen and Gerhard Hirschfeld (eds), *Social Protest, Violence and Terror in Nineteenth- and Twentieth-Century Europe* (London: Macmillan, 1982)

Wolfgang J. Mommsen and Lothar Kettenacker (eds), *The Fascist Challenge and the Policy of Appeasement* (London: Allen & Unwin, 1983)

Gerhard Hirschfeld (ed.), *Exile in Great Britain. Refugees from Hitler's Germany* (Leamington Spa: Berg Publishers, 1984)

Kaspar von Greyerz (ed.), *Religion, Politics and Social Protest. Three Studies on Early Modern Germany* (London: Allen & Unwin, 1984)

Kaspar von Greyerz (ed.), *Religion and Society in Early Modern Europe 1500-1800* (London: Allen & Unwin, 1985)

Josef Foschepoth and Rolf Steininger (eds), *Die britische Deutschland- und Besatzungspolitik 1945-1949* (Paderborn: Ferdinand Schöningh, 1985)

Wolfgang J. Mommsen and Hans-Gerhard Husung (eds), *The Development of Trade Unionism in Great Britain and Germany, 1880-1914* (London: Allen & Unwin, 1985)

Wolfgang J. Mommsen and Jürgen Osterhammel (eds), *Imperialism and After. Continuities and Discontinuities* (London: Allen & Unwin, 1986)

Gerhard Hirschfeld (ed.), *The Policies of Genocide. Jews and Soviet Prisoners of War in Nazi Germany* (London: Allen & Unwin, 1986)

Ralph Uhlig, *Die Deutsch-Englische Gesellschaft 1949-1983. Der Beitrag ihrer "Königswinter-Konferenzen" zur britisch-deutschen Verständigung* (Göttingen: Vandenhoeck & Ruprecht, 1986)

Wolfgang J. Mommsen and Jürgen Osterhammel (eds), *Max Weber and his Contemporaries* (London: Allen & Unwin, 1987)

Peter Alter, *The Reluctant Patron. Science and the State in Britain 1850-1920* (Leamington Spa: Berg Publishers, 1987)

Stig Förster, Wolfgang J. Mommsen and Ronald Robinson (eds), *Bismarck, Europe, and Africa. The Berlin Africa Conference 1884-1885 and the Onset of Partition* (Oxford: Oxford University Press, 1988)

Adolf M. Birke, Hans Booms and Otto Merker (eds), *Control Commission for Germany/British Element. Inventory. Die britische Militärregierung in Deutschland. Inventar*, 11 vols (Munich etc.: Saur Verlag, 1993)

Günther Heydemann and Lothar Kettenacker (eds), *Kirchen in der Diktatur* (Göttingen and Zurich: Vandenhoeck & Ruprecht, 1993)

Dagmar Engels and Shula Marks (eds), *Contesting Colonial Hegemony. Africa and India 1858 to Independence* (London and New York: British Academic Press, 1993)

HOUSE PUBLICATIONS OF THE GERMAN HISTORICAL INSTITUTE LONDON

Lothar Kettenacker and Wolfgang J. Mommsen (eds), *Research on British History in the Federal Republic of Germany 1978-1983* (London, 1983)

Wolfgang J. Mommsen, *Two Centuries of Anglo-German Relations. A Reappraisal* (London, 1984)

Adolf M. Birke, *Britain and Germany. Historical Patterns of a Relationship* (London, 1987)

Frank Rexroth (ed.), *Research on British History in the Federal Republic of Germany 1983-1988. An Annotated Bibliography* (London, 1990)

Gerhard A. Ritter, *The New Social History in the Federal Republic of Germany* (London, 1991)

Adolf M. Birke and Eva A. Mayring (eds), *Britische Besatzung in Deutschland. Aktenschliessung und Forschungsfelder* (London, 1992)

Gerhard A. Ritter, *Big Science in Germany. Past and Present* (London, 1994)

Adolf M. Birke, *Britain's Influence on the West German Constitution* (London, 1995)

Ulrike Jordan (ed.), *Research on British History in the Federal Republic of Germany 1989-1994. An Annotated Bibliography* (forthcoming London, 1996)

Annual Lectures of the German Historical Institute London

1979 Samuel Berrick Saul, *Industrialisation and De-Industrialisation? The Interaction of the German and British Economies before the First World War* (London, 1980)

1980 Karl Dietrich Erdmann, *Gustav Stresemann: The Revision of Versailles and the Weimar Parliamentary System* (London, 1981)

1981 A. J. P. Taylor, *1939 Revisited* (London, 1982)

1982 Gordon A. Craig, *Germany and the West: The Ambivalent Relationship* (London, 1983)

1983 Wolfram Fischer, *Germany in the World Economy during the Nineteenth Century* (London, 1984)

1984 James Joll, *National Histories and National Historians: Some German and English Views of the Past* (London, 1985)

1985 Wolfgang J. Mommsen, *Britain and Germany 1800 to 1914. Two Developmental Paths Towards Industrial Society* (London, 1986)

1986 Owen Chadwick, *Acton, Döllinger and History* (London, 1987)

1987 Hagen Schulze, *Is there a German History?* (London, 1988)

1988 Roger Morgan, *Britain and Germany since 1945. Two Societies and Two Foreign Policies* (London, 1989)

1989 Thomas Nipperdey, *The Rise of the Arts in Modern Society* (London, 1990)

1990 *Not available*

- 1991 Lothar Gall, *Confronting Clio: Myth-Makers and Other Historians* (London, 1992)
- 1992 Keith Robbins, *Protestant Germany through British Eyes: A Complex Victorian Encounter* (London, 1993)
- 1993 Klaus Hildebrand, *Reich – Nation-State – Great Power. Reflections on German Foreign Policy 1871-1945* (London, 1995)
- 1994 Alan Bullock, *Personality and Power: The Strange Case of Hitler and Stalin* (London, 1995)

Bulletin of the German Historical Institute London, Issue 1 (Spring, 1979)-