

International Relationships of the MPS during the Cold War: Changing Historical Constellations

Tracing the Max Planck Society (MPS) as an institutional player in the realm of international politics over some five decades is a complex undertaking. Trying to define its exact position at a given moment is often like chasing a moving target. On one hand, successive presidents, and the advisory circles they surrounded themselves with, cultivated distinct leadership styles and visions for the MPS's positioning in foreign scientific policy. On the other hand, as administrative routines were established to manage the rapidly increasing regulatory needs from both national and, increasingly, supra- and international bodies, there was less room for individual idiosyncrasies. From the early 1970s onwards, the central administration of international scientific relations gradually expanded, eventually forming its own department within the Administrative Headquarters. This expansion paralleled the development of an administrative guideline strategy that, even in tumultuous times, remained remarkably consistent. Its primary objective was to ensure maximum autonomy and flexibility for the Max Planck Institutes (MPI) in their international research collaborations, free from potential foreign policy constraints. This guideline would be classified as pertaining to science foreign policy, following the terminology laid out earlier, if it were not continually disrupted, especially in relations with Eastern European scientists, by foreign policy-driven interventions from the Federal Government and the governments of partner countries. Thus, representatives of the MPS—its officials, the Administrative Headquarters, and all the MPI directors who fostered scientific contacts abroad—found themselves compelled to engage with the foreign science policy directives set by governments and other players in international science policy, either by adapting to them, negotiating with them, or attempting to modify them in line with their own priorities.

The administrative guideline could also be counteracted within the organization itself, namely whenever individual scientists or groups of MPS researchers tried to leverage “the science” for purposes that went beyond the immediate project-related collaboration with foreign colleagues. Here in particular, a leadership-driven change that has been enforced since the mid-1970s can be discerned: Initially, the focus was on a world peace policy responding directly to World War II and the atomic bombings of Hiroshima and Nagasaki.

Its scientific justification was claimed by some prominent representatives as a task for the MPS as well as corresponding government consultation at the highest level. This evolved into a commitment to disarmament, peace, environmental, and climate policy by only a few, often less well-known, MPS scientists whose political activities, from the perspective of MPS's governing bodies, should no longer be identified with their institutional employer. Nevertheless, the moving target of MPS's science foreign policy remained relatively consistent in its direction, aiming at the suppression of the political in science, at least within the MPS.

Even more challenging for the historical reconstruction of this specific science foreign policy are the diverse national, transnational, supra-national, and international contexts relevant to the MPS and its international cooperations. These contexts often overlapped, placing our target in a complex web of interactions and influences. Additionally, these contexts did not obey the same time delineations, making it difficult for the historian to cleanly and clearly periodize this lengthy span. Consideration must be given primarily to the cycles of confrontation and détente in the East-West conflict, the changes in the Federal German government, and the political-cultural changes that were reflected therein. The paradigm shifts in West German foreign policy were not fully synchronized with the caesuras occurring at both the federal and bloc political levels. There were also structural developments that were primarily economically driven at the national and international levels, as well as the political, cultural, and not least scientific-political and organizational processes of Europeanization and globalization, which also followed their own rhythms, sometimes in sync with other developments, sometimes less so. In the first three decades of World War II, the MPS was quite engaged as an actor in foreign science policy, then somewhat reluctant, but always still idiosyncratic in its dealings with all these international and global developments. However, it remained an institution of the national science system, predominantly funded by federal German tax revenues. Its scope of action with regard to science foreign policy was limited mainly by Bonn's foreign policy, and from the mid-1970s increasingly by Brussels' European policy as it extended to foreign or European policy-sensitive fields. Therefore, it seems plausible to organize the following chapter, which should provide an overview of the MPS, along the major caesuras of West German foreign policy during the Cold War.

2.1 How the MPS Asserted Itself in Postwar Germany and Became Established Within the Bloc System

In the field of foreign science policy, neither the Kaiser Wilhelm Society (KWS) nor its successor starting in 1948, the MPS, experienced a “zero hour” at the end of World War II. The same could be observed in many other aspects of West German contemporary history. The international connections of the KWS did not come to a complete halt with the onset of Nazi rule, nor during the wartime years. The geographical priorities, however, did shift away from the Allied wartime opponents toward the allied, neutral, and occupied countries. Simultaneously, the character of collaboration underwent a transformation. What were once politically egalitarian relationships, perhaps ordered by the principles of scientific seniority, became more controlling forms of cooperation. Depending on the nature of the cross-border relationship, these collaborations ranged all the way to what could be characterized as relationships “based on exploitation.”¹ The expansionist, racist, and anti-Semitic nature of these relationships could not be offset by the individual behavior of KWS scientists towards their foreign colleagues, but it could be softened. A rare example of this is Wolfgang Gentner's collegial interaction with Frédéric and Irène Joliot-Curie and their staff at the *Institut du Radium* in occupied Paris.²

However, the asymmetrical power relationship could also be ruthlessly exploited. In this regard, among others, the plant breeder Wilhelm Rudorf and his colleagues at the Kaiser Wilhelm Institute (KWI) for Breeding Research stood out. They not only seized the valuable seed banks of Ukrainian research stations as soon as they could lay hands on them, but also had female French biologists, imprisoned in Auschwitz, work for them at the Kok-Saghys experimental station at the Rajsko sub-camp.³

The perception by foreign scientists and international media of the KWS/MPS as reflected in such magazines as *Science* or *Nature* was strongly shaped by the early reports of the Hungarian pathologist Miklós Nyiszli and other sur-

1 Hachtmann, *Wissenschaftsmanagement*, 2007, pp. 793–807, quote on p. 805.

2 Hoffmann and Schmidt-Rohr, “Wolfgang Gentner,” 2006, pp. 19–20.

3 Heim, *Kalorien*, 2003, pp. 36–49, pp. 172–193. Regarding the forced labor of foreign researchers for and within KWIs as a whole during World War II, see Strebel and Wagner, *Zwangsarbeit*, 2003, esp. pp. 48–65.



FIGURE 1 Wolfgang Gentner (front left), Frédéric Joliot-Curie (front center) und Walther Bothe (front right) 1941 in Paris.

viving prisoner doctors. They described how they were forced to assist Josef Mengele in the medical ward of Auschwitz, and they remembered precisely how they had produced, packaged, and sent human specimens from murdered prisoners to Berlin-Dahlem. There, the specimens were eagerly awaited by Mengele's doctoral advisor and the director of the KWI for Anthropology, Human Heredity, and Eugenics, Othmar von Verschuer, along with Karin Magnussen and other members of his research staff.⁴

Negotiating with the Occupying Powers

With the end of the war, the geographical focus of the foreign relations of KWS scientists shifted back to the most important partner countries before the war, which now confronted them as occupying powers. In none of the four occupation zones could the KWI located or translocated there in the last months of the war complain about a lack of attention from foreign colleagues, who visited

4 Nyzsli, *Im Jenseits der Menschlichkeit*, 1992; Massin, "Mengele," 2003, pp. 236–241. Sachse, "Mengele," 2020. Regarding the KWI for anthropology, human heredity, and eugenics, see Schmuhl, *Grenzüberschreitungen*, 2005.

them as research control officers of the respective military government. However, the experiences of the scientists were different in each of the four zones, even though all of these visitors were initially guided by the idea of scientific restitution.⁵

In the Soviet occupation zone, especially in Berlin, confiscations and even destruction of facilities, instruments, libraries, and records were commonplace. While the physical chemist Peter Adolf Thiessen willingly accepted an invitation to the Soviet Union, others feared being forcibly deported.⁶ Moreover, the Administrative Headquarters, which had been evacuated to Göttingen in the future British occupation zone just in time at the end of February 1945, preferred to write off the few remaining facilities in the Soviet zone and the Soviet sector of the divided city of Berlin. They chose this rather than support the efforts of physical chemist Robert Havemann, who faced likely failure in his attempts to rebuild a modified KWS under Soviet supervision in Berlin.⁷

The Administrative Headquarters was no more enthusiastic with the American plan for a German Research University, which was supposed to be a counter-model to the restructuring of the Prussian Academy into a German Academy for Science along Soviet lines, enforced by the Soviets in their sector. This university was meant to gather the remaining Kaiser Wilhelm Institutes in Berlin-Dahlem and transform them into an integrated teaching and research institution for the further education of graduate and postgraduate junior scientists.⁸ This, however, completely contradicted the traditional core identity,

5 For the transition from KWS to MPS, see the summary presentation by Balcar, *Ursprünge der MPG*, 2019.

6 Walker, *Die Uranmaschine*, 1990, pp. 222–225. The unique situation in Berlin can be well traced through the history of the KWI for Physical Chemistry and Electrochemistry, today's Fritz-Haber-Institute of the MPS: James et al., *Hundert Jahre*, 2011, pp. 136–158. Regarding Thiessen, see Schmaltz, "Peter Adolf Thiessen and Richard Kuhn," 2007.

7 For a detailed account of the attempts to reestablish a KWS based in Berlin, see Hachtmann, *Wissenschaftsmanagement*, 2007, pp. 1052–1077. Havemann made headway on his dissertation at the KWI for Physical Chemistry and Electrochemistry in 1932/33 and had distinguished himself by denouncing Jewish colleagues. He later joined the resistance group "European Union" and was sentenced to death in 1943; Havemann's execution was postponed multiple times due to his "war-critical research," allowing him to survive until the end of the war in Brandenburg-Görden prison. In early July 1945, he was appointed the provisional head of the KWS by the communist-dominated Berlin Magistrate in coordination with the Soviet occupation authorities. In the literature, Havemann is usually controversially depicted. The key sources have been evaluated by Szöllösi-Janze, *Haber*, 1998, pp. 669–673; this is also the basis for Rürup, *Schicksale*, 2008, pp. 97–98. For a different perspective, see Hachtmann, *Wissenschaftsmanagement*, 2007, pp. 1055–1057; James et al., *Hundert Jahre*, 2011, pp. 139–142, 148–151; Balcar, *Ursprünge der MPG*, 2019, pp. 27–36.

8 Sachse, "Research," 2009, pp. 122–123; Hachtmann, *Wissenschaftsmanagement*, 2007, pp.

specifically the so-called Harnack Principle, named after its founding president, according to which the KWS/MPS should exclusively host ‘pure’ research institutes, built around an outstanding scientific personality.⁹

In contrast, representatives of the British occupying forces began discussions a few days before the unconditional surrender of the German Wehrmacht—specifically, at the headquarters of the Allied forces in Reims. Here, the vanguard of the group of German nuclear scientists, who had been detained by the American Alsos Mission in the last days of April, made a several-day stopover. Before they were transported to their final internment location, the British Farm Hall, the group was to grow to a total of ten persons, including eight KWS scientists, all of whom except Max von Laue had previously been leading members of the German Uranium Project. On the afternoon of May 4, 1945, Otto Hahn, one of the most prominent internees alongside Werner Heisenberg and von Laue, conversed with his British supervisor and later noted in his diary:

In the afternoon, I had a long conversation with our Major: Subjects: Mass suggestion (Goebbels); V1 + V2; our position regarding the current situation; concentration camps: Germans must see film, what could happen under the regime in Germany; lampshade, medical guinea pigs; our hope: save science, as far as possible; bombing of Frankfurt.¹⁰

In mid-August 1945, the British-German dialogue on saving German science, especially the KWS—despite its connections with the criminal Nazi regime—was indeed resumed. Meanwhile, eavesdropping on the Germans at Farm Hall revealed the extent of what they did not know about atomic bomb construction, while the Americans had dropped their nuclear bombs on Hiroshima and Nagasaki, forcing Japan to surrender and demonstrating their military might to the Soviets.¹¹ These conversations are detailed in the Farm Hall Protocols,

1068–1077. The history of the Prussian, then German Academy of Sciences, and later the Academy of Sciences of the GDR, has now been studied in-depth. For the most recent works, see Laitko, “Etablierung der Deutschen Akademie der Wissenschaften,” 2018; Nötzoldt, “Deutsche Akademie der Wissenschaften zu Berlin,” 2018; Meiser, *Deutsche Forschungshochschule*, 2013.

9 Laitko, “Harnack-Prinzip,” 2015.

10 Hahn Tagebücher, Volume I, May 4, 1945, III. Abt., Rep. 14, No. 6819, see Sime, *Otto Hahn und die Max-Planck-Gesellschaft*, 2004, p. 31.

11 On the decision of the U.S. government to use the atomic bomb in 1945, see, from the extensive research literature, Alperovitz, *Hiroshima*, 1995; Gordin and Ikenberry, *Age of Hiroshima*, 2020.

which have been analyzed so far mostly concerning the research goals, results, and political attitudes of the German atomic scientists grouped in the “Uranium Club.”¹² Initially, Charles Darwin, the Director of the National Laboratory for Physics in London, and nuclear physicist Patrick Blackett, an “old friend” of Heisenberg from peacetime and a key figure in British wartime defense research, paid “purely private visits” to Farm Hall. Their impression of the willingness and ability of their German colleagues to cooperate, whom they believed could hardly be dispensed with during the imminent reconstruction, was apparently sufficiently positive.¹³ In any case, Hahn, Heisenberg, and von Laue were brought to London at the beginning of October. At this more official meeting at the Royal Institution with the President of the Royal Academy, Henry Dale, who had chaired the Scientific Advisory Board of the British War Cabinet, and physicists Blackett, George P. Thomson, and William Lawrence Bragg, along with physician Archibald V. Hill, the discussion was not only about the modalities of their return to Germany but also about possible British support for postwar German science.¹⁴ Their resources, like the industry in the British zone, were not to be dismantled but instead rebuilt and utilized on-site for occupation policy, and in the long term for the “revival of Europe.”¹⁵

The continuation of the Kaiser Wilhelm Society was a building block in this occupation and European political strategy, which had been developed by the British government in the second half of 1945—against the recommendations of their own military, who, similar to their American allies, had indeed initially ordered dismantling and advocated extensive research bans and strict research controls. The “United States of Europe,” which Winston Churchill predicted a year later in his visionary Zurich speech, would need a “spiritually great Germany” just as urgently as a “spiritually great France.”¹⁶

12 Hoffmann, *Operation Epsilon*, 2023. Otto G. Oexle pointed out the significance of these early discussions for the continuation of the KWS already in 1995 and 2003; Oexle, Hahn, Heisenberg und die anderen, 2003; Oexle, *British Roots*, 1995. Hohn and Schimank, *Konflikte*, 1990, pp. 90–98.

13 Quotations from Oexle, Hahn, Heisenberg und die anderen, 2003, p. 31.

14 The content of all discussions as well as the subsequent deliberations among the detainees can be found in: Hoffmann, *Operation Epsilon*, 2023, pp. 257–265, 275–322, 339–348. See also Oexle, Hahn, Heisenberg und die anderen, 2003, pp. 30–35, which also refers to Hahn's still-unpublished diary.

15 As stated by Churchill in his Zurich university speech on September 19, 1946: James, *Winston S. Churchill*, vol. 7, 1974, pp. 7380–7381. Cited here from Oexle, Hahn, Heisenberg und die anderen, 2003, p. 30.

16 Ibid. See also Mark Walker, *Die Uranmaschine*, 1990, p. 227; Balcar, *Ursprünge der MPG*, 2019, pp. 59–60; Brautmeier, *Forschungspolitik in Nordrhein-Westfalen*, 1983.

The French allies did not have to be convinced of the sensibility of research in their occupation zone, but of its continuation under the roof of a trizonal KWS. In the French zone, the radium researcher Frédéric Joliot-Curie halted the seizures ordered by military officers in the Kaiser Wilhelm Institutes that had been relocated to Tübingen, Hechingen, and Tailfingen¹⁷ as soon as he arrived on the scene as a civilian representative of the French government. A future “Franco-German cultural area” was to bind Southwestern Germany more closely to France and counteract a renewed national centralization of German top-level research, as represented by the KWS.¹⁸ Over the following three years, the relationships of the life sciences KWIs that had translocated there, with both their occupying power and the German administrations on the municipal and *Länder* level, evolved rather favorably. This was largely thanks to the mediation of Carlo Schmid, a German European with a French family background, constitutional lawyer, and Social Democrat. As a result, the directors of these institutes, the “Tübingen Gentlemen” Adolf Butenandt, Alfred Kühn, Max Hartmann, and Georg Melchers, felt no rush to join either the Kaiser Wilhelm Society, which was reestablished in 1946 initially only in the British Zone, or the renamed and since 1948 bizonal Max Planck Society.¹⁹

From the British perspective, the inclusion of the French was less urgent, as the British wanted to withhold nuclear technology knowledge, including German expertise, from the French as long as possible—in view of the communist tendencies of some of them and despite all European political visions. More important was reaching an understanding with the strongest Western victorious power. But reaching this agreement proved to be difficult.

Similar to the British military, the American occupying authorities would have liked to immediately implement one of the last resolutions of the Allied Control Council, though it had not formally come into force: to dissolve the KWS—which they viewed too indiscriminately as an armament research trust, but entirely justifiably as an important pillar of the Nazi regime—to thoroughly de-nazify its research institutes and integrate them into the universities. To change the mind of the American military government, considerable argumentative effort was needed. In this process, the conceptual distinction between basic and applied research was repeatedly used by both the British and German sides. By only speaking of basic research as the type of research

17 Walker, *Die Uranmaschine*, 1990, pp. 225–227.

18 Hachtmann, *Wissenschaftsmanagement*, 2007, pp. 1097–1099.

19 Lewis, “Kalter Krieg,” 2004.

permissible in Germany, they hoped to banish at least linguistically American fears of renewed German military research.²⁰

Some advocates, including those from American scientific circles, and not least the first emissaries, John D. Rockefeller III, Albert Mann, and David Havighurst, who were exploring the status and conditions of education, science, and research in post-war Germany on behalf of the Rockefeller Foundation, supported Otto Hahn, who had been serving as President of the KWS/MPS in the British Zone since April 1946, and the long-time, politically astute Secretary-General Ernst Telschow. However, their British patron, Colonel Bertie Blount—stationed in Göttingen as the head of the Research Branch of the British military government—proved indispensable. Blount, a chemist, had completed his doctoral thesis in 1931 at the University of Frankfurt, notably with an assessment from the external member and later director of the KWI for Physical Chemistry and Electrochemistry, Karl-Friedrich Bonhoeffer. Conveniently, Blount took up quarters in a few rooms of the Aerodynamic Testing Institute, where the evacuated Headquarters of the KWS/MPS had also found accommodation.²¹ Blount tirelessly mediated between them, his superiors in the military government, the politically responsible individuals, and their scientific advisors in London, but especially his counterparts in the American military government. As the year 1948 began, they were finally able to obtain the consent of the American military governor, General Lucius Clay, for the bi-zonal expansion of the MPS.²²

Only after the founding of the Federal Republic of Germany (FRG) in May 1949, which, as the weakest part of the Western Allies, the French military government had to reluctantly agree to, did the rebellious “Tübingen Gentlemen” consent to join the now finally nationwide established MPS. They had—supported in turn by French colleagues like the biochemists and occupation officers André Lwoff and Paul Fouché—tried to defend the newly gained

20 Sachse, “Research,” 2009, pp. 124–128; Sachse, “Grundlagenforschung,” 2014, pp. 223–227.

21 For more on Bonhoeffer, see James et al., *Hundert Jahre*, 2011, pp. 150–155 and *passim*.

22 Sachse, “Research,” 2009, pp. 131–132. Hachtmann, *Wissenschaftsmanagement*, 2007, pp. 1086–1096; in his account of the rescue and restructuring of the KWS/MPS, Hachtmann focuses largely on the person of Telschow and underestimates the interplay between British and German atomic scientists behind the scenes of occupation policy negotiations. Regarding American post-war research policy in Europe and the domestic debates about what kind, if any, research should be permitted on the old continent, see Krige, *American Hegemony*, 2006.

independence of their bioscientific institutes from the Göttingen Headquarters until the very end.²³

There were significant resistances that the KWS scientists around Otto Hahn and their British supporters faced, and they came from many sides: the militaries of all victorious powers, American science policy in Europe, French European and science policy, not least also from the cultural federalism that was forming during the founding of the FRG, and even from prominent KWS bioscientists in the southwest of the new Republic. The obstructions show that the continuation of the KWS, which had been planned since a few months after the collapse of the German Reich in Farm Hall and London, was a highly uncertain option.

That these resistances could be overcome within four years points to something else as well: after painstaking examination of the German scientists by the British, a small but prominent British-German network of eminent nuclear scientists—most of them Nobel Prize winners—had re-formed among the Farm Hall internees and their supervisors.²⁴ This group proved resilient, persistent, politically savvy, and influential enough to secure with the KWS/MPS what they saw as an indispensable resource for future research in Europe—a resource that, in proportion to the expected costs, would disproportionately benefit nuclear physics research. The hardening fronts in the beginning Cold War favored them: a Federal Republic science system that was productive as quickly as possible, and whose potential capabilities they were well-informed about thanks to the FIAT, CIOS, and BIOS reports composed by some KWI directors at the direction of the occupying authorities, seemed indispensable to all Western Allies for building the Western European bulwark against world communism.²⁵ The West German designers of this science system, along with their allied overseers, would have been ill-advised to abandon the tried and tested non-university self-administration organization of the KWS/MPS. After

23 Hachtmann, *Wissenschaftsmanagement*, 2007, pp. 1097–1100, 1143–1147; Lewis, “Kalter Krieg,” 2004.

24 Oexle, *Hahn, Heisenberg und die anderen*, 2003, p. 34, highlights the transnational connections of the ‘Rutherford family’ of former students and colleagues of Ernest Rutherford in Montreal, which included Hahn, Darwin, and Blackett.

25 FIAT: Field Information Agency, Technical; CIOS: Combined Intelligence Objectives Sub-Committee; BIOS: British Intelligence Objectives Sub-Committee. Over 4,000 reports on the status of science, technology, and industry for American and British intelligence services were written from the time of the Normandy landings in 1944 until 1947. More than 12,000 “investigators” were tasked with data collection; a number of German scientists had to deliver reports on their respective fields of research. Werth-Mühl, “CIOS, BIOS, FIAT, JIOA,” 2001.

all, research institutes gathered under its roof, which, as the scouts from the Rockefeller Foundation had already reported in 1946 and 1947, were still reasonably functional even under the meager conditions of the first post-war years and were positioning themselves in many places with interesting research ideas for better times ahead.²⁶

(Re-)Integration into International Scientific Communities and International Organizations, including the CERN

The British-American-German network, which during challenging times had successfully managed to reestablish the Kaiser Wilhelm Society as the Max Planck Society at the federal level also proved its worth when it came to quickly reintegrating its scientists into international scientific communities. Importantly, it helped place them in the newly emerging supranational organizations, which were becoming significant as initiators, hosts, or funders of future international large-scale research projects. Even before the Federal Republic was founded, and long before it had regained its foreign policy autonomy, the founding director of UNESCO, British zoologist Julian Huxley, was concerned about the state of German science. Since the Germans could not yet represent themselves, he convened an expert commission whose seven members—all from future NATO countries—were to advise him on German matters. In search of local contacts who could enlighten UNESCO about German research institutions, the British military government recommended that he turn to the German Research Council (DFR, Deutscher Forschungsrat). This short-lived institution had only emerged in March 1949 from a scientific advisory group that the British research control officer Blount had gathered in Göttingen in early 1946. It now included scientists from Göttingen and members of the MPS, as well as others. But Heisenberg, who, like Hahn, had been included in this circle immediately after returning from Farm Hall, served as its chairman until the DFR's merger with the Emergency Association of German Science to form the German Research Foundation (DFG, Deutsche Forschungsgemeinschaft) in 1951, at which point he immediately became a vice-president of the DFG.

26 Scouts from the Rockefeller Foundation in 1946 and 1947 visited about a dozen of the roughly 40 KWI existing in the western zones, particularly those previously funded, and concluded that the working and living conditions of the KWS scientists were considerably better than general post-war conditions in Germany. Many of them were also already pursuing noteworthy research approaches under the given conditions. This differed significantly from the lamentations contributed by that portion of the MPI directors to the *Festschrift* for Otto Hahn in 1949, who still perceived the collapse and occupation as an unjust humiliation. See Sachse, "Research," 2009, pp. 116–121.

This ensured the close interlocking of the MPS, as a non-university institution for basic research, with the DFG responsible for the financial support of basic research in general at West German universities and research institutes. This was all the more important as the DFG in the future was to represent this entire sector of the Federal German science system abroad, including the MPS. However, this did not eliminate conflicts of competences between the DFG and MPS, especially on the international stage; indeed, such conflicts will reappear in various contexts throughout the course of this study.²⁷

As an independent research institution and the successor to the politically corrupted but still internationally renowned KWS, the MPS was early on sought after as a desirable contact when foreign, supra-, and international institutions wanted to learn about West German science. In the fall of 1951, for example, a delegation from the Organisation for European Economic Co-operation (OEEC) consisting of 25 members from several Marshall Plan countries and the USA, who were particularly interested in economically-relevant research, paid a visit to MPS President Hahn.²⁸ In 1951, as soon as the Federal Republic was permitted to act in foreign policy and join UNESCO, the MPS sent Carl Friedrich von Weizsäcker as its first representative to the German UNESCO Commission, which had been prepared by Walter Hallstein before he transferred to the newly founded Foreign Office in 1951 as a state secretary. However, Weizsäcker did not stay long in this commission; as early as 1953, he had himself replaced “at his own request” by Karl-Friedrich Bonhoeffer, who had by then relocated to Göttingen as the director of the newly founded MPI for Physical Chemistry there.²⁹

Thanks to their early collaboration with UNESCO, and thereby in a certain sense politically rehabilitated, the leading nuclear researchers of the MPS were ready for the founding of an international nuclear research center. It was intended to enable European scientists to keep pace with American and Soviet research, something that could not have been financed by individual European nation-states alone. Heisenberg had known about these plans ever since his Danish mentor Niels Bohr had invited him to an informal physicists’ meeting. However, when the formal inquiry from UNESCO arrived at the newly founded DFG as the representative of West German science, its senate was able to nominate its Vice President Heisenberg as the chief negotiator and Wolfgang Gen-

27 Stamm-Kuhlmann, “Deutsche Forschung,” 1990, p. 905. For a brief history of DFR, see Orth, *Autonomie und Planung*, 2011, pp. 39–46; Carson and Gubser, “Science Advising,” 2002.

28 Stamm-Kuhlmann, *Deutsche Forschung*, 1990, p. 903.

29 *MPG-Tätigkeitsbericht*, p. 509; *60 Jahre*, 2011, pp. 1–2; Bode, *Auswärtige Kulturverwaltung*, 2014, pp. 305–312. For Bonhoeffer’s move from Berlin to Göttingen, see James et al., *Hundert Jahre*, 2011, p. 151.

tner as an additional representative in its first meeting. Gentner had also been a member of the Uranium Club and was initially an external member of the Heidelberg MPI for Medical Research before being appointed as the director of the newly founded MPI for Nuclear Physics in 1957. In early 1952, these negotiations culminated in the founding of the European Organization for Nuclear Research (CERN, Conseil Européen de la Recherche Nucléaire) in Geneva. Its new research center promised excellent working conditions for MPS nuclear physicists—at a time when the Allied research bans were far from being off the table. Moreover, CERN closely connected them with their international scientific community.³⁰

In the following years, the two West German representatives consistently held important positions within CERN's organizational structure. Heisenberg also represented the FRG to CERN and vice versa.³¹ In this role, he soon had to consider how to deal with other countries that applied for membership in the club of twelve European founding states. Such requests, which came in soon after the founding, could only be granted according to the CERN convention with a unanimous vote of the founding members' council. Additionally, the CERN council wanted to limit the group to European members and only began considering new admissions after the first accelerator, the Synchrocyclotron, was operational. At the beginning of 1956, the incumbent Council President Ben Lockspeiser of Great Britain believed the time had come to admit new member states. At the same time, given the fact that so far none of the informal inquiries had been unanimously endorsed, he wanted to simplify the process and introduce a two-thirds majority requirement. In the strictest confidence, he asked his council colleagues, including Heisenberg, to ascertain whether their respective governments would agree to this amendment to the convention. Heisenberg forwarded the letter without comment to the Foreign Office in Bonn and asked for instruction.³² The responsible cultural affairs officer was immediately alarmed:

30 Carson, *Heisenberg in the Atomic Age*, 2010, pp. 210–215; Stamm-Kuhlmann, *Deutsche Forschung*, 1990, pp. 906–908. Regarding the tense relationship between Heisenberg and Gentner and their respective MPIs, see Bonolis and Leon, *Astrophysics*, 2023, pp. 291–296 and *passim*. For the history of CERN: Hermann et al., *History of CERN*, vol. 1, 1987; Hermann et al., *History of CERN*, vol. 2, 1990; Krige, *History of CERN*, vol. 3, 1996.

31 Heisenberg: 1953/54 Nominating Committee; 1954–57 Chair of the Scientific Policy Committee; 1958–1960 Vice-President of CERN Council. Gentner: 1954–1958 Research Director. See Carson, *Heisenberg in the Atomic Age*, 2010, p. 213.

32 Lockspeiser to Heisenberg, Jan. 10, 1956; Heisenberg to v. Trützschler (AA), Jan. 13, 1956, PA AA B 94-REF. 604/IV5/127.

I may point out that the French side at that time made their consent to admit Spain dependent on the other member states' agreement to admit Eastern Bloc countries.³³

Accordingly, Heisenberg was asked to inform the council president of the Federal German government's rejection.³⁴ There is no evidence that Heisenberg, who had been granted access to European nuclear research by his British colleagues only a few years earlier, made any critical comments with respect to scientific universalism or the shared European cultural sphere. Heisenberg did not even make any unofficial counterarguments to the government's official anti-communism and political isolation within the bloc.

"Going International" with the Alexander von Humboldt Foundation and Other Organizations

With his government-loyal stance, Heisenberg had previously qualified himself for another key position that needed to be filled in the FRG's early years and that would become significant for shaping the MPS's international relations, up to the present day. In December 1953, the Federal Government re-established the Alexander von Humboldt Foundation (AvH, Alexander von Humboldt-Stiftung), which had already proven itself to be an effective tool of foreign cultural policy in the 1920s and 1930s. Now, the goal was to attract an elite group of young foreign scientists for research stays at West German universities and research institutions, hoping to build long-term international networking for Federal German science. As the Foreign Office looked for a suitable president of international stature, Heisenberg soon came into the view of the cultural affairs department. After ensuring that this additional responsibility would not take up too much of his time, and assuming that he would thereby provide the MPS with privileged access to the funds mainly provided by the federal government for international scientific exchange, he took over the presidency for the next twenty years, until shortly before his death. He was succeeded by Feodor Lynen, the director at the MPI for Biochemistry and Nobel laureate, from 1975 to 1979, and after a ten-year interregnum of physicist Wolf-

33 Note by Trützschler (AA, Department 6—Culture), Feb. 6, 1956, PA AA B 94-REF. 604/IV5/127. Founding states were Belgium, Denmark, France, West Germany, Greece, Great Britain and Northern Ireland, Italy, the Netherlands, Norway, Sweden, Switzerland, and Yugoslavia. Countries that expressed interest in joining included, among others, Spain (admitted: 1961–1968, 1983), Austria (1959), Israel (2013), and Japan (not admitted).

34 Trützschler to Heisenberg, 2/24/1956, PA AA B 94-REF. 604/IV5/127.

gang Paul, who did not belong to the MPS but was well-known there through collaborations at CERN and German Electron Synchrotron (DESY, Deutsches Elektronen-Synchrotron), the former MPS president, Reimar Lüst, took over this office for another ten years in 1989. Since Heisenberg's time, the supervision of the selection processes has been among the permanent tasks of the responsible department and, since 1971, the responsibility of the International Relations Unit in the MPS's Headquarters.³⁵

The activity and annual reports of the MPS from the first post-war decade contain only rather sparse information about its international contacts, but they still reveal a steady intensification and strengthening of these relationships. For the years 1946 to 1950, no "official international relations" could be reported, but there was a revival of personal relationships from pre-war times and many—unfortunately unquantified—visits to almost all Western European countries, North America, and Turkey, with corresponding return visits.³⁶ One of the participants was SS man and breeding researcher Rudolf, who was allowed to travel to the USA in 1949 with a scholarship from the Rockefeller Foundation.³⁷ Another was Heisenberg who undertook extensive lecture tours in Great Britain in 1947 and 1948 and traveled to the USA in 1950.³⁸ Two other former members of the Uranium Club, Otto Hahn and Karl Wirtz, followed repeated invitations from the Nuclear Energy Board (JEN, Junta de Energía Nuclear) to Francoist Spain at the same time to advise local colleagues on building their nuclear program. (→ 3.2).³⁹ In 1951, the first official connection to be reestablished was the participation in the high-altitude research station Jungfrauoch in Switzerland.⁴⁰ Meanwhile, the return of the KWI for Art History, the Bibliotheca Hertziana in Rome was not making significant progress. As a result, Planck, Heisenberg, and Telschow sought the intervention of 'His Holiness Pope Pius XII' during private audiences in Rome on several occasions. The Hertziana was finally able to reopen under the direction of the MPS in 1954 (→ 3.1). By then, relationships with foreign science organizations had also been "consolidated." As with personal relationships, they were expected to "expand,"

35 *MPG-Jahrbuch 1955*, p. 16; Carson, *Heisenberg in the Atomic Age*, 2010, pp. 209–210; Bode, *Auswärtige Kulturverwaltung*, 2014, pp. 256–324; Alexander von Humboldt Foundation, Frühere Präsidenten, <https://www.humboldt-foundation.de/entdecken/organisation/fruehere-praesidenten>, last accessed Jan. 19, 2019. Interview with Nickel (Sachse,) April 12, 2018.

36 KWG/MPS-*Tätigkeitsbericht 1951*, p. 362.

37 Schüring, *Vergangenheitspolitik*, 2006, p. 330; Sachse, *Research*, 2009, p. 115.

38 Carson, *Heisenberg in the Atomic Age*, 2010, pp. 206–207.

39 Presas i Puig, *Reflections*, 2008, pp. 19–20.

40 Balsiger und Flückiger, "75 Jahre," 2007.

“strengthen,” and “intensify” year by year; invitations to institute directors to lecture abroad and corresponding reciprocal visits steadily increased, although no specific numbers were provided. The year 1955 brought a breakthrough with the state sovereignty of the Federal Republic: with the funds from the Alexander von Humboldt Foundation and thanks to a special grant from the Federal Ministry of the Interior to the MPS for the cultivation of international relations, foreign guest researchers could once again be recruited again for longer periods to collaborate in the institutes.⁴¹

Looking back on this first post-war decade, the strong impression is that the MPS was able to reintegrate surprisingly quickly into international scientific relationships, including emerging inter- and supranational scientific institutions.⁴² Key to this was assistance from the countries of the Western occupying powers, which was by no means selfless, but was granted with a view to the joint reconsolidation of the Western European scientific sphere—a vision of the future that soon made it seem opportune to overlook the Nazi entanglements of the Kaiser Wilhelm Society. At the same time, the personal connections that the well-regarded KWS/MPS scientists had with foreign colleagues became the most valuable, and soon after the war, the most easily reactivated resource. With the aid of these relationships, along with additional government funding stimulated by economic growth and beginning in the early 1950s, the conventional methods of international scientific collaboration employed by the KWS/MPS—such as lecture tours, hosting international guests, and participation in international research stations—became increasingly available.

First, other aspects became more pronounced and new elements were added. One was the necessity to network and coordinate with other Federal German research (funding) institutions on international activities. Key amongst these were the DFG and AvH, and later the German Academic Exchange Service (DAAD, Deutscher Akademischer Austauschdienst) also became important. Secondly, due to the decentralized nature of the West German education and science systems in responsibility of the individual *Länder*, which initially excluded federal subsidies to the MPS based on the Königstein Agreement of 1949, the MPS had to not only navigate dealing with multiple ministries, but also various *Länder* administrations.⁴³ Specifically, the MPS had

41 *KWG/MPG-Tätigkeitsbericht 1951*, p. 362; *KWG/MPG-Tätigkeitsbericht 1952*, p. 438; *KWG/MPG-Tätigkeitsbericht 1954*, p. 509; *MPG-Jahrbuch 1955*, p. 16.

42 Unfortunately, the available data is not sufficient to quantitatively substantiate this assessment.

43 Pfuhl, “Königsteiner Staatsabkommen,” 1959.

to engage with two federal ministries: the Foreign Office and the Federal Ministry of the Interior. It's important to note that funding by the Federal Government was later permitted, but it was limited to specific programs and procedures. Starting in 1957, another federal ministry was added to this list, the ministry responsible for research. Initially, this was the Federal Ministry for Atomic Affairs (BMA, Bundesministerium für Atomfragen), which in 1962 became the Federal Ministry for Scientific Research (BMwF, Bundesministerium für wissenschaftliche Forschung).⁴⁴ Third, the emergence of new supranational institutions had an impact on the MPS. These institutions became important for the MPS as they began to initiate major research facilities and request proposals for international and regional research programs. If the MPS didn't want to rely solely on the DFG to adequately represent its interests, it had to become proactive. This could be achieved either through institutional networking at the executive level by mutually appointing representatives to presidencies and senates, or, when necessary, through appointing its own representatives in these new institutions. These institutional networks at the domestic, inter-, and supranational levels began to gain prominence over the more traditional exchanges of visits and publications with friendly foreign science organizations, which had been the hallmark of scientific internationalism until the 1930s.⁴⁵ These networks indicated a shift as early as the 1950s towards what MPS President Hans Zacher, four decades later, would suggest revising as the "amorphous internationality" of the MPS.

2.2 Foreign Science Policy in the "CDU-State"

The next period began with the FRG regaining its foreign political sovereignty and rearming in 1955. As it became integrated into the Western alliance system of NATO and the Treaties of Rome, it was also firmly anchored in the Cold War's block system. This context provided a fixed framework for the Max

44 Hohn and Schimank, *Konflikte*, 1990, 115–120. Hohn and Schimank describe the long-standing negotiation processes concerning the financing of non-university based research between the German Federal Government, *Länder*, and respective research institutions, which would initially conclude in 1964 with the "Administrative Agreement for the Promotion of Science and Research;" I thank Jaromír Balcar for this information. For the portfolio of the Federal Research Ministry that would be revised several more times, see Chapter 1, FN 41.

45 Schroeder-Gudehus, "Internationale Wissenschaftsbeziehungen," 1990; Schroeder-Gudehus, *Deutsche Wissenschaft*, 1966.

Planck Society's external science policy activities. In the "CDU-State"⁴⁶ with its claim of being the "sole representative of the German people" in foreign affairs, this policy was on the one side defined by the Hallstein Doctrine. Formulated in 1955 by Wilhelm Grewe, head of the political department at the Foreign Office (AA, *Auswärtiges Amt*), and named after the first Secretary of State of this ministry, this doctrine regarded the establishment of diplomatic ties with the German Democratic Republic (GDR) by third countries as a hostile act. In response, the FRG would sever relations with that country.⁴⁷ On the other side, this foreign policy doctrine—which was, in reality, highly impractical and soon controversial—opened up opportunities for a renewed foreign science diplomacy. It occasionally allowed the scientists to operate in areas where the official government foreign policy chose to abstain. Thanks to this ambiguity, international relations of West German scientists were not frozen within the bloc system. Instead, they experienced a further boost, not only towards the West but also, with the de-Stalinization of the Soviet Union, towards the East.

This period, which extended until the early 1970s—approximately until the end of the MPS presidency of Adolf Butenandt (1960–1972)—can be considered the golden age of the MPS's institutional expansion. Against the backdrop of the "economic miracle," the number of Max Planck Institutes (MPI) increased from 38 (1955) to 54 (1972); at the same time, the number of employees nearly quadrupled from just over 2,000 to almost 8,000, of which about a quarter were scientists, while the overall budget increased tenfold.⁴⁸ This significant growth in institutes and staff was relevant both from a science foreign policy and foreign science policy perspective: on the one hand, international scientific cooperation during this time multiplied disproportionately. This was due, in part, to the institutional expansion of research areas such as extraterrestrial physics, which inherently relied on big infrastructures (telescopes in the southern hemisphere, global networks of measuring stations, orbital installations) that transcended the boundaries of national territory as well as the national science budget. On the other hand, politics discovered science for its foreign policy purposes, whether for improving the image of the Federal Republic in the Western world, or as a vehicle for European integration.

At the same time—thanks to a persistent impulse from American colleagues—within the MPS, the idea of a policy advised by scientific rationality was revived in a circle of intellectually leading MPS members. They wanted

46 This is also the title of a contemporaneous, widely discussed political analysis: Schäfer and Nedelmann, *Der CDU-Staat*, 1967.

47 Kilian, *Hallstein-Doktrin*, 2001; Booz, *Hallsteinzeit*, 1995; Gray, *Germany's Cold War*, 2003.

48 Balcar, *Wandel*, 2020, pp. 5–6, p. 244.

to leave behind the past, which was mythologized as a catastrophic incursion of irrationality during the Nazi era, and instead deal with the possibility of a nuclear apocalypse, but not with the ever-present reality of the Holocaust and the war of annihilation.⁴⁹ During the extraordinary expansion of the MPS in the 1960s, there was a unique opportunity in the MPS's history to institutionally embed concepts of scientific policy consultancy—transcending the usual providing of expert knowledge, which was often sought, especially from scholars at the MPIs for International Law.⁵⁰

Defining Roles within the Federal German Science System: MPS and DFG

The ability of the MPS to partake in the surge of foreign science policy starting in the mid-1950s was primarily due to a new funding avenue. This was an exceptional federal subsidy earmarked for special expenses related to “nurturing international relations,” first documented in the MPS's annual report in 1955, which then became a stable source of income.⁵¹ The long-anticipated rearmament process had experienced some delays, resulting in the federal government accumulating a reserve of over seven billion Deutsche Marks (DM). Public pressure not to hoard these tax revenues—described in an allusion to the “Imperial War Treasure” of 1871 and referred to colloquially as “Julius’ Tower”—eventually persuaded the Federal Government to allocate a portion of these funds. This allocation served to alleviate the backlog of demand for research, providing a much-needed boost to research efforts in West Germany.⁵² Until the 1964 reform of federal government-*Länder* science funding, the MPS benefited from an annual allocation of seven to nine million DM; after that, this funding was absorbed into the regular MPS budget, now jointly financed by the federal government and the *Länder*. According to federal government-*Länder* agreements preserving the autonomy of the *Länder* in cultural matters, this “special budget” was only allowed to be used for specifically defined expenses. These included “improving working conditions in the institutes,” which essen-

49 As perhaps the most famous contemporary analysis of what really happened during this flight from reality and responsibility, see Arendt, “The Aftermath of Nazi Rule,” Oct., 1, 1950; <https://www.commentary.org/articles/hannah-arendt/the-aftermath-of-nazi-rule-report-from-germany/>; Mitscherlich and Mitscherlich, *Unfähigkeit*, 1967. For MPS's politics of the past, see Sachse, Butenandt, 2004; Sachse, “Was bedeutet ‘Entschuldigung’?” 2011; Schmaltz, “Brain Research,” 2022; Schmaltz, “Von der Abwehr,” 2024.

50 Balcar, *Wandel*, 2020, p. 245.

51 *MPG-Jahrbuch* 1955, 16.

52 Hohn and Schimank, *Konflikte*, 1990, pp. 111–115.

tially meant equipment purchases and construction, while top priorities also included “strengthening international relationships” and “supporting emerging scientists” at home and abroad.⁵³ As a result, research facilities could now be utilized not only at Jungfrauoch, but also at the Zoological Station in Naples and the Biological Station in Lunz, Austria, and there was increased capacity for inviting more international guests to the institutes. In 1959, it was reported that “almost 150 foreign scientists” were hosted; otherwise there is only limited relevant information up into the 1970s.⁵⁴

The nature of the relationships between the MPS and individual countries, as well as their contractual designs, depended on many factors. Under ideal circumstances, there was a clear rule following the dissolution of the DFR and the division of competences between the DFG and the MPS. According to this rule, the DFG was tasked with representing the FRG’s entire scientific community, encompassing both universities and the MPS, on the international stage. It served as the primary liaison with foreign scientific academies, fostering connections between West German and international research entities and funding collaborative programs. In this capacity, it was intended to function as an equivalent to a national academy, which, due to the delayed nation-state formation of Germany and the resulting cultural federalism of the German microstates, was only established when the Federal Government and the *Länder* elevated the Leopoldina in Halle to the status of National Academy in 2008—to the displeasure of all the other German scientific academies.⁵⁵ In contrast, the MPS’s international engagements were meant to be more specific, concentrating on the facilitation, funding, and management of direct partnerships between individual MPIs, their scientists or research groups or and their selected partners abroad.

53 *MPG-Jahrbuch 1957*, 17–19, quote 19; Hohn and Schimank, *Konflikte*, 1990, pp. 111–115. I thank Jaromír Balcar for clarifying these relationships. For a more detailed breakdown of the federal contributions, see Balcar, *Wandel*, 2020, pp. 65–85.

54 *MPG-Jahrbuch 1959*, 15. Unfortunately, such numerical data can only be found sporadically in the *Tätigkeitsberichte* and *Jahrbücher*, and they are not comparable due to a lack of explanations on how they were collected. Concerning the biological stations, see Löffler, *70 Jahre Biologische Station*, 1976; Partsch, *Die zoologische Station*, 1980; Groeben, Kaasch and Kaasch, *Stätten biologischer Forschung*, 2005.

55 Note dated Feb. 25, 1974, AMPG, II. Abt., Rep. 70, No. 373, fol. 33. In this account of MPS’s foreign relations to date, Nickel even concludes that “the attitude of the Max Planck Society” has led “to the DFG increasingly assuming the role of a national academy.” In fact, this was claimed by the DFG itself and was also pushed by the Foreign Office and the Ministry of Research; see below Chapter 3.3. For the Leopoldina, see Gerstengarbe, Thiel, and Bruch, *Leopoldina*, 2016.

In reality, things often didn't work out as intended. First, foreign partners frequently struggled to understand the jurisdictional intricacies of West Germany. Typically, countries outside of West Germany had national "Research Academies" to which there was no direct counterpart in the five regionally organized West German "Scholarly Societies." These foreign academies preferred to deal directly with the organization housing the relevant research entities they were looking for.⁵⁶ Particularly for academies in Eastern Bloc countries, which largely wanted to limit collaboration to scientific research institutes they deemed technologically valuable and ideologically neutral, the MPS remained the primary point of contact. Second, while the MPS had designated budget items for its international activities—a fund for foreign guest stays managed by the Administrative Headquarters and budget allocations in institute budgets for participation in major international research institutions, overseas trips, and more—MPS researchers could also apply for funding from the DFG for activities like overseas trips, research stays, conferences, and even research projects, with or without international involvement.

Facing this complexity, the Administrative Headquarters worked diligently—amidst increasing information, coordination, and negotiation demands—to extract the best outcomes for its institutes and the MPS as a whole. They were happy to leave bilateral framework agreements, especially those highly valued as signs of national recognition by Eastern Bloc science organizations and later by post-colonial nations in Asia, Africa, and South America, to the DFG. The MPS saw official delegation visits as less urgent. They perceived set exchange quotas as limitations, always fiercely defending their flexibility to use their limited resources in ways that best fit the actual research needs of the MPIs.⁵⁷

To maximize resources for scientific exchange, the Administrative Headquarters naturally advocated for the MPS scientists to access the most appropriate funding "pots" within the DFG based on thematic and organizational alignment. Additionally, they kept a close eye on the evolving programs of other third-party funders, ready to place grant applications where feasible. For instance, in 1958/59, using DFG funds, the solar observation station in Locarno was established. From then on, the MPI for Aeronomy operated it in partner-

56 Göttingen (1751), Munich (1759), Heidelberg (1763), Mainz (1949), Düsseldorf (1970); for a comparison of science academies in Western and Eastern Europe after 1945, see Feichtinger and Uhl, *Akademien der Wissenschaften in Zentraleuropa*, 2018.

57 Note from October 30, 1980, AMPG, II. Abt., Rep. 70, No. 86; in this note, Nickel retrospectively speaks of a principle already established "in the early 1960s for a policy of foreign relations of the MPS not determined by general contracts."

ship with the University of Göttingen.⁵⁸ By 1962/63, construction started of the Ionosphere Station in Namibian Tsumeb, again for the MPI for Aeronomy, started. The goal was to continue the work initiated during the International Geophysical Year of 1957/58, leading up to the International Years of the Quiet Sun in 1964/65.⁵⁹

Diplomacy by Other Means: The Case of Israel

When attempting to institutionally shape international scientific collaboration, the goal was not solely about funding. At times, efforts were made towards laying the groundwork for diplomacy through other means. This approach introduced another layer of ambiguity. The roles that the federal government sometimes denied, sometimes granted, or assigned to the MPS were indeed contradictory. In the case of the Soviet Union, the federal government blocked a direct cooperation agreement between the MPS and the Academy of Sciences. This occurred possibly or even precisely because, its own negotiations with the adversary superpower to the east around a government agreement for cultural and techno-economic exchange were stalled due to the contentious Berlin issue. However, during this period without any contracts pending, which would persist until 1970, individual contacts between MPS scientists and Soviet counterparts were maintained. Still, these interactions were always viewed with suspicion by the Foreign Office and the embassy in Moscow (→ 3.3).⁶⁰ In contrast, when it came to Francoist Spain, the federal government was quite pleased during the same period that the MPS, at Spain's request, expanded its contacts primarily in the realm of nuclear physics, which had been established since the early post-war years. An exchange program for young scientists was even established, funded solely by the MPS. This program was agreed upon directly with the Spanish Research Council and wasn't transformed into a "true bilateral treaty" with shared costs until 1980 (→ 3.2).⁶¹ These two contrasting examples of

58 *MPG-Tätigkeitsbericht 1960*, p. 553.

59 *MPG-Tätigkeitsbericht 1964*, p. 569; Aronova, Baker, and Oreskes, "Big Science and Big Data in Biology," 2010. For observation stations of the MPI for Aeronomy, see Bonolis and Leon, *Astrophysics*, 2023, pp. 158–183.

60 German-Soviet Agreement on Cultural and Technical-Economic Exchange from March 25, 1959: "Die Kabinettsprotokolle der Bundesregierung," online, Approval of the Draft, May 14, 1959, https://www.bundesarchiv.de/cocoon/barch/o/k/k1959k/kap1_2/kap2_18/pa ra3_7.html; Protocol of the meeting at the AA on April 25, 1960, PA AA/B 97-REF. VI 8/VI 10/57; Note from February 25, 1974, AMPG, II. Abt., Rep. 70, No. 373, p. 32 ff.

61 Note from October 30, 1980, AMPG, II. Abt., Rep. 70, No. 86, p. 17 ff.; Interview Nickel (Sachse) April 12, 2018; Presas i Puig, *Scientific and Technological Relations*, 2007, pp. 23–28.

the MPS's role at the intersection of diplomacy and science will be elaborated in detail in the third chapter of this study.

In another well-known case, the federal government tried to push the MPS into the role of a substitute actor in foreign policy. In its historical self-descriptions, the MPS often credits itself for pioneering German-Israeli rapprochement after the Nazi genocide, pointing to its cooperation with the Israeli Weizmann Institute initiated in the early 1960s.⁶² However, as the multi-perspective analysis by Thomas Steinhauser, Hanoch Gutfreund, and Jürgen Renn has shown, the initiative in the late 1950s actually came from scientists and science managers of the Weizmann Institute. Much like the State of Israel since its foundation, the Institute had to constantly fight for its survival and was actively seeking more sponsors.⁶³ The Weizmann scientist, Gerhard Schmidt, between 1956 and 1958, repeatedly contacted Professor Wolfgang Gentner of the University of Freiburg. Gentner had been the research director at CERN since 1954, and in 1958, he became the director at the MPI for Nuclear Physics. While on a research stay at CERN, Amos de Shalit, a nuclear physicist at the Weizmann Institute, and Gentner forged the first Israeli-German cooperation plans in Geneva. At the same time, the Europe-based fundraising experts of the Weizmann Institute, Josef Cohn and Richard Kronstein, managed to present their case directly to Konrad Adenauer through several intermediaries.

The Federal Chancellor, however, found himself in a foreign policy predicament because of the Hallstein Doctrine. On the one hand, the Federal Government was keen on improving its relations with Israel—not least to enhance its international image, especially in the eyes of the USA. While for reasons different than Israel, which had to consider its many Nazi-persecuted citizens, the West German government also hesitated in establishing diplomatic relations. Precisely for that reason, they would have gladly supported scientific relations with significant funding, going beyond the ongoing “reparations payments” and the covert arms supplies, which they carried out in coordination with the USA. This allowed the USA to maintain its embargo against Israel, seen as the aggres-

62 For example, Staab in his introductory statement at the annual press conference on November 24, 1987, Note December 1, 1987, Attachment 3, p. 7, BArch B 196/96345; Henning, “Foreign Relations,” 1999, p. 106; Markl, “Entschuldigung,” 2003, p. 42. Dietmar Nickel had already written, as he stated in a phone call on April 8, 2022, unsuccessfully against this self-presentation: Nickel, *Rehovot*, 1989. The Weizmann Institute was founded in 1934 by Chaim Weizmann as the Daniel-Sieff Research Institute, for multidisciplinary natural science in Palestine.

63 Steinhauser, Gutfreund, and Renn, *Turning Points*, 2017. The following brief account is based on this detailed study as well as on Nickel, *Rehovot*, 1989; and Nickel, “Wolfgang Gentner und die Begründung,” 2006; see Deichmann, “Collaborations,” 2015.

sor in the Sinai War. On the other hand, the Federal Government, in order to not contradict the Hallstein Doctrine, could not alienate its Arab friends and trade partners. These Arab nations threatened in retaliation to recognize the GDR and shift geopolitical balances in favor of the Soviet Union.

In this dilemma, the 'private' organization MPS appeared to offer a solution. The Arab states couldn't have objected to cooperation agreements between non-state West German and Israeli science organizations. Moreover, avenues for allocating additional federal funds to the MPS had already been paved earlier. Otto Hahn, whom Gentner had managed to motivate by the end of 1959 to visit the Weizmann Institute in Rehovot alongside him and the director of the MPI for Cell Chemistry, Feodor Lynen, to explore cooperation possibilities, was willing to do so in his capacity as MPS's president. However, his soon-to-be successor, Adolf Butenandt, took advice from the longtime administrative head Telschow, who pointed out that the MPS's statutes prohibited such covert official support and transfer payments to third parties. The new MPS leadership, though still advised by Telschow, didn't want to be co-opted to solve the Federal Government's foreign policy issues regarding Israel. As a result, they settled for a scholarship program funded by the MPS itself, amounting to 30,000 DM, to support young MPS scientists' stays in Israel.⁶⁴

Nevertheless, the initial installments of scientific funding that Adenauer had promised to the Israeli Prime Minister David Ben-Gurion during a meeting in New York in 1960 were disbursed. Surprisingly, these were direct payments from the Foreign Office's cultural budget, not through the covert channels that were used for the far more substantial payments for economic development and arms supplies. By 1963, a new approach was suggested: the Minerva Society, established a year earlier to handle other non-statutory financial transactions of the MPS, could offer a politically safe method for transferring West German funds to the Weizmann Institute. A corresponding agreement was struck in 1964, but it was already redundant a year later, for in 1965, Israel and the Federal Republic finally established official diplomatic relations. By then, the secret German-Israeli agreements had become internationally known, as had the sales of arms by West German companies to Egypt. Around the same time, Egypt's leader, Gamal Abdel Nasser, hosted a state reception for his East Berlin counterpart, Walter Ulbricht.⁶⁵ Given the geopolitical and defense-economic entanglements, even a more resolute science diplomatic initiative by the MPS leadership probably wouldn't have upheld the Hallstein Doctrine in the Mid-

64 Steinhauser, Gutfreund, and Renn, *Turning Points*, 2017, pp. 34–35, p. 40.

65 Ibid., pp. 35–37, pp. 42–44.

dle East conflict. However, the Minerva Program and the scientific exchange between the MPS and the Weizmann Institute continue to thrive to this day.

The Europeanization of Big Science

Amidst the backdrop of growing delineation of competencies and an increasing emphasis on cooperation from the late 1950s onwards, as well as the MPS's occasional involvement into West German diplomacy, it became evident that the MPS required leadership that was both domestically and internationally effective and decisive. A full year before the regular presidential transition in 1960, a commission was established. Its purpose was to prepare a comprehensive statutory reform, reflecting the consolidated role of the MPS in both the West German and Western European scientific landscape.⁶⁶ The commission worked for several years, allowing the new president, Adolf Butenandt, to incorporate his initial experiences into their efforts. These experiences included, from a foreign science policy perspective, a German-Soviet delegation exchange in 1962/63 (→ 3.3), as well as his visit to Spain in 1963 (→ 3.2). During this time, the continued integration of large-scale research into a European context stood out. The Max Planck Institutes involved had to collaborate closely, particularly when utilizing the extensive infrastructure and equipment provided by large-scale European research.

Initially, this affected nuclear physics research, nuclear energy promotion, and fusion research. The establishment of CERN in 1952 had already pointed in this direction. These fields were institutionalized as a shared European task with the foundation of the European Atomic Energy Community (EURATOM) in 1957. It wasn't just the Nuclear Research Center (KfK, Kernforschungszentrum Karlsruhe)—which, to Heisenberg's great disappointment, was located in Karlsruhe and not Munich—and the Jülich Nuclear Research Facility (KFA, Kernforschungsanlage Jülich) that benefited from EURATOM's support, but also the MPI for Plasma Physics. Following a complex negotiation process and a carefully weighted minority participation by EURATOM, it was initially founded in 1960 as the "Institute for Plasma Physics GmbH within the MPS" (IPP). It was then incorporated into the MPS in 1971.⁶⁷

66 See Balcar, *Wandel*, 2020, pp. 171–186.

67 On Heisenberg's role in shaping European atomic research, see Carson, *Heisenberg in the Atomic Age*, 2010, pp. 218–255. Except for the IPP, the MPS did not host any large-scale research institutes, which were generally directly led by the federal and state governments or as European collaborations. For the relationship between the MPS and large-scale research, see Balcar, *Wandel*, 2020, pp. 106–162, 248. On the negotiation process that

Furthermore, the European Space Research Organization (ESRO) emerged as a research institution, comparable in size to CERN, with respect to its member states and volume of research funding.⁶⁸ Just as with CERN, the objective was to carve a distinct identity for Western European space research that would stand independently, yet collaboratively linked, to both American and Soviet research. In alignment with the BMAt, representatives from West Germany, particularly physicists from the MPS involved in the “Working Group for Extraterrestrial Research,” led the negotiations. This group combined expertise from the MPIs for Aeronomy, for Nuclear Physics, and for Physics and Astrophysics. Notably, astrophysicist Reimar Lüst played a key role. As a result of his efforts, his department was elevated to become an Institute for Extraterrestrial Physics within the MPI for Physics and Astrophysics. In addition to leading the institute, Lüst also took on several leadership roles within ESRO, acting “in the interest of the German Federal Republic (sic!),” as Heisenberg and Biermann highlighted in their request to the Chemistry, Physics, and Technology Section (CPTS).⁶⁹

Another initiative launched in 1962 was in line with Butenandt’s own research area of biochemistry. This initiative, the founding of the European Molecular Biology Organisation (EMBO), was driven mainly by British biologists and aimed to emulate the CERN model. From the West German side, Hans Friedrich-Freksa and Alfred Gierer from the MPI for Virus Research took part in its preparation. Meanwhile, behind the scenes, Butenandt laid the groundwork for start-up financing through the Volkswagen (VW) Foundation. Ini-

initially led to the founding of the IPP as a GmbH and its further development until its incorporation into the MPS, see Boenke, *Entstehung und Entwicklung*, 1991.

68 Except for Greece and Yugoslavia, the CERN founding states were also gathered at ESRO. Spain was added, which was finally included in CERN in 1961. The costs were initially estimated by Reimar Lüst in his report before the CPTS of the MPS on June 6, 1961 (AMPG, II. Abt., Rep. 66, No. 3047, pp. 39–45, here p. 43) at initially 100 million DM, later 200 million DM annually; of this, the FRG would have to contribute approximately 20%, plus nationally incurred costs for instrument development at universities and research institutes amounting to at least 15 million DM annually, while the FRG’s costs for CERN at the same time amounted to approximately 60 million DM annually. Krige, Russo, and Sebesta, *History of ESA*, vol. 1, 2000.

69 Protocol of the CPTS from May 13/14, 1963, AMPG, II. Abt., Rep. 62, No. 1741, p.161; AMPG, II. Abt. Rep. 66, No. 3047, pp. 39–45: Report by Lüst (“Internationale Zusammenarbeit auf dem Gebiet der Weltraumforschung und die Beteiligung der Max-Planck-Gesellschaft”) before the CPTS on June 6, 1961. Lüst was Technical Director from 1962–1964, Vice President of the ESRO from 1968–1970, and following his presidency of the MPS, was Director-General of the successor organization European Space Agency (ESA) from 1984–1990. Regarding the working group on extraterrestrial research, see Bonolis und Leon, *Astro-physics*, 2023, p. 276.

tially, EMBO focused on coordinating research and enhancing collaboration among European molecular biology institutes. This was because, largely due to political differences between France and the UK, the inception of a joint European lab (European Molecular Biology Laboratory, EMBL) was delayed by over a decade.⁷⁰ Butenandt, aligning with the Federal Government's stance, would have preferred to locate it in Martinsried, near his MPI for Biochemistry. However, representatives of the twelve participating member states feared this could endanger the "establishment of its own identity" and believed the "proximity to Dachau" might be "intolerable" for Israeli scientists. These scientists, alongside their British colleagues, played a significant role in the EMBO. Thus, the decision swayed in favor of the more accessible location of Heidelberg. Here, they anticipated a "greater scientific diversity (especially regarding instrument development)" and, overall, "broader development opportunities" compared to the immediate vicinity of the established MPS science centers in Garching and Martinsried.⁷¹

A Foreign Policy Mandate for the President

It became increasingly evident that the foreign science policy tasks facing the new MPS President in the early 1960s were growing more intricate, and these were challenges he had to, and indeed wanted to, address. Unlike his predecessor, Otto Hahn, who in the later years of his tenure and advanced age had often sidestepped political challenges, Butenandt felt a strong need to influence science policy with the authority of his new position. He made this clear to his colleagues during a pivotal special session of the Scientific Council in November 1963. During this session, they discussed the nuances of the new statutes one last time before presenting the finalized draft to the Senate in June 1964. By December 1964, the members of the MPS ratified it in an extraordinary General Meeting.⁷² His statement, which he politely interjected was "not a critique of Otto Hahn," came across precisely as such. He emphasized that the way things had operated "ten years ago" couldn't continue:

70 Above all, de Gaulle's veto against the British entry into the EEC stalled the establishment of EMBL until his resignation in 1969, as per Krige, "Birth," 2002.

71 Records of the 71st Senate meeting on March 15, 1972, AMPG, II. Abt, Rep. 60, No. 71.SP, fol. 14, pp. 159–160. The reservations against Martinsried were not elaborated in the final records. My thanks go to Alison Kraft for these insights. Kraft, Renn, Sachse, and Schöttler, "Die MPG in der Welt," 2024, 695–698.

72 Letter from the MPS President to MPS members dated July 31, 1964, AMPG, III. Abt., ZA 116, K 65. For the changes in MPS statutes up to 1972, see Balcar, *Wandel*, 2020, pp. 171–243.

The Society is now consolidated, and it has secured a specific position. We have evolved to a point where, in all matters of external science policy, the Society has greatly gained in significance.⁷³

In his vision for the role of President, Butenandt sought to shape the position with a clear science policy focus in two main directions. With “external,” he was not just referring to foreign countries, but even more so to the MPG’s federal political external world, namely, the “Federal Government, *Länder*, DFG, the Science Council, and the Rectors’ Conference.” He believed there needed to be a strategy for these interactions, a responsibility that would fall squarely on the President. Internally, there was a pressing need for clarity on the organization’s direction. Butenandt lamented that “no one had ever really given it much thought” in the past. Now, with the establishment of the Science Council in 1957 as the top advisory body to the Federal Government on science policy, the MPS could no longer rely on chance when it came to founding new institutes.⁷⁴ Butenandt wanted a clear mandate for both the internal and external policies of the MPS. As his colleagues debated the implications of such a mandate—whether it would give the President too much power, or if it would actually limit the President’s powers as compared to the previous statutes that hadn’t specified the role of President at all, and how they should approach the issue of power in general—Butenandt was already thinking beyond his own term.⁷⁵ He believed it was the duty of any “future President” to always ponder the question, “What will become of the MPS?” Such contemplation should be so persistent, he remarked, that “they shouldn’t go to sleep any evening without having given it some thought.”⁷⁶ Paragraph 11 of the new statutes eventually provided the President with the mandate he desired, allowing, in Butenandt’s interpretation, for the MPS “to be represented as a vital factor in cultural policy, both domestically and abroad.”⁷⁷

73 Protocol of the special meeting of the Scientific Council on Nov. 1, 1963, AMPG, II. Abt., Rep. 62, No. 1942, fol. 310.

74 Ibid.

75 Butenandt’s strongest adversary was the Director of the MPI for Biology, Georg Melchers, who polemicized against any possible increase in the powers of the presidential office in general, and of President Butenandt in particular: AMPG III/84-2-7353, Melchers/Butenandt correspondence dated April 4, 18, 30, and May 16, 1962.

76 All the preceding quotes: Protocol of the special meeting of the Scientific Council on Nov. 1, 1963, AMPG, II. Abt., Rep. 62, No. 1942, fol. 310.

77 Letter from the MPS President to the MPS members dated July 31, 1964, AMPG, III. Abt., ZA 116, K 65. Paragraph 11 of the new statutes, which defined the rights and duties of the President, stated in section 1 that he “represents” the MPS externally, especially in the “cul-

Shortly after, Butenandt was appointed to the Cultural Policy Committee of the Foreign Office.⁷⁸ He accounted for how he executed his science policy mandate, both toward domestic institutions and internationally, in his speeches at the MPS's general assemblies. These addresses began to be regularly documented in the MPS's yearbooks.⁷⁹

His first challenges in international science policy he addressed in his inaugural speech at the MPS's 1963 General Meeting. Both the West and East showered criticism upon the West German science system, including the MPS itself. At the end of 1962, Frederik Seitz, the President of the U.S. National Academy of Science (NAS), labeled this science system as especially resistant to reform compared to its Western European neighbors, thus implying it was scientifically lagging. His biting critique appeared not only in the internationally distributed scientific journal, *Physics Today*, but also as a detailed book publication in German. This prompted the German Research Foundation (DFG) to commission a study on the "Status and Deficits of Research in Germany." This study, in turn, spurred Ludwig Raiser, the current President of the Science Council and former DFG President, to conduct a troubling analysis comparing the West German science system to the American one. In his analysis, Raiser primarily identified the early selectivity of the West German school system, along with the lack of content flexibility and hierarchical structure of universities, as areas in need of reform.⁸⁰

Butenandt saw danger in the waves of criticism and self-criticism. Seitz did not trace the roots of West Germany's woes to inadequate funding, as

turally and politically relevant area," such as making statements, delivering programmatic speeches, responding to actions of government agencies, making contact with domestic and foreign science organizations, etc. In § 11 section 2, it further states that the President "develops the basic principles of science policy"; see Dölle, *Erläuterungen zur Satzung der MPG*, 1965, p. 33.

78 Records of the 48th Senate meeting on June 10, 1964, AMPG, II. Abt., Rep. 60, No. 48. SP, fol. 160–161. Butenandt's Secretariat to Rohrehe (AA) March 5, 1964; Sattler to Etzdorf March 10, 1964, PA AA B 90-REF. 600/IV1/832, as well as PA AA B 90-REF. 600 IV1/879: In the meeting records of the advisory board, there are no contributions from Butenandt and more refusals than acceptances for the meetings. More active members of the committee founded in 1961 were, on behalf of the MPS, Hellmut Becker and initially also C. F. von Weizsäcker.

79 The *MPG-Jahrbuch 1963* for the first time included the "Ansprache des Präsidenten," which thereafter appeared regularly in it.

80 Seitz, "Science on the March," 1962, pp. 28–30. Seitz, *Wissenschaft im Vormarsch*, 1962; Paulus, *Amerikanisierung*, 2010, p. 357; Raiser, *Deutsche Hochschulprobleme*, 1966. Similar to Seitz also Conant, *Probleme*, 1965. See also the comparative review by Vierhaus, the Director at the MPI for History since 1968, "Probleme der Universitäten," 1967.

Butenandt would have. Instead, Seitz blamed the outdated institutional structures and professorial systems, remnants from the German Empire, which he believed were pushing emerging scientists abroad, especially to the USA. Moreover, while Seitz had primarily been addressing the universities, he hadn't made this clear. Butenandt addressed these points in his 1963 speech. While acknowledging the educational lag, which the DFG would soon quantify, he emphasized the existing cutting-edge research. He pointed out the work in "specific areas of chemistry," theoretical and plasma physics, and "virus research, particularly in its relationship with modern genetics"—all of which, not coincidentally, were located within MPIs. He concluded this review with a profoundly "German" reflection:

Shouldn't we also rejoice that in Germany, there still are natural scientists who don't merely ask how things behave, but are deeply concerned with the question of 'why' they behave in such ways?⁸¹

Butenandt then addressed Seitz's primary criticism, the "strict hierarchical order" of the federal German "institute operations." Even here, he conceded issues with the universities due to their typical "turnover positions" for emerging scientists, which prevented the formation of genuine "working communities." The Max Planck Institutes, however, were different: they might not use the term "so-called 'teamwork,'" but they would certainly speak of *Gemeinschaften* that, in their internal organization(...) "strive for the common goal." Here, it wasn't just a matter of translating a frowned-upon Anglicism; it was a continuation of the discourse on community, a concept that had permeated all German systems of governance over the past six decades. This was seamlessly supplemented by the leadership principle embodied in the "personality of the director" and the "integrative force emanating from him." For Butenandt, the MPIs proved their worth as "working tools of qualified individuals" when they enabled the "true researcher," much like an artist, to visualize "the yet unformed" and to "realize its form." The configuration of such a "working tool," the new areas it should explore, the methods it should employ, and the personnel it required, could and should be determined solely by the researcher-artist. The MPS had fulfilled its primary duty with the "selection of the individual" and from then on, only had to "assist the director in the administrative management of his tasks."⁸² Without any concessions to the changing times, Butenandt

81 Butenandt, "Ansprache des Präsidenten," 1963, p. 24.

82 All quotes: *Ibid.*, pp. 25–27.

championed the Harnack Principle, which, in his view, continued to prove its value, as evidenced by the internationally recognized research achievements of the MPIs.

In the face of potential criticism of this “extreme freedom of task organization”—a freedom that Butenandt himself acknowledged—he tried to deflect by suddenly switching adversaries. The delegation from the Soviet Academy of Sciences, which had visited the MPS among other scientific institutions at the end of 1962, did confirm that outstanding work was being done. However, they simultaneously criticized that some of the work dealt with “outdated” or “purely theoretical problems” that had no connection to “production-related issues” and were therefore hardly “justifiable.”⁸³ Butenandt’s straightforward rebuttal highlighted “the difference in mindset”: “There, the problems are posed from a practical, production-oriented standpoint, while our basic research seeks to expand our knowledge.” And that was the primary mission of the MPS, in the pursuit of which a wealth of practical results might emerge “along the way.”⁸⁴ The freedom that the political opponent attacks, he argued, shouldn’t be questioned; it should be defended—even if it takes the form of the near-absolute authority of an MPI director, which had to be defended against criticism from both the East and the West.

Butenandt’s Intellectual Network and Its Initiatives in Establishing Social Science Institutes

In 1963, what might have sufficed as an argument during a ceremonial address to MPS members no longer held water in the broader educational policy debate. Discussions in the Federal Republic of Germany had gained momentum since the Sputnik shock, triggered by the first satellite launched into space by the Soviet Union in 1957: education, higher education, research—everything was now under scrutiny. For these debates, Butenandt enlisted intellectual allies from a circle of scientists, philosophers, and educators. Some had found common ground in their youth, while others joined them during and after the war years. Several hailed from the MPS or were closely related or friendly with MPS members. Together, they saw themselves both as an elite, humanistically educated, and as liberal social reformers. In various configurations, this group

83 Ibid., p. 27; Butenandt quotes here from the impressions of delegation member and metallurgist Ivan Oding, which he, along with his two colleagues Georgy Vinogradov and Nikolay G. Basov, described in the magazine *Sowjetunion heute* (8/8, April 16, 1963, pp. 20–21, quotes: p. 20). For more details, see Chapter 3.3.

84 Ibid., p. 28.

exerted a significant influence on educational and foreign policy debates in West Germany's public sphere, as well as on the positioning of the MPS in the late 1950s and 1960s. One of the members, and also one of the most notable participants in the educational debates of 1960s West Germany, was the philosopher and educator Georg Picht. In the 1930s, Picht had given readings of Plato to his cousin, Carl Friedrich von Weizsäcker and introduced the young Hellmut Becker to the poems of Stefan George. All three men had enjoyed a classical education as scions of influential families that had been intertwined both culturally, and by marriage, since the time of the German Empire.⁸⁵ During the final years of the war, they reconvened at the *Reichsuniversität Straßburg*. Weizsäcker held the chair for physics there and was occasionally visited by his younger brother Richard while on military leave. Becker, who was injured during the war, returned to his position as an assistant to his former university professor, constitutional lawyer Ernst Rudolf Huber, who had moved from Leipzig to Strasbourg. Picht, born in Strasbourg and deemed unfit for military service, had been studying and teaching in nearby Freiburg. He would accompany his wife, pianist Edith Picht-Axenfeld, to her concerts in Strasbourg. All gathered in the Alsatian capital, including the nanny of the Weizsäcker family and Huber's Alsatian secretary, Antoinette Mathis, whom Becker would marry shortly before the birth of their first child. Notably, historian Hermann Heimpel, who had been friends with Heisenberg and Weizsäcker since their Leipzig days, and jurist Ludwig Raiser, had also answered the call to Strasbourg.⁸⁶ In the summer of 1944, journalist and soldier Erich Kuby, whose sister-in-law was married to Heisenberg, stopped over in Strasbourg while en route to the Atlantic front in Brest. In his diary, he described this assemblage as a "colony of intellectuals."

Here in Strasbourg, a plethora of reputable people have gathered, wanting to miss as much as possible from the Third Reich and the war. What bothers me about this circle is its elitist demeanor, and what I can least bear is the risk-free irony directed at the Nazis. These cultural and academic plutocrats wear an invisible

85 Raulff refers here to the "three *federalist families* of the early Federal Republic" and reconstructs the familial and professional connections of these and other families in detail: Picht's father Werner Picht led the Higher Education Department of the League of Nations Institute for Intellectual Cooperation in Paris from 1927 to 1933; Weizsäcker's father Ernst von Weizsäcker was the First State Secretary in the Foreign Office from 1938 to 1943; Becker's father Carl Heinrich Becker was an orientalist and had advocated for university reforms as Prussian Minister of Culture from 1925 to 1930, Raulff, *Kreis ohne Meister*, 2009, p. 491.

86 Ibid., 464–466, 470–477. Kant and Renn, "Weizsäcker," 2014, pp. 220–221.

sign around their necks: We are the other Germans. Whoever believes themselves to be an 'other' German but still sees themselves as a representative of Germans as a whole participates in the delusion that the German leadership—Hitler, Goebbels, Göring, Schacht, Bormann, Heydrich—are not exemplary Germans. But they are.⁸⁷

Due to circumstances after the war, their paths diverged but their friendships proved to be a lifeline. Becker initially settled as a lawyer near Lake Constance. He defended the father of his friend, the former State Secretary in the Foreign Office, Ernst von Weizsäcker, during the Wilhelmstrasse Trial. He was assisted by Weizsäcker's youngest son, Richard, and advised by his former professor, Huber, whom he had in turn supported during his denazification process. Heisenberg wrote a statement that mitigated the severity of Heimpel's denazification trial and facilitated Heimpel attaining a professorship in Göttingen. Raiser first accepted a professorship in Göttingen, later in Tübingen, and, in addition to that, led the German Research Foundation (DFG) until 1955, and subsequently the Science Council. Picht, as he had done briefly in the early 1940s, took over the leadership of the Birklehof boarding school in Hinterzarten. Now, Weizsäcker's war-widowed sister, Adelheid von Eulenburg, originally from East Prussia, also taught there. The university town of Tübingen, to which some of the Berlin-based Kaiser Wilhelm Institutes had already been drawn and to which the *Reichsuniversität Straßburg* had been evacuated in November 1944, became a new meeting point. It was here in 1946 that Becker met the newly appointed law professor, Carlo Schmid. As the Social Democratic state minister in Württemberg-Hohenzollern, Schmid had been instrumental in academically reintegrating the stranded KWI directors, Butenandt and Alfred Kühn, in Tübingen. Schmid later joined the MPS senate in 1951.⁸⁸ The close cultural ties between Butenandt, a merchant's son and graduate of a *Realgymnasium*, and the former Strasbourg intellectuals, now scattered across regions, is evident in the fact that, like Weizsäcker, he sent one of his sons to Picht's Birklehof, where four of the Heimpel children were already getting an education, and supported the school financially for decades.⁸⁹

87 Kuby, *Mein Krieg*, 1975, 413. The text was first published under the title "Besinnung" in Kuby's volume, *Alles im Eimer: Siegt Hitler bei Bonn?*, Stuttgart 1960. I thank Daniel Kuby for further information (written communication from Oct. 11, 2012.)

88 Raulff, *Kreis ohne Meister*, 2009, pp. 476–477. Regarding Ernst von Weizsäcker see Conze et al., *Das Amt und die Vergangenheit*, 2012.

89 AMPG, III. Abt., Rep. 84–2, No. 8102, 7456, 7457, 4699: Butenandt's son Eckart (*1937) was at Birklehof from 1952. Butenandt was a member of the Birklehof School Association and

Whether this interconnected group of intellectuals was genuinely united by the residual influence of Stefan George's poetry or by the intergenerational legacy of the "immortal master," remains a matter of debate. Ulrich Raulff, in his book *Kreis ohne Meister* (Circle Without a Master), seeks to establish this connection, alluding to a sort of conspiratorial undertone. Nonetheless, it's undeniable that they had many personal, familial, and professional connections among themselves and shared certain educational and political ideals. These ideals blended a desire for reform with an awareness of their elite status. Time and again, they convened in forums where they sought to make their ideas politically and institutionally effective. One such platform was the Research Institute of the Protestant Study Community (FEST, Forschungsstätte der Evangelischen Studiengemeinschaft) in Heidelberg, founded in 1957. Directed by Picht, who had since been appointed at the University of Heidelberg, FEST gathered Protestant scholars and intellectuals like Heisenberg, Raiser, radio director Klaus von Bismarck, mathematician and philosopher Günter Howe, and of course, Becker, among others. As a result, it frequently became the breeding ground for propositions and memorandums on nuclear, foreign, energy, and peace policies, often bearing the signatures of MPS scientists—Carl Friedrich von Weizsäcker, for instance, often took a leading role in these efforts.⁹⁰ One notable instance is the Tübingen Memorandum, drafted by figures including Weizsäcker, Picht, and Raiser. Already in 1961, this document called for the recognition of the Oder-Neisse line—the post-war border between Germany and Poland—that continued to be a source of tension in European politics. As discussed in the fourth chapter of this study (→ 4.1), this memorandum would exert a more profound influence on FRG's foreign policy than the much more renowned Göttingen Declaration. In the latter, eighteen West German nuclear physicists, many from the MPS circle like Hahn, Heisenberg, and Weizsäcker, warned against the nuclear armament of the *Bundeswehr* in 1957.

Another politically attuned forum was the MPS's Senate Commission for Humanities Affairs, which would later evolve into the Humanities Section (GWS) of the MPS. As early as 1954/55, figures including Weizsäcker, Heisen-

utilized his contacts with the pharmaceutical industry and the Rheinländische Stahlwerke (Rhineland Steelworks) for fundraising for the school until the 1980s. Birklehof students also included C. F. v. Weizsäcker's son Ernst Ulrich von Weizsäcker (*1939) as well as four children of Heimpel. Cf. Löwe, *Georg Picht*, 2004, p. 15, p. 17.

90 On the context of the Protestant Churches and the FEST see Eisenbart, "Nichtverbreitung von Atomwaffen," 2009, pp. 289–291; Schüring, *Atomstaat*, 2015, p. 208. Regarding this thought collective, see also Seefried, *Zukünfte*, 2015, pp. 87–95.

berg, and Carlo Schmid convened there to discuss, decide upon, and champion the re-establishment of the MPI for History in Göttingen and the appointment of Heimpel to the directorship. Heimpel was the one who drafted the institute's concept, initially requested as a review.⁹¹ A few years later, in 1959, it was Heimpel, Weizsäcker, and Schmid, externally supported by Picht, who introduced Becker's proposal for the establishment of an MPI for Educational Research to the MPS committees. After some delays and numerous reviews, the proposal culminated in the founding of an institute that, for the time being, was "supervised by the MPS," with Hellmut Becker already designated as its director.⁹² Opposition mainly came from the *Länder*, who feared that a centralized Berlin-based educational research institute would threaten their cultural sovereignty. Additionally, there were voices both inside and outside the MPS opposing any form of political consultancy, viewing it as an unwarranted departure from the primacy of basic research.⁹³ By the time the institute officially opened in 1963, Butenandt, in his presidential address to the MPS's General Meeting in June 1964, felt compelled to placate these critics. He also sought to reassure those who felt it was too little too late, especially after Picht had loudly proclaimed the "German educational catastrophe" to a media frenzy earlier that year.⁹⁴ The institute, Butenandt emphasized, would neither "prematurely comment on current issues" nor "determine political decisions." Instead, it would "develop theories and methods for educational research," laying the "scientific foundation for future educational policies," and provide the "materials to ensure decisions are made on the right issues."⁹⁵ To maintain alignment with international educational policy developments while prioritizing foundational research, the institute would collaborate on joint projects with "similar institutions in other countries." It would particularly engage in relevant commissions of UNESCO, the OECD, and the Paris-based *International Institute for Educational Planning*, where Becker was already at the helm.⁹⁶

91 On the founding of the MPI for History see Schöttler, *Die Ära Heimpel*, 2017, pp. 21–23.

92 Thoms, "Geschichte des Max-Planck-Instituts," 2016, p. 3; Behm, "Zu den Anfängen der Bildungsforschung," 2017; Kant and Renn, "Weizsäcker," 2014, pp. 232–234. That the founding proposal, as Karlson believes, "was independently brought to the MPS by Carlo Schmid, Georg Picht, and Hellmuth [sic!] Becker," is utterly inconceivable; cf. Karlson, *Biochemiker, Hormonforscher, Wissenschaftspolitiker*, 1990, p. 247.

93 On the founding history of the MPI for Educational Research, see also Balcar, *Wandel*, 2020, pp. 17–21; Behm, *Bildungsforschung*, 2023.

94 Picht, *Bildungskatastrophe*, 1964.

95 *MPG-Jahrbuch* 1964, p. 36.

96 *Ibid.*, pp. 37–38.

Becker was pivotal in linking the research of his colleagues' departments — the educational economist Friedrich Edding, the sociologist Dietrich Goldschmidt, and the pedagogue Saul Robinsohn — with emerging educational-policy bodies at both the West German and supranational levels.⁹⁷ In doing so, he crafted a merged research and political advisory institution, which Heisenberg and Butenandt might have envisioned when, during that legendary night in 1943 in German science history, they walked together from a lecture event at the Reich Aviation Ministry through burning Berlin back to their Dahlem villas. Along the way, as they later recalled, they discussed the “pedagogical side of science” and the primary challenges they would face as scientists after the war, notably to exert their “way of thinking... influencing broader circles” and above all, to educate the youth in “rational thinking.”⁹⁸

However, there was a distinction: while Butenandt and Heisenberg in 1943 were still engrossed in dreams of Germany's national resurgence fueled by the spirit of science,⁹⁹ the focus now was on scientifically based educational reforms in a European context, the international comparison of educational systems, and by extension, the better tapping of educational potential from which the next generation of scientists could be drawn. Evidently, Becker managed to convince his MPS colleagues of his approach to scientific policy consultancy over the ensuing years. In 1971, they elevated the “Becker Institute” to the status of a full-fledged MPI for Educational Research, thus equating it with another new social science establishment — the MPI in Starnberg.¹⁰⁰ The foundation story of the latter is even more intricate than its educational (policy) research counterpart. Unlike the former, the inception of the Starnberg Institute, contrary to popular belief, did not originate from our former Strasbourg circle of intellectuals, even though they would later be responsible for the realization of that institution.¹⁰¹ The impetus instead came from actors and locations beyond the borders of West Germany.

97 Thoms, “Geschichte des Max-Planck-Instituts,” 2016, pp. 5–8. Regarding Edding, who was also internationally very active, see Geiss, “Bildungsökonom,” 2015.

98 Heisenberg, *Der Teil und das Ganze*, 1972, p. 217. Cf. Stoff, “Butenandt in der Nachkriegszeit,” 2004, pp. 384–385.

99 Stoff, “Butenandt in der Nachkriegszeit,” 2004, pp. 400–402.

100 Thoms, *Geschichte des Max-Planck-Instituts*, 2016, pp. 5, 7. The later MPS President Lüst recalled this upgrade as another success of that “Mafia” who ensured that Becker was appointed the “proper Max Planck Director” at the moment his friend Weizsäcker moved in as MPI Director in Starnberg: Interview Lüst (Renn and Kant), May 18, 2010.

101 For the history of MPIL, see Laitko, “MPI zur Erforschung,” 2011; Leendertz, *Pragmatische Wende*, 2010; Kant and Renn, “Weizsäcker,” 2014; Seefried, *Zukünfte*, 2015, pp. 324–333; Sachse, “The Max Planck Society and Pugwash during the Cold War,” 2018.

Learning Policy Consultancy from the American Model

The origins of the Starnberg Institute can be traced back to Addis Ababa and Sopot, where in 1965 and 1966 the 15th and 16th Pugwash Conferences on Science and World Affairs (PCSWA) were held. In the wake of the 1955 Russell-Einstein Manifesto, these conferences initially convened around two dozen scientists in Pugwash, a quaint fishing village in Nova Scotia. The majority were renowned nuclear physicists from the key nuclear states: the USA, USSR, and Great Britain. United by the “universal language of science,” their mission was to explore avenues through which they could influence their governments towards averting a nuclear catastrophe. As the years passed, these Pugwash Conferences, held in different global venues, evolved into an esteemed forum for “second-track diplomacy.” Particularly in the 1960s, they served as a complement or precursor to the official disarmament dialogues of the major powers.¹⁰²

While the Pugwash initiative found adherents in West Germany, they perhaps weren’t the most influential figures in the eyes of their prominent and politically influential American and British peers. Eminent members of the Max Planck Society, ranging from personalities like Hahn and Heisenberg to the biophysicist Boris Rajewsky and Butenandt, showed reservations. As explored in depth in this study’s fourth chapter (→ 4.2), they were cautious about venturing into the slippery parquet of informal science diplomacy that bridged the West and East.¹⁰³ Weizsäcker was an exception. Having migrated to a professorship at the University of Hamburg that aligned more closely with his philosophical passions, he had attended a few Pugwash sessions in the late 1950s. However, in subsequent conferences, he passed over his invitations to younger assistants from Hamburg. These young people, while yet to make significant scientific or political marks, found themselves navigating discussions alongside international luminaries, including Nobel laureates and senior government advisors from the US, Soviet Union, and Britain. This was especially notable in the 1965/66 conferences in Addis Ababa and Sopot. Here, amidst discussions themed around “Disarmament and Security,” deliberations cen-

102 For the history of the PCSWA, see Rotblat, *Pugwash*, 1968; Rotblat, *Scientists in the Quest for Peace*, 1972; Kubbig, *Communicators in the Cold War*, 1996; Evangelista, *Unarmed Forces*, 1999; Kraft, Nehring and Sachse, “The Pugwash Conferences and the Global Cold War,” 2018; Kraft and Sachse, *Science, (Anti-)Communism and Diplomacy*, 2020; Kraft, *From Dissent*, 2022. On Track II Diplomacy, see Montville, “Track Two Diplomacy,” 1991; Diamond and McDonald, *Multi-Track Diplomacy*, 1996.

103 On the relationship between the MPS and Pugwash, see Sachse, “The Max Planck Society and Pugwash during the Cold War,” 2018; for the West and East German Pugwash groups, see Kraft, “Confronting,” 2020.

tered on the impending Nuclear Non-Proliferation Treaty (NPT). The American delegation, spearheaded by the influential Harvard Professor and Presidential Advisor Henry Kissinger, expressed palpable disappointment at the West German Pugwash team's performance. Their concern was further exacerbated by the Federal Government's refusal to endorse the NPT. Yet, a glimmer of opportunity appeared in the autumn of 1966.¹⁰⁴ With the fracture of the CDU-FDP alliance, there emerged a chance to introduce, within West Germany, a scientific policy advisory framework inspired by the American model. The goal was clear: foster a more pragmatic foreign and security policy, especially under the aegis of the forthcoming government coalition with Willy Brandt as the first Social Democratic Foreign Minister.

The MIT biophysicist, Alexander Rich, who had attended the recent Pugwash Conferences, took the initiative. Two months after the Sopot conference, in November 1966, he approached his professional colleague, Manfred Eigen, at the MPI for Physical Chemistry in Göttingen. He presented Eigen with a list of 25 distinguished U.S. scientists and government advisors who were ready to travel to the Federal Republic to enlighten the Germans about the American approach to giving scientific advice to government's policy.¹⁰⁵ Although Eigen maintained robust research collaborations with the Israeli Weizmann Institute, he hadn't been notably active in the context of foreign science policy. Nevertheless, he heeded the call for suggestions regarding potential West German participants. Along with his institute colleague, Friedrich Cramer, Eigen organized a meeting for January 1967 at the MPI for Physics in Munich. Apart from Rich, eight other American scientists joined the session.¹⁰⁶ Each of these scholars hailed from East Coast Ivy League universities, and many had served or were currently serving on the Presidential Scientific Advisory Committee (PSAC). The group included luminaries like Henry Kissinger, who advised Presidents Kennedy, Johnson, and later Nixon, and Isidor Rabi. As a nuclear physicist, Rabi participated in numerous advisory committees of U.S., inter-, and supranational nuclear policy entities.¹⁰⁷

104 Schnippenkoetter to Kissinger on May 26, 1966; Memo dated June 27, 1966; Memo by Ramisch (AA) on Sep. 29, 1966, PA AA B 43-REF. 302/II8/UA IIB/90. The disarmament commissioner of the federal government and former embassy counselor in Washington, Schnippenkoetter, and Kissinger had spoken in late April at a conference of the Ditchley Foundation in Ditchley Park (Oxfordshire, UK) about the upcoming Pugwash Conference in Sopot.

105 Rich to Eigen on Nov. 28, 1966, AMPG, II. Abt., Rep. 70, No. 359, pp. 73.

106 On Eigen, see interview with Frühwald and Eigen (Frieß and Fickers) dated Sep. 23, 1994. Obituary: Pecht and Jovin, Eigen, 2019.

107 Report on the meeting with representatives of American science and science policy in

Apart from the organizers Eigen and Cramer, MPS attendees included the host Heisenberg, President Butenandt, and his new Secretary-General Friedrich Schneider. Additionally, three other MPS directors from various physical and bioscience disciplines were present.¹⁰⁸ Weizsäcker, who had retained his MPS membership even while serving as a philosophy professor in Hamburg, arrived with his friend Picht. The current president of the Science Council, Hans Leussink, the head of the German Institute for International and Security Affairs (SWP, Stiftung Wissenschaft und Politik) established 1962 in Ebenhausen, Klaus Ritter, and Rudolf Mößbauer, a physicist and Nobel laureate from the Munich Technical University, who was not a member of the MPS, were all invited. Linking the meeting to the Federal Government was Kurt Birrenbach. Since 1957, he had represented the CDU/CSU party in the Foreign Affairs Committee of the *Bundestag*. He played a pivotal role in initiating diplomatic relations with Israel and, as a member of the *Atlantik-Brücke* (Atlantic Bridge), a non-partisan network of German and American leaders, advised Adenauer's successors, Ludwig Erhard and Georg Kiesinger, on matters related to America.¹⁰⁹

The primary concern was to explore the possibility of scientists influencing certain political decisions and how to create a functional scientific consultancy system for the federal government. Yet, at the "request of the Americans," the topic of FRG's "unsatisfactory participation in the Pugwash Conferences" was also to be addressed.¹¹⁰

For two days, discussions revolved around the significant differences in the political and science systems of both countries. This began with the comparatively weaker constitutional position of the federal chancellor relative to the federal ministries and the *Länder* ministries of education and cultural affairs.¹¹¹ Many of these ministries had established their own narrowly defined advisory

Munich on Jan. 20/21, 1967 (hereafter cited as "Report Jan. 20/21, 1967"), BArch N 1225/110. The list of participants also included: Paul Doty (Harvard University), Carl Kaysen (Institute for Advanced Studies, Princeton), Don K. Price (Harvard University), Edward Purcell (Harvard University), Eugene Skolnikoff (MIT), Charles Townes (MIT).

108 The other directors were Feodor Lynen (MPI for Cell Chemistry), Arnulf Schlüter (IPP), and Otto Westphal (MPI for Immunobiology), Report Jan. 20/21, 1967, Participant list, BArch N 1225/110.

109 Atlantik-Brücke, <https://www.atlantik-bruecke.org/geschichte-der-atlantik-bruecke/>. See also Leendertz, "Ein gescheitertes Experiment," 2014, p. 244.

110 Verbatim transcript Jan. 20/21, 1967, AMPG, II. Abt., Rep. 70, No. 359, fol. 26; Report Jan. 20/21, 1967, BArch N 1225/110.

111 Verbatim transcript, Jan. 20/21, 1967, AMPG, II. Abt., Rep. 70, No. 359, pp. 26, and report Jan. 20/21, 1967, BArch N 1225/110. The following is a condensed version of these sometimes very nuanced, sometimes redundant discussions.

committees. Because of their ample numbers and limited scope, these committees didn't stand out as prominently as the distinguished Presidential Scientific Advisory Committee (PSAC) at the helm of the Western superpower. Depending on the issue at hand, the PSAC could engage additional specialized expert groups and draw from a pool of over a thousand dedicated scientists committed to their national duty. This extensive advisory activity was consolidated, coordinated, and made "directly accessible to the President" by the PSAC. Moreover, this twenty-member elite body dealt with "matters of public life" and "state issues," preparing decisions using "methods provided by science." In contrast, advisory activities in the Federal Republic focused on educational, scientific, and research policy questions in a narrow sense or on specific research tasks commissioned by individual government agencies. The deficit in scientific policy consultancy in the Federal Republic was a mutual failing. Federal German scientists were seen as lacking a "sense of political responsibility" and a "personal commitment" to political matters, qualities that have been "traditions in the USA since the times of Jefferson and Franklin." From the government side, such an engagement wasn't promoted either. On the contrary, "uncomfortable" statements like the Göttingen Declaration of 1957 or the Tübingen Memorandum of 1961 were not welcomed as "serious contributions to political life" but resisted as "unwanted interventions."¹¹²

More than any structural differences in political constitution, legal status, funding, and (self-)administration of universities and research institutions, contrasting historical experiences of scientists during and immediately after World War II defined their relationship to state politics. It was the successful collaboration between politics and science in the Manhattan Project that laid the foundation for the PSAC, influencing its direction well into the 1970s, regardless of individual members' stances on nuclear armament and their government's military strategies during the Cold War.¹¹³ Conversely, it was the collaboration between science and politics during the Nazi regime from which West German scientists had to distance themselves if they wished to restore their own credibility not just for themselves, but also within international scientific communities. Instead of accounting for their specific involvement in

¹¹² Report Jan. 20/21, 1967, pp. 2–3, BArch N 1225/110.

¹¹³ The PSAC was established in 1951 as the 'Scientific Advisory Committee' (SAC) by President Truman. Eisenhower upgraded it to the PSAC in response to the Sputnik shock of 1957 and relocated it directly to the White House. Kennedy renamed it the 'Office of Science and Technology' (OST) in 1961. It was disbanded by Nixon in 1973 but reinstated by Ford in 1976 as the 'Office of Science and Technology Policy' (OSTP). Its successive heads (as of 2021, the mathematician Eric Lander) hold cabinet rank and are commonly referred to as the President's 'Science Adviser'. See Wang, *Sputnik's Shadow*, 2008.

Nazi crimes, they preferred to speak of the abuse of science by politics, which had to be prevented in the future. From then on, in West Germany, apolitical science was largely seen as good science. Those who dedicated all their time and intellectual resources to it could comfortably situate themselves in an ivory tower, deflecting accusations of being out of touch — a critique that prominent West German politicians often levied against scientists who ventured into political commentary.¹¹⁴ This gap between scientific research and politics, which had widened due to the “political circumstances since 1933,” now needed bridging.¹¹⁵

The (Un-)American Founding of the Starnberg Institute

The proposal that emerged was to recommend to the Federal Government the creation of an “advisory committee” inspired by the American example. However, in the proposed role and duties for the German version, Weizsäcker’s past frustrations with his political forays were glaringly evident. This was especially true in relation to the Association of German Scientists (VDW), which had been formed in 1959 in the wake of the Göttingen Declaration. It was established in a manner similar to the Federation of American Scientists (FAS) with the primary purpose of publicly championing the social responsibilities of the scientific community (→ 4.1, 4.2). The envisioned committee would serve a dual purpose. Firstly, it would act as a conduit, collecting “studies and recommendations from other scientific bodies, such as the VDW,” ensuring that these were duly processed. This suggested an intent not necessarily to censor, but perhaps to adapt these findings to a more politically digestible format. Secondly, the committee would be a reassuring presence for scientists. Those who felt a personal responsibility to voice their opinions on pressing scientific or political matters would be assured that their contributions were being taken forward with expertise and due consideration. In essence, the committee was to be tasked with both evaluation and facilitation, navigating the often-challenging waters between science and politics. All the while, it would operate under the purview of the “Scientific Advisor to the Federal Chancellor.”¹¹⁶ For the German attendees, there was a clear frontrunner for this sensitive intermediary role, even if his name hadn’t yet been formally submitted: Carl Friedrich von Weizsäcker. To begin with, it would fall to Weizsäcker, assisted by Schneider,

¹¹⁴ See below Chapter 4.1.

¹¹⁵ Report Jan. 20/21, 1967, p. 1, BArch N 1225/110.

¹¹⁶ Ibid.

Birrenbach, and Eigen, to collate and convey the outcomes of these discussions to the Federal Chancellor and other significant members of the government and *Bundestag*.¹¹⁷

Despite the ambitious plans and Birrenbach's appeal to the Federal Chancellor, neither the Grand Coalition of CDU and SPD nor the subsequent social-liberal coalition took any decisive action. Instead, the Federal Ministry for Scientific Research (BMwF), led by Gerhard Stoltenberg and advised by Picht, preempted them by establishing its own Advisory Committee on Research Policy (BAF, *Beratender Ausschuss für Forschungspolitik*). Chaired by Ludwig Raiser, the committee included notable members like Weizsäcker, Heisenberg, Butenandt, Lüst, and Konrad Zweigert from the MPI for Comparative and International Private Law. However, within this setup, they were primarily consulted for their specific academic expertise rather than for the broad scientific worldview as they had desired and interpreted from the American experience.¹¹⁸ Rumors might have spread even within the West-German governmental circles that the PSAC had peaked in influence during Eisenhower's presidency and steadily lost clout with the subsequent Kennedy administration, especially after the signing of the Limited Test Ban Treaty (LTBT) in 1963. Disbanded by Nixon in 1973, Gerald Ford, however, reinstated it in 1976.¹¹⁹

However, the American coaches could claim one, albeit fleeting, success. After an eight-year absence from Pugwash, Weizsäcker traveled to a meeting of the Pugwash Study Group on European Security in Mariánské Lázně, Czechoslovakia, in May 1967. (→ 4.2). Officially, as a West German "Pugwashite", he conveyed the VDW's strong support for the NPT. But, wearing another hat as an unofficial special envoy of the Federal Foreign Minister, he also explained the primarily economic reservations of the Federal Government, which was concerned about West German atomic energy industry. Should these concerns be addressed through appropriate treaty arrangements, he conveyed on Brandt's behalf to the assembled Pugwashites, the FRG's accession to the NPT would be conceivable, which did indeed happen after the government transition in 1969. Despite this positive experience, which Weizsäcker detailed in a report to the Foreign Office, neither he nor his MPS colleagues were motivated

117 Ibid.; Leendertz, "Ein gescheitertes Experiment," 2014, p. 244, note 8.

118 Leendertz, "Ein gescheitertes Experiment," 2014, pp. 244–245. Kant and Renn, "Weizsäcker," 2014, p. 236. For a general overview of BAF, see Rudloff, "Verwissenschaftlichung," 2004, pp. 232–239. On Heisenberg's ideas on policy advice, see Carson, "New Models," 1999, pp. 148–153, p. 165, p. 168.

119 Robinson, "Crucified on a Cross," 2011, pp. 317–318.

to engage more intensively in the informal diplomacy of the Pugwash Conferences in the future.¹²⁰

Weizsäcker spoke on his own behalf with Kissinger, who had also traveled to Marienbad as a Pugwashite, about a Plan B for the—actually impending—scenario where the PSAC model couldn't be realized in the Federal Republic: the model of the RAND Corporation, essentially an independent think tank.¹²¹ Whatever the specifics of their discussion might have been—it is documented that from that point on, they shared a lasting friendship. Kissinger was enthusiastic in supporting the concept for a Max Planck Institute, which Weizsäcker developed over the subsequent months.¹²²

Weizsäcker found wholehearted backing from the top figures at MPS. Both Heisenberg and Butenandt had consistently held onto their vision, birthed in the post-war era: to introduce themselves and the MPS as champions of “rational thought,” offering guidance in national politics.¹²³ They had always lamented letting Weizsäcker accept a philosophical professorship, especially if they couldn't keep him in Munich.¹²⁴ They missed the scientist-turned-

120 See Weizsäcker, *Bericht Pugwash-Tagung*, 1984; Weizsäcker, *Der bedrohte Friede*, 1983, 458. Wirtz from KfK, a student of Heisenberg, and his colleague Wolf Häfele, the project leader of the Fast Breeder Reactor Kalkar, also contributed to the VDW statement: VDW Communiqué from the Executive Board and Working Committee of the VDW May 2, 1967, PA AA B 43-REF. 302/II8/UA IIB/209. On June 16, 1967, Weizsäcker reported to an AA employee about the Pugwash Symposium and agreed to continue explaining the “official German position on disarmament and arms control issues,” which “coincided with his personal opinion,” at Pugwash meetings (Record of the meeting with Weizsäcker June 19, 1967, PA AA B 43-REF. 302/II8/UA IIB/209). In fact, Weizsäcker did not participate in another symposium until 1976, namely the Symposium on Problems of Military-Oriented Technologies in Developing Countries in Feldafing, Bavaria, and then in the grand 27th PCSWA in Munich in 1977, organized by the West German Pugwash Group to mark their 25th anniversary. Until 1985, he took part in three more smaller workshops. See Pugwash Conferences on Science and World Affairs: Participants and meetings, 1957–2007, <https://pugwash.org/history/resources/>, last accessed on Sep. 15, 2021; Eisenbart, *Nichtverbreitung von Atomwaffen*, 2009, pp. 292–293. See also Sachse, *MPS und die Pugwash Conferences*, 2016, pp. 32–33; Sachse, “The Max Planck Society and Pugwash during the Cold War, 2018,” pp. 197–199.

121 Abella, *Soldiers of Reason*, 2009; Brandstetter, Pias, and Vehlken, “Think-Tank-Denken,” 2010.

122 Gottstein, “Die VDW,” 2009, 373. Sachse, *MPS und die Pugwash Conferences*, 2016, pp. 33.

123 Carson, “New Models,” 1999, pp. 144–145 describes how Heisenberg, after the failure of the DFR, tried to convince every new federal government of the necessity of a scientific advisory circle at the highest government level and even considered becoming the Bavarian Minister of Culture in 1964 as the successor to Theodor Maunz, who had to resign due to his now problematic Nazi past.

124 Butenandt to Heisenberg on Dec. 13, 1956 and Heisenberg's reply on Dec. 14, 1956, AMPG,

philosopher and his adeptness in diplomacy. He had brilliantly applied the intricate principles of nuclear uncertainty to politics and showed great adaptability—evident from his shifting stance on the Göttingen Declaration in 1957/58, his measured involvement in the VDW, and his discreet approach to the Pugwash Conferences (→ 4.1, 4.2).¹²⁵ They even toyed with the idea of Weizsäcker potentially succeeding Butenandt as the next MPS president.¹²⁶ After nearly a decade as a professor in Hamburg, being the leading intellectual force behind the turbulent VDW—a body caught between its traditionally conservative academic members and its younger, more rebellious staff aligned with student protests—Weizsäcker was eager to get back to deeply focused and thoughtful work.¹²⁷ He was passionate about examining the prerequisites for a “federative world state”—in his eyes, the sole sustainable model for lasting world peace. And what better place to pursue this than in his own Max Planck Institute?¹²⁸

However, even this Plan B underwent a decidedly un-American twist as it progressed through the committees of the MPS.¹²⁹ The institute that emerged from the two-year controversies of 1969/70, eventually christened the MPI for the Study of Living Conditions in the Scientific-Technical World (MPIL, Max-Planck-Institut zur Erforschung der Lebensbedingungen in der wissenschaftlich-technischen Welt), was tailored strictly to Weizsäcker’s directorial role, following the Harnack Principle. Politically, it bore no resemblance to the PSAC, its members appointed by the U.S. president, and its chairperson serving as a personal advisor of the president. At best, its expansive scope of global issues mirrored the RAND Corporation. The range spanned topics from global

III. Abt., ZA 116, K 7: Butenandt tried with Heisenberg’s support but in vain, to have the philosophical faculty of the University of Munich appoint Weizsäcker to ward off his call to Hamburg. Heisenberg still hoped that Weizsäcker would come to Munich and wanted to offer him the position of deputy director at his MPI for Physics in that case, Heisenberg to Hahn on Jan. 16, 1957, AMPG, II. Abt., Rep. 111, No. 243.

125 On Weizsäcker’s political role in and for the MPS see Sachse, *MPS und die Pugwash Conferences*, 2016, pp. 15–20, pp. 29–33. Kant and Renn, “Weizsäcker,” 2014. On Weizsäcker’s concept of ambivalence see Laitko, “Das Ambivalenzkonzept,” 2014.

126 Leendertz, “Ein gescheitertes Experiment,” 2014, p. 250.

127 Bieber, VDW, 2009.

128 Weizsäcker, *Der bedrohte Friede*, 1983, p. 208. See also Sachse, *MPS und die Pugwash Conferences*, 2016, p. 20. Among others, Einstein, Szilard, Pauling, Sakharov, Russell, Churchill, Gandhi, Nehru, Martin Luther King, and Camus are attributed to the World Federalist Movement (WFM), founded in 1947, see Wittner, *Struggle Against the Bomb*, vol. 2, 1997, p. 465. For the debate on this in the *Bulletin of the Atomic Scientists* (BAS) see Slaney, “Eugene Rabinowitch,” 2012, pp. 125–128.

129 For more details, see Sachse, *MPS und die Pugwash Conferences*, 2016.

food security, population control, societal impacts of biological research, structural challenges of highly industrialized societies, the “conceptual horizon” of modern military strategy, to the future structure of Europe and the institutions needed for “global peace.” Yet, the intent was not to dissect these vast themes into manageable projects, as commissioned research for governmental or supranational entities, and to then distill them into science-based policy recommendations. Instead, the focus was on exploring topics chosen for their “direct practical relevance” using “abstract foundational sciences like game theory and system theory.” The aim was to foster “responsible and comprehensive reflection” and to equip science with the capability to “examine its own impact using its own methods.” In this spirit, the institute was to conduct basic research, befitting of an MPI’s role.¹³⁰ Some of these thematic clusters had already been touched upon in Weizsäcker-led research center at the VDW in Hamburg. However, now the plan was to delve deeper, within adequately resourced projects.

Weizsäcker envisioned his role as synthesizing the outcomes produced by various workgroups, aspiring to formulate a blueprint for a “*Weltinnenpolitik*” (World Domestic Policy).¹³¹ To counteract doubts about the feasibility of such a program, he pointed to potential collaborations with international partner institutions. Among those he mentioned were the RAND Corporation, notable centers at Harvard University, especially Kissinger’s Center for International Affairs, and pertinent European institutes in cities such as London, Paris, Stockholm, and Prague, as well as domestic institutions. This proposal, naturally, had the endorsement of figures like Heisenberg, Weizsäcker’s colleague from their Strasbourg days, Heimpel, his companion from Farm Hall, Walter Gerlach, co-signatory of the Tübingen Manifesto, Klaus von Bismarck, and the physician Wolfgang Bargmann. Bargmann had played a significant role in the founding of the University of Bremen, subsequently served on the MPS Senate for a few years, and was actively involved in the VDW.¹³²

130 All quotes, “Vorschlag zur Gründung eines MPI zur Erforschung der Lebensbedingungen der wissenschaftlich-technischen Welt,” Nov. 1, 1967, AMPG, II. Abt., Rep. 9, No. 13, fol. 207–216. The text was mainly composed by Weizsäcker; co-signatories were Wolfgang Bargmann, Klaus v. Bismarck, Hermann Heimpel, Walter Gerlach, and Heisenberg.

131 On the significance of this term, created by Weizsäcker in 1963, see Bartosch, *Weltinnenpolitik*, 1995.

132 “Vorschlag zur Gründung eines MPI zur Erforschung der Lebensbedingungen der wissenschaftlich-technischen Welt” from Nov. 1, 1967, AMPG, II. Abt., Rep. 9, No. 13, fol. 207–216. For the historical classification of the institute concept, see Seefried, “Ohne Atomkraft leben?” 2014, pp. 391–398.

Nevertheless, the objections to this foundational plan, particularly those raised by business representatives in the MPS's administration and senate, were vigorous. The contention was that such political consultancy did not belong within the MPS. Furthermore, the highlighted challenges could only be addressed through advancements in medicine, science, and technology, not by verbose theorizing. These objections compelled Weizsäcker to make concessions, which he did in consultation with a specially appointed advisory group. This eleven-member committee, in addition to Weizsäcker and the president of the MPS, included four MPI directors who had attended the German-American meeting in Munich in early 1967.¹³³ Within this group, consensus was also reached on the demands for international experts—a relatively simple task when compared to addressing the persistent reservations of the business representatives in the MPS Executive Council. These representatives feared the establishment of what they perceived as a completely unfitting and ideologically charged research direction for the MPS. Aside from Kissinger, all five who were consulted as international reviewers promptly sent overwhelmingly positive opinions, although their remarks were notably short from today's perspective. Only Emmanuel Mesthene, who led a similar program on Technology and Society at Harvard and was not personally acquainted with Weizsäcker, delved deeply into Weizsäcker's program and the feasibility of his concept.¹³⁴

Having honed their arguments through consultations with the advisory group and bolstered by international expert opinions, Butenandt and Weizsäcker entered the final showdown at the Humanities Section (GWS) on February 11, 1969. The task for the GWS was to decide whether they would actually integrate the new institute, which the Senate had already fundamentally endorsed in November 1968, and appoint Weizsäcker as its director. After several hours of debate, both the president and the petitioner emerged victorious.

133 Members of the Advisory Circle: Coing, Eigen, Gentner, Gierer, Heimpel, Heisenberg, Lotz, Schlögl, Schlüter, Weizsäcker, Westphal; Chair: Butenandt. For the internal resistance mainly from Wurster and Winnacker and further negotiations up to the founding resolution, see Leendertz, "Ein gescheitertes Experiment," 2014, 245–249. Regarding the controversial advisory function of the Starnberg Institute, see also Kant and Renn, "Weizsäcker," 2014.

134 The other reviewers were: Raymond Aron (École Pratique des Hautes Études, Paris), J. B. Adams (United Kingdom Atomic Energy Authority, Harwell), C. J. F. Böttcher (Raad van Advies voor het Wetenschaapsbeleid, 's-Gravenhage), Alastaire Buchan (Institute for Strategic Studies, London). See Butenandt to Buchan and all other reviewers from Feb. 8; Reviews Aron Feb. 12; Buchan Feb. 15; Kissinger Feb. 21; Böttcher Feb. 28; Adams Feb. 28; Mesthene March 6, 1968, AMPG, II. Abt., Rep. 66, No. 2359, fol. 327–341, 326, 297–298, 289, 287–288, 285–286, 279–281.

In March 1969, the Scientific Council and Senate of the MPS endorsed this decision.¹³⁵

The Mission: A Scientific Understanding of the World

The narratives of the founding of the Becker Institute and the Starnberg Institute are crucial to understanding the foreign science policy of the MPS during the extended 1960s for several reasons. First, they demonstrate that its leadership did not merely capitalize on this “formative phase” of the MPS, as aptly termed by Jaromír Balcar, to significantly expand its core natural (and legal) scientific research agendas.¹³⁶ Instead, the MPS positioned itself in both educational and foreign policy realms, maintaining a critical distance from the Bonn government’s policies. Beyond the expert advice sought by political decision-makers, the MPS asserted its authority to voice its scientific perspectives in the political arena.

Secondly, in these founding initiatives, a network of individuals sprang into action. Undoubtedly, its core consisted of prominent MPS members like Heisenberg and Weizsäcker. Still, it extended to all scientific sections of the MPS and beyond its institutional boundaries, reaching into foreign policy, educational policy, and church circles. Notably, it could rely on the active support of Butenandt, who had been serving as the MPS’s president since 1960. These actors shared a vision of a special bond between politics and science. Their conception wasn’t content with the responsibility of scientists for the societal repercussions of their research, a topic debated on both sides of the Atlantic since the atomic bombings of Hiroshima and Nagasaki. Instead, these West German actors pursued a scientific understanding of the world. They wanted to substantiate this understanding by “foundational research,” as Weizsäcker put it, using the MPS’s capabilities and then act as its appointed heralds in the political realm.

Thirdly, with the establishment of these two institutes, the MPS for the first time formalized its claim to such a “foundational research” policy consultancy role, a claim that KWS heavyweights Heisenberg and Butenandt had already articulated as the Third Reich was collapsing. More specifically, this claim was now internalized by the MPS in the form of research institutes focused on social and foreign policy. This was because all previous attempts made in collaboration with colleagues outside the MPS and at the national level had either failed

135 Protocol of the GWS from Feb. 11, 1969, AMPG, II. Abt., Rep. 62, No. 1424, pp. 3–42. Protocol of the 62nd Senate Meeting from March 7, 1969, AMPG, II. Abt., Rep. 60, No. 62.SP, fol. 19.

136 Balcar, *Wandel*, 2020, pp. 244–247.

or produced undesirable outcomes: first the DFR, then the extra-parliamentary atomic and foreign policy interventions from Göttingen and Tübingen, and finally the VDW. Against this backdrop of experience, President Butenandt, who had a political bent, hoped that these institutes would essentially serve as two advisory departments. He expected them to counsel him in matters of educational and foreign science policy, while also exerting an influence on the politics and society of the Federal Republic. With this, he felt that both he and the MPS were well-positioned in a time when science and politics, as many were advocating, should enter into a new, more productive relationship.¹³⁷

Ultimately, however, especially with the Starnberg Institute, and compared to the PSAC, certain idiosyncrasies became apparent during the foundation process. These made effective scientific policy advice based on the American model highly unlikely from the outset, even after the socio-liberal shift of power in Bonn in 1969. For one, a “pure” research institute within the Max Planck Society, which valued its scientific autonomy, didn’t remotely have the political status of a body directly appointed and recognized by the government. Moreover, C. F. von Weizsäcker, the main architect of the research concept and the future director of the institute, wasn’t primarily interested in providing the government with scientifically grounded decision-making aids or strategies for specific challenges. Instead, in line with the MPS’s emphasis on basic research, he aimed to deepen a philosophical-physical understanding of the world, which at best could describe the potential conditions for a distant global peace. The Starnberg Institute remained an idealistic venture at the top, while at its core, thematically, methodologically, and politically diverse research groups worked alongside and against each other, but rarely cooperatively. Nevertheless, as will be shown in the fourth chapter of this study (→ 4.2, 4.3), one or more of these groups would play a role in international peace politics.

¹³⁷ The *MPG-Tätigkeitsbericht* for the years 1970 and 1971 explicitly emphasized once more that the institute was in full accordance with “the Federal Government’s research planning” as outlined in the “Bundesbericht Forschung IV” (Federal Research Report IV) which had declared research on peacekeeping and educational reform as priorities. *MPG-Tätigkeitsbericht* 1972, p. 534. See also Kant and Renn, “Weizsäcker,” 2014, p. 234.