HOW POLITICAL IS SCIENCE ALLOWED TO BE?

It will be impossible to manage the current planetary crises without global scientific cooperation. This in turn will prove impossible without a balanced relationship and dialogue between science and international politics, specifically between scientists on the one hand and policymakers on the other. However, a look at the history of the Max Planck Society (MPG) shows that the links between science and foreign policy have more often served strategic national and alliance policy interests rather than the global welfare of humankind. Following from this, the MPG did not consider itself to be a major player in international science diplomacy for a very long time, as historian Carola Sachse reports in her new book.

INTERVIEW: CHRISTINA BECK

Ms. Sachse, you write in the introduction to your book Science and Diplomacy (*Wissenschaft und Diplomatie*) that the Max Planck Society (MPG), with its commitment to science diplomacy, has reacted late, if not too late, to a now 20-year international development. Can you elaborate on this?

CAROLA SACHSE: I carried out some interviews in 2018 at the MPG Administrative Headquarters, and the general thrust then was: no, we're staying out of it altogether. Our interest lies in facilitating relevant collaborations for our scientists wherever in the world these may be, where they look to be promising and possible. And if a specific case poses political obstacles, we try to overcome these via our contacts with ministries, embassies, and science organizations, and/or find other ways to realize the desired scientific cooperation. But supporting the foreign policy of the Federal German government as the Max Planck Society per se, in any way, was completely off the table. With this in mind, I was surprised to find a statement on the website at the beginning of 2022 which said that the MPG seeks to contribute to the science diplomacy of the German government as a matter of course.

The discussion around science diplomacy is primarily rooted in approaches from the USA.

Yes, around the turn of the millennium it began as a new attempt at *soft power policy* by the United States. Since then, science diplomacy has come to be propagated as a means to address global problems through a new kind of supranational cooperation between politics and science. Large EU-funded projects on science diplomacy are also driven by this hope. But the MPG did not participate in these projects. That said, it is possible that the expansion of earth system sciences, for example, with the establishment of the Max Planck Institute (MPI) of Geoanthropology, may turn out to provide fresh impetus in this direction.

Do you mean to say that, so far, the MPG has refused to deal with foreign policy and has resisted being co-opted to serve its ends?

At the very least, this is what the Administrative Headquarters says. However, if you take a closer look, events occasionally took a different course, especially if you think back to 1974 and the launch of the MPG's China program. Here, in a specific geopolitical situation and in consultation with the West German government, the MPG played a traditional diplomatic role. Without the MPG, it would not have been possible to establish scientific relations with the People's Republic of China at all.

 \rightarrow

YEARS

51

German Chancellor Helmut Schmidt and Max Planck President Reimar Lüst at the General Meeting of the Max Planck Society in 1982.

Aax Planck Research · 3 | 2023

In Adolf Butenandt, however, you had a President who wanted to play a very active role in science policy. In your book, you write about the reform of the statutes in the early 1960s: "The MPG needed leadership that could act and make decisions in domestic and foreign policy." And you go on to say: "Butenandt wanted to use the weight of his new position to influence science policy."

From our work on the Kaiser Wilhelm Society under National Socialism, I knew Butenandt to be a highly problematic figure. He remained controversial long after that period, including within the MPG. But in the 1960s, some developments took place that I found rather

the work done at the Starnberg Institute and policy consultation as understood in the United States.

Yes, you could see it that way, even if Carl Friedrich von Weizsäcker himself preferred to speak of foundational research for a global domestic policy (Grundwissenschaft für eine Weltinnenpolitik) that would be crafted in Starnberg. This was a particular and rather peculiar understanding of policy consultation that linked Weizsäcker to Hahn, Butenandt, and Heisenberg. This referred to the inherent rationality of the scientific persona and they felt compelled to use this scientific worldview to demonstrate the rational perspective to politicians who - in their view – were driven by rather irrational

ing recently stabbed the government in the back by signing the Göttingen Manifesto of 1957 with its warning against arming the Bundeswehr with nuclear weapons. Accordingly, senior politicians had little time for advice offered by these elite scientists.

Is it fair to say that with the Göttingen Manifesto, Weizsäcker et al. pretty much incensed the Federal German government of the time?

Yes, and it goes further than that. In my opinion, what was more significant in terms of shaping the relationship between science and politics in the Federal Republic than the Göttingen Manifesto, which Weizsäcker revoked barely a year later, was the much less well-

"Policy consultation of the kind that has long been common in the US has never existed in the Federal Republic – despite a plethora of expert advisory councils sprouting up."

CAROLA SACHSE

surprising: Butenandt – as a science manager concerned with junior scientists, but also as the father of seven children – had a strong interest in educational policies and pushed through the founding of the Max Planck Institute for Human Development against considerable opposition. Likewise, he supported the founding of the Starnberg Institute (MPI for Research into the Living Conditions of the Scientific and Technical World) with the hope of creating an Institute that could help secure world peace.

The comparison you made with policy consultation in the USA is interesting. Certainly, it would be hard to draw parallels between

campaign promises from one election cycle to the next. Policy consultation of the kind that had been customary in the United States for a long time and that had been practiced within the Presidential Scientific Advisory Committee (PSAC) since the early 1950s, especially in the wake of the Manhattan Project, never existed in the Federal Republic of Germany, despite the country's abundance of expert advisory boards. Starnberg had no understanding of or interest in the advisory work of the PSAC. Nor did the West German federal government, at least until the late 1960s, have any interest in soliciting such advice. Moreover, elite scientists unaccustomed to the business of politics were also seen in Bonn as hav-

known Tübingen Memorandum of 1961/1962. Here, an overly strong link between this statement and the MPG was avoided by using the research facility of the Protestant Church as the postal address. But senior MPG figures were significantly involved in this memorandum which denounced West German foreign policy vis-à-vis the two German states and the former Eastern Territories. Controversially, it called for foreign policy realism and, for the first time, gave public voice to the argument that the Oder-Neisse line and the existence of the two German states had to be accepted. At the time, this was an absolute taboo, that even the opposition party, the SPD, dared not express in public. At any rate, the



Tübingen Memorandum came to serve as a significant catalyst for the new Ostpolitik put forward in 1969 by the first social-liberal federal government under Willy Brandt.

What changed with the political shift to social-liberal governments and the policy of détente in the 1970s, and with the change in the MPG presidency from Butenandt to Lüst?

Things changed, but not in the way you might expect. When Lüst took office in 1972, Brandt was still Chancellor. The new foreign policy envisioned in the Tübingen Memorandum had been quickly implemented via a series of treaties with Warsaw Pact states. You would think that this meant that cooperation was thriving at this point between the MPG and the social-liberal governments. However, the new Ostpolitik did not make it any easier for MPG scientists to collaborate with their Soviet counterparts - something which elsewhere, working together with colleagues from a range of countries, they greatly valued, particularly in the big science projects in astrophysics, space research, radio astronomy, and plasma physics. Rather, Helmut Schmidt's government, which took

power in 1974, wanted to use research cooperation between the MPG and the Soviets - equally valued by the Soviets - as political leverage to extract concessions from Moscow on its policy towards Germany, especially regarding the political status of Berlin. Nothing changed in this regard until the Gorbachev era. On the contrary, with the Soviet invasion of Afghanistan in 1979 and the end of détente, things became even more difficult. For the MPG, everv major project involving Soviet colleagues ran up against Bonn's foreign policy: this meant that the MPG was by no means free to make its own decisions about bilateral research.

Under Reimar Lüst's presidency, only scientific factors were considered when making decisions about collaboration.

Correct. In the 1970s, the Administrative Headquarters began to redefine the MPG's relationship to national as well as European and international politics. The conflicts with the Federal German government over research cooperation with Soviet institutes may have been one reason for this. But other factors came into play, above all the national economic picture, especially the problem of persistent stagflation: savings had to be made. If you wanted to do something new, something else had to be cut. In commerce, you would say: "you have to focus on the core business." For Lüst and many of his colleagues, particularly from the physical-technical institutes, this meant the largescale, expensive projects which could only be funded through bi- or multilateral collaborations. For them, foreign policy restrictions were obstacles to scientific advances. In this context, it was a useful tactic to insist on a strict separation between politics and science.

Nonetheless, Lüst worked closely with Helmut Schmidt.

Yes, a lifelong friendship developed between them – despite their opposing ideas about the relationship between science and politics. Lüst was focused on securing resources for the Max Planck Institutes. On the one hand, he refrained from subjecting politicians to unsolicited scientific worldviews and wisdom. On the other hand, he did not want to be told by politicians which research directions should be taken up, intensified, or discontinued within the MPG. Rather, he defended - perhaps even more puristically than his predecessors - the understanding established in the post-war period in the Federal Republic, that basic research is driven solely by the desire for knowledge. This had also legitimized the internationally unique institutional autonomy of the MPG. The closure of the Starnberg Institute and the restructuring of the MPI for Human Development around 1980 - namely, the two politically-oriented institutes founded under Butenandt – fit into the strategy of drawing a line between science and politics.

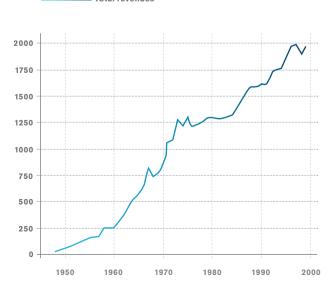
Helmut Schmidt, on the other hand, certainly expected consultation from science when he was Chancellor?

Yes, Schmidt expected science to provide him with insights into highly complex scientific matters and social processes. In arguing for this, he drew on Weber's ethics of responsibility: How can I, as a politician, especially as a head of government, make ethically and po-

GRAPHIC: GCO BASED ON A TEMPLATE BY PD DR. JAROMÍR BALCAR / MPG

MPG budget 1949-1998 (adjusted for inflation): The persistent stagflation in the mid-1970s forced the Max Planck Society to economize – if you wanted to start something, you had to stop something else.





53

litically responsible decisions based on the broadest possible foundation of knowledge, especially scientific knowledge? He expected science in general and the MPG in particular to provide him with this knowledge. In his inaugural speech as chancellor at the General Meeting of the MPG in 1975, Schmidt emphasized that science had a duty to deliver - a phrase that can be heard frequently today in debates on climate change.

And this is where Lüst drew the line?

Lüst insisted that the MPG should not be seen as having such responsibility. As a basic research institution,

he said, the MPG cannot directly advise policymakers because it could not offer any insights that can be ap-

plied politically. In 1982, Schmidt again made the point about the responsibility of scientists to deliver in terms of knowledge and insights when he spoke at the MPG Annual General Meeting for the second and last time as Chancellor. This was challenged by Lüst who countered that instead of just seeking expert opinions on everything and anything, politicians should engage seriously with scientists. Schmidt stood his ground. As he put it, scientists should "strive to possess an orderly overview." He went on to say that those who had the extraordinary privilege of being able to turn their hobby into a profession should be aware of their social responsibility towards those who worked in the factories who actually provided the means for science. Scientists not only owed society highly specialized scientific excellence, but should also provide an "overall view." In essence, Schmidt demanded from the MPG exactly what Heisenberg, Butenandt, and Weizsäcker had claimed for themselves 20 years earlier, but which in the meantime the MPG had removed from its portfolio as it swiveled into the process of social differentiation.



The book Science and Diplomacy (Wissenschaft and Diplomatie) by Carola Sachse is available as an open access publication at:



This exchange of blows was really very exciting.

Yes, in the Lüst and Schmidt eras, the relationship between science and politics remained hotly contested. But that ended in the 1980s. For Lüst's successor, Heinz Staab, it was a simple matter of blocking anything that brought the MPG close to politics. One example of this came in connection with the clarification requested by some West German politicians about the feasibility of the Strategic Defense Initiative (SDI) announced by US President Ronald

Reagan in 1983. Where else in the Federal Republic of Germany was such knowledge concentrated other than in the MPG? Was there anyone in the Staab also claimed that there was insufficient expertise within the ranks of MPG scientists to evaluate the SDI program – something that was seen quite differently by members of the research staff in the Chemistry, Physics and Technology Section.

Hans-Peter Dürr, Director at the Werner Heisenberg Institute, for example, dealt intensively with the SDI program and also penned a long article in *Der Spiegel* on the subject.

Citing the US Union of Concerned Scientists, Dürr tried to prove that the SDI program could not be implemented so quickly and, if at all, only at immense cost. Above all, he contradicted Reagan's promise that an appropriate shield could effectively protect against nuclear bombs. The highly sensitive satellites would first have to be developed for this purpose and, said Dürr, be faster and cheaper to destroy than they were to manufacture. This put him on a collision course with the Federal German government led by

"Lüst parried the thesis of science's duty to deliver with the politicians' duty to collect."

CAROLA SACHSE

country who knew more about space than the highly qualified astronomers, astrophysicists, and radiochemists working in the relevant Max Planck Institutes? However, Staab was adamant that the MPG would not engage in military research. In any case, he said, the MPG'S dedication both to basic research and to the prompt publication of research findings was wholly incompatible with military secrecy regulations. Helmut Kohl – but also with the MPG leadership, which reprimanded him. On several occasions Dürr was held up in front of the entire MPG as a cautionary example of political dilettantism. In 1987, when Dürr was awarded the Alternative Nobel Prize for his commitment to peace and environmental policy, Staab went so far in his handwritten letter congratulating Dürr to spell out again that, as an MPI director, he



had to keep the roles of citizen and scientist separate. Under no circumstances should he appear as an MPI Director in the public realm.

At the same time, it is illusory to assume that one speaks publicly as a citizen without mentioning one's title.

What is more, to insist on such a separation would not do any good. The media rarely refrain from presenting an MPI Director outside the context of his/her role at the MPG. MPI DirecThe question of role separation remains fraught – for Paul Crutzen, with climate research, research that shows where the problems are and what needs to be done.

This citizen/scientist separation remains deeply fraught. Crutzen and his colleagues at the Max Planck Institute for Chemistry in Mainz were thrust onto the international political stage by their research findings. Crutzen, as he himself said, would have preferred to explore the laws of nature in a clean atmo-

"A voice like the MPG's is needed in the political discourse."

CAROLA SACHSE

tors are always perceived as representatives of the MPG. Even at the employee level, this could not always be prevented. Hans Zacher, an expert in social law, had to explain to Lüst and Staab, that attempting to stop its members (and staff) from making public statements, resolutions, or newspaper advertisements, would harm the public image and international reputation of the MPG. Zacher reminded Lüst and Staab of historical precedents. And indeed, when speaking out, MPG scientists referred to the older MPG generation, now emeritus or deceased, who had taken a public stand in the 1950s and 1960s, for example, with radio appeals against nuclear armament, with the Mainau Manifesto, the Göttingen Manifesto, or the Tübingen Memorandum. The rebellious younger generation of MPG scholars, as well as Dürr, situated themselves within an MPG tradition that came under increasing challenge during the Lüst and Staab presidencies.

sphere, in its original state, so to speak. Unfortunately, however, this was not to be. It was neither possible nor practical to factor out anthropogenically induced changes. The results of this 'impure' research left him deeply shaken. To his mind, they left him little choice but to bring them to public light and into political debate. He did this primarily within the framework of the International Council of Scientific Unions, an organization highly regarded by the MPG, and later through popular scientific publications. And, when it came to the thorny issue of activities in the public realm, it goes without saying that the MPG leadership would handle their Nobel Prize-winning colleague, Crutzen, very differently to a colleague awarded only an Alternative Nobel Prize (Dürr).

Is it understandable that the MPG has always exercised so much restraint? Given the primacy it accords scientific cooperation, does the MPG perhaps sometimes underestimate the adverse effects associated with such restraint?

One can explain the historical reasons why the MPG came to define itself perhaps against its better judgment - as a zone that was to be kept as free from politics as possible. How to evaluate this today is another question. It was rumored that, during his (recently ended) presidency, Martin Stratmann missed the presence of political intellectuals within the MPG. In hindsight, we can see how from the 1970s on they were steadily marginalized. One can only hope that this will change again. I would like to see the MPG take an assertive stance when dealing with the knowledge that there never has been and never will be a politics-free space for pure basic research, and not to shy away from tackling political challenges in public. This applies all the more to international scientific cooperation, because universal science and research are directly and deeply affected by the shifting political contingencies of international relations. We currently see this in the case of two of the most important partner countries of the MPG, namely, Russia and China. A voice like that of the MPG is needed in the political discourse surrounding the political ambiguities of international scientific cooperation. ←

THE RESEARCH PROGRAM "HISTORY OF THE MAX PLANCK SOCIETY"

From 2014 to 2022, independent historians reconstructed the development of the Max Planck Society between 1948 and 2002, placing the history of the MPG within the contemporary history of the Federal Republic and in the context of European and global developments.