Confronting the German Problem: Pugwash in West and East Germany, 1957–1964

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This chapter explores the early history of the Pugwash organization in East and West Germany.¹ It begins by tracking the formation of each German national group and examining the different patterns of participation of East and West German scientists in the early conferences. It then explains how and why, under the auspices of Pugwash, East and West German scientists began a new dialogue with each other in the early 1960s. It identifies the London Conference in 1962 as a turning point for East German participation in Pugwash and for German-German relations in Pugwash. The analysis highlights the importance of the European Pugwash Group, a pan-European network active between 1959 and 1964, in bringing about these developments. For the Europeans, this was part of a wider strategy to foster stronger engagement within Pugwash with the "German problem" and its corollary, European security. These entwined issues were of paramount concern to Europeans within Pugwash, especially in the wake of the Berlin crisis. In effect, the "German problem" came to serve as a rallying point for East and West European scientists as, from 1961–1962 onwards, they began to make their presence felt much more strongly within Pugwash.

This growing European influence was apparent at conferences – in the organizing themes, the plenary program, and the issues discussed within Working Groups. It was manifest too in the inclusion from 1962 onwards of Europeans on the Continuing Committee, and by the creation in 1965 of a Study Group dedicated to European Security.² In ways not yet fully understood, this

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² Joseph Rotblat, *Scientists and the Quest for Peace. A History of the Pugwash Conferences* (Cambridge, MA: MIT Press, 1972), 88–90.

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'European turn' was linked to a marked shift in the content and tone of statements issued from Pugwash conferences that began to voice trenchant criticisms of the Western alliance, including West Germany, over the situation in the Central European region. This first became apparent at the eleventh and thirteenth Conferences held in Dubrovnik in 1963 and in Karlovy Vary in 1964 – and would create serious tensions within Pugwash and, externally, sparked resurgent criticism of it in the West, especially in the US.³

All of this poses a new set of questions about the significance of East and West German participation in Pugwash. How, why and to what end was the Pugwash organization able to foster dialogue between East and West German scientists? How important was German participation and the "German question" for the 'European turn' and in shaping the development of Pugwash in the early 1960s? How did both relate to a shift in the Pugwash agenda towards a new focus on the political problems engulfing the Central European region? What can we say about the power relations between the Pugwash leadership and European Pugwashites?

This chapter is a first attempt at tackling these questions using hitherto untapped archival sources.⁴ Research into post-WW11 science in East Germany and the experiences of its scientists includes that by Kristie Macrakis and Dieter Hoffmann, and by Dolores Augustine.⁵ However, very little is known about Pugwash in East Germany and those scientists actively involved in it, and about how they negotiated their relationships with each other, with the state and with fellow Pugwashites – a gap that this chapter begins to address. There is a larger, if still small, literature on West German Pugwash, notably that by Götz Neuneck and Michael Schaaf, and more recently by Carola Sachse, which has emphasized and explored its relationship with the Max Planck Society (MPS).⁶ By contrast, the present study reveals and explores the non-MPS

³ On the response in the US to Karlovy Vary, see the chapter by Paul Rubinson in this volume.

⁴ This includes materials relating to Pugwash held in the collection of Sir Joseph Rotblat (henceforth: RTBT), at the Churchill Archives Center, University of Cambridge, in the UK, and sources held at the Bundesarchiv, Koblenz, and at the Berlin-Brandenburg Academy of Sciences, Berlin.

⁵ Kristie Macrakis and Dieter Hoffmann, eds. *Science under Socialism. East Germany in Comparative Perspective* (Cambridge, MA: Harvard University Press, 1999). Dolores L. Augustine, *Red Prometheus: Engineering and Dictatorship in East Germany, 1945–1990* (Cambridge, MA: MIT Press, 2007).

⁶ Götz Neuneck and Michael Schaaf, eds. Zur Geschichte der Pugwash-Bewegung in Deutschland. Symposium der deutschen Pugwash-Gruppe im Harnack-Haus Berlin, 24 February 2006 (Berlin: Preprint 332, Max Planck Institute for the History of Science, 2007). Carola Sachse, "Die Max-Planck-Gesellschaft und die Pugwash Conferences on Science and World Affairs, 1955–1984," Max Planck Institute for the History of Science, Preprint 479, Berlin 2016; "The Max Planck Society and Pugwash During the Cold War: An Uneasy Relationship," Journal of Cold War Studies (JCWS) 20, no. 1 (2018): 170–209.

dimensions of West German Pugwash, highlighting in particular the willingness of physicists Gerd Burkhardt and Werner Kliefoth to enter into dialogue with East German colleagues and discuss with them, and others, the "German problem." Insofar as the sources currently allow, the chapter explores the motives, words and actions of East and West German scientists.

This chapter also uses the German cases to explore the internal dynamics of Pugwash, including the interplay between individual Pugwashites, national groups and the Continuing Committee. In so doing, it casts new light on the informal *modus operandi* of Pugwash which developed in tandem with the network-like organization taking shape around the conferences; the analysis emphasizes the importance of both to the transnational character of the PCSWA and the ability of its scientists to work across the blocs. In turn, this illuminates its role as a forum for the kinds of exchanges and encounters which, in this period, came to be grouped under the rubric of 'soft' or 'Track II' diplomacy.⁷ This study reveals the pivotal role of Joseph Rotblat in fostering German-German dialogue and in finding ways and means to discuss the German problem. In so doing, it offers a new perspective on his powerful influence over Pugwash – whilst the difficulties flowing from the 'European turn,' apparent especially at Karlovy Vary in 1964, also make clear that there were limits to this influence.

More broadly, the analysis underlines how the evolving character of Pugwash and its changing agenda cannot be understood in isolation from the wider geopolitical context of the Cold War. Important here was the increasingly uneasy political situation within each German state and the tense relations between them. In East Germany, the Sozialistische Einheitspartei Deutschlands (SED) was struggling amid Walter Ulbricht's increasingly fraught relations with Moscow.⁸ Meanwhile, in Bonn, the closing years of the Adenauer administration were marked by pressure from a younger generation of politicians, including Willy Brandt and Helmut Schmidt, for whom the Berlin Wall signaled the failure of Adenauer's "policy of strength," and who began to argue for a reconsideration of relations with East Germany, not least the Hallstein Doctrine.⁹ The partition of Germany was simultaneously a symbol of the ideological divide, a flashpoint in superpower relations, and at once

⁷ Peter L. Jones, *Track 11 Diplomacy in Theory and Practice* (Stanford, CA: Stanford University Press, 2015).

⁸ See, for example, various chapters in Macrakis and Hoffmann, Science under Socialism.

⁹ William Glenn Gray, *Germany's Cold War. The Global Campaign to Isolate Eastern Germany*, 1949–1969 (University of North Carolina: Chapel Hill and London, 2003). Mary Elise Sarotte, *Dealing with the Devil. East Germany, Détente, and Ostpolitik*, 1969–1973 (Chapel Hill and London: The University of North Carolina Press, 2001). For a discussion of the terminology

a theatre and engine for their rivalry. For Germans, it was both a searing reminder of the National Socialist past and a haunting reminder of an imagined future of a reunified Germany. More broadly, the "German problem" – the morass of acutely sensitive issues deriving from the division of Germany, most prominently German reunification, the Eastern borders, and rearmament – was a fundamental and on-going source of tension and instability within Europe.

The Berlin crisis further ignited these issues even as the superpowers worked towards the Limited Test Ban Treaty (LTBT).¹⁰ For Allen Pietrobon, the period 1962–1963 witnessed "one of the largest pendulum swings in attitudes of the entire Cold War period," destabilizing relations across and within the blocs.¹¹ The LTBT of August 1963 was followed by a shift in disarmament negotiations towards a focus on what superpower "disengagement" in Europe might look like, and ideas about the creation of denuclearized or "atom free" zones in the region, with much greater attention paid to the problem of nuclear non-proliferation.¹² These geopolitical developments were strongly reflected in Pugwash. As the two Germanies became ever more prominently a central battleground of the Cold War, so efforts to build bridges between East and West German scientists assumed new importance and urgency within Pugwash. This was the context in which German and also other European scientists mobilized as they sought ways to make Pugwash a forum for issues of concern to them, most immediately the "German question". To this end, getting East and West Germans together around the Pugwash table was a first priority.

1 Pugwash in Europe: Engagement, Concerns, Influence

In late 1957, the handful of scientists seeking to build on the inaugural meeting that July in Nova Scotia were keen to emulate the international, crossbloc character of that gathering. The British scientists – Bertrand Russell, Cecil

issues inherent in talking about East and West Germany, see xv–xvi. Hans-Peter Schwarz, "The Division of Germany 1945–1949," in *The Cambridge History of the Cold War* eds. Melvyn P. Leffler and Odd Arne Westad, Volume I (Cambridge: Cambridge University Press, 2010), 133–153.

Vojtech Mastny, "The 1963 Test Ban Treaty. A Missed Opportunity for Détente?" *JCWS* 10, no. 1 (Winter 2008): 3–25. Susan Schrafstetter, "The Long Shadow of the Past. History, Memory and the Debate over West Germany's Nuclear Status, 1954–1969," *History and Memory* 16, no. 1 (2004): 118–145.

¹¹ Allen Pietrobon, "The Role of Norman Cousins and Track II Diplomacy in the Breakthrough to the 1963 LTBT," *JCWS* 18, no. 1 (Winter 2016): 60–79, 60.

¹² Marc Trachtenberg, *A Constructed Peace. The Making of the European Settlement* 1945–1963 (Princeton, New Jersey: Princeton University Press, 1999).

F. Powell and Eric H.S. Burhop, and their Polish émigré colleague, Joseph Rotblat – had played a leading role in organizing the meeting in Canada, an influence that continued throughout the early years of the Pugwash project when, in one sense, the British were acting as a broker between the Superpowers.¹³ All those involved recognized the need to maintain momentum: at a meeting held in London in December 1957, the decision was taken to hold the second and third conferences the following year (at Lac Beauport in the spring, and Kitzbühel/Vienna in the fall).¹⁴ It was in London too that the so-called Continuing Committee (the Committee) was created which, henceforth, constituted the *de facto* leadership of the fledgling organization. Until 1962, this was made up exclusively of scientists from the US, USSR and the UK: that is to say, power and decision-making within Pugwash were initially concentrated in the hands of the superpowers, and the UK.

From the outset the leadership harbored global aspirations. At the third conference in Austria in 1958 when the Committee called for the formation of national groups as a means to realize this goal, European scientists responded readily. By 1967, twenty-two national groups had been established, predominantly within Europe – with the formation of western European groups typically predating by a couple of years those in the Eastern bloc.¹⁵ Each group enjoyed a degree of autonomy, had its own character, undertook activities within the national context, and to some extent followed its own path. Each also typically relied heavily upon one or two senior scientists, for example, early key figures in West Germany included the physicists Werner Kliefoth (1909–1969) and Gerd Burkhardt (1913-1969), whilst prominent figures in East Germany included the chemist Günther Rienäcker (1904–1989) and the physicist Max Steenbeck (1904–1981). Other European stalwarts included Hans A. Tolhoek (Netherlands), Hans Thirring (Austria), Karol Lapter (Poland), Ivan Supek (Yugoslavia), and the Czech trio, Ivan Málek, Theodor Němec and Frantizek Sŏrm. In effect, each scientist and each national group functioned as nodes in the expanding network-like structure of Pugwash that was rooted in the national yet avowedly international in outlook.

The early dominance of the Superpowers and the UK in the Continuing Committee meant that Pugwash carried within it an asymmetry that, left

¹³ Alison Kraft, "Dissenting Scientists in Early Cold War Britain. The "Fallout" Controversy and the Origins of Pugwash, 1954–1957," *JCWS* 20, no. 1 (Winter 2018): 58–100.

¹⁴ Joseph Rotblat, *Pugwash: A History of the Conferences on Science and World Affairs* (Prague: Czechoslovak Academy of Sciences, 1967), 18. On Austrian involvement in the third and the fourth conferences, see the chapter by Fengler.

¹⁵ By 1970, the number of National Groups had risen to thirty, and encompassed countries from Africa, Asia and South America. Rotblat, *Quest*, 1972.

unchecked, could potentially create a damaging core/periphery dynamic between the leadership and the Europeans. Indeed, some sense of such frustrations was occasionally discernible, for example, in a report on the Cambridge and London conferences in 1962, the West German Pugwash group noted that scientists from the smaller European countries stood on the periphery ("am Rand") of discussions wholly dominated by the US, USSR and UK.¹⁶ The creation in April 1959 of the European Pugwash Group (EPG) offered one means to facilitate European representation within Pugwash and to try to foster a balanced internal dynamic.

The EPG provided a small discussion-oriented forum where between ten and fifteen scientists from across Europe - initially, limited to western Europe - came together twice a year to discuss problems of concern to them and, significantly, in a setting outside of the conferences.¹⁷ Funded privately by wealthy Americans Martin Kaplan and James Wise, both of whom had private homes in Geneva, which sometimes served as the venue for these gatherings, the EPG met regularly on an informal basis in Geneva every six months or so between Spring 1959 and Autumn 1961, and less regularly until 1964.18 Beginning in 1961, scientists from the non-aligned countries and Eastern bloc were invited to the meetings.¹⁹ The minutes of its first meeting make clear that the EPG was initially geared to devising plans for fundraising and sharing experiences of building a national group.²⁰ However, its meetings came soon to afford opportunities for airing European views on the development of Pugwash, including planning for the Conferences, and ideas about setting up Study Groups. The EPG fostered collegiality across Europe and came, in effect, to function as a European hub that provided a powerful stimulus to an emerging cross-bloc European network within Pugwash. Tolhoek, Thirring and Lapter were all involved, as were the West Germans, Gerd Burkhardt and Werner Kliefoth who, between them, attended all its meetings.

The relationships forged through the EPG were arguably as important for the development of Pugwash in the 1960s as were those within the Continuing

¹⁶ Bericht über die 4. Mitgleiderversammlung der VDW e.V. am 27–28 October 1962 in Marburg-Lahn, 3. "Die diskussionen waren beherrscht durch Vertreter der USA und der UdSSR mit Einschaltung Grossbritanniens; die Übrigen kleinen Nationen standen am Rand." RTBT 5/2/1/11 (29).

¹⁷ Those involved came from: Austria, Denmark, France, Italy, the Netherlands, Norway, Switzerland and West Germany.

¹⁸ Miscellaneous documents and minutes in: RTBT 5/2/3/1-6.

¹⁹ Yugoslavian Ivan Supek attended the fourth meeting in April 1961, and participants at the sixth meeting in March 1963 included Max Steenbeck, Ivan Málek, Theodor Němec, and Karol Lapter. RTBT 5/2/3/4.

²⁰ Pugwash European Group, Meeting No 1, March 1959. RTBT 5/2/3/1.

Committee. Working within and across the blocs, the EPG was a rich site of transnational exchange, whilst the European circle that coalesced around it lent connectivity to the nascent Pugwash network. If the EPG enjoyed a degree of autonomy, the presence at all its meetings of Joseph Rotblat (and of future Secretary General, Martin Kaplan), ensured that the leadership kept a close eye on its activities. Only Rotblat attended all the EPG meetings and all those of the Committee, relaying the ideas, actions and work of each back and forth between them – affording one means by which he came to exercise such a towering influence over Pugwash during its early years. As Bertrand Russell's influence waned amid other commitments, political controversies and the frailties of advancing age, Rotblat assumed increasing responsibility for the day-to-day running of the organization. In 1959 he was appointed the first Secretary General of Pugwash, a role he largely defined.²¹ Early on in his tenure, this office was endowed with executive powers and accorded the only permanent seat on the Continuing Committee.

The EPG met less frequently after 1961: available records suggest that its last meeting took place in April 1964.²² By this time, European scientists had developed other ways and means of getting their views heard, including notably perhaps in the Working Groups which, from 1961 onwards, became an integral part of the Conferences. Like the EPG, these groups provided rich opportunities for cross bloc, transnational exchanges - but, significantly, also included scientists from the UK, US and USSR. The conferences were the flagship events in the Pugwash calendar. They were very much the public face of the organization, often reported in the press and on the radio, generously and favorably in the East, but typically less often and less favorably in the West.²³ That said, from the outset Pugwash was always about much more than the conferences with which it became synonymous. What took place at conferences was the culmination of on-going, year-round conversations by letter and by 'phone between senior Pugwashites, during which the venue, theme/s, participant list, program and topics/composition of the Working Groups were agreed upon. In one sense, the conferences were the tip of the iceberg, a carefully choreographed presentation of Pugwash, the outcome of an internal circuitry of private and informal communication. The German cases cast new light on how

²¹ Rotblat, Quest, 13.

²² The reasons for the demise of the EPG remain unclear, but it is likely not unconnected to the development of other fora in which European Pugwashites could come together, most obviously Working Groups at conferences, but also from 1965 onwards, the Pugwash Study Group on European Security (PSGE).

²³ See the chapter by Carola Sachse on the differing formats of the early conferences.

Pugwash worked in practice, how its emerging network-like structure rested on and was defined by personal relationships and interactions, and the dynamics underlying the novel form of quiet diplomacy preferred by the leadership which came to define its *modus operandi*.

2 Pugwash in East and West Germany, 1957–1962

The Pugwash leadership, that is to say, the American, Soviet and British members of the Continuing Committee, adopted a highly pragmatic stance in respect to the division of Germany. As Rotblat recalled in 1975, its position had been to accept "with reluctance" the partition of Germany, calling "for the recognition of the present frontiers and of a divided Germany" and, in the meantime, treating East Germany with "full equality."²⁴ To this end, conference invitations were consistently issued to its scientists. As Horst Sinderman, Chair of the East German Council of Ministers emphasized in 1976, when the country hosted its first Pugwash conference in Mühlhausen, this support was "always appreciated with gratitude" in East Berlin.²⁵ But openness towards East Germany did not translate straightforwardly into the regular participation of its scientists at Pugwash conferences. Far from it: rather, East German participation was severely curtailed by travel restrictions resulting from the Hallstein Doctrine which, in denying them entry to NATO countries, precluded their getting to conferences held in these countries. By contrast, West German scientists were highly engaged with Pugwash and active at the conferences. Cold War hostilities meant that the even-handed approach of Pugwash was, in practice, deeply uneven: East and West German involvement in and experiences of Pugwash differed markedly during its early years.

2.1 West Germany

The Pugwash project initially met with a positive response from senior West German scientists. Carl Friedrich von Weizsäcker was present at the meeting in London in December 1957 at which the Continuing Committee was created. A powerful figure within West German science and senior member of the Max Planck Society, the respected and politically well-connected von Weizsäcker

²⁴ Joseph Rotblat, "Pugwash Movement in European Affairs," 5. Lecture at Edinburgh University, 1975. RTBT G75.

²⁵ Horst Sindermann, Chairman of the Council of Ministers, Opening Address, 26th Annual Conference of Pugwash, Mühlhausen, East Germany, 26 August 1976. RTBT 5/2/1/26-1.

would, it was hoped, confer on Pugwash credibility and status in the Federal Republic, and provide a figurehead for it. This was not, however, to be.

After his 1957 sojourn to London, von Weizsäcker subsequently placed distance between himself and Pugwash – as did other MPS scientists. In the 1950s, the MPS was establishing its place as the flagship institution of West German science and had to manage carefully its relationship with the Adenauer administration. In April 1957 relations with Bonn had been severely strained by the action of some senior MPS scientists, including von Weizsäcker, Otto Hahn and Werner Heisenberg, in expressing criticisms of Adenauer's pro-nuclear weapons/NATO policies in a statement known as the Göttingen Declaration.²⁶ The ensuing backlash against the scientific elite was one factor underpinning the cautious stance of the MPS towards Pugwash. As Carola Sachse has recently shown, this ambivalence also reflected the deep suspicion of Pugwash in Bonn for several reasons, including the (potential) presence of East Germans at its meetings and the virulent anti-communism within West Germany.²⁷ For the Pugwash leadership, the failure to secure the regular participation of MPS scientists in the conferences long remained a source of frustration and disappointment.²⁸

In the Federal Republic, engaging with the PCSWA was not, then, without political complications. Nevertheless, a West German Pugwash group was formed in 1959 – one of the first national groups to be formed – which operated under the auspices of a new organization, the Vereinigung Deutscher Wissenschaftler (VDW).²⁹ In effect, the VDW provided an institutional home for Pugwash in the Federal Republic: as Werner Kliefoth put it, both were "inspired by the same intentions and attitude" and sought to deepen and mobilize scientists' awareness of their societal responsibility.³⁰ Pugwashites formed just one constituency of many within the diverse membership of the VDW which included scientists from many disciplines working in both academic

²⁶ Elisabeth Kraus, *Von der Uranspaltung zur Göttinger Erklärung. Otto Hahn, Werner Heisenberg, Carl Friedrich von Weizsäcker und die Verantwortung des Wissenschaftlers* (Würzburg: Königshausen and Neumann 2001).

²⁷ Sachse, "Die Max-Planck-Gesellschaft" and "Uneasy Relationship."

²⁸ For example: Rotblat to von Weizsäcker, 6 May 1966. RTBT 5/2/1/16.

²⁹ Stephan Albrecht, Hans-Joachim Bieber, Reiner Braun et al, eds. Wissenschaft – Verantwortung – Frieden: 50 Jahre VDW (Berlin: Berliner Wissenschaftsverlag, 2009). In this edited volume see especially: Elisabeth Kraus, "Die Vereinigung Deutscher Wissenschaftler. Gründung, Aufbau und Konsolidierung (1958–1963)," 27–71.

<sup>Werner Kliefoth, "Report of Activities of the German Group," London, 1962. RTBT 5/2/1/10
(4). The VDW Statutes are reprinted in: Albrecht, Bieber, Braun</sup> *et al*, *Wissenschaft*, 17–19.

and industrial research contexts, some of whom were neither connected to nor especially interested in PCSWA. The deep but somehow ambiguous entanglement between Pugwash and the VDW allowed for a degree of separation between them. That said, the VDW also afforded a context in which MPS scientists, including von Weizsäcker, and their non-MPS colleagues, including Pugwashites, such as Kliefoth and Gerd Burkhardt could meet, mingle and talk in an environment that was neither defined by nor wholly concerned with Pugwash. Sachse has shown that whilst von Weizsäcker kept Pugwash at arm's length, he kept a close eye on it by way of the VDW.³¹ The extent to which the VDW provided a politically expedient umbrella for the sensitive project of establishing Pugwash in West Germany remains unclear: what is clear is that the elite of the MPS were cautious about being associated with it.

As a result, West German scientists highly active in Pugwash came from outside the MPS. Prominent here were Gerd Burkhardt and Werner Kliefoth both physicists and based respectively at the Technische Hochschule in Hannover, and at the University of Kiel. Instrumental in creating the country's national group, both were also heavily involved in the VDW, each serving terms as president. Although not members of the MPS, both enjoyed political connections in Bonn, Burkhardt being friendly with Helmut Schmidt, and Kliefoth through his work for the Energy Ministry. Both were also well connected within Protestant circles, a powerful constituency within the Federal Republic. Burkhardt was particularly active at conferences, for example, giving papers in Moscow (1960) and at Stowe (1961) and, as noted, between them he and Kliefoth attended all meetings of the EPG. In 1962 they stood in the forefront of building relations with their Pugwash colleagues in East Germany. In 1959, the West German Pugwash circle included some thirty six members, a mix of MPS and non-MPS scientists, mostly physicists but also some lawyers, and they maintained a consistently strong presence at the conferences.³² Early regulars included K.A. Wolf, Eckart Heimendahl, Hermann Franz and the lawyer, Horst Afheldt, a junior but close colleague of von Weizsäcker: they regularly filed reports on Pugwash conferences in the VDW Rundbrief, an in-house newsletter.³³ By 1962, West Germans had been at all but two of the ten annual conferences.³⁴

³¹ See: Miscellaneous correspondence between C.F. von Weizsäcker and both Kliefoth and Burkhardt. VDW Collection, Bestand 456, File 337. Bundesarchiv, Koblenz. (Hereafter: BArch Koblenz).

^{32 &}quot;Pugwash Kreis, 1959." RTBT 5/5/2/64 (3).

³³ For example, the VDW *Rundbrief* of February 1961 contained a report by Burkhardt on the Pugwash conference in Moscow in 1960. RTBT 5/2/1/6 (41).

³⁴ Rotblat, First ten.

From 1951 onwards, Burkhardt was the director of the Institute of Theoretical Physics at the Technische Hochschule in Hannover, known for its leftist reputation; his own political allegiance lay with the Sozialistische Partei Deutschlands (SPD).³⁵ Pugwash conferences provided Burkhardt an outlet for his growing frustration with Adenauer's policies and the political situation between West and East Germany. At the Moscow conference in 1960 in a paper entitled "Some aspects of the problem of disarmament in the German Federal Republic," he lamented Bonn's position on the Eastern border issue, criticized the influence of public opinion on the tenor and policies of the country's political parties, expressed sympathy for the Rapacki plan and called for local agreements within Central Europe as a first step towards complete disarmament which, in his view, offered the only way forward to peace and stability in the region.³⁶ The eighth conference in Stowe, Vermont, in 1961 took place less than a month after the Berlin Wall had been built and was recalled by Rotblat as particularly embittered and fractious.³⁷ Nevertheless, discussions in Stowe about what Pugwash could do to try to ease international tensions led to two proposals: first, the creation of an international science center in Berlin and second, convening a conference in the city. Burkhardt was highly enthusiastic about both projects, which were premised on cooperation with East Berlin. In his paper in Stowe, he argued that the Wall represented the failure of Adenauer's "policy of strength" and encouraged his colleagues to engage with Helmut Schmidt's recent treatise on the German situation – Defense or Retaliation?³⁸ Burkhardt highlighted Schmidt's arguments that any peace treaty between the two Germanies, including the question of Berlin – "a symbol of the national unity of Germany" – must accept the Oder-Neisse (O-N) line, a position which remained deeply controversial in West Germany.³⁹ For Burkhardt this was a key step "to create the political disengagement and stabilisation in Middle Europe" and, in turn, the basis for a stable peace.

Burkhardt was also at this time making his views known to a wider audience by way of articles in the *Bulletin of the Atomic Scientists* (BAS). In May 1962, he argued in favor of working towards a comprehensive peace treaty with both

³⁵ See: Das Magazin der Medizinischen Hochschule Hannover, 6 (2015): 6–7.

³⁶ Gerd Burkhardt, "Some Aspects of the Problem of Disarmament in the German Federal Republic," Pugwash conference, Moscow, 1960. RTBT 5/2/1/6 (41).

³⁷ Joseph Rotblat to Martin Kaplan, 22 September 1961. RTBT 5/2/3/5.

³⁸ Helmut Schmidt, *Defense or Retaliation?* (New York: Praeger, 1962).

³⁹ Gerd Burkhardt, "Disarmament and the German Problem. A Proposal on Regional Disarmament in Middle Europe," Pugwash conference, Stowe, VT, US, September 1961. RTBT 5/2/1/8 (4).

parts of Germany, reiterated his position on the O-N line and called for superpower 'disengagement' in Central/Middle Europe by way of a regional disarmament agreement.⁴⁰ Again, he advanced the view that military limitations alone were not sufficient for European security: political engagement was key to the stabilization of Middle Europe. Regarding the relationship between the two Germanies, he advocated a peace treaty between them and anticipated political changes that might make it possible for the Federal Republic to recognize East Germany.⁴¹ The following month, again in the BAS, Burkhardt lent his support to the eight West German scientists, including von Weizsäcker, who in November 1961 had sent a memorandum to the Bundestag challenging its stance on a range of foreign policy issues, and calling for Bonn to renounce its policy of arming the West German army with nuclear weapons.⁴² The "Tübingen memorandum," as this came to be known, called for the recognition of Poland's western border (the O-N line), and voiced criticisms of a political culture and public attitude within the country which rendered this issue a "taboo" subject, that was now "impossible to discuss in public." This memorandum had immediately sparked furious reactions both within political circles and amongst the public and brought charges in the press that the scientists' position constituted a "betrayal of the German East."43 Burkhardt saw it as "our duty" now "to create the conditions which make it possible for the following generation to decide" what the future of "Germany" should look like.

Burkhardt was, then, highly engaged with the burning political questions facing the Federal Republic and unafraid to take a public stance critical of Bonn. He carried these views into Pugwash. As he emphasized at the annual

⁴⁰ Gerd Burkhardt, "Disarmament in Middle Europe," BAS 18, no. 5 (May 1962): 32–33.

⁴¹ The proposals (*) to which Burkhardt referred in this quote were the various ideas/models for a peace treaty then in circulation; he cited in particular a recent plan advanced by Schmidt in *Defense or Retaliation*?

⁴² Gerd Burkhardt, "German Scientists Speak Up," *BAS* 18, no. 6 (June 1962): 45–46. On the Tübingen memorandum, see: Richard von Weizsäcker, *Vier Zeiten: Erinnerungen* (München: Siedler Verlag, 1997), 180. Andrea Strübind, "Das Tübinger Memorandum. Die politische Verantwortung der Nichtpolitiker," *Kirchliche Zeitgeschichte* 24, no. 2 (2011): 360–395. Cathryn Carson, *Heisenberg in the Atomic Age. Science and the Public Sphere* (Cambridge: Cambridge University Press, 2010), 333–340. The scientists involved in the Tübingen memorandum were part of a network of the so-called "Protestant Mafia," that crossed the East–West German border and constituted a channel of contact between scientists in the two Germanies.

⁴³ The signatories to the memorandum were: Helmut Becker, D. Joachim Beckmann, Klaus von Bismarck, Werner Heisenberg, Günter Howe, Georg Picht, Ludwig Raiser and Carl Friedrich von Weizsäcker.

meeting of the VDW in October 1962, he saw in Pugwash a means for east–west dialogue ("Verbindungskanal für Ost-West-Gespräche") and as a place for scientists to come together privately and unofficially. ("auf privater, inoffizieller Ebene zusammenkommen.")⁴⁴ This was something he began personally to put increasingly into practice.

2.2 East Germany

By contrast, East German participation in Pugwash during the first quinquennium (1957–1962) was sporadic. This was a result of the Hallstein Doctrine, which denied its scientists entry to NATO countries, limiting their attendance to conferences held in neutral and communist states, that is to say, those held in Kitzbühel/Vienna in 1958 and Moscow in 1960.⁴⁵ Adenauer's implacable opposition to East Germany and Bonn's steadfast refusal to recognize what it called the "state that should not exist" had, via the Hallstein Doctrine, successfully isolated East Germany.⁴⁶ For their part, East German scientists were keen to make the most of the rare opportunity that Pugwash conferences afforded them to take part in the international scientific community. They enjoyed early support from senior political figures in East Berlin, for example, in 1958 Otto Grotewohl expressed his regret to the Continuing Committee about the lack of involvement to date of East German scientists.⁴⁷ That said, Paul Maddrell has suggested that the SED was initially wary of the Pugwash project – placing it in the hands of trusted party man Günther Rienäcker, serving president of the East German Academy of Sciences.48 Rienäcker's report on the Vienna conference in September 1958 strongly recommended Pugwash to the Academy of Sciences and the Politburo.⁴⁹ In 1960, the physicists Heinz Barwich, then director of the Zentrum für Kernforschung near Dresden, and Heinz Pose, traveled

⁴⁴ Bericht über die 4. Mitgleiderversammlung der VDW e.V. am 27-28.10.1962 in Marburg-Lahn, 4. RTBT 5/2/1/11 (29).

⁴⁵ Rotblat, A History. On Rienäcker's attempts as early as September 1964 to get assurances from the Continuing Committee about obtaining visas for the East Germans for the upcoming conference in Venice, see: Minutes of Continuing Committee meeting, no. 19, September 1964, Prague/Karlovy Vary. RTBT 5/3/1/2 (Pt 1) (4).

⁴⁶ There is extensive scholarship on this topic. In the Anglophone literature: Gray, *Germany's Cold War*. For a concise overview: Eric Weitz, "The Ever-Present Other," in *The Miracle Years. A Cultural History of West Germany, 1949–1968*, ed. Hannah Schissler (Princeton: Princeton University Press, 2001), 219–232.

⁴⁷ Otto Grotewohl to the Continuing Committee, 16 May 1958. RTBT 5/1/1/13-6.

⁴⁸ Peter Maddrell, "The Scientist Who Came In From the Cold: Heinz Barwich's Flight from the GDR," *Intelligence and National Security* 20, no. 4 (2005): 608–630, 624.

⁴⁹ Günther Rienäcker, Bericht dated 1 Oktober 1958 for the Büro des Politbüros des Zentrale Kommittee der SED. SAPMO, DY30-48026. Bundesarchiv Berlin.

to Moscow for the sixth conference. The following year, Barwich was again scheduled to attend the 7th/8th conferences in Stowe, Vermont, but in the event he did not travel to the US.⁵⁰ By the time of the London conference in 1962, East German scientists had taken part in just two Pugwash conferences. Moreover, the difficulties they encountered in getting to the conferences seem-ingly elicited little reaction within senior Pugwash circles.⁵¹ This situation was, however, about to change.

3 The London Conference 1962: A High Point, and a Turning Point?

The tenth conference in London in 1962 was planned and portrayed as a landmark anniversary, a celebration of Pugwash since 1957. With 175 participants from 36 countries, this was by far the largest conference to date, and it had a novel remit in that it was touted as an occasion to review the Pugwash project and plan its future activities. In this, London inaugurated a tradition whereby "quinquennial" meetings – subsequently, Ronneby in 1967, Oxford in 1972 and Munich in 1977 – were accorded a special place in the Pugwash calendar, serving as opportunities to review the past five years and to set priorities for the future.⁵² In 1962, Rotblat noted with satisfaction his belief that Pugwash was beginning to garner "respect from the Establishment and from the scientific community" having acquired since its inception "goodwill, high reputation and vast experience."⁵³ Five years later at Ronneby, he looked back on London as marking the "peak of success" when, in his view, Pugwash had "proved itself" amongst scientists, politicians and the public.⁵⁴

⁵⁰ The question as to whether and/or to what extent this was due to NATO travel restrictions remains to be resolved. Barwich became involved in espionage and according to Paul Maddrell, in 1961 was already supplying intelligence information to the CIA: in September 1964 he would defect to the US. This complicates interpreting the pattern of and difficulties surrounding Barwich's participation in Pugwash meetings. For example, in Maddrell's view, it was the East Berlin authorities, already harboring suspicions that he was involved in espionage, that prevented him travelling to Stowe. Maddrell, "The Scientist."

⁵¹ The difficulties encountered by the East Germans seemingly went largely unremarked upon by the Continuing Committee: the minutes of its meetings for this period rarely mention East Germany.

⁵² Rotblat, *A History*. To this end, "Standing" committees were established in the run up to quinquennial conferences, completing "retrospect and prospect" type reports that were pre-circulated and discussed during the conference.

⁵³ RTBT 5/2/1/1/10 (3) and 5/3/1/12 (1), c. 1962.

⁵⁴ Joseph Rotblat, "Memorandum: Future of Pugwash," Ronneby, 1967. RTBT 5/3/1/19.

Nevertheless, there was acute disappointment in London about the absence of both China and East Germany, each of which occupied a pivotal position within the Cold War geopolitical landscape. As Gordon Barrett explains elsewhere in this volume, the Chinese decision after 1960 to cease participating in Pugwash was made in Beijing as it grappled with its deteriorating relationship with Moscow and initiated its atomic weapons project. The situation regarding East Germany was very different. Rienäcker together with physicists Heinz Barwich and Max Steenbeck had been keen to go to London – indeed, Steenbeck had prepared a paper for the plenary program. However, their plans were thwarted by the denial of visas to travel to the UK. This was registered in a low key manner in the report on the London Conference published in the BAS which noted that: "Reminders of prevailing world tensions were provided by the absent participants from East Germany, who were unable to secure visas to attend."55 Rotblat reported to the Continuing Committee that this resulted from the refusal of the Western Allied Travel Office in Berlin to issue the requisite travel documents for a visit to a NATO country.⁵⁶ At any rate, this was a further manifestation of the embittered impasse between Bonn and East Berlin. This episode came suddenly to provide a test of the Pugwash organization.

3.1 Late 1962–Early 1963: A Flurry of Letters across the German/Bloc Divide

Rienäcker and Steenbeck were furious about the London debacle. Set within a context in which East Germans had perhaps grown accustomed to travel restrictions, it is not clear why this episode elicited such anger on their part. After all, this was not the first time that East German scientists had been unable to take up the invitation to attend a Pugwash conference. But this time the reaction of the "absent participants" was different: this time, working with their West German colleagues, they were able to mobilize the European network within Pugwash which, slowly but steadily, rolled into action to bring about change.

This began with writing letters. Letter writing had become a routine means of communication between senior Pugwash scientists – indeed, this was essential to its informal *modus operandi*. Most immediately, Rienäcker and Steenbeck each vented their frustrations in correspondence with Joseph Rotblat, Gerd Burkhardt and Werner Kliefoth. In a letter to Rotblat in early

⁵⁵ BAS 18, no. 9 (November 1962): 39–40. (No author given).

⁵⁶ Minutes of the Continuing Committee meeting no. 15, September 1962, London. RTBT 5/3/1/2 (Pt 1) (3). The exact details surrounding the denial of visas to the East Germans on this occasion remain unclear at the time of writing.

October, Rienäcker made very clear his great disappointment at not having been able to be at the London conference and that he saw in it the hand of $Bonn.^{57}$

Rotblat was also hearing from Burkhardt and Kliefoth who were aware of and attuned to the frustration of their East German colleagues. They looked to the proposal discussed at the Stowe conference in 1961 for creating an international science center in Berlin as a possible route through which Pugwash could foster German-German cooperation. In London, the West Germans had led further discussions on this idea: Burkhardt was optimistic, seeing in it a means to "help to solve one of the most difficult political problems of our time."⁵⁸ Kliefoth – who had been regularly in contact since the summer of 1960, pressing him to get in touch with East German scientists – remained more circumspect, but was equally keen to explore with Rotblat other means to reach out to the East Germans.⁵⁹ As he explained to Rotblat in November 1962, having taken soundings in Bonn, the science center project could not work given the wider German-German political situation. As he put it:

Should one really attempt such an experiment in one of the 'hottest spots' of world politics? [...] The project could only come about if both West and East German governments (Regierungsstellen) support it, or at the very least agree to it. For that to happen there would have to be talks. You yourself know that this is impossible at present, because the West German government does not recognize the GDR.

In a further indication of the developing trust between the two men, Kliefoth eased into a candid assessment of the situation, emphasizing the impossibility of any German scientist, from east or west, initiating moves towards direct contact between them. But he tentatively proposed other pathways for this:

I take the view that the Germans – at least for now – should hold back. We might, however, be possible to establish contact with the GDR scientists via Austria and Yugoslavia or Poland, if both [countries] organized a small European Pugwash meeting in Vienna or Graz. We Germans have manoeuvred ourselves into such a position that at the moment we – in

⁵⁷ Rienäcker to Rotblat, 1 October 1962. RTBT 5/2/1/11 (29).

⁵⁸ Notes of discussion on the morning of 5 September 1962 at the London Conference, 1962. RTBT 5/2/1/10 (27). Proposal for creating a study group within Pugwash given to discussing this project: RTBT 5/2/1/10 (34).

⁵⁹ File No. 409, Bestand 456. BArch Koblenz.

my view – simply cannot function. I would therefore propose that we should first organize a meeting on neutral terrain and in the process – of course not as an official agenda item! – try to clarify the situation. So my suggestion would be that the Committee treats the Berlin project for now in dilatory fashion. You must consider that the situation of scientists in both parts of Germany is at the moment, in relation to this matter, so delicate, that it is impossible to achieve anything through direct contact: on the contrary, it would be more likely to have a damaging effect. But it would be important to undertake some move as soon as the possibility of a dialogue were to open up.⁶⁰

If Kliefoth's careful words speak to the delicate nature of the matter under discussion they reflect too a determination to find a way forward. If the Germans themselves were unable to arrange meetings under the aegis of Pugwash, then perhaps others within this international network could take the lead in facilitating German-German dialogue. That he conceived these possibilities reflected his perception of what Pugwash was about and that it could serve as a resource for facilitating contact with the East Germans. Clear too was his belief that fellow scientists could work together under the umbrella of Pugwash to make the seemingly politically impossible, possible. In tentative, guarded language Kliefoth was seeking by private and informal means - in effect, using Pugwash as a 'back channel' – to open the way to German-German dialogue. Significantly, he was placing a considerable degree of trust in Rotblat. Indeed, Rotblat emerges here as the pivot between East and West – a role eased perhaps by his eastern European roots and his command of German. At any rate, we see here another means by which he was subtly guiding the development of Pugwash and orchestrating its work across the blocs.

In mid-December 1962, a meeting between Kliefoth and Max Steenbeck – who enjoyed the privileges of the East German "Reisekader" – at a party in Göttingen to celebrate Max Born's 80th birthday, spurred another round of letters.⁶¹ Here, Steenbeck and Kliefoth discussed the problem of NATO travel restrictions and on returning to Kiel, Kliefoth wrote again to Rotblat suggesting that future Pugwash conferences be held in "neutral" countries, such as

⁶⁰ Kliefoth to Rotblat, 18 Nov 1962. RTBT 5/2/1/11 (29).

⁶¹ Kliefoth to Rotblat, 15 December 1962. RTBT 5/2/1/11 (29). On Steenbeck's travel permit for this trip, and the diverse experiences of senior GDR scientists in regard to international travel more generally, see: Niederhut, Jens. Wissenschaftsaustausch im Kalten Krieg. Die ostdeutschen Naturwissenschaftler und der Westen (Vienna: Böhlau, 2007), 49.

Austria, Switzerland or Sweden, as a means to circumvent the Hallstein Doctrine so as to facilitate more regular participation of the East Germans at the conferences.⁶² Meanwhile, back in East Berlin, Steenbeck relayed the Göttingen conversation to Rienäcker, who then wrote to Kliefoth just before Christmas, 1962, reiterating his view that this problem was entirely rooted in Bonn's refusal to acknowledge the existence of East Germany.⁶³ Invoking the spirit of the Vienna Declaration – always assigned more importance in the Eastern bloc than in the West – Rienäcker remained optimistic that scientists as scientists working through Pugwash could find ways to work together to confront and transcend the profound difficulties posed by the sharpening stand-off between East Berlin and Bonn in the wake of the Berlin crisis.

For his part, Max Steenbeck's anger in 1962 partly reflected his growing frustration at the international isolation of East Germany resulting from the Hallstein Doctrine. As he explained to Kliefoth in January 1963, "This whole development and the completely invidious (*unwürdige*) situations to which it leads, leave us feeling extremely bitter."⁶⁴ He was also disconcerted at the lack of awareness in the west about travel restrictions on East Germans, and in his report about his Göttingen trip for the Academy of Sciences lamented that the deep effects of the division of Germany on the everyday life of Germans were passing largely unnoticed around the world.⁶⁵

Born and educated in Kiel, Steenbeck had spent the war working for Siemens in Berlin.⁶⁶ Late in 1945, following a brief but brutal internment in a camp in Poznan, he travelled voluntarily to the Soviet Union to work on the Soviet nuclear project.⁶⁷ Initially based at Sukhumi and then in Moscow,

⁶² Kliefoth to Rotblat, 15 December 1962. RTBT 5/2/1/11 (29).

⁶³ Rienäcker to Kliefoth, 21 December 1962. RTBT 5/2/1/11 (29). Specifically: "Da unsere Republik immer noch als 'nicht-existierend' betrachtet wird, wird unser Reisepass von den NATO-Länden immernoch nicht anerkannt." Referring to the three western powers in West Berlin/Germany as "eine Militär-Dienststelle" he lamented that East German citizens wishing to travel have to be issued by these powers with a "Pass-Ersatz, ein sogenanntes Travel-Document." In this document, "Unter 'Nationalität' wird für Burgers unsere Landes in dieses Travel Document eingetragen 'presumed German." For East German citizens, visas for travelling to NATO countries were issued only on basis of this document.

⁶⁴ Steenbeck to Kliefoth, 18 January 1963. RTBT 5/2/1/11 (29).

⁶⁵ Max Steenbeck, "Report on Max Born's 80th birthday party," Göttingen, 11 December 1962. Nachlass Max Steenbeck, File: AKL (1945–1968), Pers; Nr. A444/1. Berlin Brandenburg Academy of Sciences, Berlin.

⁶⁶ Bernd Helmbold, *Wissenschaft und Politik im Leben von Max Steenbeck* (1904–1981). Betatron, Röntgenblitz, Gasultracentrifuge und Dynamotheorien (Wiesbaden: Springer Spektrum, 2017).

⁶⁷ Pavel V. Oleynikov, "German Scientists in the Soviet Atomic Project," *The Nonproliferation Review* (Summer, 2000): 1–30.

he worked with Lev Artsimovitch - who later became important in the Soviet Pugwash group – on methods of uranium enrichment, including research into supercritical centrifuges. On returning to East Germany in 1955 to a post at Jena, Steenbeck was immediately appointed a member of the Academy of Sciences and became involved in East German nuclear research which, in the wake of the Paris Treaties, was just beginning.⁶⁸ A committed socialist, Steenbeck's relationship to the East Berlin regime was always less easy than that enjoyed by Rienäcker. Steenbeck's deep anger about London may have been connected to his disappointment at being unable to present a short paper he had written for the conference, entitled "Scholars and their place in society."69 This makes clear that he saw in Pugwash the means to put the principle of social responsibility into practice and that, for him, the National Socialist past endowed this principle with particular meaning for German scientists - which the division of the country could not erase. As he put it, the shared catastrophe of "past dark times" constituted a strong point of connection across the divide now existing between Germans. These principles and values were apparent in the two main arguments of this paper in which he first set out his avowedly socialist conception of scientists' social responsibility, in which the pursuit of scientific knowledge was:

a genuinely social task with a much greater scope than in earlier times and one which influences the thoughts and actions of far wider circles of the population than was formerly the case. This means that the scholar today, whether he wants to or not, has become a political actor and as a consequence faces a responsibility that did not exist to this degree in former times.

His second line of argument appealed to his fellow Germans wherever they now lived and worked to confront the shared heritage of the National Socialist past: together they could work to guard against the misuses of science and to look for ways to put the principle of social responsibility into practice. As he put it,

[...] No nation's scholars are more called upon to issue warnings and to offer guidance than we are; and no scholar can therefore greet the lofty goal of this conference (London) with greater passion.

⁶⁸ Burghard Weiss, "Nuclear Research and Technology in Pomparative Perspective," in Science under Socialism eds. Kristie Macrakis and Dieter Hoffmann (Cambridge, MA: Harvard University Press), 1999), 212–229.

⁶⁹ Max Steenbeck, "Scholars and Their Place in Society," London, 1962. RTBT 5/2/1/11 (29).

Steenbeck had clearly intended in London to signal his willingness to find ways to build relationships with his erstwhile countrymen under the aegis of Pugwash.⁷⁰ Later, he made sure his unread paper reached the west, sending a copy to Kliefoth who sent it on to Rotblat; it was also published in *Neues Deutschland* ensuring that it reached audiences in the East.

Emerging within these private informal exchanges between the four Germans during the winter of 1962–1963 was a sense of goodwill and a mutual willingness to talk in confidence with each other across the divide. Respectful, warm and collegial, this channel of communication served as a means to probe and gauge each other's openness to discussing sensitive political matters, identify shared views and establish the limits to which their conversations could go. They were not naïve, they cannot but have known that they were moving into politically sensitive territory. They were mindful too of the watchful eye that both East Berlin and Bonn kept on their words and actions. The extent to which they were acting with the knowledge, consent or direction from Bonn or East Berlin remains unresolved, as does the crucial question as to the effects – if any – of their efforts on either administration.⁷¹ What is clear is that these conversations were made possible by Pugwash and were rooted in the common ground of being both scientists, and Germans. Seizing on the opportunities this created for reaching across the divide, the German quartet placed German-German relations within Pugwash on a new and closer footing. In effect, this can be seen as a novel a form of soft diplomacy – between scientists.72

The timing of these exchanges proved fortuitous. For some time, senior figures within the EPG – Hans Tolhoek, Karol Lapter and Hans Thirring – had been discussing with Rotblat an idea for a meeting of European scientists in

⁷⁰ The seven-strong West German contingent in London comprised: Burkhardt, Kliefoth, Eberhard Menzel, K.A. Wolf, Horst Afheldt, H. Friedrich-Freska and H. Lenz.

⁷¹ For the West German case, primary sources indicate that Pugwash business circulated through various government departments, such as the Auswärtiges Amt, and within senior circles in Bonn. It is clear too that East Berlin kept a close eye on its Pugwash scientists who were required to routinely file reports on their activities to the SED and the Politburo.

⁷² These exchanges between scientists can be interpreted as a step toward the kinds of activities on the part of scientists within the realms of politics and policy making that, currently, are gathered under the rubric of "science diplomacy." Questions about how this compares to the meaning(s) of the term "scientific diplomacy" used in earlier scholarship, for example, that by John Beatty in his work on the Atomic Bomb Casualty Commission (ABCC), currently remains unresolved. John Beatty, "Scientific Collaboration, Internationalism and Diplomacy: The Case of the ABCC," *Journal of the History of Biology* 26, no. 2 (1993): 205–231, 214–215.

Geneva on the topic of "disengagement" in the Central European region. Still in the planning stages, this proved an ideal and timely match to Kliefoth's discussion with Rotblat about engineering a meeting between East and West Germans. In January 1963, aware of the Tolhoek, Lapter and Thirring initiative Kliefoth signaled to Rotblat his hopes that this upcoming meeting might help contribute to a relaxation of the lamentable and difficult "deutsche situation."⁷³ In February, the Continuing Committee approved the Tolhoek, Lapter and Thirring plan and invitations were issued to those involved in the EPG, including East and West Germans.⁷⁴ The flurry of correspondence between the German scientists after the London conference laid the ground for face-to-face, private talks between them at the EPG meeting in Geneva in early March 1963. As we will see, various measures and initiatives arising from this meeting would prove transformative for Pugwash in East Germany and drive forward engagement within the PCSWA with the German problem.⁷⁵

4 The 6th EPG Meeting, March 1963: European Concerns, European Solidarity

The *Disengagement in Europe* meeting took place in Geneva between 2 and 4 March 1963. It involved sixteen scientists from twelve countries, including Burkhardt, Kliefoth and Steenbeck, who, in the course of the meeting, held direct, private and informal talks.⁷⁶ Records indicate a particular guardedness around this meeting, for example, participants were discouraged from publicizing it, and were strongly reminded that it took place under Chatham House rules. A pre-circulated paper by Tolhoek and Lapter – tellingly, an East–West collaboration – entitled "General Principles for a Zone of Disarmament in

⁷³ Kliefoth to Rotblat, 3 January 1963. RTBT 5/2/1/11 (29).

⁷⁴ Minutes of meetings of the Continuing Committee, no. 16, 8–10 February 1963, London, and no. 17, September 1963, Dubrovnik. RTBT 5/3/1/2 (Pt 1) (4).

The records of the European Group of Pugwash are for some meetings incomplete and in places in some disarray. RTBT 5/2/4/1-8. On the evidence currently available, the meeting in Geneva in March 1963 did form part of the European Group's activities.

^{76 &}quot;Notes on meeting of European Representatives on Disengagement in Europe," Geneva, 2–4 March 1963. RTBT 5/2/17/24. In addition to Lapter, Tolhoek and Thirring, and the Germans, those present were: Málek and Němec (Czechoslovakia); Valkenburgh (the Netherlands); Aubert (Norway); Houtermans (Switzerland); Rotblat and Lindop (UK); Kaplan (US); Jaksic and Supek (Yugoslavia).

Europe," provided the starting point for discussion.⁷⁷ (This paper would lay the ground for a Working Group 3 at the Dubrovnik conference six months later – which, as we will see, generated considerable controversy within and beyond Pugwash).

In Geneva, the German-German situation was high on the agenda, as were the difficulties encountered by East German scientists in getting to Pugwash conferences. The latter led to a recommendation being sent to the Continuing Committee which emphasized that, as far as was practicable, future conferences be held in cities/countries that did not raise "visa difficulties" for those wishing to attend – although reference was not explicitly made to the East Germany/NATO issue.⁷⁸ Shortly afterwards, this recommendation was endorsed by the Committee, seemingly without much debate. Subsequently, between 1962 and 1967, the majority of conferences took place in cities accessible to East Germans (in Eastern Europe or the neutral/non-aligned countries), greatly facilitating the regular participation of East German scientists, including the next three conferences held in Dubrovnik, Udaipur (January 1964) and Karlovy Vary (September 1964).⁷⁹ East German scientists henceforth seized the opportunities to connect with Pugwash colleagues from both sides of the bloc and around the world. Inherently, this greatly enhanced the scope for German-German conversations around the Pugwash table, including within Working Groups where East and West Germans routinely worked together, exemplified most immediately in Working Group 3 at Dubrovnik. The changing outlook provided a powerful spur to Pugwash in East Germany, apparent most immediately in the formation in May 1963 of a national group which signaled a deepening commitment to the PCSWA. As was the case across the Eastern bloc, this functioned under the auspices of the East German Academy of Sciences.⁸⁰

A second major topic of discussion in Geneva concerned the pressing need – in the view of those present – for Pugwash to engage much more strongly with the German question. Again, steps taken here proved deci-

The minutes of Continuing Committee meeting no. 16, February 1963, actually record the Geneva meeting as involving discussions about creating a Study Group on the theme of *Disengagement*/an "atom free zone" in Europe. RTBT 5/3/1/2 (Pt 1) (4) and 5/2/17/24, Appendix 1, 6.

^{78 &}quot;Notes on Disengagement Meeting," 3, RTBT 5/2/17/24. Minutes of Continuing Committee meeting no. 17, September 1963, Dubrovnik, 2. RTBT 5/3/1/2 (Pt 1).

⁷⁹ That said, the Continuing Committee continued its commitment to "balance" the conference venues between East and West. The East Germans therefore continued to encounter difficulties when conferences were held in NATO countries, such as that in Venice in April 1965.

⁸⁰ Protocols held in Nachlass: Stubbe, 148. Berlin Brandenburg Academy of Sciences, Berlin.

sive. Important here was a five-point document produced by Burkhardt and Steenbeck which they agreed would form the basis for a paper on the "German problem" to be written jointly by them across the summer and which would be on the plenary program in Dubrovnik. As Rotblat would later emphasize, this paper, entitled "The German problem and its relevance to regional and limited disarmament agreements in Central Europe," provided a starting point for engagement within Pugwash with this issue.⁸¹

The sixth EPG meeting therefore marked a turning point in German-German relations within Pugwash. It led to measures that facilitated East German participation at conferences and paved the way for a deepening engagement with the "German problem." European Pugwashites on both sides of the bloc divide now found common ground in a shared determination to bring about stronger engagement with European security. All of this signaled the growing confidence and rising influence of Europeans within the organization. In one sense, the German problem provided a rallying call to European Pugwashites from both East and West. In late 1961 and into 1962, the increasingly volatile situation between Bonn and East Berlin was creating deep alarm within the countries of the Central European region. Concerns about this lent momentum and focus to European engagement with Pugwash. Eastern Europe – Poland and Czechoslovakia in particular, as near neighbours of both Germanies - saw themselves as most affected by this issue: František Šorm long continued to assert that the "burning questions" about Germany constituted the primary "source of danger" in Europe.⁸² As Rotblat later wrily noted, "much greater interest was taken in European problems by the socialist bloc countries."83 Indeed, Eastern Europeans were in the forefront of efforts to have Pugwash engage much more strongly with the German question and European security – by means of the EPG, but also in their own on-going circuitry of correspondence with Rotblat in which, together with Western European colleagues, they were pressing for a Study Group dedicated to these topics.⁸⁴

If the Burkhardt-Steenbeck paper provided a starting point for a new level of engagement with the "German problem," in the coming years this was a

83 Rotblat, "Pugwash Movement," 1975.

^{81 &}quot;Notes on Disengagement Meeting," Appendix 3, 8: "The German Problem." RTBT 5/2/17/24. Gerd Burkhardt and Max Steenbeck, "The German Problem and its Relevance to Regional and Limited Disarmament Agreements in Central Europe," Dubrovnik, September 1963. Main papers: XI.12-Burkhardt/XI.13-Steenbeck. RTBT 5/2/1/11 (11). Rotblat, *A History*, 45.

František Šorm, "Remarks on Past and Future Activities," September 1966, Paper XVI-18.
 16th Pugwash Conference, Sopot, Poland. RTBT 5/2/1/16 (8).

⁸⁴ The Rotblat collection holds correspondence with, for example: Ivan Málek, Theodor Němec, František Šorm and Ivan Supek.

conversation that would take place largely outside of the conferences within a new Pugwash Study Group on European Security (PSGE).⁸⁵ This was an East–West, including Scandinavian, initiative conceived by Tolhoek, Lapter, Němec, Málek, and Supek, and the Danish lawyer Jens Adler.⁸⁶ It met eight times between December 1965 and May 1968 and involved scholars from twelve European countries who shared a strong interest "in the German question and the dangers arising from it."⁸⁷ The PSGE rapidly became another site of transnational cross-bloc activity: East and West Germans were immediately and actively involved. Indeed, there was enormous satisfaction that Germans were working "side-by-side" within the PSGE: as František Šorm emphasized in 1966, this constituted "an exceptional case in the sphere of international relations."⁸⁸ In February 1968, the seventh meeting of the PSGE was held in Kiel – the first formal Pugwash meeting hosted by a German state.⁸⁹

However, if the PSGE was initially regarded as an exciting innovation, it soon became mired in conflict and controversy. The Continuing Committee became increasingly concerned about the directions in which its work was moving and the autonomy it was asserting; there were worries too about the growing dominance of Eastern Europeans within it. The "European turn" within Pugwash, first evidenced in the EPG – in which Western Europeans had been dominant – seemingly took on a different dynamic within the PSGE, which by 1966–1967 carried within it a pronounced Eastern European imprint. All of this weighed heavily in the decision of the Continuing Committee in 1968 to bring the PSGE to an end.⁹⁰

⁸⁵ Miscellaneous documents in: RTBT 5/2/17/25 and RTBT 5/3/1/6 (6).

⁸⁶ PSGE. Aide Memoire, December 1965. RTBT 5/2/4/1. For a Czech perspective on the PSGE, see the chapter by Doubravka Olšáková in this volume.

⁸⁷ Šorm to Supek, 22 March 1966. RTBT 5/2/4/3(2).

⁸⁸ Šorm to Supek, 22 March 1966. RTBT 5/2/4/3(2).

⁸⁹ Miscellaneous records of the PSGE. RTBT 5/2/4/7.

⁹⁰ In 1968, the Continuing Committee instituted the Pugwash Symposia as a means of addressing its widening sphere of work. The political problems integral to European security called for expertise other than that of physics and the hard sciences. Hitherto, Pugwash had built its identity around a narrative that emphasized scientific and technical expertise: within the PSGE this changed. Indeed, it came rapidly to be dominated by economists, lawyers and political scientists, and to a lesser extent sociologists and psychologists. This was another source of concern to some within the Continuing Committee. The newly instituted Symposia were considered one means of managing this shift and at the same time addressing more effectively the expanding range of issues that Pugwash was seeking to engage with. On Eastern bloc strengths in these fields, see: Doubravka Olšáková, "Pugwash in Eastern Europe: The Limits of International Cooperation under Soviet Control in the 1950s and 1960s," *JCWS* 20, no. 1 (Winter 2018): 210–240. There is a growing body of academic scholarship examining the rise of these disciplines

As noted, the "European turn" within Pugwash was connected to the profound changes taking place in the wider geopolitical landscape, most obviously the Berlin crisis, but also the changing relationship between the superpowers in negotiations for the LTBT – finally signed in early August 1963. The changing dynamics of the superpower relationship reverberated within and between their respective alliance systems to reshape the political constellation of Central Europe.⁹¹ Conversations about general and complete disarmament entered a new phase characterized, for example, by a new focus on nonproliferation. The project of building a stable peace in Central Europe increasingly centered around policy discussions about "disengagement" and the creation of denuclearized zones in the region.⁹² The incendiary situation in this region, most prominently the unresolved issues created by the division of Germany, now moved increasingly to the fore. For Pugwash to stay relevant amid the shifting dynamics of the Cold War it had to adapt and change direction to address the changing focal points of the conflict - including the Central European region. Here, European Pugwashites formed the vanguard. They were determined to refocus the agenda of Pugwash on the effects of the superpower rivalry in Central Europe, that is to say, to tackle the German question and European security. This new mood was strikingly in evidence in Dubrovnik. The presence of the East Germans here, the changed nature of German-German relations, signaled most strikingly in the Burkhardt-Steenbeck paper, and the participation of both East and West Germans in the Working Groups, were all indicators of the change sweeping through Pugwash. All of this stood in marked contrast to the situation just a year earlier at the conference in London.

during the Cold War. See, for example: Joel Isaac, "The Human Sciences in Cold War America," *The Historical Journal* 50, no. 3 (2007): 725–746. Mark Solovey and Hamilton Cravens, eds. *Cold War Social Science: Knowledge Production, Liberal Democracy, and Human Nature* (Basingstoke: Palgrave Macmillan, 2012). Jamie Cohen-Cole, *The Open Mind: Cold War Politics and the Sciences of Human Nature* (Chicago: University of Chicago Press, 2014).

⁹¹ Trachtenberg, *Constructed Peace*. Mastny, "The 1963." Dimitris Bourantonis, "The Negotiation of the NPT, 1965–1968. A Note," *The International History Review* 19, no. 2 (1997): 347–357. Jussi M. Hanhimäki, "Détente in Europe, 1962–1975," in *The Cambridge History of the Cold War*, Volume 11, eds. Melvyn P. Leffler and Odd Arne Westad. (Cambridge, UK: Cambridge University Press, 2010), 98–218. For an insightful analysis of the West German position see: Schrafstetter, "Long Shadow."

⁹² The bipolar model of the Cold War was giving way to a conflict that was global and multipolar in character, as the superpower rivalry was increasingly manifest in the countries of the Global South. For examples of the literature that mark the changing historiography of the Cold War, and which explores and emphasizes its multipolar dimensions, see Kraft and Sachse's Introduction to this volume.

5 Dubrovnik, September 1963: Winds of Change within Pugwash

Given to the theme "Current Problems of Disarmament and World Security," the eleventh Pugwash conference took place in Dubrovnik in September 1963. Sponsored by the Yugoslav Academy of Sciences, for Ivan Supek this marked the realization of a long-held aspiration. Seventy-eight delegates (including fourteen observers) from twenty-four countries gathered on the Adriatic coast. The West Germans included Burkhardt, Eckhart H. Heimendahl, Helmut Rumpf and the lawyer Horst Afheldt; the East Germans present were Rienäcker and Barwich, with the economist Peter Hess attending as an observer. For reasons that remain unclear, although Max Steenbeck had been expected in Dubrovnik, in July Rotblat received news that Rienäcker was to come in his place – a change which, as he confided to Burkhardt, was "from many points of view, a pity."⁹³ Indeed, Steenbeck seems never to have attended a Pugwash conference.⁹⁴

5.1 The Burkhardt/Steenbeck Paper/s: German Perspectives on the German Problem

The Burkhardt/Steenbeck paper stands as testimony to the attempts of German scientists, via Pugwash, to confront and create a means to talk about the tensions between Bonn and East Berlin. It is a remarkable Cold War document, within and beyond Pugwash, that articulates the bitter emotions surrounding the division of Germany at a particular moment in time.⁹⁵ Within Pugwash it assumed importance as a German-led initiative that marked a first step towards tackling the German problem. Tracking its production reveals that it was the outcome of a careful choreography coordinated by Rotblat. Throughout August and early September 1963, Burkhardt and Rotblat were regularly in contact discussing the format and content of the paper, with Rotblat reminding him in late July of the fast-approaching deadline for it.⁹⁶ A week later, Burkhardt replied, saying that he had discussed the paper extensively with Steenbeck in two meetings in Jena and Hannover and that they had agreed on an unusual format for it.⁹⁷ As Burkhardt noted, the project had been far from

⁹³ Rotblat to Burkhardt, 30 July 1963. RTBT 5/2/1/11 (22).

⁹⁴ See list of participants at: www.pugwash.org.uk. Accessed 2 April 2017.

⁹⁵ The placing of 'joint' in quote marks and the term 'paper/s' when referring to the Burkhardt-Steenbeck manuscript articulates/emphasizes its unusual format which in itself was a reflection of the impossibility of the two men sitting together in the same room to work on the text.

⁹⁶ Rotblat to Burkhardt, 30 July 1963. RTBT 5/2/1/11 (22).

⁹⁷ Burkhardt to Rotblat, 8 August 1963. RTBT 5/2/1/11 (22).

straight-forward but, in his view, very worthwhile. The paper would have some "common" parts but would also include sections where each author set out his own and very different views on four key aspects of the "German problem." These views closely reflected those prevailing in East Berlin and Bonn. Both papers had also to be translated into English – and the translations checked by both authors. Although on sabbatical in Ghana for the coming winter, Burkhardt discussed the paper/s with Horst Afheldt who was in touch with Steenbeck and was going to Dubrovnik. In early September, Burkhardt confirmed to Rotblat that he too would be in Dubrovnik and explained too that on the East Berlin side there was a difficulty in the final preparation of the paper. This related primarily to postal delays that Burkhardt attributed to the censorship authorities there which, as he emphasized, exemplified the difficulties bedeviling contact/communication between Germans on either side of the divide.98 On 5 September, Burkhardt sent his paper to Rotblat, and confirmed that Steenbeck's paper had now been translated and was ready. On the same day, Rotblat received Steenbeck's paper from Hess, who confirmed that it was to be discussed ahead of the conference by the newly formed East German Pugwash group.99

This correspondence is of interest for the light it casts on Burkhardt and Steenbeck's steadfast commitment to the paper, on the practical difficulties inherent in a collaboration at the frontline of the Cold War divide, and of Rotblat's pivotal role in ensuring that it came to fruition. Rotblat wrote to Burkhardt on 6 September saying that he had read the complete "joint" paper "with great interest" and that he thought it "an excellent piece."¹⁰⁰ He also suggested, given the unusual format of the paper – combining shared and independent elements – that "perhaps it would be better if the two papers appear under the joint authorship of yourself and Steenbeck" and, reflecting his concern that Pugwash demonstrate "balance", emphasized that points of difference be "clearly marked" so that "the reader would immediately be able to compare the two points of view." As he put it, "Otherwise, it may happen that some will read one paper and not the other and get an unbalanced view." On 10 September, Rotblat wrote to Steenbeck, assuring him that great care was being taken to ensure the accuracy of the English translation of both papers.¹⁰¹

⁹⁸ Burkhardt to Rotblat, 2 September 1963. RTBT 5/2/1/11 (22).

⁹⁹ Burkhardt to Rotblat, 5 September 1963. RTBT 5/2/1/11 (22). Hess to Rotblat, 5 September 1963. RTBT 5/2/1/11 (27).

¹⁰⁰ Rotblat to Burkhardt, 6 September 1963. RTBT 5/2/1/11 (22).

¹⁰¹ Rotblat to Steenbeck, 10 September 1963. RTBT 5/2/1/11 (27).

The production and the materiality of the paper – the distinctive 'dual' discursive format – manifest the divisions that both Germans wanted to confront but also transcend. Each version comprised shared statements on four key flashpoints that they saw as defining the "German problem" – the partition of Germany, the question of reunification, political preconditions for a zone of disarmament, and the question of Berlin. Each section also included passages that differed markedly: this embedded within the paper the 'space' in which Burkhardt and Steenbeck put forward very different interpretations of and views on each flashpoint. Here, although rehearsing the official views of East Berlin and Bonn, each scientist also hinted at some reflexive criticisms of their respective governments. It is possible to discern elements of Burkhardt's earlier papers at the Moscow and Stowe conferences and in his 1962 *BAS* articles, and of Steenbeck's paper for the London conference. Of course, loyalty to their respective governments was also apparent as each made trenchant criticisms of the 'other' German state.

The paper/s opened with a common introduction describing the "geographical concept" of Central Europe – comprising Austria, the Benelux countries, Czechoslovakia, Hungary, Poland, Switzerland and the divided Germany – which, as they put it, was currently the site of a "military potential of a density never in history, and nowhere else, previously experienced."¹⁰² Echoing the fundamental position of Pugwash, they were agreed that armament and disarmament (i.e. military) agreements alone were an insufficient basis for securing stability and peace in the region. As they put it, peace was not possible "unless the causes for political instability are eliminated by political agreements at the same time. And the central political problem in this area at the present is the *German* situation." The introduction concluded with a clarification of the paper/s scope and aims:

It is neither possible nor intended to submit proposals for the *solution* of the German problem in this paper. Its purpose is the merely the representation of the political *preliminary preconditions* which must be fulfilled, if a regional agreement for the creation of a 'relaxed zone of reduced armament' in Central Europe is to become feasible.

The section given to historical comments on the partition of Germany by the Allied forces began with a common account of this process as a prelude to descriptions of the political systems in East and West Germany, and then

¹⁰² Burkhardt and Steenbeck, "The German Problem."

their different interpretations of democracy. It concluded with two 'theses' on which they were agreed. First:

The German post-war situation is essentially the consequence of the German policy during the National Socialist Era and of the war, which was caused by Germany, for the consequences of which we are responsible and answerable.

And second:

The present 'German problem', which is a source of tension in Central Europe and a danger to world security, is not merely a German problem. It is the result of the disintegration of the Anti-Hitler-Coalition and the world tension between the two antagonistic blocs created in consequence. A satisfactory solution can, therefore, not possibly be achieved by the Germans alone. However, the increasing gravity of the worldwide conflicts and the fact that these find their most dangerous expression in Germany itself, has not come about without the assistance of the Germans. For this reason the solution of this problem cannot be put on the victorious powers alone, it is a vital task for the German themselves.

The third section, which considered the question of German reunification, began by dismissing as "illusory" the hope of reunification under a common government in the "foreseeable future." Here Burkhardt leveled some criticisms at Bonn:

[...] she has, by her actual politics, moved further and further away from this target. [...] The policy of the Federal Government is, however, inconsistent insofar as it keeps up the illusion, which is being cherished by some circles and deliberately supported by associations that there is hope of regaining the formerly German districts beyond the Oder-Neisse line. This inconsistency is bound to evoke mistrust with our eastern neighbours – and not just with them – concerning the sincerity of the merely defensive aim of German rearmament. It might encourage the suspicion, that such hopes should be realised if not by force, then by threat of force. These fears are an essential element of the present tensions in Central Europe.

Meanwhile, Steenbeck lambasted the Federal Republic's policy of rearmament and remilitarization, seen in East Berlin as "a national betrayal" and as a serious threat to the Soviet Union. Echoing Burkhardt, he went on to argue that this policy was not simply "an internal German drama" but "directly affects all people everywhere" and that the starting point for reducing tensions as a "task for the Germans themselves." In the shared thesis at the end of this section, they agreed that: "In the interest of world peace Germany must delay her understandable desire for reunification until such time as a world-wide relaxation of the East–West conflict occurs." Moreover, they were agreed that it was "in the Germans' own interest to seek seriously for means to bring about this relaxation and to collaborate in this direction."

The following section entitled "Political Measures for Relaxation as a Preliminary Condition for the Creation of a Zone with Limited Armament" called for "a change of attitude of the two parts of Germany towards each other" and argued that the people of the Federal Republic "must accept the existence of a second German state" and both had to "find a way of living with each other or rather, for the time being, next to each other." Returning to his burning concern, Steenbeck called for an end to the Hallstein Doctrine, emphasizing that: "There will never be any relaxation of tension between the two German states and, consequently, in Central Europe, as a whole, so long as this policy is maintained, with the support of the western world." Steenbeck suggested that Pugwash might help to work towards this end. He concluded by calling for a rapproachement, which could not be achieved "unless the responsible governments negotiate with one another on a possible modus vivendi [...]." For his part, in this section, Burkhardt argued for a loosening of the strict travel restrictions imposed by East Germany and for the Federal Republic to issue visas (initially time-limited) to facilitate cross-border visits. In the final section dealing with Berlin, the authors essentially repeated the official positions of East Berlin and Bonn, and were agreed that the Berlin question could not be resolved in isolation from solving the wider German situation. The common final sentence asserted the need for cooperation as a means for reducing tensions and that this was "a German duty."

This paper was replete with a sense of shared history and of a duty to the country in which the authors had grown up. Both scientists conceived their role now as creating the conditions in which the following generation could decide how that country should look in the future and play its part in a stable and peaceful Europe. In this way, the authors were able to preserve their integrity as loyal and patriotic scientists. That is to say, whilst both authors enjoyed a degree of agency, they were acting within limits set by East Berlin and Bonn.

Made possible in large part by the EPG, the Burkhardt-Steenbeck paper symbolized both the strengths and weaknesses of the Pugwash organization.

On the one hand, it testified to its ability to create the means for scientists to transcend the bloc divide. As noted, it was hugely significant within Pugwash as a means to open discussion on the German problem. On the other hand, whilst preliminary analysis of government sources indicate that the paper/s reached and was discussed within political circles in both German states, the question of its wider influence – the responses in Bonn and East Berlin – remains to be resolved.¹⁰³ This maps to the general and thorny problem of assessing the influence that the scientists of Pugwash wielded within the political and policy-making machinery of the nation state.¹⁰⁴ Nevertheless, that this collaboration took place had importance in its own right: it stands as testimony to the capacity the Pugwash organization to foster dialogue across the bloc divide. It demonstrated too that it was possible for its scientists to forge a degree of agency and autonomy – even if there were limits to this, and to the effects that this could have, politically and policy-wise. For those involved, it perhaps brought a sense of satisfaction that doing something was better than doing nothing.

5.2 Working Group 3

First introduced in 1961 at the Stowe conference, Working Groups typically involved between fifteen and twenty scientists from both sides of the bloc divide, and from the non-aligned movement and "developing" worlds, and were adopted to facilitate in-depth discussion of specific topics. They rapidly became rich sites for the exchange of ideas across national borders and the blocs, including across the German divide. In short, the Working Groups enhanced greatly the transnational character of the conferences and served as a wellspring of ideas on disarmament, conflict moderation and related issues.

Given to the topic of "Denuclearized Zones, especially in Central Europe and the Balkans," Working Group 3 in Dubrovnik took its cue from Tolhoek and Lapter's paper at the EPG meeting in March, and Gunter Rienäcker and Horst Afheldt counted amongst its members.¹⁰⁵ The concept of denuclearized zones was a contested and politically incendiary topic: the idea for one in Central Europe was fundamentally bound up with the "German question." This idea was

¹⁰³ For example, miscellaneous documents in: File B43118, Band 12, Auswärtiges Amt, Berlin.

¹⁰⁴ See: Kraft and Sachse, "Introduction," this volume.

¹⁰⁵ In Dubrovnik, there were five Working Groups. The other four were: 1. Problems of General Disarmament. 2. Consequences of the Spread of Nuclear Weapons. 4. Role of Non-Aligned Nations in Disarmament and World Security. 5. The Partial Test-ban, the Problems of Detection, and the Next Steps. Minutes of Continuing Committee meeting no 16, February 1963. RTBT 5/3/1/2 (Pt 1) (4). Rotblat, *A History*, 157–163.

anathema to Adenauer because it went against Bonn's conceptions of NATO and the country's role in the defence of Europe. Discussions ranged across the definition and geographical parameters of denuclearized zones, the staging of their introduction in Central Europe, and the value of such zones as both a brake on nuclear proliferation, and a key step towards General and Complete Disarmament. Working Group 3 signaled the new directions in which Pugwash was moving, as it sought closer engagement with the political territory of disarmament, as perceived and experienced in Europe – and which would generate a great deal of controversy.

By convention, each Working Group produced a summary report to be circulated and discussed in plenary session. The final report of Working Group 3 asserted that the creation of a denuclearized zone in Central Europe (defined as comprising Czechoslovakia, Poland and both Germanies) could "help the East and West German governments to make a real effort to diminish the existing tension between them" that "may lead to removal of the obstacles to genuine communication (including travel between their territories)."¹⁰⁶ Elsewhere, there were criticisms of the *status quo* in Central Europe, and of the Western alliance and the West German government in particular, especially Bonn's reluctance to enter into discussions about a denuclearized zone in Central Europe. It urged Pugwash to make efforts in this direction:

We are of the opinion that it will be most useful for the 11th PCSWA to appeal to all governments directly concerned with the situation in Central Europe, and to urge them to enter into negotiations leading to the lessening of tensions in this area and to the establishment of a denuclearized Central Europe. Thus we may hope to achieve a peaceful Central Europe and bring nearer the ultimate unification of Germany.¹⁰⁷

This Report meant a great deal to the East German Pugwash group. It came subsequently to define its position in any/all discussions within Pugwash about the German question, and its scientists repeatedly called for its recommendations to be upheld and for the organization to adopt them publicly and forcefully. This was especially apparent within the PSGE – contributing to the controversy that came to surround it.

^{106 &}quot;Denuclearized Zones, Especially in Central Europe and the Balkans." Report of Working Group 3, Dubrovnik, September 1963. RTBT 5/2/4/3 (3).

¹⁰⁷ The Report also called for the creation of Denuclearized Zones in the Balkans, Africa and Latin America. RTBT 5/2/4/3 (3).

The forceful tone of the criticisms leveled at the western alliance in the Report stood in marked contrast to the quiet Pugwash diplomacy of the past.¹⁰⁸ This new critical 'edge' was again and more strikingly apparent at the thirteenth conference held in the Czechoslovakian resort of Karlovy Vary in September 1964.¹⁰⁹ Here, the new emphasis on the German problem and European security was striking: the plenary sessions included contributions by East and West Europeans addressing various aspects of the "German problem," for example, that by Leopold Infeld on "The Berlin problem," and a joint Dutch-Czech piece by Tolhoek and Šorm on the reduction of tensions in Central Europe.¹¹⁰ As in Dubrovnik, the findings and recommendations of some of the Working Groups, as set out in their summary reports, again sparked controversy because of the trenchant criticisms leveled at the western powers. For example, the Report of Working Group 1, on which Rienäcker, Hess and Afheldt served, alongside Infeld, Antonín Šnejdárek, Šorm and Tolhoek, began with the politically charged recommendation that:

We consider it urgently necessary that those nations concerned with the German Problem which have not already done so, and in particular the former occupying powers together with the Federal Republic, should recognize and guarantee the existing frontiers of Germany with neighbouring states.¹¹¹

The Dubrovnik and Karlovy Vary conferences took Pugwash into uncharted and stormy waters. This course was set internally by a strengthening sense of cross-bloc European solidarity. The politicized and partisan nature of some reports and recommendations emerging from these conferences sparked

¹⁰⁸ Rotblat, A History, 157-163.

This was attended by the West Germans Burkhardt and Horst Afheldt, and from East Germany, the trusted Rienäcker, Peter Hess and the "passionately communist" economic historian Jurgen Kuczynski – whose involvement was of particular concern in Bonn. Minutes of Continuing Committee meeting no. 20, 19–20 December 1964. RTBT 5/3/1/5. Maddrell, "The Scientist," 624. During the Second World War, Kuczynski had been the leader of the German Communist Party in London and head of its underground network. See: John Green, *A Political Family. The Kuczynskis, Facism, Espionage and the Cold War* (London: Routledge, 2017). The changing vocabulary evident in the use of "scholars" in addition to and/or instead of "scientists" is noteworthy in that it registers the widening range of experts invited to Pugwash meetings which reflected the changing nature of the problems under discussion.

¹¹⁰ List of papers on the main program in Karlovy Vary. RTBT 5/2/1/13 (2).

¹¹¹ Report of Working Group 1: Measures for Reducing Tensions and the Dangers of War, Especially in Central Europe. Karlovy Vary, September 1963. RTBT 5/2/1/13 (3).

controversy within and beyond the Pugwash organization. The Karlovy Vary conference drew especially sharp criticism in the US (see Rubinson) whilst internally it seeded growing concerns that taking such a strong and critical stance would damage the reputation of the PCSWA – with attendant implications for its ability to operate effectively internationally and across the blocs. This contributed significantly to a gathering sense of "crisis" within senior Pugwash circles which, by 1967, would threaten its future.¹¹²

6 Concluding Remarks

The internal dynamics of Pugwash and its agenda underwent a transformation between the 10th (London, September 1962) and 11th (Dubrovnik, September 1963) conferences, apparent in Dubrovnik and even more so in 1964 in Karlovv Vary. On the one hand, this reflected external geopolitical events, most prominently the Berlin crisis, but also the twists and turns of NATO and its policies, and currents that would inform détente - exemplifying the way in which Pugwash was shaped by the changing geopolitical contours of the Cold War. On the other hand, it reflected internal changes driven by scientists from Eastern and Western Europe, flexing their muscles to place issues of concern to them on the Pugwash agenda. Their rising influence can be tracked in a lineage running from the creation of the EPG in 1959, to the "Disengagement" meeting in March 1963, to increasing European - including East German - participation in Dubrovnik and Karlovy Vary, including within the Working Groups, to the formation in 1965 of the PSGE and its work until 1968. All were fora for transnational, cross-bloc encounters and exchanges. Significantly too, this was accompanied by the emergence and expression of views sharply critical of the Western alliance that, predictably, proved unpalatable to Washington and Bonn, and which re-kindled unfavourable perceptions of Pugwash on this side of the bloc divide. Growing European influence within Pugwash came, seemingly, at a price: internally, it seeded unease and tensions, whilst externally, it was implicated in a new wave of suspicion of Pugwash in the west that brought charges of disproportionate Eastern bloc influence. Full understanding of this dynamic remains a topic for future research.

Pugwash in both German states and the changing nature of the German-German relationship were key to the development and changing character of Pugwash in the 1960s as the "German problem" and European Security were

¹¹² Joseph Rotblat, "The future of Pugwash," 1967, 1. RTBT 5/3/1/19.

repositioned higher on its agenda. These changes were driven by European scientists working together across the bloc divide – an example of East–West transnational cooperation within Pugwash. The exclusion of East German scientists from the London conference set in train a sequence of events that proved transformative within Pugwash – a transformation driven by Europeans. For Europeans, including as we have seen, East and West Germans, the political problems of the Central European region were of utmost concern – issues that they were determined that Pugwash should tackle. The hard-ening stand-off between Bonn and East Berlin, post-1961, was creating deep alarm within the countries of the Central European region and the "German problem" functioned as a rallying point for scientists from 'smaller European countries,' including both Germanies.

The EPG provided an initial forum for this, serving as both a resource and framework for building relations between Europeans and for building influence within Pugwash. The EPG developed within it a novel kind of transnational "soft" diplomacy between (senior) scientists that forged a sense of crossbloc solidarity that profoundly shaped the development of Pugwash. Increasingly, its meetings manifest a new mood amongst Europeans within Pugwash, first apparent in a changing sensibility to the situation of their East German colleagues. As we have seen, the sixth EPG meeting marked an important moment in German-German relations and proved decisive for East German involvement in Pugwash. This meeting embodied the growing confidence of European scientists - and especially, perhaps, those from the Eastern side of the bloc divide - and their determination to have Pugwash reflect their interests. This was apparent at the Dubrovnik and Karlovy Vary conferences and later within the PSGE. The extent to which this sowed seeds of conflict within the organization - within the Continuing Committee and/or between its members and European Pugwashites - raises intriguing questions about the power relations between different constituencies within Pugwash. For example, to what extent were Europeans forcing the hand of the Continuing Committee in tackling the exclusion of the East Germans and placing the German problem on the Pugwash agenda?

The German-German case reveals how Pugwash made possible the expression of goodwill across the bloc divide – a possibility that rested at least in part on a belief amongst its scientists in the idea of an international scientific community and a shared sense of identity, one bound up with a commitment to the principle of social responsibility, and of putting this into practice. The Burkhardt-Steenbeck paper stands as an example of how scientists within the different political systems of the two German states were, under the auspices of Pugwash, able to develop forms of agency and create a new space for dialogue across this sharpest of Cold War divides. The history of this paper – how it came about and the means of its production – casts light onto the informal *modus operandi* of Pugwash and its ability to function as a site of transnational flows and exchange. Whilst the encounter between Gerd Burkhardt and Max Steenbeck in Geneva in March 1963 may have been fleeting, it had longlasting and far-reaching effects within Pugwash. In line with the founding Pugwash aims and strategy the leadership hoped that in bringing East and West Germans together, ideas and findings arising from discussions between them would be relayed to senior political circles in Bonn and East Berlin. However, the question as to the extent to which German Pugwashites were able to reach into and influence such circles in either capital remains to be resolved.

Bibliography

- Albrecht, Stephan; Bieber, Hans-Joachim; Braun, Reiner *et al*, eds. *Wissenschaft Verantwortung – Frieden:* 50 *Jahre VDW*. Berlin: Berliner Wissenschaftsverlag, 2009.
- Augustine, Dolores L. *Red Prometheus: Engineering and Dictatorship in East Germany,* 1945–1990. Cambridge, MA: MIT Press, 2007.
- Beatty, John. "Scientific Collaboration, Internationalism and Diplomacy: The Case of the ABCC," *Journal of the History of Biology* 26, no. 2 (1993): 205–231.
- Bourantonis, Dimitris. "The Negotiation of the NPT, 1965–1968. A Note," *The International History Review* 19, no. 2 (1997): 347–357.
- Burkhardt, Gerd. "Disarmament in Middle Europe," *Bulletin of the Atomic Scientists* 18, no. 5 (May 1962): 32–33.
- Burkhardt, Gerd. "German Scientists Speak Up," *Bulletin of the Atomic Scientists* 18, no. 6 (June 1962): 45–46.
- Carson, Cathryn. *Heisenberg in the Atomic Age. Science and the Public Sphere*. Cambridge: Cambridge University Press, 2010.
- Cohen-Cole, Jamie. *The Open Mind: Cold War Politics and the Sciences of Human Nature*. Chicago: University of Chicago Press, 2014.
- Glenn Gray, William. *Germany's Cold War. The Global Campaign to Isolate Eastern Germany*, 1949–1969. Chapel Hill and London: University of North Carolina, 2003.
- Green, John. A Political Family. The Kuczynskis, Facism, Espionage and the Cold War. London: Routledge, 2017.
- Hanhimäki, Jussi M. "Détente in Europe, 1962–1975," in *The Cambridge History of the Cold War*, Volume 11, eds. Melvyn P. Leffler and Odd Arne Westad, 98–218. Cambridge, UK: Cambridge University Press, 2010.
- Helmbold, Bernd. Wissenschaft und Politik im Leben von Max Steenbeck (1904–1981). Betatron, Röntgenblitz, Gasultracentrifuge und Dynamotheorien. Wiesbaden: Springer Spektrum, 2017.

- Isaac, Joel. "The Human Sciences in Cold War America," *The Historical Journal* 50, no. 3 (2007): 725–746.
- Jones, Peter L. Track 11 Diplomacy in Theory and Practice. Stanford, CA: Stanford University Press, 2015.
- Kraft, Alison. "Dissenting Scientists in Early Cold War Britain. The "Fallout" Controversy and the Origins of Pugwash, 1954–1957," *Journal of Cold War Studies* 20, no. 1 (Winter 2018): 58–100.
- Kraus, Elisabeth. Von der Uranspaltung zur Göttinger Erklärung. Otto Hahn, Werner Heisenberg, Carl Friedrich von Weizsäcker und die Verantwortung des Wissenschaftlers. Würzburg: Königshausen and Neumann 2001.
- Kraus, Elisabeth. "Die Vereinigung Deutscher Wissenschaftler. Gründung, Aufbau und Konsolidierung (1958–1963)" in *Wissenschaft – Verantwortung – Frieden: 50 Jahre VDW* eds. Stephan Albrecht; Hans-Joachim Bieber; Reiner Braun *et al*, 27–71. Berlin: Berliner Wissenschaftsverlag, 2009.
- Macrakis, Kristie and Hoffmann, Dieter. eds. *Science under Socialism. East Germany in Comparative Perspective*. Cambridge, MA: Harvard University Press, 1999.
- Maddrell, Peter. "The Scientist Who Came in from the Cold: Heinz Barwich's flight from the GDR," *Intelligence and National Security* 20/4 (2005): 608–630.
- Mastny, Vojtech. "The 1963 Test Ban Treaty. A Missed Opportunity for Détente?" *Journal* of Cold War Studies 10, no. 1 (Winter 2008): 3–25.
- Neuneck, Götz and Schaaf, Michael. eds. *Zur Geschichte der Pugwash-Bewegung in Deutschland.* Symposium der deutschen Pugwash-Gruppe im Harnack-Haus Berlin, 24 February 2006. Berlin: Max Planck Institute for the History of Science, Preprint 332, 2007.
- Niederhut, Jens. Wissenschaftsaustausch im Kalten Krieg. Die ostdeutschen Naturwissenschaftler und der Westen. Vienna: Böhlau, 2007.
- Oleynikov, Pavel V. "German Scientists in the Soviet Atomic Project," *The Nonproliferation Review* (Summer, 2000): 1–30.
- Olšáková, Doubravka. "Pugwash in Eastern Europe: The Limits of International Cooperation under Soviet Control in the 1950s and 1960s," *Journal of Cold War Studies* 20, no. 1 (Winter 2018): 210–240.
- Pietrobon, Allen. "The Role of Norman Cousins and Track II Diplomacy in the Breakthrough to the 1963 Limited Test Ban Treaty," *Journal of Cold War Studies* 18, no. 1 (Winter 2016): 60–79.
- Rotblat, Joseph. *Pugwash: A History of the Conferences on Science and World Affairs.* Prague: Czechoslovak Academy of Sciences, 1967.
- Rotblat, Joseph. *Scientists and the Quest for Peace. A History of the Pugwash Conferences.* Cambridge, MA: MIT Press, 1972.
- Sachse, Carola. "Die Max-Planck-Gesellschaft und die Pugwash Conferences on Science and World Affairs (1955–1984)." Berlin: Max Planck Institute for the History of Science, Preprint 479, 2016.

- Sachse, Carola. "The Max Planck Society and Pugwash During the Cold War: An Uneasy Relationship," *Journal of Cold War Studies* 20, no. 1 (2018): 170–209.
- Sarotte, Mary Elise. *Dealing with the Devil. East Germany, Détente, and Ostpolitik, 1969–1973.* Chapel Hill and London: The University of North Carolina Press, 2001.
- Schmidt, Helmut. Defense or Retaliation? New York: Praeger, 1962.
- Schrafstetter, Susan. "The Long Shadow of the Past. History, Memory and the Debate over West Germany's Nuclear Status, 1954–1969," *History and Memory* 16, no. 1 (2004): 118–145.
- Schwarz, Hans-Peter. "The Division of Germany 1945–1949" in *The Cambridge History of the Cold War*, Volume 1, eds. Melvyn P. Leffler and Odd Arne Westad, 133–153. Cambridge: Cambridge University Press, 2010.
- Solovey, Mark. E. and Cravens, Hamilton. Cold War Social Science: Knowledge Production, Liberal Democracy, and Human Nature. Basingstoke: Palgrave Macmillan, 2012.
- Strübind, Andrea. "Das Tübinger Memorandum. Die Politische Verantwortung der Nichtpolitiker," *Kirchliche Zeitgeschichte* 24, no. 2 (2011): 360–395.
- Trachtenberg, Marc. A Constructed Peace. The Making of the European Settlement 1945– 1963. Princeton, New Jersey: Princeton University Press, 1999.
- von Weizsäcker, Richard. Vier Zeiten: Erinnerungen. München: Siedler Verlag, 1997.
- Weiss, Burghard. "Nuclear Research and Technology in Comparative Perspective," in *Science under Socialism. East Germany in Comparative Perspective* eds. Kristie Macrakis and Dieter Hoffmann, 212–229. Cambridge, MA: Harvard University Press, 1999.
- Weitz, Eric. "The Ever-Present Other," in *The Miracle Years. A Cultural History of West Germany, 1949–1968*, ed. Hannah Schissler, 219–232. Princeton: Princeton University Press, 2001.