

HISTORY OF MODERN SCIENCE

# SCIENCE, (ANTI-)COMMUNISM AND DIPLOMACY

*The Pugwash Conferences on Science and  
World Affairs in the Early Cold War*

EDITED BY  
ALISON KRAFT AND CAROLA SACHSE



BRILL

# Science, (Anti-)Communism and Diplomacy

# History of Modern Science

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Thinker's Lodge, Pugwash, Nova Scotia, Canada, c. 1957

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# Abbreviations

AAAS	American Academy of Arts and Sciences
AAS ČR	Czechoslovakian Academy of Sciences
ABCC	Atomic Bomb Casualty Commission
AEC	Atomic Energy Commission (US)
AN	Soviet Academy of Sciences
ARAN	Archives of the Russian (formerly Soviet) Academy of Sciences
ASA	Atomic Scientists Association (UK)
ASW	Association of Scientific Workers (UK)
BAS	Bulletin of the Atomic Scientists
BCFA	British-China Friendship Association
BBC	British Broadcasting Corporation
BTF	Bernard T. Feld papers
CAFIU	Chinese Association for International Understanding
CAST	China Association for Science and Technology
CC CPSU	Central Committee of the Communist Party of the Soviet Union
CCF	Congress for Cultural Freedom
CC KSČ	Central Committee of the Communist Party of Czechoslovakia
CCP	Chinese Communist Party
CEA	Commissariat à l'Énergie Atomique (Atomic Energy Commission, France)
CERN	Conseil Européen de la Recherche Nucléaire (European Organization for Nuclear Research)
CIA	Central Intelligence Agency (US)
CMFA	Chinese Ministry of Foreign Affairs
CNI	(St. Louis) Campaign for Nuclear Information
CNRS	Centre National de la Recherche Scientifique (National Center for Scientific Research, France)
Cominform	Communist Information Bureau
CPAPD	Chinese People's Association for Peace and Disarmament
CPPCC	Chinese People's Political Consultative Conference
CPSU	Communist Party of the Soviet Union
DHP	Dorothy Hodgkin papers
EHSB	Eric Henry Stoneley Burhop papers
EPG	European Pugwash Group
ER	Eugene Rabinowitch papers
EURATOM	European Atomic Energy Community
FAS	Federation of Atomic Scientists (US)

FBI	Federal Bureau of Investigation (US)
FPÖ	Freiheitliche Partei Österreichs (Freedom Party of Austria)
GARF	Gosudarstvennyi Arkhiv Rossiiskoi Federatsii (State Archive of the Russian Federation)
GAS	Ghana Academy of Sciences
GDR	German Democratic Republic
GKAE	Soviet State Committee on the Use of Atomic Energy
GPA	Gewerkschaft der Privatangestellten (Trade Union of Private Employees, Austria)
HTP	Hans Thirring papers
HUAC	House Un-American Committee (US)
IAEA	International Atomic Energy Agency
ICSU	International Council of Scientific Unions
ICTP	International Center for Theoretical Physics
IGY	International Geophysical Year
ILC	International Liaison Committee of Intellectuals for Peace
IIASA	International Institute for Applied Systems Analysis
(I)NGO	(International) Non-Governmental Organization
IPPNW	International Physicians for the Prevention of Nuclear War
IYP	International Year of Peace
JCWS	Journal of Cold War Studies
JDB	John Desmond Bernal papers
KGB	Komitet Gosudarstvennoi Bezopasnosti (Committee for State Security)
KPÖ	Kommunistische Partei Österreichs (Austrian Communist Party)
LBJL	Lyndon B. Johnson Library (US)
LTBT	Limited Test Ban Treaty
MIT	Massachusetts Institute of Technology (US)
MLF	Multi-Lateral Force
MPS	Max Planck Society (West Germany/Germany)
NA ČR	National Archives of the Czech Republic
NAS	National Academy of Sciences (US)
NATO	North Atlantic Treaty Organization
NPT	Non-Proliferation Treaty
OSCE	Organization for Security and Cooperation in Europe
ÖSGAE	Österreichische Studiengesellschaft für Atomenergie GmbH
ÖVP	Österreichische Volkspartei (Austrian People's Party)
PCF	French Communist Party
PCPP	Permanent Committee of Partisans for Peace
PCSWA	Pugwash Conferences on Science and World Affairs
PRC	People's Republic of China

PRO	Public Relations Office/r
PSGE	Pugwash Study Group on European Security
PSAC	President's Science Advisory Committee (US)
RGANI	Rossiiskii Gosudarstvennyi Arkhiv Noveishei Istorii (Russian State Archive of Recent History)
RGASPI	Rossiiskii Gosudarstvennyi Arkhiv Sotsial'no-Politicheskoi Istorii (Russian State Archive of Social and Political History)
RMRB	<i>Renmin ribao</i> (China: <i>People's Daily</i> newspaper)
RTBT	(Sir) Joseph Rotblat papers
SADS	Soviet-American Disarmament Study Group
SDAP	Sozialdemokratische Partei Deutschösterreichs (Social Democratic Party, German Austria)
SED	Sozialistische Einheitspartei Deutschlands (East Germany)
SIPRI	Stockholm International Peace Research Institute
SPC	Soviet Peace Committee
SPÖ	Sozialistische Partei Österreichs (Austrian Socialist Party)
TASS	Informatsionnoye agentstvo Rossii (Soviet (Russian) News Agency)
TLP	Thinker's Lodge papers
UN	United Nations
UNESCO	United Nations Educational, Scientific and Cultural Organization
UPI	United Press International
URSI	Polish Committee of the International Union of Radio Science
VDW	Vereinigung Deutscher Wissenschaftler
VFW	Victor F. Weisskopf papers
VÖW	Vereinigung Österreichischer Wissenschaftler (Association of Austrian Scientists)
WFSW	World Federation of Scientific Workers
WPC	World Peace Council
ZBPh	Österreichische Zentralbibliothek für Physik & Fachbibliothek Chemie (The Austrian Central Library for Physics and Chemistry Library, Vienna)

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# The Pugwash Conferences on Science and World Affairs: Vision, Rhetoric, Realities

*Alison Kraft and Carola Sachse*

On 9 July 1955, in a moment of high drama in front of a packed audience at the Guildhall in London, Bertrand Russell read out a statement signed by eleven eminent scientists, including nine Nobel Prize winners, from different parts of the world, including Albert Einstein and Frédéric Joliot-Curie and one, Leopold Infeld, from the Eastern bloc (Poland). The scientists called for an end to the arms race and the cessation of nuclear weapons tests; their statement came in response to the development of the hydrogen bomb – a weapon that, in their view, placed the world in a new situation of “universal peril” and jeopardized the future of the human race. They emphasized too that the fallout created by on-going nuclear weapons tests was already putting the world at grave risk of radiological poisoning. This statement, which came to be known as the Russell-Einstein Manifesto, appealed to “governments of the world” to seek “peaceful means” for resolving their differences and to develop “a new way of thinking.” It concluded with a rallying call for scientists to “assemble in conference” to discuss the “tragic situation which confronts humanity,” and to try to help avert nuclear war.<sup>1</sup>

Between 1955 and 1957 Russell, working closely with Joliot-Curie and British-based physicists Eric H.S. Burhop, Cecil F. Powell and Joseph Rotblat, sought to realize the idea for a conference.<sup>2</sup> This took place two years later in July 1957 in Pugwash, Nova Scotia, and involved twenty-two scientists, including four from the Soviet Union, and was financed by the Canadian-American businessman Cyrus S. Eaton.<sup>3</sup> This meeting would become the inaugural Pugwash Conference on Science and World Affairs (PCSWA or Pugwash)

1 The Russell-Einstein Manifesto is widely available on the web, e.g. “Statement: The Russell-Einstein Manifesto.” (<https://pugwash.org/1955/07/09/statement-manifesto>) Accessed 17 April 2019.

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

3 On Eaton, see the chapter by Carola Sachse in this volume. For a list of those present, see: Joseph Rotblat, *A History of the Conferences on Science and World Affairs* (Prague: Czechoslovak Academy of Sciences, 1967), which contains full listings of participants at the

which, henceforth, sought to bring together senior scientists from across the bloc divide, and from the non-aligned countries, to confront the dangers posed by nuclear weapons: their aim was to develop a new approach to disarmament and conflict moderation. In 1957, the means by which the scientists who met in Pugwash would pursue this aim remained unclear: an organization had to be built. This involved an organic and contingent process in which the leadership was constantly improvising in response to both external and internal developments. Powered by ideas about scientists' social responsibility, claiming political neutrality, brandishing technoscientific expertise relevant to the disarmament conversation, and emphasizing the "common language of science" as a means to transcend national and ideological allegiances, this small international group of elite scientists sought, as they put it, to make the Pugwash project a "strong force for peace."<sup>4</sup>

This volume sets out to look at how this vision was elaborated, examine what became of it in practice in different national settings, and to assess the significance of the Pugwash project during the early Cold War. How did the scientists of Pugwash go about creating the means to "assemble in conference," what held this project together and how did governments in the East and the West perceive their efforts? How did the specific character of the nation state – the political system, its position within the geopolitical landscape of the Cold War – shape engagement with Pugwash? In what ways did the changing dynamics of this conflict influence its development? How did the conferences become relevant to state actors? How were relations between the different parts of the Pugwash organization? For example, what were the relations of power between the leadership (the so-called Continuing Committee) and other constituencies within the network as it expanded and evolved?

Numerous accolades accorded to the Pugwash organization point to its importance, including the testimonies of several senior Cold War politicians who acknowledged the usefulness of its work, including Helmut Schmidt and Mikhail Gorbachev.<sup>5</sup> Its nomination twice, albeit unsuccessfully, for the Nobel

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conferences up to 1966. Note: This volume was published in 1968 in London/New York by Humanities Press with the title: *Pugwash. The First Ten Years. History of the Conferences on Science and World Affairs*.

- 4 Joseph Rotblat, "Memo for First Meeting of the Continuing Committee," 15 December 1957. Papers of Sir Joseph Rotblat (RTBT): RTBT 5/2/1/1-15, The Churchill Archives Center, University of Cambridge, UK.
- 5 Helmut Schmidt, letter dated April 1984, RTBT 5/2/2/64 (1). See also: *The Strangest Dream* (2008). This film about Sir Joseph Rotblat, directed by Eric Bednarski, was made by the National Film Board of Canada and includes assessments of the Pugwash conferences and its work by various senior political figures and Cold Warriors, including Mikhail Gorbachev. A copy is held in the archives at: Thinkers Lodge Histories, Pugwash, Nova Scotia, Canada.

Peace Prize in the 1960s, strongly suggests that the Pugwash project enjoyed a degree of success during its first decade.<sup>6</sup> The actual award of this Prize thirty years later in 1995 – shared with Rotblat, its first and long-serving Secretary General – in recognition, as the Nobel Committee put it, of its “efforts to diminish the part played by nuclear arms in international politics and, in the longer run, to eliminate such arms,” points to the long-term relevance of the Pugwash organization within the arms control realm.<sup>7</sup> Its identity was built around a narrative that emphasized techno-scientific expertise relevant to disarmament negotiations on-going since 1955, albeit in a faltering manner.<sup>8</sup>

The nuclear arms race gave material form to the ideological war between communism and its opponents in the west: the scientists of Pugwash were knowingly positioning themselves directly in the crossfire between the blocs, creating a new intersection between science and politics.<sup>9</sup> Our organizing theme of science, diplomacy and anti-/communism defines this highly politicized space in which they were operating, as they walked a tightrope between East and West. Looking eastwards, the scientists of Pugwash had always to remain vigilant to manipulation by Moscow; looking westwards, they had to contend with charges of naivety and of being communist ‘stooges,’ and sought to avoid anything that could be used to discredit it as a ‘front’ organization. Mindful of this, the leadership handled carefully any association with the idea of promoting ‘peace,’ acutely aware that in the west ‘peace’ was seen as a tool of Soviet propaganda and, as such, a deeply politicized slogan that rendered its use highly problematic.<sup>10</sup> Following from this, and somewhat predictably, the leadership emphasized the political neutrality of Pugwash – although this did little to assuage its critics in the west.<sup>11</sup> To this end, senior American and British Pugwashites also sought to ensure that western scientists at the conferences

6 Miscellaneous correspondence during 1966 in: RTBT 5/2/1/16 (32).

7 <https://www.nobelprize.org/prizes/peace/1995/summary/> Accessed 22 April 2019.

8 For an analysis of this narrative, see: Jean-Jacques Salomon, “Scientists and International Relations: A European Perspective,” *Technology in Society* 23 (2001): 291–315.

9 For a discussion of the arms race in this sense, see: David Holloway, “Nuclear Weapons and the Escalation of the Cold War,” in *The Cambridge History of the Cold War*, eds. Melvyn P. Leffler and Odd A. Westad, Volume 1 (Cambridge: Cambridge University Press, 2010), 376–397. Richard H. Immerman and Petra Goedde, eds. *The Oxford Handbook of the Cold War* (Oxford: Oxford University Press, 2013).

10 William Styles, “The WFSW, a Case Study of a Soviet Front Organization: 1946–1964,” *Intelligence and National Security* 33, no. 1 (2018): 116–129.

11 In his chapter, Geoffrey Roberts notes that E.H.S. Burhop stepped back from involvement in Pugwash because of his leftist commitments and profile, and his concerns that this could have negative implications for its reputation.

spanned the left-right political spectrum. Where possible, this included scientists with ties to the political ‘establishment’ which, in addition to strengthening claims of political neutrality, carried the advantage of creating, potentially, a means of building links within government circles.<sup>12</sup>

The conferences were the founding *raison d'être* of the Pugwash organization and the cornerstone of its efforts to develop as a channel for East–West dialogue. It was here that Pugwash scientists came together to discuss, initially, the problems surrounding disarmament, and this was where the transnational character of the project was initially forged. Held once or twice a year from 1957 onwards, by the tenth conference in London in 1962, twenty-five countries had been represented at Pugwash gatherings, and by 1967 some 430 scientists had attended at least one conference; by 1971 there were thirty national groups, and in 1977, 223 participants from forty-seven countries celebrated its twentieth anniversary in Munich.<sup>13</sup> Attendance was on a strictly invitation-only basis, decided upon by the leadership (the Continuing Committee), and frequently based on personal recommendations by ‘word of mouth’ from within Pugwash circles. In 1961, Working Groups became a routine part of the conference program and later, during the 1960s, Study Groups and Symposia were added to the expanding portfolio of Pugwash activities. These developments were driven from within and, in themselves, reflect the combination of commitment and pragmatism on the part of its scientists that were important to the survival of the project and to its emerging, distinctive characteristics. All of these transnational fora were geared to fostering more detailed analysis of the complex issues gathered under the rubric of ‘arms control’ and undertaken with the aim – ideally – of relaying findings and ideas in a quiet, discreet way, via political contacts, to national governments.

To date, research into Pugwash has been undertaken by scholars from a range of academic disciplines. As a result, the literature is somewhat scattered and the historiography disparate.<sup>14</sup> This also reflects the way in which the organization has tended to fall between specialist areas of enquiry, notably Cold War Studies, International Relations, Diplomatic History, History of Science

12 For example, for the British case, see: Kraft, “Dissenting.” Christoph Laucht, *Elemental Germans: Klaus Fuchs, Rudolf Peierls and the Making of British Nuclear Culture, 1939–1959* (Basingstoke: Palgrave Macmillan, 2012).

13 Joseph Rotblat, “Report of Secretary General,” London, 1962, p. 4. RTBT 5/2/1/10 (3).

14 Alison Kraft, Holger Nehring and Carola Sachse, eds. “The Pugwash Conferences and the Global Cold War. Scientists, Transnational Networks, and the Complexity of Nuclear Histories,” introduction to special issue of *JCS* 20, no. 1 (2018): 4–20. Focused on the histories of Pugwash in a range of countries, the introduction to this Special Issue includes an extended historiography which may be of interest to some readers.

and scholarship employing transnational approaches. We see Pugwash as, potentially, a point of contact between scholars from different disciplines working on its history in different countries – which, to some extent, is reflected in this volume.

Earlier accounts by those involved, and biographies of key figures, have established a basic narrative of Pugwash history, presenting it as a remarkable initiative in which scientists were able to bridge the Cold War divides and highlighting what they see to be its successes.<sup>15</sup> It features too, albeit briefly, within the literature on anti-nuclear protest, most notably in Lawrence Wittner's trilogy on the World Nuclear Disarmament Movement.<sup>16</sup> It appears fleetingly in Paul Boyer's cultural history of the atomic bomb and in general history of science texts, for example, Jon Agar's *Science in the Twentieth Century and Beyond*.<sup>17</sup> As early as 1971, Lawrence Scheinman highlighted the role of Pugwash as a cross bloc communication channel, describing its conferences as a "channel for regularized informal exchanges between scientists from east and west."<sup>18</sup> Around this time, the transnational approach to history, in which emphasis was placed on non-state actors, on processes of cross-border flows and exchanges – of people, information, knowledge, ideas – and on the circulation of knowledge, was beginning to emerge.<sup>19</sup> It has been applied within

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- 15 For example: Joseph Rotblat, *A History*, 1967; *Scientists and the Quest for Peace. A History of the Pugwash Conferences* (Cambridge, MA: Massachusetts Institute of Technology Press, 1972). Andrew Brown, *Keeper of the Nuclear Conscience: The Life and Work of Joseph Rotblat* (Oxford: Oxford University Press, 2012). Leonard E. Schwartz, "Perspective on Pugwash," *International Affairs* 43, no. 3 (1967): 498–515. Boris B. Kadomtsev, ed. *Reminiscences about Academician Lev Artsimovitch* (Moscow: Nauka, 1985). For assessments of Pugwash by Jerome Wiesner, see: Walter A. Rosenblith, *Jerry Wiesner: Scientist, Statesman, Humanist: Memories and Memoirs* (Cambridge, MA: Massachusetts Institute of Technology Press, 2003). Richard Maquire, "Scientists Dissent Amid the British Government's Nuclear Weapons Program," *History Workshop Journal* 63, no. 1 (2007): 113–135. Duane Thorin, *The Pugwash Movement and US Arms Policy* (New York: Monte Cristo Press, 1965).
- 16 Lawrence S. Wittner, *Resisting the Bomb. A History of the World Nuclear Disarmament Movement, 1954–1970* (Stanford, CA: Stanford University Press, 1997), 111–113, 278, 292–296, 354–358.
- 17 Paul Boyer, *By the Bomb's Early Light. American Thought and Culture at the Dawn of the Atomic Age* (New York: Pantheon Books, 1985). Jon Agar, *Science in the Twentieth Century and Beyond* (Cambridge: Polity Press 2012), 404–406.
- 18 Lawrence Scheinman, "Security and the International System: The Case of Nuclear Energy," *International Organization* 25, no. 3 (summer 1971): 626–649.
- 19 A key early work is that by Joseph S. Nye, Jr. and Robert O. Keohane, "Transnational Relations and World Politics: An Introduction," *International Organization* 25, no. 3 (1971): 329–349. A more recent key contribution has been: Akira Iriye, *Global community: The Role of International Organizations in the Making of the Contemporary World* (Berkeley,

scholarship on international policy making within the arms control realm in which Pugwash has sometimes featured. For example, in 1992, in his analysis of “transnational epistemic communities” – drawing on the new concept of the “epistemic community” being advanced by Peter Haas at this time – Emmanuel Adler described Pugwash as a kind of “switchboard” through which connections were “established and maintained.”<sup>20</sup> The switchboard concept acknowledged that Pugwash was more than a communication channel, hinting at its wider role as a broker between Cold War adversaries – and between allies.

Transnational history brought forth perspectives that moved away from a focus on state actors. This emerges clearly within Matthew Evangelista’s influential book, *Unarmed Forces*, published in 1999, which highlights the transnational character of Pugwash focusing on the Soviet case.<sup>21</sup> Evangelista explores and explains how Pugwash and also the International Physicians for the Prevention of Nuclear War (IPPNW) created opportunities for exerting influence on authoritarian communist political leaders.<sup>22</sup> Evangelista posed intriguing questions about its work and role(s), yet twenty years later, his landmark study remains the only in-depth, country-based book-length analysis of Pugwash. That said, a small number of articles have examined Pugwash in particular national settings, especially in West Germany, although these tend to focus primarily on questions and themes relating to the distinctive history

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CA: University of California Press, 2004). For an outline account of the growth of transnational history, see: Simone Turchetti, Néstor Herran and Soraya Boudia, “Introduction. Have We Ever Been Transnational? Towards a History of Science Across and Beyond Borders,” *British Journal for the History of Science* 45, no. 3 (2012): 319–336. Turchetti and his colleagues also called for historians of science to take up the transnational perspective more strongly and there is a burgeoning literature within the history of science adopting this approach. Eg: Jeroen van Dongen, ed. with Friso Hoeneveld and Abel Streefland (associate eds.), *Cold War Science and the Transatlantic Circulation of Knowledge* (Leiden: Brill, 2015). Naomi Oreskes and John Krige eds. *Science in the Global Cold War* (Cambridge, MA: MIT Press, 2014).

- 20 Emmanuel Adler, “The Emergence of Cooperation: National Epistemic Communities and the International Evolution of the Idea of Nuclear Arms Control,” *International Organization* 46, no. 1 (Winter 1992): 101–145. Adler acknowledges that in using the ‘switchboard’ metaphor, he is drawing on earlier work by Ruggie in 1978. Peter M. Haas, “Introduction: Epistemic Communities and International Policy Coordination,” *International Organization* 46, no. 1 (Winter 1992): 1–35.
- 21 Matthew Evangelista, *Unarmed Forces. The Transnational Movement to End the Cold War* (Ithaca, New York: Cornell University Press, 1999).
- 22 For recent work on the IPPNW see: Claudia Kemper, *Medizin gegen den Kalten Krieg. Ärzte in der anti-Atomaren Friedensbewegung der 1980er Jahre* (Göttingen: Wallstein Verlag, 2016).

of this country in the twentieth century and how this shaped the relationship between science, scientists and the state.<sup>23</sup> A number of studies examine the work of Pugwash in relation to particular arms control treaties, most notably Bernd Kubbig's 1996 analysis of its role in the Anti-Ballistic Missile Treaty, and more recently, Paul Rubinson's study of the Limited Test Ban Treaty (LTBT).<sup>24</sup> For Kubbig, Pugwash scientists were "icebreakers" and the conferences "places for the exchange of scientific knowledge and information."<sup>25</sup> In 2006, Kai-Henrik Barth lauded the PCSWA as "the most important transnational effort of scientists in the Khrushchev/Brezhnev era" and its conferences as "an influential and open communication forum, especially during times of tension between the superpowers."<sup>26</sup> Barth emphasized too its importance as a site for the "generation of new ideas that have shaped foreign policy decisions," especially in the context of the 1963 LTBT and the 1968 Non-Proliferation Treaty (NPT). Whilst scholarship has established and reinforced a narrative of Pugwash as an important actor within the Cold War nuclear nexus and established its transnational significance, we nevertheless have only partial understanding of its transnational character and activities, know even less about its internal dynamics and development, and lack detailed accounts of its work around the world and during different phases of the Cold War.

The editors of this volume have taken up the challenge of gaining closer understanding of the history – or rather the histories – of the Pugwash organization and its conferences. This began in 2012 with a workshop at the University of Vienna, selected papers from which formed the basis for a recent Special Issue of the *Journal of Cold War Studies* organized around national case studies.<sup>27</sup> Taking our cue from this work and that of Matthew Evangelista, the

23 Götz Neuneck and Michael Schaaf, eds. *Zur Geschichte der Pugwash-Bewegung in Deutschland. Symposium der deutschen Pugwash-Gruppe im Harnack-Haus Berlin, 24. Februar 2006*, Max Planck Institute for the History of Science, Preprint 332, Berlin 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," *JCWS* 20, no. 1 (2018): 170–209.

24 Paul Rubinson, "'Crucified on a Cross of Atoms': Scientists, Politics and the Test Ban Treaty," *Diplomatic History* 35, no. 2 (April 2011): 283–319.

25 Bernd W. Kubbig, *Communicators in the Cold War: The Pugwash Conferences, The U.S.-Soviet Study Group and the ABM Treaty. Natural Scientists as Political Actors: Historical Successes and Lessons for the Future*, PRIF Reports No. 44 (Frankfurt am Main: PRIF, October 1996).

26 Kai-Henrik Barth, "Catalysts of Change: Scientists as Transnational Arms Control Advocates in the 1980s," *Osiris* 21, no. 1 (2006): 182–206.

27 Kraft, Nehring and Sachse, "Pugwash Conferences."



present volume also adopts a national ‘case study’ approach. On the one hand, this reflects the central place of the national groups in the Pugwash organization, and the practical implications flowing from this: relevant archival materials are typically organized along national lines. On the other hand, as the chapters in this volume make clear, the transnational character and capacities of Pugwash, and its conferences, were powerfully shaped by the ‘national.’<sup>28</sup> In addition, national case studies can lay the ground for comparative analyses which, in illuminating differences, similarities and patterns, can enrich our understanding of Pugwash and also identify questions that can be a spur to and guide future research.

The essays in this volume examine Pugwash in Austria (Silke Fengler), China (Gordon Barrett), Czechoslovakia (Doubravka Olšáková), East and West Germany (Alison Kraft), the USA (Paul Rubinson and Carola Sachse), and the USSR (Fabian Lüscher). The chapter by Geoffrey Roberts analyzes the political context in which the Russell-Einstein Manifesto was forged and the key role of the French physicist and communist Frédéric Joliot-Curie in its conception and formulation, working together with the staunchly anti-communist philosopher, mathematician and Nobel laureate, Bertrand Russell. Drawing on hitherto untapped archival sources, this new work highlights aspects of the development and the distinctive character of Pugwash in each national setting, and affords fresh insights into how its scientists were able to operate transnationally, including across the blocs. In turn, this illuminates how the organization and its conferences was able to serve as a forum for the kinds of conversations and exchanges that came in this period to be called ‘soft’ or Track II diplomacy.<sup>29</sup> Overall, this collection contributes new understanding of how the PCSWA developed a reputation as a credible actor within the landscape of nuclear diplomacy in the Cold War world.

In introducing our work in the present volume we would like to make two clarifications. First, we highlight the problem of talking about “Pugwash.” This was an organization that encompassed simultaneously a set of confer-

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28 The meaning of ‘transnational’ varies and remains contested. See: Thomas Risse-Kappen, “Bringing Transnational Relations Back In: Non-state Actors, Domestic Structures, and International Institutions,” in *Bringing Transnational Relations Back In*, ed. Thomas Risse-Kappen (Cambridge: Cambridge University Press, 1995). On the contested meaning of “transnational” see, for example: Patricia Clavin, “Defining Transnationalism,” *Central European History* 14, no. 4 (2005): 421–439. Akira Iriye and Pierre-Yves Saunier, eds. *Palgrave Dictionary of Transnational History* (London: Palgrave Macmillan, 2016).

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

ences and a collection of national groups that comprised, indeed relied fundamentally upon, individual scientists: these elements, together with a steadfast adherence to informal modes of working, combined to create an unusual network-like structure that was simultaneously international and national. However, and as we discuss below, for all its claims to informality, there existed within the Pugwash organization a hierarchy, with decision making largely concentrated in the hands of what was called the Continuing Committee which, from the outset, functioned as the *de facto* leadership. The activities of individual scientists was an important element in its work, likewise the national Pugwash Groups (sometimes called Committees, especially in the Eastern bloc) and later various Study Groups. It is therefore important to guard against conceiving and talking about Pugwash in terms only of the conferences and/or as a unitary entity, which it was not – although it could speak and act collectively. Meanwhile, its informal *modus operandi* meant that it was not possible to be a ‘member’ of Pugwash in any formalized sense. The term Pugwashite was coined partly in response to this: becoming a “Pugwashite” was a matter of having attended at least one conference – although an invitation one year was no guarantee of receiving invitations in the future. Although during the 1950s and 1960s, those involved in Pugwash sometimes described it as a ‘movement,’ it cannot be considered as such in the sense developed within ‘social movement’ scholarship.<sup>30</sup> Pugwash was avowedly elitist, grounded in claims to technical and scientific expertise, and with a mode of working that was premised on and prioritized elite-to-elite conversations and connections. In light of these conceptual and linguistic difficulties, when referring to Pugwash as a collective enterprise we use the terms organization, network and project interchangeably and when talking about individuals we use the terms Pugwashites and/or scientists.

Second, most of the work in this volume focuses on the decade 1955 to 1965, a period which in the wider geopolitical context stretched from the post-Stalin ‘thaw’ to the onset of superpower and European détente. The question as to when efforts to reduce tensions – détente – began to have discernible effects in terms, for example, of dialogue and policy-making, is a question of interpretation. The onset/dynamics of détente differed between countries, and the distinction between superpower and European détente is an important one. For Arne Westad, attempts at stabilizing the Cold War through a lasting détente

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30 See the chapters in this volume by Fabian Lüscher and Doubravka Olšáková regarding the meaning and uses of the term “movement” in relation to Pugwash in the context of the Eastern bloc.

began in Europe in the early 1960s.<sup>31</sup> Others date the beginning of détente to the late 1960s and specifically link it with Willy Brandt's *Ostpolitik*, the seeds of which were sown earlier in that decade. For Jussi Hanhimäki, the relaxation of East–West tensions in Europe was the result of a European challenge to the excesses of bipolarity – a response to being pawns on the superpower chessboard of global geopolitics.<sup>32</sup> That European détente was already gaining momentum by the middle of the 1960s was apparent, for example, in de Gaulle's calls in 1966 for “détente, entente and cooperation” and in Brandt's emphasis in the 1965 election campaign in the Federal Republic on bridge-building with Eastern Europe, ideas which had been mooted since the early 1960s. Whether or not the LTBT was a “missed opportunity” for détente, the ensuing five years of negotiations leading up to the NPT of July 1968, suggests strongly that détente was in the air.<sup>33</sup> Certainly, both treaties have been regarded as defining moments on the path towards superpower and European détente. In a sense, different interpretations in the literature about détente reflect the complicated and shifting periodization of the Cold War, brought increasingly to light by a historiographical shift that has emphasized the shifting temporalities and global dynamics of the conflict.<sup>34</sup> The relationship between détente – however defined – and Pugwash undoubtedly poses intriguing questions. For example, whilst Pugwash welcomed arms control treaties such as the LTBT and the NPT, the extent to which it was impacted – and perhaps weakened – by them remains unclear. Research into this potential paradox, and the response of Pugwash to the changing dynamics of the nuclear threat, during periods of détente but also in intervening periods of volatility and crisis, constitute a priority for future research. The present volume makes clear that Pugwash was attuned to and powerfully shaped by the changing contours of the Cold War.

31 Odd Arne Westad, *The Cold War. A World History* (London: Penguin, 2017), 382.

32 Jussi M. Hanhimäki, “Détente in Europe, 1962–1975,” in *Cambridge History*, Leffler and Westad, Volume 11, 198–218.

33 Vojtech Mastny, “The 1963 Test Ban Treaty: A Missed Opportunity for Détente?” *JCWS* 10, no. 1 (Winter 2008): 3–25.

34 See, for example: Matthew Connelly, “Taking Off the Cold War Lens: Visions of North-South Conflict During the Algerian War for Independence,” *The American Historical Review* 105, no. 3 (June 2000): 739–769. Michael Geyer and Charles Bright, “World History in a Global Age,” *The American Historical Review* 100, no. 4 (October 1995): 1034–1060. Robert J. McMahon, ed. *The Cold War in the Third World* (Oxford: Oxford University Press, 2013). Jadwiga E. Pieper-Mooney and Fabio Lanza, eds. *De-Centering Cold War History: Local and Global Change* (London and New York: Routledge, 2013). Tony Smith, “New Bottles for New Wine: A Pericentric Framework for the Study of the Cold War,” *Diplomatic History* 24, no. 4 (Fall 2000): 567–591. Odd Arne Westad, *The Global Cold War. Third World Interventions and the Making of Our Times* (Cambridge: Cambridge University Press, 2007).

In the remainder of this introduction we set out an historical and historiographical context for Pugwash, and provide an analytical and conceptual framework in which to situate this new body of work. Organized into three parts, this begins with an examination of the Pugwash ‘vision’ and its narrative about the special attributes of the scientist which was important in enabling them to develop and to play a special role in confronting the dangers posed by nuclear weapons in the context of a deepening Cold War. The second part then considers the development of Pugwash in practice, organizationally and in terms of its mode(s) of working. Here, we highlight the way in which trust between scientists was a vital resource for the Pugwash project. The third part discusses the transnational character of Pugwash and its emerging role as a ‘back channel’ for political dialogue, fashioning an alternative mode of cross bloc diplomacy. Along the way, we identify some of the factors that helped or hindered its scientists as they sought to work across the Cold War divides. Notwithstanding the contested meaning of transnational, borrowing from Andrew Tompkins, we see Pugwash scientists in this period as in the vanguard of thinking, acting and being transnational – a mindset and attitude crucial for the emerging role of Pugwash as a forum for Track II diplomacy.<sup>35</sup> We conclude with some reflections on the challenges involved in writing Pugwash histories, including the thorny question of its influence within government circles and in the policy-making process, and identify some areas for future research.

## 1 The Pugwash Vision: Science as a Means to Transcend the East–West Divide

For some physicists, the use of the atomic bomb against Japan in 1945 and the ensuing arms race engendered an especially strong dilemma of conscience that became bound up with ideas about scientists having a particular and fundamental responsibility to wider society.<sup>36</sup> This provided the context for the

35 Andrew Tompkins, “Grass Roots Transnationalism(s): Franco-German Opposition to Nuclear Energy in the 1970s,” *Central European History* 25, no. 1 (2016): 117–142.

36 Greta Jones, “British Scientists, Lysenko and the Cold War,” *Economy and Society* 8, no. 1 (1979): 26–58; “The Mushroom-Shaped Cloud: British Scientists’ Opposition to Nuclear Weapons Policy, 1945–1957,” *Annals of Science* 43, no. 1 (1986): 1–26. Laucht, *Elemental Germans*. On ‘concerned’ scientists in the US, see: Alice Kimball Smith, *A Peril and a Hope. The Scientists’ Movement in America* (Cambridge, MA: MIT Press, 1965). Martin Kuznick, “The Birth of Scientific Activism,” *Bulletin of the Atomic Scientists (BAS)* 44 (1988): 39–43. Donald A. Strickland, *Scientists in Politics: the Atomic Scientists’ Movement, 1945–1946*

formation by scientists, in the mid-late 1940s, in the west, of a raft of new organizations, typically national in character, which sought to protest the development of nuclear weapons and the arms race, most prominently, the Federation of Atomic Sciences (FAS) in the US and the British Atomic Scientists Association (ASA). International initiatives also sprang up, notably, the formation in 1946 of the World Federation of Scientific Workers (WFSW) – the significance of which for the Russell-Einstein Manifesto is analyzed in this volume by Geoffrey Roberts.<sup>37</sup> The hydrogen bomb, a weapon first tested by the Americans in 1952, marked a sea change in the scale of nuclear destruction: growing recognition of its dangers across the winter of 1954 and spring of 1955 sparked a new wave of opposition amongst those scientists long dissenting from the Cold War orthodoxy and the arms race.<sup>38</sup> In 1956, US biophysicist Eugene Rabinowitch, soon to become a leading figure in Pugwash, captured the concerns of like-minded colleagues when he warned that science was in danger of becoming “the gravedigger of mankind.”<sup>39</sup> Some of those who played a leading role in creating Pugwash had a track record in challenging government policy regarding nuclear weapons through initiatives such as the FAS and the British ASA. For example, Eric H.S. Burhop, Cecil F. Powell, and Joseph Rotblat were all veterans of the British ASA. The Pugwash project differed in important respects from earlier scientist-led initiatives, most obviously in being centered around conferences, but also in its avowedly selective and elitist character. Premised on fostering contact and links between scientific and political/policy-making elites, within and across the bloc divide, its primary strategy centered on gaining access to government circles. With this vision, the founders of Pugwash were taking the idea of scientists’ social responsibility in new directions.

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(Lafayette, IN: Purdue University Studies, 1968). More recently: Kelly Moore, *Disrupting Science: Social Movements, US Scientists and the Politics of the Military, 1945–1975* (Princeton, NJ: Princeton University Press, 2008). Sarah Bridger, *Scientists at War: The Ethics of Cold War Weapons Research* (Cambridge, MA: Harvard University Press, 2016). Paul Rubinson, *Redefining Science: Scientists, the National Security State and Nuclear Weapons in Cold War America* (Amherst/Boston: University of Massachusetts Press, 2016). Audra J. Wolfe, *Freedom’s Laboratory: The Cold War Struggle for the Soul of Science* (Baltimore, MD: Johns Hopkins University Press, 2018).

37 For a recent perspective on the WFSW from the point of view of the British security services, see: Styles, “The WFSW.”

38 The *Castle Bravo* hydrogen bomb test in March 1954 has generally been taken as marking a turning point for opposition to thermonuclear weapons and the arms race generally. On the Bravo accident, see for example, the contributions in Toshihiro Higuchi and Masakatsu Yamazaki eds. Special Issue of *Historia Scientiarum* 25, no. 1 (2015); Kraft, “Dissenting.”

39 Eugene Rabinowitch, “The Role of the Scientist in Society,” 1956. RTBT 114.

What made the Pugwash project conceivable and possible, in practice, were, firstly, claims that scientists – and especially physicists – had technoscientific expertise relevant to the disarmament conversation. Secondly, and we would argue, equally important were ideas about the special status of science as a field of enquiry and about the distinctive attributes of the scientist supposedly derived from the training, methods and intellectual culture particular to the profession.<sup>40</sup> For the Pugwash leadership, these ideas became valuable resources for mobilizing scientists and building the organization. To this end, these ideas featured prominently in their own narratives about what Pugwash was and their visions of its work and aims.<sup>41</sup> For the founding cohort of Pugwash, including Powell, Rabinowitch and Rotblat, the significance of their identity as scientists was central to the project they were embarked upon. But their narrative also rested on a broadening interpretation of what it meant to be a scientist; for them, this included an awareness of the mutually reciprocal relationship between science and society, which underpinned a keenly felt sense of social responsibility and a commitment to putting this into practice.<sup>42</sup>

This was clear at the third Pugwash conference held in Kitzbühel/Vienna in Austria in 1958 (the first held outside North America) when the leadership set out in detail its ideas for overcoming political antagonisms in a six-page statement known as the Vienna Declaration.<sup>43</sup> This set out the principal spheres of action of Pugwash which encompassed (1) the necessity to end wars, (2) requirements for ending the arms race, (3) what world war would mean, (4) the hazards of bomb tests, before turning to specific considerations of the relevance of science and the scientist to these issues in the final three sections, entitled: (5) science and international cooperation; (6) technology in the service of peace; and (7) the responsibilities of scientists. The Declaration set out the vision of Pugwash and delineated its agenda. It reveals much about how in 1958 senior Pugwash scientists conceived the Cold War confrontation, how they perceived the contributions that they could make to reducing East–

40 These notions resonate with the idealized ‘norms’ of science proposed by Robert Merton.

41 Eugene Rabinowitch, “About Pugwash,” *BAS* 21, 4 (April 1965): 9–15.

42 Rabinowitch was chief editor of the *BAS* throughout this period, and Pugwash activities featured regularly in its pages. On Rabinowitch, see: Patrick D. Slaney, “Eugene Rabinowitch, the *BAS*, and the Nature of Scientific Internationalism in the Early Cold War,” *Historical Studies in the Natural Sciences* 42, no. 2 (2012): 114–142.

43 Rabinowitch and Rotblat were closely involved in formulating the Declaration, which was the outcome of a painstaking process involving several drafts. The Vienna Declaration was widely published, for example, in the *BAS* (November 1958): 341–344.

West tensions, and their understanding of the close, entangled relationship between science, politics and wider society.

The Pugwash vision drew centrally upon the internationalist tradition of science and notions of a global scientific community. Writing in 1965, Rabinowitch proposed that scientists had:

a large common background of knowledge, beliefs, and attitudes – not to speak of mutual acquaintance, appreciation and respect. They do form a vague but real worldwide community [...].<sup>44</sup>

The Pugwash leadership sought to channel and harness this kind of sentiment. For example, we would highlight in particular two claims advanced within the Pugwash narrative: that scientists shared a common language of science, and that, as scientists, they were able to suspend, at least temporarily, for the sake of discussion, national and political allegiances. The leadership was not naïve: they knew these claims for the most part to be unattainable ideals within the constraints of the bloc system.<sup>45</sup> But they saw in them a potentially powerful resource for mobilizing scientists, for asserting a (mostly fraternal) relationship, a rationale for coming together, and a starting point for building trust between them, all of which would be important in terms of creating a sense of community across national loyalties and the bloc divide. In effect, these claims functioned as myths that were indispensable to the Pugwash project.

The Pugwash leadership emphasized that the shared ‘common language of science’ was rooted in the education and training of scientists. The natural sciences employed particular methods that were understood to function within a framework of conventions or “norms.” The standards and principles of the scientific method, associated closely with rationality, impartiality, objectivity, imbued the scientist with a special capacity for weighing evidence and balanced reasoning. Here was the basis for a ‘shared language’ that could reach across and transcend national loyalties and political differences. In ways not yet fully understood, this was bound up with notions of mutual understanding and respect, and about the existence of a scientific community: as a Pugwash brochure of 1960 put it, science was a “collective way of life perhaps more

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44 Rabinowitch, “About Pugwash,” 15.

45 This did not preclude the reality that at some moments some scientists perhaps felt there to be some substance to these claims. That some scientists conceived an international community is apparent in Rabinowitch’s 1965 article.

than any other intellectual pursuit.”<sup>46</sup> A second Pugwash claim emphasized that scientists as scientists were able to suspend national, political and ideological allegiances – at least temporarily – and that this afforded a means to transcend the ideological and political divides. This kind of thinking was apparent in Rotblat’s assertion that scientists came to conferences as individuals, independent of the nation state, “representing nobody but ourselves.”<sup>47</sup> This attitude of mind resonated with an idealized view of the scientist that undoubtedly appealed to the self-perception of some within the profession, especially perhaps those who were both senior and successful.

The myths perhaps helped to create for Pugwash scientists a sense of autonomy and of agency amid the constraints otherwise operating forcefully upon them within the Cold War nation state. Their identity as scientists was paramount to both their self-perception and their conception of Pugwash: this helped to engender amongst them a sense of mutual respect, and a set of values about behaving honorably and with integrity. That is to say they were bound together by a shared understanding of what it meant to be a scientist. Together, in and through Pugwash, they would – so the rhetoric went – create a new kind of space in which it was possible to analyze and discuss sensitive problems relating to arms control, for example, that of verification, objectively and rationally, using the scientific method, and setting aside political and national differences.

Some sense of how these kinds of ideas were integrated into the Pugwash vision is apparent in the fifth section of the Vienna Declaration, given to the theme of “Science and international cooperation,” which asserted the existence of a distinctive bond between scientists, whilst emphasizing too their special position of responsibility in society:

We believe that, as scientists, we have an important contribution to make toward establishing trust and cooperation amongst nations. Science is, by long tradition, an international undertaking. Scientists with different national allegiances easily find a common basis of understanding; [...] despite differences in philosophical, economic or political views. The rapidly growing importance of science on the affairs of mankind increases the importance of the community of understanding. [...] This

46 For an example of this kind of thinking, see: George B. Kistiakowski, “Science and Foreign Affairs,” *BAS* 16 (1960): 114–116. *Pugwash: Its History and Aims* (London, 1960). Pugwash brochure, copy held in: Bestand 456 (Vereinigung Deutscher Wissenschaftler), File 492, Bundesarchiv, Koblenz.

47 Joseph Rotblat, “Report of Secretary General,” London, 1962, 3. RTBT 5/2/1/10 (3), Rotblat, *A History*, 141.



understanding is an excellent instrument for bridging the gap between nations and for uniting them around common aims.<sup>48</sup>

Of course, the reality was somewhat different. Around the Pugwash table, national allegiances and ideological affinities proved impossible to relinquish; posturing along national and bloc lines was a constant feature of its meetings – especially at moments of Cold War crisis. Indeed, perhaps, that was the point. Pugwash could only realize its aim of reducing international tensions exactly by confronting the hostilities that underpinned and drove the arms race. Here, we see the myths coming centrally into play. In encouraging scientists to look to each other across the bloc divide, they helped to foster a sense of community and of loyalty to something other than the nation state – even if this was contingent, ephemeral and unstable. This perhaps helped to maintain levels of goodwill between scientists that could keep alive their commitment to the Pugwash project during periods of rancor and hostility.<sup>49</sup> That is to say, the myths not only helped to bring scientists to Pugwash – they helped also to keep them there. In reality, Pugwash was always both a bridge and a battleground between east and west. In practice, its scientists never could escape the divides they sought to transcend. But the claim that they could was simultaneously a rationale for taking action, a means to create a shared sense of purpose and collective identity, and a key component of the vision on which the Pugwash project was built.

At the same time, the myths resonated beyond Pugwash, informing external perceptions of it. For state actors, politicians and policy makers, and the wider public, the Pugwash rhetoric about suspending allegiances and a shared language of science conformed with lay perceptions of science as a special domain of knowledge, and of scientists as rational, objective and trustworthy actors, and about the authority and power of both. That is to say, idealized models of the scientific enterprise and of the ethically attuned scientist were key elements in the strategy for presenting Pugwash externally, especially to state actors, but also amongst fellow scientists and with the public.

All of this was important in helping to create a framework for the trust-building process within Pugwash. The papers in this volume by Barrett, Kraft

48 The Vienna Declaration, *BAS* (November 1958): 341–344.

49 Testimony to such dynamics include Joseph Rotblat's later recollections of some conferences – often those held at times of Cold War crisis, such as at the Baden conference in 1959, and at the eighth meeting held in Stowe, Vermont, USA, in September 1961, when the recent resumption of weapons testing by the Soviets “cast a deep shadow over the gathering.” Rotblat, *A History*, 23, 31.

and Lüscher illuminate in different ways how scientists felt able to reach out to each other to try to build bridges across the divides of the Cold War world. These instances of trust ‘in action,’ so to speak, manifest the culture of discretion and confidentiality that developed within Pugwash and which served to distinguish it from other organizations concerned with arms control/conflict moderation that by the early 1960s were springing up around it. Trust was a vital resource that made the East–West character of Pugwash possible and sustainable, and enabled it to accommodate the difficulties inherent in its cross-bloc character. This human element made both its unconventional network-like infrastructure and its distinctive informal *modus operandi* conceivable and practicable.

## 2 Building Pugwash: Leadership, Infrastructure, *Modus Operandi*

The project envisaged by the founding cohort of Pugwash scientists was ambitious and bold. They were moving in new territory and had constantly to innovate and improvise, calling on the resources – intellectual, political, cultural – available to them as elite scientists. In a process that was, paradoxically, at once both pragmatic and strategic, they created a unique network-like structure and informal modes of working.

A decisive first step was the creation in December 1957 of a five-member Continuing Committee (or Committee) that, in addition to Russell, included Powell, Rotblat, Rabinowitch, and the Soviet physicist Dmitrii Skobel'tsyn.<sup>50</sup> This set a pattern for the first five years whereby the Committee was dominated by scientists, especially physicists, from the US, Soviet Union and the UK, that is to say, the nuclear powers. Meeting for the first time in December 1957, and thereafter two or three times a year, the Continuing Committee assumed responsibility for guiding the early development of Pugwash, directing and coordinating its activities, formulating practices and protocols – including the Vienna Declaration, deciding upon the venue and, importantly, the invitation list and the program for the conferences.<sup>51</sup>

Wherever we look in this early period, we see the controlling influence of the Continuing Committee. Power and decision-making came rapidly to be concentrated in its hands – and, significantly, also in the office of the Secretary General, a post first held by Rotblat between 1959 and 1973. Membership

50 Rotblat, *Quest*, 88–90.

51 Joseph Rotblat, “Memo on Future Activities and Organization,” c. 1962. RTBT 5/3/1/2.

of the Committee was placed on a rotating basis, and beginning in 1962, it included scientists from eastern and western Europe, and India.<sup>52</sup> In 1967, it was renamed the Executive Committee, by which time its membership had been increased to twelve. Those serving on it in the early 1960s included the Americans Bentley Glass and Harrison Brown, the Soviet physicist Aleksandr Topchiev, and the British/German émigré Rudolf Peierls, together with some of the early/leading members of the European national groups, notably Leopold Infeld (Poland), Ivan Málek (Czechoslovakia), Herbert Markovich (France) and Edoardo Amaldi (Italy).<sup>53</sup> Currently our understanding of relations within this Committee remains limited: the minutes of its meetings are typically cursory, comprising a list of agenda points, and perhaps a brief statement of actions in relation to them. That said, archival sources make clear that the Committee was a closely-knit circle with its own circuitry of communication – letters, phone calls, postcards, quiet words at scientific meetings, on planes and trains – passing messages to each other, soliciting views on prospective Pugwashites, and discussing plans for conferences.<sup>54</sup> As time went by, these exchanges routinely encompassed discussion of political developments and problems of the day. In effect, the Committee stood at the apex of the Pugwash hierarchy; it constituted an ‘inner circle,’ a kind of transnational fraternity – women were few and far between during the 1950s and 1960s – in which successive Secretary Generals, Joseph Rotblat, Bernard T. Feld and Martin Kaplan, wielded particular power.<sup>55</sup> That said, as Alison Kraft’s chapter shows, the Committee was not the only axis of power within Pugwash. In 1959, Europeans formed their own hub, the European Pugwash Group which, although lacking executive powers, began from around 1962 onwards to formulate its own priorities and to press issues of concern to them onto the Pugwash agenda.

52 In 1958, membership of the Continuing Committee was increased to nine, comprising three scientists each from the UK, US and USSR. In 1962, the composition was changed: henceforth, the UK, US and USSR now had two members, with one member each from Eastern Europe, Western Europe and from either India or Japan. RTBT 5/3/1/12 (1). The first Indian member of the Committee was Vikram Sarabhai, who served on it from 1962 until his sudden death in 1971.

53 For a genealogy of membership of the Committee until 1971, see: Rotblat, *Quest*, 88–89. On Amaldi and Pugwash in Italy, see: Lodovica Clavarino, *Scienza e politica nell’era nucleare. La scelta pacifista di Edoardo Amaldi* (Rome: Carocci, 2014).

54 For example, testimony to this can be found in the collection of Sir Joseph Rotblat, (RTBT).

55 In 1973 Bernard T. Feld succeeded Rotblat as Secretary General and was, in turn, succeeded in 1976 by Martin Kaplan. The Secretary General automatically held a seat on the Continuing Committee.

Scientists from east and west were very differently situated in relation to political power within the nation state: the Committee carried this asymmetry within it and was profoundly shaped by it. Western members, for example, Rotblat and Rabinowitch, were political outsiders in the UK and US respectively and, as Paul Rubinson shows for the US case, were viewed with suspicion within government.<sup>56</sup> As such, they faced challenges in building relations within government circles, often relying for this on colleagues who, by virtue of their careers, had become closer to/part of the political establishment.<sup>57</sup> In striking contrast, Soviet members of the Continuing Committee, for example, Academicians Aleksandr Topchiev and Dmitrii Skobel'tsyn, were a part of the Soviet scientific and political elite and had direct links to the Kremlin – explored further in the chapters by Fabian Lüscher and Geoffrey Roberts.

The cross-bloc character of the Continuing Committee provided a vital first test of the Pugwash vision of itself as an East–West forum. The test was seemingly passed. The Committee proved able to accommodate or reconcile the differences embedded within it: these scientists were attuned to each other's position 'domestically,' including their relation to political power, and of the ways in which this actively shaped the encounters between them. Indeed, these American, British and Soviet scientists got to know each other well, and sometimes even formed friendships across national borders and the blocs, for example, that between Rotblat and Rabinowitch, both of whom were close to Topchiev. These relationships in a sense constituted a valuable resource that could, potentially, help in times of heightened tensions, within international relations and within the Pugwash network. The Committee was where the vision of the Pugwash project as a cross bloc initiative was initially realized and where the groundwork for its transnational character was laid.

The forging of personal ties and the trust-building process were facilitated by the similarities pertaining between the founding cohort of Pugwash scientists – those on the Committee, but also leading figures in the national groups in East and West. Many were roughly the same age, engendering perhaps a shared a sense of generational belonging: many had forged their careers –

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56 Rotblat and Rabinowitch worked in the rapidly expanding research fields of radiation biology and biophysics respectively – branches of physics far removed from military applications. On Rabinowitch, see: Slaney, "Eugene." On Rotblat, see: Brown, *Keeper*; Kraft, "Dissenting."

57 For insights into the US case, see: Rubinson, "Crucified." Jessica Wang, "Scientists and the Problem of the Public in Cold War America, 1945–1960," *Osiris* 17 (2002): 323–347; *Science in an Age of Anxiety: Scientists, Anticommunism, and the Cold War* (Chapel Hill, NC: University of North Carolina Press, 1999). On the British case, see: Wittner, *Resisting*; Kraft, "Dissenting."

predominantly in physics – during the 1930s, indeed, some knew each other during the interwar period; all had experienced and survived the Second World War, and were witnesses to the changing world that followed in its wake. All were middle-class, cosmopolitan, and routinely moved in elite social and scientific circles. As senior scientists they were also accustomed to the cut and thrust of institutional and professional politics within science; they were also used to having authority and deploying it strategically to realize particular goals. Seemingly sharing a way of reading the Cold War world, they were adept at moving within it as they each navigated the widely differing political conditions in which they lived and worked within the nation state. This like-mindedness perhaps helped to create a sense of familiarity amongst scientists conducive to the building of trust between them.<sup>58</sup> Theories about trust in international relations scholarship acknowledge the importance of familiarity to the trust-building process, a point convincingly argued by Susan Schattenberg in her analysis of the dynamics between Brezhnev and the Politburo.<sup>59</sup> The early narratives about “scientific community” and about the shared and special attributes of the profession likewise helped to foster a sense of familiarity amongst Pugwashites. Padraic Kenney’s conception of the “short distance” pertaining between people who share common interests and skills is perhaps also useful in theorizing familiarity and trust-building within Pugwash.<sup>60</sup> A range of elements came together to enable the scientists of Pugwash to develop in its first few years a distinctive kind of transnational capacity for acting across the blocs.

In overseeing the careful expansion of Pugwash activities, the Continuing Committee put in place an innovative network-like organizational structure. In 1958, its call for the creation of national ‘sponsoring bodies’ was seen as one means by which to gain a foothold around the world. This met with a positive response: by 1962 ten national Pugwash groups existed and by 1972 there were over thirty, each having a dual aspect, being active within the national setting

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- 58 On concepts of trust within international relations see: Jan Ruzicka and Vincent C. Keating, “Going Global: Trust Research and International Relations,” *Journal of Trust Research* 5, no. 1 (2015): 8–26. On trust more broadly within society, see: Barbara Misztal, *Trust in Modern Societies. The Search for the Bases of Social Order* (Oxford: Blackwell/Polity Press, 1996).
- 59 Susanne Schattenberg, “Trust, Care and Familiarity in the Politburo: Brezhnev’s Scenario of Power,” *Kritika* 16, no. 4 (Fall, 2015): 835–858.
- 60 Padraic Kenney, “Electromagnetic Forces and Radio Waves or Does Transnational History Actually Happen?” in *Entangled Protest: Dissent and the Transnational History of the 1970s and 1980s*, ed. Robert Brier (Osnabrück: Fiber Verlag, 2015).

as well as on the international stage, at the conferences. Each group had its own character and all enjoyed a degree of autonomy – albeit within bounds: national groups were required to file annual reports to the Committee which made clear that their independence was contingent on their acting in ways that were “consistent with the chief criteria of Pugwash.”<sup>61</sup> Each group had also to send annually an agreed sum of money to the Committee as a financial contribution to the Pugwash project.

From the outset, the Committee placed great emphasis on the need for confidentiality, which it saw as essential to establishing and sustaining an informal *modus operandi*. (From time to time, it considered the question as to whether to place Pugwash on a more formal basis, such as registering it as a Non-Governmental Organization (NGO), but was consistently rejected).<sup>62</sup> The Committee also advanced notions about a Pugwash ‘ethos’ or ‘spirit’ which emphasized ‘scientific integrity,’ mutual respect and tolerance of opposing viewpoints.<sup>63</sup> Confidentiality was simultaneously a cherished principle, a routine practice and a strategy for realizing the Pugwash vision.<sup>64</sup> Of course, trust and mistrust were simultaneously operating within Pugwash and at its conferences – it could hardly be otherwise – but this did not preclude these scientists from attempting to find ways of building trust. These elements combined to function internally as an informal but nevertheless stringent code of conduct and disciplining technique amongst the ‘foot soldiers’ of Pugwash.<sup>65</sup> Moreover, as Carola Sachse’s chapter shows for the case of Cyrus Eaton, the Committee devised ways and means of distancing itself from those deemed to be contravening internal codes of behavior.<sup>66</sup> The much-vaunted informal character of Pugwash was, in fact, the outcome of a carefully engineered process

61 Rotblat, “Memo on Future,” c. 1962.

62 Powerful voices within Pugwash argued that NGO status would erode its cherished independence, interfere with its informal ways of working and impede its ability to respond both quickly and as it saw fit to political events and/or moments of Cold War crisis. It was not until 1991 that the organization registered with the UN as an International NGO. See: Elisabeth Röhrlich, “An Attitude of Caution: The IAEA, the UN, and the 1958 Conference in Austria,” *JCWS* 20, no. 1 (2018): 31–57.

63 Martin M. Kaplan, “Report of Secretary General,” Mühlhausen, 1976. RTBT 5/2/1/26.

64 Of course, in their dealings with policy-makers and government figures within the nation state, Pugwash scientists moved in circles where confidentiality and truth operated very differently.

65 Julian P. Perry Robinson, “The Impact of Pugwash on Debates over Chemical and Biological Weapons,” *Annals of the New York Academy of Sciences* 866, no. 1 (1998): 224–252.

66 In the early 1960s, for different reasons, Bertrand Russell, Linus Pauling and Leo Szilard all came to be perceived as troublesome by the Continuing Committee: strained relationships were accompanied by the lessening involvement of each in Pugwash.

tightly controlled by the leadership, and strikingly apparent in the staging of the annual conferences.

Held annually from 1959 onwards, the conferences were the flagship event in the Pugwash calendar: this was where the handpicked elite of Pugwash scientists came together. These events were carefully choreographed. Planned long in advance and held in good hotels in different cities around the world, in east and west, and in the non-aligned countries, the conferences lasted typically between three and five days: the core program comprised pre-circulated papers by delegates. The format and ambience resembled that of an academic conference: plenary sessions included time for questions and discussion, facilitating the cut and thrust of argument around the table. To encourage open and frank exchanges, the Continuing Committee placed great emphasis on Chatham House rules, that is to say, discussions took place on the basis of non-attribution i.e. with the assurance of anonymity beyond the room. This was seen as essential for realizing the Committee's vision of Pugwash and its conferences as a place for discreet quiet diplomacy away from the spotlight – which could not have worked without the operation of a degree of trust between those involved/present.

The imposition of Chatham House rules was a principal mechanism by which the Committee imbued amongst its scientists a culture that routinized, prioritized and protected the principle of confidentiality. Confidentiality became a habit, a way of working, and a form of self-discipline. This was an important element in creating a culture in which delegates felt at ease, and helped to foster collegiality and the perception of the conferences as a place where politically sensitive conversations could be conducted 'off-the-record.' To this end, the Committee also carefully managed the physical spaces of conference venues, for example, setting aside small private rooms for impromptu meetings on an *ad hoc* basis. A busy social program, including a conference banquet, cocktail parties, barbeques and picnics, as well as cultural activities such as visits to theatres, museums, and classical concerts, and walks in gardens or on beaches, enhanced further the scope for informal conversations.

All of this was an attempt to ameliorate the effects of the Cold War and to create a milieu conducive to a particular style of communication that was informed and informal. In this way, the Pugwash conferences provided for a re-imagining of political communication in the Cold War made possible by situating the East–West encounter in a convivial and informal setting. Unprecedented at the time, this constituted a new kind of transnational, cross bloc scientific diplomacy involving – and made possible by – elite scientists. But the aim was always to move beyond an exclusive focus on conversations between scientists: as noted, the goals of the Pugwash project emphasized

contact with political and policy making elites. Gradually, its gatherings came to provide a context for the kinds of encounters and exchanges that came in this period to be called ‘soft’ or Track II diplomacy. Decisive in moving in this direction – towards a form of what has been called “science diplomacy” – was a shift wherein state actors, especially in the west, and especially in Washington and London, began to perceive the Pugwash conferences to be relevant to their interests.<sup>67</sup> The Moscow Conference of 1960 was highly significant in this respect.<sup>68</sup> Whilst suspicions of it remained, in the early 1960s Pugwash was being recast as a potential resource by state actors who began to dispatch their representatives to its conferences – typically drawn from amongst the rapidly professionalizing ranks of scientific advisors, policy advisors and/or defense intellectuals.

### 3 Pugwash: Transnational Actor, Forum for Soft Diplomacy

A key issue for research on the Pugwash Conferences concerns how its scientists were able to establish these events as an important transnational forum accepted/used by governments in West and East as an alternative channel of communication between the Cold War blocs. In exploring this theme, it is important to ask both what it was about the Pugwash initiative that favored its attempts to position itself in this way, and what it was about the wider geopolitical situation and international diplomatic climate of the time that enabled

67 “Science diplomacy” can generally be considered as encompassing miscellaneous initiatives and activities on the part of scientists through which, individually, collectively and/or through institutions, they sought to make political and/or policy relevant contributions and interventions, and which often involved interactions with state actors or their representatives. Its links with ‘soft power’ and its connections with themes and concepts developed in the historical literature on scientific advisers and organizations such as the PCSWA during the Cold War remain poorly understood. For a sense of the current, different interpretations of this term, and its contemporary uses, see for example: The Royal Society, *New Frontiers in Science Diplomacy: Navigating the Changing Balance of Power* (January 2010). Vaughan C. Turekian and Norman P. Neureiter, “Science and Diplomacy: The Past as Prologue,” *Science and Diplomacy* 1, no. 1 (March 2012): 1–5. For a sense of historical scholarship on scientists’ roles in the policy-making realm during the Cold War see, for example: Ronald E. Doel and Kristine C. Harper “Prometheus Unleashed: Science as a Diplomatic Weapon in the Lyndon B. Johnson Administration,” *Osiris* 21, no. 1 (2006): 66–85; Julia MacDonald, Eisenhower’s Scientists: Policy Entrepreneurs and the Test-Ban Debate 1954–1958,” *Foreign Policy Analysis* 11 (2015): 1–21. Rubinson, “Crucified”; *Redefining*.

68 Wittner, *Resisting*. Eugene Rabinowitch, “Thoughts on the Moscow Meeting,” January 1961. RTBT 5/2/1/6 (39).



its scientists in the first instance to mobilize and then to develop into an unorthodox cross-bloc forum.

Establishing at least some credibility with Western and Communist governments as a transnational forum was assisted by the distinctive character of the Pugwash organization as a collection of national groups and by the different relationships to political power of its scientists in the west and in the Communist bloc. In the west, where Pugwashites were often viewed with suspicion within government circles and perceived as politically unreliable, the operation of democratic principles accorded opportunities to express dissenting views and to challenge the policies of their national governments. This made for uneasy relations with political circles in Washington and London in particular. In the countries of the Soviet bloc and in China, by contrast, Pugwashites were chosen by the state because they were deemed to be politically reliable. As the contributions by Barrett (China), Lüscher (USSR) and Olšáková (Czechoslovakia) show, scientists here were strictly controlled, being briefed and debriefed before and after conferences. This constellation had intriguing consequences. In what Evangelista has called the “paradox of state strength,” scientists operating within the centralized political systems of the communist dictatorship of the Soviet bloc could more readily access the centers of political power than was the case in the west, even as here their counterparts enjoyed more options for expressing views critical of/dissenting from government.<sup>69</sup> Meanwhile, the proximity of scientists in Communist bloc countries to their respective governments created affinities and dependencies that worked in more than one direction: as Fabian Lüscher shows, and as Matthew Evangelista has noted, the nature of the political regime in the USSR and the political reliability of Soviet Pugwashites kept Moscow close to Pugwash. The western Pugwash leadership understood and sought to manage this reality: they recognized too that this was an asset – one that afforded a window onto the Kremlin and, potentially, an alternative route for contact with it.

The unique East–West configuration of Pugwash always endowed it with a fundamental asymmetry in the sense that its scientists were very differently placed in terms of gaining access to government circles and having scope to express criticism of their respective governments. This asymmetry created a faultline within the Pugwash initiative seeding within it contradictions and ambiguities: yet, at the same time, this was also decisive to its ability to act

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69 Matthew Evangelista, “The Paradox of State Strength: Transnational Relations, Domestic Structures, and Security Policy in Russia and the Soviet Union,” *International Organization* 49, no. 1 (1995): 1–38.

across the blocs and as an informal ‘back channel’ between Cold War adversaries. There was no naivety about this dynamic within Pugwash: on the contrary, the entire project rested on accommodating this asymmetry. The tensions and contradictions that flowed from this accommodation were the price of working across the blocs. For the Continuing Committee, it meant that presentation mattered inordinately: the leadership had to avoid perceptions that Pugwash was pandering to the east or the west and constantly reiterated its political neutrality. But Pugwashites were politically attuned both to the realities of bloc and national hostilities and to each other’s position within the nation state. These sensibilities enabled the Pugwash leadership to navigate between east and west as it sought to work both with and against governments to challenge their entrenched stance on the necessity of nuclear weapons and the logic of the arms race.

Moscow undoubtedly saw Pugwash – which they referred to as a movement – as a resource for advancing its interests. Cognizant of this, the (western) Pugwash leadership sought always to guard against such manipulation. Of course, all those involved were aware that some associated the organization and its meetings with espionage, surveillance and intelligence gathering.<sup>70</sup> These difficulties came with the territory in which they were operating but western members of the Continuing Committee were acutely mindful of the need also to retain the goodwill of their Soviet counterparts. All those involved knew the East–West connection to be the most valuable asset of the project. If the cross-bloc character of Pugwash engendered wariness towards it in the west, at the same time this was precisely what came to make it relevant to western governments as they sought new means to communicate with the Communist world.

In positioning itself from the late 1950s onwards as an unorthodox channel of communication between the blocs, the Pugwash intervention was well-timed. The ‘thaw’ following Stalin’s death in March 1953 provided, as Matthew Evangelista has put it, the “political preconditions for a transnational dialogue of scientists.”<sup>71</sup> Mobilization amongst scientists included moves by the International Council of Scientific Unions (ICSU) to again cooperate with colleagues behind the Iron Curtain in preparing the International Geophysical

70 International scientific gatherings generally were liable to such perceptions. See, for example: John Krige, “Atoms for Peace, Scientific Internationalism, and Scientific Intelligence,” *Osiris* 21, no. 1 (2006): 161–181. On this theme see various contributions in Van Dongen, 2015.

71 Matthew Evangelista, “Transnational Organizations and the Cold War,” in *Cambridge History*, eds. Leffler and Westad, Volume III, 400–421, here 403.

Year (IGY) scheduled for 1957/58.<sup>72</sup> In 1955, the first conference on “Peaceful Uses of Atomic Energy” took place in Geneva: arising from Eisenhower’s ‘Atoms for Peace’ initiative, this brought together scientists from east and west.<sup>73</sup> Meanwhile, the onset of disarmament talks under the auspices of the United Nations seemed also to signal a positive shift in superpower relations, although the path proved slow and faltering. Disarmament negotiations themselves illustrated an emerging political pattern, namely, the global scope of the Cold War and the decentralization of the negotiation process in the form of multipolar engagement.<sup>74</sup> But the difficulties that pervaded these talks highlighted a larger problem with state-state communication in this period.

This connects to another significant aspect in the timing of the Pugwash initiative. Its early years coincided with growing reservations in some quarters about the suitability of conventional diplomacy as the sole means for handling East–West relations amid the unprecedented mistrust and novel political sensitivities of the deepening Cold War. Some intellectuals close to governments in east and west perceived limitations in the formal and hierarchical style of official diplomatic channels, and also about the limits of approaches to statecraft that were heavily reliant on summitry. Existing modes of communication between state actors seemed increasingly ill-suited to the problems of disarmament and arms control, especially given the personalities of those in power and the relationships between them. The tit-for-tat escalation of nuclear weapons testing even as diplomatic efforts were underway to establish a moratorium on such tests provided a case in point in the mid-late 1950s. In his treatise on nuclear weapons and US foreign policy in 1957, Henry Kissinger, at this time both associate director of Harvard’s Center for International Affairs and consultant to the US government, called for a rethinking of the “art of communication” and for new approaches to political engagement that were more attuned to the nuances of superpower relations and the

72 On the history of the IGY, see: Rip Bulkeley “The Sputniks and the IGY,” in *Reconsidering Sputnik. Forty Years Since the Soviet Satellite*, eds. Roger D. Launius, John M. Logsdon and Robert W. Smith (Amsterdam: Harwood Academic Press, 2000), 125–160. Elena Aronova “Geophysical Datascape of the Cold War: Politics and Practices of the World Data Centers in the 1950s and 1960s,” *Osiris* 32, no. 1 (2017): 307–327.

73 On Atoms for Peace, see: Krige, “Atoms.” Ira Chernus, *Eisenhower’s Atoms for Peace* (College Station: Texas A&M University Press, 2002). Martin Medhurst, “Atoms for Peace and Nuclear Hegemony: The Rhetorical Structure of a Cold War Campaign,” *Armed Forces and Society* 23, no. 4 (1997): 571–593. Ulrike Wunderle, “Atome für Krieg und Frieden. Kernphysiker in Großbritannien und den USA im Kalten Krieg,” in Neuneck and Schaaf, *Zur Geschichte*, 17–29.

74 Dimitris Bourantonis, “The Negotiation of the Non-Proliferation Treaty, 1965–1968. A Note,” *The International History Review* 19, no. 2 (1997): 347–357.

arms control problem.<sup>75</sup> Looking back on this period, senior Soviet physicist and Pugwashite Lev Artsimovitch – from 1963, a long-serving member of the Continuing Committee – recalled his perception that official diplomacy had become an “outdated chariot.”<sup>76</sup>

This provided the context for the development of an alternative mode of engagement, that of Track II diplomacy. Science in particular came to be seen by state actors as an instrument of diplomacy and a locus for exercising ‘soft power’ with scientists having some role to play in this.<sup>77</sup> Defined as “unofficial, non-structured interaction,” soft power operated in parallel to official diplomacy and added another dimension to the repertoire of diplomatic channels. It drew on concepts formulated by Harvard social psychologist Herbert C. Kalman arising from his research into the psychological aspects of political negotiations and conflict moderation.<sup>78</sup> The new attention to communication that foregrounded the human element – the emotions/psychology of fear, of trust and mistrust and so forth – formed one part of a broader shift taking place at this time in which the human sciences became an integral part of the Cold War battleground.<sup>79</sup> Allen Pietrobon’s recent analysis of Norman Cousins’ role as an unofficial courier between Kennedy and Khrushchev from October 1962 to August 1963 highlights one form of ‘soft’ diplomacy and underlines the importance of alternative approaches to political communication and dialogue.<sup>80</sup> Seen in this light, the informal, discreet *modus operandi* fashioned by Pugwash scientists seems prescient. Work in this volume, and perhaps especially that by Barrett, Kraft and Lüscher, provide insights into how individual Pugwash scientists were able to work across the blocs, by means of informal contacts mobilized to bring about dialogue and exchanges that, in ways not yet fully understood, are linked to the development of Pugwash and its conferences as a forum for Track II diplomacy involving state actors.

75 Henry Kissinger, *Nuclear Weapons and Foreign Policy* (New York: Harper, 1957), 203; *Diplomacy* (New York: Simon and Schuster, 1995); *Years of Renewal* (New York: Simon and Schuster, 1999).

76 Cited in Kadomtsev, *Reminiscences*, 155. See also: Rubinson, “Crucified,” 291.

77 See for example: Doel and Harper “Prometheus Unleashed,” MacDonald, “Eisenhower’s,” Kraft, Nehring and Sachse, “Pugwash Conferences.” Rubinson, *Redefining Science*.

78 William D. Davidson and Joseph V. Montville, “Foreign Policy According to Freud,” *Foreign Policy* 45 (Winter, 1981–1982): 144–157. 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.

79 See for example: Joel Isaac, “The Human Sciences in Cold War America,” *The Historical Journal* 50, no. 3 (September, 2007): 725–746. Jamie Cohen-Cole, *The Open Mind: Cold War Politics and the Sciences of Human Nature* (Chicago: University of Chicago Press, 2014).

80 Pietrobon, “Role.” Jones, *Track II*.

The transnational character of the Pugwash network provided the basis for its leading figures to fashion a role for its conferences as occasions for Track II diplomacy. The reputation of the conferences as presenting opportunities for confidential off-the-record exchanges began to register with state actors – especially in the west. The Pugwash conferences began to take on new relevance with governments that began to perceive in them a means to advance their interests. Paradoxically, whilst suspicions of it remained, Pugwash was being recast within western government circles as a resource in the realm of nuclear diplomacy. Whilst much remains to be investigated in relation to this shift, for the moment, it is clear that for all the difficulties resulting from the asymmetry woven into Pugwash because of its East–West character, this was a unique and powerful asset that began to attract the attention of Washington and London. If the emphasis remained with communication – the composition of those doing the communicating changed, as the conferences began to feature senior members of policy and scientific elites close to western governments, for example, the Americans Henry Kissinger, Walter Rostow and Jerome Wiesner, and Britons Solly Zuckerman and nuclear supremo, John Cockcroft. Untangling, clarifying and characterizing these encounters and exchanges constitutes a priority for future research into Pugwash – its scientists, the conferences and its on-going work ‘behind the scenes’ on what Solly Zuckerman later called the “nuclear plateau.”<sup>81</sup>

## 4 Writing Pugwash Histories

### 4.1 *Overview of the Volume*

The chapters collected together in this volume underline how each scientist arrived at the Pugwash table via a pathway profoundly shaped by the particularities of the nation state, most prominently the character of its political system and its position within the wider geopolitical landscape, within and beyond the blocs. Time and again we see the influence of the nation state in shaping the possibilities for and the nature of the transnational encounters and exchanges that took place under the umbrella of the Pugwash Conferences. We see too how governments were sufficiently interested in these gatherings to learn what happened there – and, sometimes, to try to influence what took place. The chapters point to how the development of Pugwash – its con-

81 Solly Zuckerman, “Science Advisers and Scientific Advisers,” *Proceedings of the American Philosophical Society* 124, no. 4 (1980): 241–255, 251. By this term Zuckerman referred to the “vista from which political leaders view foreign policy and nuclear/defence strategy.”

ferences, workshops and study groups – mirrored the twists and turns of Cold War geopolitics, for example, the Sino-Soviet split (Barrett), the Berlin crisis (Kraft) and the Prague Spring (Olšáková). The chapters by Barrett, Lüscher and Olšáková afford a strong sense of the power exercised over Pugwash scientists by the communist regimes in China, the Soviet Union and Czechoslovakia respectively. For the Soviet case, Lüscher illuminates how its scientists negotiated their dual loyalties towards the Party/State and towards the Pugwash project which, as he shows, coexisted in a reciprocal and sometimes uneasy dynamic. Barrett and Olšáková illuminate the way in which relations with the USSR powerfully shaped Chinese and Czechoslovakian participation. As Paul Rubinson's study makes quite clear, western Pugwashites had also to contend with constraints imposed by the watchful state and the virulent anti-communism that marked the US political system long after McCarthyism had passed its zenith. As he shows, in this setting, suspicions about leftist sympathies translated into financial difficulties, as funders wary of association with Pugwash channeled their largesse to causes deemed to be less politically contentious. Ironically, as Carola Sachse's chapter shows, American Pugwashites found themselves refusing financial support from the billionaire businessman, Cyrus Eaton, whose friendship with Premier Khrushchev and public pronouncements advocating cooperation with the Soviet Union turned what in the beginning had been a useful association into a political liability. Accordingly, they severed ties to the colorful Eaton to preserve the integrity of the US Group 'at home' and to protect the narrative of 'political neutrality' that was so important to the organization more generally. In a second contribution focused on an important early Pugwash figure, Geoff Roberts' study of the openly communist Frédéric Joliot-Curie details his relationship with the staunchly anti-communist Bertrand Russell as, after Einstein's death, they sought to realize the idea set out in the Russell-Einstein Manifesto for scientists to "assemble in conference." As he shows, the two men had links to prominent Soviet scientists – that would prove important in bringing them to the meeting in Pugwash, Nova Scotia in July 1957. Joliot-Curie's early death in 1958 makes for interesting speculation as to what might have been had he lived longer. The third section of the book encompasses the experiences of some of the smaller states in the Central European region.<sup>82</sup> The chapters by Fengler, Olšáková and Kraft cast new light on Pugwash in Austria, in Czechoslovakia, and in East and West Germany respectively. These studies show the different ways in which the communist/anti-communist theme powerfully shaped Pug-

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82 For an example of analyses from the 'smaller state' perspective see: Matthias Heymann and Janet Martin-Nielsen, eds. "Perspectives on Cold War Science in Small European States," special issue of *Centaurus* 55 (2013).

wash groups in all three countries, underlining too the way in which Pugwash histories cannot be written in isolation from both the 'domestic' political context and the position of the nation state within the Cold War geopolitical landscape. For example, Fengler highlights and explains the unusual dynamics of the Austrian case, where Pugwash scientists aligned strongly with the Austrian government, because of shared anti-communist and pro-nuclear technology (especially energy) positions.

Overall, the chapters reveal the signal importance of often just two or three scientists in the early development of the PCSWA in the different national settings, revealing how each grappled with the specificities of this context, not least their relation to political power, as each negotiated a particular set of opportunities and constraints to contribute to the Pugwash project.

#### 4.2 *Challenges for the Future*

Tackling the Pugwash enterprise presents serious challenges for the historian. Its unconventional structure and innovative *modus operandi*, the complexities arising from its rootedness in national groups, which meant that it operated simultaneously within the nation state and on the international stage, the articulation between its national and international components, its widening repertoire of activities beyond the annual conferences, and its work at the intersection between science and politics, whilst intriguing, create a set of methodological and conceptual challenges.

The longevity of the PCSWA – which continues up to the present – and its global reach presents serious practical challenges. Tackling this history requires a demanding range of contextualization, in terms of engaging with different national settings and the shifting geopolitical contours of the Cold War and the post-Cold War world. As several chapters in this volume show, there is also a need to situate Pugwash in relation to other 'peace' and disarmament organizations, not least, for example, the World Peace Council (WPC), the WFSW, the Soviet-American Disarmament Study Group (SADS) and Stockholm Institute for Peace Research (SIPRI), and explore further the work and roles of those scientists, advisers and so forth, who had overlapping involvement in these different initiatives. The Pugwash Conferences became associated with a distinctive style of working transnationally at the intersection between science and politics in the Cold War – engaging with this also raises the challenges of interdisciplinarity. As such, the Pugwash project is a rich site in which to respond to calls by historians of science for stronger engagement with the transnational dimensions inherent in this field.<sup>83</sup> As a priority,

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83 On calls for historians of science to make greater use of this approach, see: Turchetti, Herran and Boudia, "Introduction," and Krige, "Conclusion."

we need to know much more about the relationships between the Continuing Committee and the national groups, and about the national groups themselves, and how both changed amid the shifting temporalities of the Cold War. In connection to the latter point, we would in particular highlight the pressing need for research into Pugwash in the countries of the Global South and its work across the North–South divide.

A second set of challenges relate to primary sources, including the silences of the archive. The preference for working informally and discreetly, together with an awareness amongst the leadership about the need to protect confidentiality, and that its meetings could provide opportunities for espionage and intelligence gathering, instilled a tendency to conduct business verbally (in person and by 'phone), and a wariness towards committing anything deemed sensitive to paper. Further complications arise from its operating in the clandestine, secret realms of national nuclear policy-making and therefore in sensitive areas of the national security state during the Cold War. In effect, the Pugwash project operated centrally within what Ronald Doel, in his work on the US case, has called “science in black,” which he defined as the:

large, unexplored continent of interconnections, maintained in secrecy, between scientists and public officials mutually interested in adopting science to serve (American) interests and the national security state.<sup>84</sup>

This historical terrain varies from state to state and, moreover, as Peter Galison has emphasized, nuclear history is beset with particular difficulties in terms of gaining access to relevant primary sources which often remain classified.<sup>85</sup>

A third issue concerns the thorny question of influence. This is always hard to gauge and archival sources that can shed unambiguous light on this can often be hard to come by – and especially so for Pugwash, for the reasons outlined above. Jan Voorhees has proposed two ways of assessing the impact of transnational organizations on government policy, “by examining either the direct influence by such communities on state policy or their indirect influ-

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84 Ronald E. Doel, “Scientists as Policy Makers, Advisors and Intelligence Agents: Linking Contemporary Diplomatic History with the History of Contemporary Science,” in *Histography of Contemporary Science and Technology*, ed. Thomas Soderqvist (Amsterdam: Harwood Academic Press, 1997), 215–244.

85 Peter Galison has drawn attention to the extent in the United States of the practice of classifying nuclear-related data using the categories of confidential/secret/top secret. Peter Galison, “Removing Knowledge: The Logic of Modern Censorship,” in *Agnatology: The Making and Unmaking of Ignorance*, eds. Robert Proctor and Londa Schiebinger (Stanford, CA: Stanford University Press, 2008), 37–54.



ence, that is, their ability to influence the climate of opinion in which policy is made.”<sup>86</sup> In the case of Pugwash, both are difficult to evidence and assess although one might imagine, given its *modus operandi*, that it was more likely to exercise influence ‘indirectly.’ But what does influence mean and how does one measure it? For example, can making contacts and friendships at meetings – for example, a Pugwash conference – be counted as ‘influence?’ Can an ‘off the record,’ perhaps impromptu, conversation that was then relayed to a third party that subsequently featured in other conversations in senior policy-making circles about a particular topic or problem be considered as ‘influence?’ The elusive, abstract and ambiguous nature of ‘influence,’ and the particular difficulties of tracking it within the realm of (nuclear) “science in black” and the clandestine Cold War world of ‘back channels’ seem, at the present time, to suggest a need to reframe the analysis. To be sure, when the sources allow, ‘influence’ remains important. Perry Robinson and Martin Kaplan have suggested that Pugwash was influential in moves to prohibit Chemical and Biological Weapons; and the respected SADS had its roots in Pugwash.<sup>87</sup> However, one can look to other markers of significance, for example, one could argue that the durability of Pugwash, its longevity, provides an important barometer of its usefulness within the political and policy nexus surrounding nuclear weapons. Following Claudia Kemper’s thoughts on the ‘influence’ problem in her recent book on the IPPNW, we wish to move away from the preoccupation with influence narrowly defined and to develop a broader analytical framework.<sup>88</sup> Rather, we would emphasize that Pugwash is intrinsically of interest, exactly because of its meaning for those involved and as a site where science met politics during the Cold War. It stands as an important chapter in the lineage of scientists’ social responsibility in the twentieth century. It brought scientists into the political realm and registered science and its practitioners in new ways with state actors. As such, Pugwash stands as a novel example of “science diplomacy” and affords a means to enrich our understanding of the diverse and sometimes uneasy relationships at the intersection between science and politics during the Cold War.

A fourth challenge is that of how to categorize and compare the PCSWA with other Cold War actors and how to situate it within the heterogeneous

86 Jan Voorhees, *Dialogue Sustained: The Multilevel Peace Process and the Dartmouth Conference* (Washington DC, 2002), 25.

87 Martin M. Kaplan, “The Efforts of WHO and Pugwash to Eliminate Chemical and Biological Weapons,” *Bulletin of the World Health Organization* 77, no. 2 (1999): 149–155. Perry Robinson, “Impact.” On SADS, see: Kubbig, *Communicators*.

88 Kemper, *Medizin*.

landscape of organizations within the arms control and conflict moderation spheres. Unsurprisingly perhaps, the PCSWA defies ready categorization. As noted, its innovative network-like organization and distinctive informal *modus operandi* were the outcome of highly contingent processes. Its chimeric form and roles were shaped by the Cold War conditions in which it was forged and in which it operated. If Pugwash began as a novel expression of the principle of scientists' social responsibility it evolved to become simultaneously and/or variously a pool of techno-scientific expertise, a communication channel, a transnational network (comprising individuals and groups around the world), an intellectual project, a broker of political dialogue and exchange, and a forum for soft diplomacy. Its hybridity, its East–West character and the implications of this within the Cold War context complicates the application to it of models of organizational theory and theories of protest movements. Certainly, the Pugwash organization resonates with the concept of the epistemic community as proposed in 1992 by Peter Haas which, simply stated, have been defined as “professional networks with authoritative and policy-relevant expertise.”<sup>89</sup> But it does not straightforwardly ‘fit’ with this concept. It also shares some features of the “transnational advocacy network” put forward in 1998 by Keck and Siddink – although again, not always or completely fitting with this concept.<sup>90</sup> As the work in this volume shows, Pugwash had a network-like structure that, when called upon, could mobilize to function as a network – evident in particular in the chapters by Barrett, Kraft and Lüscher. We understand Pugwash partly as an epistemic community in the broader sense recently proposed by Davis Cross which can take greater account of both its transnational and Track II roles.<sup>91</sup>

The collection of papers in this volume make clear that Pugwash was about much more than its conferences – indeed, this is something we wish to emphasize. This new body of work points to the diverse range of activities carried out by the scientists of Pugwash, reveals the complexities of their experiences in different national settings, and further illuminates the transnational character of the organization and its conferences. In further demonstrating the significance of the PCSWA as a Cold War actor – within and beyond the nation state – we hope this volume can serve as a spur to further investigation of its histories.

89 Haas, “Epistemic communities.”

90 Margaret E. Keck and Kathryn Sikkink, *Activists Beyond Borders. Advocacy Networks in International Politics* (Ithaca, New York: Cornell University Press, 1998).

91 Mia'a K. Davis Cross, “Rethinking Epistemic Communities Twenty Years Later,” *Review of International Studies* 39, no. 1 (2013): 137–160.

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**PART 1**

*Founding a Transnational Network of Concerned  
Scientists in a Bipolar World*





# Science, Peace and Internationalism: Frédéric Joliot-Curie, the World Federation of Scientific Workers and the Origins of the Pugwash Movement

*Geoffrey Roberts*

## Introduction

The origins of the Pugwash Conferences on Science and World Affairs (PCSWA) can be traced to the so-called Russell-Einstein Manifesto of July 1955. Launched at a press conference in London this statement warned of the dire threat posed to humanity by thermonuclear weapons of mass destruction:

In view of the fact that in any future world war nuclear weapons will certainly be employed, and that such weapons threaten the continued existence of mankind, we urge the Governments of the world to realize, and to acknowledge publicly, that their purpose cannot be furthered by a world war, and we urge them, consequently, to find peaceful means for the settlement of all matters of dispute between them.<sup>1</sup>

Such a statement by the world's most famous philosopher and the world's most famous scientist generated considerable public interest but what grabbed the attention of those present was the political composition of the list of scientists giving their names and support to the manifesto. As well as Bertrand Russell and Albert Einstein, the statement was signed by nine leading scientists from Britain, Europe, Japan and the United States, nine of whom were Nobel laureates. They included Frédéric Joliot-Curie, President of the communist-dominated World Peace Council (WPC), the physicist Leopold Infeld who was a member of the Polish Academy of Sciences and a Vice-President of the WPC, and the British physicist Cecil F. Powell, a leading member of the World Federation of Scientific Workers (WFSW), over which Joliot-Curie also presided. In answers to journalists' questions, Russell stressed that although he had failed to secure any signatures from Soviet scientists they

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1 <https://pugwash.org/1955/07/09/statement-manifesto/>. Accessed 30 March 2017.

were sympathetic to the manifesto and he was confident that some would participate in an international conference of scientists to discuss the dangers of the arms race and nuclear weapons, proposed within it.<sup>2</sup>

The Russell-Einstein manifesto opened with the statement that “in the tragic situation which confronts humanity, we feel that scientists should assemble in conference to appraise the perils that have arisen as a result of the development of weapons of mass destruction.” It was this appeal that inspired the first PCSWA, held in Pugwash, Nova Scotia in July 1957.<sup>3</sup> Crucial to the success of this conference as a scientific bridge across the political and ideological divide of the Cold War was the participation of Soviet scientists. The high-powered Soviet delegation in Nova Scotia was led by Aleksandr Topchiev, chief scientific secretary of the Soviet Academy of Sciences. He was accompanied by Vladimir P. Pavlichenko, Aleksandr M. Kuzin, a leading radiation chemist from the Institute of Biophysics, and Dmitrii Skobel'tsyn, an old friend of Joliot-Curie, who was director of the Lebedev Institute of Physics in Moscow and headed the committee that awarded the Soviet government's Stalin/Lenin Peace Prizes.<sup>4</sup> Soviet participation in the inaugural Pugwash conference was but one example of a significant expansion of East–West cultural, sporting, and scientific relations that developed after Stalin's death in March 1953.<sup>5</sup> An

2 Andrew G. Bone, ed, *Man's Peril, 1954–55: The Collected Papers of Bertrand Russell*, Vol. 28, (Routledge: London, 2003), 321–333. For a perspective on Soviet responses to the Russell and Joliot-Curie initiative, see the chapter by Fabian Lüscher in this volume.

3 For insights into the process by which this became linked to the PCSWA, see: Alison Kraft, “Dissenting Scientists in Early Cold War Britain,” *Journal of Cold War Studies (JCWS)* 20, no. 1 (Winter 2018): 58–100.

4 The International Stalin Peace Prize “for strengthening peace among peoples” was first awarded in 1950–1951. In 1956 the name of the prize was changed to the Lenin Peace Prize and all previous recipients' prizes were renamed accordingly. J.D. Bernal, a member of the committee that awarded the prize, and himself a recipient of the Stalin award, was not enthusiastic about the name change, which he thought was far too obvious a move now that the Soviet dictator had been denounced by Khrushchev at the twentieth party congress in 1956. He argued for widening the scope of the prizes and creating a new award for contributions to human knowledge and welfare, which could be named after Lenin. He felt that such a prize would be more palatable to the likes of Bertrand Russell who would not accept a peace prize because it was too closely associated with the Soviet Union. (Bernal letter to Skobel'tsyn, Ehrenburg and Alexandrov, 30 August 1956, File: Stalin and Lenin Peace Prize, GBR/0012/MD Add.8287/I23), John Desmond Bernal Papers, Cambridge University Library, Manuscripts Room. (Hereafter JDB Papers).

5 Matthew Evangelista, *Unarmed Forces: The Transnational Movement to End the Cold War* (Ithaca, New York: Cornell University Press, 1999). Matthew Evangelista, “Transnational Organizations and the Cold War,” in *The Cambridge History of the Cold War*, Volume 3, eds. Melvyn P. Leffler and Odd Arne Westad. (Cambridge, UK: Cambridge University Press, 2010), 400–421.

important but hitherto unacknowledged contributor to this opening up of the Soviet system was the networking activities of the communist-led peace movement, which helped counteract the isolationism of the late Stalin era and facilitated the flowering of East–West contacts in the post-Stalin years.

Neither Russell nor Einstein was behind the call for a conference of scientists, rather this idea had been inserted into the manifesto at Joliot-Curie's insistence. As Sandra Ionno Butcher has noted, it was Joliot-Curie's negotiations with Bertrand Russell that "resulted in the critical call for a conference of scientists that was a pillar of the Russell-Einstein Manifesto."<sup>6</sup> Joliot-Curie and the WFSW had been lobbying for such a conference since the early 1950s but had made little headway in the face of escalating cold war tensions, which reached a crescendo with the outbreak of the Korean War in June 1950. The Russell-Einstein initiative gave Joliot-Curie an opportunity to secure endorsement of the conference proposal by a prestigious group of scientists of diverse political views. Crucially, after the manifesto was published Joliot-Curie and the WFSW continued to work for the convening of a broad-based international meeting of scientists. The central argument of this chapter is that without their efforts the Pugwash project might not have happened. In examining the role of Joliot-Curie and of the WFSW in the origins of the PCSWA, the following analysis highlights three separate but linked developments, each of which is crucial to understanding how the meeting in Nova Scotia in July 1957 came about:

First, the lobbying by Joliot-Curie and the WFSW for an international gathering of scientists that would highlight the growing dangers of weapons of mass destruction.

Second, Joliot-Curie's efforts as leader of the WPC to rally anti-nuclear opinion across the world, especially among scientists.

Third, the negotiations between Joliot-Curie and Bertrand Russell about the content of the Russell-Einstein manifesto and the WFSW's subsequent efforts to implement the call made within the manifesto for a conference of scientists to discuss the dangers posed by nuclear weapons.

## 1 Joliot-Curie and the World Federation of Scientific Workers

In the 1930s, Frédéric Joliot-Curie was more famous for his science than his politics. In 1935 he and his wife Irene, the daughter of Marie Skłodowska Curie,

6 Sandra Ionno Butcher, "The Origins of the Russell-Einstein Manifesto," *Pugwash History Series*, no. 1 (May 2005):10.

were awarded the Nobel Prize for Chemistry for their discovery of “artificial radioactivity.”<sup>7</sup> This led to his appointment as a professor at the Collège de France, where he worked on nuclear chain reactions.

However, like many scientists of his generation, Joliot-Curie (1900–1958) was radicalized by the rise of fascism in the 1930s and by the accumulating political and economic crises that led to the outbreak of the Second World War. He was inspired, too, by what he saw as the progress of the socialist experiment in the Soviet Union. In 1934 Joliot-Curie joined the French socialist party but was disillusioned by the party’s support for non-intervention in the Spanish Civil War. Given the massive German and Italian support for General Franco’s military mutiny, non-intervention was a policy tantamount to aiding the fascists, or so it seemed to Joliot-Curie, who was a founder of the *Comité de vigilance des intellectuels antifascistes* and a member of *Union des intellectuels français pour la justice, la liberté et la paix*.<sup>8</sup> Importantly, as Patrick Petitjean has shown, the 1930s was time of flourishing contacts between radical scientists in Britain and France. From these contacts emerged the idea of an international organization of scientists against war.<sup>9</sup>

Of particular importance to Joliot-Curie personally was the relationship he forged with the Irish-born crystallographer John Desmond Bernal (1901–1971), with whom he worked closely in the peace movement after the war. Bernal was the author of the highly influential *The Social Function of Science* (1939) and a leading light in the social relations of science movement, inspired by the idea that scientists had social and political responsibilities and that science itself could only flourish fully in a socialist-type society. Bernal (and Joliot-Curie) believed that scientists were members of an international scientific community that should use its power and influence in the interests of peace.<sup>10</sup> Contacts between British and French progressive scientists were disrupted by the

7 <https://www.nobelprize.org>. Accessed on 30 March 2017.

8 On Joliot-Curie’s political formation see the various contributions in Monique Bordry and Pierre Radvanyi, eds. *Oeuvre et Engagement de Frédéric Joliot-Curie* (EDP Sciences: Paris, 2001).

9 Patrick Petitjean, “The Joint Establishment of the World Federation of Scientific Workers and of UNESCO after World War II,” *Minerva* 46 (2008): 247–270.

10 John D. Bernal, *The Social Function of Science* (London: Routledge, 1939). On Bernal, see: Andrew Brown, *J.D. Bernal: The Sage of Science* (Oxford: Oxford University Press, 2005). On the radical science movement in Britain in the 1930s see: Gary Werskey, *The Visible College: A Collective Biography of British Scientists and Socialists of the 1930s* (London: Allen Lane, 1978); “The Visible College Revisited: Second Opinions on the Red Scientists of the 1930s,” *Minerva* 45, no. 3 (2007): 305–319; “The Marxist Critique of Capitalist Science: A History in Three Movements?,” *Science as Culture* 16, no. 4 (December 2007): 397–461.

outbreak of war in 1939 but were rapidly re-established after the liberation of France, when Joliot-Curie played a decisive role in the renewal of these relations.

When Einstein wrote his famous letter to President Roosevelt in August 1939 – that proved an important spur to the inception of the Manhattan Project three years later – he singled out Joliot-Curie as a pioneer of the work that could lead to an atomic bomb:

Through the work of Joliot in France as well as Fermi and Szilard in America [...] it may be possible to set up a nuclear chain reaction in a large mass of uranium, by which vast amounts of power and large quantities of new radium-like elements would be generated.<sup>11</sup>

During the war Joliot-Curie chose to stay in France rather than flee Nazi occupation. Active in the Resistance, he became President of the *Front National de Lutte pour la Liberation et l'Independence de la France* in May 1941 and in 1942 joined the French communist party (PCF). During preparations for the Resistance insurrection in Paris in summer 1944 Joliot-Curie's laboratory was turned into a factory for the manufacture of Molotov cocktails.

After the liberation of France, Joliot-Curie became director of the *Centre National de la Recherche Scientifique* (CNRS) and then, in autumn 1945, was asked by General de Gaulle to head up the *Commissariat a l'Energie Atomique* (CEA).<sup>12</sup> The PCF was by far country's biggest political party at this time and communist ministers served in the governing coalition. The early postwar years saw the Soviet-Western coalition that defeated Hitler fracture into hostility. One turning point was the Truman Doctrine speech of March 1947 in which the US president called on Congress to use American power to defend the free world from encroachments by totalitarian states and authoritarian movements. Six months later, at the founding meeting of the Communist Information Buro (Cominform), Stalin's ideological chief, Andrei Zhdanov proclaimed that the postwar world had split into two camps – a camp of imperialism, militarism and war and a camp of peace, socialism and democracy.

Whilst Joliot-Curie was a passionate believer in the peaceful uses of atomic energy and under his leadership France had developed its first atomic pile by

11 <http://www.atomicarchive.com/Docs/Begin/Einstein.shtml>. Accessed 30 March 2017.

12 On Joliot-Curie's activities during and immediately after the war see Michel Pinault, Frédéric *Joliot-Curie* (Editions Odile Jacob: Paris 2000). For accounts of the Manhattan Project, see: Richard Rhodes, *The Making of the Atomic Bomb* (New York: Simon and Schuster, 1986); Jeffrey A. Hughes, *The Manhattan Project. Big Science and the Atom Bomb* (Cambridge: Icon Books, 2002).



1948 – dubbed the “Communist Pile” by *Time* magazine – he was fundamentally opposed to the use of nuclear energy for weapons purposes and refused to take part in military-related research. Joliot-Curie’s consistent goal was the prohibition of nuclear weapons – an easy stance for a communist scientist when only the United States possessed the atomic bomb. Things became more complicated after the Soviet Union tested its first atomic bomb in August 1949. However, the USSR remained officially committed to the universal prohibition of nuclear weapons and Joliot-Curie believed that Soviet intentions – unlike those of the Americans – were peaceful and well disposed towards negotiations for nuclear disarmament and arms control.

Joliot-Curie always claimed he was a patriot as well as a communist but with the onset of the Cold War in the late 1940s – amid scandals about Soviet atomic espionage – his loyalty to France was increasingly questioned. He responded by ridiculing suggestions he would pass atomic secrets to the Soviets:

A French Communist, as any other citizen, holding a post entrusted to him by the Government, cannot honestly think of communicating to a foreign power, whoever she may be, results which do not belong to him but to the community which has allowed him to work.<sup>13</sup>

But under the polarizing pressures of the Cold War Joliot-Curie’s position hardened and in April 1950 he told the 12th congress of the PCF that

progressive scientists, Communist scientists will never give a scrap of their science to make war against the Soviet Union. And we shall stand firm, upheld by our conviction that in acting in this way we are serving France and the whole of mankind.<sup>14</sup>

This was too much for the French government, which had ejected its communist ministers from the coalition in May 1947. By the end of the month Joliot-Curie had been removed from his CEA post. The political temperature in France continued to rise and a year later – in April 1951 – the French government banned the WPC from establishing its HQ in Paris, forcing relocation first to communist-controlled Prague and then to neutral Vienna.<sup>15</sup>

13 Maurice Goldsmith, *Frédéric Joliot-Curie* (London: Lawrence & Wishart, 1976), 158.

14 Goldsmith, *Frédéric Joliot-Curie*, 163.

15 Natalia I. Yegorova, *Narodnaya Diplomatya Yadernogo Veka: Dvizhenie Storonnikov Mira i Problema Razoryzheniya 1955–1956 gody.* (Moscow: Akvilon, 2016), 78.

John D. Bernal was a leading member of the British Association of Scientific Workers (ASW), a scientists' trade union with decidedly left-wing leanings. In June 1945 the ASW decided to establish an international federation that would link similar organizations in other countries, including Joliot-Curie's *Association des Travailleurs Scientifiques*. There were further discussions about this matter at an ASW conference in London in February 1946 on "Science and the Welfare of Mankind." Joliot-Curie was unable to attend but sent a speech that called for the free international exchange of information on atomic energy. This conference led to a request to the ASW Executive to draft a constitution for a new international organization of scientific workers. The founding conference of the new organization in London in July 1946 was attended by representatives of eighteen associations from fourteen different countries and Joliot-Curie was elected President of the WFSW or *Federation mondiale des Travailleurs scientifiques*.<sup>16</sup> As Pinault has noted, Joliot-Curie was an obvious, prestigious choice to preside over the new body, but his strong and very public communist connections cast doubt on the neutrality of an organization whose stated purpose was to include in its ranks scientists with a variety of political perspectives.<sup>17</sup> However, in 1946 the Cold War had yet to begin in earnest and Joliot-Curie's partisan political position was considered to be a secondary matter, not least by those in the Federation – like Bernal – who shared his communist politics.

The constitutional aims of the WFSW included the use of science to promote peace; international co-operation in science and technology; and the international exchange of scientific knowledge. Because of financial difficulties the Federation did not hold its first general assembly until 1948, which took place in Prague, by which time it had 24, 000 members worldwide. A second general assembly was planned for Paris in 1951 but because of political difficulties it too was held in Prague. In his presidential address Joliot-Curie responded to critics who charged the WFSW with political bias. While he accepted that the WFSW was a politically-engaged organization he denied that it was the cham-

16 On the history of the WFSW see: David Horner, "The Cold War and the Politics of Scientific Internationalism: The Post-War Formation and Development of the World Federation of Scientific Workers, 1946–1956," in *Internationalism and Science* eds. Aant Elzinga & C. Landstrom (London: Taylor Graham, 1996). For a view of the WFSW through the prism of British intelligence surveillance see William Styles, "The World Federation of Scientific Workers: A Case Study of a Soviet Front Organization: 1946–1964," *Intelligence and National Security* 33, no. 1 (2018): 116–129. On the dynamics between the WFSW and Pugwash in the late 1950s and early 1960s see Doubravka Olšáková's essay in this volume.

17 Pinault, *Joliot-Curie*, 389.

pion of any particular regime, insisting that its role was to unite scientists of all opinions in accordance with the goals of its constitution.<sup>18</sup>

At the 1951 assembly, Leopold Infeld called for a conference on the theme of “science for peace,” to be organized by a committee of 20 members, called together by the Federation, but which should be politically diverse and independent of the WFSW.<sup>19</sup> The resolution passed by the assembly called for the “speedy convocation of a Congress, where all scientific workers throughout the world could unite with the aim of ensuring a happy future for all mankind.” The call for such a conference was reiterated by the WFSW’s Executive Committee when it met in Vienna in June 1952. “The conference should be one with the widest aims to secure the participation of scientists of the most diverse opinions,” Joliot-Curie told the Executive, and “it should have two major objectives in view; to examine the nature of the present tensions between nations and to discuss the role that scientists play in this situation and how best they can contribute to the cause of peace.” These aims resonated strongly with those of the Pugwash project which began five years later. In September 1953 the Federation’s third general assembly, held in Budapest, instructed the Executive to organize a broadly-based international conference on the dangers of weapons of mass destruction.

In January 1954 the WFSW’s Indian affiliate asked the Federation to approach the United Nations to organize an international convention of scientists to suggest effective measures to ban all weapons of mass destruction. This request became all the more urgent when an American thermonuclear test, *Castle Bravo*, at the Bikini Atoll in the Pacific on 1 March 1954 went badly wrong. The explosion created significant radioactive fallout which contaminated the crew of a Japanese fishing boat sailing well outside the official exclusion zone, and a number of civilians living in the Marshall Islands. An interna-

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18 Goldsmith, *Joliot-Curie*, 179.

19 My account of the role of the WFSW in the origins of the Pugwash organization is based in part on the recollections of Eric H.S. Burhop, “Actions of the W.F.S.W. Leading up to the First Pugwash Conference,” MS ADD385, File B13, Burhop Papers, University College London Special Collections, (hereafter EHSB Papers). This unpublished typescript dates from the late 1960s. It appears to be a chapter from a book on the history of the WFSW, whether a monograph or an edited collection is not clear. Since it has a strong memoir dimension it is referenced as “Burhop Memoir.” An earlier piece by Burhop, dating from the early 1960s entitled “The World Federation of Scientific Workers and the Origins of the Pugwash Movement” may be found in the file: RTBT 5/1/46 in the Joseph Rotblat Papers (hereafter Rotblat Papers), the Churchill Archives Center, Churchill College, University of Cambridge, UK. The two texts are broadly similar with the later version being a little fuller.

tional outcry ensued.<sup>20</sup> At its meeting in Vienna in September 1954 the WFSW Executive decided that the organization of “an international conference of scientists is the Federation’s most important task. The conference should be as broad as possible and should be held in the spring of 1955.” While it was agreed to ask the United Nations to organize such a conference the WFSW would, through its own efforts, try to assemble a broad initiating committee of eminent scientists. Important for later developments was the positive response that this initiative received from the WFSW’s Soviet branch. In a letter to Joliot-Curie, biochemist Aleksandr Oparin, Moscow’s representative on the WFSW Executive, reported that Soviet scientists would participate in the proposed conference and that if this was held outside the UN framework he would nominate Dmitrii Skobel’tsyn (1892–1990) to serve on the organizing committee.<sup>21</sup>

As Oparin noted, Skobel’tsyn was well-known to Joliot-Curie. Indeed, the two men were good friends and colleagues, having worked together in Marie Curie’s Laboratory in Paris in the late 1920s and early 1930s. After Skobel’tsyn’s return to Russia they kept in touch and on two trips to the USSR Joliot-Curie met him and other Soviet scientists. They met again in Moscow in 1945 at the celebrations of the 220th anniversary of the Soviet Academy of Sciences. Joliot-Curie then served with Skobel’tsyn on the committee that awarded the Stalin Peace Prize and was himself among the first recipients of this award in 1951.<sup>22</sup> Skobel’tsyn attended the first three Pugwash conferences becoming a key Soviet participant during its early years, and serving on the Continuing Committee. When Joliot-Curie died in August 1958, Skobel’tsyn flew from Moscow to attend the funeral in France.

Around this time the UN decided to organize an international scientific congress on the peaceful uses of atomic energy (eventually held in Geneva in August 1955).<sup>23</sup> Responding to this development, on 5 November 1954 Joliot-Curie wrote to the President of the UN General Assembly proposing that the UN’s conference should include discussion of the dangers of weapons of mass destruction and the scientific and technical problems associated with controlling them.<sup>24</sup>

20 On the *Castle Bravo* test and ensuing controversy, see the Special Issue of *Historia Scientiarum* 25, no. 1 (2015).

21 Oparin’s undated letter to Joliot-Curie may be found in File B5. ESHB Papers.

22 P. Akhmanev, *Stalinskie Premii* (Moscow: Russkie Vityazi, 2016): 159–195.

23 For insights into this conference see: John Krige, “Atoms for Peace, Scientific Internationalism, and Scientific Intelligence,” *Osiris* 21, no. 1 (2006): 161–181. Ira Chernus, *Eisenhower’s Atoms for Peace* (College Station: Texas A&M University Press, 2002).

24 Burhop Memoir.

As well as writing to the UN, Joliot-Curie wrote to Eric Burhop in Britain suggesting that he organize on behalf of the WFSW a broad international scientific congress on the dangers of nuclear weapons. Burhop was Chairman of the ASW's Atomic Science Committee and Secretary of the British Atomic Scientists' Association. Burhop (1911–1980), who was to play a vital role in organizing the first Pugwash meeting, was a British citizen born in Tasmania. Radicalized while a postgraduate student at Cambridge in the 1930s, he returned to Australia before the Second World War but later traveled to the US to work on the Manhattan Project.<sup>25</sup> In 1945 he was appointed Lecturer in Mathematics at University College London. Heavily involved in the pro-Soviet peace movement, Burhop was scheduled to visit the USSR as a member of a delegation of scientists in summer 1952 but on the eve of departure his passport was revoked on security grounds. Some newspapers suggested it was withdrawn because it was feared he would defect to Russia just like the “Cambridge spies” Guy Burgess and Donald Maclean had done a year earlier. Burhop sued the papers and was paid damages. While his passport was restored quite quickly he had to obtain permission from the British Foreign Office to travel to communist bloc countries, a condition that continued to be imposed until 1962. Burhop served as President of the WFSW from 1971 to 1980 and in 1972 was awarded the Lenin Peace Prize.<sup>26</sup>

Together with Joliot-Curie, Burhop drew up a statement which on 4 January 1955 he sent to a hundred scientists across the world:

The danger that faces humanity appears to us so terribly real that we believe it essential to issue an objective statement on this matter, addressed to a very wide public, over the signature of scientists of great eminence and of such a broad range of views that it will be possible to raise a cry of alarm without any section of public opinion being able to doubt the sincerity of the warning.

The preparation of the text of such a statement will require careful study in different countries and we propose the holding of an international scientific meeting to discuss the results of these preliminary studies and the drawing up of the terms of the statement.<sup>27</sup>

25 Harrie Massy and D.H. Davis, “Obituary,” Eric Henry Stoneley Burhop, *Biographical Memoirs of Fellows of the Royal Society* (27 November 1981): 131–152.

26 The author's summary of Burhop's biography based on materials in the Burhop Papers. See also: Massey and Davis, “Obituary.”

27 Burhop memoir.

Joliot-Curie, Burhop and Pierre Biquard, General Secretary of the WFSW, also made personal contact with a number of other scientists who had been involved in independent moves to organize an international conference of scientists to consider the nuclear danger, including Joseph Rotblat in Britain, Eugene Rabinowitch in the United States and the German physicist and recent Nobel laureate, Max Born, now living in Edinburgh. According to Burhop:

it was clear from the result of these various approaches that there was wide support for the holding of a conference [...] but difficulty was being experienced in finding a scientist of sufficient eminence, influence and impartiality [...] to sponsor the first step.<sup>28</sup>

Meanwhile, in December 1954, partly in response to the Castle Bravo disaster earlier that year, Bertrand Russell had broadcast a program on BBC radio called "Man's Peril" in which he, too, warned of the nuclear threat to humanity. Joliot-Curie took the opportunity to write to Russell about the idea of a conference. Russell replied positively but thought there should be a statement first and then a conference.

Russell was staunchly anti-communist and in the late 1940s had advocated threatening the Soviet Union with preventative war if it did not agree to international control of nuclear energy.<sup>29</sup> That the two men were now prepared to talk to each other reflected not just Russell's political evolution but the changed circumstances of the mid-1950s: the urgency of the situation post-Bravo; the respite in Cold War hostilities that followed after Stalin's death; and the growing popularity of Joliot-Curie and the communist-led peace movement.<sup>30</sup> It was indicative, too, of the degree of the changes in the peace movement's political character since its emergence at the end of the 1940s as a classic communist front organization. By the mid-1950s the movement was quite diverse and its non-communist element increasingly assertive. It was still broadly pro-Soviet – as was Joliot-Curie – but was pursuing its own agenda and interests as well as supporting Moscow's foreign policy demands.

28 Burhop memoir.

29 Ray Perkins, "Bertrand Russell and Preventative War," *Russell: The Journal of Bertrand Russell Studies* 14 (Winter 1994–1995): 135–153.

30 Geoffrey Roberts, "A Chance for Peace? The Soviet Campaign to End the Cold War, 1953–1955," *Cold War International History Project Working Paper No. 57*, December 2008.

## 2 Joliot-Curie and the WPC

After his removal from the CEA in 1950, Joliot-Curie returned to his work directing the laboratories of the CNRS and the Collège de France but continued to spend a great deal of time working for the peace movement – which involved a punishing schedule of journeys, meetings, demonstrations, speeches and articles. As President of the WPC, Joliot-Curie became an international political celebrity in the 1950s, feted by progressives but shunned by those with opposing political points of view.

The progenitor of the WPC was the World Congress of Intellectuals for Peace, held in Wrocław in August 1948.<sup>31</sup> Contrary to western Cold War legend, the Congress was not a Soviet initiative – the idea came from French and Polish communist intellectuals – but it was inspired by Moscow's anti-war propaganda, which became increasingly shrill as the postwar alliance with Britain and the United States broke down and the rhetoric of the Truman Doctrine clashed with Zhdanov's two-camps speech. In 1946, the Soviet Union had proposed the prohibition of all nuclear weapons and in 1947 had sponsored a UN resolution on banning war propaganda. In 1948, Moscow called for the conventional armed forces of the five great powers to be reduced by a third.<sup>32</sup> The Polish authorities were anxious about Soviet support for the Wrocław congress and concerned about what kind of delegation Moscow would send.<sup>33</sup> In the event, the Soviets were well-represented at the congress. Leading their large delegation was Aleksandr Fadeev, the head of the Soviet Writers' Union, and the writer and journalist Ilya Ehrenburg who, together with Joliot-Curie, was the peace movement's most important international emissary in the 1940s and 1950s.

The congress was quite diverse involving some 500 delegates from 46 countries. The US presidential candidate Henry Wallace sent a message of support and the congress was attended by many prominent western writers, artists and scientists, including Bertolt Brecht, Pablo Picasso, John D. Bernal, J.B.S. Haldane and A.J.P. Taylor. Julian Huxley, the head of UNESCO was there, as were representatives of the WFSW. Joliot-Curie was unable to attend but his wife Irene (who was half-Polish) chaired the congress, which passed a manifesto in defence of peace and established an International Liaison Committee

31 On the history of the postwar peace movement see Geoffrey Roberts, "Averting Armageddon: The Communist Peace Movement, 1948–1956 in *The Oxford Handbook of the History of Communism*, ed. Stephen A. Smith (Oxford: Oxford University Press, 2014), 322–338.

32 *Vneshnaya Politika Sovetskogo Souza: 1949 god* (Moscow 1953): 21–22.

33 Rossiiskii Gosudarstvennyi Arkhiv Noveishei Istorii (hereafter RGANI; Russian State Archive of Recent History), F. 3, Op. 21, D. 2, L. 1.

of Intellectuals for Peace. Based in Paris, the committee included Joliot-Curie among its members.

Seeing its potential to develop into a mass peace movement the Soviets quickly got behind the International Liaison Committee (ILC) with political and financial support. In April 1949 the ILC organized a World Congress of Partisans of Peace in Paris. The Soviet delegation, led by Fadeev and Ehrenburg, came with instructions from Moscow that the movement should involve as many people as possible, irrespective of national, political and religious differences.<sup>34</sup>

Before every meeting of the peace movement's leadership Ehrenburg and Fadeev were issued with instructions from the party about the line they should take. Crucially, these directives often reflected their own recommendations to the Soviet leadership and in turn derived from their prior discussions with the leaders of the peace movement, including Joliot-Curie. Hence, relations between Moscow and the peace movement were much more complex than the western Cold War caricature of the WPC as a transmission belt for Soviet foreign policy. Fadeev and Ehrenburg were the Soviets' main interlocutors within the peace movement. The constant theme of their reports to Moscow was the need for an influential, broad-based peace movement and the necessity to take political risks to achieve that goal.

The Paris Congress in 1949 was attended by nearly 2000 delegates, claiming to speak for 600 million people from seventy-two countries. Another 275 delegates who had been refused visas by the French government, gathered in Prague and listened to a live broadcast of the proceedings. The congress was attended by even more luminaries than the Wroclaw gathering: those present included W.E.B. Du Bois, Charlie Chaplin, Arthur Miller, Heinrich Mann, Henri Matisse and Marc Chagall. Especially important to the political image of the congress was the presence of leading non-communist socialist politicians such as Pietro Nenni, the head of the Italian Socialist Party. The congress was opened by Joliot-Curie, who appealed to scientists to stop the use of atomic energy for military purposes:

It is our duty to prevent the use of atomic energy for destructive purposes, to prevent this abuse of science and to support the efforts of those who propose to outlaw atomic weapons [...] Scientists [...] cannot remain indifferent to this problem. They are correct in assuming that we

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34 Rossiiskii Gosudarstvennyi Arkhiv Sotsial'no-Politicheskoi Istorii (hereafter RGASPI; Russian State Archive of Social and Political History), F. 82, Op. 2, D. 1399, L 15-6.



can avoid the misuse of science and many of them are working to this end. This is true of the World Federation of Scientific Workers of which I have the honour to be President.<sup>35</sup>

The resolution passed by the congress condemned NATO, opposed the rearmament of Germany and Japan and called for the prohibition of nuclear weapons. Elected by the congress was a 100-strong Permanent Committee of the Partisans of Peace (PCPP) with representatives from 50 different countries and international organizations. At its first meeting the committee elected an Executive Buro chaired by Joliot-Curie.

Throughout its history the communist-led peace movement was closely aligned with the Soviet Union and generally followed the twists and turns of Moscow's diplomacy. At its second meeting in Rome in October 1949 the PCPP condemned Tito and the Yugoslav government and broke relations with the country's peace committee – a move motivated by the Stalin-Tito split, which had precipitated a witch hunt for so-called 'national communists' who supposedly placed political independence above loyalty to the Soviet Union.<sup>36</sup> On the other hand, the relationship between the peace movement and Soviet and communist policy was a two-way affair. While the peace movement is often viewed as an appendage of the Cominform, it quickly eclipsed that organization as the centerpiece of Stalin's foreign strategy. Indeed, after 1949 the Cominform increasingly functioned as an auxiliary of the peace movement. The pages of the Cominform's newspaper – charmingly entitled *For a Lasting Peace, For a People's Democracy!* – were filled with coverage of peace movement activities and these reports reflected the movement's growing influence on the ideological direction of the Cominform. Of particular importance was the impact of the peace movement on the traditional communist doctrine of the inevitability of war under capitalism. From its inception, the peace movement, particularly politicians like Nenni, was adamant that war could be prevented by political struggle. At a meeting of the Cominform Secretariat in April 1950 Mikhail Suslov, Zhdanov's successor as Soviet ideology chief, echoed these sentiments and criticized fatalistic talk about the inevitability of war, which he said undermined the struggle for peace.<sup>37</sup> This theme was taken up by an editorial in the Cominform newspaper:

35 Frédéric Joliot-Curie, Opening speech, Reported in: Supplement to *New Times* no. 19 (1949): 3.

36 The proposal that the Yugoslav delegates not be invited to the Rome meeting came from the leader of the French Communist Party, Maurice Thorez. F3, Op. 21, D. 2, L. 173. RGANI.

37 F. 81, Op. 1, D. 234, Ll. 35-36. RGANI.

One of the main propaganda theses of the Anglo-American imperialists is that of the inevitability of war. This thesis is the basis for the war hysteria which they are fomenting [...] We must be firm in the knowledge that war is not inevitable [...] it depends on the partisans of peace [...] That is why the exposure of the thesis of the fatal inevitability of war [...] is the most important task of the communist parties.<sup>38</sup>

This deviation from Marxist-Leninist tradition went too far for Stalin who in October 1952 felt compelled to intervene and publicly reaffirm the doctrine that wars were inevitable while capitalism continued to exist. However, Stalin qualified his remarks by stating that while war was existentially inevitable under capitalism each and every actual war could be prevented by the peace movement.<sup>39</sup> The goal of Stalin's arcane reasoning was to salvage a semblance of the traditional doctrine whilst at the same time emphasizing that the struggle for peace could be won within the framework of capitalism – an important point when war in the nuclear age threatened the very existence of human civilization.

In the 1950s the peace movement's campaigning revolved around a series of petitions. The first of these was the Stockholm Appeal of 1950 – a petition calling for the prohibition of nuclear weapons. Joliot-Curie was the first to sign and across the world tens of thousands of local peace committees sprang up to collect signatures. The results exceeded all expectations. Within a few months more than half a billion people had signed the petition – a quarter of the world's population. True, a good many of these signatures derived from the communist bloc, particularly China and the Soviet Union, but tens of millions signed in the capitalist world, too, including seventeen million in Italy and fifteen million in France. Many scientists signed the petition, including some who had worked on the Manhattan Project. Niels Bohr refused to sign and issued a statement that he could not associate with any appeal that did not demand freedom of information from all countries.<sup>40</sup> Bohr's position was not as far removed from that of scientists associated with peace movement as he might have imagined. Broadly, they shared Bohr's concern for the free exchange of scientific knowledge. As a London conference on "Science for Peace" in January 1952 put it:

38 *For a Lasting Peace, For a People's Democracy!* 12 May 1950.

39 Joseph Stalin, *Economic Problems of Socialism in the USSR* (Foreign Languages Publishing House: Moscow, 1952), 37–41.

40 "The Stockholm Appeal and the Men of Science," *New Times*, no. 25, 1950.

We assert the permanently international character of science. It is a worldwide republic of the mind. The scientists of all countries are fraternally united in a common effort to understand nature; they could be united in a common concern for human betterment. We must seek to maintain everywhere the civil rights of scientists; and it is our duty to strive for the removal of all barriers that restrict or embarrass the free intercourse of scientists and the free exchange of information throughout the world.<sup>41</sup>

In November 1950 the PCPP convened its second world congress, this time in Warsaw. It was here that the WPC was established, with Joliot-Curie as its Chair/President. At its first meeting, held in February 1951, the WPC launched a new petition campaign – for a peace pact between the five great powers – a Soviet proposal that dated back to 1949. This campaign was even more successful than the Stockholm Appeal, collecting a hundred million more signatures than its better-known predecessor. But it was a hard-slog politically. As Nenni warned, “to gain 500 million signatures to the Stockholm Appeal it was enough to appeal to the emotions. It was necessary to appeal to reason and intelligence to secure support for the Appeal of Berlin.”<sup>42</sup>

The other problem with the Berlin Appeal was that it enhanced the WPC’s identification with the Soviet Union at a time when Joliot-Curie and his co-workers were attempting to broaden the council’s political basis and develop alliances with other peace movements and campaigners. At the Warsaw congress, J.D. Bernal proposed a motion on co-operation with other peace organizations and at its Berlin meeting the WPC resolved to take a number of steps to engage with other peace activists, including a conference of scientists and approaches to “peace-loving scientists” who were asked to urge their national and international scientific organizations to adopt the principle that their discoveries would be used only for peaceful purposes.<sup>43</sup>

At its second World Congress in 1950, the peace movement called for the promotion of cultural intercourse as a means to create mutual understanding. Afterwards, an International Commission for Cultural Relations was established. In November 1951, the WPC proposed there should be celebrations

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41 File I31 (Science for Peace file), JDB Papers. On the “Science for Peace” movement in Britain see Werskey, *Visible College*, 307–308.

42 Nenni speech to the Berlin session of the WPC, February 1951, JDB Papers, Box: World Peace Council, Marx Memorial Library, London.

43 *New Times*, no. 11, 1951, 1–2. Since Leopold Infeld was a Vice-President of the WPC it may have been the Council’s call for a conference of scientists in February 1951 that inspired his proposal for such a conference at the WFSW Assembly in April 1951.

in different countries of the anniversaries of significant cultural figures such as the 150th anniversary of the birth of Victor Hugo and the 500th anniversary of the birth of Leonardo Da Vinci.

One peace movement initiative of particular note was the little-known Moscow International Economic Conference of April 1952, which took place at the zenith of Stalinist isolationism during the early cold war. The conference originated from a Soviet proposal to the WPC in February 1951. Its aim was to erode the western cold war economic blockade of the communist bloc. The idea was that the peace movement would utilize its contacts to mobilize support and participation in the conference by economists and business leaders. Particularly active in recruiting support were the British and French peace committees. The conference attracted 470 delegates from forty-eight countries, including large delegations from Britain and France.<sup>44</sup>

There was much common ground between the WPC and other peace campaigners but the council's political partisanship, its identification with the Soviet Union and the leading role of communists in the organization were barriers to close collaboration. To help overcome these problems, in July 1952 the WPC decided to convene a Peace Congress of the Peoples, which was held in Vienna in December. Joliot-Curie and the WPC's organizers worked hard to ensure the Vienna congress of December 1952 was as diverse as possible. It attracted 1857 delegates from eighty-five countries, including many representatives from religious groups, trade unions, political parties and social organizations with no previous connection to the communist peace movement. A number of parliamentarians attended, among them Giuseppe Nitti, the liberal chair of the Italian parliament's peace group, whilst Jean-Paul Sartre was amongst the intellectuals speaking at the congress. Opening the congress Joliot-Curie emphasized that the peace movement's "first task was to secure controlled prohibition of weapons of mass destruction." In the first rank of this struggle should be scientists who "must insist that science be used for welfare and not destruction." He also alluded to the failures of past peace movements, particularly pre-World War II pacifists who had been disunited and had failed to act to prevent war.<sup>45</sup> The call for a peace pact was supported by the congress, as was the demand for a ban on atomic, biological and chemical weapon, but its resolutions were far less strident than those passed at the Paris and Warsaw

44 Mikhail Lipkin, "The Surprising Attempt of an Early Economic Detente in 1952," in *The Long Detente: Changing Concepts of Security and Cooperation in Europe, 1950s-1980s*, eds. Oliver Bange and Poul Villaume (Budapest: Central European University Press, 2017), 53-76.

45 Supplement to *New Times*, no. 1 (1952): 5-7.

world congresses. A new and prominent theme in Vienna was the need to foster a political atmosphere conducive to the easing of international tensions. This presaged a major WPC campaign in 1953–1954 for international negotiations to resolve problems of peace and security. To this end the WPC organized a conference on the reduction of international tensions, which took place in Stockholm in June 1954.

Following the *Castle Bravo* disaster in March 1954, peacetime nuclear weapons tests and the dangers of low-level radiation exposure became the subject of political controversy, scientific debate and growing public anti-nuclear sentiment. Against this backdrop, the WPC began to foreground nuclear issues once again and in January 1955 it launched another petition on the prohibition of nuclear weapons. The new campaign was taken up with particular enthusiasm in the USSR, where the Soviet Peace Committee (SPC) collected nearly 120 million signatures.<sup>46</sup> The SPC was by far the most important national section of the WPC. It was the conduit for Soviet direction and advice to peace movement leaders and the channel for Moscow's substantial funding of the WPC. The SPC supplied personnel to serve in the peace movement's headquarters and facilitated WPC access to the resources of the Soviet diplomatic apparatus, which proved invaluable when it came to recruiting attendees to its world congresses. Above all, the SPC served as an interface between the international peace movement and Soviet society and its political elite. WPC leaders attended Soviet peace congresses and there was widespread coverage of the international peace movement in the Soviet press. Through its relations with the SPC, the international peace movement functioned as an agency for Soviet contacts with the outside world, very important in the late Stalin era, which was characterized by a retreat into isolationism, a growth of nationalism and xenophobia, and a return to the siege mentality of the 1930s. During this period, contact with the outside world was curtailed in every sphere and contact with foreigners forbidden, but the prohibition did not apply to peace movement activists who continued to visit the USSR and to receive Soviet delegations to their own countries. As the peace movement grew globally in the early 1950s so did the invitations for SPC leaders to travel abroad. After Stalin's death these political-cultural contacts via the peace movement increased substantially.

In 1954 the Soviet peace committee welcomed thirty-two foreign delegations – 1300 visitors – including 800 participants in a bicycle peace race, and

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46 On the Soviet peace movement see: Timothy Johnston, "Peace or Pacifism? The 'Soviet Struggle for Peace in All the World,' 1948–1954," *Slavic and East European Review* 86, no. 2 (April 2008): 259–282.

twenty-three Soviet delegations – 130 people – were dispatched abroad. In 1955 the Soviets sent twenty-seven delegations – 148 people – abroad. Received in the USSR were forty-two delegations involving some 300 people. So busy was the SPC in this respect that on more than one occasion it had to ask the party leadership for additional funds and foreign currency reserves, requests granted without demur.<sup>47</sup>

Whenever Bernal and Joliot-Curie visited the USSR they made sure they met Soviet scientists and visited scientific installations. Bernal, in particular, was keen to keep open lines of communication between Soviet and western scientists and was involved in sponsorship of exchange schemes. When Bernal composed a fifteen-year plan for the development of Soviet science in 1959 its very first point was the improvement of scientific communications with the USSR.<sup>48</sup>

Joliot-Curie was an important figurehead for the peace movement and the Soviets were keen to retain him in that role, notwithstanding his bouts of illness and frequent absence from meetings of the WPC central apparatus. A December 1953 note entitled “Concerning Joliot-Curie,” written by Ehrenburg and others, urged the Soviet leadership to give all the support they could to the WPC President such as inviting him to the USSR to meet party and state leaders and showing respect for his scientific work by publishing it in Russian.<sup>49</sup> Another document pointed out that Joliot-Curie was the kind of person who sometimes required moral support and encouragement, especially from the USSR.<sup>50</sup> Equally, the Soviets had high regard for his management skills. As Ehrenburg recounted in his memoirs: “there were difficulties, all-night vigils, political tensions, also at times personal antagonisms, but Joliot always succeeded in conciliating people and putting new heart into them.”<sup>51</sup>

There was a broader, Franco-Soviet context to the importance that Moscow attached to good relations with Joliot-Curie. In the 1950s France was the object of persistent Soviet efforts to break up the western cold war alliance.<sup>52</sup> The

47 F. 5, Op. 20, D. 360, L.157, 235; D. 384, L.11. RGANI.

48 File H32, Correspondence with the Soviet Academy of Sciences. JDB Papers.

49 F. 3, Op. 21, D. 7, L. 83. RGANI.

50 F. 3, Op. 21, D. 7, L.11-2. RGANI. This was a comment by Fadeev in a report to Malenkov in March 1953. He reported that Joliot-Curie was thinking of relinquishing the presidency of the WPC and going to work in China because he found it difficult to combine scientific and political work.

51 Ilya Ehrenburg, *Postwar Years, 1945–54* (London: MacGibbon & Kee, 1966), here 184–185.

52 For a concise account of this dynamic, see: Jussi M. Hanhimäki, “Détente in Europe, 1962–1975,” in *The Cambridge History of the Cold War*, Volume II, eds. Melvyn P. Leffler and Odd Arne Westad (Cambridge, UK: Cambridge University Press, 2010), 198–218.

Kremlin believed that France and the USSR had a common interest in the containment of a revived Germany, which the British and Americans were sponsoring as a means to strengthen NATO. Soviet political influence in France was considerable. The French communist party was very strong, as was the peace movement. The pro-western orientation of French foreign policy was challenged on the right as well as the left, and the Soviets invested a lot of time and effort in cultivating relations with the Gaullist movement, which was seen in Moscow as sympathetic to a Franco-Soviet rapprochement.

While Moscow failed to woo the centrist politicians that governed France, its strategy enjoyed some successes. In August 1954 the French parliament refused to ratify the establishment of the European Defence Community, including the rearmament of West Germany. There was a significant expansion of Soviet-French cultural, scientific, economic and political contacts after Stalin's death in 1953. In May 1956 a high-powered French government delegation traveled to Moscow, where it was met with wild enthusiasm by the Soviet public. In all these developments the peace movement in France and internationally was highly active. Although little of concrete value resulted from this summit with Kremlin leaders, the Franco-Soviet mini-détente of mid-1956 was only blown off course by the combined impact of the Anglo-French-Israeli invasion of Egypt and Moscow's military intervention in Hungary in October-November 1956.<sup>53</sup>

Relations between Joliot-Curie and the Soviets were not always smooth. One notable instance of discord occurred at the Vienna meeting of the WPC Buro in January 1955. In his opening speech Joliot-Curie spoke about the danger of a nuclear war that could destroy all human life. Joliot-Curie's statement was commensurate with what Soviet Premier Georgy Malenkov, under advice from Soviet scientists, had said in an election speech in March 1954: "a new world war with modern weapons means the end of world civilisation." The following January, however, Malenkov was ousted from office and this statement was attacked by his critics as being too pessimistic about the survival of socialism in the event of nuclear war. When Moscow heard that Joliot-Curie was saying much the same thing, urgent instructions were sent to the Soviet representatives at the Buro meeting directing them to get him to retreat from

53 See Geoffrey Roberts "Impossible Allies? Soviet Views of France and the German Question in the 1950s," in *France and the German Question, 1945-1990* eds. Frédéric Bozo & Christian Wenkel (New York: Berghahn Books: 2019), 72-89. When the WPC met in Helsinki to consider the Hungarian events there was split and the Soviets failed to secure agreement on a resolution supporting their action. Joliot-Curie, who was ill, did not attend this meeting but Bernal was present.

this position in his closing speech.<sup>54</sup> But Joliot-Curie was not for turning. According to Ehrenburg, Joliot-Curie was determined to resign the presidency of the WPC rather than take back his convictions as a scientist. Looking back on the incident Joliot-Curie told Ehrenburg:

We once had an argument – you remember, it was in Vienna – [Fadееv] tried to persuade me to take back my words about an atomic war being able to annihilate life on our planet, and he kept saying: “we know you’re a loyal friend.” I replied that loyalty was a good thing in friendship but in politics, as in science, to have faith is not enough, one must also think.<sup>55</sup>

In May 1955, on the eve of a WPC-organized World Peace Assembly in Helsinki, Ehrenburg raised the matter again with Joliot-Curie and was told that if the French scientist wasn’t allowed to “rehabilitate” the phrase that nuclear weapons “theoretically have the technical possibility to destroy humanity” he wouldn’t go to the meeting.<sup>56</sup> Joliot-Curie got his way and in his speech to the World Peace Assembly he said: “Scientific specialists can now say that it is technically possible to destroy all life on the planet” – a reality that made even more urgent the banning of nuclear weapons and international control of civilian uses of nuclear energy.<sup>57</sup>

### 3 Towards Pugwash

Russell’s “Man’s Peril” program was broadcast by the BBC on 23 December 1954 and a text published in *The Listener* a week later. Among those who wrote to Russell in response to this program was Max Born – who had first suggested to Russell the idea of a statement by distinguished scientists.<sup>58</sup> However, it may be that Born was a recipient of a letter that Burhop sent to 100 scientists on 4 January urging the convening of an international scientific meeting to draw up such a statement. On 31 January Joliot-Curie wrote to Russell, repeating the contents of the Burhop circular and adding that Russell’s distinguished support would help promote the idea of such a conference. While Russell’s reply

54 F. 3, Op. 21, D. 8, L 1.174-175. RGANI.

55 Ehrenburg, *Postwar Years*, 187.

56 F. 3, Op. 21, D. 9, L. 32. RGANI.

57 Gosudarstvennyi Arkhiv Rossiiskoi Federatsii (hereafter GARF; State Archive of the Russian Federation), F. 9539, Op. 1, D. 410, L 1.23-44.

58 Butcher, “Origins,” 9.



to Joliot-Curie on 4 February resisted the idea of a conference, and argued instead that a statement should come first, he echoed some of the Frenchman's other views:

I think it very important that the signatories should have no common political complexion, and that their declaration should strenuously abstain from any blame to either side [. . .] If such a declaration as I have in mind is to be effective, the signatories should represent all shades of opinion so that, collectively, they could not be regarded as leaning towards either side.<sup>59</sup>

On 11 February Russell wrote to Einstein enthusing about idea of a statement but not a conference:

Joliot-Curie apparently pins his faith to a large international conference of men of science. I do not think this is the best way to tackle the question. Such a conference would take a long time to organise. There would be difficulties about visas. When it met there would be discussions and disagreements which would prevent any clear and dramatic impression upon the public. I am convinced that a very small number of very eminent men can do much more, at any rate in the first instance.<sup>60</sup>

In a letter of 2 March, Joliot-Curie suggested to Russell that he discuss the content of the proposed statement with Burhop. The two men met at Russell's home in Richmond, London, and the result was a draft dated 5 April which included the Manifesto's famous opening line that "scientists should assemble in conference to appraise the perils that have arisen as a result of the development of weapons of mass destruction."<sup>61</sup>

Albert Einstein died on 18 April 1955 and when Russell (who was attending a conference of Parliamentarians for World Government) met Joliot-Curie in Paris on 21 April it was agreed that it would not now be possible to make any substantial changes to the draft statement. According to Pierre Biquard, Russell told Joliot-Curie "I am an anti-Communist and it is precisely because you are a Communist that I want to work with you."<sup>62</sup> Doubtless Joliot-Curie

59 Burhop Memoir.

60 Butcher, "Origins," 11.

61 Andrew G. Bone, "Russell and the Communist-Aligned Peace Movement in the mid-1950s," *Russell: The Journal of Bertrand Russell Studies*, no. 21 (2001): 31–57, here 50.

62 Butcher, "Origins," 11.

felt the same way, but he was not prepared to sign the statement until some more amendments had been made. Russell agreed to these changes but Joliot-Curie continued to prevaricate about adding his signature to the statement.<sup>63</sup>

A clue to Joliot-Curie's thinking is contained in a report from Ehrenburg to the party leadership in Moscow about a discussion the two had had about the proposed statement. Joliot-Curie was worried that Russell's corrections to the text had introduced pacifist elements. He asked Ehrenburg: should he break off discussions with Russell or should he say that a conference of scientists should agree the text of a statement? Ehrenburg asked Moscow for instructions, which in reply requested further details and wanted to know what Joliot-Curie thought was Russell's purpose in proposing the statement.<sup>64</sup>

Around the same time there was another visitor to Paris: Skobel'tsyn. Russell had sent him the April 5 draft of the manifesto and invited him to sign. But Skobel'tsyn did not see Russell's letter until after his return from the French capital on 7 June. He drafted a reply to Russell, which was then submitted to the party leadership for approval on 25 June. In his reply, Skobel'tsyn said that if he understood Russell's text correctly, its underlying thesis was this:

Recognizing the consequences arising from new means of destruction and mass annihilation it is necessary that all disputed questions in international relations should in future be resolved peacefully, given the inadmissibility of war as a means to resolve such issues.

If the text could be amended to reflect this thesis, wrote Skobel'tsyn, it would be possible to secure all the necessary signatures. But given the aim was to involve the representatives of different political tendencies the text would have to be carefully drafted. With this in mind, Skobel'tsyn suggested a meeting of the proposed signatories to agree a text.<sup>65</sup> Skobel'tsyn's draft was accepted by the Soviet party leadership and it is probably the closest that Moscow came to adopting an official position on the incipient Russell-Einstein Manifesto.<sup>66</sup> Given Joliot-Curie's closeness to Skobel'tsyn it is difficult to believe the two men did not meet in Paris which would have afforded an opportunity to discuss Russell's proposal. Certainly, Joliot-Curie would have had no difficulty in

63 Bone, *Russell Papers*, Vol. 28, 308.

64 F. 5, Op. 20, D. 357, L. 1.184-116. RGANI. This summary of Ehrenburg's report from Paris is dated 12 May 1955.

65 *Akademiya Nauk v Resheniyakh Politburo TsK KPSS: Buro Prezidiuma, Prezidium, Sekretariat TsK KPSS, 1952-1958*, document 78. (Rosspen: Moscow 2010). I am grateful to Fabian Lüscher for a copy of this document.

66 For a Soviet perspective, see Fabian Lüscher's chapter in this volume.

agreeing with Skobel'tsyn's line in his letter to Russell; it was the standard Soviet-Communist position and he had said as much himself on several occasions.

In any event Joliot-Curie continued to delay and to suggest changes to Russell's draft. On 17 June, Russell wrote to Joliot-Curie expressing exasperation that while he would regret a failure to sign a joint statement, the best outcome of their discussions might be for the two of them to issue separate statements simultaneously.<sup>67</sup> In a delay perhaps related to the convening in Helsinki of the World Peace Assembly from 22–30 June, Joliot-Curie did not reply to this letter until five days before the press conference in London on 9 July at which Russell launched the manifesto.

The Soviets were keen to get Russell to participate in the assembly and they sent an emissary to see him – Boris R. Isakov, a journalist working out of their London embassy. The two men talked about past anti-Soviet statements by Russell, but the philosopher indicated he was now ready to cooperate with the communist peace movement. “You can be sure,” said Russell, “that I will not speak at international meetings in the spirit of my pronouncements in past years. I will make conciliatory speeches.”<sup>68</sup>

Russell did not go to Helsinki but he did send a speech, which was read out by William Wainwright, the communist secretary of the British Peace Committee. Russell criticized the peace movement for demanding the prohibition of nuclear weapons, arguing that such agreements and declarations could not guarantee the non-use or non-development of nuclear weapons. As a first step to nuclear disarmament Russell proposed that there should be a statement by important scientists on the consequences of nuclear war, a statement that would then be adopted by governments.<sup>69</sup> Not all delegates liked being lectured to about world peace by a former advocate of preventative nuclear war but Russell's intervention was welcomed by Joliot-Curie as a contribution to discussion and his speech was subsequently published in the assembly's book of documents.<sup>70</sup>

It is worth noting that after the launch of the Russell-Einstein Manifesto the philosopher continued his collaboration with the communist peace

67 Bone, *Russell Papers*, Vol. 28, 312.

68 F. 3, Op. 21, D. 9, L. 72. RGANI. Isakov also went to see James Aldridge and Sean O'Casey, whom he found living in genteel poverty in Torquay. The two writers were willing to go to Helsinki as long as their expenses were paid. They took the opportunity to complain about the failure of the Soviets to pay royalties on translations of their works (the USSR did not adhere to international copyright laws until decades later).

69 F. 9539, Op. 1, D. 410, L. 1.62-69. GARF.

70 Bone, *Russell Papers*, Vol. 28, 297–298.

movement. Indeed, in November 1955 Bernal nominated Russell for the Stalin Peace Prize on grounds that he was “undoubtedly the most reputed peace fighter of the year and has done enormous work on uniting scientists against nuclear warfare.” Bernal cautioned, however, that Russell was unlikely to accept the prize and that even mentioning it to him might make him think he was being unduly influenced: “negotiations would have to be carried out with great tact.”<sup>71</sup> Nothing came of Bernal’s suggestion but in November 1957 Burhop tried to nominate Russell for one of the WPC’s International Peace Prizes. Russell declined on the grounds that as a peace campaigner he needed to remain, and had to be seen to remain, impartial – which Burhop accepted.<sup>72</sup>

While Bernal and Joliot-Curie had a lot of time for Russell they did not think that lobbying by scientists alone could contain the nuclear danger and pave the way to disarmament. The efforts of scientists had to be supplemented by popular struggle for peace – an idea that Russell would himself embrace later in the 1950s in his support for the Campaign for Nuclear Disarmament in Britain.<sup>73</sup> Needless to say, Bernal and Joliot-Curie had a much more benign view of the Soviet Union than did Russell, though neither of the two men were happy with all aspects of Moscow’s interference in the peace movement. When he succeeded Joliot-Curie as President of the WPC, Bernal resisted Moscow’s efforts to embroil the peace movement in the Sino-Soviet split and in 1968 he opposed outright the Soviet-led invasion of Czechoslovakia.

The Helsinki Peace Assembly in 1955 was by far the most diverse and open of the WPC’s world congresses. Afterwards the Soviets conducted a comparative analysis of the delegate profile of the Assembly and the Vienna People’s Congress. The two events were found to be broadly similar in terms of numbers of delegates, countries represented, gender balance (seventy-five/twenty-five per cent, men/women), and occupational profile (mostly middle-class). But in two respects there were striking differences: at Helsinki there were many more parliamentarians present (146 compared to forty-six in Vienna) and significantly more representatives from organizations with no previous connections to the peace movement (269 compared to forty-six). In an analysis of the political composition of the 446-strong WPC elected at the Helsinki assembly (similar in size to that elected at the Vienna congress) the Soviet authors concluded

71 Bernal to Skobel'tsyn, 10 November 1955, File I 23: Stalin and Lenin Peace Prize. JDB Papers.

72 Correspondence between Burhop and Russell, November-December 1957, File A21. EHSB Papers.

73 On CND, see for example: Richard Taylor, *Against the Bomb. The British Peace Movement 1958–1965* (Oxford: Clarendon Press, 1988).

that, excluding delegates from the USSR, China and the People's Democracies, eighty-four members of the council were communists, seventy-nine were communist sympathizers and progressives, twenty three were socialists or socialist sympathizers, and, significantly, ninety-eight were representatives of "bourgeois political parties."<sup>74</sup>

In his report to the Soviet leadership on the assembly, Ehrenburg stressed not just the greater political diversity of the assembly compared to previous peace movement congresses but the more critical discussion of the policies of the WPC and of the USSR. At the same time, reassured Ehrenburg, Helsinki was:

evidence of the great turn among broad sections of international public opinion in favour of negotiations and the reduction of international tensions. It is necessary to note that the Soviet delegates had never met with such warmth and attentiveness [...] This happened because almost all the speakers at the assembly stressed the enormous contribution of the Soviet Union to peace in the recent period.<sup>75</sup>

Ehrenburg was referring to the Geneva Summit of July 1955 – the first such meeting of the leaders of Britain, France, the Soviet Union and the United States since the end of the Second World War. There was much talk in the press about the spirit of Geneva – the idea and hope that the post-Stalin respite in the cold war could develop into a prolonged East–West "détente" of the kind that actually did develop in the 1960s and 1970s, though use of the term in the 1950s was not common. The Geneva summit discussions were continued in the autumn by the four powers' foreign ministers. These negotiations failed but public opinion remained wedded to the idea that a fundamental breakthrough in the resolution of the Cold War had occurred and remained so until the Hungarian and Suez crises of November 1956.<sup>76</sup>

When, on 4 July, Joliot-Curie finally replied to Russell's 17 June letter it was in a much more constructive spirit than their previous correspondence about the manifesto. It is possible that Joliot-Curie's change of attitude was the result of advice from Skobel'tsyn or the Soviets but more important may have been the impact of the pluralistic and open atmosphere of the Helsinki Assembly.

74 F. 5, Op. 28, D 356, L 1163-170. RGANI.

75 Ob Itogakh Vsemirnnoi Assamblei Mira (22–29 Iunya 1955g. Khel'sinki)," F. 5, Op. 20, D. 356, L 1146-153. RGANI.

76 Roberts, *Chance*.

In Joliot-Curie's mind, too, must have been the prospect of achieving the international conference of scientists that he had long sought. To help finalise the draft Russell and Burhop were joined on 7 July by Pierre Biquard. Joliot-Curie had some final textual amendments but these were quickly and easily dealt with by the device of adding a couple of qualifying notes and on the eve of its launch Biquard signed the statement – later Manifesto – on his behalf.<sup>77</sup>

At the last moment Russell asked one of the Manifesto's signatories, Joseph Rotblat, to chair the press conference at which it was launched and to field any scientific questions. Rotblat was co-founder of the British Atomic Scientists' Association, its Executive Vice-President and editor of its in-house bulletin. Russell had met Rotblat when they both appeared on the BBC TV Panorama program discussing the *Castle Bravo* test and radiation dangers.<sup>78</sup> In 1954 Rotblat had corresponded with Eugene Rabinowitch, editor of the US *Bulletin of the Atomic Scientists (BAS)*, who had also been advancing the idea of an international scientific conference about the dangers of the nuclear arms race – and who would later become a leading figure in the Pugwash organization. Rabinowitch and Rotblat had in mind a more technical and western-oriented conference than that proposed by the WFSW but they encountered the same problem as the Federation: the reluctance of non-aligned scientists to support a venture that might be seen by western governments as politically hostile.<sup>79</sup> If, for a time, there had been a 'thaw' in the Cold War, the conflict was far from over. West Germany was being rearmed and integrated into the western bloc, joining NATO in May 1955. In response the Soviets and their allies established the Warsaw Treaty Organization, while Moscow's proposals for disarmament, arms control and European collective security were spurned by the western powers.

For Andrew G. Bone, the most logical follow-up to the Russell-Einstein manifesto was the conference proposed by Joliot-Curie, and Burhop was keen to see what help the WFSW could give to this venture.<sup>80</sup> On 22 August, Biquard and Burhop informed the WFSW's affiliated organizations that the Federation had offered its support to the conference proposal set out in the Manifesto and urged them to spread the idea among scientists and scientific organizations in their own countries.<sup>81</sup> At its Fourth Assembly, held in Berlin at the end of September, the WFSW passed a resolution "on the need for an international

77 Bone, *Russell Papers*, Vol. 28, 312.

78 Kraft, "Dissenting."

79 Correspondence between Rabinowitch and Rotblat, RTBT 5/1/1/1. Rotblat Papers.

80 Bone, *Russell Papers*, Vol. 28, 315.

81 Burhop Memoir.

conference” and Burhop stressed that such a conference had to be politically independent as well as scientifically authoritative.<sup>82</sup>

For his part Russell asked Rotblat to help with the organization of the conference and suggested to fellow Manifesto signatory, the German-American geneticist Herman J. Muller, that he work on enlisting what Russell called scientists of a “western outlook.” However, Muller declined on grounds that he was too left-wing for such a task. Russell was disheartened and wrote to Rotblat on 10 September:

I do not feel that I personally can do anything more among scientists [...] further steps among scientists ought to be taken by scientists [...] I am not wholly convinced of the necessity of such a conference [...] and in any case I do not feel it is my business to organize it.<sup>83</sup>

Undeterred, Burhop and Rotblat continued with preparations for the conference. At the end of October 1955 the two men drafted a letter about forming an initiating committee of eminent scientists that would organize an international scientific conference on the problems posed by nuclear weapons. The letter stated that the conference should be organized “in such a way as to not arouse the hostility of governments” and must not “appear to be directed against this or that particular government.” Furthermore, they noted that:

it is our view that the presence of scientists of both East and West is necessary on this committee and in view of the atmosphere of détente created by events this summer, is entirely appropriate.<sup>84</sup>

Before committing himself, Russell sent this draft to another Manifesto signatory, Max Born who, in turn, consulted with his erstwhile German colleague, the chemist and serving President of the Max Planck Society, Otto Hahn, who was at that time in the United States. Born’s own view was that the international situation was not conducive to such a conference, while Hahn thought American scientists would see it as a communist venture and would not take part in it, at least not in large numbers.<sup>85</sup> Russell’s response to this negative

82 Horner, *Cold War*, 155.

83 Bone, *Russell Papers*, Vol. 28, 315–316.

84 RTBT 5/1/1/3. Rotblat Papers. The final sentence quoted was amended by hand to read: “it is our view that the presence of scientists of both East and West is both necessary and appropriate.”

85 Born may have had in mind the failure of Soviet-Western negotiations at the Geneva Foreign Ministers Conference of October–November 1955, which ended hopes for an agreed resolution of the German question and the reunification of East and West Germany.

feedback was, once again, to row back from the idea of a conference. As persistent as ever, Burhop argued that a meeting of a small initiating committee of 20–30 participants would still be useful even if a large-scale conference was not feasible at this time. Fortunately, an opportunity to pursue this line of action was presented by an imminent trip – in February 1956 – to the Far East of the Chairman of the WFSW's Executive, Cecil F. Powell.<sup>86</sup> A visit to Japan was on Powell's itinerary and the idea was that he would discuss matters with fellow physicist and signatory to the Manifesto, Hideki Yukawa. However, Powell's route took him first to India and there he discussed nuclear issues with Indian scientists and with the country's Prime Minister, Jawaharlal Nehru.

Following these discussions Powell composed a memorandum which proposed that the Indian government should sponsor a gathering of a small group of scientists who would meet in India immediately before a meeting of the Indian Science Congress in January 1957. This suggestion was welcomed by the Indians and embraced by Russell.<sup>87</sup> In mid-1956 Russell, Powell, Rotblat and Burhop began to organize for a meeting in India, to be held in January 1957. Invitations were sent to some thirty scientists and by October about twenty positive acceptance letters had been received. Much of the organizational work was done by Burhop, with Rotblat and Powell also making a substantial contribution. Burhop sent detailed progress reports to Biquard and Joliot-Curie. "It is clear that the response has been very satisfactory," he wrote to Biquard on 16 October,

although the American representation will probably not be as strong as one would have hoped, and one must feel a little uneasy at the continued absence of definite replies from Soviet scientists. However, on the basis of the replies already received there is no doubt at all that the meeting is well worth having.<sup>88</sup>

That same month – October 1956 – Russell had a meeting with the man who would later head the Soviet delegation to the first Pugwash Conference – Aleksandr Topchiev, who was in Britain to attend the opening of Calder Hall in Cumbria – the country's first nuclear power station. The previous year Topchiev had taken part in discussions on nuclear issues at the World Association of Parliamentarians in London and at the UN's conference on the

86 On Powell see "Cecil Frank Powell," Obituary, F.C. Frank & D.H. Perkins, *Biographical Memoirs of Fellows of the Royal Society* 17 (November 1971): 541–563.

87 Andrew G. Bone, ed. *Détente or Destruction, 1955–57: The Collected Papers of Bertrand Russell*, Volume 29 (London: Routledge, 2005): xxvi–xxvii.

88 The relevant correspondence may be found in: RTBT 5/1/1/3. Rotblat Papers and File B4. ESHB Papers.



peaceful uses of atomic power in Geneva.<sup>89</sup> Russell, Topchiev, and Powell met in Chirk in Wales, a village near to Russell's home. During the meeting Russell canvassed for Soviet participation in the forthcoming Science Congress in India but Topchiev was non-committal, at least according to his own report of the meeting. The future of humanity depended on co-operation between the Soviet Union and the United States, Russell told him, and contacts among scientists would help foster mutual understanding between the two countries.<sup>90</sup>

There was a fly in the ointment, however: the lack of money to finance the Indian meeting which meant, wrote Burhop, that the odds on it happening were no more than 50/50. Moreover:

The difficulties in this connection are increased on account of the marked reluctance of Rotblat to accept help from any source which he may regard as associated with a particular political orientation. For example, he is not even prepared to accept the £500 from the WFSW [...] opportunities for approaching people are being lost or delayed by this attitude.

The meeting, when it assembles, will be purely an informal one, called on behalf of the eight sponsors, and there will be nothing to indicate that any organisation, including the WFSW, has played any part at all in calling it together. I have discussed this matter with Bernal and Powell and they are very much of the opinion that this is exactly as it should be and that the importance of the meeting transcends all other sectional considerations.

The guiding principle as far as Rotblat is concerned has been to secure American participation, or at least that of Rabinowitch, and he quite sincerely believes that this is incompatible with any mention at all of the World Federation.<sup>91</sup>

One hope for financial sponsorship was Cyrus Eaton, the Chairman of the Chesapeake and Ohio Railway Company who, shortly after the publication of the Russell-Einstein Manifesto, had written enthusiastically to Russell offering to host a meeting of scientists in the small village of Pugwash, in Nova Scotia, Canada, where he had a summer residence.<sup>92</sup> In the same letter Eaton wrote:

89 On Topchiev see Fabian Lüscher's essay in this volume.

90 "Spravka o Besede Akademika A.V. Topchieva s B. Rasselom i Professorom Pauellom," 25 October 1956. F. 2193, op. 1, d. 2. Archives of the Russian Academy of Sciences (ARAN). I am grateful to Fabian Lüscher for providing me with a copy of this document.

91 File B1. ESHB Papers.

92 On Eaton, see Carola Sachse's chapter in this volume.

“if you feel that some other place might be more convenient, I should be happy to be of assistance.”<sup>93</sup> With this in mind, on 4 September 1956 Russell wrote to Eaton asking for a contribution toward the £8000 needed to finance the meeting in India. Eaton replied on 10 September declining to help the Indian conference but leaving open the possibility of a meeting in Pugwash.<sup>94</sup>

Following this and other rebuffs from potential sponsors it was decided to postpone the January meeting in Delhi. In a letter to his WFSW contacts on 11 December Burhop explained that the postponement was mainly for financial reasons, although he noted too that the “troubled international atmosphere,” a reference to the Hungarian and Suez crises, would have created serious difficulties in traveling to India. But Burhop was hopeful the meeting would go ahead sometime in the spring. After outlining the proposed agenda for the meeting – the dangers of nuclear weapons, the peaceful uses of atomic energy, disarmament and arms control – he suggested that the interval created by the postponement be used to prepare background papers on these topics. “I know that I do not have to point out that the meeting is being assembled by the invitation of Earl Russell,” concluded Burhop,

and that neither the World Federation of Scientific Workers nor any other body has any direct organisational connection with it. In these circumstances the most effective way of drawing attention to the work of the Federation and the various bodies affiliated to it would consist in the submission of relevant contributions connected with the agenda.<sup>95</sup>

By the end of 1956 Russell, Rotblat, Powell and Burhop had concluded that it was Nova Scotia or nowhere and in early 1957 letters were sent to interested parties explaining that for financial and other reasons the meeting in India had been cancelled but there would be a conference in Pugwash in July. Burhop continued his active role in preparations for the conference, particularly in relation to securing the attendance of Soviet scientists. On 6 May, for example, he telegraphed Oparin in Moscow asking him to submit without delay the names of the Soviet scientists who would travel to Canada.<sup>96</sup>

These efforts notwithstanding, Burhop was not himself slated to go to Pugwash. But Biquard and Joliot-Curie were keen that he should do so, particularly

93 Eaton to Russell, 13 July 1955, RTBT 5/1/1/3. Rotblat Papers.

94 RTBT 5/1/1/2. Rotblat Papers.

95 File B1. ESHB Papers.

96 File B3. ESHB Papers.

after the British left-wing scientist, C.H. Waddington, dropped out.<sup>97</sup> Russell and Rotblat agreed to Burhop going to Nova Scotia but as a member of the technical support team and, tellingly, the post-conference statement did not include Burhop's name. The reason for this related to a clear understanding of the need to take steps to combat criticisms of leftism, as Burhop explained to Pierre Biquard in a letter in November, "this was entirely my own decision and was based on the ground that the addition of my name as well as Powell's would have made the British delegation appear very left-wing and unrepresentative of British science."<sup>98</sup>

At the same time, Burhop was disgruntled by the lack of recognition of the WFSW's role in the success of the Pugwash conference. Rabinowitch had published an article on the Nova Scotia meeting in the *BAS* which had mentioned several organizations but not the WFSW.<sup>99</sup> While Burhop accepted that it would have been difficult to secure the participation of American scientists had the WFSW's role been publicized before the conference, he noted that affiliated organizations in China, Eastern Europe, and the Soviet Union would find it difficult to understand why there was no mention of the Federation. "It all reduces to a question," Burhop concluded in his letter to Biquard,

of to what extent we are justified in belittling the role of the Federation in the interests of achieving a very broad conference. I must confess that I am very uncertain of the limits to which one should go in this direction.<sup>100</sup>

Like Russell, Joliot-Curie was unable to attend the conference because of ill-health, but he received a detailed briefing on it from Burhop, via Biquard, who reported that "Topchiev appears very pleased with the results," but that Skobel'tsyn had been "less so. He gave Burhop the impression that it had been a big journey to achieve very little."<sup>101</sup> In July 1957, the future of the conferences beyond the first meeting in Pugwash remained uncertain, but in December 1957 at a meeting in London – where the Pugwash Continuing Committee was formed – it was agreed to hold a second conference in Lac Beauport the

97 File B3, Correspondence between Burhop and Biquard June 1956. ESHB Papers.

98 File B3, Correspondence between Burhop and Biquard June 1956. ESHB Papers.

99 Eugene Rabinowitch, "Pugwash: History and Outlook," *BAS* 13, no. 7 (September 1957): 243–252.

100 File B4. ESHB Papers.

101 Biquard to Joliot-Curie, 19 July 1957, File B4. ESHB Papers.

following spring and plans discussed for a third conference in the autumn.<sup>102</sup> Topchiev would soon become a member of this Committee and, until his untimely death in 1962, was seen by Rotblat and Rabinowitch as the key Soviet figure in the project.

Meeting in Helsinki in August 1957, the Fifth General Assembly of the WFSW welcomed the conference in Pugwash and called for “ever more representative international conferences of scientists” and pledged its “support for efforts directed towards this end.”<sup>103</sup> In years to come many WFSW members and associates would take part in the conferences, including Cecil F. Powell, who succeeded Joliot-Curie as President of the Federation. Indeed, Powell became a stalwart of the Pugwash organization both within the British group and on the international stage. When Powell died suddenly in 1969, Rotblat paid tribute to his enormous contributions to the organization: “Cecil Powell has been the backbone of the Pugwash Movement. He gave it coherence, endurance and vitality.”<sup>104</sup>

Initially, Soviet press coverage of the conference in Pugwash was scant, for example *Pravda* carried only a brief report on it, even omitting reference to Soviet participation.<sup>105</sup> However, when the Soviet delegation returned to Moscow, the Academy of Sciences held a session on the conference which led to the formation of a Pugwash working group headed by Topchiev, and which became the Soviet Pugwash Committee.<sup>106</sup> On 13 August 1957, *Pravda* published a statement by 200 prominent Soviet scientists praising the Pugwash initiative and calling for a broader international gathering of scientists to consider steps towards a ban on nuclear testing and the prohibition of nuclear weapons.<sup>107</sup> On 16 August Topchiev published a laudatory article on the Pugwash project in *Pravda*, highlighting the immediate dangers of increased levels of strontium-90 as a result of continued nuclear testing as well as the existential threat to humanity posed by nuclear weapons.<sup>108</sup> Skobel'tsyn gave an interview to *Izvestiya*, and *Novoe Vremya* (New Times) also published an

102 Joseph Rotblat. *Pugwash: A History of the Conferences on Science and World Affairs*. (Prague: Czechoslovak Academy of Sciences, 1967).

103 Burhop memoir.

104 Butcher, “Origins,” 17.

105 “Zayavlenie Uchenykh-Atomnikov v Paguoshe,” *Pravda*, 14 July 1957.

106 For further detail on the Soviet response to the first Pugwash meeting see Fabian Lüscher's essay in this volume. On Soviet scientists and Pugwash after 1957 see: Evangelista, *Unarmed Forces*.

107 “Ob'edinit Usiliya Uchenykh v Borbe za Nemedlennie Zapreshchenie Yadernogo Oruzheniya: Zayavlenie Gruppy Sovetskikh Uchenykh,” *Pravda*, 13 August 1957.

108 Aleksandr V. Topchiev, “Ustranat' Ugrozu Atomnoi Voiny,” *Pravda*, 16 August 1957.

article about the conference in Pugwash.<sup>109</sup> In September 1957, Topchiev and Skolbel'tsyn also sent Powell a copy of the Academy of Sciences *Vestnik* (Bulletin) which was devoted to the meeting in Pugwash. They reported that the Academy's members had discussed this and lent its unanimous support to the conclusions reached and set out in the statement from the meeting. They also reiterated the call made by Soviet scientists in *Pravda* in August for a much larger international meeting of scientists, noting too that:

even if such a new conference dealing with same problems as in Pugwash, is unable to go much further ahead in the solution of these problems, the adherence of much larger circles of scientists to the principles adopted in Pugwash could be of great importance.<sup>110</sup>

This testifies to a view of scientists as a respected and authoritative constituency within and also beyond the Soviet Union, something which those involved early in the Pugwash conferences sought to mobilize and harness to the project of forging East–West communication and dialogue.

#### 4 Conclusion

In his memoir about the origins of the Pugwash project, Burhop was characteristically generous about Rotblat's role in the process: "the greatest credit to any individual must go to Rotblat who has become the indefatigable Secretary General of the Pugwash Movement." But as this article has tried to show, the role of Joliot-Curie, Burhop and the WFSW was at least as important as Rotblat's, if not more so, in relation to the inaugural meeting of what would become the Pugwash conferences. It was Joliot-Curie who inserted the call for a conference into the Russell-Einstein manifesto, it was the WFSW who secured Soviet participation in the first Pugwash conference, and it was Burhop who did much of the organizational work.

The path to the Pugwash conferences is bound up with the history and difficulties of the WFSW, about which David Horner has said:

The Federation represented a genuine attempt to develop a new mode of scientific internationalism [...] the failure to achieve many of the objectives laid out in its Charter resulted primarily from the fragility of

109 "The Scientist and the Atomic Weapon," *New Times*, no. 32, August 1957.

110 RTBT 5/1/1/2. Rotblat Papers. The letter is undated but refers to the conference in Pugwash "about two months ago."

many of its affiliated organisations and the vehement conflicts aroused by the Cold War.

It was, nevertheless, able to contribute to the growth of a broader movement for the international control of nuclear weapons. In addition, its success was to have maintained a channel of communication between scientists of East and West for discussions of mutual concern against the background of a world deeply divided along ideological lines.<sup>111</sup>

In terms of the weaknesses and limits of the WFSW, Patrick Petitjean has argued the significance of the Wroclaw Congress in the increasing difficulties it faced, which:

[...] had two long-term negative consequences: the pro-communist scientists became more isolated from their former friends in the popular fronts; the WFSw (WFSW) lost its independence and was actually transformed into the scientist branch of the World Peace Council.<sup>112</sup>

Actually, it was not the peace movement but the Cold War that isolated pro-communist scientists from some of their former friends and allies. Moreover, persistent efforts by Joliot-Curie and the WPC to broaden the basis of the peace movement achieved considerable success in the early 1950s. By the mid-1950s there was much popular support for the policies espoused by the WPC and its Soviet partner. This paper has tried to show, and argues that, this political context was decisive in creating conditions conducive to the inception of the Pugwash initiative. While the WPC and the WFSW were connected by shared politics and by Joliot-Curie's leadership of both, the Federation pursued its own agenda, which was crucial for the Russell-Einstein Manifesto and for the path that led subsequently to the meeting in Nova Scotia that would become the first Pugwash Conference. Far from using the WFSW to support the peace movement, Joliot-Curie used the WPC to prioritize the abolition of nuclear weapons and to further the cause of scientific internationalism that he had first embraced in the 1930s.

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<sup>111</sup> Horner, *Cold War*, 157.

<sup>112</sup> Petitjean, "Joint," 261.

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## Patronage Impossible: Cyrus Eaton and His Pugwash Scientists

*Carola Sachse*

A United Press International (UPI) report from 13 September 1960 proved to be the last straw.<sup>1</sup> It cited the “wealthy industrialist” Cyrus Eaton from Cleveland: “The next session of his ‘Pugwash Scientists Conference’ will be held in Moscow because of the State Department’s refusal to permit Red China physicists to attend.”<sup>2</sup> The following day, the *New York Herald Tribune* and other leading US newspapers disseminated Eaton’s statement. It was not the first time the “red capitalist,” with his expressions of friendship towards the Soviet Union in general and Nikita Khrushchev in particular, had put US foreign policy to the test. The strongest reaction, however, came not from government circles in Washington, but from the three American members of the London-based Continuing Committee of the Pugwash Conferences on Science and World Affairs (PCSWA; Pugwash): biophysicist and former Manhattan Project scientist Eugene Rabinowitch, biologist and geneticist Bentley Glass and nuclear chemist Harrison Brown.

Eaton was a wealthy industrialist whose business portfolio included not only coal, iron and steel companies but also the Chesapeake Ohio Railway: his interest in averting nuclear war led to his becoming an early and principal patron of Pugwash. However, since the first conference, which took place at Eaton’s country lodge in Pugwash, Nova Scotia (Canada) in 1957, Rabinowitch

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1 This article could not have been written without the ongoing scholarly discussions with my colleague Alison Kraft, her help with the English language and her willingness to share archival materials with me, especially those held in the Rotblat papers (Henceforth: RTBT) at the Churchill Archives Center, Cambridge, UK. My warm thanks also go to Teresa Kewachuk for her generosity in enabling access to the collection of historical documents at the Thinkers’ Lodge in Pugwash and making my stay there in late summer 2014 a productive and enjoyable experience. This manuscript was written in the library of the Max Planck Institute for History of Science in Berlin and I greatly appreciate and would like to thank the librarians there for their excellent help and support. Finally, special thanks go to Camilla Nielsen (Vienna) for translating my text.

2 *Bulletin of the Atomic Scientists (BAS)* 16, no. 8 (1960): i. Marcus Gleisser, *The World of Cyrus Eaton* (Kent: Kent State University Press, 1965/2005): 229.

had observed his unconventional and rather brash activities with great suspicion and had sent critical reports about them to London on numerous occasions.<sup>3</sup> In Fall 1960 he felt he had to take action. Together with Brown and Glass he penned a “Letter to the Editor” for the October edition of the *Bulletin of the Atomic Scientists (BAS)*.<sup>4</sup> The letter stated that Eaton had funded three Pugwash conferences in Canada and had also provided substantial funding for the Kitzbühel/Vienna meeting in Austria in 1958. It emphasized that Eaton had neither initiated these conferences nor had any say in determining their content. It also made clear that in the future, he would no longer be allowed to support any event and would be invited to attend only as a guest, rather than as an active participant. Brown, Glass and Rabinowitch emphasized too that the possibility of a US conference venue had not been explored. Rather, Soviet colleagues had offered to host the upcoming sixth conference in Moscow because all of the previous conferences had taken place in the West. That said, the three letter writers remained committed to holding another conference in the United States as soon as possible. The American Pugwash group as well as the Continuing Committee was acutely aware of the need to demonstrate balance between east and west, not least in protocol issues such as the location of conference sites. Eaton, who liked to flaunt both his involvement in the Pugwash conferences and his personal friendship with Khrushchev in the American media, represented a challenge primarily for US Pugwashites, who feared for their reputations at home. But the way in which they defined this problem was heavily influenced by American anti-communism; moreover, this also influenced how Brown, Glass and Rabinowitch framed the issue in discussions with British and Soviet Pugwash colleagues within the Continuing Committee.<sup>5</sup> That is to say, these conversations were steeped in political

3 Rabinowitch to Rotblat, 15 November 1957 and 23 November 1957. RTBT 5/1/1/8-2. Rabinowitch to Rotblat, 23 October 1958. RTBT 5/4/7/1. Rabinowitch to Rotblat, 21 May 1959. RTBT 5/2/1/4 (15).

4 “Scientists and Cyrus Eaton.” Letter to the editor by Harrison Brown, Bentley Glass, and Eugene Rabinowitch, in: *BAS* 16, no. 8 (1960): i–ii. Rabinowitch had co-founded the *BAS* in 1945 and was its editor until his death in 1973. In effect, this was, therefore, a letter to himself.

5 For broader historical context on the experiences of American scientists in the anti-communist climate in the country see, for example: Jessica Wang, *American Science in an Age of Anxiety: Scientists, Anticommunism, and the Cold War* (Chapel Hill: University of North Carolina Press, 1999). Zuoyue Wang, *In Sputnik's Shadow: The President's Science Advisory Committee and Cold War America* (New Brunswick, NJ: Rutgers University Press, 2008). Paul Rubinson, *Redefining Science: Scientists, the National Security State, and Nuclear Weapons in Cold War America* (Amherst: University of Massachusetts Press, 2016). Sarah Bridger, *Scientists at War: The Ethics of Cold War Weapons Research* (Cambridge: Harvard University Press, 2016).

considerations specific to the nation-state – specifically, the US. Here, then, we have an example of the way in which domestic matters exercised powerful and enduring influence over the emerging transnational character of Pugwash.

The fact that these senior American scientists were now actively seeking to dissociate themselves from Eaton raises a number of questions. How did the conflict arise? Why did it come to a head in 1960, and why was such a distancing even necessary at a time when American anti-communism had already passed its zenith? To be sure, the conflict with Eaton, which culminated in the summer of 1960, also conjured up memories of the McCarthy era. The difficulties with Eaton forced senior figures within Pugwash, especially the American group, to confront several sensitive but crucial aspects of their transnational project at what was a formative phase in the development of the PCSWA. It was not just about the ever-precarious funding of meetings which involved substantial travel and accommodation costs for scientists from around the world. Also at stake was the public image of Pugwash: American press coverage of Eaton and his links with Pugwash was having a powerful and negative effect on public perceptions of Pugwash. There was also the question of where the “eminent men of science” convening under the rubric of Pugwash could best position themselves so as to be able to make a contribution to preventing nuclear war in a rapidly evolving global landscape of peace and anti-nuclear movements, the various initiatives – statements, petitions, organizations – of concerned scientists, as well as self-proclaimed and official expert boards convened by the government.<sup>6</sup>

In the following, I first identify the sources of conflict between senior Pugwash scientists and Eaton – whose patronage was, undoubtedly, crucial to Pugwash in its early years. A sketch of Cyrus Eaton as a public figure in the 1950s illustrates both his self-assured manner and his idiosyncratic political actions, which were the source of growing unease and ultimately proved incompatible with the Pugwash style. The shared interest of preventing nuclear war proved an insufficient basis for a fruitful and sustainable relationship between the Ohio businessman and senior American scientists keen to protect their own reputation and that of Pugwash. In the final section, I analyze how this incompatibility became untenable for Brown, Glass and Rabinowitch amid an intensifying presidential campaign which, as we will see, created a political dynamic that came to bear centrally upon the agenda of the transnational Pugwash conferences.

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6 For more information on the context of the international anti-nuclear (weapons) movement, see Lawrence S. Wittner, *Resisting the Bomb. A History of the World Nuclear Disarmament Movement 1954–1970* (Stanford, CA: Stanford University Press, 1997).

## 1 Framing Pugwash: Locations, Money, Management, Brand Names and the Media

In the turbulent years following Stalin's death in 1953, when the entire political world was thinking about new ways to communicate in order to contain the nuclear threat, Cyrus Eaton decided to use the idyllic lodge he had owned since 1929 in his home village of Pugwash, for a new purpose. He had it elaborately rebuilt, replacing its former use as a bed and breakfast place for tourists to remodel it as a venue for scientists and scholars from around the world to come together in a relaxed setting in order to exchange ideas about the global situation.<sup>7</sup> At "Thinkers' Lodge," as it became known, prominent figures – including British biologist Julian Huxley – gathered for the first time in the summer of 1955. The following year, this comfortable "hideaway for brains" drew eleven scholars of the type "from whom governments seek advice" who in their discussions focused on the situation in the Middle East right after Egyptian president Abdel Nasser nationalized the Suez Canal.<sup>8</sup> Eaton's retreats in Pugwash continued to take place until 1961, addressing various themes and bringing together different participants.<sup>9</sup>

Only a few days after the publication of the Russell-Einstein Manifesto in July 1955, Eaton wrote to the author of this "brilliant statement on nuclear warfare," Bertrand Russell, offering to finance the conference called for in the

7 <http://thinkerslodge.org/history/thinkers-lodge>. Accessed 30 March 2017. Pineo Lodge, as it was originally called, functioned as a guesthouse and teahouse run by one of Cyrus Eaton's sisters from 1930/31 to 1953.

8 The participants were Heinrich Brüning (former Reich Chancellor of Weimar Germany; Harvard University), Chien Juan-Sheng (Peking Institute of Politics and Law), H.N. Fieldhouse (McGill University), Paul Geren (US State Department, United Nations), Majid Khadduri (Johns Hopkins University), Leo Kohn (Hebrew University), Jean Lapierre (French consul at Halifax), Stephen Longrigg (Brigadier in the British Army), John Marshall (Rockefeller Foundation), Alexander Samarin (metallurgist, Academy of Sciences, Moscow), James Baster (United Nations, UK). See: Wilson MacDonald, "Pugwash, Toronto," The Pine Tree Publishing Company, 1957 (printed facsimile of a handwritten manuscript), Thinkers' Lodge Papers (hereafter, TLP). Ian Sclanders, "Cyrus Eaton's hideaway for brains," *Maclean's*, Canada's National Magazine, 27 October 1956. TLP, Folder: clippings. (Hereafter: TLP, clippings).

9 Robert G. McGruder, "Loved and hated. Eaton: One-man sage of changing fortunes in business and politics," *The Plain Dealer* (Cleveland), 1 January 1977. TLP, clippings. In addition to the Pugwash conference convened by Russell and Rotblat, two further retreats for North American college presidents and deans took place in 1957 alone. Sylvia Nickerson, "Taking a Stand: Exploring the Role of the Scientists prior to the First Pugwash Conference on Science and World Affairs, 1957," *Scientia Canadensis: Canadian Journal of the History of Science, Technology and Medicine/Scientia Canadensis: revue canadienne d'histoire des sciences, des techniques et de la médecine* 36, no. 2, (2013): 63–87, 72.

Manifesto on the condition that it would be held at Thinkers' Lodge in Pugwash.<sup>10</sup> This condition, however, was just as unacceptable to Russell and the cohort around him in London as a similar offer of funding made by the Greek shipping magnate Aristoteles Onassis, contingent on the conference being held in Monte Carlo. In London, it was hoped that sponsors could be found whose financial support did not come with conditions, enabling the conference to take place as planned in New Delhi following the Indian Science Congress in January 1957. Senior Indian scientists and Prime Minister Jawaharlal Nehru had signaled their enthusiasm for this project in conversations with the British physicist and Nobel laureate Cecil Frank Powell, who had been a co-signatory of the Manifesto. However, the Suez Crisis in fall of 1956 and the resulting precarious travel conditions thwarted these plans.<sup>11</sup> Eaton's offer was now reconsidered.<sup>12</sup> Eaton's wealth meant that he would have no trouble flying participants in from ten different countries and four continents in July 1957 and arranging for their onward travel to the remote village of Pugwash where they would find newly refurbished accommodation at his lodge. Anne Jones, the lady of the house, made sure there was a dignified setting for the "stimulating conversations." Having attended university with his daughters and sharing their father's dedication to the cause of peace-building, she married Eaton shortly after the 1957 conference.<sup>13</sup> Bertrand Russell and Joseph Rotblat, the only non-Nobel laureate signatory of the manifesto but who, from the outset, had shouldered the greatest burden in organizing and disseminating information about the project, now accepted Eaton's offer. But they insisted that the conference be kept strictly separate from Eaton's other activities both in Pugwash and beyond.<sup>14</sup> However, it would soon prove impossible to maintain this separation which clouded the claims of Pugwashites to intellectual independence in the public sphere.

Eaton was the sole financier of the first two conferences, held in Pugwash in July 1957 and in the Canadian town of Lac Beauport in March 1958. Moreover, he did not adopt a stance of noble detachment but rather participated, together with his wife Anne, as a very active 'guest' at almost all conferences, be it in Pugwash or elsewhere – and he made no secret of this. The connection

10 Eaton to Russell, 13 July 1955. RTBT 5/2/1/1-11.

11 For further details on plans for and discussions of the conference between 1955 and 1957, see the chapter by Geoffrey Roberts in this volume.

12 Joseph Rotblat: *Pugwash – the First Ten Years. History of the Conferences of Science and World Affairs* (New York: Humanities Press 1968), 13.

13 Rotblat, *First ten*, 16. Andrew Brown, *Keeper of the Nuclear Conscience. The Life and Work of Joseph Rotblat* (Oxford: Oxford University Press, 2012), 135–141.

14 Rotblat, *First ten*, 13–14.

Eaton was making between himself and the PCSWA was readily apparent in press reports as early as May 1958:

Man's mind devised the thermonuclear bomb, and man's mind can devise a way to avoid destroying himself with that bomb. Because he believes this, Cyrus Stephen Eaton has dipped into his millions to sponsor two international conferences of nuclear scientists and to begin preparations for a third, probably in Austria this September.<sup>15</sup>

Within the Continuing Committee, and especially amongst its US members, there was irritation at such press reports because they suggested that scientists were serving as "Eaton's puppets," following the call of a super-rich philanthropist with "naïve appeasement" ideas.<sup>16</sup> Such episodes served as an incentive to find other sponsors. As it turned out, the third and hitherto, largest conference held in the Austrian town of Kitzbühel and in Vienna in September 1958 was made possible by public funding.<sup>17</sup> Instrumental in this was the physicist and Pugwashite Hans Thirring who, as Silke Fengler discusses elsewhere in this volume, had strong connections to social-democratic circles of Austria's Second Republic. However, the American participants' travel expenses still had to be raised by soliciting donations in the United States. In the end, about a dozen sponsors had been found; together, they provided just \$24,000, with \$10,000 coming from Eaton.<sup>18</sup> Eaton was, of course, present at that conference, and in Vienna he insisted on giving one of the concluding public speeches in the ceremonial hall of the Austrian Academy of Sciences.<sup>19</sup> All the more effort was made to organize the following conference without

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- 15 Richard H. Smith, "Eaton, Capitalist Peacemonger," *Sunday* 25 May 1958. TLP, clippings.
- 16 Rabinowitch to Rotblat, 21 May 1959. RTBT 5/2/1/4 (15). Rabinowitch to Rotblat, 15 November 1957. RTBT 5/1/1/8-2.
- 17 Rotblat, *First ten*, 22. For background information, see Silke Fengler's chapter in this volume.
- 18 The donations ranged from 100 to 5,000 dollars, and not all of them could be clearly attributed. The donors came mainly from New York (4) Boston (1) or resided in Rome (1) or Geneva (2). Three donors were women. "Donation list for the Vienna Conference of Scientists." RTBT 5/2/1/3 (37).
- 19 Apart from Eaton, the speakers included Austrian Federal President Adolf Schärf, scientists Powell (UK), Russell (UK), Aleksandr Topchiev (USSR) and Thirring (Austria). Report by Günther Rienäcker to the Central Committee of the Sozialistische Einheitspartei Deutschlands regarding his participation at the third Pugwash Conference, 1 October 1958, 5. DY 30/48026, Bundesarchiv Berlin (hereafter BArch). In his report on the Kitzbühel/Vienna conference, Rotblat mentions the "guests" Anne and Cyrus Eaton as well as their extensive support, but he makes no reference to Eaton's closing speech. Rotblat, *First ten*, 20-23.

Eaton's support which was held in Baden (near Vienna) in July 1959, and was an altogether smaller and more intimate affair.<sup>20</sup> However, that same year, in a move indicative of the extent of the financial difficulties enveloping the PCSWA, the scientists returned to Pugwash, Nova Scotia, for the fifth conference in August 1959 which was given to the theme of Biological and Chemical warfare. As with the first conference, Anne and Cyrus Eaton took care of everything, easing preparations and lending a professional air to the gathering.<sup>21</sup> This was particularly noticeable because in Baden the organizers had not only gone without Eaton's financial support, but also without managerial support from his office which, as Rotblat later noted, had negative effects on the conference: "The Baden Conference was not as effective as the previous Pugwash Conferences, probably because of the lack of proper organization."<sup>22</sup>

From the first conference onward, Eaton's personal assistant Betty Royon, herself "a millionaire with a Phi Beta Kappa key," and her secretarial staff provided managerial and administrative support to the PCSWA – this was a huge advantage which helped reduce mutual misunderstandings of the kind which had overshadowed the Baden meeting.<sup>23</sup> In 1958 and 1959, Royon was aided in her administrative role by Patricia Lindop, a young British radiobiologist, short-term partner and long-standing colleague of Rotblat, who later participated in many Pugwash meetings as a scientist in her own right. Together, Royon and Lindop transcribed papers written by conference participants, often at the last minute; they put in night shifts to record the proceedings of daily meetings so that they could be circulated to everyone the next morning. During the second conference at Lac Beauport alone, they processed nearly 1,000 pages of material. Royon and her staff also ran, at Eaton's expense, the back office in Kitzbühel, and following the administrative shortcomings of the Baden meeting they took over again in Pugwash in 1959 using "all modern equipment."<sup>24</sup> Moreover, they compiled the official proceedings, usually

20 Protokoll über die Sitzung des Pugwash-Kreises in der Bundesrepublik (Minutes of the Meeting of the Pugwash Circle in the Federal Republic), 1 October 1959, 2. RTBT 5/5/2/64 (3). Rotblat, *First ten*, 23. See Fengler's chapter in this volume.

21 Rotblat, *First ten*, 24–26.

22 Rotblat, *First ten*, 24.

23 Booton Herndon, "Cyrus Eaton: Bouncing Billionaire," *True. The Man's Magazine*, January 1958, 19–21 and 90–92, 90. TLP, clippings. Rotblat later reported that the Baden meeting was difficult, with some "very heated" sessions "particularly on the deadlock in the Geneva negotiations on a test ban treaty" and traced "mutual accusation" and "mistrust" between the Americans and the Soviets – somewhat vaguely – back to "a lack of understanding the different ways of handling reports of official negotiations in the respective countries." Rotblat, *First ten*, 23.

24 Rotblat, *First ten*, 25.

several hundred pages in length, after each conference and sent them out not only to all the participants of previous conferences but also to the “heads of state or government” and to other interested parties.<sup>25</sup> Only Eaton’s Cleveland office run by Betty Royon was able to organize the questionnaire that was sent out to 35,000 scientists worldwide in 1958 to determine how the recently adopted Vienna Declaration and the agendas of the Pugwash conferences defined therein were to be positioned in the future.<sup>26</sup> In 1960, Royon became a casualty of the growing desire of American Pugwashites to distance themselves from Eaton and was divested of her administrative role largely at the instigation of the American and the British members of the Continuing Committee.<sup>27</sup>

However, separating Pugwash from Eaton’s financial and organizational support was still not enough. The name Pugwash continued to denote two different things: the on-going retreats Eaton organized on his own initiative in his Thinkers’ Lodge every summer – as well as the scientists’ conferences that had been organized by the Continuing Committee in London once or twice a year at different places all over the world since 1957. Neither the press nor Eaton himself tried to differentiate the two types of conference. Shortly after the first scientists’ conference in Pugwash in 1957, Rabinowitch had already complained to Rotblat about Eaton’s counter-productive “drum beating” in the press, to which Eaton had close contacts – especially the *New York Herald Tribune* – and by means of which he was coopting the scientists’ conferences for his own agenda.<sup>28</sup> Astonishingly, this did not deter the Continuing Committee from calling the conference held in Kitzbühel and Vienna in 1958 – the

25 Rotblat, *First ten*, 19.

26 Rotblat, *First ten*, 19, 25, 35–36; Brown, *Keeper*, 149–154.

27 *BAS* 16, no. 8 (November 1960), ii. Two years later, Gleisser describes Royon as “still bridling with the words of the trio” (i.e., Brown, Glass, Rabinowitch), denouncing them as the “petty jealousies of some men of science.” Gleisser, *World*, 231. “Participants in the Pugwash Conferences of Science and World Affairs meetings 1957–2007,” official list found on the website of the Pugwash organization: <https://pugwashconferences.files.wordpress.com/2014/05/participants-and-meetings-1957-2007.pdf>. Accessed 30 March 2017. This includes not only all the Pugwashites but also some observers and important staff members; Royon, however, is not listed.

28 Rabinowitch to Rotblat 15 November and again 21 May 1959, RTBT 5/1/1/8-2. The interview in question was printed as “Cyrus Eaton: Let’s Meet the Soviets Half-Way,” *New York Herald Tribune* 8 November 1957 and cited in the anonymous article entitled “Cyrus S. Eaton – Industrialist with Vision,” *The American Review of East-West-Trade* 22 (March 1969): 14–26. TLP, clippings. It was also reprinted as “Eaton, Cyrus: Let’s Meet the Soviets Half-Way,” in Chalmers M. Roberts, ed. *Can We Meet the Russians Halfway?* (New York: Doubleday, 1958), 92–94.



first on the European continent – the “Third Pugwash Conference.” In order to continue their new tradition, they decided to stick with the “absurd but unforgettable” name Pugwash in spite of on-going confusion in the media.<sup>29</sup> Rabinowitch and his American colleagues repeatedly insisted on changing the name so as to sever the link with Eaton which, in their view, was not only off-putting to other potential American sponsors but also politically compromising the entire undertaking in the US. But they did not succeed in making themselves heard. In June 1960, the Continuing Committee deferred discussion of the name to the next conference. In November 1960, the Soviet member of the Continuing Committee, petro-chemist Aleksandr V. Topchiev, warned in stark terms against addressing the name issue during the Moscow conference.<sup>30</sup>

Hopes were set on the newly appointed public relations officer (P.R.O.) Wayland Young, 2nd Baron Kennet, a colourful figure in British public life who was both a member of the Labour Party and the House of Lords, whilst also an architect, politician, journalist, father of six children and author of a manifesto for the sexual revolution.<sup>31</sup> He spent three somewhat turbulent years monitoring and correcting information in the press for the Continuing Committee and tried, in vain, to introduce a new name: Conferences on Science and World Affairs (COSWA).<sup>32</sup> At the suggestion of the Continuing Committee, the tenth conference, held in London in 1962, adopted the combined name Pugwash Conferences on Science and World Affairs (P-COSWA) with the added stipulation that each national group be allowed to shorten this name at their discretion.<sup>33</sup> In everyday business, people simply used the name Pugwash. In spite of the hardships experienced by the American scientists, it had become a common view in the early years, when the goal was to establish the scientists’ conferences as a regular forum, that any publicity, however absurd or dubious, brought visibility and was better than none at all. From then on, those who had taken part in a Pugwash conference were identified as “Pugwashites.”

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- 29 Wayland Young, “Pugwash,” *Encounter* (February 1963): 54–57, 54. Rotblat, *First ten*, 20.
- 30 Meeting Minutes, Pugwash Continuing Committee: 21–23 June 1960, 26–29 November 1960 and 2–4 December 1960. RTBT 5/3/1/5. Patrick David Slaney, “Eugene Rabinowitch, the Bulletin of the Atomic Scientists, and the Nature of Scientific Internationalism in the Early Cold War,” *Historical Studies in the Natural Sciences* 42, no. 2 (April 2012): 114–142, 129.
- 31 Wayland Young, *Eros Denied: Sex in Western Society* (New York: Grove Press 1964). Rotblat, *First ten*, 33–34. Notes: Pugwash Continuing Committee 21 June 1960, 1 and 23 June 1960, 1. RTBT 5/3/1/6 (3).
- 32 Young to Editor of *Fortune Magazine* 28 March 1961. RTBT 5/4/2/17. Young, “Pugwash,” 1963, 54.
- 33 Rotblat, *First ten*, 43.

This honorary title was not officially accorded to Eaton as a sponsor and regular guest. But as long as he was a prominent public figure in the US, he was still referred to as the “initiator” of the Pugwash conferences in the North American press. The Canadian media, which had initially criticized him for communist liaisons, later celebrated the successful Nova Scotian farm boy all the more because he had brought international renown to the small fishing village on the Northumberland Strait.<sup>34</sup> Very few journalists were concerned about differentiating between the format of Eaton’s retreats and the scientists’ conferences, and Eaton himself did not contribute at all to clarifying this issue. With professional backing from his own press team, he was active behind the scenes, giving interviews and occasionally making himself heard in his own articles.<sup>35</sup> These statements were often seen as provocative because they did not subscribe to the prevailing discourse in the US of suspicion and mistrust of the Soviet Union, positing instead reciprocal trust as a means to prevent a nuclear war, which was paramount. Together with his critical statements on American foreign policy during the Cold War and acerbic comments on leading politicians, his clever business methods, his spectacular success as a financier and his carefully staged second life as a farmer, cattle breeder and grandfather of thirteen children, he was simply able to supply the better stories.<sup>36</sup> For journalists, Eaton’s flamboyant and accessible style made for more attractive and exciting reports than the more reserved and very carefully worded Pugwash conference statements, that were purged of controversies and personal opinions: put simply, newspapers had to be sold, and the readers entertained.

Much more than one would expect from an altruistic philanthropist, Eaton shaped the outer appearance of the Pugwash conferences – with the financing, the management and the name, which referred to the birthplace of the famous self-made billionaire and the original site of the initially little-known conferences. But that was not the whole story. Due to his carefully crafted media profile (managed by his own press office) on the one hand and the media’s

34 See, for example: Anonymous, *The Chronicle Herald* (Halifax, Nova Scotia), 6 October 1960; Smith, “Eaton, Capitalist Peacemonger,” *Sunday* 25 May. Both sources in: TLP, clippings. Wittner, *Resisting*, 111; Gleisser, *World*, 226–228; Brown, *Keeper*, 145.

35 Several of his articles can be found in TLP, clippings. For example: “Cyrus Eaton Sees great Challenge to Mankind,” *Detroit Times* 19 January 1958; “Cyrus Eaton Calls on US to End Its Boycott of Cuba,” *Los Angeles Times* 21 February 1974; Letters to the Editor. Progress in Cuba, *New York Times* 27 January 1976. On the effective presswork of Eaton’s office, see: Gleisser, *World*, 265–274.

36 For a critical account of his business practices, anything but demure, see the title story “Cyrus S. Eaton,” *Finance* 4 (1966): 8–10. TLP, clippings.

need for controversies, scandals and home stories on the other, Eaton's worldview, his ideas of peace-building and his self-assured commentaries on political life in the US, often found their way into the press where they were easily but wrongly taken for the original PCSWA agenda – especially since the Pugwashites themselves still had to define their own way how to confront the public.<sup>37</sup>

## 2 Eaton's Public Persona

As much as Eaton sought to stage his public profile, he did not have it fully under control. At least three different but related decisive factors were in play here: Eaton's political agenda, as far as he formulated it himself; the co-opting of his peace-building mission by Soviet rulers; and the way he was perceived by the American public.

### 2.1 *Eaton's Agenda: "Let's Meet the Soviets Half-Way."*<sup>38</sup>

Cyrus Eaton's interest in Russia reached back to the late Imperial Period. It was the Baptist network in Cleveland that linked his uncle Charles Eaton, at the time a preacher at the Euclid Avenue Baptist Church and a long-standing Republican congressman from 1924 onward, with two prominent figures: John D. Rockefeller, the most famous member of the church, who continued to spend his summers at his estate in Cleveland after having moved his businesses to New York, and William Rainey Harper, the founding president of the University of Chicago. In the opening years of the twentieth century, the younger Eaton was financing his studies at the Baptist-oriented McMaster University in Toronto with summer jobs in Cleveland, where he worked as a messenger and caddy for Rockefeller and his golf partners, among them Harper and Uncle Charles. It was at the Forest Hills Golf Course that he ultimately decided not to become a minister but to go into business. Here he had heard Harper talk enthusiastically about Russia's "immense natural resources, both agricultural and mineral."<sup>39</sup> Here, too, began his life-long friendship with Harper's son Samuel, who in 1906 was to become the first US expert in Russian

37 On trips abroad Eaton was also usually accompanied by the head of his press office. See, for example, "Program for the visit of the American industrialist Cyrus S. Eaton, 3–5 June 1960," DC 20/507, BArch Berlin. Notes: Pugwash Continuing Committee 10 September 1960, 8. RTBT 5/3/1/6 (4).

38 Cyrus Eaton, "Let's Meet the Soviets Half-Way," *New York Herald Tribune* 8 November 1957 (see footnote 28).

39 Cyrus Eaton quoted from Gleisser, *World*, 234.

Language and Institutions and a faculty member at the University of Chicago. Samuel Harper's notes on "The Russia I believe in" shaped Eaton's strongly positive image of Russia.<sup>40</sup>

It was thus no coincidence that in 1955 when the State Department asked Eaton whether he could welcome two Soviet travel delegations, he was more than happy to oblige. First, he led a group of Soviet farm officials through his Acadia Farms on the outskirts of Cleveland, showing them his purebred Beef Shorthorn cattle herds and commenting on himself with the *bon mot* cited frequently ever since: "It's better to trade bulls than bullets."<sup>41</sup> Soon afterwards, he also welcomed a group of seven Soviet journalists, including Khrushchev's son-in-law Alexsej Adzubei, the publisher of the government paper *Izvestia* until Khrushchev was removed from office.<sup>42</sup> This time Eaton appeared with his family. The journalist Boris Polevoy, who was to devote an entire chapter of his travel report to their visit to Acadia Farms, later wrote to Eaton emphasizing that he and the group had felt themselves to be on the same wavelength as Eaton:

Like you, we believe that we must be tolerant of one another's views, that we should understand one another, trade with another, be friends and not interfere with another's way of life [...] Today, when two completely different social systems exist on this crowded good old earth of ours, the greatest thing, as I see it, is to ensure that all countries of the world might live side by side in peace and comfort like good neighbors without elbowing one another or quarreling over the fence; that they respect one another's opinions, learn to be good friends and to trade with one another not only pedigree cattle but, also say, technical inventions, ores, machines and whatever they possess that might be of use to their trade partners.<sup>43</sup>

40 His notes were published posthumously. Samuel N. Harper, *The Russia I Believe In*, ed. Paul V. Harper (Chicago: University of Chicago Press, 1945). Paul A. Goble, "Samuel N. Harper and the Study of Russia: His Career and Collection," *Cahiers du monde russe et soviétique* 14, no. 4 (1973): 608–620. Cf. Gleisser, *World*, 233–235. Jay Miller, "Cyrus Eaton – Khrushchev's Favorite Capitalist," <http://teachingcleveland.org/wp-content/uploads/2010/12/cyrus%20eaton%20final%20version.pdf>. Accessed 30 March 2017.

41 The *bon mot* was quoted frequently, for example: Anonymous, "Cyrus S. Eaton. Industrialist," footnote 28, 18. Carola Sachse, "Bullen, Hengste, Wissenschaftler. Diplomatische Tiere im Kalten Krieg," in *Wandlungen und Brüche. Wissenschaftsgeschichte als politische Geschichte*, eds. Johannes Feichtinger, Marianne Klemun, Jan Surman and Petra Svatek. (Göttingen: V&R unipress. 2018), 345–353.

42 McGruder 1977, see footnote 9.

43 Polevoy to Eaton, 26 March 1956 (English translation, included in file). TLP.

But the story did not end here. In his thank you note, Polevoy mentioned that he was also “extremely interested” in Eaton’s “idea about setting up a ‘Haven for Minds,’ where thinkers of the USA, the Soviet Union, Britain, China, France, India and other countries” could exchange thoughts irrespective of any political and religious differences. Apparently, in those meetings Eaton had succeeded in conveying to the Soviet Union his idea of organizing scientists’ conferences that transcended all political divisions. The family-like setting and the charm of his youngest granddaughter, “that dignified young lady” who left a special impression on Polevoy, had laid the groundwork for trust.<sup>44</sup> Further visits of Soviet state guests to Acadia Farms followed; moreover, when Soviet visitors were unable to obtain visas allowing them to leave the United Nations headquarters, Eaton organized instead gala dinners in New York. The American press reported frequently, and often critically, on Eaton and his Soviet guests, usually in connection with the Pugwash conferences.<sup>45</sup>

Against this backdrop, the *New York Herald Tribune* gave Eaton a chance in August 1957, one month after the first PCSWA at Thinkers’ Lodge, to describe in detail his impressions of this meeting, which he summed up in the exhortation: “Let’s meet the Soviets half-way!”<sup>46</sup> This, in turn, resulted in an opportunity to give an interview led by Mike Wallace on a nationally televised prime-time show in May 1958.<sup>47</sup> Here Eaton was able to explain to the American TV audience his views of the Soviet Union and the development of US-Soviet relations. After all, the Pugwash conferences had shown him “that men of different languages and different philosophies can get together and discuss crucial questions, come to a common understanding, and part great friends.” But that was not all. On the one hand, given the “scientific miracles” that Russia had achieved and her “immense power of retaliation,” the following had become clear: regardless of how “frightful” communism may seem, “we can’t destroy it; it’s here to stay. Russia. China.” On the other hand, no “intelligent Russian” would still believe that the United States would “ever become communist.” Eaton was convinced “that the Russian today, whether it’s the Russian scientist or the Russian people, they don’t want war” and that “as I’ve seen the Russian: he loves his children, he loves his grandchildren, he loves his country, he wants to get along.”

44 Polevoy to Eaton 26 March 1956. TLP.

45 Numerous examples are documented in the form of press clippings in TLP, clippings.

46 Cyrus Eaton, “Let’s Meet the Soviets Half-Way,” *New York Herald Tribune* 8 November 1957. See footnote 28.

47 <http://www.hrc.utexas.edu/collections/film/holdings/wallace/>; the Mike Wallace interviews were broadcast by ABC. Accessed 30 March 2017.

Eaton, however, did not just bank on the common family-based emotions that he had so carefully cultivated at Acadia Farms: he also congratulated his Russian guests on the creation of an education system “that’s now the marvel of the world.” First and foremost, however, he relied on what he saw to be the fundamental appeal of the American way of life, which he described as an irresistible consumer paradise:

The more they see us, the more they’re going to admire our way of living [...] As they become acquainted with what’s going on in the world, as they make these great strides in their economic life – which they are making. They’re not going to be interested in military exploits. They’re going to enjoy their way of living; or better way of living. They want to imitate American: better homes, better food, better clothing and more automobiles. And more of all the wonderful things that make life so attractive here.

In Eaton’s view, all one had to do was give the Russians a chance to experience things for themselves. Their strong “faith in the evolution of humanity” would then let “these natural forces modify the Russian and his internal and external attitudes.”<sup>48</sup> Eaton was not thrown off when Mike Wallace confronted him with a contradictory natural law and cited the brutal short version of historical materialism with which – in an earlier interview with Wallace – Khrushchev had recently tried to intimidate American TV viewers by asserting that “your grandchildren will live under Socialism [...] Whether you like it or not, history is on our side, we will bury you.”<sup>49</sup>

Instead, Eaton sought direct contact with the Soviet premier. He took the mailing of the proceedings of the Pugwash conference in Lac Beauport as an occasion to write to Khrushchev personally. At the end of May 1958, he received a reply. Khrushchev expressed his respect for the scientists’ initiative, acknowledging the responsibility of his government “for its part in the fate of the world” and recalling that his government had just imposed a unilateral ban on nuclear tests. He also expressed appreciation of Eaton’s personal efforts in this direction, noting “the important part you are playing personally

48 All citations: Transcript of the Mike Wallace interview with Cyrus Eaton, 4 May 1958. [http://www.hrc.utexas.edu/multimedia/video/2008/wallace/eaton\\_cyrus\\_t.html](http://www.hrc.utexas.edu/multimedia/video/2008/wallace/eaton_cyrus_t.html). Accessed 30 March 2017. The interview was apparently dated inaccurately in the transcript; it actually took place a week before the interview announced for 11 May 1958 with William Douglas. Gleisser, *World*, 176–178.

49 [http://www.hrc.utexas.edu/multimedia/video/2008/wallace/eaton\\_cyrus\\_t.html](http://www.hrc.utexas.edu/multimedia/video/2008/wallace/eaton_cyrus_t.html). Accessed 30 March 2017.

in promoting the efforts of the scientists of the world in their struggle against atomic danger, and in establishing mutual understanding and trust between our countries.”<sup>50</sup>

It took Eaton only a few days after receiving this letter to make a formal statement to the world. Here he even elaborated on the second Pugwash conference, in spite of the fact that the Continuing Committee had decided not to publish any documents. He also interpreted Khrushchev’s reply to him as “full evidence that Russia wants to meet us half way.”<sup>51</sup> And this was how Eaton wanted to accommodate the Soviet premier.

## 2.2 “Khrushchev’s Favorite Capitalist”<sup>52</sup>

Of course, Eaton was not the first to draw Khrushchev’s attention to the Pugwash conferences. The Soviet leader was regularly kept abreast of developments by the Soviet members of the Continuing Committee and by the World Federation of Scientific Workers, whose president Frédéric Joliot-Curie had added the call for such a conference to the Russell-Einstein Manifesto.<sup>53</sup> Eaton was not the only American interlocutor who Khrushchev listened to. He also spoke with chemistry Nobel laureate and peace activist Linus Pauling, who had been accepted into the Soviet Academy of Sciences in 1958, and with Leo Szilard, who had gone from being a nuclear physicist to a molecular biologist and was one of the most vehement critics of US nuclear policy. At his initiative, the Kremlin enabled the mother and sister of Edward Teller, the “father” of the American hydrogen bomb and a vehement anti-communist, to finally emigrate to the US from Hungary.<sup>54</sup> In Khrushchev’s personnel and staffing structure, with which he hoped to advance his new disarmament initiative, Eaton still played an exceptional role: as a strong – and also American – sponsor, he

50 Khrushchev to Eaton 1958-5-31, as cited in Gleisser 2005, 223. See Wittner 1997, 106, footnote 30.

51 Eaton statement 1958-6-6, as quoted in: Gleisser 2005, 225.

52 Jay Miller, “Khrushchev’s favorite capitalist,” 2010. <http://teachingcleveland.org/wp-content/uploads/2010/12/cyrus%20eaton%20ofinal%20version.pdf>. Accessed 30 March 2017. Connecticut Walker, “Cyrus Eaton: The Communists’ Best Capitalist Friend,” Oakland Tribune – Parade 5 December 1971, 8–11. TLP, clippings. Similar descriptions could be found throughout the press at that time.

53 See the chapters by Fabian Lüscher and Roberts in this volume.

54 Wittner, *Resisting*, 105–106, 256–257, 345. Szilard’s conversations with Soviet scientists in Lac Beauport enabled Teller’s family members to obtain an exit visa. On Khrushchev’s conversations with Norman Cousins in the early 1960s see Allen Pietrobon, “The Role of Norman Cousins and Track II Diplomacy in the Breakthrough to the 1963 Limited Test Ban Treaty,” *Journal of Cold War Studies (JCWS)* 18, no. 1 (winter 2016): 60–79.

was to dispel the suspicion voiced again and again in the West that Pugwash was merely another communist front. Also on the domestic front Khrushchev needed support: With his ban on nuclear arms tests in March 1958, the Soviet Premier had entered his personal Cold War on two fronts: first, against both his own military and the majority of the scientists in the Soviet nuclear program, who perceived in the ban a real danger of falling behind the US in weapons technology. Second, against the Eisenhower Administration in Washington, which interpreted his unilateral test ban as a ploy to draw worldwide public opinion to the Soviet side. From the American perspective, Khrushchev only wanted to distract from something that was more important: concrete agreements to keep outer space, which had just become accessible through the Soviet Sputnik program, out of the arms race.

In the years 1958 to 1960, with a moratorium on nuclear weapons tests in place, the focus of the disarmament negotiations moved forward with discussions for a test ban treaty whilst a great deal of effort was being given to what requirements had to be fulfilled before a summit of all heads of state from the nuclear powers could take place. Khrushchev wanted to initiate such negotiations in a summit without any preconditions, in order to demonstrate the good will of both sides. For the administration in Washington, that was nothing but propaganda; a summit could only represent the completion of negotiations after concrete results had been achieved on an administrative level. It was in this propaganda war to sway public opinion worldwide that Eaton entered the game. Like Khrushchev, he repeatedly argued for talks without any conditions: for him, disarmament was not an “essay contest” but a grave concern, “a matter of life and death for all humanity.”<sup>55</sup> The chief diplomatic correspondent of the *Washington Post*, Chalmers M. Roberts, compiled a brochure in 1958 which reflected Eaton’s creed in its very title: “Can We Meet the Russians Halfway?” The brochure juxtaposed excerpts from interviews and speeches with and by Khrushchev with statements of leading Western – most notably US – politicians, journalists, political scientists and historians. Eaton was the only one among them to fully align with Khrushchev.<sup>56</sup>

55 “Ike, Khrush Urged to End War Threat,” *The Cincinnati Post and Times Star* 31 October 1958. Cf. Al Ostrow, “Reds’ Envoy here, Asks US Trade,” *The Cleveland Press*, 12 April 1958, (On the 1958 visit to Cleveland of the Soviet Ambassador Mikoyan, arranged by Eaton). All in: TLP, clippings.

56 Roberts, *Can we meet*, 1958. In addition to Khrushchev and Eaton, the authors included Dwight D. Eisenhower, Winston Churchill, John Foster Dulles, George F. Kennan, Richard Nixon, Konrad Adenauer, Lyndon B. Johnson, Dag Hammarskjöld, Walter Rostow and Raymond Aron.



Khrushchev immediately returned the favor and invited Cyrus and Anne Eaton to Moscow in September 1958. On the front page of *Pravda*, Eaton recommended, in a separate article, that President Eisenhower “pay a three-day visit of friendship and good will to the Soviet Union,” to which Khrushchev would respond by visiting the US.<sup>57</sup> The Eatons’ trip was scheduled so that they – Khrushchev’s special emissaries, as it were – could travel straight from Moscow to the third Pugwash conference in Kitzbühel and Vienna. In the US, Eaton’s efforts in Moscow drew more attention than the entire Vienna Pugwash conference – even if meeting also with some scepticism.<sup>58</sup>

The following year, the Eatons once again launched a diplomatic mission. In the midst of the second Berlin crisis, triggered by Khrushchev’s threat to transform Berlin into either a demilitarized special zone or make it all part of the German Democratic Republic, they announced a trip to Eastern Europe for early summer 1960.<sup>59</sup> Their first stop was Prague, where Cyrus Eaton was awarded an honorary doctorate; Budapest, Warsaw and East Berlin followed. At each stop along the way, Eaton appeared at specially organized press conferences voicing criticisms of US foreign policy whilst at the same time making friendly remarks about his high-ranking Eastern European interlocutors and the general situation in the satellite states.<sup>60</sup> Here, however, it was apparent to his Czechoslovakian and Hungarian hosts that Eaton was not particularly knowledgeable about the conditions in Europe and that he was “completely insufficiently” informed about the German problem and “the entire complex of questions regarding peace treaty – West Berlin.”<sup>61</sup> By contrast, Anne – well known as a Democratic delegate at the Democratic Convention in Ohio – insisted on going through all items on the agenda together with her husband and was perceived as considerably “more vital,” “clearer and more straightforward,” and “more positive and progressive.”<sup>62</sup> In short, she was perceived as having a political awareness and sensibility lacking in her husband.

57 Translation of Eaton’s article in *Pravda*, 7 September 1958. RTBT 5/4/7/1.

58 *Time*, the weekly news magazine, reported extensively on Eaton’s Moscow trip. For example: 15 September 1958, newspaper clipping, RTBT 5/4/7/1. The *New York Times* published an interview with Eaton. Rabinowitch to Rotblat, 23 October 1958. RTBT 5/4/7/1.

59 Christian Bremen, *Die Eisenhower-Administration und die zweite Berlin-Krise, 1958–1961* (Berlin: Walter de Gruyter 1997).

60 The embassies of the German Democratic Republic in Prague and Budapest reported extensively on Eaton’s appearances in Prague and Budapest during the preparation of Eaton’s visit to East Berlin – on the basis of Czechoslovakian and Hungarian memos. DC 20/696, 49, 52–55, 59–81. BArch Berlin.

61 DC 20/696, 55 and 73. BArch Berlin.

62 DC 20/696, 76, 79, 64. BArch Berlin.

It may have been a mere coincidence that the Eatons wanted to spend a few days in Paris before continuing on to Eastern Europe. But it could not have worked out better. In the course of the crisis-ridden negotiations between the great powers over a comprehensive test ban treaty, which had begun with the second Geneva Conference in the summer of 1958 and only ended with the Limited Test Ban Treaty (LTBT) in August 1963, a solution was closer than ever in the spring of 1960, only to be followed immediately by a deep crisis. The Paris conference of heads of state from the US, the Soviet Union, Great Britain and France had been scheduled for 16 and 17 May 1960. By then the final technical difficulties related to monitoring the ban on underground tests were to have been resolved. In spite of the fact that a US Lockheed U2 had been shot down over the Soviet Union on May 1 and the surviving pilot, Gary Powers, confessed that he had been engaged in a spying mission, all heads of state travelled to the conference and arrived on time. At the first informal meeting, however, Khrushchev called upon Eisenhower to apologize, to bring those responsible to justice, and to impose a guaranteed ban on reconnaissance flights. When Eisenhower refused to consider these demands, the Soviet delegation did not appear at the opening session and the Western powers declared the summit a failure.<sup>63</sup>

However, Stalin's court jester, who had also "returned laughter to the Soviet citizens" following his master's death, did not let the Western powers have the final say.<sup>64</sup> At his press conference in Paris on 18 May, Khrushchev snubbed and openly offended Eisenhower.<sup>65</sup> Indeed, insights gleaned from his encounter with the Eatons in this moment indicate that he had already staged his departure. A few days earlier, the Soviet embassy had informed Eaton that Khrushchev wanted to meet him in Paris. But there was not much time. The only option was 19 May, the day the Eatons landed in Paris-Orly, from where Khrushchev planned to depart. After their delayed landing, Anne and Cyrus were immediately led to the farewell ceremony for the Soviet premier. Khrushchev was already waiting for them on the red carpet in front of the Soviet plane that was about to take off. He pressed a bouquet of flowers, which

63 Benjamin Greene, *Eisenhower, Science Advice, and the Nuclear Test-Ban Debate, 1945–1963* (Palo Alto: Stanford University Press, 2006). Vojtech Mastny, "The 1963 Test Ban Treaty," *JCSWS* 10, no. 1 (Winter 2008): 3–25.

64 Jörg Baberowski, *Verbrannte Erde. Stalins Herrschaft der Gewalt* (Frankfurt am Main: Fischer 2012/2014): 481, 490, quote on 503.

65 Khrushchev's explanations and speeches from May 1960 are available at: [https://archive.org/stream/RedenChruschtschow1960/Reden%20Chruschtschow%201960\\_djvu.txt](https://archive.org/stream/RedenChruschtschow1960/Reden%20Chruschtschow%201960_djvu.txt). Accessed 30 March 2017.

he had just been given, into Anne's arms and chatted with his "two old friends" in front of the press cameras for another twenty minutes.<sup>66</sup> It was only then that Khrushchev allowed his plane to take off for East Berlin.

Shortly after this encounter, the "last tycoon" was awarded the Lenin Peace Prize – a reward for Eaton's diplomatic missions on Khrushchev's behalf. As early as May 3, 1960, the Soviet news agency TASS reported on this, adding that Eaton was the only North American to be awarded this prize. Eaton received the award not in Moscow but in Pugwash where his famous peace-building efforts had first begun. Soviet nuclear physicist Dmitri Skobel'tsyn, a Pugwashite from the very beginning, arrived from Moscow in early July to give a speech at the award ceremony in the presence of the Soviet ambassadors from Washington and Ottawa, all against the backdrop of regional folkloristic festivities marking Dominion Day, with about 5,000 people in the audience.<sup>67</sup> In his acceptance speech, Eaton underlined the importance of "more than 20 conferences [...] held under the Pugwash name," including the five "scientific meetings," once again conflating two very different conference series. He also reiterated his unwavering trust in Khrushchev who, he was sure, would, sooner or later, adopt the American way of life:

I have not the least doubt that Premier Khrushchev and the members of his government would like to concentrate the immense resources of their vast country not on the costly modern instruments of annihilation, but on more and better homes and schools, on industrial and agricultural progress, and on physical fitness and intellectual excellence.<sup>68</sup>

### 2.3 *Enfant Terrible of the US Establishment*

Unlike some American businessmen – and several American Pugwashites – Cyrus Eaton was at no time "afraid of being accused of being pro-Red."<sup>69</sup> It

66 Gleisser, *World*, 248. For Anne Eaton and her political ambitions in the ongoing election campaign, this scene in particular was compromising, see: Gleisser, *World*, 249–252.

67 Eaton office to Otto Grotewohl 6 July 1960. DC 20/696, 82–83. BArch Berlin. C.B. Johnson, "Russia's Peace Prize Presented to Cyrus Eaton," *The Chronicle-Herald*, 2 July 1960. TLP, clippings. Gleisser, *World*, 243–247.

68 Cyrus Eaton In Acceptance Of International Lenin Prize Award, 1 July 1960. TLP, Folder: Pugwash Address.

69 *Detroit Free Press*, 24 April 1958. (Quoted here from Anonymous, "Cyrus S. Eaton. Industrialist," footnote 28, 22), Eaton criticized his colleagues: "Most industrialists realize the deadly character of what we are doing. They are unhappy over the astronomical taxes it demands. But most of them are afraid of being accused of being pro-Red."

was this maverick spirit that drew respect even from his greatest critics in the United States, where anti-communist denunciations were rampant. His legendary double success as a businessman – after a disastrous fall at the beginning of the Great Depression, Eaton had made a comeback in the 1930s – may have also contributed to the fact that the more simple than concise wording of his peace-building convictions in the media were rarely rendered without a clause of distancing irony.<sup>70</sup> The caustic satire that some of his activities might have roused was, in any case, absent.

The official institutions of US anti-communism, however, launched furious attacks against him. Eaton's television appearance with Mike Wallace in May 1958 prompted the chairman of the House Committee on Un-American Activities (HUAC), Francis E. Walter, to take action. On this occasion, Eaton had also criticized the Federal Bureau of Investigation (FBI) and all other "governmental agencies" that were "engaged in investigation, in snooping, in informing, in [...] creeping up on people" as a "police state" which trusted its citizens even less than the Soviet leaders did theirs. As he put it, the entire surveillance system in the US, with its branches covering all political realms, was more extensive than Hitler's "spying organization," including the Gestapo, had ever been.<sup>71</sup> These were pretty strong accusations. But in contrast to his Russian adventures, Eaton's critique of the domestic control system was almost unanimously applauded by the North American press, which celebrated him as an advocate of the freedom of expression and the Bill of Rights. He could hardly wait for the HUAC to deliver the subpoena they had already announced. He would have been more than happy to explain in Washington where he saw the greatest danger of all the snooping and state-imposed secrecy, namely in the obstruction of scientific progress and of the free international exchange of ideas among "his" scientists on ways to prevent a nuclear war. When the subpoena had still not arrived one month later, he set out for Washington himself. At his regional congressman's office, he met Walter and a long verbal battle ensued, but the subpoena still failed to materialize. Perhaps Walter had finally realized what was at stake: "Go right ahead and speak your mind,

70 Gleisser, *World*, 50–69, 80–111. For descriptions of Eaton's financial success from this time see the cover stories: "Industrialist Cyrus Eaton: imagination & stubborn virtues," *Forbes* (May 1965): 17–22 and "Cyrus S. Eaton," *Finance* (April 1966): 8–10. Both in TLP, clippings. George E. Condon, "The Man in the Tower," in George E. Condon, *Cleveland. The Best Kept Secret* (New York: Doubleday, 1967), 307–315.

71 All citations: Transcript of the Mike Wallace interview with Cyrus Eaton 4 May 1958. ([http://www.hrc.utexas.edu/multimedia/video/2008/wallace/eaton\\_cyrus\\_t.html](http://www.hrc.utexas.edu/multimedia/video/2008/wallace/eaton_cyrus_t.html)). Accessed 30 March 2017.

Cyrus,” the *New York Herald Tribune* had already conveyed to Eaton weeks before, “Representative Walter is making a fool of nobody but himself.”<sup>72</sup>

From this experience, Eaton concluded that public support for anti-communist investigations was waning. The HUAC, FBI and CIA were, however, still subverting the success of his Pugwash conferences by monitoring the participants and passing on false information to politicians and the media so as to disparage in particular foreign Pugwashites, notably accusing Austrian physicist Hans Thirring of being a Soviet agent.<sup>73</sup> However, Eaton was not just concerned about the welfare of his conference participants, he was interested in the big picture. Several months later, in an interview he gave for an editorial published in *The Nation*, he outlined his twelve “proposals for an American foreign and domestic policy.” The first thing he called for was the dismissal of Secretary of State John Foster Dulles. In his view, the man who “blithely courts the ultimate world catastrophe of the bomb without even consulting the Senate Foreign Relations Committee and the House Foreign Affairs Committee” constituted an uncontrollable risk.<sup>74</sup>

If [...] Mr. Dulles in the big press conference says that what we need to think about is how we can most effectively fight what we most hate [...] – those are terrific words to use when speaking of a proud and powerful nation of two hundred and twenty-five million people that have the military strength that’s beyond anything that’s ever been created in the world. Those are unwise and foolish words and oughtn’t to be said by any responsible statesman in this country.<sup>75</sup>

Here was someone who considered his own secretary of state to be a dangerous blockhead, who himself formulated a striking foreign policy agenda – including unconditional reciprocal state visits by Khrushchev and Eisenhower, the recognition of Red China, a treaty of peace and friendship with the Soviet Union, a halt to the nuclear arms race and non-intervention in the domestic

72 Cited here from Max Freedman: “Right to criticise without fear of reprisal,” *The Manchester Guardian* 12 May 1958. TLP, clippings. This article offers a good overview of press coverage of the events of May 1958; further press clippings in TLP, clippings. Gleisser, *World*, 176–189.

73 Eaton to Rotblat, 13 May 1958, RTBT 5/1/14-2. On Thirring see Fengler’s chapter in this volume.

74 John Barden, “Cyrus Eaton: Merchant of Peace,” *The Nation*, 31 January 1959, 85–91, here 87.

75 Transcript of the Mike Wallace interview with Cyrus Eaton 4 April 1958. ([http://www.hrc.utexas.edu/multimedia/video/2008/wallace/eaton\\_cyrus\\_t.html](http://www.hrc.utexas.edu/multimedia/video/2008/wallace/eaton_cyrus_t.html)). Accessed 30 March 2017.

affairs of other nations, and who also advocated strengthening the influence of scientists in disarmament policy. Furthermore, he discussed this with other heads of state, most notably on the Soviet side.<sup>76</sup> Eaton was seemingly seeking to pursue a different type of foreign policy – without a political mandate. Indeed, this was a charge directed at him regarding his trip to Moscow in 1958. His meetings with Khrushchev were seen as violating the Logan Act of 1799, which prohibits US citizens, under threat of sanction, from coming into contact with foreign governments “with intent [...] to defeat the measures of the United States.”<sup>77</sup>

Eaton, however, was not deterred by this; after all, he would not have received his passport without the consent of the State Department. He certainly could count on Washington placing trust in him. After all, construction of an enormous, elaborately camouflaged nuclear bunker for the US administration had just begun under the western wing of the Greenbrier Hotel in White Sulphur Springs, Virginia, which belonged to Eaton’s Chesapeake Ohio Railway, and counted the Eisenhowers and the Kennedys among its regular guests. This top secret facility was completed in 1961 but only became known to the public some thirty years later in 1991, just prior to being taken out of service.<sup>78</sup> Indeed, he saw himself in agreement with President Eisenhower, who “has wanted Russia to see as many Americans as possible so they will know us better over there.”<sup>79</sup> In the early summer of 1960, when Senator Thomas Dodd, then head of the U.S. Senate Internal Security Subcommittee, threatened once again to enforce the Logan Act on the occasion of Eaton’s tour of Eastern Europe, Eaton reprimanded him while speaking from the lectern at Prague University, as he accepted an honorary doctorate for his achievements in connection with the Pugwash conferences. This time he appealed to “the world’s best informed scientists,” who agreed – as Dodd allegedly had not realized – that “the first day of a nuclear war would see the deaths of seventy-five million Americans, while another fifty million would die from fallout.” In view of this, he and the scientists of Pugwash would not cease “to warn the world of the hazards of nuclear, chemical and biological warfare and [would] offer suggestions to all heads of state on ways and means of diminishing them.”<sup>80</sup>

In any case, Eaton did not stop meddling in American foreign, disarmament and security policy, and he stayed true to his convictions, namely the

76 Barden, “Merchant of Peace,” 87.

77 1 Stat. 613, enacted January 30, 1799, codified at 18 US C. § 953 (2004).

78 Ted Gup, “The Ultimate Congressional Hideaway,” *The Washington Post* 31 May 1992, W11.

79 Quote from Gleisser, *World*, 238.

80 Quote from Gleisser, *World*, 250.

coexistence of capitalism and communism, trust in the desire for peace, also among politicians on the other side, and conducting unconditional conversations in person without conditions attached. He did good deeds – or at least what he considered to be such – and spoke about them in all media without shying away from being provocative. He defined the role of “his” Pugwashites in ways that echoed those of his friend Khrushchev. That is to say, they were to give scientific legitimacy to his political views. Such a role was wholly unacceptable to western scientists and for American Pugwashites in particular. This kind of thinking was not only eroding their professional integrity, but remained potentially highly damaging to their scientific reputations and careers at home within a political climate still touched by the remnants of McCarthyism. Moreover, in their view it endangered the transnational Pugwash project as a whole, and especially so during the presidential election campaign of 1960.

### 3 The Pugwash Conferences: Searching for Their Own Path

The scientists’ behind the conferences inspired by the Russell-Einstein Manifesto who still called their meetings “Pugwash conferences” despite the strife surrounding the name, found it much more difficult than Eaton to define their political mission and develop a style of cooperation and communication suited to their goals. In the early years of this process, the conflict with Eaton loomed large, serving not least to make clear to them the kinds of behavior and public profile that they did not want for the project they were embarked upon. Even if this problem was initially limited to the US Pugwashites, their British and Soviet colleagues could not ignore it and ultimately had to agree to a solution *à l’américaine*.

In 1955 and 1956, it had not proved at all easy to persuade senior scientists to follow the call of the Russell-Einstein Manifesto and to participate in a conference geared to discussing the “perils of the nuclear age.” However, the twenty two scientists from ten countries who ultimately gathered in Pugwash in 1957, and those who followed in their wake at subsequent Pugwash conferences, came to greatly appreciate the value of these events in creating an atmosphere conducive to discussions and as a place where it was possible to have informal conversations with colleagues from the other side of the bloc divide. In the 1950s, the international scientific community of “eminent” nuclear physicists was not very large. If scientists didn’t know each other personally from professional conferences, they were familiar with each other’s work from scientific publications. They trusted, as Rotblat put it, in “each other’s scientific

integrity” and were convinced that as physicists they were qualified to engage in “rational analysis and objective inquiry” as well as to deal with political problems “without prejudice but with respect to facts.”<sup>81</sup> Rotblat, Rabinowitch and other like-minded colleagues involved in the early days of Pugwash believed “that all scientists – including those from the other side of the Iron Curtain – have a common language and can productively discuss even controversial political matters.”<sup>82</sup> Most of them banked on what Rotblat called the “scientific approach” to achieve political goals: these goals were, namely, preventing a nuclear war and ultimately doing away with war as a means of political conflict.<sup>83</sup> How this could be achieved was the subject of discussion first within the Continuing Committee which, initially, comprised Russell, Rotblat, Powell, Rabinowitch and Skobel'tsyn.

When this small circle – sometimes expanded in an *ad hoc* way to include guests such as Leo Szilard and the West German physicist and philosopher Carl Friedrich von Weizsäcker – met for the first time in London in December 1957, there was agreement on three equally important goals: “to influence governments, to form a channel of communication between scientists, and to educate public opinion.” Those present realized fully that it was not possible to achieve everything at once, so they came up with two types of conferences: one that they defined as “private meetings” in order to be able to openly discuss, in a small circle of highly-qualified scientists who were “influential with their governments,” the controversial points which kept disrupting the disarmament negotiations – without having to make public statements. In this setting, it was hoped that mutual antagonisms and reservations could be eliminated, disarmament models calculated and mutually acceptable control procedures developed as a means of slowing down the arms race and reducing the nuclear arsenals, while at the same time maintaining an equilibrium in military terms. For Rotblat, the blackboard at which mathematicians and physicists traditionally developed their thoughts symbolized this mode of communication.<sup>84</sup> The second Pugwash conference in Lac Beauport in 1958 was seen as a prototype of this style of meeting. The other type of gathering was the larger “public” conference, which was focused on issues relating to the “social implications of science in general” but also with the “particular problem of averting the dangers of the atomic age.” These conferences were meant to

81 Joseph Rotblat, “The Early Days of Pugwash,” *Physics Today* 54, no. 6 (June 2001): 50–55, 53.

82 Rabinowitch to Russell, 14 August 1957; quote from Wittner, *Resisting*, 35.

83 Nickerson, “Taking a Stand,” 87. Slaney, “Rabinowitch,” 117, 119, 124, 130.

84 Rotblat, *First ten*, 27.



alarm the broader public and, to this end, concluded with press conferences and public statements. The conference in Kitzbühel, with its very large and public closing festivities in the Austrian capital, at which the Vienna Declaration was presented, was the first to follow this format.<sup>85</sup>

This dual model for the conferences, however, did not stand the test of time. On the one hand, the “private” meetings did not reach enough politically influential scientists, especially in the US, something that would have been required to bring the discussion results into senior political circles in Washington. Khrushchev was not the only one unhappy with the fact that there was only talk at the Pugwash conferences, while the decision-makers, in particular the Americans and their scientific advisers, sat somewhere else.<sup>86</sup> On the other hand, although the large Kitzbühel/Vienna conference had resonated considerably with the public in the eastern Bloc, this was not matched in the west. The press in China and the Soviet Union, under dictatorial rule, reported on this conference and the Vienna Declaration arising from it in great detail, but the enthusiasm of thousands of Austrians who had celebrated Pugwash at the City Hall in Vienna hardly spread further west. And certainly it did not travel across the Atlantic, especially since Eaton could not have cared less about the dual strategy of holding both larger (publicly-oriented) and smaller (private) conferences that had just been agreed upon by the Continuing Committee. In Vienna, Cyrus Eaton spoke into every microphone pointed at him, stealing the show from the Pugwash leadership as they sought to address the public.<sup>87</sup> The problem the Pugwash leadership faced in raising its public profile was rendered all the more acute by Bertrand Russell’s gradual withdrawal from Pugwash as he chose increasingly instead to endorse and engage very actively in public protests in the UK for the Campaign for Nuclear Disarmament.<sup>88</sup> The mantle of leadership, in the sense of coordinating the nascent PCSWA, passed to Joseph Rotblat who, for all his manifold organizational and negotiating skills, could not compete with Eaton’s powerful charisma and taste for being in the public limelight which, as we have seen, derived from a combination

85 All quotes: Rotblat, *First ten*, 17–18. Rotblat developed this typology in describing the conferences in Lac Beauport, Kitzbühel/Vienna and Baden. Wittner, *Resisting*, 36.

86 Wittner, *Resisting*, 345.

87 Rabinowitch to Rotblat, 23 October 1958. RTBT 5/4/7/1. Rotblat, *First ten*, 17.

88 Andrew G. Bone, “Russell and the Communist-Aligned Peace Movement in the Mid-1950s,” *Russell: the Journal of Bertrand Russell Studies* 21 (summer 2001): 31–57. Ray Monk, *Bertrand Russell: The Ghost of Madness* (London: Jonathan Cape, 2000). Cf. Holger Nehring, *Politics of Security: British and West German Protest Movements and the Early Cold War, 1945–1970* (Oxford: Oxford University Press, 2013).

of his pursuit of and adept handling of publicity, his appetite for political controversy, and his great wealth.<sup>89</sup>

In the process of defining the two different conference formats and combining them with two different public relations strategies, the three goals that had initially defined the Pugwash agenda in 1957 were reduced to two. This did not, however, ease the complex process of building Pugwash, as Rabinowitch noted in 1959, these two goals still caused all the “ups and downs about the Pugwash meetings” that made Rotblat’s everyday work as Secretary General so difficult:

One is to mobilize the scientific community of the world and make them [...] realize their responsibilities, and try to influence the world public opinion. This we could do [...] paying no attention to people’s suspicions about our respectability [...]. The other thing is our attempt to provide indirect communication channels between governments. For this purpose, the trust of the ‘establishments’ is indispensable [...].<sup>90</sup>

Rabinowitch’s informal downsizing of the goals – set out in private to Rotblat – also concealed a more modestly defined role for scientists active in Pugwash. For Rabinowitch, Pugwashites were no longer the guardian of nuclear knowledge enlightening an uninformed public and confronting politicians about the risks of recklessly building up their nuclear arsenals which endangered the future of the planet. Now they only advanced the self-enlightenment of their own scientific communities and beyond that were willing to serve as an informal communication channel between governments in east and west. So, in just a short time, these communication channels, originally conceived by and for scientists, were now being used by governments – albeit via trusted people from amongst the growing ranks of policy and scientific advisers. For Rabinowitch, this second function was the much more important one. It required, as he wrote to Rotblat, people such as geophysicist Edward Bullard on the British side, who had led the British delegation in the Geneva disarmament negotiations, or retired rear admiral and director of British naval intelligence Anthony Buzzard who, as a founding member of the Institute for Strategic Studies, had helped develop the idea of “graduated deterrence.” From the American side,

89 Rotblat, *First ten*, 33 and 42. On the division of tasks between Russell and Rotblat see: Andrew G. Bone ed. “Introduction,” in *Bertrand Russell, Détente or Destruction 1955–57*. The Collected Papers of Bertrand Russell, Vol. 29. (London/New York: Routledge, 2005), xiii–lxiii, liii–liv.

90 Rabinowitch to Rotblat, 21 May 1959. RTBT 5/2/1/4 (15).

he wished for strategy specialists such as Amrom Katz from the RAND Corporation or NATO scientific adviser Frederick Seitz. Rabinowitch felt that the “private meetings” could very well do without all the “Powells, Paulings, or even Harrison Browns,” who in his view were asserting their own ethics of conviction and did not give a damn about the trust of the political “establishment.”<sup>91</sup> This was certainly true of Eaton, about whom even Russell remarked “that all that interested (him) was Cyrus Eaton, not Pugwash.”<sup>92</sup>

Not all the scientists involved in Pugwash shared Rabinowitch’s views. In the most extensive international questionnaire, organized by Betty Royon from Cleveland in 1959, the majority of those Western scientists who responded at all had advocated “smaller conferences or study groups to explore specific problems.”<sup>93</sup> Pugwash colleagues who had been asked by Rabinowitch in the US and Rotblat in Great Britain the previous year likewise mostly preferred small meetings either “to discuss immediate political problems, and primarily directed at influencing governments” or “to study the social implications of scientific progress, and aimed at clarifying the thinking of scientists themselves.”<sup>94</sup> In the Soviet Union, by contrast, the overwhelming majority of scientists were “in favour of large open meetings aimed at influencing public opinion.”<sup>95</sup> Most Soviet scientists thus shared the view of their political leaders, who supported Pugwash mainly as a scientists’ “movement” similar to other anti-nuclear arms movements worldwide. They saw it as one part of a wider assemblage of “peace-loving forces” which they strongly supported and forcefully advocated.<sup>96</sup>

Prior to the Moscow Conference, which was postponed several times, the Continuing Committee discussed their experience with both types of conference. During these discussions in the summer of 1960, Rotblat noted that “most activities were confined to the private meetings.” But the criticism of “some people outside the movement” that “very little was known about it outside a small circle” could not be ignored.<sup>97</sup> Mainly, the idea was to avoid

91 Rabinowitch to Rotblat, 21 May 1959. RTBT 5/2/1/4 (15).

92 Notes Pugwash Continuing Committee 21 June 1960, 6. RTBT 5/3/1/6.

93 Rotblat, *First ten*, 36. A total of 35,000 questionnaires were sent out, 5,000 in the Soviet Union where the response was 83%, while in the Western countries it was only 20%. The survey in the Soviet Union was organized and probably also evaluated by the Soviet Academy of Science.

94 Rotblat, *First ten*, 17.

95 Rotblat, *First ten*, 36. Rotblat, “Early Days,” 54.

96 On the communist infiltration and cooptation of social movements see Matthew Evangelista, *Unarmed Forces. The Transnational Movement to End the Cold War* (Ithaca, New York: Cornell University Press 1999), 75–76.

97 Notes Pugwash Continuing Committee 21 June 1960, 1. RTBT 5/3/1/6 (3).

frustrating the national groups that now formed crucial nodes in the expanding Pugwash network. What was their role to be and what remained for the Pugwashites to do given the dramatically changed political situation following the cancellation of the Paris summit of the four nuclear powers? All these questions, along with “the constitution of the Movement” were deferred to the next larger public conference which, however, was not to take place until 1962 in London.<sup>98</sup> Until then, only “private meetings” were planned, for which the Pugwash leadership had already coined the saying at the conference in Baden in 1959: “Private but not secret!” – when journalists “were pestering the participants for interviews.”<sup>99</sup> This meant that they met behind closed doors but that proceedings were made available to all Pugwashites and to heads of state – but not to the press.

Topchiev and Skobel'tsyn, the Soviet members of the Continuing Committee, which had expanded since 1958, accepted the distinction between “private meetings” and “public conferences,” but it was not easy for them to understand its importance for their Western colleagues.<sup>100</sup> First, they had no troublesome press at home to contend with. Second, they only attended Pugwash conferences or committee meetings if permitted by, if not at the request of, their political leadership; and third, the constant presence of their KGB translator Vladimir Pavlichenko served always to influence what they could say during meetings.<sup>101</sup> That said, this did not rule out conversations with a trustworthy Western colleague on a *promenade à deux*.<sup>102</sup> Even in summer of 1960, Topchiev saw no reason to redefine the tasks of the “Pugwash Movement.” If Pugwashites were “sufficiently eminent,” Topchiev was convinced that “governments and public opinion could both be influenced by the authority of scientists.”<sup>103</sup> Topchiev had not made the change from scientific enlightener to a role as a provider of political services of the kind envisaged by Rabinowitch. Nor did he share the concerns of his American and British colleagues about Eaton, without whom there would not have been any meetings, after all. Rather, in Topchiev's view, “an efficient P.R.O.” [Public Relations Officer] would quickly correct the “wrong impressions created by his publicity,” and

98 Notes Pugwash Continuing Committee 21 June 1960, 1 and 23 June 1960, 4. RTBT 5/3/1/6 (3).

99 Rotblat, *First ten*, 24. Draft Statement on Dodd report for the Continuing Committee, no date (ca. September 1960). RTBT 5/1/1/15-2.

100 The expansion of the Continuing Committee to a membership of 9 (i.e. US/USSR/UK: 3/3/3) was agreed at the Kitzbühel/Vienna conference in 1958. RTBT 5/2/1/10 (3).

101 See Lüscher's chapter in this volume.

102 Such a scene is described by Rotblat, “Early days,” 55.

103 Notes Pugwash Continuing Committee 21 June 1960, 2. RTBT 5/3/1/6.

if “this business man exaggerates his role he should be stopped.”<sup>104</sup> For the Western and (more importantly) the American members of the Continuing Committee, the situation in the summer of 1960 did not appear so simple – quite the contrary. The power of the press, the still-smoldering embers of anti-communism and the need for discretion among the few US Pugwashites close to the government on the one hand and, on the other hand, their obligations vis-à-vis the growing global Pugwash community, the deficiencies in their own public relations work and the appreciation of the Soviet leadership (which had been voiced in a highly indiscreet way), all made for an explosive device with an uncontrollable fuse: Cyrus Eaton.

Had the conference planned for Moscow taken place in April 1960 as originally planned, everything might have been different. Pugwashites might have contributed to clarifying the technical disagreements on test ban verification in the context of the ongoing Geneva disarmament negotiations and perhaps helped make the imminent Paris summit a success. However, the April date “turned out to be inconvenient to our American colleagues.”<sup>105</sup> Rotblat’s superficial explanation concealed the real problem: an insufficient number of suitable scientists, namely “people favourable to Pugwash ideas and well in with government as well,” had accepted the invitation to match the delegation of Soviet scientists, which was impressive both in number and scientific reputation.<sup>106</sup> Especially because the conference was to take place in Moscow, the balance between both delegations had to be maintained at all costs so as to avoid any additional umbrage in the US. The people whom the Continuing Committee would have ideally preferred to come to Conferences – for example, scientific advisers of the still governing Eisenhower Administration, or those who were associated with the presidential candidates, Nixon and Kennedy – sometimes, for a variety of personal and professional reasons, could not or did not want to be involved.<sup>107</sup>

When the Continuing Committee convened in June 1960 to prepare for the Moscow conference – at this point, postponed to September – the geopolitical situation had taken a turn for the worse with the failure of the Paris summit. Moreover, Khrushchev’s capitalist buddy was enjoying more publicity than ever before as a traveler through Eastern Europe and the winner of

104 Notes Pugwash Continuing Committee 21 June 1960, morning, 6. Skobel’tsyn voiced something similar in his rare comments.

105 Rotblat to Burkhardt, 2 March 1960. RTBT 5/5/2/64 (3). Elsewhere, Rotblat’s explanation for the postponement of the conference also included that there would not have been “sufficient time for preparation.” See: Rotblat, *First ten*, 26.

106 Notes Pugwash Continuing Committee, 21 June 1960, morning, 2. RTBT 5/3/1/6 (3).

107 Notes Pugwash Continuing Committee, 21 June 1960, morning, 9. RTBT 5/3/1/6 (3).

the Lenin Peace Prize. “Mr. Eaton” was not just one item on a long agenda; his spirit pervaded the entire three-day meeting.<sup>108</sup> The question was whether they could simply dispense with “guests” altogether and thus also with Eaton. As the chief organizer of the Moscow conference, Topchiev decided “that it was impossible not to invite him.”<sup>109</sup> But all agreed that his public visibility and internal involvement was to be curtailed. For instance, Eaton should be informed carefully but firmly that Betty Royon was to be replaced in her secretarial role by Pavlichenko.<sup>110</sup> And it was also debated whether a special publicity rule ought to be introduced in Moscow to silence Eaton.<sup>111</sup> But the main question was how to make these changes without offending Eaton and risking a backlash from him: indeed, nothing was feared more than “Eaton’s power in the press and with government officials.” Even worse than being identified with him in the American public sphere was the prospect of making an enemy of him. Thus, as Powell put it, “any formal break” was to be avoided. Indeed, “he must be treated with a great deal of circumspection.”<sup>112</sup> Topchiev, seconded by Skobel’tsyn, kept his cool and assured his colleagues on the Continuing Committee that, once in Moscow, they would have everything – the conference secretariat, the press and Eaton – under control, and so the preparation work continued.

However, things were to take a radically different turn. Over the summer of 1960, the US election campaign became ever more divisive and American scientists sympathetic to Pugwash became increasingly nervous, and several of them even withdrew their acceptance of the invitation to Moscow. This disrupted the balanced representation from East and West, and Rotblat was forced once again to postpone the conference until after the election. Instead of a conference in Moscow, a hastily convened Continuing Committee came together in London for a crisis meeting – at which not all members were present.<sup>113</sup> On the British side, Russell was missing; Topchiev came only with the unavoidable Pavlichenko; Brown, Glass and instead of Rabinowitch, a contrite Jerome Wiesner came from the US. The latter, an MIT professor work-

108 The meeting lasted from June 21 to 23, 1960. Detailed, handwritten notes were made by Patricia Lindop. RTBT 5/3/1/6 (3).

109 Notes Pugwash Continuing Committee 10 September 1960, 8. RTBT 5/3/1/6 (4).

110 Royon’s role was discussed on several occasions in the Continuing Committee in 1960; the Soviet Committee members Topchiev and Skobel’tsyn who had no objection to Royon joined the majority. Notes 22 June 1960, 5–6 and 23 June 1960, 5. RTBT 5/3/1/6(3). Notes 10 September 1960, 8. RTBT 5/3/1/6 (4).

111 Notes Pugwash Continuing Committee 22 June 1960, 6. RTBT 5/3/1/6 (3).

112 Notes Pugwash Continuing Committee 21 June 1960, morning 7. RTBT 5/3/1/6 (3).

113 Notes Pugwash Continuing Committee 10 September 1960. RTBT 5/3/1/6 (4). Rotblat, *First ten*, 26–28. Evangelista, *Unarmed Forces*, 64.

ing in the Research Laboratory for Electronics, had already taken part in two Pugwash conferences. If Kennedy were to win the election, Wiesner would likely become his chief science adviser. Together with Eisenhower's adviser Richard Leghorn, he had travelled to Moscow before and was well informed about the advance preparations for the conference already made by their Soviet colleagues.<sup>114</sup>

In London, Wiesner tried to explain to Topchiev, and to equally frustrated British colleagues, the "politically embarrassing situation" of American scientists, who during the presidential campaign did not dare to travel to Moscow or – given the all-too-obvious Soviet support – did not consider attending a Pugwash conference because "they might be attacked at home."<sup>115</sup> Even if he was convinced that above all in "times of stress" the thread of the talks should not be severed – and for that reason was willing to continue traveling to Moscow – his contributions to the discussion show that Wiesner, too, was still in the grip of US anti-Communist fervor.<sup>116</sup> There was discussion as to whether the conference should not be moved to a neutral location, preferably to Vienna, or if in Moscow, whether the next conference planned for the US could be scheduled earlier for reasons of balance. As for the plenary UN assembly that was planned for the end of September, one could only hope that Khrushchev would make "a quiet speech."<sup>117</sup> Moreover, Pauling – still "held in contempt" by Senator Dodd's subcommittee because of his refusal to name his fellow campaigners – "would bring a certain amount of unfavorable publicity" and had better stay away; a solidarity address for him which Topchiev had already requested in vain in June was still not deemed to be appropriate.<sup>118</sup> Since Eaton's presence would already cast an "unfavorable spotlight" on the conference, Wiesner wanted "as little publicity as possible [...] without giving the impression of absolute secrecy." In the US, they "had been working for two years to get the Government to support the Pugwash Movement and now it seemed possible that they were to do it."<sup>119</sup> This opportunity could not be gambled away.

Topchiev, who had been hit like a "bolt from the blue" by Rabinowitch's cable in summer 1960 telling him that the conference had had to be put back

114 Walter A. Rosenblith, *Jerry Wiesner: Scientist, Statesman, Humanist: Memories and Memoirs* (Cambridge, MA: MIT Press, 2003).

115 Notes Pugwash Continuing Committee 10 September 1960, 4. RTBT 5/3/1/6 (4).

116 Notes Pugwash Continuing Committee 10 September 1960, 5. RTBT 5/3/1/6 (4).

117 Notes Pugwash Continuing Committee 10 September 1960, 5. RTBT 5/3/1/6 (4).

118 Notes Pugwash Continuing Committee 10 September 1960, 7. RTBT 5/3/1/6 (4). Notes Pugwash Continuing Committee 23 June 1960, 5. RTBT 5/3/1/6 (3). Wittner, *Resisting*, 364.

119 Notes Pugwash Continuing Committee 10 September 1960, 8 and 11. RTBT 5/3/1/6 (4).

once again, followed the American-British exchanges with bewilderment, especially since his attempts to calm down his paranoid colleagues by reassuring them that Pugwash was held in the highest regard in the Soviet Union only fueled American anxieties.<sup>120</sup> Ultimately, however, the top member of the communist nomenclatura and his KGB man Pavlichenko understood that they had to take American fears into account and accept their conditions if they wanted to reach the decision-makers in Washington at all. The Pugwash conferences were to be continued, until further notice, as “private meetings.” Following the series of spectacular political events that had brought the official test-ban negotiations to a standstill, it seemed all the more urgent to the Soviet Pugwashites to provide a discreet communication channel, and therefore they were willing to respect the fears of their American colleagues. To forestall any possible indiscretions on the part of Eaton, who was thinking about bringing not just his wife Anne and his office manager Betty Royon, but also his press officer, it was decided to follow the strict rules that Topchiev himself had suggested. That is to say, on the invitation list a strict distinction should be made between “participants + honorary guests” and “no-one must issue any publicity without consulting the Committee.”<sup>121</sup> The Soviet members of the Continuing Committee had to realize that under the dark clouds of American anti-Communism, Cyrus Eaton was not the one who could open a line of communication. Even for the Soviets, Eaton had become an obstacle, around which they had to navigate carefully.

Actually, this maneuver had only been scheduled for the opening meeting of the Moscow conference at the end of November 1960. A few days after the September meeting of the Continuing Committee in London, the American Pugwashites decided not to wait that long. When UPI reported in September that “Eaton’s Pugwash Scientists” would soon be meeting in Moscow, the American Pugwashites changed tack ahead of time by publicly distancing themselves from Eaton so as to prevent the expected anti-Communist gusts from capsizing the presidential election campaign, which was in full swing.<sup>122</sup> Meanwhile, they could tacitly expect the consent of their Soviet colleagues.

Two months later, in November 1960, the Soviet Pugwashites masterfully performed their part of the job in Moscow. In the shadow of the Kremlin and its highly effective press censorship, they were able to contain Cyrus Eaton, who was uncontrollable in the West, and his entourage, using their publicity rules. The Moscow conference – in spite of or perhaps precisely due to

120 Notes Pugwash Continuing Committee 10 September 1960, 3. RTBT 5/3/1/6 (4).

121 Notes Pugwash Continuing Committee 10 September 1960, 8–9. RTBT 5/3/1/6.

122 See footnotes 2 and 4.



the conflicts that were fought behind closed doors – was a rousing success in the eyes of the overwhelming majority of participants from both East and West.<sup>123</sup> The hope of the American Pugwashites in September 1960 “that the next meeting would be especially influential with governments” had materialized.<sup>124</sup> Here, and at subsequent Pugwash conferences, the personal contacts between the scientific advisers of the Kennedy administration and their Soviet counterparts were intensified, for example, that between Jerome Wiesner and Evgenii Fedorov, the head of the Soviet expert delegation in Geneva in 1958. These contacts were instrumental in sustaining transnational efforts to secure a stop to weapons tests that, during the crises of the early 1960s – from Paris to Berlin and Cuba – were threatened time and again, and contributed to the LTBT that was finally signed in August 1963.<sup>125</sup> Thus, the laborious five-year process of self-discovery driven by the ideas and ethos of the Russell-Einstein Manifesto had been realized, that is to say, Pugwash was serving as a channel of communication between governments, including not only the Soviet regime, but that in Washington. This success was only possible under the conditions insisted upon by the Americans during the troublesome summer and autumn of 1960, as they remained stuck in the climate of anti-communism that continued to influence American politics, and the country more generally. It was not that they were afraid of their Soviet colleagues and their KGB-observers. But their fears of being accused of harbouring communist tendencies or of being denounced as a fellow traveler strongly limited the American Pugwashites’ room for maneuver at the national level – at least for those who sought personal contact with those in government circles and did not, like Linus Pauling, bank on broad social movements as a means to exert public pressure on the centers of political power.

#### 4 Conclusion: Publicity, Privacy and Secrecy

Topchiev had been absolutely right. Without Cyrus Eaton and his extensive patronage in the early years there would have been no Pugwash conferences

123 See Lüscher’s chapter. On the importance of the Moscow conference for the Czechoslovakian Pugwash group see Doubravka Olšáková’s chapter in this volume.

124 Notes Pugwash Continuing Committee 10 September 1960, 5. RTBT 5/3/1/6 (4).

125 Cf. Evangelista, *Unarmed Forces*, 60–89. As Paul Rubinson notes, scientists on both sides, as well as in the context of Pugwash conferences, contributed to preserving the dominance of the logic of deterrence and to making a comprehensive test ban treaty impossible. Paul Rubinson, “‘Crucified on a Cross of Atoms’: Scientists, Politics, and the Test Ban Treaty,” *Diplomatic History* 35, no. 2 (April 2011): 283–319. See also Rubinson’s chapter in this volume.

at all. However, Eaton gave the scientists he supported little time to find their own way for putting the scientific rationality and objectivity that they claimed for themselves into best use for preventing a nuclear war. From the very beginning he confronted them with a problem, which in various forms – depending on the changing political constellations on a national and global scale – would continue to occupy the PCSWA for some time to come. This was the question as to how they were to present themselves in public as they sought broad support from the international scientific communities and public recognition, while, at the same time, they wanted to function as discreetly as possible as a special ‘elites to elites’ communication channel – something that was key to the development of the PCSWA as a forum for second-track diplomacy.

The political contexts and public discourses in East and West which the Pugwashites faced, especially in the late 1950s, related to each other in a contradictory way. There was, on the one hand, the Soviet rhetoric if not policy, which tried to coopt all “peace-loving forces” of the world and in this way to secure not just peace, but also to expand the Communist sphere of influence worldwide. On the other hand, they had also to contend with American anti-communism, which saw the hand of the Soviets behind each peace and disarmament initiative. If the scientists of Pugwash were to have any chance of success at all, they had to navigate around and overcome this double-bind situation. Eaton’s unique public relations strategy which combined plain horse sense with political provocation was not a model for them – quite the contrary. While his public appearances perhaps secured him the applause of the Soviet side, at home he was seen as being at best a naïve fellow traveller.

The “private, but not secret” policy finally agreed upon as the Pugwash mode of working proved to be beneficial in the specific political constellation of this period, marked on the one hand by the change of administration in Washington and on the other by the reform policy of Khrushchev, who would have liked to direct part of his available resources from military purposes to economic and social reconstruction – so long as the great power position of post-Stalinist Soviet Union was not threatened. Coupled with mutual mistrust, this mix of reforms and persistent power politics on both sides resulted in a quick succession of political crises – the construction of the Berlin Wall, the Bay of Pigs, the Cuban Missiles Crisis – and again and again blocked the negotiation of a comprehensive test ban. After Kennedy was elected, it became clear that two Pugwashites (Jerome Wiesner and Walt Rostow) would be advising the new US president, and Pugwash was able to prove its worth several times in functioning as a communication channel that in fostering East–West dialogue could help to repair the torn threads of political discourse. Even before Kennedy’s election, these two Moscow travelers established the first contact between the future administration and the Soviet government. Further advis-

ers – among them George Kistiakowski, Hans Bethe, Franklin Long and Isidor Rabi – were to travel to the following conferences in Stowe (Vermont), Cambridge and London, making Pugwash one of the most important forums of second-track diplomacy in connection with the test ban negotiations.<sup>126</sup> The British government had also changed its position. Initially, they also saw the Pugwash conferences as mere “communist front gatherings.” As late as 1959, the British government was still unsure of how to view the conferences before they asked chief adviser John D. Cockroft of the UK Atomic Energy Authority to put together a scientifically strong and politically reliable team for Moscow. Subsequently, the UK Foreign Office was so convinced of the potential benefits of the Pugwash conferences that it not only backed the two conferences that took place in Cambridge and London in 1962, but also tried to exert influence on “the composition of the British delegation or what they were to say.”<sup>127</sup>

Thus, the success already generated the next problem: with such proximity to the government, how could the independence of the Pugwash conferences be maintained – if not in the East, then at least in the West, where the nimbus of “scientific objectivity” that marked Pugwash (and which rendered it distinct from other international peace initiatives) was linked to the independence and impartiality of the scientists? It was always a balance that had constantly to be recalibrated between privacy, secrecy and publicity, between scientific autonomy and loyalty to governments. The key questions were how exclusive Pugwash conferences had to be in order to serve as a communication channel for governments, and how much backing from popular movements was still needed to be able to tap into grassroots pressure against governments still stuck in the logic of mutually assured destruction. And another question would come up soon: For what purpose was the knowledge of natural scientists and the authority to which they laid claim still necessary if nuclear arms policy was conceived in the war games of military figures, strategists and security experts, while the best of the next generation of scientists working in Russian “nuclear cities” or California labs were developing ever more sophisticated nuclear military gadgets and making themselves mutually indispensable as developers of arms and defense systems in their highly productive scientific competition?<sup>128</sup> Here the self-enlightenment of scientists on both sides of the

126 Eugene Rabinowitch, “The Stowe Conferences,” *BAS* 17, no. 9 (November 1961): 382–386. Kai-Henrik Barth, “Catalysts of Change: Scientists as Transnational Arms Control Advocates in the 1980s,” *Osiris* 21, no. 1 (2006): 182–206.

127 Notes Pugwash Continuing Committee 10 September 1960, 5. RTBT 5/3/1/6 (4).

128 Rubinson, “Crucified,” 314–315. Paul Erickson, *The World the Game Theorists Made* (Chicago/London: University of Chicago Press, 2015).

Cold War divide would certainly have been called for, but success on this front would have been dependent on much greater publicity than could ever be achieved with the “private, but not secret” policy adopted by the Pugwash leadership from 1960 onwards.

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**PART 2**

*Pugwash and the Superpowers*







# Party, Peers, Publicity: Overlapping Loyalties in Early Soviet Pugwash, 1955–1960

*Fabian Lüscher*

## Introduction

The Austrian-born physicist Victor Weisskopf (1908–2002) published his memoirs in 1991, when the Soviet Union still existed. One of the insights shared by the American scientist concerned his participation in Pugwash conferences (PCSWA) – a transnational initiative to discuss “science and world affairs,” especially nuclear disarmament, among influential scientists from both sides of the Iron Curtain.<sup>1</sup> According to Weisskopf, Soviet delegates at the PCSWA always stood in for their government’s positions while, in contrast, “western” scientists were free to express their personal views. Because Soviet Pugwashites were very close to the centers of political power in Moscow, the contact with them was, for Weisskopf, basically advantageous in order to get direct access to Soviet policy-making.<sup>2</sup> This meant that statements and ideas could be quickly forwarded to influential politicians in Moscow through the high-ranking scientists participating in Pugwash. Such networks opened channels of communication that in some instances led directly to the First Secretary of the Communist Party of the Soviet Union (CPSU), Nikita S. Khrushchev (1894–1971).<sup>3</sup> Using such opportunities, the network emerging around the PCSWA aimed at overcoming political disaccord in the most pressing issues of the atomic age.

Several attempts to end nuclear testing and the arms race had been undertaken since 1946, when the first US proposal on nuclear arms control – the

1 Victor F. Weisskopf, *Mein Leben: Ein Physiker, Zeitzeuge und Humanist erinnert sich an unser Jahrhundert* (Bern: Scherz, 1991), 238–242.

2 Weisskopf, *Mein Leben*, 240–242.

3 A first comprehensive account on the influence of disarmament initiatives during the Cold War, including Pugwash, was given by: Lawrence S. Wittner, *Resisting the Bomb: A History of the World Nuclear Disarmament Movement, 1954–1970* (Stanford: Stanford University Press, 1999), 265–290. Matthew Evangelista was the first to make broad use of Soviet archival records which became partially accessible in the 1990s, in order to analyze transnational efforts, including Pugwash, throughout the Cold War: Matthew Evangelista, *Unarmed Forces: The Transnational Movement to End the Cold War* (Ithaca: Cornell University Press, 1999).

so-called Baruch-Plan – had been dismissed by the Soviet Union, at the time developing its own nuclear weapon's program. Even after the USSR had become a nuclear power in 1949 and after Iosif V. Stalin's death in 1953, one of the main conflicts regarding nuclear arms control could not be overcome: a system of international control that involved on-site inspection within the territory of the nuclear powers was unacceptable from the Soviet point of view.<sup>4</sup> On the other hand, outlawing nuclear weapons without any safeguards – as proposed by the Khrushchev administration – was not an option from the United States' perspective. In early 1955, these fundamental positions remained unchanged and seemed to lead any further diplomatic disarmament initiative into an impasse.<sup>5</sup> Another unresolved question, one closely bound up with disarmament, was that relating to the testing of nuclear weapons. Here the nuclear powers tried to find solutions, without risking any drawbacks in the arms race. In March 1958, just after the completion of a test explosion series, the Soviet Union announced a unilateral test ban, trying to force the governments of Great Britain and especially the United States – at this time poised to begin a major series of tests in the Pacific – to also cease testing. After the announcement of this unilateral Soviet moratorium, the three nuclear powers took steps to directly negotiate a multilateral test ban.<sup>6</sup> In July and August 1958, experts from the USSR, the US and UK convened in Geneva to discuss the technical aspects and implications of a comprehensive test ban.<sup>7</sup> During this time, the United States and Britain continued with their planned series of tests and on 30 September 1958 Khrushchev revoked his self-imposed test ban and immediately commenced a new series of experimental nuclear explosions.<sup>8</sup> Official diplomatic negotiations regarding a comprehensive test ban

4 One noteworthy exception was a Soviet proposal made in 1947. While keeping up the call for a complete ban of nuclear weapons, this also included a clause on inspections, although less rigid than proposed in the Baruch-Plan. But, according to the American historian David Holloway, "[...] this proposal received only desultory consideration [...]." David Holloway, "The Soviet Union and the creation of the International Atomic Energy Agency," *Cold War History* 16, no. 2 (2016): 177–193, here 180–181.

5 Robert A. Divine, *Blowing on the Wind. The Nuclear Test Ban Debate 1954–1960* (Oxford/New York: Oxford University Press, 1978), 58–63.

6 The unilateral test ban was not least a result of an initiative by the Soviet nuclear physicist and later popular dissident Andrei D. Sakharov (1921–1989). See: Paul R. Josephson, "Atomic-Powered Communism: Nuclear Culture in the Postwar USSR," *Slavic Review* 55, no. 2 (1996): 297–324, especially 303–304.

7 An overview over these expert talks is given by Donald A. Strickland, "Scientists as Negotiators: The 1958 Geneva Conference of Experts," *Midwest Journal of Political Science* 8, no. 4 (1964): 372–384.

8 Evangelista, *Unarmed Forces*, 60.

started on 31 October but soon ended in deadlock.<sup>9</sup> That said, the three nuclear powers agreed to initiate a temporary suspension of nuclear tests. This moratorium, which began in November 1958, lasted for almost three years until September 1961, when the Soviet Union resumed testing.<sup>10</sup> No diplomatic solution to the test ban issue was found until after the Berlin Crisis (1961) and most notably the Cuban Missile Crisis (1962) had brought the world to the edge of a nuclear war between the superpowers. In August 1963, the Limited Test Ban Treaty (LTBT) was signed in Moscow. Throughout the period with which the present chapter is concerned, the United States, the Soviet Union and, to a lesser degree, Great Britain, continued to stockpile nuclear warheads and poured resources into the development of new weapon delivery systems.

Second track diplomacy efforts towards disarmament and the ban of nuclear weapons' testing have recently begun to receive more attention from historians.<sup>11</sup> This scholarship has, for example, emphasized the importance of semi-official contacts established through transnational networks in negotiations for the LTBT of 1963.<sup>12</sup> In this regard, the efforts of Pugwash scientists – in both the East and the West – have frequently been described as important in facilitating both formal and informal communication and dialogue across the Iron Curtain.<sup>13</sup>

9 Julia M. MacDonald, "Eisenhower's Scientists: Policy Entrepreneurs and the Test-Ban Debate 1954–1958," *Foreign Policy Analysis* 11, no. 1 (2015): 1–21. Evangelista, *Unarmed Forces*, 61–62.

10 Steven J. Zaloga, *The Kremlin's Nuclear Sword. The Rise and Fall of Russia's Strategic Nuclear Forces, 1945–2000* (Washington: Smithsonian Institution Press, 2002), 71. Divine: *Blowing*, 234–240.

11 See for example: Allan Pietrobon, "The role of Norman Cousins and Track II Diplomacy in the Breakthrough to the 1963 LTBT," *Journal of Cold War Studies (JCWS)* 18, no. 1 (2016): 60–79.

12 Following the examples of Matthew Evangelista and Lawrence Wittner, the value of unofficial contacts with regard to arms limitation negotiations has recently been stressed by: Pietrobon, "Role." On the history of the LTBT see Jonathan Hunt, "The Birth of an International Community: Negotiating the Treaty on the Non-Proliferation of nuclear Weapons," in *Foreign Policy Breakthroughs. Cases in Successful Diplomacy*, eds. Robert L. Hutchings and Jeremi Suri (New York: Oxford University Press, 2015), 72–100. Vojtech Mastny, "The 1963 Nuclear Test Ban Treaty: A Missed Opportunity for Détente?" *JCWS* 10, no. 1 (2008): 3–25.

13 Bernd W. Kubbig, *Communicators in the Cold War: The Pugwash Conferences, the US-Soviet Study Group and the ABM Treaty*. PRIF Reports No. 44, Peace Research Institute Frankfurt (Frankfurt am Main: PRIF, October 1996). Yuri A. Ryzhov and Mikhail A. Lebedev, "Uchenye Akademii nauk v Paguoshskom dvizhenii," *Vestnik RAN* 75, no. 6 (2005): 491–497. Lorian D. Vinogradova, "Predystoriia Paguoshskogo dvizheniia," in *Istoriia sovet-skogo atomnogo proekta: dokumenty, vospominaniia, issledovaniia*, Vol. 2, ed. Vladimir

Drawing on the records of the Soviet Pugwash Committee and on personal papers, this article casts new light on Soviet Pugwashites' work towards disarmament, as advocates for the revitalization of contacts with western scientists and as actors engaged in the kinds of exchanges that came to be known as second track diplomacy. The American political scientist and historian Matthew Evangelista has described the influential position of scientists in cross-border networks, challenging the narrative of an impermeable hierarchical system in which Soviet Pugwashites were nothing more than banner-holders of the Party.<sup>14</sup> Evangelista's research into and analysis of the Soviet Pugwash group revealed much about power relations between influential scientists and the political elite in the Cold War Soviet Union. Building on this work, this chapter explores further the internal consistency of the Soviet Pugwash group in its early years. Focusing on the historical actors within these structures brings forth new insights into the scope and limits of their agency, their intentions and their achievements within the Pugwash network. By making use of hitherto untapped archival sources related to the Soviet Pugwash group and its members, this chapter emphasizes and explores the idea of (at least) dual loyalties of Soviet scientists during the Cold War. It takes up the observation that loyalties towards the Party/State and towards the transnational scientific community were not mutually exclusive but rather coexisted in a reciprocal and sometimes uneasy dynamic.<sup>15</sup> It stresses that the position taken by the Pugwash organization on some key disarmament-related issues were close to arguments put forward in the propagandistic disarmament discourse of the Soviet leadership.<sup>16</sup> When reporting on Pugwash conferences to Moscow, Soviet scientists often stressed these intersections. Their reports are examples of how "speaking bolshevik" – a certain use of language and vocabulary which helped to express loyalty to the CPSU – was connected to the objectives of

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P. Vizgin (Sankt-Peterburg: Janus-K, 2002), 333–344. Yale Richmond, *Cultural Exchange and the Cold War: Raising the Iron Curtain* (University Park: Pennsylvania State University Press, 2003), 96–101. Kai-Henrik Barth, "Catalysts of Change: Scientists as Transnational Arms Control Advocates in the 1980s," *Osiris* 21, no. 1 (2006): 182–206, especially 186–188. Akira Iriye, *Global Community: The Role of International Organizations in the Making of the Contemporary World* (Berkeley: University of California Press, 2004), 60–96.

14 Matthew Evangelista, "Transnational Organizations and the Cold War," in *The Cambridge History of the Cold War*, Volume 111, eds. Melvyn P. Leffler and Odd Arne Westad (Cambridge: Cambridge University Press, 2010), 400–421.

15 Nikolai Kremontsov, *International Science between the World Wars: The Case of Genetics* (New York/London: Routledge, 2005).

16 See Doubravka Olšáková's chapter in this volume.

the Pugwash initiative.<sup>17</sup> The case at hand provides what is probably one of the most complex examples of scientists mediating between an international peer-group and the Soviet state.

If Victor Weisskopf perhaps somewhat underestimated the multiple agendas of his Soviet peers, he drew attention to the way in which parts of the agenda of the Pugwash organization were warmly welcomed by political decision makers in Moscow. As soon as the CPSU's leadership was convinced that Pugwash was worth supporting, Soviet nuclear foreign policy was linked with the scientists work towards disarmament in the press.<sup>18</sup> The CPSU and the media under its control claimed that the Pugwash initiative pursued – to some extent – the same values as the Party.

The popular picture drawn of the PCSWA in the Soviet Union was accordingly one of a worldwide association of scientists promoting viewpoints that aligned closely with the program of the CPSU. Potential lines of conflict between positions of the PCSWA and CPSU thus were blurred in popular reporting about Pugwash and its conferences.<sup>19</sup> Under the banner of the new foreign policy doctrine of “peaceful coexistence” it was even advantageous to publicly celebrate the friendship between Cyrus Eaton, the controversial American businessman who financially sponsored some of the early PCSWAs, and Nikita Khrushchev, the First Secretary of the CPSU.<sup>20</sup>

17 I borrow the term «speaking bolshevik» from Stephen Kotkin's study on the history of Magnitogorsk. Kotkin argued that loyalty to the Party in Stalinist society could be expressed by using a certain language and vocabulary. The value of this cultural skill arguably persisted after Stalin's death and shaped the language used in the Soviet Academy of Sciences during in the Khrushchev years as well. Stephen Kotkin, *Magnetic Mountain: Stalinism as a Civilization* (Berkeley: University of California Press, 1997), 198–237.

18 In addition to media campaigns, several historiographical texts on the PCSWA have been published in the Soviet Union – mostly by authors who participated themselves in Pugwash. See for example: Vladimir M. Buzuev and Vladimir P. Pavlichenko, *Paguosh – eto mir* (Moskva: Nauka, 1960); *Uchenye predosteregaiut* (Moskva: Nauka 1964); *Uchenye v bor'be za mir i progress: iz istorii Paguoshskogo dvizheniia* (Moskva: Nauka, 1967). Vladimir G. Trukhanovskii, “Sovetskie Uchenye v bor'be za mir: Paguosh,” *Voprosy Istorii* 12 (1974): 165–167. Vasilii S. Emelianov, “Bor'ba uchenykh za mir,” *Voprosy Filosofii* 6 (1974): 3–11. In 1990, *Voprosy Istorii* published and commented on some archival documents related to Pugwash: [Anonymus]: “U istokov paguoshskogo dvizheniia,” *Voprosy Istorii* 1 (1990): 97–114.

19 On the effects of the CPSU's public alliance with Pugwash see also Paul Rubinson's chapter in this volume.

20 On the relationship between Eaton and Khrushchev see the chapter by Carola Sachse in this volume. Eaton's visits to Moscow in 1958 and 1960 (immediately after Khrushchev had cancelled a meeting with US President Eisenhower due to the U2 affair) and the fact that in 1960 he was awarded the International Lenin Peace Prize contributed to his

Focusing on the relationship of the early Soviet Pugwash group with Western Pugwashites – particularly from the United States and Great Britain – this chapter reveals how boundaries between science and ideology were negotiated and how the party, the peers and the public were reconciled with each other. Even though the institutionalization of the Soviet Pugwash group was framed by strict party control, the establishment of more or less stable networks in and around the PCSWA paved the way for further development of mutual trust and created an atmosphere conducive to cross-bloc communication of a kind that was rare during this phase of the Cold War.

## 1 Soviet Scientists' Social Responsibility

Some senior Soviet scientists were introduced to ideas which would later shape the agenda of Pugwash prior to the Russell-Einstein manifesto of 9 July 1955.<sup>21</sup> In June 1955 the Soviet experimental physicist and Academician Dmitrii V. Skobel'tsyn (1892–1990) had answered a letter dated 5 April 1955 from British polymath and anti-war activist Bertrand Russell (1872–1970) outlining his proposal for an international congress of specialists from east and west to discuss problems arising from the deadlock in the disarmament talks.<sup>22</sup> Attached to Russell's letter was the draft version of the statement that would become the Manifesto.<sup>23</sup> Skobel'tsyn's answer, which was confirmed by the Presidium of the CPSU's Central Committee, was cautiously positive, but included the demand for a face-to-face meeting to edit the final version of the statement.<sup>24</sup> In the event, no revisions by Soviet academicians took place before its publication in London in July 1955, which perhaps goes some way to explaining the

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becoming arguably the most controversial person involved in early Pugwash. According to the memoirs of the Soviet translator Aleksandr D. Shveitser, who was involved in many Pugwash conferences, Soviet political leaders did not really take Eaton's offers to mediate between the superpowers seriously. Nevertheless, they wanted to profit from the propagandistic effect of Eaton's benevolence towards the Soviet Union. Aleksandr D. Shveitser, *Glazami perevodchika: Iz vospominanii* (Moskva: R. Valent, 2012), 68–69.

21 On the Russell-Einstein manifesto, see the introduction to this volume by Kraft and Sachse. The text of the manifesto and related documents are in: Andrew G. Bone, ed. *The Collected Papers of Bertrand Russell*, Vol. 28, "Man's Peril, 1954–55." (New York/London: Routledge, 2003), 304–334.

22 The letter to which Skobel'tsyn referred contained a revised draft of the manifesto which was circulated by Russell to seventeen proposed signatories: Skobel'tsyn was the only Soviet recipient.

23 Vitalii Iu. Afiani and Vladimir D. Esakov eds. *Akademiia nauk v resheniiach TsK KPSS, 1952–1958* (Moskva: Rosspen, 2010).

24 See the chapter by Geoffrey Roberts in this volume.

absence of Soviet signatories. From the outset, when the idea to draft a memorandum on the perils of nuclear war was first brought to Russell's attention, he was skeptical about the chances of winning Soviet scientists over to such a project and so, perhaps, had anticipated Skobel'tsyn's reluctance to sign the document.<sup>25</sup>

Nevertheless, at the press conference in London in July 1955, Russell expressed his optimism that Skobel'tsyn would attend a conference based on the Manifesto, even if he had not signed it.<sup>26</sup> Actually, the Manifesto sparked activity within the Soviet Union within those networks that would later become important for the inception there of the PCSWA. One of the direct outcomes of Russell's initiative was the announcement of an international conference – including a Soviet delegation – to discuss the Manifesto. This was held under the auspices of the World Association of Parliamentarians for World Government and took place from 3 to 5 August 1955, also in London.<sup>27</sup> In Moscow, vice-president of the Soviet Academy of Sciences (AN) Ivan P. Bardin (1883–1960) together with deputy minister of foreign affairs, Vasilii V. Kuznetsov (1901–1990) took the initiative to form a Soviet delegation for this meeting.<sup>28</sup> The Presidium of the Central Committee of the CPSU endorsed the proposed composition of this delegation without objection, and subsequently four members of the AN traveled to the British capital.<sup>29</sup>

25 Nathalie A. Duddington, a Russian-born translator and Frédéric Joliot-Curie were the first who suggested to Russell the idea of making a public statement together with a number of eminent scientists, including Soviet scientists. Russell was initially of the opinion that Soviet scientists would only sign statements exclusively signed by fellow communists: Bone, *Collected Papers*, 304–305.

26 Bone, *Collected Papers*, 325–326.

27 For a short summary of this conference with special emphasis on the pretty spontaneous and thus unexpected appearance of a Soviet delegation see: Eugene Rabinowitch, "International Cooperation of Atomic Scientists," *Bulletin of the Atomic Scientists (BAS)* 12, no. 2 (1956): 34–37, 61. Bone, *Collected Papers*, 340–345. On the other side of the Iron Curtain, an interview on the London conference with Bertrand Russell had already been printed in late 1955. Here, Russell was presented as an important philosopher, a self-declared anti-communist who nevertheless was supportive of Soviet positions in questions of disarmament and international relations. Quotations of Russell, including a statement that the People's Republic of China should become part of the UN were emphasized. Karl E. Nepomniashchii, "Londonskie Vstrechi," *Ogonek* 46 (1955): 17.

28 On the Academy of Sciences as the responsible body for Soviet Pugwash activities see Doubavka Olšáková's chapter in this volume.

29 Afiani and Esakov, *Akademiia nauk v resheniiax*, Document. 85, 305–308. The delegation consisted of Topchiev, Markov, Kuzin and the criminologist Sergei A. Golounskii (1895–1962). From 3 to 5 August, Skobel'tsyn had to attend the last session of the United Nations' Scientific Advisory Committee which prepared the first Geneva Conference on the Peaceful Uses of Atomic Energy. Accordingly Skobel'tsyn was not eligible for the meeting in London.



Aleksandr V. Topchiev (1907–1962) was chosen to head the delegation. Trained as a chemist, he became professor for organic chemistry in 1938 in Moscow. From 1947 to 1949 he acted as Soviet deputy minister for higher education, before he was elected chief scientific secretary and vice president of the Academy of Sciences – positions he held until the end of his life.<sup>30</sup> Since the AN was a key institution in re-establishing international scientific relations in the 1950s, Topchiev's positions and his political reliability made him one of the central actors in this and related processes. He often acted as the connecting link between the Presidium of the CPSU and the Presidium of the Academy. As a long-time Party-member (since 1932) he was one of the first academicians who regularly traveled abroad as a representative of Soviet science and reported extensively on his journeys to the Central Committee or even directly to Khrushchev.<sup>31</sup>

For him, traveling to Russell's conference was part of a longer trip abroad. Together with two colleagues – theoretical physicist Moisei A. Markov (1908–1994) and biophysicist Aleksandr M. Kuzin (1906–1999) – Topchiev was in the Soviet delegation to the First International Conference on the Peaceful Uses of Atomic Energy, held in Geneva from 8 to 20 August 1955.<sup>32</sup> After his return, Topchiev held an extensive lecture in Moscow, discussing not least questions related to the social responsibility of scientists: “The conclusive question is how these resources [nuclear energy; F. L.] will be used – in the interest of peace and creation or for purposes of destruction and devastation.”<sup>33</sup> Later in his speech Topchiev used the world's first nuclear power plant – which had been connected to a local energy grid near Moscow in 1954 – as an example to highlight and explain the particularities of social responsibility of *Soviet* nuclear scientists and engineers:

30 Buzuev and Pavlichenko: *Uchenye predosteregaiut*, 89–90.

31 Topchiev was a member of the CPSU since 1932 and, according to the American Historian Alexander Vucinich, “[...] acquired the job of protecting, coordinating, and implementing Stalinist designs for an ideological and nationalistic bastion of Soviet science” in the early 1950s. Alexander Vucinich, *Empire of Knowledge. The Academy of Sciences of the USSR* (Berkeley: University of California Press, 1984), 246.

32 The London meeting was actually scheduled as an unofficial prelude to the Geneva Conference in order to facilitate participation of highly reputed scientists: Bone, *Collected Papers*, 340.

33 “Pervaia mezhdunarodnaia konferentsiia po mirnomu ispol'zovaniiu atomnoi energii. Lektsiia v Dome Uchenykh” [First international conference on the peaceful uses of atomic energy. Lecture at the House of Scientists], September 1955. Archives of the Russian Academy of Sciences (hereafter: ARAN) f. 694, op. 1, d. 101, l. 1.

Its [the nuclear power plant's; F. L.] construction became possible thanks to the historical victory of the Soviet people in the fight for socialist industrialization of the country, for the realization of the revolutionary culture, for the flourishing of progressive science and technology.<sup>34</sup>

In the Soviet Union, it was common to directly link nuclear science and technology to the overall goal of building up a communist society. Soviet scientists' social responsibility thus went beyond preserving peace through involvement in disarmament initiatives to include responsibility in helping to pave the way to a communist utopia.<sup>35</sup> Early in 1955 Topchiev had described the task of academicians and scientists in the atomic age in a radio interview as follows: "Soviet scientists consider it their *sacred duty* to wage an active fight, so that atomic energy serves only peaceful and constructive purposes."<sup>36</sup> Of course, the authors of the Russell-Einstein Manifesto had also made a certain connection between disarmament and atomic powered progress. Still, it should be kept in mind that in the Soviet context, "progress" and "construction" were clearly linked to the communist project, which became part of the Soviet version of scientists' social responsibility. Regardless of the tirelessly repeated peace agenda behind Soviet politics and science, stockpiling and testing of nuclear weapons went on at a rapid pace. In 1955 alone, six nuclear bombs of different types were exploded on Soviet testing grounds.

In spite of the fact that peace rhetoric was out of touch with the reality of the actual nuclear arms race, Topchiev continued to promote the Marxist-Leninist approach of scientists' social responsibility. Irrespective of the differences between "eastern" and "western" interpretations regarding social responsibility, he drew a favorable picture of his peers when asked in another interview about his personal impressions of meetings with British scientists.<sup>37</sup>

34 Ibid. l. 28.

35 On the specifics of the Marxist-Leninist approach to scientists' social responsibility see Doubavka Olšáková's chapter in this volume.

36 Ob ispol'zovanii atomnyj energii v mirnykh tseliakh, tekst beseda po radio, s komentarii avtora [On the peaceful uses of atomic energy, text of a conversation on radio with comments of the author], January 1955. ARAN f. 694, op. 1, d. 85, l. 1 (emphasis added).

37 O razvitii anglo-sovetskikh nauchnykh svyazei, tekst interv'iu [On the development of English-Soviet scientific relations, text of the interview], 21 April 1956. ARAN f. 694, op. 1, d. 111, l. 2. By the time this interview was held, Khrushchev and the *de jure* head of the Soviet state, Nikolai A. Bulganin (1895–1975), together with the leading Soviet nuclear physicist Igor' V. Kurchatov and aircraft designer Andrei N. Tupolev, were visiting the United Kingdom. Against the background of this state visit, Topchiev, of course, had to draw an optimistic picture of future cooperation between British and Soviet scientists. In

In the fall of 1956, Topchiev got another chance to meet Russell in the United Kingdom.<sup>38</sup> After attending the opening of the Calder Hall nuclear power plant on the north west coast, he headed to the small Welsh village of Chirk, where on 25 October he met Bertrand Russell together with the British physicist and Nobel laureate Cecil F. Powell (1903–1969) to discuss further the possible participation of Soviet scientists in a conference on the dangers of nuclear weapons.<sup>39</sup> Originally it had been planned to hold such a meeting in India, in January 1957 – a plan later abandoned by the organizers in light of political developments, notably the Suez crisis.<sup>40</sup> In his notes of the conversation in Chirk, Topchiev recollected the cornerstones of the planned conference as outlined by Russell. Therein the ever growing confidence in scientific thought becomes obvious: “Russell said that the scientist’s authority is such that their opinion, in the end, needs to be considered by governments as well.”<sup>41</sup> According to Russell, Topchiev noted, the presence of distinguished Soviet scientists was crucial to the success of the conference, and would raise the authority of its resolutions. He reminded Topchiev that the participants would meet as scientists and not as politicians. Because resolutions should be taken unanimously, “disputed political questions” or any kind of “political demands” would not be part of the conference’s agenda.<sup>42</sup> According to Topchiev, Russell

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this context, he underlined the importance of establishing personal contacts with British peers. On the state-visit and its influence on Soviet-British relations see: Mark B. Smith, “Peaceful Coexistence at all Costs: Cold War Exchanges Between Britain and the Soviet Union in 1956,” *Cold War History* 12, no. 3 (2012): 537–558.

- 38 Letter from Powell to Topchiev, 10 October 1956. ARAN f. 2193, op. 1, d. 3, l. 22. The main purpose of this visit was the opening of the first British nuclear power plant at Calder Hall, where Topchiev led a small delegation of the Soviet Academy of Sciences. Connecting the reactor to the power grid in the UK for the first time was a major media event: Queen Elizabeth II and senior representatives from many parts of the world were present at the ceremony. For Soviet media coverage see: [Anonymus]: “Otkrytie pervoi atomnoi elektrostantsii v Anglii.” [Opening of the first atomic power plant in England], *Pravda* 292, 18 October 1956, 4.
- 39 Spravka o besede akademika Topchieva A. V. s lordom B. Rasselom i professorom S. Paelom v derevne Chirk (Uel’s, Velikobritaniia) ob uchastii sovetских uchenykh v konferencii ob opasnosti dal’neishhego rasprostraneniia oruzhiia massovogo porazheniia [Information about the conversation of academician A.V. Topchiev with Lord B. Russell and Professor C.F. Powell in the village Chirk (Wales, Great Britain) on the participation of Soviet scientists in the conference on dangers of further dissemination of weapons of mass destruction], 25 October 1956. ARAN f. 2193 op. 1, d. 2, l. 1-4 (hereafter: Spravka o besede, ARAN).
- 40 Evangelista, *Unarmed Forces*, 32. Jean Klein, “Atomic Scientists and Disarmament: The Pugwash Movement,” in *Individualism and World Politics*, ed. Michel Girard (Basingstoke: Macmillan, 1999), 160–185.
- 41 Spravka o besede, ARAN f. 2193, op. 1, d. 2, l. 1.
- 42 *Ibid.* l. 2.

had another important goal in mind, as he planned the conference: The direct contact between scientists of different states would “[...] lead to a rapprochement between them, to the establishment of a coherent point of view on an important international question [...]”<sup>43</sup>

Although Russell sought to exclude potential political conflicts from the planned conference, the meeting in Chirk was apparently a welcome opportunity to ascertain Topchiev’s personal opinion on the most pressing Cold War issues. When Russell asked his Soviet guest what he thought about the “Hungarian occurrences” Topchiev, as recorded in his notes, answered diplomatically: “[...] [I]t would be hard to give a more or less correct account of these occurrences because here no Soviet newspapers are available and the English newspapers accounted these occurrences contradictorily.”<sup>44</sup> Insofar as his own report of the meeting indicates, there were clear limits on the extent to which Topchiev would be drawn on sensitive political issues. What the first contacts between Soviet academicians and those who would later play a key role in establishing the Pugwash conferences reveal is that those scientists chosen to participate in discussions about and moves toward realizing Russell’s initiative were loyal to both the scientific community and the Soviet Party. They shared with their foreign peers the conviction that as scientists they had a duty or responsibility to speak up about the menace of nuclear war but as Soviet citizens they refused or were unable to separate this discourse from the nuclear foreign policy discourse of the CPSU. In their public statements, correspondence with peers and in reports filed to the Soviet authorities, they stressed that social responsibility towards peace and disarmament was inherent in both their profession (as scientists) and in their conviction as socialists.<sup>45</sup>

## 2 The Common Language of Science and Soviet Nuclear Policy

Following the acute Cold War crises of 1956, the first PCSWA meeting took place in the Canadian village of Pugwash, Nova Scotia, in early July 1957.<sup>46</sup> Twenty-two scientists attended this meeting which provided new opportunities for establishing personal contacts across national and Bloc divides – in itself a

43 Ibid. I. 3.

44 Ibid. I. 4. Russell’s question referred to the Hungarian Revolution which took place just two days before the meeting with Topchiev and Powell.

45 On the implications of the Soviet discourse about the “struggle for peace” on Pugwash see Olšáková, chapter seven.

46 Because the original plan to convene the meeting in India could not be realized, the organizers finally accepted the multi-millionaire Cyrus Eaton’s proposal to invite the scientists to his estate in Nova Scotia from 7 to 10 July 1957.

novel and important goal. The Presidium of the Central Committee of the CPSU approved four members for the Soviet delegation, which consisted of three scientists, Topchiev, Skobel'tsyn and Kuzin, all of whom were affiliated to the Academy of Sciences, and Vladimir P. Pavlichenko (1923–1991). Officially working as a translator and aide to Topchiev, Pavlichenko was also monitoring the meeting for the Soviet Intelligence Service (КГБ).<sup>47</sup>

A month after returning from Canada and in his capacity as chief of the Soviet delegation, Topchiev filed a full report on the meeting in Nova Scotia – which would become the inaugural Pugwash conference – to the Presidium of the Academy.<sup>48</sup> Beyond statements issued in the press, Topchiev mentioned that there had been fierce disagreements in Nova Scotia on political questions – especially between the American and Soviet delegates.<sup>49</sup> He did not, however, elaborate further on these conflicts, but instead emphasized the role of scientific knowledge in the problems under discussion, before concluding with the point that “[...] scientists from different countries, with differing social and economic systems, with differing political convictions can find a common language, when speaking about the vital interest of mankind.”<sup>50</sup> The notion of both “political fights and discussions” as well as of “common language” would become characteristic in reports by Soviet scientists about their meetings with western peers. Topchiev’s efforts to draw a boundary between political and scientific discussions speak to the faultline embedded within the Pugwash project more broadly as it sought constantly to negotiate the ideological divide whilst simultaneously seeking to develop mutual understanding and establish a shared position on the dangers of the nuclear age. On the one hand, he needed to assure the Academy’s Presidium that no concessions were made when crucial political questions – e.g. on international control of nuclear material – were discussed. On the other hand, claiming the universal language of science as a basis for constructive discussions was necessary to justify to the Soviet leadership further meetings with western peers.

Whatever the difficulties and differences in Pugwash in July 1957, this meeting had made it clear that scientists – in the east as well as in the west – could

47 Kubby, *Communicators*, 8–10. Wittner: *Resisting*, 279.

48 O 1-oi Paguoshskoi konferencii bortsov za mir, Vystuplenie v Presidiums AN SSSR [On the first Pugwash conference of the fighters for peace, address before the presidium of the Soviet Academy of Sciences], 9 August 1957, ARAN f. 694, op. 1, d. 139 (hereafter: O 1-oi Paguoshskoi konferencii, ARAN). Toshihiro Higuchi, “Radioactive Fallout, The Politics of Risk, and the Making of a Global Environmental Crisis, 1954–1963,” PhD diss., Georgetown University, USA, 2011, here 278.

49 O 1-oi Paguoshskoi konferencii, ARAN f. 694, op. 1, d. 139, l. 4.

50 O 1-oi Paguoshskoi konferencii, ARAN f. 694, op. 1, d. 139, l. 9.

and were staking claims to having a legitimate and authoritative place in discussions about the potential dangers posed by nuclear weapons. The statement arising from the meeting in Nova Scotia was grist to the mill of the CPSU in that it included elements that aligned with Soviet propaganda about disarmament and a test ban at this time.<sup>51</sup> The dual challenge for the CPSU lay in ensuring that the Soviet Pugwash group was seen to align with the aims of this emerging international network of “concerned scientists,” whilst, at the same time, making sure that Soviet Pugwashites also adhered to the party line.

On order of the CPSU, by 13 August 1957, 198 signatures of Soviet scientists had been collected in support of a five-page statement entitled “Uniting the scientist’s efforts in the fight for the immediate ban of nuclear weapons.”<sup>52</sup> This statement gave resounding support to the latest Soviet proposal for an uninspected moratorium on nuclear tests that had been put forward in June 1957.<sup>53</sup> Within it, the Pugwash initiative was mentioned as a positive step towards direct discussion of the dangers of nuclear war.<sup>54</sup> Three days later, *Pravda* published an article by Topchiev under the title “Eliminating the menace of atomic war” in which he repeated his view that scientists had a “sacred duty” to fight the nuclear arms race, emphasizing too that scientists understood better than anybody else the disastrous consequences of an atomic war.<sup>55</sup> On the one hand, this article served to bring the Pugwash initiative to public attention within the USSR. On the other hand, Topchiev was making clear his views about who was in charge of assessing and adjudicating on nuclear dangers and seeking publicly to affirm this “area of uncertainty” as something over

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- 51 On the emergence of the Soviet disarmament discourse and the related proposals see: Matthew Evangelista, “Cooperation Theory and Disarmament Negotiations in the 1950s,” *World Politics* 42, no. 4 (1990): 502–528. Higuchi, “Radioactive Fallout,” 257–259. David Holloway, *Stalin and the Bomb: The Soviet Union and Atomic Energy, 1939–56* (New Haven: Yale University Press, 1994), 161–166. For general accounts of the origins of the Test Ban debate see: Rebecca Strode, “Soviet Policy Toward a Nuclear Test Ban: 1958–1963,” in *The Other Side of the Table. The Soviet Approach to Arms Control*, ed. Michael Mandelbaum. (New York: Council on Foreign Relations Press, 1990), 5–39. Divine, “Blowing,” 58–75.
- 52 Ob’edinit’ usiliia uchenykh v bor’be za nemedlennoe zapreshchenie iadernogo oruzhiia, Zaiavlenie gruppy sovetskikh uchenykh [Uniting the forces of scientists in the fight for an instant ban of nuclear weapons, statement of a group of Soviet scientists], 3 August 1957, ARAN f. 2193, op. 1, d. 4, l. 1–5 (hereafter: Ob’edinit’ usiliia uchenykh, ARAN). The statement was published in *Izvestiia* on 13 August and in *Pravda* on 14 August 1957.
- 53 Glenn T. Seaborg and Benjamin S. Loeb, *Kennedy, Khrushchev, and the Test Ban*. (Berkeley: University of California Press, 1983), 7–8.
- 54 Ob’edinit’ usiliia uchenykh, ARAN f. 2193, op. 1, d. 4, l. 1–5, l. 3.
- 55 Aleksandr V. Topchiev: Ustranit’ ugrozu atomnoi voiny [Eliminate the menace of atomic war], *Pravda* 228, 16 August 1957, 4.

which scientists had control.<sup>56</sup> In an almost identical article published on the same day in the daily newspaper *Izvestiia*, Skobel'tsyn summarized the Pugwash conference and drew some conclusions.<sup>57</sup> He referred to the statement from 13 August, emphasizing that Soviet scientists were ready to discuss each and every proposal that could lead to the mitigation of nuclear dangers.<sup>58</sup> In their press publications about the Pugwash project, Skobel'tsyn and Topchiev presented Soviet science as an impartial and unified body, fighting alongside the CPSU to bring about a ban on the development and testing of nuclear weapons and arguing against war as a means of settling political conflicts. They were mindful too of lessening tensions with American scientists. Soviet scientists' reports in *Pravda* and *Izvestiia* satisfied one of the main tasks defined by a Central Committee decision of 2 August which called for extensive press coverage of the Pugwash initiative. This discussion in the Central Committee had been started by Foreign Minister Andrei A. Gromyko (1909–1989), who had pointed to the growing international movement of scientists for a test ban.<sup>59</sup> He was of the opinion that the CPSU should take advantage of this situation and reinforce its demand for complete disarmament by referring to the growing movement of concerned scientists. The Central Committee supported Gromyko's idea and decided on three measures to be taken.<sup>60</sup> Along with the aforementioned press campaign to promote the Pugwash conferences, a large conference on the banning of nuclear weapons was to be organized in the Soviet Union as quickly as possible. The Soviet Pugwashites should use their personal contacts with western peers to promote this upcoming meeting of mainly Soviet scientists. Actually, within just one month this large conference ordered by the Central Committee had been organized. It opened on 6 September 1957, when more than 2000 scientists and scholars gathered in the

56 I borrow the term “areas of uncertainty” from Olga Kuchinskaya who, referring to Sharon Stephens, described scientist's claims to control areas of uncertainty as a means to “reaffirm solid scientific grounds for current policies” in the context of Chernobyl. Olga Kuchinskaya, *The Politics of Invisibility: Public Knowledge about Radiation Health Effects after Chernobyl* (Cambridge: MIT Press, 2014), 118. Sharon Stephens, “Bounding Uncertainty: The Post-Chernobyl Culture of Radiation Protection Experts,” in *Catastrophe & Culture: The Anthropology of Disaster*, eds. Susanna M. Hoffman and Anthony Oliver-Smith (Santa Fe: School of American Research Press, 2002), 91–112.

57 Dmitrii V. Skobel'tsyn, *Uchenye predosteregaiut ob opasnostiakh iadernoi voiny* [Scientists warn against dangers of nuclear war], *Izvestiia*, 195, 16 August 1957, 3.

58 An article by Eugene Rabinowitch in the *BAS* optimistically summarized the Soviet press reaction to Pugwash in November. Eugene Rabinowitch, “After Pugwash: The Soviet Reaction,” *BAS* 13, no. 11 (1957): 314–317.

59 Afiani and Esakov, *Akademiia*, Doc. 231, 818–819.

60 Afiani and Esakov, *Akademiia*, Doc. 231, 816.

House of Unions in Moscow. This vast gathering was opened by the winner of the 1956 Nobel Prize in chemistry, Nikolai N. Semenov (1896–1986) who, in his address, emphasized the unanimity of the Party and the scientists in the Soviet Union regarding questions of nuclear tests and disarmament:

We, the Soviet scientists [...] are happy to state that our government in the question of atomic weapons, of their ban, of the ban of tests, stands on the same point of view as we do [...].<sup>61</sup>

A major outcome of the Moscow meeting was a resolution which was printed in the newspapers together with Semenov's speech. Published on 7 September 1957, this resolution contained, amongst other things, an element characteristic of public statements by Soviet scientists in the late 1950s. By referring to recent successful Soviet tests of intercontinental missiles (ICBM), the rhetoric of peace and disarmament came along with an implicit warning that Soviet science indeed was prepared to compete on both military and non-military grounds and, moreover, was wholly capable of doing so. Rockets were, in this context, described as an invention that built on a long tradition in Russian and Soviet sciences.<sup>62</sup>

Actually, the first successful tests of ICBMs had just taken place in August 1957 and marked a major technological breakthrough, even though, as the historian Vladislav Zubok pointed out, "[...] for many years, the Soviet Union had only a hypothetical strategic capacity against the United States."<sup>63</sup> On 4 October 1957, Sputnik 1, the world's first artificial earth satellite, publicly demonstrated that Soviet rockets could theoretically reach every point on earth. As such, this stunning techno-scientific achievement implicitly opened a new era in the Cold War.<sup>64</sup> Sputnik 1 changed the conversation, profoundly reshaping the contours of international relations and diplomacy, enabling Soviet delegations to enter into discussions on disarmament from a position of strength.

61 [Anonymus]: Protiv ugrozy atomnoi voyny, za mir i progress! [Against the menace of atomic war, for peace and progress], *Izvestia* 213, 7 September 1957, 2.

62 The resolution gives, for example, account of Konstantin E. Tsiolkovskii (1857–1935), described as the ingenious inventor of rocketry.

63 Vladislav Zubok, *A Failed Empire. The Soviet Union in the Cold War from Stalin to Gorbachev* (Chapel Hill: University of North Carolina Press, 2007), 130–131.

64 On the effects of Sputnik 1 see for example: Paul Dickson, *The Shock of the Century* (New York: Walker, 2001). Roger D. Launius, John M. Logsdon and Robert W. Smith, eds. *Reconsidering Sputnik. Forty Years Since the Soviet Satellite*. Studies in the History of Science, Technology and Medicine, 11. (Amsterdam: Harwood Academic Publishers, 2000).



While the successful test of Soviet ICBMs and the launch of Sputnik marked significant steps in the arms race in the fall of 1957, the growing movement of scientists concerned about nuclear weapons – including the first Pugwash conference – served as an argument to reinforce the CPSU's rhetoric of peace in the press, as evidenced in the aforementioned decision of the Central Committee. The Pugwash initiative was used to show that the Party's foreign policy was congruent with the "authoritative opinion of scientists."<sup>65</sup> In media reporting, Soviet science was represented by a few high-ranking academicians who appeared to speak for a large and homogenous group of scientific-technical experts. Scientists speaking publicly about Pugwash were supposed to claim authority over all kinds of questions linked to the nuclear age and, at the same time, explain to the public, why the policy of the CPSU was the right one from a scientific perspective. Linking the international initiative around the Pugwash conferences with official Soviet foreign policy doctrine served as a means by which to infer that this doctrine was scientifically approved and, moreover, carried the authority that flowed from this association.

### 3 Directives for "Non-governmental" Conferences

At the second Pugwash conference in Lac Beauport, Canada, in spring 1958 – hastily convened in light of heightening Soviet-American tensions – Topchiev and his group were well-placed to capitalize on the advantages flowing from Sputnik. Again, the Soviet delegation received directives: this was not unusual, Soviet participants in all types of international scientific conferences were typically briefed in this way by Moscow.<sup>66</sup> Whilst these directives do not reveal much about the actual scope of action open to Soviet scientists present at Lac Beauport, they reveal a great deal about the aims and intentions of the CPSU when it came to Pugwash meetings and about the role of the Academy's Presidium in this process. For Lac Beauport, the CPSU's instructions to

65 As Foreign Minister Andrei A. Gromyko had put it: "Given that the authoritative opinion of scientists has a great influence on public opinion, such an organized international address of scientists for the cessation of nuclear tests, without any doubt would further the development of all-peoples movement for the ban of these tests." (Translation by FL). Afiani and Esakov, *Akademiia*, Doc. 231, 818–819.

66 Nikolai Kremensov: "Sovetskaia nauka na poroge kholodnoi voiny. 'Delo KR,'" *In Memoriam*. Istoricheskii sbornik pamiati F.F. Perchenka, eds. Aleksandr I. Dobkin and Marina Iu. Sorokina (Moskva/Sankt-Peterburg: Feniks, 1995), 288. "Delo KR" refers to a Stalinist campaign against the professors Kliueva and Roskin, biomedical scientists who were accused of being spies during late Stalinism.

Topchiev and his colleagues emphasized the need to stress the Soviet position on nuclear foreign policy.<sup>67</sup> The most important task was accordingly to “[...] mobilize scientists to fight for the ban of atomic and hydrogen weapons, for a cessation of tests of these weapons.”<sup>68</sup> The directives, which ran to twelve pages, stand out for the degree of detail within them. Almost every eventuality was taken into consideration to guide the delegates through the twists and turns of another conference that would likely involve fierce exchanges about political disagreements. In an opening statement the Soviet Pugwashites were supposed to describe the contemporary context for disarmament discussions and then present “their” proposals on how to confine the dangers of a nuclear war. The CPSU directives specified that, amongst other things, this statement should:

[...] draw the attention of the conference to the following moment. The launch of artificial earth satellites and other recent achievements of scientific-technical thought opened a new era – the mastering of cosmos. The great scientific-technological achievements leave their imprint on every process of social development, on domestic and foreign politics of the states. [...] Mankind now faces a dilemma: either peaceful coexistence and comprehensive cooperation, or devastating atomic and thermonuclear war.<sup>69</sup>

Linking Sputnik directly with nuclear war was intended to convey the threatening potential of Soviet rocketry. The so-called Sputnik-shock reached many layers of political life in the late 1950s, especially in the US.<sup>70</sup> Having the lead in one of the most competitive scientific-technological fields, and one which bore directly upon military capability, presented the Soviet Union with a rare,

67 Direktivnye ukazaniia Prezidiuma AN sssr delegacii sovetskikh uchenykh na vtoroi mezhdunarodnoi Paguoshskoi konferentsii uchenykh [Directives of the Presidium of the Soviet Academy of Sciences for the delegation of Soviet scientists at the second international Pugwash conference of the scientists], 1 February – 31 March 1958. ARAN 2193, op. 1, d. 6, l. 1.

68 Ibid.

69 Ibid. l. 2.

70 Julia Richers, “Welt-Raum. Die Sowjetunion im Orbit,” *Globalisierung imperial und sozialistisch. Russland und die Sowjetunion in der Globalgeschichte 1851–1991*, ed. Martin Aust (Frankfurt am Main: Campus Verlag, 2013), 400–424. Columba Peoples, “Sputnik and “Skill Thinking” Revisited. Technological Determinism in American Responses to the Soviet Missile Threat,” *Cold War History* 8, no. 1 (2008): 55–75. Robert Divine, *The Sputnik Challenge: Eisenhower’s Response to the Soviet Satellite* (Oxford: Oxford University Press, 1993).

perhaps unique, opportunity for its representatives (including its scientists at Pugwash meetings) to insist on their government's demands for complete disarmament and for a cessation of nuclear testing. Sputnik proved that the threat of destruction through nuclear intercontinental missiles was real and the call for a halt in the arms race urgent. The scientists gathered in Lac Beauport were seen by the CPSU as an important audience where its scientists could make further use of Sputnik's propagandistic power and try to convince those present of the need for an immediate test ban. That said, while the Soviet space program was implicitly (but obviously) linked to the danger of nuclear war, the delegates should draw clear boundaries between military and non-military uses of atomic energy: there was a strategic need to safeguard the development of 'peaceful' nuclear technologies, especially energy. According to the CPSU directives, radiation hazards were only inherent to the military (weapons-related) applications of nuclear science:

The delegation needs to proceed from the point that supplies of fissionable materials [...] for peaceful uses by itself do not threaten the health of the population and environment. Equally, different kinds of installations for the peaceful uses of atomic energy do not constitute a danger.<sup>71</sup>

The CPSU sought to link the so-called biological dangers of radiation exposure exclusively to nuclear weapons whilst simultaneously downplaying any possibility of accidental contamination or the serious menace posed by radioactive waste disposal. According to this logic, the delegates should emphasize that the nuclear arms race – via, for example, fallout from weapons tests – could lead to an increased risk of cancer, leukemia and not least to genetic dangers. The latter raised the additional danger of passing along deleterious genetic mutations between generations – that is to say, those exposed to fallout (low level radiation) could pass genetic damage on to their children – although such effects were uncertain and contested.<sup>72</sup> Of course, exposure resulting from accidents rather than tests created a similar menace. But radiation dangers were

71 Direktivnye ukazaniia Prezidiuma AN sssr delegacii sovetskikh uchenykh na vtoroi mezhdunarodnoi Paguoshskoi konferentsii uchenykh [Directives of the Presidium of the Soviet Academy of Sciences for the delegation of Soviet scientists at the second international Pugwash conference of the scientists], 1 February – 31 March 1958. ARAN 2193, op. 1, d. 6, l. 7.

72 Alison Kraft, "Dissenting Scientists in Early Cold War Britain. The "Fallout" Controversy and the Origins of Pugwash, 1954–1957," *JCWS* 20, no. 1 (2018): 58–100. Scientists differed in their views about the genetic dangers posed by exposure to low levels of ionizing radiation.

hotly debated and in 1958 the research on the biological effects of radiation – especially for low dose radiation – was only just getting underway in the Soviet Union.<sup>73</sup> The late 1950s saw the emergence of different theories on radiation dangers as well as the establishment of institutions responsible for the creation of standards in radiation protection and safety.<sup>74</sup> Knowledge about health hazards stemming from nuclear technologies other than weapons was a developing field in 1958, but it is just as clear that neither the CPSU nor the scientists of the Academy were keen to ensure that this radiological issue did not discredit nuclear technology in general.<sup>75</sup>

As was the case for the first Pugwash meeting, Lac Beauport also presented another chance to foster the valuable contacts established in Nova Scotia in 1957. Those present included influential scientists such as the American biophysicist Eugene Rabinowitch (1901–1973), editor of the *Bulletin of the Atomic Scientists*, and the West German physicist Carl F. von Weizsäcker (1912–2007).<sup>76</sup> Face-to-face meetings were undoubtedly of great value to the Soviet delegation, led again by Topchiev, enabling them for example to speak directly with the American delegates.<sup>77</sup> It was here that the Hungarian-born US physicist Leo Szilárd (1898–1964) brought up the idea for the first time of initiating unofficial talks about disarmament between a group of ten-fifteen American and Soviet scientists – something welcomed by Topchiev and which he sought to advance back in Moscow.<sup>78</sup> Supported by the Minister for Medium

73 On the production of radiation knowledge in the Soviet Union see: Laura Sembritzki, “Maiak 1957 and its Aftermath: Radiation Knowledge and Ignorance in the Soviet Union,” *Jahrbücher für die Geschichte Osteuropas* 66, no. 1 (2018): 45–64. Hiroshi Ichikawa, “Radiation Studies and the Soviet Scientists in the Second Half of the 1950’s,” *Historia Scientiarum* 25, no. 1 (2015): 78–93.

74 On the discussions aiming at theorizing “harmful” doses of radiation, see for example: Jeffrey L. Roberg, *Soviet Science under Control. The Struggle for Influence* (Basingstoke: Macmillan, 1998), 62–63.

75 On the contrary, atomic scientists in and outside the Academy persistently lobbied for further development of the nuclear energy sector. Sonja D. Schmid, *Producing Power: The Pre-Chernobyl History of the Soviet Nuclear Industry* (Cambridge: MIT Press, 2015), 20–21.

76 For more on von Weizsäcker and the German Pugwash groups, see Kraft, chapter eight.

77 The delegation was again headed by Topchiev. He was accompanied by the geochemist Aleksandr P. Vinogradov (1895–1975), Skobel'tsyn, Kuzin and, of course, Pavlichenko.

78 Otchet delegatsii AN SSSR i proekt postanovleniia Prezidiuma AN SSSR ob uchastii v rabote vtoroi mezhdunarodnoi Paguoshskoi konferentsii uchenykh [Report of the Soviet Academy of Sciences' delegation and draft for a resolution of the Presidium of the Soviet Academy of Sciences on the participation in the work of the second international Pugwash conference of scientists], 4 April 1958. ARAN 2193, op. 1, d. 11, l. 3. William Lanouette, *Genius in the Shadows. A Biography of Leo Szilard, the Man behind the Bomb* (New York: Skyhorse Publishing, 2013), 374.

Machine Building, Efim P. Slavskii (1898–1991), and the scientific head of the Soviet atomic program, Igor V. Kurchatov (1903–1960), Topchiev contacted Khrushchev in June 1958 to propose exactly such an unofficial meeting of Soviet and US scientists in Moscow:

[A] group of American scientists, participants of the Quebec-conference [Lac Beauport; F.L.], expressed the wish to come to Moscow to the Academy of Sciences to meet Soviet scientists and, in a non-official way, discuss the questions aroused by modern science and technics, which seriously upset the USSR and the USA [...].<sup>79</sup>

Topchiev, Kurchatov and Slavskii attached a memorandum to this proposal, which touched on topics reaching from troop-reduction to international trade. As they noted, “We [the Soviet scientists; F.L.] see that the world, like the atom, has split into two economical unities [...]”<sup>80</sup> They emphatically stressed the dangers of the Cold War and asked for relaxation in all aspects of East–West relations. By intensifying cooperation and the flow of scientific ideas and staff across borders, tensions between the two blocs could, according to the memorandum, be eased.<sup>81</sup> On 17 June 1958 the Presidium of the Central Committee of the CPSU replied positively to the proposal and instructed Topchiev and his colleagues to prepare all necessary documents for further planning of such an unofficial visit.<sup>82</sup>

Even though a meeting of the kind proposed by Szilárd and supported by Topchiev did not take place in 1958, their efforts stand as an example of how ideas developed within the framework of the Pugwash project reached the Soviet Party elite where they were given serious consideration. It shows too how loyal scientists were listened to within senior Kremlin circles and that their status as elite scientists was crucial for bringing ideas and plans to the attention of Khrushchev. As we will see, Szilárd’s and Topchiev’s efforts to establish unofficial bilateral meetings to discuss disarmament did not disappear altogether, rather the idea resurfaced in 1960 when it met with much greater success.

After the second major Geneva Conference on the peaceful uses of atomic energy in 1958, several Soviet scientists traveled directly from this to Kitzbühel,

79 Ministry of Medium Machine Building was the official name of the heavily disguised ministry responsible for nuclear research and development. Afiani and Esakov, *Akademiia*, Doc. 280, 969–970, here 969.

80 *Ibid.* 973.

81 *Ibid.* 976.

82 *Ibid.* 968–969.

where the third Pugwash conference was taking place from 14 to 20 September.<sup>83</sup> In the final session held in Vienna, the ethos and aims of the Pugwash initiative were more fully elaborated in a document that became known as the Vienna Declaration, which was read to a huge audience of 10,000.<sup>84</sup> Again, CPSU directives for Kitzbühel/Vienna instructed Soviet scientists to criticize the foreign policy of both the United States and Great Britain by drawing attention to the Lebanon crisis or the recent US military intervention there which had started in July 1958:

It is necessary that the participants of the conference condemn the unprovoked operations of the USA and England in the near and middle East, which appear to be an armed aggression against countries fighting for their national independence and constitute a serious threat for peace and bring mankind to the borderline of a total atomic war.<sup>85</sup>

Another instruction for the Kitzbühel delegation explained that their members should use the conference for “propaganda of the achievements of Soviet science and technics.”<sup>86</sup> This point is important because it highlights one of the interests underlying CPSU support for international encounters of scientists: under the peaceful coexistence doctrine, the Soviet Union wanted to compete with the west. International meetings of scientists were an ideal stage on which to demonstrate leadership and prowess in some of the most leading-edge and competitive techno-scientific fields. Scientific achievements were a crucial asset in this competition, since they embodied and displayed the Soviet Union’s allegedly accelerated path to modernity and served to demonstrate the superiority of the Soviet system. Both the accusation of western “warmongering” as well as the showcasing of scientific-technological achievements point to the way in which the Soviet regime perceived Pugwash conferences as stages on which the Cold War competition and rivalry could be played out. In particular, the Soviet Union was especially keen to present itself as a peaceful superpower – a claim that, for a time, looked much more substantial after

83 Elisabeth Röhrlich, “An Attitude of Caution. The IAEA, the UN, and the 1958 Pugwash Conference in Austria,” *JCWS* 20, no. 1 (2018): 31–57.

84 The Vienna Declaration is printed in: Rotblat: *A History*, 90–97. On the distinctive character of the third Pugwash Conference held in Austria in 1958, see Sachse, chapter two.

85 Direktivnye ukazaniia Prezidiuma AN SSSR sovetskoi delegatsii na tret’ei mezhdunarodnoi Paguoshskoi konferentsii uchenykh [Directives of the Presidium of the Soviet Academy of Sciences for the Soviet delegation at the third international Pugwash conference of scientists], 1 August – 30 August 1958. ARAN f. 2193, op. 1, d. 15, l. 1.

86 *Ibid.* l. 2.

Khrushchev's declaration of a unilateral test ban in March 1958. At scientists' conferences, the Soviet peace agenda was also colorfully illustrated by talking about the country's non-military scientific achievements such as the world's first nuclear power plant, the nuclear propelled icebreaker "Lenin" and the successful launch of artificial satellites.<sup>87</sup>

The close entanglement between the Soviet government and the Soviet Pugwash group raised the hackles of some in Kitzbühel. As part of the opening program, Topchiev read a welcoming telegram from Khrushchev. As he later recalled in his report before the Presidium of the Academy, the message was received with applause, but some "western scientists" saw the address as a proof of the fact that Soviet scientists just "repeated the position of the Soviet government."<sup>88</sup> According to Topchiev's report, his delegation managed to challenge this view, and even persuade the western Pugwashites that rather it served as "colorful evidence of the influence Soviet scientists have on governmental practice."<sup>89</sup> Topchiev's double move here was to resonate with the Pugwash agenda whilst suggesting to the Academy that influence was a two-way street.

Immediately after mutual understanding and shared belief in scientific progress had been celebrated in Geneva, Kitzbühel provided an international stage for different conversations and new confrontations.<sup>90</sup> For example, Topchiev reported that the Vienna Declaration was a major source of disagreement.<sup>91</sup> In his eyes, here the Soviet point of view prevailed against forceful opposition and, as such, the form and wording of the Declaration constituted a

87 For a recent analysis of Soviet propaganda around "peaceful nuclear technologies" see for example Hiroshi Ichikawa, "Obninsk, 1955. The World's First Nuclear Power Plant and 'The Atomic Diplomacy' by Soviet Scientists," *Historia Scientiarum* 26, no. 1 (2016): 25–41. On the celebration of the "peaceful atom" in the Soviet Union, see: Vladimir P. Vizgin: Fenomen "kul'ta atoma" v SSSR (1950–1960e gg.), in *Istoriia sovetskogo atomnogo proekta: dokumenty, vospominaniia, issledovaniia*, Volume 2, ed. Vladimir P. Vizgin (Sankt-Peterburg: Janus-K, 2002), 413–488.

88 Otchet ob uchastii delegatsii Akademii nauk SSSR v rabote tret'ei Paguoshskoi mezhdunarodnoi konferentsii uchenykh. Vystuplenie na Prezidiume AN SSSR [Report on the participation of the Soviet Academy of Sciences' delegation in the work of the third Pugwash international conference of the scientists. Address before the Presidium of the Soviet Academy of Sciences], 10 October 1958, ARAN f. 694, op. 1, d. 190, l. 2 (hereafter: Otchet ob uchastii v rabote tret'ei Paguoshskoi konferentsii, ARAN).

89 Ibid.

90 On the different preconditions of the Geneva and Kitzbühel conferences regarding ideological quarrels see: Röhrlich, "Attitude of Caution."

91 Otchet ob uchastii v rabote tret'ei Paguoshskoi konferentsii. ARAN f. 694, op. 1, d. 190, l. 4–5.

major success for the Soviet group. Briefly stated, the consensus among those scientists present in Kitzbühel can be summarized as follows: Warlike nuclear technology jeopardizes mankind in general and, at the same time, concentrates valuable resources which otherwise could and should be used to expand non-military nuclear research and development.

On 30 September 1958, ten days after the Pugwash press conference in Vienna, Khrushchev abandoned the unilateral cessation of tests that he had announced in March and went ahead with a new series of experimental nuclear explosions.<sup>92</sup> This setback to the test ban conversation was felt keenly by many, including Bertrand Russell, who immediately contacted Topchiev to try to convince him that another Pugwash conference might provide a way to counter the current escalation.<sup>93</sup> In the summer of 1959, when the fourth Pugwash conference took place in Baden, near Vienna, Topchiev was not among the participants. Joseph Rotblat, the Polish-born British physicist and Secretary-General of Pugwash, described the discussions in Baden as “very heated, particularly on the deadlock in the Geneva negotiations on a test ban treaty, when there was some mutual accusation between the American and the Soviet participants.”<sup>94</sup> That Baden proved a cauldron of fractious exchanges was perhaps no surprise, given that the Presidium of the Soviet Academy of Sciences had instructed its delegates to:

insist on fastest, permanent, general and total cessation of every kind of nuclear tests and dismantle the unjustified objections and reservations, put forward by the USA and the English side (about the insufficient effectivity of control measures, about underground and high-altitude explosions).<sup>95</sup>

When the Baden conference started, all three nuclear powers had by now – under the terms of the 1958 Moratorium on nuclear weapons tests, agreed that November – ceased weapons tests for more than a half year.<sup>96</sup> That said, a comprehensive treaty on the suspension of testing remained a distant prospect.

92 Evangelista, *Unarmed Forces*, 60.

93 Letter from Russell to Topchiev, 19 February 1959. ARAN f. 2193, op. 1, d. 41, l. 45.

94 Rotblat, *A History*, 23–24.

95 Direktivnye ukazaniia Prezidiume AN sssr delegatsii sovetskikh uchenych na chetvor-toi Paguoshskoi mezhdunarodnoi konferencii (Directives of the Presidium of the Soviet Academy of Sciences for the delegation of Soviet scientists at the fourth Pugwash international conference), 1 June 1959. ARAN f. 2193, op. 1, d. 27, l. 1.

96 Zaloga, *Kremlin's Nuclear Sword*, 70–72. Divine, *Blowing*, 234–240.



The test ban issue was a key topic on the Pugwash agenda, and its conferences consistently provided a forum where both Soviet and western positions could be aired and discussed. Considering the early Pugwash conferences from a Soviet perspective reveals how much the political leadership of the USSR sought to exert strong influence on its scientists, all of whom moved in senior political circles in Moscow. Topchiev, tasked from the outset with leading the Pugwash group, was a loyal party member, as was Pavlichenko who, as noted, was an informant for the KGB. The CPSU issued detailed directives, setting out priorities and goals for each conference. As discussed, these documents show a certain pattern: at the core of every directive lay contemporary diplomatic matters – mostly related to the test ban debate. From this, it is clear that for the Kremlin, Pugwash was understood as a useful network to spread foreign policy propaganda and to attack US and British policy, especially in relation to nuclear weapons testing, but also aspects of their foreign policy, including in the Middle East. At the same time, the newly established contacts with western peers forged under the aegis of Pugwash should be fostered to further use its conferences for the promotion of Soviet foreign policy plans. On the other hand, as Topchiev had sought to suggest, the participation of Soviet academicians in the Pugwash project made it possible to bring thoughts and ideas arising from exchanges at its conferences to the attention of Soviet decision makers. In this way, members of the Soviet Pugwash Group were developing roles as mediators between the political elite in Moscow and the international scientific elite gathered together at Pugwash conferences.

In August 1959, a fifth Pugwash conference was held, this time again at Cyrus Eaton's Estate in Nova Scotia, which was focused on biological and chemical weapons. Again, Topchiev was not amongst the small Soviet delegation. His absence from both 1959 Pugwash conferences did not mean that Topchiev had put his Pugwash work on hold. On the contrary, this year saw intensifying correspondence between him and several of his foreign peers, including Leo Szilárd, by now well known for his letters to political leaders, including Khrushchev.<sup>97</sup> Szilárd's first letter to Khrushchev in September 1959 enclosed a copy of his latest Pugwash conference paper and reached

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97 In 1947 Szilárd had addressed Stalin with a direct letter and started to write Khrushchev in the late 1950s. This contact to the new leader of the CPSU was possible not least thanks to Szilárd's direct relations with Soviet Pugwashites. It is not surprising that during the two years between the first Pugwash meeting and Szilárd's first letter to Khrushchev, Szilárd also corresponded with his peers in the Academy in Moscow. His tireless commitment to exert influence on political decision-making can be traced through several correspondence files of the Soviet Pugwash group.

Khrushchev via Topchiev. The two scientists had been corresponding for more than two years by this time – exchanges begun by Szilárd immediately after the first Pugwash meeting. As noted by Evangelista, Khrushchev did not answer Szilárd's letter of September 1959.<sup>98</sup> When Topchiev forwarded Szilárd's paper to Khrushchev he included with it a short introductory letter.<sup>99</sup> Marginalia on this document indicate, however, that Topchiev handed all materials to the Central Committee on 9 October 1959, when Topchiev reminded the party elite that Szilárd supported the unpopular "balance of terror" concept.<sup>100</sup> He explained that Szilárd repeatedly had taken a strong stand for this strategy at Pugwash meetings and was again promoting similar ideas in the paper at hand. Topchiev had also summarized the most disturbing aspects for the members of the Central Committee: "He [Szilárd; F. L.] basically appeals for the legalization of nuclear weapons and for the preparation of a cynical price list of cities liable for mutual annihilation."<sup>101</sup> The dilemma facing Topchiev was that Szilárd was a well-known anti-nuclear weapons activist, Pugwashite and, although a somewhat controversial figure, was a valuable contact within US nuclear science, who was now seeking to get his views heard in the USSR. But the mutually assured destruction (MAD) approach outlined in his paper was not at all compatible with the Soviet Union's official policy towards complete disarmament. Topchiev resolved the dilemma by bringing Szilárd's letter, and the views in it, to the attention of the Central Committee but at the same time recommending strongly that it should not be published in the Soviet Union:

[...] I believe that we should abstain from the placement of L. Szilárd's article in the Soviet press, since in this case the article would have to be accompanied by a sharp critic from the editorship, what scarcely would be expedient for the relation with one of the participants of the Pugwash movement of scientists.<sup>102</sup>

This episode casts light on Topchiev's role as a mediator between the Central Committee of the Party and his fellow Pugwashite (Szilárd), and how he was able to exercise a degree of agency, albeit limited, to make his own point of

98 Evangelista, *Unarmed Forces*, 35. Helen S. Hawkins, G. Allen Greb and Gertrud Weiss Szilard, eds. *Toward a Livable World: Leo Szilard and the Crusade for Nuclear Arms Control* (Cambridge: MIT Press, 1987), 254.

99 Letter from Topchiev for the attention of the TsK KPSS, 9 October 1959. ARAN f. 2193, op. 1, d. 41, l. 159–161.

100 Ibid.

101 Ibid. l. 159.

102 Ibid.

view known to the political elite. These events and chains of correspondence illuminate the developing roles and value of the Pugwash initiative as both a network for second track diplomacy and at the same time a stage for Soviet peace propaganda. Soon, the Soviet Union would itself host a major PCSWA, an event that yields further insights into how some sought to exploit Pugwash conferences for propaganda purposes – and also the struggle to limit this.

#### 4 1960: Pugwash in Moscow

In October 1959, Topchiev submitted a proposal to the Central Committee of the CPSU to convene a Pugwash meeting in Moscow the following year. In addition to emphasizing that he considered the call for a conference in Moscow important, he added too that it was “politically advantageous for us.”<sup>103</sup> The Central Committee concurred, paving the way for a Pugwash meeting in the Soviet Union, organized under the auspices of the Academy of Sciences.

1960 was a turbulent year for Soviet nuclear science as well as for East–West relations. Several developments had implications for the Soviet disarmament discourse. In February, one week after the dean of Soviet nuclear science, Igor’ V. Kurchatov, had died in Moscow, France tested its first atomic weapon, becoming the fourth nuclear power and fueling fears of further proliferation. On 1 May, an American U2 reconnaissance aircraft was shot down over Soviet territory, and its pilot captured, escalating tensions between the superpowers. The U2 affair jeopardized East–West relations and deeply affected the realms of both official and second track diplomacy. Topchiev immediately activated the Pugwash network to express indignation about the U2 episode and what it had revealed about US surveillance practices over Soviet territory – a point he emphasized in a letter to Eugene Rabinowitch in which he criticized the US government for “sending their military reconnaissance plane to the air space of the USSR.”<sup>104</sup> Topchiev sent copies of his letter to all members of the Pugwash Continuing Committee – Powell, Rotblat, Russell, and the Americans, Hiram Bentley Glass (1906–2005) and Harrison S. Brown (1917–1986) – encouraging them to make public statements against the confrontational foreign policy of the United States and restating the determination of Soviet Pugwashites to work for peace: “We [the scientists of the Soviet Pugwash group;

103 Letter from Topchiev for the attention of the TsK KPSS, 9 October 1959. ARAN f. 2193, op. 1, d. 41, l. 263.

104 Letter from Topchiev to Rabinowitch, 24. May 1960. ARAN f. 2193, op. 1, d. 70, l. 166.

F.L.] believ [sic!] that all those who treasure the cause of peace will not remain indifferent under such circumstances.”<sup>105</sup> Rabinowitch replied promptly assuring Topchiev that:

all of us are very unhappy about the setback to the rapprochement between our country and the Soviet Union which has resulted from the shooting down of an American observation plane [...].<sup>106</sup>

Furthermore, like Topchiev, he was wholly committed to maintaining the Pugwash network which he felt to be of the utmost importance exactly because of the possibilities it afforded to mitigate Cold War crises, including that currently surrounding the U2 episode.

1960 was also a year of presidential elections in the United States. The election of John F. Kennedy (1917–1963) brought a changed approach to relations with the USSR. The US presidential electoral campaigns had, according to Rotblat, been the main reason for a postponement of the Pugwash meeting in Moscow, initially scheduled for April and then September. In the event, the sixth conference began on 27 November 1960 and marked the first conference to be held in the Eastern Bloc.<sup>107</sup> Topchiev headed what was, to date, by far the largest Soviet delegation which, in addition to those senior scientists who had already taken part in Pugwash activities, included Anatolii P. Aleksandrov (1903–1994), Kurchatov’s successor as director of the Institute of Atomic Energy, Vasilii S. Emel’ianov (1901–1988), chairman of the Soviet State Committee on the Use of Atomic Energy (GKAE) and head of the Soviet mission at the International Atomic Energy Agency (IAEA), Petr L. Kapitsa (1894–1984), by then head of the Vavilov Institute of Physical Problems, and the famous aircraft-designer Andrei N. Tupolev (1888–1972). Pugwash in Moscow, of course, made it to the front page of *Izvestiia*.<sup>108</sup>

According to the official statement of the Conference, the discussions “proceeded in a cordial and constructive atmosphere [...]”<sup>109</sup> This differed

<sup>105</sup> Ibid.

<sup>106</sup> Letter from Rabinowitch to Topchiev, 6 June 1960. ARAN f. 2193, op. 1, d. 70, l. 181.

<sup>107</sup> On the establishment of the “Eastern Bloc group of national Pugwash committees” at this conference see Doubravka Olšáková’s chapter in this volume. After the 1960 meeting in Moscow, three more Pugwash conferences were held in the Soviet Union – in 1969, 1976 and 1988.

<sup>108</sup> Nikita S. Khrushchev, “Vo imja nasushchnykh interesov chelovechestva” [In the name of the vital interests of mankind], *Izvestiia*, 28 November 1960, 1. Bronislav I. Koltovoj: “Velenie vremeni” [The dictates of time], *Izvestiia*, 28 November 1960, 1.

<sup>109</sup> Rotblat, *A History*, 106.

markedly from the account presented in the report of the Soviet delegation which reported that arguments with and accusations by the American delegation shaped the whole conference from its very beginning.<sup>110</sup> American delegates, for example the biochemist Paul Doty (1920–2001), were specifically identified as having repeatedly provoked disputes between those present.<sup>111</sup> The report filed by Soviet Pugwashites on the Moscow conference also affords further insights into internal Soviet communication about Pugwash. Here, the discussions were described as following the frontline of the Cold War. Taking into consideration the Kremlin's directives to its scientists ahead of Pugwash meetings – regarding, as we have seen, the need to follow and press lines of argument that reflected official Soviet policy – arguments around the Pugwash table took on an almost predetermined character. Soviet Pugwashites needed to legitimize their participation by making the propagandistic value of these meetings clear to the political leadership in Moscow. As a priority therefore, Soviet Pugwashites emphasized in their reports that they had consistently adhered to the party line, complied with the directives issued to them and, when needed, actively defended the positions and policies of their government – especially in the face of American challenges and criticisms.

The different accounts of the Moscow conference expose the impossibility in practice, within the Pugwash network, of suspending national allegiances – even as, more broadly, this claim continued to form an integral element of the Pugwash narrative about its work across national borders and the bloc divide. It also illuminates the transnational and second track roles of Pugwash scientists and in particular opens a window onto how the Pugwash organization was making itself relevant to state actors – here, specifically, the USSR. These new Soviet sources show how key issues that defined and maintained the Cold War divide were at work shaping discussions in Moscow – as was the allegiance that scientists felt to the state. Within the Soviet Union, arguments that took place during this meeting were disclosed in internal reports intended for government whilst, at the same time, being glossed over in public statements from the Pugwash network about the meeting. That senior political circles in Moscow, even Khrushchev, learned of the fractious exchanges at the Moscow

110 Otkhet delegacii sovetskikh uchenykh ob uchastii v rabote 6-oi mezhdunarodnoi Paguoshskoi konferencii uchenykh i sovetskogo-amerikanskogo soveshchaniia uchenykh [Report of the delegation of Soviet scientists on the participation in the work of the sixth international Pugwash conference of the scientists and on the Soviet-American meeting of scientists], 08. – 12. December 1960, ARAN f. 2193, op. 1, d. 67, l. 5 (hereafter: Otkhet delegacii ob uchastii v rabote 6-oi Paguoshskoi konferencii, ARAN).

111 Ibid. l. 5-6.

conference stands in itself as evidence of the importance of Pugwash meetings as sites of engagement between the superpower leadership and as places where scientists could make meaningful contributions to Cold War diplomacy by informal means.

Whatever the conflicts in Moscow, the conference was followed by an unofficial meeting of Soviet and United States representatives. After Szilárd's proposal in Lac Beauport and his letter to Khrushchev, he launched a further attempt to encourage bilateral meetings, not least as a reaction on the acute dangers posed by the political crises of 1959/60. This time, Szilárd realized his aims. On 31 August 1960, Topchiev informed Szilárd that such a meeting would take place and that the Academy was happy to host the American delegates selected to participate in it.<sup>112</sup> This informal bilateral meeting in Moscow was the first encounter of what would later become the Soviet-American Disarmament Study Group (SADS) and the report filed by the Soviet Pugwash group also includes an account of this.<sup>113</sup> Here, the report described the overall discussion of US-Soviet relations as having been candid and also afforded the Soviet scientists the opportunity to once more put forward their main arguments.<sup>114</sup> Again, the Soviet scientists assured the CPSU that they had adhered to the party line, and took care too to make the point that the Americans had been politically biased. While this new channel of communication was highly valued and the discussion perceived as constructive, two of the Soviet scientists – Vasilii S. Emel'ianov and geophysicist Evgenii K. Fedorov (1910–1981) – expressed concerns that the United States government together with the American press would hinder this friendly flow of ideas and people across the Iron Curtain.<sup>115</sup>

The 1960 conference in Moscow was especially important for the Pugwash project for several reasons. First, that it took place in the Soviet Union was an indication of the importance attached to Pugwash, and its work, by the country's political leadership whilst also signaling support for Soviet participation in it. That the Moscow conference went ahead in the wake of the U2 crisis speaks also to this point. The press campaign surrounding the Moscow conference illustrated that both Party leaders and scientists were willing to further develop the forum which grew around Pugwash in the five years following the

112 Letter from Topchiev to Szilárd, 31 August 1960. Leo Szilard Papers. Special Collections & Archives, UC San Diego Library, MSS 32, Box 19, Folder 4, 47. Later that same year, Szilárd had to turn over all correspondence with Topchiev to Paul Doty for health reasons.

113 Evangelista, *Unarmed Forces*, 36–37.

114 Otchet delegacii ob uchastii v rabote 6-oi Paguoshskoi konferencii. ARAN f. 2193, op. 1, d. 67, l. 18.

115 *Ibid.* On the perception of Pugwash in the US, see Paul Rubinson's chapter in this volume.

Russell-Einstein Manifesto. Second, its role as host for a Pugwash conference facilitated an expansion of Soviet participation which, as noted, now widened to include other senior Soviet scientists, which served also to bolster further its authority amongst and links with the country's political elite. This conference showed that Pugwash was well-established in the Soviet Union, and supported by a remarkable group of top scientists and science administrators as well as supported by the Party. Thirdly, and arguably most importantly, the conference provided the framework for establishing a new forum (SADS) for unofficial bilateral disarmament talks between specialists exclusively from the Soviet Union and the United States. Notwithstanding the fact that the CPSU sought to limit Soviet Pugwashites' agency strongly, Topchiev and others had been successful in convincing the Party leadership that Pugwash was useful – regardless of the deep ideological and political disagreements that were a routine feature of discussions during its conferences.

## 5 Conclusion

During the first Pugwash conferences, Soviet scientists tried to reconcile their work as Pugwashites with the non-negotiable CPSU party line regarding the strategy of complete and general disarmament. Even if discussions at the Pugwash table consistently reflected the divisions of the Cold War, the scientists of Pugwash – working together, if not always in agreement – were nevertheless able to establish its conferences as a place where it was possible to reach and exchange views and ideas across the ideological and political divide. A shared interest in slowing down the arms race and the common belief that scientists had a particular responsibility for nuclear weapons and also a role to play in the disarmament conversation because they had expertise directly relevant to this process, opened novel opportunities for scientists to access the centers of political power and decision-making on both sides of the Iron Curtain. For Soviet Pugwashites it was important to adapt their mode of speaking to the specific context, indeed, it can be argued that their position as both senior scientists and Pugwashites was contingent on doing so. As noted, this was apparent in the language, tone and content of reports on Pugwash conferences filed to the AN and the CPSU. Whilst at one level their credibility at Pugwash meetings depended on their standing as “concerned scientists,” reports to the party elite and to the Presidium of the Academy needed to fit the standards of “speaking bolshevik.” They needed to convince western bloc Pugwashites of their influence on Soviet policy making and, at the same time, they had to display the propagandistic and diplomatic value of their involvement in Pugwash to the Central Committee of the CPSU and to the Soviet media. Only by

striking a successful balance between the Party, the peers and the public could Soviet scientists guarantee that their future engagement in the Pugwash network would be possible – which was vital to their ability to be involved in and influence policy making in the nuclear realm.

The Party controlled the Academy's decisions regarding the selection of scientists for participation in the Soviet Pugwash group and at conferences, and, as we have seen, sought to keep close control over both through directives and surveillance, where, for example, Pavlichenko was important. To what extent this undertaking was successful is difficult to assess, since little evidence exists regarding informal talks at Pugwash meetings, which could offer opportunities for exchanges and discussions of a kind that went beyond the framework set by directives. Certainly, it can be argued that the Pugwash organization and its conferences were seen in Moscow as an interesting, even useful resource in the repertoire of Soviet assets that could be mobilized for Cold War propaganda purposes. The positions taken by the Pugwash organization on, for example, moving forward with disarmament and the banning of nuclear tests were close to those officially promoted by the CPSU. As noted, fierce debate, typically along bloc lines, was a constant feature of discussions at Pugwash meetings. But participation in Pugwash was also useful for those Soviet scientists eager to establish and maintain contacts with foreign peers. Diplomatic initiatives, notably SADS and later the Stockholm International Peace Research Institute (SIPRI), had their roots in Pugwash networks and testify to the concrete benefit of the contacts established in and around the PCSWA.

Topchiev died in December 1962 and was succeeded as head of the Soviet Pugwash group first by the physicist and party official Vladimir A. Kirillin (1913–1999) who, in 1964, turned this post over to physicist Mikhail D. Millionshchikov (1913–1973). With the conclusion of the LTBT in 1963 and not least with the appointment of Millionshchikov, Soviet Pugwash activity would soon move in new directions and its representatives found more and more ways to set their own agendas, to intensify contacts with fellow Pugwashites and to strengthen their position as both scientific experts for nuclear foreign policy and as figureheads of Soviet nuclear science – a field which grew rapidly and continued to stay in the forefront of international relations during the Cold War for some time to come.

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## American Scientists in “Communist Conclaves:” Pugwash and Anti-communism in the United States, 1957–1968

*Paul Rubinson*

Scientists had been the first to oppose nuclear weapons, beginning their activism almost simultaneously with the atomic destruction of Hiroshima and Nagasaki in August 1945. But the Red Scare of the late 1940s and early 1950s muted opposition to nuclear weapons in the United States. The US government had begun purging left-leaning scientists from its ranks at that time, a process that culminated in the infamous Oppenheimer security clearance hearing of 1954. An emerging Cold War consensus, enforced by the Atomic Energy Commission (AEC) and other branches of the national security state, rigidly defined science as an apolitical discipline dedicated to strengthening the US nuclear deterrent. But during the late 1950s, fears of nuclear fallout reignited anti-nuclear activism, including a number of scientists determined to work toward nuclear arms control and disarmament.<sup>1</sup>

Upon its founding in 1957, the Pugwash organization played a distinctive and important role in this wider landscape of anti-nuclear activism by linking scientists opposed to the arms race with government policymakers. Although the McCarthyist phase of the Red Scare had ended by the late 1950s, anti-communist politicians continued to use Red Scare tactics to smear scientists as communists and stifle their efforts to promote arms control. Most notably, in 1960, Senator Thomas J. Dodd issued a report that denounced the Pugwash conferences as “communist conclaves” and US Pugwash scientists as unwitting dupes of the Soviets.<sup>2</sup> Surprisingly, initially, Dodd’s report did little to hinder the Pugwash project in the US. As the Kennedy administration entered office

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- 1 Jessica Wang, *American Science in an Age of Anxiety: Scientists, Anticommunism, and the Cold War* (Chapel Hill: University of North Carolina Press, 1999). Paul Rubinson, *Redefining Science: Scientists, the National Security State, and Nuclear Weapons in Cold War America* (Amherst: University of Massachusetts Press, 2016).
  - 2 Thomas J. Dodd, *The Pugwash Conferences: A Staff Analysis*, Internal Security Subcommittee, 87th Congress, 1st session 1 (Washington: Government Printing Office, 1961). *Congressional Record*, Vol. 107, Pt. 11, 15059. [The Dodd Report]

in 1961, the scientists of Pugwash were stepping up their arms control efforts and would play an active role in helping bring about the 1963 Limited Nuclear Test Ban Treaty (LTBT).<sup>3</sup>

But just as quickly, the Pugwash initiative fell from favor when Lyndon Johnson became president. In common with many individuals and organizations advocating diplomacy over deterrence in the Cold War, it found itself tarred as a tool of Soviet propaganda at best, and as a pro-communist organization at worst. These accusations encouraged Johnson to cut off connections between Pugwash scientists and the US government with the result that they increasingly struggled to influence US policy. And while American Pugwashites certainly knew how damaging it was to be labeled communist sympathizers, the US Pugwash group appears to have felt very little urgency at this time to fix the problems stemming from these allegations. Instead, the members of this group spent much more time discussing internally another harmful – and false – accusation: that it was a puppet of the US government and especially the Central Intelligence Agency (CIA). Both of these contradictory assertions created serious difficulties for the US Pugwash group and weakened its ties to US policy-makers, a challenge exacerbated by a constant lack of funding and the Johnson administration’s general hostility toward scientists. These struggles, especially perhaps the weakening connections to the US government, combined to seriously limit the ability of the American Pugwash group both to gain insights into and influence the country’s nuclear policies of the time.

Pugwash represented just one group of scientists attempting to shape nuclear weapons policy and work towards arms control and disarmament during the 1950s and 1960s. Other scientists – in substantial numbers – worked and were building careers in weapons labs and believed that nuclear deterrence offered the best chance of winning the Cold War. This school of thought, epitomized by the physicist Edward Teller, embraced a rabid anti-communism that characterized arms control agreements as appeasement, and quickly led to a massive arms race and the militarization of science. More toward the center of this spectrum sat the scientists of the President’s Science Advisory Committee (PSAC). Formed in 1957, President Eisenhower envisioned these experts as offering an informed counterpoint to the views of nuclear enthusiasts like Edward Teller and the members of the AEC. PSAC scientists encouraged Eisenhower and then President Kennedy to pursue arms control negotiations with the Soviets, though they always did so in coolly technical terms that argued

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3 Rubinson, *Redefining Science*, 93–116.

that arms control would enhance the nation's security. Slightly further to the left were scientists who relied on their reputation as disinterested experts to critique official statements and studies on nuclear weapons, especially regarding the danger of nuclear fallout. The St. Louis Committee for Nuclear Information (CNI), led by biologist Barry Commoner, presented itself as a mainstream, nonpartisan, and objective source for reliable knowledge: in particular, in contrast to AEC claims, the CNI argued that radioactive fallout from nuclear weapons tests was dangerous to human health.<sup>4</sup> The CNI maintained a strictly neutral political image to avoid the fate of scientist-activists on the far left such as Linus Pauling, who tirelessly picketed, sued, and petitioned the government to demonstrate his profoundly moral objections to nuclear weapons only to find himself smeared in the press and in Congress as a communist sympathizer.<sup>5</sup>

Pugwash did not neatly fit into this spectrum. Anti-communists found much to dislike about Pugwash, as several of the scientists and others involved in the movement undeniably leaned to the left politically, especially Pauling, Cyrus Eaton and Bertrand Russell.<sup>6</sup> And simply talking with their Soviet counterparts was enough for vehement anti-communists to smear Pugwash scientists as disloyal. But others who took part in Pugwash conferences were much more mainstream and enjoyed connections within the US government, often through PSAC, including for example, Paul Doty and Jerry Wiesner, and their arguments for arms control relied less on moral persuasion but rather on technical scientific expertise. This array of ideologies was a reflection of the many vibrant views found amongst Pugwash scientists, but such nuance did not sit well amid with the virulent anti-communism characteristic of the United States during this phase of the Cold War. Accordingly, in the US, the Pugwash group was vulnerable to charges of having communist ties from the American right, whilst at the same time there were suspicions from the European left that it was subject to US government manipulation.

4 On Commoner, see for example: Michael Egan, *Barry Commoner and the Science of Survival* (Cambridge, MA: MIT Press, 2007). Kelly Moore, *Disrupting Science: Social Movements, US Scientists and the Politics of the Military, 1945–1975* (Princeton, NJ: Princeton University Press, 2008).

5 See Rubinson, *Redefining Science*. Zuoyue Wang, *In Sputnik's Shadow: The President's Science Advisory Committee and Cold War America* (New Brunswick, NJ: Rutgers University Press, 2008). Benjamin Greene, *Eisenhower, Science Advice, and the Nuclear Test-Ban Debate, 1945–1963* (Palo Alto, CA: Stanford University Press, 2006). Sarah Bridger, *Scientists at War: The Ethics of Cold War Weapons Research* (Cambridge, MA: Harvard University Press, 2016).

6 See the chapters in this volume by Geoffrey Roberts and Carola Sachse.

## 1 The Early Years of Pugwash

Although the worst of the rabid, Red Scare paranoia in the United States had dissipated by the mid-1950s, the US Pugwash group naturally dealt with the issue of anti-communism from its earliest days. Members of the US Pugwash committee that wrestled with these issues included Eugene Rabinowitch, the Russian-born biophysicist and also the editor of the *Bulletin of the Atomic Scientists* (BAS), and Bernard Feld, a Brooklyn-born physicist and professor at Massachusetts Institute of Technology (MIT) who had participated in the Manhattan Project. In 1955, Rabinowitch had attended a world government conference convened by the mathematician-turned-philosopher-turned-social-activist Bertrand Russell, and although not amongst the eleven original signatories to the Russell-Einstein Manifesto, he eagerly joined Russell's call for a conference of scientists in 1957.<sup>7</sup> With the financial support of the wealthy and left-leaning railroad, steel, and coal magnate Cyrus Eaton, Rabinowitch helped arrange for the group's first meeting in Pugwash, Nova Scotia, in July that year. The meeting brought together scientists from ten countries, including the United States, Britain, Japan, and the Soviet Union. Rabinowitch thought scientists were ideally suited to confront the challenges of the future because “the detachment to which the study of science has accustomed one helps to avoid errors into which partisanship often leads the most astute political leaders and observers.”<sup>8</sup> In tune with contemporary Cold War views of science, which emphasized objectivity as the defining characteristic of the discipline, Rabinowitch characterized true science as divorced from political ideologies.

Rabinowitch would remain an influential figure within Pugwash for the rest of his life. Playing the role of “principal American organizer,” he helped put together the first few Pugwash conferences and set their agendas. As a Russian émigré, he frequently took on the role of interpreter for Soviet scientists at conferences, since no other American scientists could speak the language. He drafted the “eleven items of common belief,” a statement on the social responsibilities of scientists that evolved into Pugwash's core tenet, the Vienna Declaration, published in 1958. Rabinowitch attended all but one of the twenty two Pugwash conferences that took place while he was alive, and became

7 Eugene Rabinowitch, “Pugwash. History and Outlook,” *Bulletin of the Atomic Scientists* (BAS) 13, no. 7 (September, 1957): 243–248.

8 Eugene Rabinowitch, *The Dawn of a New Age: Reflections on Science and Human Affairs* (Chicago: University of Chicago Press, 1963), 5.



president of the organization in 1969.<sup>9</sup> Feld likewise played “a pivotal role” in Pugwash, in the words of Joseph Rotblat. A member of the Continuing Committee starting in 1963 and chair of US Pugwash, Feld’s job was to arrange US participation in the annual conferences, conduct US studies for the organization, and, perhaps most importantly, raise money for the American group. In 1973, he was unanimously elected to succeed Rotblat as Secretary-General, and succeeded Rabinowitch as editor of the *BAS* that same year.<sup>10</sup>

From the outset, Pugwash scientists actively engaged in discussions about a nuclear test ban, with nine of the first eleven Pugwash conferences, held first in the West and later in Warsaw Pact nations, covering various aspects of a test ban.<sup>11</sup> Much of the discussion centered around scientific analysis of inspection and verification systems needed to enforce a nuclear test ban treaty. As early as their second meeting in 1958, Pugwash scientists discussed methods of inspection under a test ban, and a following conference in 1959 aimed to jumpstart the official test ban negotiations underway in Geneva that had recently stalled.<sup>12</sup> One reason Pugwash scientists eagerly pursued a test ban was because the Russell-Einstein manifesto had encouraged such international agreements. “Any agreement between East and West is to the good in so far as it tends to diminish tension,” Russell had written.<sup>13</sup> The document that so influenced scientists such as Rabinowitch did not, for example, encourage vibrant grass roots activism but rather an approach centered on subtle diplomacy. Furthermore, a nuclear test ban was a technically complex issue where scientific expertise was highly relevant and could, potentially, also offer ways to resolve disputes; scientists emphasized too they could also draw on the much-vaunted ‘objective’ approach to problem solving that was a hallmark of the profession. In this way, the scientists of Pugwash felt that they could contribute to reducing East–West tensions and work towards peace.

The *raison d’être* of the Pugwash project depended on the ability of its scientists to reach policymakers in Washington, Moscow, London, and elsewhere, and push them toward arms control and nuclear disarmament. In the United States, the avenue for that influence was often the PSAC, created, like Pugwash, in 1957. Sources indicate that American Pugwashites had access to PSAC in the

9 Bernard T. Feld, “A Voice of Conscience is Stilled,” *BAS* 29, no. 6 (June 1973): 4–12.

10 Joseph Rotblat, “Remembering Bernie,” *BAS* 49, no. 4 (May 1993): 13–17.

11 Joseph Rotblat, *Pugwash. The First Ten Years: History of the Conferences of Science and World Affairs* (New York: Humanities Press, 1968), 17; *Scientists in the Quest for Peace: A History of the Pugwash Conferences*. (Cambridge, MA: MIT Press, 1972).

12 Rotblat, *Pugwash*, 19, 23.

13 Rotblat, *Pugwash*, 78.

late 1950s, but their influence on policy appears to have been only intermittent and sporadic. PSAC member and former head of MIT's Research Laboratory of Electronics Jerome Wiesner was at the second Pugwash conference in Lac Beauport in Spring 1958 and on his return reported immediately to PSAC and the President that a test ban would not risk US national security. He told the group that "no amount of Soviet testing would reduce the value of the American weapons."<sup>14</sup> For the most part, however, Pugwash scientists had a hard time getting through to the administration. In late March 1960, Rabinowitch, the chair of US Pugwash, visited Eisenhower's second science adviser, the Harvard scientist and head explosives director at the Manhattan Project, George Kistiakowsky "with a hard sell of the Pugwash conferences," but Kistiakowsky told him: "I am not at all sure about the value of these conferences."<sup>15</sup>

It is by no means certain that Kistiakowsky's ambivalence had anything to do with suspicions of communism. But although the worst of the Red Scare had been over for years, scientists trying to actively engage with peers in the communist world on issues of national security nevertheless faced an uphill battle. Tensions between the superpowers remained high over potential Cold War hotspots such as Suez, Hungary, and Berlin, while the Soviet achievement of launching the *Sputnik* satellite in October 1957 alarmed an already on-edge US public.<sup>16</sup> In 1959, as Pugwash scientists tried to find their way in this bipolar world, the organization's leaders sent out questionnaires. The responses to a Rabinowitch survey included 66 members of the US National Academy of Sciences, thirteen of whom, according to Rabinowitch, opposed the Pugwash meetings "because of distrust of Soviet intentions," as well as doubts that scientists were fit to discuss nuclear disarmament. Rabinowitch's analysis of his survey results, however, focused almost entirely on what types of meetings to have in the future.<sup>17</sup> At this stage, US Pugwash scientists did not appear to discuss scientists' distrust of the Soviets or take the problem of anti-communism very seriously.

14 Walter A. Rosenblith, *Jerry Wiesner: Scientist, Statesman, Humanist: Memories and Memoirs*. (Cambridge, MA: MIT Press, 2003), 263.

15 George Kistiakowsky, *A Scientist at the White House: The Private Diary of President Eisenhower's Special Assistant for Science and Technology* (Cambridge: Harvard University Press, 1976), 292, 322.

16 Robert Divine, *The Sputnik Challenge: Eisenhower's Response to the Soviet Satellite* (Oxford: Oxford University Press, 1993).

17 Eugene Rabinowitch, "Dear Colleague," letter dated 14 January 1958. Folder 3: Pugwash Conferences on Science and World Affairs (PCSWA), 1957, 1958, 1974, Box 6.16, MC 572, Victor F. Weisskopf Papers, Institute Archives, Massachusetts Institute of Technology (hereafter VFW Papers).

Rotblat, meanwhile, conducted his own survey, but when only 20% of scientists in Western countries responded, he sent out a second questionnaire to British scientists to find out why the responses to the first questionnaire had been so few. The return rate was high: 90% of those questioned responded to the second questionnaire, “maybe,” Rotblat wrote, “because a stamped, addressed return envelope was enclosed.” Whatever the reason, Rotblat was pleased with the results, telling fellow Pugwash colleagues that overall, 48% of British scientists were in favour of Pugwash, 27% were against it, and 25% were “indifferent.” But the responses to individual questions do not necessarily bear out Rotblat’s enthusiasm. Instead, one can see in them a vague sense of unease among many scientists about the Pugwash endeavor. In answering the question as to why they had not responded to the first survey, 17.5% of respondents answered, “because they do not wish to be involved in anything political.” (This was the second most common response; the most common response, at 18%, was that they “have mislaid the questionnaire and asked for another copy to be sent to them.”) In addition to those who opposed political activism, another 7.5% disagreed with “the Pugwash ideas,” 2% did not approve of “the views of the Pugwash Committee members,” and 1.5% did not like the name Pugwash. A further 15% said they had not answered the first survey because they never responded to questionnaires “on principle” (though one wonders, then, why they responded to this second questionnaire).<sup>18</sup> These responses hint at a certain amount of unease about, even opposition to Pugwash. Disapproval of the group’s “views” and “ideas” suggests that Pugwash’s political mission fell maybe too far to the left. Given that several important figures in Pugwash meetings – including Eaton, Linus Pauling, and Frédéric Joliot-Curie – had been accused of communist connections or sympathies, scientists and the public may have been conditioned to believe the worst about the group. Rotblat’s confidence that scientists were mostly supportive of the Pugwash initiative was perhaps useful in helping downplay later accusations of it as having communist sympathies.

The leadership of the US Pugwash group – Rabinowitch, along with Harrison Brown and Bentley Glass – did receive early on some warning signs of the harm that anti-communism could inflict on it. In July 1958 the French scientist Michel Magat had been invited to speak in Burlington, Vermont, at the International Radiation Conference, as well as give presentations to the Dow and DuPont corporations. He told Rabinowitch that his visa had been

18 Rotblat, *Pugwash*, 34–35. Folder 2: PCSWA – history, reports 1957, 1962, 1964, box 6.16. VFW Papers.

delayed by US officials until it was too late for him to travel, and that he suspected the delay was related to the fact that in 1952 he had been refused a visa because of his "pacifist activities," as he put it. Regarding future Pugwash gatherings, Magat wondered if it would be "proper" to organize international conferences in the United States, "since some specialists[,] like myself, may be prevented from attending."<sup>19</sup> The first Pugwash conferences to take place in the United States were those held in Stowe, Vermont, in 1961; it would be another nine years before another, when the twentieth Pugwash conference was held in Fontana in 1970. The Magat case underlines how significance attached to the siting of the conferences which could, for reasons relating to Cold War hostilities, have the unintended effect of excluding scientists from taking part. Elsewhere in this volume, Alison Kraft highlights the difficulties faced by East German scientists in attending Pugwash meetings held in NATO countries.

From across the Iron Curtain came another warning about the effect of anti-communism on Pugwash. An article in the Soviet newspaper *Izvestiya* praised the Pugwash conference that took place in Moscow in 1960, but complained about the "unfavorable reaction" from "certain circles" in the United States.<sup>20</sup> The US press, according to this *Izvestiya* article, was guilty of "confusing and distorting the facts" by falsely claiming that "the conference of scientists is some sly maneuver of the Soviet Government." The author, identified as Evgenii Fedorov, warned that these reactionary views aimed at ruining the peace that the scientists of Pugwash genuinely hoped to achieve.<sup>21</sup> And yet this warning, along with the scant few other indications of an anti-communist backlash, amounted to very little as of 1960. Rotblat remained optimistic about the future of the conferences, as did other Pugwash scientists. But as the 1960s began, Pugwash scientists in the United States would face a strengthening anti-communist backlash.

## 2 Anti-communists Attack

In the early 1960s, tensions between the United States and Soviet Union remained high. The leaders of the superpowers – John F. Kennedy in the United

19 Michel Magat to Rabinowitch, 31 July 1958. Folder 3: PCWSA, 1957–58, 1974, Box 6.16. VFW Papers.

20 See the chapter by Fabian Lüscher for an account of the Moscow conference from the Soviet perspective.

21 E. Fedorov, "The Scientists and Disarmament," News Clippings, Journal Articles Re: Pugwash Movement, 1961–1972, Box 45, Bernard T. Feld Papers, Institute Archives, Massachusetts Institute of Technology (hereafter BTF Papers).

States and Nikita Khrushchev in the Soviet Union – engaged in a series of diplomatic and military standoffs that threatened nuclear war, including crises in Berlin and Cuba. Kennedy’s aggressive Cold War, however, did not initially result in a revival of Red Scare anti-communism. In contrast to the outgoing Eisenhower administration, the Kennedy administration, which valued scientific and technocratic expertise, allowed Pugwash a much greater role upon entering the White House in 1961, as Pugwash veteran Jerome Wiesner became Kennedy’s presidential science advisor. According to one Kennedy administration official, Wiesner “was a driving force to do something about the test ban negotiations.”<sup>22</sup> After attending the 1960 Moscow Pugwash meeting, Wiesner reported directly to the State Department about Soviet willingness to work with Kennedy for a test ban. According to Wiesner himself, informal contacts with the Soviets provided him a great deal of otherwise inaccessible information, as he explained in a 1987 letter:

I developed very good relationships and a good rapport with Soviet scientists [at Pugwash meetings] [...] While working as science advisor to President Kennedy, these contacts were very important to me in my effort to achieve a nuclear test-ban.<sup>23</sup>

With the signing of the LTBT in August 1963, the United States and Soviet Union concluded an arms control agreement of the kind that Pugwash had long advocated. The period around the LTBT marked the highpoint during the Cold War in the political influence wielded by Pugwash scientists in the United States.<sup>24</sup> Throughout the Kennedy and Johnson administrations, the goals set out by the Pugwash leadership usually aligned with those of PSAC. That said, a notable exception was PSAC’s involvement in Vietnam War-related research, a conflict which Pugwash vigorously opposed.

However, the increasing visibility of Pugwash scientists in US policymaking circles brought increased scrutiny from virulent anti-communists in the

22 Interview with Carl Kaysen, Massachusetts Institute of Technology, 16 March 2005.

23 Rosenblith, *Wiesner*, xiii–xiv, 40, 509.

24 On the test ban, see: Vojtech Mastny, “The 1963 Nuclear Test Ban Treaty: A Missed Opportunity for Détente?” *Journal of Cold War Studies (JCWS)* 10, no. 1 (Winter 2008): 3–25. Allen Pietrobon, “The Role of Norman Cousins and Track II Diplomacy in the Breakthrough to the 1963 Limited Test Ban Treaty,” *JCWS* 18, no. 1 (Winter 2016): 60–79. Sarah Bridger, *Scientists at War: The Ethics of Cold War Weapons Research* (Cambridge, MA: Harvard University Press, 2016), 30–62. Rubinson, “‘Crucified on a Cross of Atoms’: Scientists, Politics, and the Test Ban Treaty,” *Diplomatic History*, 35, no. 2 (April 2011): 283–319. Rubinson, *Redefining Science*, 117–42.

United States. Senator Thomas J. Dodd (Democrat-Connecticut) chaired the Internal Security Subcommittee which investigated Pugwash and in 1961 produced *The Pugwash Conferences: A Staff Analysis*, hoping to discredit Pugwash, which he considered to be a suspicious group of scientists. Dodd's analysis portrayed the conferences as tools of Soviet propaganda and US participants as unwitting dupes. "In most of the contacts that have thus far taken place," the tract began, "the free world scientists, although they have sometimes argued strongly, have not been able to compete with their Communist counterparts." According to Dodd, whose sources were merely positive portrayals of Pugwash in leftist publications such as *The Daily Worker*, Communist scientists arrived at Pugwash conferences as "captive[s] of an inflexible political dogma," and hoped "to shape and exploit the conference in a manner which will best serve the ends of Soviet imperialism." Dodd also berated Pugwash for its connections to Cyrus Eaton who, as discussed by Carola Sachse in this volume, had become known as an unabashedly pro-Soviet sympathizer, leading the Pugwash leadership to seek ways of distancing the organization from him.<sup>25</sup> Dodd's public smears can only be seen as an attempt to undermine Pugwash and make sure that those in political power would not take it seriously.

The Dodd report seems to have had no immediate effect on US Pugwash, but during Senate hearings on the 1963 LTBT, conservative senators revived Dodd's redbaiting attacks on the American group, accusing Soviet scientists of "lying" to Wiesner at the 1960 Moscow conference and "planning [nuclear tests] all the time."<sup>26</sup> And whilst the scientists of Pugwash had hoped to facilitate arms control and disarmament by encouraging trust between Americans and Soviets, most senators and witnesses throughout the hearings took it for granted that the Soviets would cheat the test ban. The hearings began with numerous references to the number of treaties the Soviet Union had violated, leaving Secretary of State Dean Rusk to resort to claiming that the "treaty is

25 "Ex-Senator Dodd Is Dead at 64," *New York Times*, 25 May 1971. Press Release from Senate Internal Security Subcommittee, 28 May 1961, Series 11, Box 8, Folder 10: The President and Foreign Policy-Publication, Eugene Rabinowitch Papers, Regenstein Library, University of Chicago. (Hereafter: ER papers). "Senate Staff Study Hits Science Talks Promoted by Eaton," *New York Times*, 28 May 1961. "The Dodd Report," 1961. Lawrence S. Wittner, *Resisting the Bomb: A History of the World Nuclear Disarmament Movement, 1954-1970* (Stanford, CA: Stanford University Press, 1997), 363-64.

26 US Senate, Preparedness Investigating Subcommittee of the Committee on Armed Services. *Military Aspects and Implications of Nuclear Test Ban Proposals and Related Matters*. Eighty Eighth Congress., First sess. Hearings, Part I: 7, 15, 28 May; 5, 25-27 June; 1, 2, 9 August 1963; Part II: 12, 14, 16, 19, 20, 22, 23, 27 August 1963. (Washington, D.C.: US Government Printing Office, 1964), 206.

not standing upon the foundation of trust.”<sup>27</sup> The Pugwash ideal of objective discourse between scientists able to rise above national allegiances withered in the face of ardent Cold War anti-communism.

As Carola Sachse details elsewhere in this volume, the Pugwash leadership was relatively proactive in addressing anti-communist criticism of it when it came to Cyrus Eaton. One of the richest men in the United States, Eaton had for years encouraged friendship between the United States and Soviet Union, arguing that the value of international trade between the two countries outweighed any ideological conflicts. He had visited Moscow in 1955, and hosted both First Deputy Premier Anastas Mikoyan and Soviet Chairman Nikita Khrushchev at separate events in 1959. For his efforts, including the Pugwash conferences, Soviet officials awarded Eaton the Lenin Peace Prize in 1960, something that anti-communists harped on frequently. Unlike other accusations charging the American Pugwash group with communist sympathies, the association with Eaton alarmed Rabinowitch, Brown and Glass, who grew increasingly angry at his politically controversial public statements.<sup>28</sup> In 1963, Eaton expressed his desire to attend an upcoming Pugwash conference in India, leading to some anxiety on the part of Rabinowitch and Rotblat. His presence would be “disruptive,” Rabinowitch told Rotblat, but he had the right to attend having donated so much money to Pugwash. As a solution, Rabinowitch suggested inviting Eaton to the final days of the conference, where he would presumably cause less trouble. The following year, Rotblat complained again about Eaton, this time to Feld.<sup>29</sup>

Eaton remained a thorn in the side of the US Pugwash group well into the 1960s, as he increasingly and loudly blamed anti-communists for ruining it and the conferences. In a 1966 letter to US Pugwash scientists, he claimed that an “aggressively anti-communist” group of scientists, some of whom were associated with the CIA, had “increased in influence and numbers with each passing Conference.” While this anti-communist “spirit” pervaded “every segment of American life. . . the Pugwash purposes can hardly be accomplished in this climate.” He bemoaned the fact that although the first Pugwash conference had

27 US Senate, Committee on Foreign Relations, *Nuclear Test Ban Treaty: Hearings before the Committee on Foreign Relations*. Eighty Eighth Congress., First sess. Hearings, 12–15, 19–23, 26–27 August 1963. (Washington, D.C.: US Government Printing Office, 1963), 81, 165, 541.

28 Harrison Brown, Bentley Glass, and Eugene Rabinowitch, “Scientists and Cyrus Eaton.” Letter to the editor, *BAS* 16, no. 8 (1960): i–ii.

29 Rabinowitch to Rotblat, 6 December 1963, Folder 411, Pugwash Correspondence: Rabinowitch, Eugene, 1958–1972, Box 40. Rotblat to Feld, 31 July 1964, Folder 412, Pugwash Correspondence: Rotblat, Joseph, 1963–1965, Box 40. Both sources: BTF Papers.

received "front page coverage" from the *New York Times*, "the militant anti-communists subsequently clamped down on publicity, under the pretense that great scientists would refuse to come together and talk frankly if their statements were going to be reported."<sup>30</sup> Feld commented to a colleague that Eaton's comments were absurdly off the mark. Indeed, perhaps Eaton's rants even made Pugwash scientists less likely to take claims of anti-communism seriously. Certainly his claims had no credibility in their eyes, as Feld described Eaton's views as "discouraging." And yet Eaton remained a dilemma for the organization: his leftist rhetoric threatened to discredit the organization, but he remained incredibly wealthy and the cash-strapped Pugwash conferences could ill afford to alienate him. The following year, when John Voss, the Executive Leader of the American Academy of Arts and Sciences, wondered whether Eaton was in the category of "untouchables" when fundraising for the Ronneby conference, the answer was apparently no, as Voss requested \$10,000 from Eaton.<sup>31</sup>

In addition to Eaton, Bertrand Russell similarly embarrassed Pugwash with his leftist rhetoric. Although, as discussed by Geoffrey Roberts in this volume, Russell had helped create the impetus for the Pugwash project, he quickly moved on to participate in more confrontational and grassroots anti-nuclear activities. In 1960, Russell left the Campaign for Nuclear Disarmament to form the "Committee of 100," a more radical organization dedicated to non-violent, direct action and civil disobedience against weapons of mass destruction. Amid the intensifying US involvement in Vietnam by the mid-1960s, Russell unleashed increasingly vitriolic criticism of the war. Rabinowitch explained to Feld that Pugwash had been for some time "much too tame" for Russell's temperament. Alexander Rich, an MIT scientist who had once worked with Pauling, wrote to Feld in 1967 about possibly negative associations that Pugwash needed to avoid. In particular, Russell, the one-time honorary chairman of Pugwash, was getting "extremely adverse publicity" in the United States for his anti-Vietnam War activities, including apparently convening a mock trial of President Johnson. "This publicity has made many people feel very critical and has indirectly cast a shadow on his Pugwash connection," Rich wrote, "which I am afraid might have some effect in terms of our ability to get strong

30 Eaton to Voss, 10 May 1966, Folder 425, Pugwash Correspondence: Voss, John, 1964–1972; Feld to Voss, 17 May 1966, Folder 425, Pugwash Correspondence, Voss, John, 1964–1972, Box 41. BTF Papers. Pugwash did get one front page story: Raymond Daniell, "Scientists Wary on Giving Data on Nuclear Perils to the World," *New York Times*, 11 July 1957, 1.

31 Voss to Feld, 4 January 1967 and Voss to Feld, 28 April 1967, Pugwash Correspondence: Voss, John, 1964–1972, BTF Papers.



letters of recommendation from various influential [sic] people in this country, including several senators.”<sup>32</sup> In fact, statements and reports from Pugwash conferences became increasingly critical of the Vietnam War, and while some of the criticism was to be expected from the official Soviet delegation, western scientists were also harshly critical of US policy in Vietnam.

As Fabian Lüscher discusses in this volume, even Soviet scientists were not necessarily, at all times, puppets of the Soviet state, as they found ways to remain loyal to both the Communist party and the scientific community. As Doubrovka Olšáková demonstrates in this volume, a similar dynamic – Pugwash scientists finding room for maneuver – was apparent in Czechoslovakia, where the state sought also to control closely its scientists as they engaged with the Pugwash project. But the notion that Pugwash was a tool of Soviet propaganda was and remained prevalent across the West; indeed, on occasion British officials looked to their US counterparts for guidance in making policy toward Pugwash. This co-ordination reflected a clear belief that the Pugwash organization was a communist mouthpiece and that the US and British governments hoped to turn it into a pro-Western, anti-communist mouthpiece. A 1963 communiqué from the British Foreign Office requested the names of the US Pugwash delegates, and asked if the Americans had planned any attempts to plant official views into the Pugwash conference held this year in Dubrovnik.<sup>33</sup> A telegram from the British embassy back to the Foreign Office stated that US officials were taking a “very relaxed” attitude toward the upcoming Dubrovnik conference, but that the Kennedy administration did hope that scientists would drop disarmament and other political hot potatoes in favor of “non-controversial subjects” such as cooperation on Third World development.<sup>34</sup>

In contrast to official views, however, senior figures involved in Pugwash in Britain felt the American group was vulnerable to manipulation by the US government. In 1962, as part of a strategy to foster more favorable publicity for its work and the conferences, the Pugwash leadership – the Continuing Committee – discussed starting a Pugwash journal, which raised the question of who would publish it. During this debate, Wayland Young, the Pugwash

32 Rubinson, *Redefining Science*, 120. Rich to Feld, 3 March 1967, Folder 409, Pugwash Correspondence: R, 1959–1973, Box 40. BTF Papers.

33 A.D.F. Pemberton-Pigott to J.E. Killick, Sept. 10, 1963, FO 371/ 171190; IA D1092/ 22: 11th International Pugwash Conference Dubrovnik, restricted Pugwash Meetings, 1963. UK National Archives.

34 Telegram: British Embassy to Foreign Office, 16 September 1963, FO 371/ 171190; IA D1092/ 31: Eleventh International Pugwash Conference Dubrovnik, restricted Pugwash Meetings, 1963. UK National Archives.

publicity officer, asked, “If the Pugwash Journal is published by an American company or a British subsidiary of an American company, is it more likely to be open to political pressure *through the publisher* than if it were published by a British company?” (emphasis in original).<sup>35</sup>

### 3 Pugwash and the Johnson Administration

In 1963, the Cold War began to undergo dramatic changes. In contrast to years of tension and hostility between the superpowers, the LTBT ushered in further treaty agreements and a decrease in East–West tensions. Furthermore, the focus of the Cold War rivalry was beginning to shift to the Third World, where decolonization inspired numerous conflicts, most especially in Vietnam. While the global Cold War entered a new phase, the Pugwash conferences, however, faced problems that had blighted its past, particularly the problem of anti-communism. As noted, the US Pugwash group had always enjoyed access to policymakers, but this access appeared to be dwindling. An editorial in the *New York Times* on 11 October 1964 lauded Pugwash, hailing its recommendations as “important because policymakers in Washington, Moscow, and other world capitals pay serious attention to the results of Pugwash meetings.”<sup>36</sup> While this may have been true during the test ban era, President Lyndon Johnson increasingly made a point of turning a cold shoulder to Pugwash. On September 13, 1964, the biochemist Paul Doty and Jerome Wiesner cabled National Security Adviser McGeorge Bundy from a Pugwash conference in Czechoslovakia requesting a message of greeting from President Johnson to the attendees. As president, Kennedy had sent greetings to the conferences, a gesture that Johnson continued for the early 1964 conference in India. But by late 1964 the situation had changed. Refusing Doty and Wiesner’s request, Bundy replied that Pugwash would survive without the “banality” of a “repeated official blessing from on high.”<sup>37</sup>

35 Young to Feld, 22 March 1962, Folder 491, “Pugwash Journal,” 1961–1972, Box 45. BTF Papers.

36 “Peace Moves at Pugwash,” *New York Times*, 11 October 1964.

37 Telegram from Jerome Wiesner and Paul Doty to McGeorge Bundy, Department of State, Czechoslovakia Cables, Vol. 1, November 1963–August 1967, 23, National Security File, Country File, Europe and USSR, Czechoslovakia, Box 179, Lyndon B. Johnson Presidential Library (hereafter LBJL). Telegram from McGeorge Bundy, Department of State, to Jerome Wiesner and Paul Doty, Czechoslovakia Cables, Vol. 1, November 1963–August 1967, 24, National Security File, Country File, Europe and USSR, Czechoslovakia, Box 179, LBJL. For Kennedy’s messages to Pugwash, see *Pugwash Newsletter* 2, no. 3, January 1964, Series IV, Addenda 11, Box 1, Folder 2: Thirteenth PCSWA, ER Papers. Rotblat, *Quest*, 59.

Johnson's actual reasons for distancing the administration from Pugwash lay in the domestic sphere and his desire to avoid even the possibility of being criticized by anti-communist politicians. In a handwritten note to Bundy, a State Department official explained that a message to Pugwash might harm the president during an election year "because of congressional criticisms of Pugwashery," though there is little evidence to suggest that he could have seriously expected to be attacked for support of the Pugwash conferences.<sup>38</sup> At any rate he won the 1964 presidential election in a landslide. The *Congressional Record* reveals no comments on Pugwash during either 1963 or 1964, while in 1962 Senator Jennings Randolph, a Democrat from West Virginia, had praised Pugwash, emphasizing his endorsement of the 1962 conference's statement that "full disarmament is realistic and urgent."<sup>39</sup>

The mention of Congressional criticism may have been a reference to Dodd, who still had the potential to cause major headaches for Johnson. While his attacks on Pugwash during the Kennedy years had done little to hinder American Pugwashite's access to/influence on policymakers, Dodd's accusations at this time might nevertheless have made an impression on Johnson, who was then Vice-President after an influential tenure in the Senate. In fact, Johnson and Dodd had encountered each other years before. As Senate majority leader in 1959, Johnson welcomed Dodd to the Senate and immediately enlisted his support against Clinton Anderson, who opposed Johnson's position on a filibuster rule. Returning the favor, Johnson placed Dodd in charge of the Internal Security Subcommittee from where, as we have seen, he waged war on Pugwash. Even after his landslide victory in 1964, Johnson continued to fear domestic anti-communism, haunted especially by the fate of Harry Truman, eviscerated politically after the 1949 communist victory in China's civil war. In 1965 a China specialist from the State Department mentioned Dodd by name in a memo to Bundy, expressing fear of a McCarthy-esque reaction if the United States failed to stand up to communist aggression in South Vietnam. Johnson himself claimed that he would be "destroyed" if Dodd ever accused him of being soft on communism.<sup>40</sup>

38 J. Kretzman to McGeorge Bundy, undated (September 1964), 82 and 82a, Czechoslovakia Memos, Vol. 1, November 1963–August 1967, National Security File, Country File, Europe and USSR, Czechoslovakia, Box 179. LBJL.

39 *Congressional Record*, 1963, Appendix, A7185.

40 Kai Bird, *The Color of Truth: McGeorge Bundy and William Bundy, Brothers in Arms* (New York: Touchstone, 1998), 309. Lyndon Johnson phone conversation with Abe Fortas, 19 May 1965, in Michael Beschloss, ed. *Reaching for Glory: Lyndon Johnson's Secret White House Tapes, 1965–65* (New York: Simon and Schuster, 2001), 332. *Congressional Record*, Vol. 112, Pt. 15, 1966, 19441.

While Johnson feared an anti-communist backlash, he also did not want scientists shaping national security policy. He believed that science properly belonged in the domestic sphere as part of his Great Society program, where the progress of science would elevate the standard of living of all US citizens.<sup>41</sup> Scientists' desire to advise the president on geopolitics quickly annoyed Johnson, causing hostility toward not just Pugwash but also to PSAC, once so influential and, as noted, one conduit through which American Pugwashites had been able to reach policymakers. Whereas the Eisenhower and Kennedy administrations had relied fairly heavily on the expertise of scientists, the Johnson administration began to spurn the advice of its scientific experts regarding nuclear weapons. Moreover, as the president's Vietnam policy began to alienate scientists, in the late 1960s many scientists began to break from the foreign policy and defense establishments. Although at one time PSAC had pursued goals that often aligned with those of the Pugwash project, this was not always the case: a 1968 memo describing PSAC's accomplishments included more achievements in the category of "military technology" than any other category.<sup>42</sup>

Along with being associated with leftists in Johnson's eyes, many scientists in favor of peace and arms control, including many active in Pugwash, were actively attempting to halt the war that Johnson was trying to win. A 1968 Pugwash report by Paul Doty decried the effects of the Vietnam War as well as the Soviet invasion of Czechoslovakia on efforts towards the principle and policies of nuclear non-proliferation: his argument "End the Vietnam War. Get out of Czechoslovakia" was an even-handed critique of both superpowers. The following year, a statement from the 18th Pugwash conference held in Nice advocated the complete withdrawal of US forces from Vietnam as a "necessary condition for the establishment of peace."<sup>43</sup>

The Johnson administration's change in attitude toward Pugwash went beyond the White House, as the State Department became increasingly irritated by the organization, especially after the 1964 Karlovy Vary conference. At issue

41 Kistiakowsky to Morris Marden, December 6, 1965, Box 33: General Correspondence ca. 1928–1982, folder: Don Hornig, HUG (FP) 94.8, George B. Kistiakowsky Papers, Harvard University. Glenn Seaborg, *Stemming the Tide: Arms Control in the Johnson Years* (Lexington, MA: Lexington Books, 1987).

42 Hornig, Memo for Marvin Watson, February 19, 1968, January-March 1968, Box 6, Chronological File, Donald F. Hornig Papers. LBJL. On Pugwash and PSAC, see Rubinson, "Crucified."

43 Paul Doty, "On the Current Impasse," 1968, Series IV, Addenda II, Box 2, Folder 1: Eighteenth Pugwash Conference, ER Papers. Rotblat, *Quest*, 320–21.

was the allegedly pro-Soviet tone of statements issued during Pugwash conferences. At Karlovy Vary, the Continuing Committee issued a press release that mentioned the fact that one working group unanimously opposed US proposals for a multilateral force (MLF) as part of NATO in Europe.<sup>44</sup> (Indeed, as Kraft shows in this volume, at this time, Pugwash was undergoing changes that saw growing European influence within it: the suggestion here is that at the same time, American influence seemed to be waning). When Feld sent the papers and statements from the conference to the State Department as usual, he received in reply a harsh condemnation from Llewellyn Thompson, the Ambassador at Large for Soviet Affairs, who told Feld that “the conference in Karlovy Vary represented a one-sided endorsement of Soviet policies and a tendentious criticism of US policies.” The statement coming from the conference, he added, “makes us extremely dubious about the usefulness of the entire exercise” and “serves the end of Soviet propaganda.”<sup>45</sup> This view reflected other officials’ opinions as well that Pugwash was a victim of Soviet manipulation. Herbert Scoville, Assistant Director for Science and Technology of the Arms Control and Disarmament Agency, agreed in similar terms that such statements have “detracted from the usefulness of the Pugwash conferences” because they “can be used by the Soviets for their own propaganda purposes.”<sup>46</sup>

Feld described Thompson’s criticisms as “unfair” and “indicative of an unexpected hostility, if not paranoia.”<sup>47</sup> Other members of US Pugwash also contested Thompson’s claims: Bentley Glass told Feld that the Pugwash views on the MLF were not “a skilful [sic] perversion of American sentiments by the Russians,” but rather that the State Department and the Department of Defense were overestimating domestic support for the MLF idea.<sup>48</sup> The Cornell University scientist Frank Long admitted that the Karlovy Vary statement was indeed “rather hard on the American position,” but did not represent “a serious point.”<sup>49</sup> In his response to Thompson, Feld urged the ambassador to stop

44 Eugene Rabinowitch, “About Pugwash,” *BAS* 11, no. 4 (April 1965): 9–15, here 11.

45 Thompson to Feld, 1 December 1964, Folder 422: Pugwash Correspondence: T, 1961–1973, Box 41. BTF Papers.

46 Scoville to Feld, 11 December 1964, Folder 422: Pugwash Correspondence: T, 1961–1973, Box 41. BTF Papers.

47 Feld to Freund and Wiesner, 8 December 1964, Folder 422: Pugwash Correspondence: T, 1961–1973, Box 41. BTF Papers.

48 Glass to Feld, 23 December 1964, Folder 422: Pugwash Correspondence: T, 1961–1973, Box 41. BTF Papers.

49 Long to Feld, 31 December 1964, Folder 422: Pugwash Correspondence: T, 1961–1973, Box 41. BTF Papers.

seeing Pugwash "almost entirely in the context of the Cold War propaganda duel." While the Soviets may occasionally "achieve some small propaganda advantage, this seems a small price to pay" for the opportunity to discuss important issues with "some of the best minds and most influential scientists of Eastern Europe."<sup>50</sup> American Pugwashites were still not engaging fully with or responding to the concern that Pugwash was a Soviet propaganda exercise; rather they suggested that Soviet propaganda simply did not matter. Whilst perhaps rational, this point of view could not at the time have been convincing to US government officials who saw the world as a zero-sum Manichaean Cold War game. Instead, as American Pugwash scientists demonstrated resistance to outside control, Washington increasingly distanced itself from the group.

US diplomats shared these concerns about the Pugwash organization and its conferences with peers overseas. In 1965 the British Foreign Office learned that the US State Department did not send an official representative to Pugwash conferences so as to more easily "disown the conclusions of a particularly unsatisfactory meeting," though it did "discreetly" brief US participants. US officials also expressed the hope that Pugwash would become "more scientific in character and less political," a "change of direction" that the Foreign Office agreed was long "overdue." Finally, the State Department had also considered cutting off funds for Pugwash if the meetings continued to spout anti-Western statements.<sup>51</sup>

It does not seem that Pugwash made any major changes in response to State Department criticisms, but the leadership recognized and was concerned about the consequences of the conference statements. Rotblat wrote to Feld in advance of the 1965 Venice conference, anticipating that the Russians would want to issue a public statement on Vietnam. Rotblat had no objection to a statement but wondered "whether it will not do too much damage to Pugwash" in the United States.<sup>52</sup> After the Venice conference, Ambassador Thompson did not change his tone, complaining that statements from the conference were overly critical of the United States and not at all critical of the Soviet Union. He told Feld that unless the statements were abandoned or became more balanced, "the United States Government will probably, in the future, not look

50 Feld to Thompson, Dec. 31, 1964, Folder 422: Pugwash Correspondence: T, 1961–1973, Box 41, BTF Papers.

51 D.L. Benest, Minutes, "Pugwash," 22 February 1965, FO 371/181421. IA D1092/7: Pugwash Conferences on Science and World Affairs, 1965. Both sources: UK National Archives.

52 Rotblat to Feld, 29 March 1965, Folder 412: Pugwash Correspondence: Rotblat, Joseph, 1963–1965, Box 40. BTF Papers.

with sympathy upon such meetings.”<sup>53</sup> The highly influential physicist Alvin Weinberg counseled Feld not to be so quick to dismiss State Department concerns, reminding Feld that at one conference the Russians “relentlessly and skillfully presented their viewpoint and insisted on their wording.” Keeping the State Department on board mattered, Weinberg wrote, since “Pugwash affairs are most useful if they can somehow be used as informal sounding boards for ideas which are not yet official policy, but which are being discussed informally in the State Department. To lose all State Department interest would be a most unfortunate turn of events.”<sup>54</sup> The State Department’s change in attitude toward Pugwash heightened concerns for the scientists. In 1965 Feld forwarded to Wiesner a note from Rotblat encouraging him to get a message from Johnson for the upcoming Pugwash conference. Rotblat was concerned that, after Johnson’s snub to Karlov Vary, “if there is not one [message] this time, people will begin to take it as a withdrawal of support for Pugwash by the establishment of the USA.”<sup>55</sup>

Feld had heard the State Department’s criticism and tried to address it at the Venice conference. He told Rabinowitch in a letter that “I took much more of the ‘establishment’ attitude than I would normally have taken had it not been for the fact that I felt that this conference was being regarded in some sense as a test by many people in Washington.” In other words, the State Department wanted to see if US Pugwash would obey its commands. He further explained that the Soviets should have “regard” for “political problems faced by Americans when they return home” from the conferences. While this internal discussion did not amount to a dramatic change in behavior, it did reflect a growing awareness about the damaging effects of US anti-communist attitudes. Feld added that the statements also caused “problems” for Soviet scientists, though it does not appear that he mentioned this fact to the State Department.<sup>56</sup>

If Venice was a test, Pugwash failed, as the White House continued to ignore the conferences. After Johnson again refused to send a message of greeting to the 1966 Addis Ababa conference, Feld wrote to the acting director of the Office of International Scientific and Technological Affairs at the State Department. “Here was a Conference,” he wrote, “on a subject (science in the aid of

53 Thompson to Feld, 23 April 1965, Folder 422: Pugwash Correspondence: T, 1961–1973, Box 41. BTF Papers.

54 Weinberg to Feld, 5 January 1965, Folder 426: Pugwash Correspondence: W, 1963–1973, Box 41. BTF Papers.

55 Feld to Wiesner, 2 April 1965, Box 41: Pugwash Correspondence: W, 1963–1973, Box 41. BTF Papers.

56 Feld to Rabinowitch, 22 April 1965, Folder 411: Pugwash Correspondence: Rabinowitch, Eugene, 1958–1972, Box 40. BTF Papers.

developing countries) of minimum controversial content where I think such a message would have been highly appropriate."<sup>57</sup> Presumably Feld meant that the White House could have scored propaganda points in the competition with the Soviet Union for the loyalties of the Third World. And yet Johnson Administration officials' obsession with communism blinded them to this fact.

Senior American Pugwashites showed much less concern when anyone other than the US government raised the issue of communist influence within the organization. Frank Long wrote to Feld in April 1966 to pass on a story from Cornell President James Perkins, who had told Long that some of his Italian friends saw a poster about a Pugwash meeting in Italy and told Perkins "that the Italians on it were all members of the Communist Party," and that "the Commies seem to have taken over Pugwash here." Long admitted that "I know nothing about this but pass it on to you for whatever it is worth."<sup>58</sup> Feld, who was a speaker at the meeting, responded to Long merely by refuting the claims. He described Edoardo Amaldi as "absolutely fine in all respects," while Carlo Schaerf was "certainly not a communist," Arangio Ruiz was "a longtime thorn in the side of the Communists," another attendee was "undoubtedly left of you and me on many issues, but not, to my knowledge, a Communist," and a "Polish intellectual" on the list was "certainly a Communist." Feld concluded, "I suspect President Perkins' friends are more than somewhat biased," a fairly blasé reaction that seems refreshing, given that other anti-nuclear groups of the 1960s, especially the Committee for a SANE Nuclear Policy, bent over backward to appease anti-communist politicians.<sup>59</sup>

Linus Pauling took a very different – and very confrontational – approach to red-baiting. The winner of the Nobel Prize in chemistry (1954) and the winner of the Nobel Peace Prize in 1963 for his anti-war/anti-nuclear activism, Pauling had for years suffered accusations of communist connections. He wrote to Feld in 1966 thanking him for a copy of Rotblat's history of Pugwash, writing, "It turned out to be useful to me, in connection with my suit against National Review and its publisher and editor."<sup>60</sup> *The National Review* had several times described Pauling as a communist sympathizer, and Pauling had sued for libel,

57 Feld to Herman Pollack, 17 January 1966, Folder 408: Pugwash Correspondence: P, 1963–1973, 1975, Box 40. BTF Papers.

58 Long to Feld, 12 April 1966, Folder 402: Pugwash Correspondence: Long, Franklin, 1963–1973, Box 39. BTF Papers.

59 Feld to Long, 15 April 1966, Folder 402: Pugwash Correspondence: Long, Franklin, 1963–1973, Box 39. BTF Papers.

60 Pauling to Feld, 28 April 1966, Folder 408: Pugwash Correspondence: P, 1963 to 1973, 1975, Box 40. BTF Papers.



just as he had done with other publications that had labeled him red. His lawsuits met with mixed results: successful at first, they floundered after the 1964 *New York Times v. Sullivan* Supreme Court decision made it harder for public figures to prove libel. Although Pauling attended four Pugwash conferences between 1958 and 1962, this was a troubled relationship. Pauling's approach was somewhat ill-suited for Pugwash, since the leadership preferred to stay out of the limelight and avoid controversy, and because, as will shortly be discussed, the scientists' group constantly struggled to raise cash for its own conferences, much less drawn-out lawsuits.<sup>61</sup> The strategy pursued by the scientists of Pugwash, within the different national groups, including that in the US, and as a collective on the international stage, remained tightly focused on influencing government elites and avoiding publicity.

Feld seems to have rarely discussed the ways in which anti-communism constrained the work of Pugwash in the US; one time he did was in 1966 when his fellow MIT professor Y.T. Li proposed an international study group involving US and Chinese scientists. Feld found the proposal "extremely interesting and quite provocative," but declared himself ultimately "pessimistic" about the idea and anticipated "governmental opposition" to any group that was premised on "the assumption that some of our interests converge with those of the communists in the long run." Feld described the State Department as "self-righteous" and "tending to assume that since we [the United States] are the carriers of the true religion, our opponents must be representatives of the devil." Such governmental opposition would doom funding attempts from US foundations like Ford and Rockefeller. And while this stands as a rare recognition of the ways in which anti-communism could and did throw a wrench into Pugwash endeavors, Feld did not offer much of a solution to the problem, merely suggesting France, Denmark, Romania and Canada as possible hosts.<sup>62</sup>

A 1967 assessment of Pugwash from Cornell political scientist Steven Muller explicitly warned Long, Feld, and Rabinowitch about the risk of Pugwash "los[ing] all of its value to everybody if it achieves a reputation only as a Communist front organization." This reputation was the direct result of "the tendency of the Russians to use the conference as a propaganda forum," as the Soviet delegates frequently denounced US policies. As a solution, Muller recommended discussing the problem "very frankly" with the Soviets before the next conference, and suggested limiting the polemics to a plenary session and

61 See, for example, correspondence with John Voss in the BTF Papers.

62 Feld to Y.T. Li, July 1, 1966, Feld Papers, Folder 400: Pugwash Correspondence: L, 1965 to 1973, 1976, Box 39, BTF Papers. Whether such a study group was ever formed remains unknown.

not the working group sessions with prepared papers, where the most productive exchange and discussions occurred.<sup>63</sup> It is unclear whether Long or the others implemented such changes, but the problem still appeared unsolved as of 1967, when Deputy Under Secretary of State Foy Kohler received materials from Rabinowitch on that year's conference which was held in Ronneby, Sweden. Kohler focused on a statement from the Continuing Committee that he saw as "one-sided." Although Kohler recognized that the US participants saw this as a piece of "bacon" for the Soviets to bring home, such statements "detract from the stature of the Pugwash conferences and prevent them from receiving the recognition which many in the scientific community feel they deserve." He counseled Rabinowitch to "forego this ancillary propaganda exercise."<sup>64</sup>

#### 4 Communist Puppets and CIA Puppets: The Double Bind

As opposition to the US government erupted in the late 1960s over Vietnam, the role of the CIA, and Civil Rights, the Pugwash organization – especially the American group – became caught up in these growing controversies. While concerns about Pugwash as a tool of Soviet propaganda hampered its influence within the US government in the mid-1960s, by 1967 senior American Pugwashites became much more worried about the possibility that the US government might seek to manipulate the organization. Early in 1967, the *New York Times* reported that the CIA had for years been funding a "wide spectrum of youth, student, academic, research, journalist, business, legal and labor organizations" in the United States and overseas. The agency had distributed millions of dollars to these organizations, and many Pugwash scientists in the United States and overseas worried that their own group had been tainted.<sup>65</sup>

Revelations of the CIA bankrolling of cultural and intellectual organizations worried Feld perhaps even more than State Department claims that Pugwash aided Soviet propaganda. He reassured Rabinowitch and Long that there was no possibility that they had even inadvertently received covert CIA funding.

63 Steven Muller, Memo to Frank Long, September 12, 1967, Folder 402: Pugwash Correspondence: Long, Franklin, 1963–1973, Box 39, BTF Papers.

64 Kohler to Rabinowitch, 8 December 1967, Folder 411: Pugwash Correspondence: Rabinowitch, Eugene, 1958–1972, Box 40. BTF Papers.

65 Neil Sheehan, "Aid by C.I.A. put in the Millions; Group Total Up," *New York Times*, 19 February 1967, 1. Elena Aronova, "The Congress for Cultural Freedom, 'Minerva,' and the Quest for Instituting 'Science Studies' in the Age of Cold War," *Minerva* 50, no. 3 (September 2012): 307–37.

The “front” foundations, he wrote, “were among the many which turned down our appeal for help a few years ago.” He joked that “the CIA clearly thought us either too unreliable or too ineffectual for support.” But the issue did raise concerns for Feld about the funding of Pugwash in the future from the National Academy of Sciences (NAS) and the Ford Foundation as well as from government sources. The State Department, he wrote, varied from hot to cold in its support of Pugwash, “and I wonder if we cannot expect more of this to the extent that our financial well-being depends on their good will.” While Feld welcomed guidance and suggestions from the State Department he remained wary, conceding that “I would become vastly disturbed if there were to develop any tendency to use us as a front for permit of ‘official’ policy and goals.” Unlike the communist issue, for Feld the CIA problem needed “careful consideration and treatment on our part.” Writing to Long from Paris, he admitted that his “paranoid” thoughts may have been from “constant exposure to French Americophobia,” but still suggested remaining vigilant of any attempts to veer the group in a pro-US direction.<sup>66</sup>

The US Pugwash group exhaled in relief having avoided being implicated in the CIA’s “sea of controversy,” in the words of Alexander Rich, who told Feld that he was relieved that financially “we seem to have kept miraculously clear” of the CIA taint. He added that they had once turned down someone for a conference who “was reported to be 100% subsidized by the C.I.A.”<sup>67</sup> Feld later discussed with Rotblat US participants at Pugwash conferences in light of the CIA problem. He wrote, “I think you can rest assured that we are very sensitive, in view of our narrow escape from CIA infiltration, to the need to keep the list ‘clean,’ and that the people suggested all have bone fide credentials.”<sup>68</sup> US Pugwash was apparently very careful about keeping out US government influence, even as its scientists sought to influence that same government. This emphasis suggests that, in contrast to allegations of communist sympathies, Pugwash scientists saw insinuations of CIA influence as much more damning to it. Perhaps too there were concerns amongst senior American Pugwashites about the power shift within the organization as European influence grew steadily stronger at a time when the American group was hamstrung by its domestic situation.

66 Feld to Rabinowitch and Long, 18 February 1967, Folder 403: Pugwash Correspondence: Long, Franklin, 1963–1973, Box 39. BTF Papers.

67 Rich to Feld, 3 March 1967, Folder 409: Pugwash Correspondence: R, 1959–1973, Box 40. BTF Papers.

68 Feld to Rotblat, 22 March 1967, Folder 413: Pugwash Correspondence: Rotblat, Joseph, 1966–1967, Box 40. BTF Papers.

Internal discussion of the CIA problem continued throughout 1967. In a letter to Feld, Rabinowitch blamed not the CIA but the US Congress, which "has always refused to appropriate money for American cultural and educational activities abroad, while willing to give practically unlimited funds... to the military and the CIA." He continued: "I do not think the CIA had any nefarious plans of its own... for espionage or information gathering." Wondering about any Pugwash funds that were tainted, he thought that perhaps the US Pugwash committee had received \$3,500 from the Kaplan Fund, a social justice philanthropy founded by Jake Kaplan, who had amassed a fortune through the sale of the Welch's grape juice company, "but maybe that was before it had started serving as a channel for CIA money." Rabinowitch hoped it would be embarrassing enough to the United States that Congress might actually start to fund cultural and educational efforts overseas. Ultimately, Rabinowitch knew of no attempts by the CIA to influence Pugwash. Frederick Seitz and Harrison Brown, senior figures within Pugwash as well as the NAS, however, did want to have "some influence on the political behavior of the American Pugwash participants," but Rabinowitch was confident that the NAS would not get very far in these efforts, such as preventing the US committee from including "leftists" like Pauling (who was not going to attend a Pugwash conference anyway as he claimed without evidence that Pugwash had received \$100,000 from the CIA in 1961), "or other violent opponents of American policy in Vietnam." Interestingly, there had been pressure from the Ford Foundation in 1960 when, following the Pugwash conference in Moscow, the US committee approached the Ford Foundation for funds for the upcoming Stowe conference. Ford representatives apparently told the US committee that in order to receive money, the existing leadership of the American Pugwash group leadership (i.e. Rabinowitch) needed to be replaced with more "reliable" people like Paul Doty. Although no changes were made, money for Stowe from Ford was still forthcoming, but later the Ford Foundation chose to distribute money elsewhere.<sup>69</sup> The CIA question erupted again in 1968, when Jeremy Stone, a Stanford economist and influential figure within the Federation of Atomic Scientists, was suspected of working for the agency. He wrote to Feld, "some believe I am working for CIA. This is categorically false and I ask you to accept my word on it. I have neither assisted them nor been assisted by them." Feld responded that he had "never had any

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69 Rabinowitch to Feld, undated (pre-May 1967), Folder 411: Pugwash Correspondence: Rabinowitch, Eugene, 1958–1972, Box 40. BTF Papers. On Pauling and Pugwash, see Rubinson, *Redefining Science*, 60.

question of your status and independence.”<sup>70</sup> The CIA issue proved hard to shake off.

## 5 US Pugwash Finances in the 1960s

While critics asked challenging questions about the funding of the American Pugwash group, the details of its finances reveal mundane realities. In September 1962, according to Feld’s records, the US Pugwash group had \$35,805 in the coffers. The money came from a variety of foundations, including \$2,000 from the Christopher Reynolds Foundation; \$5,000 from the Danforth Foundation; \$2,500 from the Carnegie Endowment for International Peace; \$3,000 from the Edgar Stern Fund; \$2,000 from the Atomic Scientists Foundation; and \$1,200 from Cyrus Eaton. The group had less luck with other potential funding bodies: in 1962 and 1963 the Rockefeller Foundation turned down its request for financial support by explaining that it did not support conferences.<sup>71</sup> Over the next ten years, the financial condition of US Pugwash would swing rather wildly, as its leadership committee scrambled for funds, cobbled together money from a variety of organizations and individuals, and struggled to compete for money in a decade when an increasing number of causes and organizations were likewise seeking funds. For example, in 1965, Feld reported to a colleague: “I’m working on some foundations here, but most of our old supporters are now spending their money on Civil Rights.”<sup>72</sup>

Funds continued to be desperately needed. In 1963, its leaders estimated that they would need a budget of \$50,000. Most years, however, the US Pugwash group had to make do with roughly half that amount. By the end of 1964, for example, it ended up with \$21,000 in income, and spent all but \$500 of it. While financially stable in 1964, Feld had already begun to worry about the next year, writing to Doty that “the need remains acute.” 1965 was indeed precarious. By October the group had taken in \$27,793.56, with \$15,375.50 in expenses, leaving \$12,418.06. Feld could count on \$5,000 from the Christopher Reynolds Foundation, bringing the total up to \$17,418.06, but with \$26,450

70 Stone to Feld, n.d., and Feld to Stone, 30 August 1968, Folder 420: Pugwash Correspondence: S, 1962–1973, Box 41. BTF Papers.

71 Budget, Conference on Sciences and World Affairs, September 24, 1962, Folder 429, Box 41; Fundraising, 1963–1972, 3/3, Box 41; Kenneth Thompson to Edsall, July 10, 1962, and John Weir to Feld, July 26, 1963, Folder 463. Box 43. Fundraising: Rockefeller Foundation, 1963–1973. All BTF Papers.

72 Feld to Prof. J. Hans Jensen, Heidelberg, Germany, 13 September 1965, Folder 429: Fundraising, 1963–1972, 1/3, Box 41. BTF Papers.

in upcoming expenses, the group faced a \$9,000 shortfall. The situation improved in 1966, as US Pugwash had \$45,000 on hand by the end of March.<sup>73</sup>

In the early 1960s, the American group decided to no longer accept money from Cyrus Eaton, reflecting their determination to weaken their links to him. This decision, however sound politically and strategically, made poor sense from a strictly financial perspective. The foundations to which US Pugwash appealed to for funds proved less interested than Eaton in its conferences and its work. When the Alfred P. Sloan Foundation rejected a proposal in October 1963, a representative of the foundation explained, "A grant for the purpose you have outlined, worthy as this is, does not in our opinion have sufficient priority to 'bump' (to use an old World War II air travel phrase) any of those projects which we now have under careful scrutiny." The following year, Harrison Brown described the "larger foundations" as "jittery and reluctant to help."<sup>74</sup> As the head of the US Pugwash group, Feld spent an increasing amount of time searching for funds to make up for the shortfall resulting from the Eaton decision. The situation was serious, as he wrote in June 1963, "We have, at present, practically no funds at hand." A few months earlier, the American Academy of Arts and Sciences officially linked itself to the US Pugwash group by creating a 'dedicated' Pugwash Committee to help organize future conferences. Feld took charge of this committee, which undertook a push to raise \$200,000 from US Foundations to meet the financial need.

In its 1963 fundraising campaign, US Pugwash approached about thirty foundations, ranging from the Max Ascoli Fund to the World Peace Foundation. Fifteen of them were ultimately "flops," as Feld put it. The foundations approached were as varied as the rejections. The Carnegie Endowment for International Peace turned down the request for a long-term grant (but remained open to travel grant requests). The Old Republic Charitable Foundation as well as the Johnson Foundation did not bother to reply. The New World Foundation confessed that they had not yet looked at the application, while the Danforth Foundation had not yet decided whether to fund the proposal. The William C. Whitney Foundation was a flat "no" for 1963, while the Ascoli Fund responded that "a grant of the size mentioned [...] is completely out of

73 Feld, undated (1963) draft letter; Feld Memo, 31 December 1964; Feld to Doty, 11 May 1964; Memo from Feld, "Financial Status," 1 October 1965; Financial Report on Pugwash-COSWA for the period of 1 April 1965–31 March 1966, Folder 429: Fundraising, 1963–1972, 2/3, Box 41. All BTF Papers.

74 L.H. Farinholt to Frank Long, 10 October 1963, Folder 434: Fundraising: Alfred P. Sloan Foundation, 1964–1973, Box 42. Harrison Brown to Agnes Meyer, 25 August 1964, Folder 429: Fundraising, 1963–1972, 1/3, Box 41. Both BTF Papers.

the question.” The Maurice and Laura Falk Foundation replied that its “funds [are] already earmarked,” while the Field Foundation “does not make grants of this type.” Finally, the Alfred P. Sloan Foundation was “not in a position at this time to assist.” Nine proposals remained outstanding, but a later update noted that seven of these had been rejected.<sup>75</sup>

In an appeal for funds in 1964, Harrison Brown explained Pugwash’s financial precariousness. “The American Pugwash group has been attempting to diversify its sources of funds ever since it ceased accepting Mr. Eaton’s sponsorship. [But] success has been modest.” US Pugwash made do with small grants from a variety of sources. Over the next four years, the Christopher Reynolds Foundation and the Edgar Stern Family Fund each pledged \$5,000 a year. The American Academy of Arts and Sciences (AAAS) was also a consistent source of funding, supplying money through various committees, including \$10,000 from its Committees on Research Funds Grant in May 1964 and an additional \$5,000 for the upcoming conference in 1965. In March 1966, US Pugwash received almost \$10,000 from the AAAS Permanent Science Fund.<sup>76</sup>

The financial situation improved in 1965 and 1966, when the Ford Foundation began to supply substantial assistance, including, at one point, about \$20,000 per year. Other Ford money made its way to Pugwash via the AAAS (\$2,000), the NAS (\$2,500), and the Ford Foundation’s International Studies of Arms Control (\$2,000). Also in 1965 and 1966, \$5,000 grants came from the American Committee for the Weizmann Institute for Science, and \$4,000 from the Institute of International Education. In July 1968, the William and Mary Swartz Foundation provided \$15,000 – ‘Bill’ Swartz had been a longstanding supporter of the Pugwash project until his death in 1987.<sup>77</sup>

75 Feld, undated (1963) draft letter; Feld memo, 7 June 1963, Folder 429: Fundraising, 1963–1972, 1/3, Box 41. Report on Foundations Approached for Financial Support, undated [1963], Folder 429: Fundraising, 1963–1972, 2/3, Box 41. Both BTF Papers.

76 Harrison Brown to Agnes Meyer, 25 August 1964; Feld memo to AAAS Pugwash Committee, 11 May 1964; Ralph W. Burhoe, Executive Officer, to David Hunter, Edgar Stern Family Fund, 21 April 1964; Harlow Shapley, Chairman of Committees on Research Funds (AAAS), to Feld, 19 March 1965, Folder 429: Fundraising, 1963–1972, 1/3, Box 41. BTF Papers. Income (1 October 1, 1964 – 15 September 1965); Financial Report on Pugwash-COSWA for the period of 1 April 1965–31 March 1966, Folder 429: Fundraising, 1963–1972, 2/3, Box 41. BTF Papers.

77 Feld to Doty, 11 May 1964, Folder 429: Fundraising, 1963–1972, 1/3, Box 41. BTF Papers. Stanley Gordon, Ford Foundation, to Feld, 18 November 1965; Stanley Gordon, Ford Foundation, to Feld, 18 November 1965, Folder 447: Fundraising: Ford Foundation, 1968–1971, 1/2, Box 42. BTF Papers. Pugwash-COSWA Financial Report 1 April 1965–30 September 1966; Financial Report for the Period of 1 April 1968 – 31 July 1968, Folder 429: Fundraising, 1963–1972, 2/3, Box 41. BTF Papers.

In 1966 a staffer with US Pugwash compiled a list of "Good guys" and "Bad guys" in terms of funding. The good included the Rockefeller, Alfred P. Sloan, Christopher Reynolds, and Danforth Foundations, as well as the Carnegie Endowment. The bad guys included the *Washington Post* Foundation, the World Peace Foundation, and the Old Republic Charitable Foundation. The Edgar Stern Foundation was on this list as well, rather surprisingly since the foundation had provided substantial funding in previous years.<sup>78</sup>

US Pugwash also relied on small donations from individuals, mostly the organization's participants and associates – "alumni," as Feld put it. The donations varied widely; in 1963 they ranged from \$25 from Freeman Dyson to \$500 from Mrs. Cyrus Eaton. The following year, US Pugwash received contributions from fourteen individuals ranging from \$15 to \$100, totaling just over \$850. 1965 saw \$25 contributions from 17 individuals, for a total of \$425. Large donations occasionally arrived as well, such as W.H. Rayner's \$4000 gift in 1965 to the AAAS Pugwash Committee. Individual gifts in 1966 tallied just under \$1,000, with twenty-three individuals giving between \$25 and \$200; in 1968 they ranged from \$25 to \$100 from fourteen individuals, numbers which repeated the following year. The rate of donation continued in 1970, ranging from \$25 to \$1,200. The "alumni" who gave over the years included well-known scientists and Pugwash figures including Feld, Hans Bethe, Freeman Dyson, Frank Long, Eugene Rabinowitch, Harrison Brown, Jack Ruina, Walter Selove, Victor Weisskopf, Jay Orear, Carl Djerassi, and George Rathjens.<sup>79</sup>

Pugwash held conferences, and conferences meant expensive travel. Most of US Pugwash's money, therefore, went to pay for scientists' travel to the various meetings and conferences. From April 1963 to May 1964, for example, US Pugwash spent about \$11,000 on travel, out of \$17,665.59 in total expenditures. Travel to the conference in Udaipur, India, in January 1964 alone cost \$6,300. Feld estimated in September 1965 that the AAAS Pugwash Committee needed \$10,000 to pay for scientists' travel to the Addis Ababa conference in December 1965, much of it earmarked for African, Asian, and Latin American scientists

78 Jane [no last name but probably Zoba; worked with Voss] to Feld, 4 January 1967, Folder 429: Fundraising, 1963–1972, 3/3, Box 41. BTF Papers.

79 Handwritten chart, December 1963 to November 1964; Handwritten chart, "Date, Name, Purpose, Amount," undated, January 1965 to May 1965; Jon Voss, Executive Officer, to W.H. Rayner, 4 May 1965; Handwritten chart, "1966 rec'd," May 1966 to December 1966; Feld memo, 29 April 1966; Handwritten chart, "1967 rec'd," November 1967 to May 1968; Handwritten chart, "1968 rec'd," December 1968 to May 1969; Chart, Folder 429: Fundraising, 1963–1972, 1/3, Box 41. BTF Papers. Financial Report for the period of 1 April 1963–26 February 1964, Folder 429: Fundraising, 1963–1972, 2/3, Box 41. BTF Papers.



who especially needed the funding.<sup>80</sup> By this time, supporters of arms control who had money to give increasingly had other causes to consider. For example, in August 1964, Pugwash lost out when Agnes Meyer gave \$2,500 to the *Bulletin of the Atomic Scientists*, in light of which she felt therefore that “I cannot make any more contributions this year to the Pugwash Conference.”<sup>81</sup>

Another huge expense for US Pugwash was the annual contribution it was required to make to the International Pugwash office in London – a requirement imposed by the Continuing Committee on all the national groups. The London office had not received tax exempt status, a circumstance that was putting Rotblat “in serious financial trouble,” according to Feld. Postponing payment to London, he explained, would allow US Pugwash to “squeak through,” but would be “a failure on our part to fulfill an obligation.” In 1964, US Pugwash sent \$3,900 to London, under half of the \$8,000 they had hoped to contribute. The Soviet Academy of Sciences also gave money to the London office on behalf of Soviet Pugwash, but just \$3,000 of it was in western currency; the remainder was a credit for 5,000 rubles, “most of which could not be used,” Feld noted. The AAAS Pugwash Committee asked participants old and new to give \$25 per year for the London office. Travel ate up \$18,000 of the September 1966 budget, along with \$2,000 to the London office and \$2,000 for administrative costs. In July 1968, the pattern reversed, as contributions to the London office jumped to \$20,000 and actually eclipsed travel expenditures.<sup>82</sup>

Little changed as the new decade began. Feld bemoaned the stinginess of potential alumni donors in 1970. “I was very disappointed in the (lack of) response to the appeal for financial help,” he wrote. “Both members responding and the amount received to date fall very far below your response in previous years.” Although US Pugwash had \$20,000 from the Ford Foundation as well as a grant from the Adlai Stevenson Foundation to cover conference expenses, the group still needed funding to make up for a \$4,000 deficit from

80 Financial Report for the period of 1 April 1963–26 February 1964, Folder 429: Fundraising, 1963–1972, 2/3, Box 41. BTF Papers. Feld memo to AAAS Pugwash Committee, 11 May 1964; Feld to George Harrar, Rockefeller Foundation, 16 September 1965, Folder 429: Fundraising, 1963–1972, 1/3, Box 41. BTF Papers.

81 Mrs. Eugene [Agnes] Meyer to Harrison Brown, 27 August 1964, Folder 429: Fundraising, 1963–1972, 1/3, Box 41. BTF Papers.

82 Feld memo to AAAS Pugwash Committee, 11 May 1964; Ralph W. Burhoe, Executive Officer, to David Hunter, Edgar Stern Family Fund, April 21, 1964; Feld Memo, 31 December 1964, Folder 429: Fundraising, 1963–1972, 1/3, Box 41. BTF Papers. Financial Report on Pugwash-COSWA for the period of 1 April 1965–31 March 1966; Pugwash-COSWA Financial Report 1 April 1965–30 September 1966; Financial Report for the Period of 1 April 1968–31 July 1968, Folder 429: Fundraising, 1963–1972, 2/3, Box 41. BTF Papers.

1969, to cover \$20,000 in travel expenses for the twentieth Pugwash Conference in Fontana in the US in 1970, and to contribute \$10,000 to the London office.<sup>83</sup>

Two years later, not only was the group's major Ford grant expiring, but inflation in the US economy was also putting US Pugwash "in a growing financial bind," as Feld put it. The organization was "just barely solvent, with no cushion to provide for carrying out any new activities." Feld sought to replace the Ford money with support from "interested foundations, internationally involved corporations, and sympathetic individuals," hopefully something in the \$5,000 to \$10,000 range. In the meantime, he asked the "individual friends of Pugwash" for contributions. In response, he received \$25 from Martin Kaplan, \$25 from Robert Marshak, \$30 from John Toll, \$50 from Herbert Scoville, \$100 from Carl Djerassi, and \$40 from Walter Selove.<sup>84</sup> After a decade of fundraising, US Pugwash continued to struggle to stay afloat financially.

## 6 Conclusion

In late 1967, the physicist and long-standing American Pugwashite Richard Garwin reflected on its conferences and came to the view that they had "accomplished almost nothing." At the same time, however, Garwin admitted that the discussions it held and encouraged had educated people, "some of whom are very important." He wondered why Pugwash "is so unloved" in the United States that it struggled to raise a measly few thousand dollars for its endeavors.<sup>85</sup> Why this lack of love? US Pugwash scientists do not appear to have discussed the problem openly. But anti-communism had dogged the group since the early 1960s, and that must have had at least a small part in the negative image of Pugwash among US government officials.

In its first encounter with anti-communism, senior figures within the US Pugwash group dismissed Senator Thomas Dodd's attacks on it. Yet Dodd's views of the organization had powerful effects, setting a long term narrative that future critics of the conferences relied on. State Department complaints that public statements during the conferences aided Soviet propaganda efforts

83 Memo from Feld to US Pugwash Alumni, January 23, 1970, Folder 429: Fundraising, 1963–1972, 1/3, Box 41. BTF Papers.

84 Feld letter, "Report on the year 1972," Folder 429: Fundraising, 1963–1972, 1/3, Box 41. BTF Papers.

85 Garwin to Voss, 3 October 1967, Folder 395: Pugwash Correspondence, 1958–1975, G: 1963–1972, Box 39. BTF Papers.

basically echoed Dodd's characterization of Pugwash scientists as puppets of Soviet propagandists, and although Rabinowitch, Brown, Glass and colleagues needed access to the US government, they were not willing to bend to the State Department's demands that they muzzle their peers at Pugwash conferences. When journalists revealed the CIA's role in funding US cultural organizations, it became clear that US Pugwash feared being manipulated by the US government much more than it worried over the role of communism in the movement. Anti-communism did not destroy Pugwash in the US, but it hampered the group's efforts and revealed a dilemma at the heart of the organization. To maintain its independence, senior figures within the American Pugwash group essentially ignored criticisms of it as serving Soviet interests. But alienating the State Department and the White House ran the risk of losing the chance to influence US arms control policy.

The character, strategies and priorities of the American Pugwash group and of the wider international collective, which was overseen by the London-based Continuing Committee, changed in the wake of dramatic changes in the Cold War and the arms race. After the Cuban Missile Crisis of October 1962, the superpowers entered a period of *détente*, symbolized by several hard-won but landmark arms control agreements: the 1963 LTBT, the 1968 Non-Proliferation Treaty, and the 1972 Anti-Ballistic Missile Treaty. European *détente* too was also developing in the course of the 1960s. The superpower confrontation shifted markedly to the Third World, in particular the devastating US war in Vietnam that only ended in 1975. With the superpowers meeting frequently and agreeing on the need for arms control, Pugwash – its scientists, conferences, Study Groups and so forth - risked becoming less useful to policymakers, a dilemma recognized at the time by the Pugwash leadership, at both national and international levels. Moreover, it faced stiffening competition as a channel of cross-bloc communication and dialogue. As Feld told an interviewer in 1981, during the years of *détente*, Pugwash “seemed less and less interesting, because there were a lot of channels for discussion.”<sup>86</sup> Even without problems caused by allegations of communist and CIA influence, the US Pugwash group would have faced an increasingly difficult struggle to continue to influence policy.

US government officials had offered US Pugwash a way to remain close to policymakers, when Thompson and Scoville at the State Department had implied that if US scientists muzzled their Soviet counterparts, they would find their organization better favored in Washington circles. But to change to suit

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86 Quoted in Rubinson, *Redefining Science*, 142.

the State Department would have been seen as a betrayal of the independent spirit of Pugwash, and it would have also confirmed the growing fears among European Pugwash scientists alarmed at the thought of the CIA and other US government agencies influencing the group. The US Pugwash group never took any official position on this dilemma, but its refusal to submit to State Department demands reflected a willingness to sacrifice political influence in order to maintain their political independence. In the process, US Pugwash resisted the polarization of the geopolitical world during the Cold War and survived the anti-communist era of the United States with its integrity still intact.

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## Minding the Gap: Zhou Peiyuan, Dorothy Hodgkin, and the Durability of Sino-Pugwash Networks

*Gordon Barrett*

The trajectory of Sino-Pugwash relations between 1960 and 1985 was as much a consequence of the persistence of the scientists of Pugwash as it was the shifting political tides in the People's Republic of China (PRC). A great deal changed in the twenty-five-year gap in Chinese participation in the Pugwash Conferences on Science and World Affairs (PCSWA) between 1960 and 1985. When in 1985 Chinese delegates departed for the thirty-fifth Pugwash Conference in Campinas, Brazil, their country's international and domestic circumstances differed markedly to those prevailing in 1960 when the country's last delegation had traveled to Moscow for the Sixth Conference. The PRC had become a firmly-established nuclear power, having conducted successful atomic and hydrogen bomb tests in the mid-1960s. Chinese relations with both superpowers also underwent dramatic reversals: the Sino-Soviet Alliance faltered then disintegrated completely by the early 1960s, followed in the early 1970s by a thaw in Sino-American relations which saw *rapprochement* developing into full diplomatic recognition by the end of the decade. Such developments took place against a domestic backdrop of tremendous political, economic, and social upheaval. Under Chairman Mao Zedong, the Chinese Communist Party (CCP) pursued increasingly radical policies in the 1960s, culminating in the Cultural Revolution (1966–76). By the time of the Campinas Conference in 1985, Deng Xiaoping's "reform and opening up" (*gaige kaifang*) program was into its seventh year and Deng was established as "paramount leader" of both the CCP and the PRC.

Throughout these two and a half decades, key members of the Pugwash Continuing Committee, later renamed the Pugwash Council, remained committed to re-engaging with Chinese scientists. They were not only motivated by China's becoming a nuclear weapons state in 1964, but also by the geopolitical significance of the country throughout this period. This reflected the Continuing Committee's broad remit: it was responsible for organizing international events carried out under the "Pugwash" banner such as the conferences, but also organizing public declarations and working to make "private interven-

tions in time of crisis.<sup>1</sup> This chapter examines episodes during both the 1960s and 1970s during which both China's development of nuclear weapons and military crises in Asia triggered concentrated efforts by members of the Continuing Committee to contact and arrange meetings involving Chinese scientists.

These episodes elucidate two important facets of the development of Sino-Pugwash relations as well as the evolution and complexity of Pugwash as a transnational actor in the Cold War. First, Continuing Committee members viewed the conferences and, indeed, even the Pugwash name, as a means to initiate dialogue rather than an end in itself. While they were consistently keen to see Chinese scientists back at official Pugwash events, they readily lent support to proposals for comparatively informal initiatives like private discussions without the "Pugwash" name attached. These senior figures included successive Secretaries-General: physicists Joseph Rotblat (1957–1973) and Bernard T. Feld (1973–1976), and the virologist Martin M. Kaplan (1976–1988).

Based at St Bartholomew's Hospital in London from the late 1940s until his retirement, Joseph Rotblat had previously worked on the Manhattan Project before leaving in 1944 on learning that Germany's atomic ambitions would not come to fruition and that the new weapon might be used by the US and its allies against Japan.<sup>2</sup> He was central to the Pugwash project from its inception, on both a symbolic and an organizational level, reflected in his being jointly awarded the 1995 Nobel Peace Prize with the PCSWA.<sup>3</sup> Bernard T. Feld was professor of physics at Massachusetts Institute of Technology (MIT), and joined the Continuing Committee in 1963, having worked with Rotblat on the Manhattan Project: his involvement with Pugwash began when he attended the 1958 conference in Kitzbühel/Vienna, Austria.<sup>4</sup> A senior figure in the World Health Organization, Martin M. Kaplan had also been at the Kitzbühel-Vienna conference, and quickly became a key figure in developing Pugwash's work on chemical and biological weapons.<sup>5</sup> Tellingly, Joseph Rotblat described

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- 1 Joseph Rotblat, *Scientists in the Quest for Peace: A History of the Pugwash Conferences* (Cambridge, MA: MIT Press, 1972), 34.
  - 2 On Rotblat's departure from the Manhattan Project, see: Andrew Brown, *Keeper of the Nuclear Conscience: The Life and Work of Joseph Rotblat* (Oxford: Oxford University Press, 2012), 54–58.
  - 3 Brown, *Keeper*. Jack Harris, "Joseph Rotblat and Pugwash" in *Joseph Rotblat*, eds. Reiner Braun, Robert Hinde, David Kriege, Harold Kroto and Sally Milne (Weinheim: Wiley-VCH, 2007), 3–14.
  - 4 A collection of reminiscences about Feld, including by Rotblat, can be found in: "Remembering Bernie," *Bulletin of the Atomic Scientists (BAS)* 49 (1993): 13–17.
  - 5 For a detailed account of Pugwash work in this area, including Kaplan's role, see: Julian P. Perry Robinson, "The Impact of Pugwash on the Debates over Chemical and Biological Weapons," *Annals of the New York Academy of Sciences* 886 (1998), 224–52.



Pugwash in these early years as “amorphous in its structure. The only link between the various activities [was] the Continuing Committee, and this body too worked for a time without any well-defined rules.”<sup>6</sup> Fuzzy boundaries were characteristic of how the international organization operated from its earliest days.

While members of the Continuing Committee may have played an important role in these private or unofficial initiatives, the second crucial factor was the contributions made by a constellation of Pugwashites without formal positions within the international organization. Just as Martin Kaplan took on behind-the-scenes work supporting Pugwash long before he held a formal position within it, so too did many other Pugwashites. The Chinese case demonstrates the importance of looking at Pugwash beyond the PCSWA and, indeed, the international organization, demonstrating the extent to which it needs to be considered as a “transnational network of scientists with a global reach.”<sup>7</sup> Recent work on transnational scientific networks has emphasized their contribution to knowledge circulation and consensus-building.<sup>8</sup> Although these may have been their long-term or overarching aims, the episodes analyzed in this chapter show Pugwash networks working toward a more immediate and fundamental outcome, carving out channels for communication on issues of concern to members of these networks. As will be seen, the MIT-based biophysicist and molecular biologist Alexander Rich was a driving force in attempts to create a channel of communication with China via Ghana during the mid-1960s. In order to do so, he enlisted the help of another Pugwashite, one with strong ties to both China and Ghana: the eminent Oxford-based biochemist Dorothy M.C. Hodgkin. Awarded the 1964 Nobel Prize in Chemistry for her pioneering work in x-ray crystallography, having confirmed the structures of penicillin and vitamin B<sub>12</sub>, Hodgkin went on to lead the team that also determined the structure of insulin.<sup>9</sup> Dorothy Hodgkin was equally active and influential outside the laboratory, however, and quickly established herself as a primary “node” for unofficial contact with China not long after her first attendance at a PCSWA in London in 1962. She drew on a crucial combination of left-wing credentials and academic accomplishment, cultivating contacts

6 Rotblat, *Quest*, 8.

7 Alison Kraft and Carola Sachse, “Introduction,” this volume.

8 Simone Turchetti, Néstor Herran, and Soraya Boudia, “Introduction: Have We Ever been ‘Transnational’? Towards a History of Science Across and Beyond Borders,” *British Journal for the History of Science (BJHS)* 45, no. 3 (2012): 331–334.

9 Comprehensive discussions of Hodgkin’s life, research, and activism see: Georgina Ferry, *Dorothy Hodgkin: A Life* (London: Granta Books, 1998). Guy Dodson, “Dorothy Mary Crowfoot Hodgkin,” *Biographical Memoirs of Fellows of the Royal Society* 48 (2002): 179–219.

not only with high-level party-state officials such as ambassador and later Foreign Minister, Huang Hua, but also numerous influential Chinese scientists. Hodgkin would go on to serve as Pugwash President from 1975 to 1988, but like Kaplan, her earliest Pugwash-related efforts were entirely informal. Both before and after becoming President, Hodgkin was a key player in Pugwash efforts to engage with China.

Alongside Hodgkin, the other crucial node for contact during the twenty-five-year gap in Chinese participation in the Pugwash conferences was the Chinese theoretical physicist Zhou Peiyuan.<sup>10</sup> Indeed, Zhou was the central point of continuity in Chinese relations with the Pugwash organization from the first conference in 1957 until his death in 1993. He was the sole Chinese participant at the second and fourth Pugwash conferences, held in Lac Beauport and Baden in 1958 and 1959 respectively, before leading the Chinese delegation at the sixth conference in Moscow in 1960. Twenty-five years later, Zhou also headed the delegation to the Campinas conference in Brazil in 1985 that signaled the PRC's re-engagement with the organization. By then well into his eighties, following this conference he took up a place on the Pugwash Council and helped to organize the forty-first PCSWA held in Beijing in 1991. Thus Zhou Peiyuan was every inch a Pugwashite. Based at Peking University for most of his career, he was simultaneously a prominent scientific, administrative, and political figure in the PRC.<sup>11</sup> His very engagement with Pugwash initially came at the behest of the party-state, having been selected, prepared, and debriefed by foreign relations officials for the Pugwash conferences he attended between 1957 and 1960.<sup>12</sup> Thus, of the Pugwashites who sought to strengthen links across the Bamboo Curtain during the 1960s and 1970s, Zhou arguably faced the greatest and most complex challenges in managing both transnational and national loyalties, doing so within a domestic political context of profound political upheaval and change taking place within China during these decades.

10 During the period covered in this chapter, Zhou's name was romanized in a variety of ways, including: Chou Peiyuan and Chou P'ei-yüan.

11 On Zhou's life and career, see: Mary Brown Bullock, "American Science and Chinese Nationalism: Reflections on the Career of Zhou Peiyuan" in *Remapping China*, eds. Gail Hershatter, Emily Honig, Jonathan N. Lipman and Randall Stross (Stanford, CA: Stanford University Press, 1996), 210–223. Jinian Zhou Peiyuan danchen 100 zhounian huodong bangongshi [Office for Activities Commemorating the 100th Anniversary of Zhou Peiyuan's Birth] (eds.), *Zongshi jujiang baoshuai kaimo – jinian Zhou Peiyuan wenji* [*Great Scholar and Master, Exemplary Model: A Collection Commemorating Zhou Peiyuan*] (Beijing: Xueyuan chubanshe, 2002).

12 Gordon Barrett, "China's 'People's Diplomacy' and the Pugwash Conferences, 1957–1964," *Journal of Cold War Studies* 20, no. 1 (2018): 140–169.

## 1 The 1960s: Walking Away, Going Informal

The Moscow conference of 1960 would come to mark a turning point in Chinese relations with the PCSWA. While available archival evidence, either personal or institutional, remains limited on the Chinese side, documents from China's Ministry of Foreign Affairs do provide some insight into official opinions and positions on Pugwash at the turn of the decade. Behind closed doors in Beijing, opinion had some months earlier already turned against future participation at Pugwash conferences, amid growing perceptions of it as too dominated by Soviet, American, and British interests and therefore not as malleable or sympathetic to Chinese interests as were other international organizations.<sup>13</sup> Even Zhou Peiyuan lent his support to this view, although this was perhaps less a reflection of his personal beliefs than the direction in which the political winds were blowing in Beijing, as the Chinese bomb project also got underway.<sup>14</sup> Sending a delegation to Moscow in 1960 had been driven by a desire to maintain the façade of Sino-Soviet cooperation, but this was a dwindling incentive as the Sino-Soviet split became increasingly apparent and acrimonious. Thus, the view among PRC policymakers was that the Pugwash organization was not "red" enough or, more accurately, the wrong shade of "red."

At the same time, key architects of the PCSWA sought to formalize and expand the conferences and simultaneously shake off the reputation of them – among some in the West, particularly the United States – as a hotbed of communist sympathizers and fellow travelers or ultimately a communist "front organization."<sup>15</sup> The treatment of Cyrus Eaton by the some within the Pugwash leadership did much to reinforce Beijing's perceptions in the early 1960s.<sup>16</sup> An early and outspoken sponsor of the PCSWA, Eaton's pro-Soviet stance and politically controversial public pronouncements were increasingly viewed by senior western Pugwashites as a liability: the association with him was a source of negative publicity, and 1960 was a tipping point. Eaton liked to play up

13 This can be seen, for example, in an influential assessment from early September: Beijing, Archive of the Chinese Ministry of Foreign Affairs (CMFA), Folio 113-00343-01, Quanguo kexie dangzu [Party Leadership Group, Scientific and Technical Association of the PRC] to Duiwai wen wei [Foreign Cultural Liaison Committee] and Waiban [Foreign Affairs Office], 2 September 1960.

14 Zhou Peiyuan and Yu Guangyuan to Waiban [Foreign Affairs Office], Duiwai wen wei [Foreign Cultural Relations Committee] and Kexueyuan dangzu [Chinese Academy of Sciences Party Leadership Group], 10 October 1960. CMFA, 113-00343-01.

15 These tensions, perceptions, and responses in the United States are discussed in depth by Paul Rubinson in chapter four.

16 On Eaton, see Carola Sachse's chapter in this volume.

his association with the PCSWA and many media reports portrayed the conferences as Eaton's own undertaking, something which Eaton encouraged. A United Press International (UPI) story in September 1960, "Eaton to Sponsor Moscow Session," prompted the three American members of the Pugwash Continuing Committee, Eugene Rabinowitch, Harrison Brown and Bentley Glass, to write a joint letter to influential newspapers and periodicals such as *The Washington Post*, which had carried the UPI story, downplaying Eaton's influence in the PCSWA and seeking to distance the US Pugwash group from him.<sup>17</sup> While this intervention might have changed some readers' minds, it did little to change the tenor of reporting by UPI itself: in November it circulated a story that again portrayed Eaton as a central figure in the Pugwash organization.<sup>18</sup> But from the Chinese perspective, Eaton's association with the conferences was an attraction rather than a liability. Beijing found his public political pronouncements far from vexing and, although he had never been to China, he was also a vocal advocate of engagement with the PRC. In July 1960, Eaton included a blistering attack on American policy toward the PRC in his remarks to reporters after being presented with the Lenin Peace Prize at his estate in Pugwash, Nova Scotia.<sup>19</sup> Attempts by American Pugwashites to publicly break with Eaton were thus poorly received in China. Indeed, even as late as 1962, foreign relations officials cited such efforts to distance the PCSWA from Eaton as evidence of the pervasiveness of "reactionary" American influence over the conferences.<sup>20</sup>

After the Moscow conference in 1960, subsequent invitations from the Pugwash Continuing Committee and formal efforts to reach China went unanswered. Other initiatives via comparatively informal channels, employing intermediaries like Dorothy Hodgkin, got further and even came close to fruition in 1965. Although unsuccessful in bringing the PRC back into the Pugwash

17 Brown, Glass and Rabinowitch also wrote to the *BAS* to this effect, where it was published in 1960. "Scientists and Cyrus Eaton," letter to the editor, *BAS* 16, no. 8 (1960): before 306, 345. On Eaton's relationship with the US Pugwash group, see Paul Rubinson's chapter in this volume.

18 "Pugwash Conference Slated for Moscow," *Washington Post*, 19 November 1960, A6.

19 See, for example: Harrison Salisbury, "Lenin Prize Received by Eaton during Scots Fete in Pugwash," *New York Times*, 2 July 1960, 37. On the controversy surrounding Eaton in the USA and the prize presentation in particular, see: Maurice Gleisser, *The World of Cyrus Eaton* (Kent, OH: Kent State University Press, 2005), 233–264. Carola Sachse provides a detailed discussion of Eaton's turbulent relationship with the PCSWA and, these episodes in particular, in chapter two.

20 [Zheng] Tuo, comment on letter from Joseph Rotblat to Zhou Enlai, 25 August 1962. CMFA, 113-00422-02.

fold, these interactions established individuals like Hodgkin as vital conduits for informal contact. They also show the extent to which informal Pugwash networks were functional, meaningful units operating well beyond the conferences themselves. At this stage, Hodgkin was a Pugwashite by virtue of having attended the Tenth PCSWA in 1962, but had no formal relationship with Pugwash. She also had longstanding personal connections that fed her interest in China. While studying at Somerville College, Oxford, in the early 1930s she became friends with an undergraduate chemist, Liao Hongying. Liao was a passionate leftist who, starting in the 1950s, became heavily involved in the PRC-supporting Britain-China Friendship Association (BCFA).<sup>21</sup> In 1959, Hodgkin made her first trip to China, as part of a BCFA-organized delegation which also included Liao. Hodgkin's participation had come at the invitation of her friend, fellow biochemist, and pre-eminent "foreign friend" (*waiguo pengyou*) of the PRC, BCFA President Joseph Needham.<sup>22</sup> Like Hodgkin, Needham had longstanding ties to China. Indeed, his passionate support for international scientific exchange and cooperation was in fact closely tied to his Chinese connections, fostered while traveling extensively throughout the country between 1943 and 1946 as head of the British Council-sponsored Sino-British Science Cooperation Office. His desire to facilitate Sino-foreign exchange continued after the Second World War, both while heading UNESCO's Natural Sciences Section and after returning to his academic post at Cambridge.<sup>23</sup> Hodgkin may not have known it at the time but in having facilitated her visit, Needham and the BCFA will have helped to smooth the way for Hodgkin's future travels to the PRC and her future dealings with Chinese scientists and officials.

Hodgkin's next visit to China in autumn 1965 took place in the midst of a complex and long-term plan to resume Sino-Pugwash dialogue in which

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- 21 See: Innes Herdan, *Liao Hongying: Fragments of a Life* (Dereham: Larks Press, 1996), especially Part 5.
- 22 Oxford, Bodleian Library, Papers and Correspondence of Dorothy Mary Crowfoot Hodgkin (DHP), Needham to Hodgkin, Midsummer Day 1959. DHP: MS. Eng. c.7950, F.1. On Needham and the BCFA's relationship with China in this period, see: Tom Buchanan, *East Wind: China and the British Left, 1925–1976* (Oxford: Oxford University Press, 2012), 142–178. On the range of foreigners hosted by the PRC in this period, see: Julia Lovell, "The Uses of Foreigners in Mao-Era China: 'Techniques of Hospitality' and International Image-Building in the People's Republic, 1949–1976," *Transactions of the Royal Historical Society* 25 (2015): 135–58.
- 23 On Needham's internationalist activities during and after the war, see: Thomas Mougey, "Needham at the Crossroads: History, Politics, and International Science in Wartime China (1942–1946)," *BJHS* 50, no. 1 (2017): 83–109. Gordon Barrett, "Between Sovereignty and Legitimacy: China and UNESCO, 1946–1953," *Modern Asian Studies* (forthcoming). <https://doi.org/10.1017/S0026749X17001159>.

Hodgkin was the central, crucial figure. The trip came about thanks in part to an invitation by the British Council and British Embassy in Tokyo to deliver lectures at a British Exhibition to be held in the city in September.<sup>24</sup> From the outset, Hodgkin saw this as a way to return to China after completing these commitments in Japan. On Needham's advice, she used her ties to the Royal Society (London) to secure an invitation from the Chinese Academy of Sciences.<sup>25</sup> It was one of the shorter trips she would make to China, but it did represent a further opportunity to consolidate her ties within the PRC's scientific community. It simultaneously reinforced her status as a sympathetic, well-connected, and high-status foreigner with a strong interest in the country.

It was not just these connections that made her such a high-value interlocutor for Pugwash when it came to China. She also had high level political and academic connections in Ghana via her husband Thomas' work for President Kwame Nkrumah's government and the University of Ghana.<sup>26</sup> An important figure in both the Pan-African and Non-Aligned movements, Nkrumah had sought to navigate the tricky waters between Cold War blocs following Ghanaian independence in 1957. However, by the early 1960s, Nkrumah's government had shifted toward socialism and the USSR and PRC were actively courting the country with offers of financial and military assistance.<sup>27</sup> Sino-Ghanaian relations grew to be among the most positive in the region and Ambassador Huang Hua's embassy in Ghana served as a hub for the PRC's diplomatic efforts in West Africa.<sup>28</sup> By 1964, Huang was one of the most influential diplomats in the country.<sup>29</sup> Hodgkin's first Pugwash-related efforts in Ghana saw her reach out to Huang in early 1965 after formal invitations issued to China for the Eleventh PCSWA had gone unanswered.<sup>30</sup> In this, she was acting entirely informally to support Pugwash, using her own contacts as an alternative channel for communication with Chinese officials. Hodgkin may not have met with success, but her intervention paved the way for a new plan to try and re-establish Sino-Pugwash relations.

24 R.P.H. Davies to Hodgkin, 1 April 1965, and C.R.S. Menders to Hodgkin, 13 May 1965. DHP, MS.Eng.c.5670/1.

25 Hodgkin to David Martin, 1 June 1965 [copy]. DHP, MS.Eng.c.5670/25.

26 On Hodgkin's connections to Ghana, see: Ferry, *Dorothy Hodgkin*, 347–50.

27 W. Scott Thompson, *Ghana's Foreign Policy, 1957–1966* (Princeton: Princeton University Press, 1969), 162–197. Jeremy Friedman, *Shadow Cold War* (Chapel Hill: University of North Carolina Press, 2015), 120–121.

28 Bruce D. Larkin, *China and Africa, 1949–1970* (Berkeley and Los Angeles: University of California Press, 1971), 64.

29 Thompson, *Ghana's Foreign Policy*, 296–297.

30 Mentioned in Rich to Hodgkin, 1 April 1965. DHP, MS.Eng.c.5680/2.

In April, fellow x-ray crystallographer and biophysicist Alexander Rich wrote to Hodgkin – as someone familiar with Ghana and China – for advice about a plan to hold the next PCSWA in Ghana, and with a view also to creating conditions for the conference that might encourage Chinese participation. Although heavily involved in these plans, Rich was not a member of the Continuing Committee, like Hodgkin. Nevertheless, he did have a connection to the committee via his MIT colleague, Bernard Feld. It was clear from Rich's letter that neither he nor those on the Continuing Committee knew much about Ghana, let alone how to operationalize their plan. For that, they needed someone like Dorothy Hodgkin and that is precisely what she did. Her reply was enthusiastic, suggesting that she could pitch the idea of a PCSWA in Accra to both Huang and Nkrumah next time she was there.<sup>31</sup> Just before returning to Ghana in June, however, Rich informed her that for logistical reasons the Continuing Committee had instead taken up an existing invitation to hold the next Pugwash Conference in Addis Ababa, Ethiopia. Instead, Rich proposed a new plan, this time for a smaller-scale meeting in Ghana focused on Chinese scientists' involvement.<sup>32</sup> Once in Ghana, Hodgkin met with Huang and was encouraged both by the ambassador's suggestion to discuss the proposal with Nkrumah and the Ghanaian President's subsequent favorable response.<sup>33</sup> The Ghana Academy of Sciences (GAS), of which Hodgkin was an Honorary Fellow, signaled its willingness to potentially host such a meeting in Accra.<sup>34</sup> All of these interactions seemed to augur well for a meeting, even Huang's non-committal rather than wholly negative response.

A plan based on Hodgkin's soundings began to take shape. Crucially, Rich and the other US-based Pugwashites with whom he was discussing the initiative indicated they were completely flexible when it came to the format and nature of the meeting. Rich, in particular, was emphatic that the involvement of Chinese scientists was of the utmost significance.<sup>35</sup> Put simply, it did not matter whether or not dialogue was re-initiated under the Pugwash banner, so long as it happened. These American Pugwashites included Bernard Feld, who then developed a plan with Hodgkin, subsequently agreed by the Continuing Committee, in which GAS would organize an informal meeting to be held in early 1966. Pugwash scientists would be involved, but the Pugwash name would not be invoked.<sup>36</sup> Hodgkin, Rich, and other Pugwashites

31 Hodgkin to Rich, 27 May 1965. DHP, MS.Eng.c.5680/2.

32 Rich to Hodgkin, 14 June 1965. DHP, MS.Eng.c.5680/2.

33 Hodgkin to Rich, 27 July 1965. DHP, MS.Eng.c.5680/2.

34 Yanney Ewusie to Hodgkin, 22 July 1965. DHP, MS.Eng.c.5680/2.

35 Rich to Hodgkin, 24 August 1965. DHP, MS.Eng.c.5680/2.

36 Hodgkin to Rich and Hodgkin to Ewusie, 2 September 1965. DHP, MS.Eng.c.5680/2.

worked throughout the Fall to bring about the meeting. Thus, the Committee appeared to share the American Pugwashites' priorities, pragmatically pursuing whichever path seemed to offer the best prospects for bringing about Chinese engagement.

The decision to delay the meeting until 1966 ultimately doomed the plan to failure as, in February, a coup d'état toppled Nkrumah's government. Ghana's geostrategic alignment shifted under the military government that followed, so that Sino-Ghanaian relations soured and the Chinese Embassy closed in November.<sup>37</sup> Alexander Rich was particularly pessimistic following these political developments in Ghana which brought with them the loss of one of the very few remaining conduits for communication with colleagues in China.<sup>38</sup> Things were only going to get worse. Over the following few years, China's burgeoning Cultural Revolution would disrupt and temporarily sever lines of cross-border communication between scientists.

It is unlikely that a tangible proposal or invitation to such a meeting would have ultimately found favor back in Beijing, since Chinese foreign affairs officials would have been aware of the Pugwash connection even without any explicit invocation of the Pugwash name. That prominent scientists associated with Pugwash had been involved in early discussions, however tentative or informal, will have likely connected the meeting with the PCSWA regardless of whether or not the invitation came from the GAS. The topics to be discussed at any such meeting also presented problems from the Chinese point of view. The persistence of the American Pugwashites in seeking to re-establish communication with China was rooted in a desire to discuss not only the intensifying Vietnamese conflict, but also China's first successful detonation of an atomic bomb in October 1964.<sup>39</sup> In Vietnam the PRC was prominently allied to the regime in Hanoi, making it a significant geopolitical player in the conflict.<sup>40</sup> China justified its atomic weapons program as an effort to "put an end to nuclear weapons" by "breaking the nuclear powers' nuclear monopoly," therefore also vocally opposing Non-Proliferation Treaty negotiations as a means for those powers to maintain that monopoly.<sup>41</sup> Any meeting

37 W. Scott Thompson, "Ghana's Foreign Policy under Military Rule," *Africa Report* 14 (1969): 8–13. Friedman, *Shadow*, 121.

38 Rich to Hodgkin, 25 March 1966. DHP, MS.Eng.c.5680/2.

39 Rich to Hodgkin, 24 August 1965. DHP, MS.Eng.c.5680/2.

40 Chen Jian, *Mao's China and the Cold War* (Chapel Hill: University of North Carolina Press, 2001), 205–237.

41 "Jiaqiang guoji liliang de dazhong chengjiu [Major Success in Strengthening National Defence]," *Renmin ribao* [*People's Daily*, hereafter: *RMRB*], 17 October 1964, 1. On China and the NPT, see: Nicola Horsburgh, *China and the Nuclear Order* (Oxford: Oxford University Press, 2015), 59–76.



centered on such pointedly political topics for discussion would have been a non-starter in Beijing if it involved scientists from the nuclear states – from Britain, America, or even the Soviet Union – even if, personally, they were committed to non-proliferation and fiercely critical of the nuclear policies of their own governments. Regardless of their success or failure, however, the efforts of the scientists of Pugwash to establish contact with Chinese colleagues in the mid-1960s reveal the Pugwash project to be something far larger and more amorphous than its conferences. Members of the Continuing Committee took on a supporting role in these initiatives driven forward in practice by Rich and Hodgkin. Their activities and efforts demonstrate the centrality of informal transnational scientific networks to the Pugwash project.

## 2 1970s: Re-establishing Informal Dialogue and Deepening Pugwash Networks

By the late 1970s, prominent Chinese scientists like Zhou Peiyuan were more internationally-mobile than any other time since 1949. This was a product of fundamental changes in the PRC's international position starting earlier in the decade, most prominently signaled by Sino-American *rapprochement*. Domestic political and social upheaval caused by the Cultural Revolution, however, left little meaningful opportunity for Sino-Pugwash engagement before Deng Xiaoping's rise to power as the PRC's "paramount leader" in the years following Mao Zedong's death in 1976. Although Zhou had fared comparatively better during the late 1960s than many other prominent academics or intellectuals, the early 1970s saw him caught up in elite power struggles between rival political factions.<sup>42</sup> Notably, he put his head above the parapet in order to argue for reforms to research and post-secondary education supported by Premier Zhou Enlai, who had long known Zhou Peiyuan, thanks in part to the physicist's years of foreign affairs work.<sup>43</sup> Zhou Peiyuan prepared a lengthy article to be published during May 1972 in the CCP's central media organ, the *People's Daily*. Ultra-leftists associated with the group later labelled the "Gang of Four" held sufficient influence at the newspaper to block the article's publication, seeing it as a call for a return to something closer to the status-quo in education and

42 On early-1970s factional rivalry within the CCP, see: Roderick MacFarquhar and Michael Schoenhals, *Mao's Last Revolution* (Cambridge, MA: Belknap Press of Harvard University Press, 2006), 358–412.

43 See: Bullock, "American Science," 218–20. Barrett, "China's 'People's Diplomacy,'" 147–148.

research and, by extension, an attack on radicalism more broadly.<sup>44</sup> The article was eventually published in October, in the lower-profile national newspaper *Guangming Daily*.<sup>45</sup> Both the article and, indeed, the entire episode ensured that the theoretical physicist was subject to repeated attacks by radicals opposed to Zhou Enlai.

After Zhou Enlai and Mao Zedong both died in 1976, however, the Gang of Four were made scapegoats for the Cultural Revolution. Ever the politically-astute survivor, Zhou Peiyuan deftly navigated the shifting political currents stirred up in the wake of Mao's death. First, the theoretical physicist was among those who published articles praising Mao's influence, published in media organs targeting both domestic and foreign audiences.<sup>46</sup> Zhou was ideally placed to voice support for the CCP while condemning the Gang of Four, having been so publicly attacked by their allies as a "reactionary" a few years earlier. In contrast to 1972, an article by Zhou that damned the Gang's impact on theoretical research was prominently placed in the *People's Daily* in January 1977 and reprinted elsewhere, including in the Chinese journal *Physics*.<sup>47</sup> In subsequent months, the 1972 incident, and Zhou's treatment in particular, would be used to exemplify the "counter-revolutionary opinions" of the Gang and their supporters.<sup>48</sup> The theoretical physicist was an unambiguously Party-supported public figure once again. Yet, political life was still very much in flux in the early post-Mao period under the short, ineffectual tenure of Hua Guofeng. Pugwash did not fall off of Zhou Peiyuan's radar in the 1970s, but in both 1972 and 1977, the shifting political landscape created conditions that made a return to the PCSWA unlikely.

Many senior Pugwashites hoped that a resumption of relations might be possible following the PRC's entry into the United Nations in 1971 and moves

44 On this episode, see: Merle Goldman, *China's Intellectuals: Advise and Dissent* (Cambridge, MA: Harvard University Press, 1981), 162–166; Yan Jiaqi and Gao Gao, *Turbulent Decade: A History of the Cultural Revolution*, trans. D.W.Y. Kwok (Honolulu: University of Hawai'i Press, 1996), 412–414.

45 See: "Dui zonghe daxue like jiaoyu geming de yixie kanfa [A Perspective on the Comprehensive University Science Education Revolution]" in *Zhou Peiyuan wenji* [Collected Works of Zhou Peiyuan] (Beijing: Beijing daxue chubanshe, 2002), 54–58.

46 See: Chou Peiyuan [Zhou Peiyuan], "Chairman Mao's Teachings Are Ineffaceably Engraved on My Heart," *Scientia Sinica* 19 (1976): 734–736.

47 Zhou Peiyuan, "'Sirenbang' pohuai jichu lilun yanjiu yongxin hezai ['Gang of Four' Destroyed the Foundation of Theoretical Research]," *RMRB*, 13 January 1977, 2. *Wuli* [Physics] (1977): 1–3.

48 For example, see: Theoretical Study Group, Academia Sinica, "A Refutation of the 'Gang of Four's' Fallacies to Sabotage Basic Theoretical Research in Natural Science," *Scientia Sinica* 20 (1977): 141.

toward Sino-American *rapprochement*. In a visit in 1972 on her way to an International Union of Crystallography International Congress in Japan, Dorothy Hodgkin was one of the first British scientists to visit the PRC in the 1970s.<sup>49</sup> Her track record of trips to the country, starting with the 1959 BCFA-sponsored tour, and her robust, long-established network of high-level academic contacts there will have eased her way. It may have been a whirlwind visit focused on meetings with crystallographers and biochemists involved in mapping the structure of insulin, but while in Beijing she nevertheless made time to visit Zhou Peiyuan at Peking University.<sup>50</sup> Hodgkin's record of the journey does not detail what they discussed, but this encounter served to solidify their personal connection.

Subsequent years saw a significant change in Hodgkin's relationship with Pugwash, most notably in 1975 when she became its President. This was still a relatively new office, having been created in 1967 at the seventeenth PCSWA, in Ronneby, Sweden. After 1970, the President would serve a five-year term as "the titular head of Pugwash" whose role was envisioned as providing "counsel and advice" to the Secretary General and Continuing Committee.<sup>51</sup> Her appointment, followed in 1976 by a new Secretary-General, the American-born but Geneva-based retired World Health Organization official, Martin Kaplan, represented a "changing of the guard."<sup>52</sup> Like Alexander Rich and Dorothy Hodgkin, even though Kaplan held no formal position within its international organization, his involvement in Pugwash initiatives during the 1960s went far beyond simply attending conferences. Now, however, both Hodgkin and Kaplan had formal roles and titles, accompanied by additional duties that would more closely enmesh them in Pugwash networks.

Following the pattern for the previous decade-and-a-half, the Secretary-General had sent Zhou Peiyuan a letter of invitation to the next PCSWA, to be held in Munich in August 1977. Having received no reply by December 1976, Kaplan asked Hodgkin if she might use her contacts to encourage Chinese

49 On the expansion of Sino-British scientific relations in the era of Sino-American *rapprochement*, see: Jon Agar, "It's Springtime for Science: Renewing China-UK Scientific Relations in the 1970s," *Notes and Records of the Royal Society* 67 (2013): 1–18. Peter Collins, *The Royal Society and the Promotion of Science since 1960* (Cambridge: Cambridge University Press, 2016), 186–190. Alfred Hopkinson, "Describing Cultural Revolution Science: A Study of British Scientists' Encounters with Chinese Research, 1972–4," MSt Dissertation (University of Oxford, 2018).

50 "Visit to China, 1972, by Dorothy and Thomas Hodgkin," January 1973. DHP, MS.Eng.c.5672/6.

51 Rotblat, *Quest*, 13.

52 Brown, *Keeper*, 214.

participation.<sup>53</sup> Hodgkin immediately sent a personal note to Zhou to this effect.<sup>54</sup> Although Kaplan had suggested doing so, she did not send anything to Huang Hua. As she later explained to Kaplan, she knew that Huang was only recently appointed Foreign Minister and that he and Zhou were “old friends and will certainly discuss the situation.”<sup>55</sup> Hodgkin was, in other words, hoping to avoid potential bureaucratic roadblocks, instead opting for a strategy reliant on Zhou’s networks and influence in Beijing. What she may not have understood fully, however, was that any international correspondence to Zhou would also always have been a formal, officially-handled matter as a matter of course. The initial formal invitation will have triggered formal internal dialogue between scientist officials and their foreign relations counterparts, as indeed, would did her more personal follow-up letter. Thus, when Zhou replied to Hodgkin in February 1977, his response had all the hallmarks of official filters and consultation: he robustly riffed on the same themes as his anti-Gang of Four articles for the Chinese popular and scientific press, writing that, “we have very much work to do in Educational Revolution which has suffered due to their interference. I am very much occupied and shall have no possibility to go abroad this year.”<sup>56</sup> Coded and full of official obfuscation, it lacked the same frankness as Zhou might have communicated in person; nevertheless, his letter did clearly signal that the PRC’s domestic politics remained sufficiently in flux to preclude renewed engagement with Pugwash and indicated that Zhou was to some extent caught up in all of it.

Even though Zhou’s February 1977 letter may have implied that he would not be internationally mobile in the near future, the septuagenarian scientist’s travels abroad increased dramatically in the late 1970s. His longstanding networks in Europe and North America, in the United States of America in particular, helped make him a major player in shaping the future trajectory of Sino-American scientific exchange. Even in Mao’s final months, while the Gang of Four enjoyed tremendous political influence, Zhou led a China Association for Science and Technology (CAST) delegation to America. Described in a *Reuters* report as “the highest-ranking scientific delegation from China ever to visit the United States,” the month-long trip in autumn 1975 incorporated visits to numerous higher education and research institutions across the country, as well as a one to the White House for a brief dialogue with President

53 Kaplan to Hodgkin, 13 December 1976. DHP, M.S.Eng.c.5680/6.

54 Hodgkin to Chou Pei-Yuan [Zhou Peiyuan], 8 February 1977. DHP, MS.Eng.c.5680/6.

55 Hodgkin to Kaplan, 8 February 1977. DHP, MS.Eng.c.5680/6.

56 Chou P’ei-yüan [Zhou Peiyuan] to Hodgkin, 24 February 1977. DHP, MS.Eng.c.5680/6.

Gerald Ford.<sup>57</sup> By 1978, in addition to heading a wider Chinese educational delegation to Washington, D.C., Zhou also led the PRC in negotiations with the United States over educational relations.<sup>58</sup>

Nor, of course, was this thaw in the PRC's foreign relations universal. As the PRC and USA moved from tentative *rapprochement* toward full diplomatic recognition, the PRC's relations with its former ally the USSR remained hostile. Alongside heightened bilateral Sino-Soviet tensions that had spilled over into a brief border conflict in 1969, the two socialist powers remained locked in long-term competition for influence within the developing world, and Asia in particular.<sup>59</sup> While Chinese relations with North Vietnam had soured during the Vietnam War, they disintegrated further after Vietnamese unification in 1975.<sup>60</sup> Meanwhile, the Soviets grew closer to Vietnam, including the agreement of a treaty of friendship and cooperation in Autumn 1978. Beijing viewed this as both threat and provocation, later accusing the Soviets of having "spurred on and supported" anti-Chinese policies in Vietnam and elsewhere.<sup>61</sup> In December 1978, Vietnam invaded its neighbor and China's ally, Cambodia (then Democratic Kampuchea), prompting China in turn to invade northern Vietnam in February 1979.<sup>62</sup> That month Moisei Markov, chair of the Soviet Pugwash Committee, wrote to the top trio of Pugwash officials, President Dorothy Hodgkin, Secretary-General Martin Kaplan, and Executive Committee Chair Bernard Feld. Markov urged an "appeal directly to the Chinese government" over its incursion into Vietnam, further stating that "the Soviet Pugwash Committee draws your attention to the fact that the ideology of China's leaders utterly contradicts the goals and ideas of the Pugwash Movement."<sup>63</sup> It was a clear attempt on the part of the Soviets to use the Pugwash networks as a means to pillory their Chinese rivals, while comments about "goals and ideas" appeared in part to be about maintaining a distance between Pugwash and China.

57 "Ford Meets Chinese Group of Scientists at White House," *New York Times*, 28 September 1975, 7.

58 Bullock, "American Science and Chinese Nationalism," 221–222.

59 On Sino-Soviet competition in this period, see: Friedman, *Shadow Cold War*. Sergey Radchenko, *Unwanted Visionaries* (New York: Oxford University Press, 2014).

60 Chen, *Mao's China*, 235–237.

61 *People's Daily* Commentator, "[What Reason Has Moscow for Flying into a Rage?]," *RMRB*, 17 April 1979, 1.

62 See: Radchenko, *Unwanted Visionaries*, 127–129; Odd Arne Westad, "Introduction: From War to Peace in Indochina" in *The Third Indochina War* eds. Odd Arne Westad and Sophie Quinn-Judge (Abingdon: Routledge, 2006), 1–11. Xiaoming Zhang, "China's 1979 War with Vietnam: A Reassessment," *China Quarterly* 184 (2005): 851–874.

63 M.A. Markov to D. Hodgkin, B.T. Feld and M. Kaplan [no date]. DHP, MS.Eng.c.5679/3.

Concerned about these violent clashes in Southeast Asia but wary about becoming a pawn in the Sino-Soviet rivalry, Hodgkin, Feld, and Kaplan instead proposed a meeting to be held in London involving Joseph Rotblat, Zhou Peiyuan, and scientists from China, Vietnam, the USA and the USSR.<sup>64</sup> Many of the key players here were members of the Pugwash Continuing Committee, underscoring that their interests went far beyond simply promoting the Pugwash Conferences. As had been the case in 1965, their over-riding interest lay in mobilizing the Pugwash network of scientists to foster dialogue that might help reduce or, ideally, avoid further conflict. Hodgkin, Feld, and Kaplan cabled Zhou in March, following up with a more detailed joint letter hand-delivered by MIT physicist Herman Feshbach while on a visit to the PRC in April. This expanded the scope of their initial proposal to also include scientists from Cambodia, a condition on which Zhou had insisted on in an initial cabled reply. Their letter also proposed additional wide-ranging “unofficial discussions” with scientists from China, the USA, the USSR, and the UK.<sup>65</sup> The first proposal had already run into trouble before the letter had even been sent to Zhou, with the Vietnamese Ambassador in Paris making participation in any such “negotiations” on Cambodia contingent on Chinese troops first withdrawing from Vietnamese territory.<sup>66</sup> In May, Zhou wrote back, rejecting outright a secondary proposal of wider discussions “lest they divert our attention,” and emphatically insisting that any meeting should only focus on the Vietnamese-Cambodian conflict.<sup>67</sup> The competing and contradictory conditions insisted upon by potential participants helped ensure no meeting would take place.

This may have been another failed attempt on the part of Pugwashites to organize an informal meeting involving China, but is nevertheless notable for the extent to which it was a collective undertaking that required carefully coordinated cross-border actions and interactions on the part of numerous individuals. At the center of these interactions sat the core grouping of Kaplan, Feld, Hodgkin, and Rotblat. Hodgkin and Rotblat were based in different UK cities, while the Geneva-based Kaplan lived in another country, and Feld on a different continent. The initiative had been set in motion by colleagues in Moscow, while the French civil engineer Raymond Aubrac and his daughter Élisabeth coordinated approaching the Vietnamese Ambassador to France.<sup>68</sup> Building

64 Hodgkin, Feld, and Kaplan to Markov, 26 February 1979. DHP, MS.Eng.c.5679/3.

65 Hodgkin, Feld, and Kaplan to Chou Pei Yuan [Zhou Peiyuan], 29 March 1979. DHP, MS.Eng.c.5679/3.

66 Kaplan to Hodgkin, Feld, and Rotblat, 4 April 1979. DHP, MS.Eng.c.5679/3.

67 DHP, MS.Eng.c.5679/3, Chou P'ei-yüan [Zhou Peiyuan] to Dorothy Hodgkin, 25 May 1979.

68 Kaplan to Hodgkin, Feld, and Rotblat, 18 April 1979. DHP, MS.Eng.c.7955/10.

on his longstanding relationship with Ho Chi Minh, Aubrac had served a similar role as unofficial intermediary on previous occasions, including on behalf of Henry Kissinger.<sup>69</sup> The joint letter to Zhou Peiyuan in Beijing was created by Kaplan, then edited and updated in the United States by Feld and Victor Weisskopf, the retired MIT physics professor and long-time Pugwashite, then carried to China by another US-based colleague. In the Chinese case, such dependence on written communication may have been a logistical necessity, but party-state filters limited its efficacy as a means for putting plans in place.

Zhou Peiyuan's increasing international mobility in the late 1970s affected a dramatic transformation in the nature of his interactions with fellow Pugwashites. In addition to Zhou's trips to the United States, he also made a number of trips to Western Europe that facilitated frank and forthright discussion about China's future relations with Pugwash. This all took place during the summer of 1979, just a few months after the flurry of correspondence over the Sino-Vietnamese conflict. In June, Zhou headed a Chinese delegation to the Second Marcel Grossman Meeting on General Relativity, held at the International Center for Theoretical Physics (ICTP) in Trieste, Italy. His daughter, Zhou Ruling, who accompanied him, later remembered her father had hoped to use the trip to see Martin Kaplan and so was disappointed that Kaplan found out too late for such a meeting to happen. She described it as a "golden opportunity" missed, demonstrating Zhou's continued interest in Pugwash.<sup>70</sup> However, there were other senior Pugwashites at the Trieste meeting: theoretical physicist Abdus Salam, founder of the Marcel Grossmann Meetings and the ICTP, and Victor Weisskopf, who Zhou knew from the first Pugwash meeting in 1957. Both were thoroughly in the loop, not only coordinating with Hodgkin, Kaplan, and Feld about meeting with Zhou, but also reporting back on the meeting.<sup>71</sup> This initial in-person exchange laid the foundation for an even more crucial one the following month (June, 1979) when Zhou was in Switzerland visiting the European Organization for Nuclear Research (CERN). He was there with a group of "senior scientists," one in a series of high-level Chinese delegations working toward the establishment of

69 For his own account of such work across this period, see: Raymond Aubrac, "Mes rencontres avec Hô Chi Minh et le Vietnam (1946–1982)," *Revue française d'histoire d'outre-mer* 72 (1985): 349–356.

70 Zhou Ruling, "Zhou Peiyuan he Pagewoshi kexue yu shijie shiwu huiyi [Zhou Peiyuan and the Pugwash Conferences on Science and World Affairs]," *Kexue wenhua pinglun [Science and Culture Review]* 2 (2006): 92.

71 Hodgkin to Salam [handwritten draft], 8 June 1979; handwritten notes by Victor Weisskopf, [no date]. DHP, MS.Eng.c.7955/10.

systematic exchange arrangements.<sup>72</sup> This time Kaplan was able to see Zhou in person, thanks in part to Salam and Weisskopf's efforts in Trieste. Their original plan was for Hodgkin to travel to Geneva during Zhou's visit, likely because she already knew Zhou personally. Kaplan stepped in as replacement when this proved unviable, and he provided Hodgkin and those others who could not be present with a detailed summary of the encounter.<sup>73</sup> It took place in the CERN canteen, a suitably banal and informal setting in which to orchestrate a "chance" meeting between Zhou and Kaplan.

On 13 July 1979, Zhou was in the canteen for lunch with a group that included Weisskopf. This provided an opportunity to bump into Kaplan, with Weisskopf providing introductions. Zhou then pulled Kaplan aside, ostensibly to explain that his itinerary was too full for them to meet. As Kaplan subsequently described in a summary of the meeting for the other Pugwashites involved in planning the meeting, in actuality this served as a cover for a candid conversation. Although they were only able to speak for under eight minutes, the two were able to discuss both the situation in Southeast Asia as well as Chinese relations with Pugwash.<sup>74</sup> The theoretical physicist provided a pragmatic assessment of potential political complications that precluded Chinese scientists' immediate formal re-engagement, concluding that:

[a]t present, the return of China to Pugwash would cause great difficulties for the host country and Pugwash officers but he indicated that nevertheless China might come back soon to one of the large Conferences.<sup>75</sup>

Abdus Salam had pushed the latter idea in Trieste, and Zhou's mention of the idea in the CERN conversation raised hopes that the upcoming thirtieth PC-SWA in August 1980 might see Chinese participation.<sup>76</sup> It may have been five years later than that, but the PRC's return did indeed take place at a large-scale PCSWA, rather than a smaller symposium or an informal meeting of the type pursued by the Continuing Committee in the 1960s or 1970s. In fact, Zhou explicitly flagged up that issue-focused informal talks of the nature the Pugwash

72 W.O. Lock, "Origins and Evolution of Collaboration between CERN and the People's Republic of China, 1971–1980," CERN 81–14 (Geneva: CERN, 1981), 23. Available at <http://cds.cern.ch/record/134999/>. Accessed 9 May 2019.

73 Martin Kaplan, "Meeting between Chou Pei Yuan [Zhou Peiyuan] and Kaplan at CERN, Geneva, 13 July 1979." DHP, MS.Eng.c.5679/3.

74 Ibid.

75 Ibid.

76 Kaplan to Abdus Salam, 9 August 1979. DHP, MS.Eng.c.7955/10.



organizers had proposed were unlikely to successfully secure Chinese participation precisely because they had been issue-focused. As Kaplan summarized, Zhou's alternative suggestion was that, "at large physics conferences the opportunity could be taken for informal conversations, preferably on a bilateral basis, i.e. USA or UK/China."<sup>77</sup> China's broader push to increase scientific exchange in Western Europe and North America made attending high-profile academic conferences in those places politically acceptable, thereby opening up new opportunities for frank, informal dialogue along the lines of Zhou's discussions with Weisskopf and Salam at the Second Marcel Grossman Meeting or his subsequent CERN conversation with Kaplan.

Zhou's comments in 1979 and the circumstances in which they were communicated collectively demonstrate both continuity and great change in his ability to act as a channel for communication with Pugwash. The PRC's domestic politics and foreign policy remained the major factors shaping his relationship with Pugwash and fellow Pugwashites as much as during the Mao era. Zhou's international travel in the late 1970s provided opportunities for meaningful and unfiltered contact with fellow Pugwashites than in previous decades, but these trips were still at the behest of the Chinese party-state. The subterfuge involved in that contact indicated that it remained politically risky and, furthermore, that a return to the PCSWA could only happen in the context of further changes in the PRC's political environment. On the Pugwash side, all of these interactions during the late 1970s involved careful cross-border coordination on the part of a responsive and flexible transnational network of Pugwashites.

### 3 1980s: The Return

Hopes among senior Pugwashites that Zhou's statement in 1979 that China might "soon" return to the PCSWA spurred a redoubling of effort to try and make this happen. After disappointment in 1980, both the Pugwash leadership and the Canadian Pugwash Group – hosts for the 1981 conference – sought again to bring about Chinese participation. In January, Martin Kaplan wrote to Dorothy Hodgkin assuring her that the Canadians had pushed hard for Chinese participation in the conference, scheduled for August and September.<sup>78</sup> Kaplan's own letter of invitation to Zhou detailed some of their efforts: the Canadian Pugwash Group would cover hotel and meals, along with some

<sup>77</sup> "Meeting." DHP, MS.Eng.c.5679/3.

<sup>78</sup> Kaplan to Hodgkin, 21 January 1981. DHP, MS.Eng.c.5681/1.

funding for travel expenses for scientists coming from so-called 'developing' countries. He also argued that since the 1981 PCSWA was to be in Banff, Canada, "would be a most appropriate time for the return of Chinese scientists" since Zhou had attended the first and second conferences, both held in Canada.<sup>79</sup> For all of the offers of financial assistance and as compelling a case as Kaplan may have made, once again nothing came of the invitation. Even without the same level of political turbulence that characterized previous decades, Zhou was still carrying out a delicate balancing act.

Zhou had a longstanding explicitly political side to his career that accompanied his bureaucratic and foreign affairs work. Even after joining the Chinese Communist Party in 1959, he continued as a senior figure in the "Jiusan Society," one of the "allied" political parties represented in the Chinese People's Political Consultative Conference (CPPCC). In August 1980, he also became a CPPCC Vice Chairman, making him a member of its Standing Committee and thus one of the most senior figures in the PRC's national political advisory chamber. The biographical notes accompanying the announcement of his position in the *People's Daily* made clear that Zhou's political roles went even further: he was also serving as the Jiusan Society's Vice President and, since 1978, had sat on the Standing Committee for the National People's Congress, the PRC's national legislature.<sup>80</sup> In 1981, Zhou stepped down from his 1978 appointments as Vice President of the Chinese Academy of Sciences and as President of Peking University. Far from signaling either decreased responsibilities owing to his age or any loss of status, these moves instead reflected a shift in his responsibilities to focus on his work with CAST. Zhou was formally elected to the post at its Second National Congress in March 1980, at which he "called on the 95 organizations attached to the association to be advisers to the Party and government in modernizing science and technology."<sup>81</sup> Political and scientific elements were ever-more tightly interwoven in this late stage of Zhou's career, with the physicist playing an active role in developing Deng Xiaoping's science and technology program. In October 1982, his name featured early and prominently in the *People's Daily's* front-page coverage of the opening ceremonies for the State Science and Technology Prizes, not as an award recipient – of which he was one – but rather as one of the high-level "Party and state leaders" attending the opening ceremony.<sup>82</sup> By this stage in his

79 Kaplan to Chou Pei-Yuan [Zhou Peiuan], 12 January 1981. DHP, MS.Eng.c.5681/1.

80 "Zhou Peiyuan jianli [Zhou Peiyuan Biographical Notes]," *RMRB* 13 September 1980, 2.

81 "New Impetus," *Beijing Review* 23 (7 April 1980): 3.

82 "Xingdong qilai, pandeng xin jishu feng [Moving Upward, Scaling the New Technology Summit]," *RMRB*, 24 October 1982, 1.

career, Zhou was as much in the public eye as a political figure as he was as an academic, and these political credentials made him well-placed to advocate for a return to Pugwash when the moment seemed right.

There were a number of factors contributing to that moment coming in 1985. For one, both Chinese and Soviets had started making moves toward repairing relations in 1982 and afterwards.<sup>83</sup> Chinese scientists were thus likely to receive a warmer reception than they had even a few years earlier, when the Soviets had appeared to be attempting to use Pugwash as a proxy to attack the PRC. For another, China was simultaneously taking tentative steps toward engagement with a range of actors and dialogues related to arms control.<sup>84</sup> However, formal Chinese re-engagement with Pugwash also came packaged as part of a large-scale peace push by the PRC. From the first conference in 1957 onward, participation – and, indeed, withdrawal – had been justified in terms of propaganda value for the Chinese party-state. So, too, was the return in 1985. 1986 was the United Nations' "International Year of Peace" (IYP) and the PRC spent the year leading up to it undertaking a flurry of related activities. As one of the country's longest-standing and prominent peace activists, Zhou Peiyuan was heavily involved in this event. In May 1985, he was appointed a Deputy Director on the China Organizing Committee, tasked with coordinating the PRC's undertakings for the IYP.<sup>85</sup> June saw the founding of a new mass organization, the Chinese People's Association for Peace and Disarmament (CPAPD). With links to the PRC's State Council, by the end of the decade CPAPD would regularly interact with foreign non-governmental actors, such as the US National Academy of Sciences, on a range of arms control issues.<sup>86</sup> Zhou was CPAPD's first president. His speech at its inaugural meeting spoke of the need "to carry on and develop the glorious tradition" of peace activism carried out by the likes of Song Qingling (Mme. Sun Yat-sen) and Guo Moruo, explicitly linking it to Mao-era undertakings and organizations such as the

83 See: Niu Jun, "Zuoxiang 'zhengchanghua' [Heading for 'Normalization']" in Shen Zhihua ed. *ZhongSu guanxi shi gang* [*History of Sino-Soviet Relations*]. (Beijing: Shehui kexue wenxian chubanshe, 2011), 466–524. James C. Hsiung, "Soviet-Chinese Détente," *Current History* 84, no. 504 (1985): 329–33.

84 See: Horsburgh, *China and Global*, 77–96. Alastair Iain Johnston, "Learning Versus Adaptation: Explaining Change in Chinese Arms Control Policy in the 1980s and 1990s," *China Journal* 35 (1996): 27–61.

85 "Guoji Heping Nian Zhongguo Zuzhi Weiyuanhui Zai Jing Zhengshi Chengli [IYP Chinese Organizing Committee Formally Established in Beijing]," *RMRB*, 11 May 1985, 4.

86 Banning N. Garrett and Bonnie S. Glaser, "Chinese Perspectives on Nuclear Arms Control," *International Security* 20 (1995): 60. Johnston, "Learning Versus Adaptation," 44.

China Peace Committee.<sup>87</sup> Zhou's very presence at the top of the organization provided another point of symbolic continuity. Moreover, a number of existing mass organizations linked with both the PRC's peace outreach and international propaganda had helped to "sponsor" the new organization, most notably the Chinese Association for International Understanding (CAFIU). Two days after the formation of CPAPD, CAFIU organized an international conference in Beijing on "Safeguarding World Peace."<sup>88</sup> China's return to Pugwash at the Thirty-Fifth PCSWA a month later was in many respects the climax to this series of summer activities aimed at proving the PRC's peace credentials involving mass organizations and prominent individuals with ties to the Chinese party-state.

Senior Pugwashites provided Chinese attendees with a suitably positive reception. The Pugwash Council's post-conference public statement noted that China's "high-level scientist participants were especially welcome after so many years of absence from Pugwash Conferences."<sup>89</sup> Dorothy Hodgkin pointedly welcomed Zhou Peiyuan in her opening remarks as President, highlighting his status as an attendee at the first conference.<sup>90</sup> In light of this, Zhou was one of the speakers to give a brief speech marking the thirtieth anniversary of the Russell-Einstein Manifesto. There was some small irony in this, as the PRC had opted to officially ignore rather than respond to the manifesto back in 1955.<sup>91</sup> Zhou's remarks pointedly articulated PRC policies and priorities, all framed within the context of the country's commitments to peace, and therefore all also in line with the PRC's wider agenda – and in which re-engagement with Pugwash was a part. Emphasizing China's opposition to biological weapons and the militarization of space, as well as the country's "no first use" policy for nuclear weapons, he argued that the PRC's aim was ultimately to "break the monopoly [...] of the two superpowers."<sup>92</sup> In this, Zhou was largely restating phrases and principles that dated back to the PRC's first nuclear weapons test in 1964. As had been the case then, the argument in 1985 went that in doing so China's intentions were ultimately peaceful. As

87 Zhu Manting and Li Zhiming, "Zhongguo Renmin Zhengqu Heping Yu Caijun Xiehui Zai Jing Chengli [CPAPD Established in Beijing]," *RMRB*, 2 June 1985, 1.

88 Zhang Qihua and Zhu Manting, "Lao Heping Renshi De Xinyuan [Venerable Peace Dignitaries' Cherished Desire]," *RMRB*, 4 June 1985, 7.

89 "Statement from the Pugwash Council," in *Proceedings of the Thirty-Fifth Pugwash Conference on Science and World Affairs*, Campinas, Brazil, 3–8 July 1985, 13.

90 "Response by the President of Pugwash, Dorothy Hodgkin," in *Proceedings*, 51.

91 Barrett, "Foreign Policy," 86–95.

92 Zhou Peiyuan, "30th Anniversary of the Russell-Einstein Manifesto and the Future of Pugwash," in *Proceedings*, 88–89.

further evidence of the PRC's promotion of "world peace and security," Zhou cited Sino-British negotiations over Hong Kong and the PRC's June announcement that it would look to demobilize a million soldiers over the following two years.<sup>93</sup> In all, the statement had far less to do with the Russell-Einstein Manifesto than it did with PRC policies and international position.

The Campinas conference may have included "high-level" Chinese delegates, as the Pugwash Council had indicated, but as with Zhou's statement, the composition of the Chinese delegation was firmly rooted in the PRC's wider priorities. Zhou was joined by fellow theoretical physicist, Huang Zuqia, then heading Beijing Normal University's Institute for Low-Energy Nuclear Physics, and who had taken part in China's crash nuclear weapons program, notably as member of the Institute of Atomic Energy's Leading Group contributing to development of China's hydrogen bomb.<sup>94</sup> Rounding out the Chinese attendees was Zhu Shanqing, representing CAFIU, the mass organization sponsoring many of the PRC's peace-related activities in 1985, and which had institutional ties to the CCP's primary foreign affairs body, the International Liaison Department.<sup>95</sup> China's Brazilian Embassy also sent along an observer. Each member reinforced an aspect of the PRC's agenda: Huang's presence was in keeping with Zhou's framing of the Chinese nuclear weapons program as peaceful in intent; Zhu's presence reflected CAFIU's close involvement in the PRC's wider peace propaganda and outreach program at the time, as well as their opaque institutional link back to the Chinese party-state; and, finally, Zhou's presence was a potent symbol of continuity. He was there both as an informal representative of the PRC, while at the same time also as a Pugwashite who had long been enmeshed in transnational Pugwash networks and privately committed to bringing about Sino-Pugwash re-engagement. In 1985, as in all his previous interactions with Pugwash, Zhou was pulled in multiple directions, having to balance differing and sometimes contradictory loyalties and identities.

#### 4 Conclusion

Once Chinese links with Pugwash had been formally re-established they proved to be long-lasting. Chinese participants thereafter became a regular

93 Ibid.

94 John Wilson Lewis and Xue Litai, *China Builds the Bomb* (Stanford: Stanford University Press, 1988), 196.

95 David Shambaugh, "China's 'Quiet Diplomacy': The International Department of the Chinese Communist Party," *China: An International Journal* 5 (2007): 43–44.

feature of future PCSWA with the PRC going on to host Pugwash events, including a 1988 symposium on “Peace and Security in the Asia-Pacific Region” and the forty-first conference in 1991. The same longstanding networks of Pugwashites that had worked toward re-engagement remained an important means for maintaining forward momentum in Sino-Pugwash relations in those early years of re-engagement. The Pugwash Council did not immediately receive a direct reply to its offer of a place on the council for Zhou Peiyuan. Dorothy Hodgkin visited China in the early autumn of 1985, and before she left Martin Kaplan duly asked her to remind Zhou about the offer and the invitation for four Chinese participants to attend the next PCSWA in 1986.<sup>96</sup> Unlike in previous decades both proposals now received a positive response.

At the turn of the new decade, both the Pugwash Council and national Pugwash groups sought to capitalize on Deng Xiaoping’s “reform and opening up” policy program, determinedly pursuing formal and informal efforts to get PRC participants back at the Pugwash Conferences. Although not immediately successful, the policy environment in Beijing was shifting toward one that made some kind of return increasingly possible. Ultimately, when that moment came, for all of the differences between the PRC under Mao and Deng, the immediate context and wider political motivations that made re-engagement possible in 1985 nevertheless bore striking similarities to China’s initial engagement with Pugwash in 1957: Zhou Peiyuan spearheaded the PRC’s return to the conferences as part of a wider range of party-state-sponsored peace and disarmament activities. Yet the context in which the PRC sponsored such activities in the 1980s was very different that in the 1950s. In the late 1950s, these peace activities took place in tandem with a secret nuclear weapons program, both intended to help protect and secure the position of Mao’s China. By 1985, the PRC was a widely-recognized state on the rise but also with a well-established nuclear arsenal.<sup>97</sup> For all China’s rhetoric relating to the “no first use” policy, there remained an inherent, if evolving, tension in such state support for involvement in disarmament activities as an aspiring and then established nuclear weapons power. Ultimately, the consequence of these differences in domestic and international structures in 1985 as compared to 1957 meant that Chinese engagement with Pugwash proved both deeper and far more durable this time around.

96 Kaplan to Hodgkin, 19 September 1985, DHP, MS.Eng.c.5679/9.

97 On the evolution of Mao’s thinking about nuclear weapons, see: Shu Guang Zhang, “Between ‘Paper’ and ‘Real Tigers’: Mao’s View of Nuclear Weapons,” in *Cold War Statesmen Confront the Bomb: Nuclear Diplomacy Since 1945*, eds. John Gaddis, Philip Gordon, Ernest May and Jonathan Rosenberg (Oxford: Oxford University Press, 1999), 195–215.

Zhou becoming a member of the Council was both symbolic and practical, recognizing his long-standing links and continued commitment to Pugwash whilst also formalizing his relationship to the organization by according him a senior position within it. Moreover, in bringing a Chinese member onto the Council, it potentially gave Pugwash a stronger foothold in China moving forward. Zhou Peiyuan and his successors would now be a part of the meetings, telephone calls, and chains of correspondence of the type similar to those between 1960 and 1985 that had been mobilized to re-engage with the PRC. This transformed what had long been an informal relationship: one that started as a PCSWA attendee and, following Chinese dis-engagement in 1960, had been sustained via informal, sometimes clandestine cross-bloc contacts with fellow Pugwashites. In many respects, this personal trajectory mirrored that of Dorothy Hodgkin: she had attended a conference in 1962, was subsequently asked to act as an informal interlocutor to help bring about re-engagement with China, and ultimately took up a senior post within the Pugwash organization. Zhou and Hodgkin represented two different generations of Pugwashites whose paths did not cross at a Pugwash conference until 1985; nevertheless, each was a central actor in bringing about Chinese re-engagement with the PCSWA. For both, conference participation acted as an initial pathway into a dynamic network of prominent academics who were predominantly left-leaning internationalists for whom participation in Pugwash was one of many undertakings. For all the differences in their domestic circumstances, they self-identified as Pugwashites and remained committed to cross-bloc dialogue involving scientists.

Both Hodgkin and Zhou were crucial interlocutors in what Hodgkin biographer Georgina Ferry has aptly called “the long courtship” leading up to the re-establishment of Sino-Pugwash relations in the 1980s.<sup>98</sup> Yet they did not act alone. In the 1960s, Hodgkin was brought in by a cluster of American and British Pugwashites keen to make contact again with the PRC in the years following its turn away from the PCSWA. Their attempts to initiate dialogue via issue-based meetings, either formal or informal, may have repeatedly failed because of political realities within China and, taken in isolation, these episodes during the 1960s and 1970s could be interpreted as failures. In an immediate sense, they were. However, if examined collectively and considered over the long term, they show incremental progress and small successes, particularly once Pugwashites fully reconnected with Zhou Peiyuan in the late 1970s. These transnational scientific networks were, in other words,

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98 Ferry, *Dorothy Hodgkin*, 371.

both highly flexible and ultimately very durable. As such, the nature of the scientific networks forged under the aegis of the Pugwash conferences helps to explain its longevity and its continuing relevance as a transnational actor throughout the Cold War decades and beyond.

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**PART 3**

*Pugwash at the Central European Frontier*





## “Salonbolschewiken:” Pugwash in Austria, 1955–1965

*Silke Fengler*

In Austria, the development of the Pugwash Conferences on Science and World Affairs (PCSWA) was closely linked to the attempt of the country’s post-war government to develop a policy of “permanent neutrality” following the withdrawal of the allied occupation in 1955. A careful dialogue with the Western capitalist-democratic superpower and the Eastern communist-totalitarian counterpart and, at the same time, a close orientation towards the west and a rigid anti-communism, constituted an integral part of this strategy. This chapter explores the engagement of Austrian scientists in the Pugwash project and the formation of a national group here, emphasizing the key role of senior scientist Hans Thirring (1888–1976) in both. The analysis casts fresh light on how Pugwash in Austria was profoundly shaped by the deeply rooted anti-communism within Austrian politics and society, highlighting too the ways in which nuclear fears and anti-nuclear sentiment shaped the development of Pugwash here. Indeed, this distinctive political configuration – a combination of anti-communism, anti-nuclear sentiment and the government’s pursuit of “permanent neutrality” – lent a unique dynamic to Pugwash in this national setting, one that saw it align much more closely with the government than was the case elsewhere in Western Europe.

That government was the ‘Grand Coalition’ between with the Austrian People’s Party (ÖVP) and the Austrian Socialist Party (SPÖ) that was in place between 1945/47 and 1966.<sup>1</sup> In the period of interest – from the mid 1950s to the mid 1960s – two important questions arise: How did the specific context of Austrian foreign policy influence the way the Pugwash idea took hold in Austria? And second, what internal political and policy constellations fostered and/or hindered this? Although Austria’s Communist Party (KPÖ) wielded little if any political influence during the 1950s, it nevertheless came in this period to dominate the discourse on nuclear dangers, especially radioactive fallout from nuclear weapons tests – a discourse that it tried to incorporate into

1 Otmar Höll, “The Foreign Policy of the Kreisky Era,” in *The Kreisky Era in Austria*, eds. Günter Bischof and Anton Pelinka (New Brunswick, NJ: Transaction Publishers, 1994), 32–77.

the world peace movement largely controlled by Moscow.<sup>2</sup> As a result, any Austrian who spoke out for peace and expressed concerns about the dangers posed by nuclear weapons and other nuclear technologies was immediately suspected of being an agent of the Soviet Union. This was compounded further by suspicions in the west that the PCSWA was leftist, and/or had communist sympathies and allegiances. In addition, West Germany remained an important reference point for science policy in Austria, and there were close links between scientists in the two countries – exemplified by Hans Thirring: both countries were characterized by a virulent anti-communism.<sup>3</sup> In this context, how did Austrian Pugwashites and the PCSWA manage to become accepted as actors in the Austrian political system?

In no small part this is explained by the key Pugwash figure in Austria in this period, the physicist and long-time peace activist Hans Thirring, who was a regular participant in Pugwash throughout its early years.<sup>4</sup> Thirring was instrumental in convening in Austria two Pugwash conferences – those held in Kitzbühel-Vienna in 1958 and in Baden the following year – and in the inception in the early 1960s of the Austrian Pugwash group. This was formed as the Association of Austrian Scientists (Vereinigung Österreichischer Wissenschaftler, vöw), modeled after the Association of German Scientists (Vereinigung Deutscher Wissenschaftler (VDW). The vöw included senior scientists who played a leading role in promoting the Austrian research program on the civilian use of nuclear energy, and who were keen to preserve and advance this program even in the face of mounting public fears of and opposition to nuclear technologies within Austria. Significantly, scientists who were communist and/or closely associated with the KPÖ were excluded from the Austrian Pugwash group until the late 1960s – another distinctive feature of Pugwash in this setting.

Thirring was able to successfully navigate the complex sensibilities at work in the Austrian political system and, crucially, made open, non-aligned

2 On the World Peace Movement and World Peace Congress see the chapters by Fabian Lüscher, Doubravka Olšáková and Geoffrey Roberts in this volume.

3 For more on the development of Pugwash in East and West Germany, see Kraft, chapter eight. On the West German case, see: 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.

4 Thirring attended his last PCSWA in spring 1965. *Pugwash Newsletter*, 44, no. 2 (2007): 134. In the early 1960s, he was actively involved in the European Pugwash Group – see Kraft, this volume.

dialogue on nuclear dangers/threats possible.<sup>5</sup> A respected academic and university professor, Thirring was also a member of the SPÖ who, already in the interwar period developed his anti-war and anti-militarist position. He was immediately attracted to the values and aims of the PCSWA: although anti-communist, Thirring was open to the idea of dialogue with communists, as a means to work for peace across the ideological divide. However, in seeking to advance Pugwash in Austria, Thirring struggled to find supporters among his academic colleagues but was able to build support among his party colleagues in the SPÖ – most notably Bruno Kreisky, a key architect of the foreign policy of the ‘Grand Coalition’ government.<sup>6</sup> The “fallout” controversy of the mid-late 1950s had an especially strong impact in Austria – turning the public against the development of nuclear technologies, including the country’s reactor program. Here, communists dominated the anti-nuclear position – and Thirring moved swiftly to change this, in no small part to protect Austrian nuclear and scientific interests: the government supported nuclear energy and was investing in research reactors. Thirring succeeded in bringing Pugwash into play as an alternative to the communist-led anti-nuclear discourse. The Austrian communists lost ground in the debate about nuclear technologies and the radiological dangers posed by them as Thirring carefully moved to ensure that this discourse came instead to be dominated and shaped by a coalition between Socialists and bourgeois-conservatives which sought to counter growing public anti-nuclear sentiment and protest. Thirring was at the same time able to successfully align Pugwash with this position and agenda.

## 1 The Political Context in Austria: An Outline

Situated at the geographical center of the European Cold War theater, Austria – in contrast to Germany and other former enemy countries of the Allied Powers – remained on the periphery of international power politics.<sup>7</sup> Within Austria, the two governing parties, the People’s Party (ÖVP) and the Socialists (SPÖ) acted to safeguard the country’s traditional “orientation towards the west.” That these parties received almost ninety-five per cent of votes in

5 Wolfgang L. Reiter, “Hans Thirring – ein Leben im Spannungsfeld von Physik und Politik,” in *Physik, Militär und Frieden*, eds. Christian Forstner and Götz Neuneck (Wiesbaden: Springer Fachmedien, 2018), 143–163.

6 Höll, “Foreign Policy,” 32.

7 Michael Gehler, “From Non-Alignment to Neutrality: Austria’s Transformation during the First East-West Détente, 1953–1958,” *JCS* 7, no. 4 (2005): 104–136, here 104.



the first post-war general election held on 25 November 1945 strongly suggests widespread support for this strategy.<sup>8</sup> State Secretary Karl Renner (1870–1950), socialist elder statesman and leader of the Provisional Government, maintained close contact with the Western allies.<sup>9</sup> Vis-à-vis the US occupying forces, Renner emphasized that the country was under constant threat of communist attack, an argument which helped to secure considerable financial and political support from the west. At the same time, he also corresponded with Stalin and the Soviet authorities in Austria through which he was also able to secure Soviet support.<sup>10</sup> As historian Michael Gehler has noted, the Austrian government was performing a delicate balancing act in its relations with the West:

While profiting from the European Recovery Program allowed for a Western *orientation* of the economy, Austrian leaders avoided *integration* into the West as long as their country was under the control of the Occupying Powers.<sup>11</sup>

Austrian foreign policy of the entire postwar period was to a large extent conceptualized and dominated by Bruno Kreisky. Kreisky was appointed State Secretary of Foreign Affairs in 1953, in effect, the second in command in the foreign policy division of the Austrian chancellery.<sup>12</sup> In this capacity he took part in the negotiations for the Austrian State Treaty of 1955 which – together with the declaration of neutrality – ended a decade of allied occupation. However, following the departure of the occupying forces, the Austrian government

8 Wolfgang Mueller, “Wildwest in Wien dauert an.’ Das Amerikabild in der Sowjetischen Besatzungs- und kommunistischen Parteipresse in Österreich 1945–1953,” in *Antiamerikanismus im 20. Jahrhundert. Studien zu Ost- und Westeuropa*, eds. Jan C. Behrends, Árpád von Klimó and Patrice G. Poutrus (Bonn: Dietz, 2005), 114–142.

9 Karl Renner was a Socialist statesman, chancellor (1918–20; 1945) and president (1945–50) of Austria who, after the First World War, advocated the Anschluss between Germany and Austria. He played a major role in re-establishing Austrian independence after the end of the German occupation in 1945. Renner studied law at the University of Vienna and became a member of the moderate wing of the Austrian Socialist Party. With the collapse of Germany in 1945 and the occupation of Austria by Soviet troops, Renner worked with Soviet officials to reconstitute an Austrian government, formed a provisional regime, and became the first chancellor of the reborn Austria in April 1945. On Dec. 20, 1945, the Reichsrat unanimously elected him president of the republic. *Encyclopedia Britannica*, “Karl Renner.” URL: <https://www.britannica.com/biography/Karl-Renner>. Accessed on 9 September 2018.

10 Oliver Rathkolb, *The Paradoxical Republic. Austria 1945–2005* (New York: Berghahn Books, 2010), 94.

11 Gehler, “Non-Alignment,” 105.

12 Höll, “Foreign Policy,” 32–33.

struggled to define the country's position within the international community. As Gehler has put it,

during the first few years after the signing of the Austrian State Treaty, Austrian leaders were neither wholehearted nor completely convinced about their neutrality. This lack of conviction led to inconsistencies, disloyalties, double games, and a dubious political morality, all of which affected the country's precarious position between East and West. But in this phase of emergence from foreign occupation, Austria began to understand the value of neutrality in not having to comply with every foreign demand and in making its own decisions about foreign policy.<sup>13</sup>

Bruno Kreisky can be considered as a key architect of the Second Republic's foreign policy of “permanent neutrality.” His prime objective was to ensure Austria's political independence and security. These goals had to be embedded in a lasting peace with the whole of Europe and in the delicate power balance between the opposing blocs.<sup>14</sup> The foreign policy of “permanent neutrality” pursued by Austria constituted a novel form of neutrality that differed markedly from the Swiss model. Neither country adhered to Western military alliances such as the North Atlantic Treaty Organization (NATO), nor did they participate in the European integration process.<sup>15</sup> For Austria this strategy corresponded with the interests of the Soviet Union, which sought to impede the expansion of Western alliances.<sup>16</sup> Since Switzerland was determined to retain an autonomous defense policy, it flirted briefly with the idea of acquiring nuclear weapons or at least a nuclear threshold capability. Various obstacles kept the Swiss on the non-nuclear path, while Austria did not openly consider the option of nuclear armament. Promoting itself as an active mediator and humanitarian benefactor in international conflicts, Switzerland advertised its neutral “reserve position” outside the United Nations (UN) and sought to establish equal relations with all states under the notion of universality.<sup>17</sup> In marked contrast to the Swiss interpretation of neutrality, Austria opted to

13 Gehler, “Non-Alignment,” 136.

14 Höll, “Foreign Policy,” 34.

15 Thomas Fischer and Daniel Möckli, “The Limits of Compensation: Swiss Neutrality Policy in the Cold War,” *JCWS* 18, no. 4 (2016): 12–35, here 15.

16 Hans Rudolf Fuhrer, “Neutral zwischen den Blöcken: Österreich und die Schweiz,” in *Zwischen den Blöcken. NATO, Warschauer Pakt und Österreich*, ed. Manfred Rauchensteiner (Vienna: Böhlau, 2010), 193–251, here 228–229.

17 Fischer and Möckli, “Limits,” 18, 23.

join the UN as soon as possible. Beginning in 1956, the Austrian government emphasized a global foreign policy rather than privileging a Euro-centric perspective. In explaining this shift, Gehler has argued that “the Cold War in Europe set strict limits on the actions of a neutral state, whereas the global scene permitted greater leeway.”<sup>18</sup> Austria belonged to the “Western European and Other States” group within the UN, which created a means for forging close relationships with other Western European member states, and with the United States. As Jankowitsch has noted, Austrian voting behavior in UN ballots indicates that in key questions regarding the relationship between the blocs, Austria aligned with Western positions. At the same time, senior Austrian politicians pursued a good neighbour policy with Central and Eastern European countries.<sup>19</sup>

In taking the position and interests of both West and East into account, Austria earned respect as a reliable adjudicator and source of balanced view, trusted by both superpowers and the signatory states of the Austrian Independence Treaty.<sup>20</sup> While Swiss officials eventually came to the conclusion that the best way to preserve the country’s neutral status was by pursuing a passive foreign policy, Austrian foreign policymakers sought to develop a role as a mediator between East and West.<sup>21</sup> In 1959, Bruno Kreisky founded the Federal Ministry of Foreign Affairs under conservative Chancellor Julius Raab (1891–1964).<sup>22</sup> He held that position until 1966, when the Grand Coalition between the ÖVP and the SPÖ came to an end.<sup>23</sup> In his role as Foreign Minister, Kreisky functioned as “more than just a passive back-channel” in international diplomacy, becoming an internationally active information broker who was held to be amongst the most successful office bearers in the small states during the 1960s.<sup>24</sup>

18 Gehler, “Non-Alignment,” 126–127.

19 Peter Jankowitsch, “Das Problem der Äquidistanz. Die Suche der Zweiten Republik nach außenpolitischen Leitlinien,” in *Zwischen den Blöcken*. Rauchensteiner, 451–495, here 467–468, 474.

20 Oliver Rathkolb, *Washington ruft Wien: US-Großmachtpolitik und Österreich 1953–1963* (Vienna: Böhlau, 1997), 11.

21 Fischer and Möckli, “Limits,” 25.

22 Julius Raab was among the co-founders of the Austrian People’s Party (ÖVP) in 1945, serving as ÖVP chairman between 1951 and 1960, and also from 1953 to 1961 as Federal Chancellor. <http://www.whoswho.de/bio/julius-raab.html>. Accessed on 9 September 2018.

23 Höll, “Foreign Policy,” 33.

24 Martin Kofler, “Kreisky – Brandt – Krushchev: The United States and Austrian Mediation during the Berlin Crisis, 1958–1963,” in *Austrian foreign policy in historical context*, ed. Günter Bischof (New Brunswick, NJ: Transaction Publishers, 2006), 170–185. Helene Maimann, *Über Kreisky. Gespräche aus Distanz und Nähe* (Vienna: Falter Verlag, 2011), 40–41.

In June 1956, the Austrian government convinced the US State Department to locate the headquarters of the International Atomic Energy Agency (IAEA) in Vienna – a decision supported independently by the Soviet government.<sup>25</sup> Elisabeth Röhrlich has proposed that securing Vienna as the site of the IAEA headquarters was part of a wider effort to establish Austria as a “hub” within the emerging nuclear world order.<sup>26</sup> It can be argued that efforts by Hans Thirring and senior political figures, notably Bruno Kreisky, to host early Pugwash meetings was likewise, in part, aimed at raising the international profile of Austria as a neutral venue where East and West could come together. The third and fourth Pugwash conferences were held in Kitzbühel/Vienna and in Baden, in September 1958 and in June–July 1959 respectively. The Vienna conference would assume particular importance in the history of Pugwash: it was here that the Continuing Committee elaborated more fully on the aims and priorities of Pugwash in a statement that became known as the Vienna Declaration which became the founding tenet of the organization. For the Pugwash leadership, accepting the Austrian offer to host a conference in Kitzbühel/Vienna was pragmatic and expedient: the Continuing Committee was very keen to hold further conferences as soon as possible but, as Carola Sachse shows elsewhere in this volume, was also seeking at this time to move away from a reliance on the financial support of Cyrus Eaton. It was Hans Thirring who mobilized support within senior political circles in Vienna and amongst his scientific colleagues for Austria to host these Pugwash conferences. This was far from easy, given perceptions of Pugwash as leftist and the virulent anti-communism that was a feature of the political landscape within Austria – for all the government’s claims to neutrality and aspirations to serve as a bridge between East and West. This contradiction reflected the complex political dynamic within the country to which attention now turns.

## 2 Austrian Politics and Society: The Faultline between Communism and Anti-communism

Anti-communism, which often took the form of equating communism with Slavic culture, had been common in the German-speaking parts of the

25 Elisabeth Röhrlich, “Die Gründung der International Atomic Energy Agency (IAEA) in Wien: Österreich, die atomare Herausforderung und der Kalte Krieg,” in *Wissenschaft, Technologie und industrielle Entwicklung in Zentraleuropa im Kalten Krieg* eds. Wolfgang L. Reiter, Juliane Mikoletzky, Herbert Matis and Mitchell G. Ash (Vienna: Lit, 2017), 337–366.

26 Röhrlich, Elisabeth, “An Attitude of Caution: The IAEA, the UN and the 1958 Pugwash Conference in Austria,” *JCWS* 20, no. 1 (2018): 31–57, here 55–56.

Habsburg Empire since the late 19th century.<sup>27</sup> Both the rural peasantry and the conservative bourgeoisie perceived the 1917 revolutionary events in Russia and the Soviet Union as an existential threat from the very start.<sup>28</sup> There is agreement amongst some scholars of Austrian history that during the occupation anti-communism had been the lowest common denominator among the ruling elites and a shared concern that had powerful effects.<sup>29</sup> For Günther Bischof “this anti-communism of the people was like the mortar that cemented together the two leading parties – the People’s Party and the Socialist Party of Austria in the governing coalition, and accompanied that coalition on the way to its pro-Western politics.”<sup>30</sup> Oliver Rathkolb has argued that anti-communism in Austria had an important binding function among the political elites, and that the effect of this shared anti-communism was stronger than the famous “mentality of the camps” and the feeling of solidarity across classes, rooted in the Christian-socials’ and the Socialists’ shared experience of Nazi persecution.<sup>31</sup> Rathkolb depicts the “paradox” of mainstream post-war Austrian identity as an amalgam of mutually exclusive positions: being the first victim of National Socialist aggression, but at the same time complicit in National Socialist crimes; striving for integration into the Western community of states, but with one foot still in the East; eager to have a share in the nascent consumer society, but with a cultural policy favoring music and art from an earlier period.

This contradictory identity left no room for ambivalence towards communists and their sympathizers. Both parties in the coalition government – the

27 Ingrid Fraberger and Dieter Stiefel, “Enemy Images’: The Meaning of Anti-Communism and its Importance for the Political and Economic Reconstruction in Austria after 1945,” in *The Marshall Plan in Austria*, eds. Günter Bischof, Anton Pelinka and Dieter Stiefel. Contemporary Austrian Studies 8. (New Brunswick, NJ: Transaction Publishers, 2000).

28 Fraberger and Stiefel, “Enemy Images,” 58.

29 Manfred Rauchensteiner, “Das Jahrzehnt der Besatzung als Epoche in der österreichischen Geschichte,” in *Österreich unter alliierter Besatzung 1945 bis 1955*, eds. Alfred Ableitinger, Siegfried Beer and Eduard G. Staudinger (Vienna: Böhlau, 1998). Heidemarie Uhl, “The Politics of Memory: Austria’s Perception of the Second World War and the National Socialist Period,” in *Austrian Historical Memory and National Identity* eds. Günter Bischof and Anton Pelinka. Contemporary Austrian Studies 5. (New Brunswick, NJ: Transaction Publishers, 1997). Robert Kriechbaumer, “Der lange Weg in die Moderne. Ein mentalitätsgeschichtlicher Essay zur Geschichte der Zweiten Republik,” in *Österreichische Nationalgeschichte nach 1945*, ed. Robert Kriechbaumer (Vienna: Böhlau, 1998), 17–48. Ernst Hanisch, “Überlegungen zum Funktionswandel des Antikommunismus. Eine österreichische Perspektive,” in *Zeitgeschichte im Wandel. 3. Österreichische Zeitgeschichtstage 1997*, ed. Gertraud Diendorfer (Innsbruck: Studien Verlag, 1998), 37–54.

30 Fraberger and Stiefel, “Enemy Images,” 62.

31 Rathkolb, “Paradoxical Republic,” 39.

ÖVP and the SPÖ – wanted to restore the pre-1938 political and economic system as soon as possible. One consequence of their shared anti-communism was the ready re-integration of ex-Nazi elites within the political system.<sup>32</sup> At the same time, the political and cultural establishment sought to exert pressure on cultural and academic institutions to isolate communists and their sympathizers.<sup>33</sup> The physical chemist Engelbert Broda (1910–1983) is a case in point of a communist intellectual who encountered serious professional difficulties in post-war Austria. As we will see, Broda later became an important figure within the Austrian Pugwash group. Broda had fled from his hometown of Vienna in 1938 returning in 1946 whereupon he sought to establish an academic career at the University of Vienna. This would prove a lengthy struggle: only in 1964 after almost two decades of meagerly paid and precarious positions, was he able to secure a full professorship.<sup>34</sup>

The strong anti-communist sentiment at large within Austrian political and cultural elites did not diminish in the face of the political weakness of the KPÖ which, already in the general elections of November 1945, had suffered a crushing defeat, obtaining just over five per cent of the popular vote.<sup>35</sup> It drew much of its political influence from the presence of the Soviet occupying forces – communists continued to hold key positions in the Provisional Government led by the socialist Karl Renner.<sup>36</sup> For the time being, Renner realized that the Soviet Union was not willing to give up the three party schema:

32 Rathkolb, “Paradoxical Republic,” 10.

33 Thomas Kroll, *Kommunistische Intellektuelle in Westeuropa: Frankreich, Österreich, Italien und Großbritannien im Vergleich 1945–1956* (Köln: Böhlau, 2007), 333. Gerhard Oberkofler, “Wilhelm Frank zum Gedenken: Stationen eines Lebens für sozialen und technischen Fortschritt,” *Alfred Klahr Gesellschaft: Mitteilungen* 7, no. 1 (2000): 2–9.

34 Engelbert Broda studied at the University of Vienna. Coming from a communist background, he took part in the communist resistance against the Nazis. During this period he was imprisoned several times because of his political activities. Broda had his Ph.D. in Chemistry approved in 1934 at the University of Vienna. From 1940 he worked at the Medical Research Council at University College London, researching the transformation of light into chemical energy. From 1941 he worked at the Cavendish Laboratory at Cambridge University in the UK on radioactivity and nuclear fission. Broda became embroiled in espionage rumours, see: Andrew Brown, “The Viennese Connection: Engelbert Broda, Alan Nunn May and Atomic Espionage,” *Intelligence and National Security* 24, no. 2 (April 2009): 173–193.

35 Wolfgang Mueller, “Stalin and Austria: New Evidence on Soviet Policy in a Secondary Theatre of the Cold War, 1938–53/55,” *Cold War History* 6, no. 1 (2006): 63–84.

36 Mueller, “Stalin and Austria,” 71. Communists were assigned to the posts of State Secretary of Internal Affairs, responsible for public enlightenment, education, and cultural affairs, and the State Secretary to the Office of the Prime Minister.

Socialists – People’s Party – Communist Party.<sup>37</sup> In the period from 1945 to 1969, however, the average share of communist MPs in Austria – 2.4% – was the lowest in Western Europe.<sup>38</sup> Anti-communist sentiment following from the Soviet occupation, the communist putsch in Czechoslovakia (1948), and events later in Hungary (1956), further undermined the KPÖ, leading eventually to a total break between it and the two remaining governing parties, the SPÖ and ÖVP.<sup>39</sup>

Influenced by the Korean War, many Austrian politicians believed that communists would invade any territory abandoned by the West; Communist gains in Korea during the initial phases of the conflict (1950–1953) fuelled concern in Austria. In order to escape a fate similar to that of Korea, many Austrians became convinced that their future safety and security depended on the ability of US and allied military forces to protect them from a communist take-over.<sup>40</sup> In early 1950, US High Commissioner in Austria, Geoffrey Keynes, was of the view that almost 90 per cent of Austrians were “Western minded” and would be ready to fight against communism.<sup>41</sup> Three years later, US Secretary of State John Foster Dulles was satisfied that the communist movement in Austria was amongst the weakest within the international community.<sup>42</sup>

Nevertheless, communists remained active within Austrian political, intellectual and cultural life, and continued to contribute to political debates, including those surrounding nuclear technologies. The political scientist Thomas Kroll has argued that around one hundred intellectuals were affiliated to the KPÖ, the majority of whom were not very well known outside the workers’ movement. Inspired by Austro-Marxist ideas, these intellectuals shared their own “utopia” within an imagined Austrian nation. After the end of the war, they hoped for an Austrian path to Socialism.<sup>43</sup> In contrast to most of

37 Rathkolb, “Paradoxical Republic,” 94.

38 Gabriella Ilonszki, “Socialist and Communist Members of Parliament: Distinctiveness, Convergence, and Variance,” in *Democratic Representation in Europe. Diversity, Change, and Convergence* eds. Maurizio Cotta and Heinrich Best (Oxford: Oxford University Press, 2007), 284–315.

39 Müller, “Wildwest,” 140. Gehler, “Non-Alignment,” 126. Elizabeth L. Pennebaker, “Ideas instead of bombs’: an examination of anti-communism in cold war Austria and its reflection in five novels (1950–1962),” PhD. Thesis, University of Oxford, 2001, here 51.

40 Warren C. Williams, “Flashpoint Austria: The Communist-Inspired Strikes of 1950,” *JCWS* 9, no. 3 (2007): 115–136.

41 Fraberger and Stiefel, “Enemy Images,” 62.

42 Günter Bischof, “Österreich – ein ‘geheimer Verbündeter’ des Westens?” in *Österreich und die europäische Integration 1945–1993* eds. Michael Gehler and Rudolf Steininger (Vienna: Böhlau, 1993), 427–428.

43 Kroll, “Kommunistische Intellektuelle,” 243–244.

their contemporaries within Austria, they considered themselves to be independent political players, formulating their own positions on different issues and certainly not as “Soviet agents.”<sup>44</sup>

Within Austria, the media played a pivotal part in the escalating “war of words” between communists and anti-communists.<sup>45</sup> Socialist daily *Arbeiter-Zeitung* was at the forefront of efforts to fight both the KPÖ and the Soviet occupying forces, whereas the Conservative weekly newspaper *Wiener Kurier am Sonntag* shamed anti-fascists and peace activists as “Trojan horses of the communists.”<sup>46</sup> Meanwhile, *Forvm. Österreichische Monatsblätter für kulturelle Freiheit* considered itself as the leading anti-communist monthly, and sought more specifically to directly counter the communist *Tagebuch*.<sup>47</sup> In the 1950s, anti-communist sentiment was especially apparent within influential cultural circles – amongst intellectuals, artists, and writers – who enjoyed close ties to journalists and newspapers. *Forvm* editor Friedrich Torberg (1908–1979) together with the writer and theater critic Hans Weigel (1908–1991) counted amongst the most prominent of Austrian anti-communist Cold Warriors.<sup>48</sup>

*Forvm* sought to publish views from across the political spectrum, including socialists, independent communist sympathizers and Catholics. Contributors from the political sphere included the socialists Bruno Kreisky

44 Ibid., 294.

45 Müller, “Wildwest,” 114.

46 The anti-communist stance of the *Arbeiter-Zeitung* persisted in later years. See for example “Erfolgreicher Besuch,” *Arbeiter-Zeitung*, 15 October 1959. “Wien – Paradies der Friedenskämpfer: Österreichs Hauptstadt als Eldorado kommunistischer Tarnorganisationen, und Berufsverbände als Trojanische Pferde,” *Wiener Kurier am Sonntag*, 26 March 1953. Initially edited by US armed forces, the *Wiener Kurier* became a tabloid and by the 1950s, its circulation outstripped other Austrian newspapers.

47 Anne-Marie Corbin, “Das FORVM ist mein Kind. Friedrich Torberg als Herausgeber einer publizistischen Speerspitze des Kalten Krieges,” in *Die Gefahr der Vielseitigkeit. Friedrich Torberg 1908–1979*, eds. Marcel Atze and Marcus G. Patka (Vienna: Holzhausen, 2008), 201–221.

48 Friedrich Torberg was the pen-name of Friedrich Kantor, an Austrian writer. He worked as a critic and journalist in Vienna and Prague until 1938, when his Jewish heritage compelled him to emigrate to France and, later to the United States, where he worked as a scriptwriter in Hollywood and then for Time magazine in New York City. In 1951 he returned to Vienna, where he remained for the rest of his life. Julius Hans Weigel was an Austrian Jewish writer and a theater critic. After his return from exile in Switzerland (1938–1945), he wrote critical reviews about theater plays for the Austrian newspapers *Kurier* and *Neues Österreich*. Jointly with Friedrich Torberg he was responsible for the boycott in Austrian theaters of Bertolt Brecht whom he rejected because of Brecht’s communist convictions.



(Undersecretary of State) and Federal President Adolf Schärf (1890–1965), the conservative Chancellor Leopold Figl (1902–1965), the co-founder of the ÖVP, Julius Raab and also representatives of the Christian-catholic left such as historian Friedrich Heer (1916–1983).<sup>49</sup> The Nobel Prize winning theoretical physicist Erwin Schrödinger (1887–1961) also published in *Forvm*.<sup>50</sup> The very first

49 Adolf Schärf studied law at the University of Vienna and graduated in 1914. From 1920 to 1933 he worked as a secretary to the presidents of the Nationalrat (National Council), Karl Seitz, Matthias Eldersch and Karl Renner; he was elected a member of the Bundesrat (1933–1934), representing the Sozialdemokratische Partei Deutschösterreichs (SDAP) whilst practising law. He was imprisoned several times on political charges (1934, 1938, 1944) and after the war served as chairman of the SPÖ from December 1945 to May 1957. A member of the National Council (1945–1957), he served as Vice Chancellor in three cabinets of Leopold Figl and in one of Julius Raab and was an active participant in the negotiations for the restoration of Austrian sovereignty (1955). [http://www.archontology.org/nations/austria/au\\_rep2/scharf.php](http://www.archontology.org/nations/austria/au_rep2/scharf.php). Accessed on 9 September 2018.

Leopold Figl studied Agriculture at the University of Natural Resources and Applied Life Sciences Vienna and became vice chair of the Lower Austrian Bauernbund (Farmer's League) in 1931 and chairman in 1933. Figl later became a member of the federal council of economic policy and became leader of the paramilitary organization of Ostmärkische Sturmcharen for the state of Lower Austria. After the Anschluss, the Nazis deported Figl to Dachau concentration camp in 1938, from which he was released in May 1943. In October 1944 Figl was rearrested and brought to Mauthausen concentration camp. Figl was released on 6 April 1945, when troops of the Soviet Army advanced to the center of Vienna in an operation which became known as the Vienna Offensive. On 14 April 1945 he refounded the Bauernbund and integrated it into the ÖVP, which was founded three days later. On 27 April he became interim Governor of Lower Austria and vice-minister. At the first free elections since 1930, held in December 1945, the ÖVP won with almost fifty per cent of the vote and an absolute majority of seats in the legislature. Figl was proposed as Chancellor; the Soviets agreed, because of his opposition to the Nazis and his managerial abilities. The coalition (from which the communists were pushed out in 1947) remained in office until 1966 and did much to solve the serious economic and social problems left over from World War II. Figl resigned as Chancellor on 26 November 1953, but remained in the government as foreign minister. [https://en.wikipedia.org/wiki/Leopold\\_Figl](https://en.wikipedia.org/wiki/Leopold_Figl). Accessed on 9 September 2018.

Friedrich Heer received a PhD from the University in Vienna in 1938. Even as a student he came into conflict with pan-German historians as a staunch opponent of National Socialism and in March 1938 was arrested for the first time by the Austrian Nazis. He founded a small Catholic resistance group which he tried to amalgamate into one organized band the Christians, communists and Trades Unionists against the Nazis, and as a soldier later came into contact with the resistance group Soldatenrat. From 1946 to 1961, Heer was the editor of the weekly magazine *Die Furche* and in 1961 he was appointed chief literary adviser and editor for the Vienna Burgtheater; he also taught at the University of Vienna. <http://www.friedrichheer.com/biographie/biography.html>. Accessed on 9 September 2018.

50 Günther Nenning, *Reprint FORVM 1954 bis 1995. Register zusammengestellt von Peter Csulak und Evi Fördermair*. (Vienna: Überreuter, 2001).

issue of *Forum* on 1st January 1954 had featured a discussion between historian Friedrich Heer and editor Friedrich Torberg about whether Western intellectuals should talk to communists from behind the Iron Curtain. Torberg, a hard-line anti-communist, refused the idea of any cooperation with the Soviet Union whilst Heer considered it an option, a position which led to charges that he was a communist fellow traveler.<sup>51</sup> This exchange became the subject of a controversy dubbed “Conversation with the enemy” and established *Forum* as a place for airing and tackling sensitive political issues.

Nuclear technologies (weapons, energy) and their dangers crystalized deep differences between the political parties in Austria – differences exposed and brought to the fore in the mid-1950s by developments outside the country. In March 1954, the *Castle Bravo* accident at the American Proving Ground at the Bikini Atoll in the Pacific Ocean and the ensuing controversy about radioactive fallout from nuclear weapons tests, placed the radiological dangers of nuclear energy in the political and public spotlight around the world.<sup>52</sup> The responses in Austria manifest the deep political division within the country between communists and anti-communists who, as noted, took opposing positions on nuclear issues. Briefly stated, the communists were publicly critical of nuclear weapons whilst both socialists and conservatives who shared an anti-communist outlook, steered clear of engaging publicly with nuclear issues, including weapons tests.<sup>53</sup> The same was true of the mainstream, center-right national press: newspapers with a large circulation, such as the socialist *Arbeiter-Zeitung* or the conservative-catholic weekly *Die Furche* rarely reported on nuclear matters, including the fallout controversy. That said, the *Arbeiter-Zeitung* occasionally published articles condemning the anti-nuclear position of the communists.<sup>54</sup> Nuclear war, and its effects on Austria – centrally located in the European region where such a war would likely be played out – was a taboo topic. Even when from 1956 onwards the Soviet Union stationed nuclear weapons in East Germany, Hungary, and other members of the Warsaw Pact,

51 Heer to Reinhold Schneider, 26 January 1951, cited in Doris Neumann-Rieser, “Atomangst in österreichischer Literatur zwischen 1945 und 1966,” in *Österreich im Kalten Krieg. Neue Forschungen im internationalen Kontext* eds. Maximilian Graf and Agnes Meisinger (Göttingen: V&R unipress, 2016), 97–119.

52 On the Castle Bravo accident, see for example, 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.

53 Friedrich Korkisch, “Die atomare Komponente. Überlegungen für einen Atomwaffen-Einsatz in Österreich,” in *Zwischen den Blöcken*, Rauchensteiner, 387–450.

54 “Wahre Geschichten aus 5 Jahren,” *Arbeiter-Zeitung*, 8 June 1950.

domestic discussions on the “unspeakable” prospect of a nuclear attack on Austria did not take place in public.<sup>55</sup>

By contrast, the issue of nuclear fallout from nuclear weapons testing featured prominently in the communist press in Austria, and scientists and politicians sympathizing with leftist ideas actively engaged with the radiological dangers posed by nuclear weapons and other nuclear technologies.<sup>56</sup> The communist press therefore dominated the critical discourse on nuclear fallout in Austria during the mid-late 1950s, although the circulation of these newspapers was somewhat limited.<sup>57</sup> In particular, *Stimmen zur Zeit*, *Österreichisches Tagebuch*, *Österreichische Volksstimme*, and *Der Abend* offered a platform to intellectuals and scientists for discussing nuclear tests and weapons, which offered a means to educate the public on these topics.<sup>58</sup> Prominent here was Engelbert Broda who in the late 1940s and early 1950s published popular scientific articles on nuclear issues in the communist press, including the problem of radioactive fallout.<sup>59</sup> Chemist Thomas Schönfeld (1923–2008), deputy of the Austrian Peace Council – the Austrian branch of the World Peace Council (WPC) – and, like Broda, sympathetic to communist ideas, likewise published pamphlets and booklets to inform the broader public on the effects of

55 Korkisch, “Die atomare Komponente,” 406 and 436.

56 Müller, “Wildwest,” 115.

57 “Amerikanische Atomwaffenversuche beunruhigen Japan,” *Der Abend*, 12 January 1955. “Die ersten Fälle von Atomkrankheit in Österreich? Radioaktiver Regen verursacht in Salzburg rätselhafte Krankheitserscheinungen,” *Der Abend*, 15 July 1956. “Deutscher Gelehrter warnt vor totaler Atomverseuchung,” *Der Abend*, 30 July 1956. Communist newspaper *Volksstimme* had a circulation of circa 100,000 copies, whereas *Der Abend* never reached more than 30,000 copies. Conservative and socialist newspress had a circulation of circa 250,000 copies each. See: Müller, “Wildwest,” 141.

58 For information about newspaper circulation see: Kurt Paupié, *Handbuch der österreichischen Pressegeschichte, 1848–1959*, Band 1 (Vienna: Wilhelm Braumüller, 1960), 112–114.

59 “Alsos – oder warum die Deutschen die Atombombe nicht erfunden haben,” *Österreichisches Tagebuch*, August 1948. “Amerika, Rußland und die Atombombe. Wie es der mit dem Nobelpreis ausgezeichnete britische Atomforscher Professor Patrick Blackett sieht,” *Volksstimme*, 14 November 1948. “Atomenergie – Freund oder Feind,” *Die Woche*, 27 November 1949. “Warum Amerika kein Atomkraftwerk baut,” *Österreichisches Tagebuch*, Oktober 1949. “Die Atombombe aus der Pfütze,” *Tagebuch*, 4 February 1950. “Business-Geist und Atomtod,” *Tagebuch*, 1 April 1950. “Wenn die Atombombe fällt,” *Tagebuch*, 11 November 1950. “Zu dieser Kobalt-Bombe,” *Tagebuch*, 9 December 1950. “Wie entdeckt man eine Atomexplosion?” *Der Abend*, 9 March 1953. “Ein Stück Sonneninneres auf der Erde – was ist die Wasserstoffbombe?” *Volksstimme*, 23 August 1953. “Von der Wasserstoff- zur Kobaltbombe,” *Der Abend*, 28 September 1953. “Alarm um die H-Bombe,” *Tagebuch*, 10 October 1953. “Worum handelt es sich beim Atomwaffenproblem?” *Weg und Ziel*, Mai 1954. “Atomenergie in Österreich,” *Volksstimme*, 10 May 1956. “Gefahr durch Radio-Strontium,” *Volksstimme*, 25 July 1956.

nuclear weapons tests; he attended peace conferences in Austria and abroad, which called for an international ban of nuclear weapons.<sup>60</sup> Communist intellectuals such as Broda and Schönfeld regarded it as their responsibility to educate the proletariat or – as the Austrian socialist Victor Adler put it – to serve as “inspirers of the masses towards a conscious life.”<sup>61</sup> Although, as noted, Austrian communists saw themselves as acting independently of the Soviet Union, their anti-nuclear activities were largely channeled through institutions more or less steered by the Soviet Union. After 1948, the Soviet Union launched massive “peace offensives” as part of an attempt to consolidate Soviet control over the “People’s Democracies” in Eastern Europe and to influence peace movements in Western countries. The WPC served as a powerful means to this end.<sup>62</sup>

For all their efforts to bring nuclear issues and dangers before the public and into the political sphere, communist intellectuals and those sympathetic to communist ideas played no part in the creation of a national Pugwash group in Austria, nor were they involved in the annual conferences. As noted, the leading figure in the PCSWA in Austria, Hans Thirring, was a member of the center-left Viennese bourgeoisie. Almost seventy years old when the PCSWA began, Thirring was well connected both within senior political circles within Austria and within the international scientific community. In spearheading the development of Pugwash in the country, he had to balance carefully the delicate political situation within Austria, especially the communist/anti-communist dynamic and the sensitivity around nuclear issues, whilst supporting the aims, values and principles of the Pugwash project. This meant that he had to overcome his personal distaste for communism and also take care that working with communists within Pugwash did not create difficulties for him, or for Pugwash, in Austria. Thirring rapidly established himself as a useful figure within senior Pugwash circles in the late 1950s and was in close contact with the Continuing Committee, especially Joseph Rotblat. Thirring was instrumental in bringing about the two Pugwash conferences held in Austria in 1958 and 1959 – for which he drew heavily upon his connections within the country’s political elite.

60 Thomas Schönfeld and Friedrich Scholl, *Österreichischer Friedensrat, Tödliche Strahlen, tödlicher Staub. Wie die Wissenschaft die Atombombenversuche beurteilt* (Vienna: Österreichischer Friedensrat, 1958). Thomas Schönfeld was Jewish and spent the period from 1938 until 1945 in exile in the UK. In 1947 he returned to Vienna to study chemistry and subsequently built his career there. He was also active in peace initiatives, for example, serving as the Chair of the international NGO Committee on Peace. Kurt Komarek and Robert Rosner, “Prof. Dr. Thomas Schönfeld 1923–2008,” *Plus Lucis* 1–2 (2008): 60.

61 Kroll, “Kommunistische Intellektuelle,” 251.

62 On the WPC, see Doubavka Olšáková and Geoffrey Roberts in this volume.

### 3 Contact with Communists and the Dangers of the “Salonbolschewik”<sup>63</sup>

Hans Thirring was unusual amongst center-left/right Austrian intellectuals in being open towards engaging with communist peace initiatives and, indeed, had established credentials in peace activism. He had been a strong opponent of militarism during the Great War and became actively involved in the international peace movement during the 1930s.<sup>64</sup> Although never actually involved in nuclear physics research, after the Second World War he published popular books on nuclear physics and also on the problems of building a stable peace in the atomic age.<sup>65</sup>

Thirring's fundamental commitment to working towards peace led him to look for possibilities for cooperation with those on both sides of the Iron Curtain. In 1949, for example, he sent a personal message of greeting to the Austrian representatives of the second World Festival of Youth and Students in Budapest, encouraging them to reach an understanding between East and West. Moreover, together with writers Edwin Rollet, Franz Theodor Czokor, and Ernst Fischer, he formed a committee which collected the signatures of over 500 representatives from Austrian cultural life in support of a message of greeting to the first World Peace Congress in Paris (1949) – efforts which brought Thirring high praise from the communist daily *Volksstimme*.<sup>66</sup> Conservative intellectuals, scientists, and creative artists were, however, reluctant

63 Thirring to Weigel, 7 April 1949, Box 35, Folder 1645, Hans Thirring Papers (hereafter, HTP), Österreichische Zentralbibliothek für Physik & Fachbereichsbibliothek Chemie (ZBPh), Wien. (The Austrian Central Library for Physics and Chemistry Library, Vienna).

64 Reiter, “Hans Thirring.”

65 For example: Hans Thirring, *Die Geschichte der Atombombe: mit einer elementaren Einführung in die Atomphysik, auf Grund der Originalliteratur gemeinverständlich dargestellt* (Vienna: Neues Österreich Zeitungs- und Verlagsgesellschaft, 1946). Hans Thirring, *Atomphysik in gemeinverständlicher Darstellung* (Vienna: Franz Deuticke, 1954). Hans Thirring and Hans Grümm, *Kernenergie gestern, heute und morgen* (Vienna: Oldenbourg, 1963). Hans Thirring, *Homo sapiens: Psychologie der menschlichen Beziehungen. 1. Grundlagen einer Psychologie der kulturellen Entartungserscheinungen* (Vienna: Ullstein, 1947). Hans Thirring, “Was ist Aggression?” *Österreichische Zeitschrift für öffentliches Recht* 5, nos. 1–2 (1952): 226–242.

66 Ernst Fischer (1899–1972), also known under the pseudonyms: Ernst Peter Fischer, Peter Wieden, Pierre Vidal, and Der Miesmacher, was a Bohemian-born Austrian journalist, writer and politician. Ernst Fischer studied philosophy in Graz and did unskilled labour in a factory before working as a provincial journalist and then on the *Arbeiter-Zeitung* from 1927. Initially a socialist, Fischer became a member of the Communist Party of Austria in 1934. That year, after Fischer and his wife were involved in the Austrian Civil War, they had to leave Austria for Czechoslovakia, where he began working as an editor for

to follow suit for reasons that varied. Psychiatrist Otto Kauders from Vienna withdrew his initial support for the WPC out of fears of being associated with communism.<sup>67</sup> Writer Hans Weigel refused to support the WPC out of hand, dismissing it as a “communist organization in disguise” and, in a letter to Thirring in April 1949, suggested that the WPC’s influential supporters “to get off the Trojan horse.”<sup>68</sup> In reply, Thirring emphasized the benefits of joining forces with the enemy in order to secure peace:

The call for participation (in the World Peace Congress, S.F.) is addressed to all intellectuals concerned about the cause of peace. If all those people attended, they could adopt a resolution by majority vote, which would not be biased political propaganda, but an instruction for intellectuals around the world on how to use their spiritual authority to counter the current war psychosis and the Cold War.

Warming to his theme, he continued:

There is less evil in a Viennese professor catching the smell of a “Salonbolschewik,” than missing an opportunity to enter into an intellectual exchange with people whom one cannot easily meet otherwise [...]. Since the responsible political leaders up until now have not accomplished anything in this regard, intellectuals, writers, men of science and letters should try, who have the spiritual authority to influence public opinion. [...]. I believe that it is fair and appropriate for these people to get together for consultation. Of course, representatives from both sides have to sit down at the same conference table – or should we exclude one party right from the start, as in the case of consultations on the Treaty of Versailles 1919.<sup>69</sup>

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the Comintern. In 1938, they went to Moscow, where Fischer continued to work for the Comintern. After the war, Fischer remained an important figure in the Communist Party until 1969. Between April and December 1945, he served as Communist Minister of Information in the first post-war government. [https://en.wikipedia.org/wiki/Ernst\\_Fischer\\_\(writer\)](https://en.wikipedia.org/wiki/Ernst_Fischer_(writer)). Accessed on 9 September 2018. *Volksstimme*, 17 September 1948.

67 Kauders to Thirring, 23 April 1949. Box 35, Folder 1646, HTP.

68 Thirring to Weigel, 7 April 1949, Box 35, Folder 1645, HTP.

69 Weigel and Thirring were repeatedly locked in heated debates on the communist infiltration of peace and anti-nuclear weapons initiatives. In mentioning the Treaties of Paris that ended the Great War, Thirring referred to the trauma the Austro-Hungarian Empire had experienced as a defeated nation. In May 1919, the Austrian delegation had found itself excluded from the peace negotiations led by French Prime Minister Georges

For Thirring, consorting with “Salonbolschewiken” was a strategic means to an end. Coined by members of the German National Socialist Anti-Comintern circle, the term was used to cast aspersions on university professors, writers and artists who had traveled in the Soviet Union in the 1920s and 1930s, and written favorably about their experiences in the German press. Having its roots in the 1930s, this term, along with variants such as “Salonkommunismus,” circulated within conservative circles in Western Europe and the United States, where it was used to discredit their ideological opponents as communist sympathizers.<sup>70</sup> Later, the Nazis blamed the so-called “Salonbolschewiken” for giving allegedly “objective descriptions of the circumstances in Russia” while at the same time “adjourning to the sphere of bourgeoisie culture.”<sup>71</sup> In using the term “Salonbolschewik” in 1949, Thirring was challenging the suspicions about and accusations of Weigel and other anti-communist intellectuals, and unmasking what he saw as their reactionary mindset.

Already then in the late 1940s, Thirring was expressing views and values that would become the cornerstones of the Pugwash project and its conferences. It is perhaps unsurprising then that he came to play a leading role in building the organization in Austria – even if this presented serious difficulties and involved political dangers. Just as the Austrian government strived for a powerful “neutral” role on the international stage, Thirring sought to develop a meaningful position as a peace activist, constantly vigilant to the need to avoid being seen as a tool of or in league with communist organizations – challenges that would also confront Pugwash. For Thirring, the PCSWA provided welcome opportunities for the Austrian scientific elite to participate in international conversations about the superpower rivalry and the dangers of the arms race, and a forum in which they could express their own distinctive position and viewpoints. Within Austria, Thirring’s connections within senior political circles made him a valuable asset to the Pugwash project.

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Clemenceau. The delegation signed the Treaty of Saint-Germain-en-Laye upon an Allied ultimatum on 10 September. By signing the treaty, the Austrian side agreed to the dissolution of the Empire; it also accepted responsibility for causing the war, acknowledging its role as a part of the Central Powers. The country subsequently grappled with the consequences of the Treaty throughout the entire interwar period.

70 Ulrike Goldschweer, “Salonbolschewismus.” <http://web.archive.org/web/20160304084528/http://eeo.uni-klu.ac.at/index.php?title=Salonbolschewismus>. Accessed on 10 August 2019.

71 Source of quotes: Michael Kohlstruck, “Salonbolschewist und Pionier der Sozialforschung; Klaus Mehnert und die Deutsche Gesellschaft zum Studium Osteuropas 1931–1934,” *Osteuropa* 55, no. 12 (2005): 29–48, here 42. As his sources, Kohlstruck cites: “Salon-Bolschewisten,” in: *Antikomintern. Nachrichtendienst, herausgegeben von der Antikomintern*, 4 June 1934, 3–4.

A member of Viennese bourgeois circles and oriented politically to the socialists, Thirring was far from being a communist sympathizer, however he was firmly convinced of the need to talk with communists.<sup>72</sup> In letters to colleagues, and in public speeches, he made it very clear that in his view, “unilaterally emphasizing a particular standpoint” could not bring about peace and that those who sought peace should work together to develop an understanding of political and ideological differences.<sup>73</sup> Expressing sympathy for “a number of people” engaged in communist rallies against nuclear weapons tests, Thirring remained wary of communist propaganda. His outlook on ‘peace’ was in any case broadly construed, evident in a letter in 1958 to Max Born, the German physicist, now living in Edinburgh and in 1955 one of the eleven signatories of the Russell-Einstein-Manifesto and who in 1957 had also signed the Göttingen Declaration, in which Thirring stated that “massive propaganda should not be directed against one particular weapon, but against war and militarism in general.”<sup>74</sup>

In the conservative, anti-communist climate of 1950s Austria, Thirring encountered difficulties in finding allies among his peers. In marked contrast to the situation in West Germany, members of the Austrian scientific elite were reluctant to express opinions on nuclear weapons. The question of West German nuclear rearmament provoked even conservative West German scientists to speak up against nuclear weapons in the mid-1950s. In 1955, when senior West German physicist Otto Hahn outlined the special dangers of nuclear weapons in a radio program (“Cobalt 60 – A Danger or a Blessing for Mankind?”) and called upon politicians to solve international problems without resorting to military force, his views were received positively in left-wing circles, including high-ranking politicians in East Germany, such as Otto Grotewohl.<sup>75</sup> In Austria, Engelbert Broda immediately proposed showing solidarity with Hahn. Thirring reacted quickly to this, in part to ensure that the communists could not dominate the response to Hahn, drafting a statement entitled “Imagined and real dangers of the Atomic Age – The view of Austrian physicists.” He contacted several colleagues at home and abroad and asked for

72 Thirring to Schwarcz, 11 July 1959, Box 35, Folder 1465, HTP.

73 Botschaft an die 2. Weltjugend- und Studentenfestspele in Budapest, 18 August 1949. Box 35, Folder 1642/2, HTP.

74 Thirring to Born, 13 April 1958. Box 35, Folder 1828, HTP.

75 Klaus Hoffmann, *Otto Hahn: Achievement and Responsibility* (Heidelberg: Springer, 1993), 220. Elisabeth Kraus, *Von der Uranspaltung zur Göttinger Erklärung. Otto Hahn, Werner Heisenberg, Carl Friedrich von Weizsäcker und die Verantwortung des Wissenschaftlers* (Würzburg: Königshausen & Neumann, 2001), 159.



their support – including Lise Meitner, the most famous Austrian nuclear scientist of the time who had emigrated to Sweden in 1938.<sup>76</sup> He also contacted Engelbert Broda, and strategically and subtly played Broda off against Meitner. By confronting Broda with Meitner's reservations regarding a joint Austrian message of solidarity, Thirring skillfully warded off Broda's proposal:

How would you answer Lise Meitner's question on who seems a well-suited signer of the appeal to impress Russia? The appropriate person is of course (Frédéric) Joliot. The only question is if [...] the fact that he co-signed put off some of the Western physicists [...]. It is not easy at all to reconcile to many people whose ideas differ greatly. But basically, I agree with Meitner that an appeal jointly signed by international authorities would have more impact than a few Austrians, some of whom are almost unknown abroad.<sup>77</sup>

Broda's disappointment and frustration was strikingly apparent in his reply to Thirring in which he asked:

What happens is that nothing is done again. [...] I must say that for my taste our Austrian colleagues could and should dare take this rather modest step to show their solidarity with Otto Hahn, who is definitely not a bolshevik. Even if they stick with their kind.<sup>78</sup>

For the time being, Thirring's hope that Austrian scientists would find a way to work together in the quest for peace and against nuclear armament would depend on distancing such an initiative from the taint of communism. He would eventually have some measure of success by teaming up with radically anti-communist socialist political elites.

#### 4 Paving the Way for Pugwash: An Austrian Intervention

In 1957, Hans Thirring sought political office and in June was elected as a member of the Federal Council, the Upper House of the Austrian parliament: re-elected in 1959, he retained a seat on the Council until 1963. As a representative

76 On Meitner's relation to Hahn and to her Viennese colleagues see Ruth Lewin Sime, *Lise Meitner. A Life in Physics* (Berkeley, CA: University of California Press, 1996).

77 Thirring to Broda, 27 March 1955. Box 51, Folder 728, НТР.

78 Broda to Thirring, 7 April 1955. Box 35, Folder 1283, НТР.

of the Socialist Party, Thirring participated in parliamentary debates at the Council’s committee for foreign relations – the majority of which dealt with the peaceful uses of nuclear energy in the context of Eisenhower’s *Atoms for Peace* program.<sup>79</sup> In July 1957, a month after his election to the Federal Council, Thirring took part in the inaugural meeting in Pugwash, Canada. Joseph Rotblat later recalled Thirring as “one of the most enthusiastic supporters of the Pugwash Movement (...) who was very keen that another conference should be convened in Europe, to enable a larger number of scientists to participate”.<sup>80</sup> Thirring corresponded regularly with Rotblat and was instrumental in bringing Pugwash to Austria for the third conference in September 1958, which began in his Tyrolian hometown of Kitzbühel and closed in Vienna, and the fourth conference the following year, held in Baden, near Vienna.<sup>81</sup> Meanwhile, he was also actively involved in the European Group within Pugwash which, as discussed by Alison Kraft in this volume, served between 1959 and 1964 as a forum for European Pugwashites. Around this time, Thirring was working closely with fellow SPÖ party members, namely Undersecretary of State Bruno Kreisky and Federal President Adolf Schärf, to strengthen the Pugwash project in Austria.<sup>82</sup> In effect, Thirring had long served as Kreisky’s unofficial adviser on nuclear issues, rendering him well placed to include Kreisky in his various peace initiatives.<sup>83</sup>

In the early years, the Pugwash leadership struggled constantly to secure financial support for the conferences.<sup>84</sup> Whilst the Continuing Committee was keen to not to rely on any one donor – partly because of the implications this would have for its much-valued and much-vaunted independence – the Pugwash organization nevertheless initially relied heavily on the financial support of the American entrepreneur, Cyrus Eaton.<sup>85</sup> However, the Continuing Committee sought increasingly to distance itself from Eaton and his money – a

79 In 1958/9, Thirring engaged in debates including IAEA issues, a law for the promotion of nuclear science and the Agreement for Cooperation with the US about civil uses of atomic energy.

80 Rotblat to Wolfgang Kerber, 6 January 1989, cited in *Hans Thirring. Ein Leben für Physik und Frieden* eds. Brigitte Zimmer and Gabriele Kerber (Vienna: Böhlau, 1992), 129.

81 Thirring to Schwarcz, 29 July 1958. Box 35, Folder 1482, HTP. Russell to Thirring, 29 October 1958. Box 35, Folder 1263, HTP.

82 Thirring to Kreisky, 8 April 1958. Box 35, Folder 1501, HTP. Thirring to Kreisky, 22 August 1958. Box 35, Folder 1474. HTP.

83 Thirring to Kreisky, 3 March 1955, with manuscript attached entitled “Imagined and real dangers of the Atomic Age – the view of Austrian physicists.” Box 35, Folder 1286, HTP.

84 Leonard E. Schwartz, “Perspective on Pugwash,” *International Affairs* 43 (1967): 498–515, here 499–500.

85 On Eaton, see Carola Sachse’s chapter in this volume.

situation that provided the context for the Austrian conferences in 1958 and 1959.<sup>86</sup> Thirring put a proposal to Bertrand Russell, Eugene Rabinowitch, and Joseph Rotblat to hold the upcoming third Pugwash conference (envisaged for autumn 1958) in Austria.<sup>87</sup> Plans moved forward, and thanks to Thirring's personal intervention, the Theodor Koerner Foundation, of which Bruno Kreisky was secretary general, financed the Kitzbühel part of the conference, while the city of Vienna defrayed the costs of the closing events in the Austrian capital.<sup>88</sup> Thirring soon became the target of anti-communist attacks by the conservative American popular columnist Fulton Lewis Jr., who accused him of being a fellow traveler of the Soviet Union – a charge that apparently carried little weight with the Austrian government.<sup>89</sup> Certainly it did not put off Bruno Kreisky traveling to Kitzbühel two days before the conference opened in order to meet with leading Pugwashites.<sup>90</sup> President Schärff addressed the opening session of the conference in Vienna, while Franz Jonas, the socialist mayor of Vienna, opened the Pugwash meeting at the Austrian Academy of Sciences.<sup>91</sup> Following a strict anti-communist domestic policy, Kreisky and other high-ranking SPÖ government officials embraced opportunities to appear on the international stage promoting international dialogue – just like the Pugwashites.<sup>92</sup>

In light of the anti-communist attacks, Thirring sought to downplay his role in organizing the conference and adopted a low profile on the international Pugwash stage. Portraying himself as a “link” between the Continuing Committee and Austrian public figures who had arranged financial support for the Kitzbühel/Vienna conference, he was nevertheless closely involved in the process surrounding invitations to it.<sup>93</sup> Working on behalf of the Continuing

86 Vereinigung Österreichischer Wissenschaftler, 5. Mitteilung, Mai 1965. Box Pugwash vöw, File 35, HTP.

87 Thirring discussed this proposal with Max Born. Thirring to Born, 13 April 1958. Box 35, Folder 1309, HTP.

88 Thirring to Kepnik, 26 July 1958. Box 35, Folder 1483, HTP. See also Russell to Thirring, 29 October 1958. Box 35, Folder 1763, HTP.

89 Thirring to Nathan, 15 July 1958. Box 35, Folder 1123, HTP. Thirring to Born, 9 September 1958. Box 35, Folder 1309, HTP.

90 Kreisky to Thirring, 23 August 1958. Box 35, Folder 1467, HTP.

91 Thirring to Meister, 26 June 1958. Box 35, Folder 1497, HTP.

92 Jonas to Thirring, 16 December 1958. Box 35, Folder 1499, HTP. “Wider die starken Männer und gordischen Lösungen. Österreichs Beitrag zu einer neuen internationalen Zusammenarbeit. Von Bundesminister für Unterricht Dr. Heinrich Drimmel,” *Die Furche*, 7 September 1957.

93 Thirring to Nathan, 15 July 1958. Box 35, Folder 1123, HTP. See also Thirring to Trampusch, 29 August 1958. Box 35, Folder 1490, HTP.

Committee, he personally invited representatives of various international institutions, such as the IAEA and EURATOM, to Kitzbühel.<sup>94</sup> Furthermore, drawing on his long-standing connections to scientists abroad, notably with senior West German physicists who were members of the Max Planck Society, he tried to convince Wolfgang Gentner, Otto Hahn, Werner Heisenberg, Max von Laue, Carl Friedrich von Weizsäcker and also Max Born to take part in the third conference.<sup>95</sup> In a letter to Born he made clear his thinking:

I would consider it unfortunate if the Pugwash Group suffered the same fate as some other international movements, namely that more and more Western participants backed out for fear of compromising themselves, so that, finally, an enterprise dominated by communists remains.<sup>96</sup>

However, as Carola Sachse's work has shown, for various reasons, senior members of the Max Planck Society were reluctant to engage with Pugwash.<sup>97</sup> When it became clear that all but Born would reject the invitation to Vienna, Thirring proposed less senior West Germans to the Continuing Committee, notably physicists Helmut Hönl and Werner Kliefoth from Heidenheim, and the biologist Hanns Langendorff from Freiburg im Breisgau, who agreed to attend.<sup>98</sup> In September 1958, the conference welcomed seventy scientists from twenty nations; it began in Kitzbühel and concluded at the City Hall Auditorium in Vienna, with an audience of some 10,000 people.<sup>99</sup> The following year, Austria hosted the fourth Pugwash Conference, this time in Baden, although this was a much smaller affair.<sup>100</sup>

Thirring's success in bringing Pugwash conferences to Austria depended largely on the support of leading SPÖ (socialist) politicians, notably Kreisky and Schärff. In this, these politicians were pursuing their own political agenda, promoting Austria and its capital Vienna as a venue for international,

94 Thirring to Gruber, 8 August 1958. Box 35, Folder 1496, HTP. Gueron to Thirring, 13 August 1958, Box 35, Folder 1308, HTP.

95 Thirring to Kliefoth, 16 July 1958. Box 35, Folder 1322, HTP.

96 Thirring to Born, 10 July 1958. Box 35, Folder 1320, HTP.

97 Sachse, “Max-Planck-Gesellschaft,” 2016; “Uneasy Relationship,” 2018.

98 Born to Thirring, 7 July 1958. Box 35, Folder 1323/1. Weizsäcker to Thirring, 25 July 1958. Box 35, Folder 1316. Thirring to Lorenz, 20 June 1958. Box 35, Folder 1498. Thirring to Hönl, 19 July 1958. Box 35, Folder 1321. All HTP. On the major role Kliefoth subsequently played in West German Pugwash for the ensuing decade, see the chapter by Kraft in this volume.

99 Joseph Rotblat, *Scientists in the quest for peace: a history of the Pugwash conferences*. (Cambridge, MA: Massachusetts Institute of Technology Press, 1972), 41.

100 Rotblat to Thirring, 7 July 1959. Box 35, Folder 1294, HTP.

especially East–West gatherings, after years of the country’s absence from the international political scene. This success belied the difficulties that Thirring faced in building and further strengthening support for Pugwash within Austria. Certainly for the time being, Thirring could not find allies to promote Pugwash ideas among his peers in university circles. As noted, anti-nuclear sentiment and protest in Austria was dominated by the left and strongly associated with the communists, a situation which created difficulties for senior figures – scientists, intellectuals, and politicians – to voice publicly concerns about or opposition to nuclear tests and weapons: to do so, would raise suspicions and perhaps also attract charges of being a fellow traveler. These strongly rooted perceptions only began to change when mounting public fears about radioactive fallout – inextricably linked to nuclear weapons – called into question Austria’s nascent civil nuclear energy program. The Austrian “atom hysteria” soon turned public opinion against a research reactor which was only about to be built in Vienna. Responding to the rapidly growing interest of the conservative and liberal scientific elite to enter into the discussion of nuclear fallout, Thirring succeeded in presenting Pugwash as an alternative to the anti-nuclear discourse led by Austrian communists. He convinced his colleagues to provide “neutral” – that is to say objective, scientific – expertise on nuclear issues for the public within the Pugwash framework. Their aim was to defend the nascent Austrian civil nuclear energy program against the rising tide of public opposition to it.

## 5 The Austrian Nuclear Energy Research Program and Austrian “Atom Hysteria”

The dangers of nuclear fallout – hitherto something of a side issue within Austria, discussed and reported upon almost exclusively by the communist press – was moving to the forefront to the public conversation across Europe in 1957.<sup>101</sup> Anti-nuclear weapons sentiment was apparent, for example, in West Germany, including the Göttingen Manifesto of April 1957, and a wave of public protest against Chancellor Adenauer’s ideas about equipping the country’s armed forces with tactical nuclear weapons.<sup>102</sup> The Göttingen Manifesto was

101 Kraft, “Dissenting.” Holger Löttel, “Des ‘Emotionalen Herr werden’: Konrad Adenauer und die ‘Angst vor der Atombombe’ im Jahr 1957,” in: *Angst in den internationalen Beziehungen* eds. Patrick Bormann, Thomas Freiberger and Judith Michel (Göttingen: V&R unipress, 2010), 205–225.

102 Löttel, “Des Emotionalen,” 210–211.

the first major non-communist protest against nuclear weapons by scientists in the German speaking world. At approximately the same time, radio stations around the world transmitted Albert Schweitzer's broadcast "Declaration of Conscience," which spoke out against the danger of nuclear weapons tests. These expressions of anti-nuclear sentiment met with determined resistance from conservative Austrian intellectuals.<sup>103</sup> The fallout issue, which was bound up with the arms race, exposed and consolidated the faultline in Austria between communists and socialists in Austria. Communist intellectuals such as Engelbert Broda took a prominent stand against nuclear weapons tests, for example writing articles in the socialist *Arbeiter-Zeitung*, emphasizing the health risks of radioactive fallout generated by these tests.<sup>104</sup> Thirring found himself profoundly at odds with Broda, and adopted a strident pro-nuclear weapons position in various newspaper articles.<sup>105</sup> Arguing that these nuclear bombs acted as a useful deterrent against nuclear war, Thirring also held that nuclear fallout was not hazardous to human health, when compared with – for example – exposure to radiation resulting from 'background' natural radioactivity, or the medical use of X-rays.<sup>106</sup> The editor of the communist journal *Tagebuch*, Victor Matejka, sharply criticized Thirring for attempting to lull the public into a false sense of security with an argument that cast nuclear tests as the lesser of two evils.<sup>107</sup>

While it is hard to gauge the effect that these heated debates among intellectuals had on public opinion, awareness of nuclear issues in Austria certainly changed in the late 1950s. Even the conservative press was moved to discuss the health risks of fallout from nuclear weapons tests.<sup>108</sup> This was an important shift: for the first time, nuclear issues were moving into central areas of

103 Neumann-Rieser, "Atomangst," 117–118. See also "Wie Renner und Körner?" *Die Furche*, 11 May 1957.

104 "Univ.-Prof. Engelbert Broda: Keine Angst vor Atomversuchen?," *Arbeiter-Zeitung*, 15 January 1957.

105 "Ist die Menschheit durch Strahlung gefährdet? (mit Traude Bernert)," *Die Furche*, 5 January 1957. "Die Atomgefahren," *Die Weltwoche*, 27 September 1957. "Gefährdet die Atomrasche die Gesundheit?," *Die Presse*, 5 October 1957.

106 "Ein totaler Krieg ärger als Atombombenversuche," *Arbeiter-Zeitung*, 25 August 1957.

107 "Viktor Matejka: Antwort an Professor Hans Thirring und andere Beschwichtigungshofräte. Die Gefahr für alle Menschen ist nicht durch Aufklärung allein zu bannen," *Tagebuch*, 9 September 1957.

108 "Hoffnung auf Atom-Frieden?" *Die Furche*, 27 April 1957. "Das Atom. Der Mensch. Der Staat. Zur jüngsten Phase der amerikanischen Atomdiskussion," *Die Furche*, 22 June 1957. "Absoluter Radioaktivitätsrekord für Wien, aber: Die "Atomluft" ist noch nicht gefährlich. Die Fachleute machen sich aber Sorgen wegen der Dauerwirkung," *Arbeiter-Zeitung*, 14 September 1957. "Kosmisches Wettrüsten?" *Die Furche*, 23 November 1957.

Austrian domestic politics. Watching the events from the sidelines, Bertrand Russell was puzzled to see Austria going through “a kind of atom hysteria.”<sup>109</sup> Responding to rising public pressure, senior SPÖ representatives also began to engage directly with the fallout issue – which took center stage during the presidential election campaign of 1957. Socialist candidate Adolf Schärff, who was unequivocal in his support for Albert Schweitzer’s “Declaration of Conscience” and enjoyed the support of the Austrian Trade Union Federation, positioned himself as a firm opponent of nuclear weapons.<sup>110</sup> By contrast, his chief opponent, Wolfgang Denk (1882–1970) of the ÖVP and the right-wing Freedom Party of Austria (FPÖ), campaigned on a pro-nuclear weapons platform, advocating the deployment of nuclear weapons in Austria.<sup>111</sup> In May 1957, Schärff narrowly defeated Denk to become the second Federal President (by a margin of fifty-one to forty-nine per cent). The socialist Trade Union of Private Employees (GPA), the biggest affiliate within the Austrian Trade Union Federation, were sure that “Dr. Denk’s rebuff [...] was a sharp rebuff of all atomic weapons. Voting for Dr. Schärff was a commitment to any effort of banning atomic weapons and aiming at disarmament.”<sup>112</sup>

During the summer of 1957 the GPA remarked on “the growing number of letters and postcards dealing with the fear of experiments with the atomic bombs. This is a remarkable symptom.”<sup>113</sup> At the very time when public protests against nuclear weapons tests reached their peak, further steps to embark upon a civil nuclear energy research program were taken in Austria – within the framework of Eisenhower’s *Atoms for Peace* initiative.<sup>114</sup> The Council of Ministers, headed by chancellor Julius Raab (ÖVP), and vice-chancellor Adolf Schärff (SPÖ), had decided to build a nuclear research reactor with American support even before the signing of the State

109 Russell to Thirring, 28 May 1957. Box 35, Folder 1264, HTP.

110 “Österreichischer Friedensrat an Schärff,” *Stimmen zur Zeit*, 1 June 1957.

111 Wolfgang Denk was a trained surgeon who had studied at the University of Vienna. From 1924 to 1928 he worked at Rudolfstiftung Vienna, and later in Graz. In 1948 he was rector of the University of Vienna and president of the Physicians Society in Vienna. [https://de.wikipedia.org/wiki/Wolfgang\\_Denk\\_\(Mediziner\)](https://de.wikipedia.org/wiki/Wolfgang_Denk_(Mediziner)). Accessed on 10 August 2019.

112 “Hiroshima mahnt,” *Der Privatangestellte (Solidarität)*, 5 August 1957. “Die Welt kämpft gegen die Atomgefahr. Der ÖGB darf nicht fehlen!” Pamphlet issued by the news service of the Trade Union (Pressedienst der gewerkschaftlichen Einheit), June 1957.

113 “Gewerkschaft und Atombombe. Eine Antwort an viele Leser. Von Josef Hindels,” *Der Privatangestellte (Solidarität)*, 12 August 1957.

114 Christian Forstner, “Kernspaltung und Westintegration. Beispiel Österreich,” in *Physik im Kalten Krieg. Beiträge zur Physikgeschichte während des Ost-West-Konflikts*, eds. Christian Forstner and Dieter Hoffmann. (Wiesbaden: Springer Spektrum, 2013), 21–32.

Treaty (1955). At that time, using nuclear power as means of energy generation was being considered only as a promising option for the future.<sup>115</sup> The energy industry, together with other industrial branches, formed an interest group – the Österreichische Studiengesellschaft für Atomenergie GmbH, ÖSGAE (founded in May 1956). Struggling with leading nuclear scientists for control over the new research reactor, ÖSGAE successfully lobbied chancellor Julius Raab to transfer to it supervisory power over planning and building a research reactor in Seibersdorf, in the south-eastern outskirts of Vienna.<sup>116</sup> The transfer took place in May 1957, and the research reactor in Seibersdorf became operational in 1960.<sup>117</sup> In response to this, representatives of several Austrian universities and scientific institutes of the Austrian Academy of Sciences proposed a second research reactor that would be placed exclusively under their control. In August 1957, the decision was taken to build a second research reactor in the Viennese Prater (a large public park in Vienna’s central 2nd district). Construction work started in 1958, but this project quickly became a focus of public protest spearheaded by local residents initiatives – joined by communist groups.

Mounting public fears of radiation was impacting negatively on societal perceptions of the development and use of civil nuclear energy. Hans Thirring considered it his duty to counter the “nuclear psychosis” and to defend the reactor project against public protest.<sup>118</sup> In a number of newspaper articles, public lectures, and in letters to colleagues, Thirring openly blamed the Austrian communists for fueling fears about the health hazards of ionizing radiation and for stirring public protests against the country’s nuclear research facilities.<sup>119</sup> As he put it, communist propaganda had led the wider public to believe that “the air in the Prater” was contaminated by “emissions produced by the research reactor,” and that “radioactive waste water” from the reactor was being directed into the Danube channel. Moreover, due to the lack

115 The decision to build a nuclear power station in Zwentendorf near Vienna was taken only in 1972. Until 1970, the ÖVP had been the driving force behind the Austrian nuclear policy. After the election victory of the Socialist Party in 1970, the conservatives distanced themselves from the project. Meanwhile the Socialists fully supported the opening of the turnkey power station. Helmut Lackner, “Von Seibersdorf bis Zwentendorf. Die »friedliche Nutzung der Atomenergie« als Leitbild der Energiepolitik in Österreich,” *Blätter für Technikgeschichte* 62 (2000): 201–226.

116 Lackner, “Von Seibersdorf,” 209.

117 The reactor remains in use today in basic research on nuclear physics, electronics, metallurgy, chemistry, biology, and agricultural sciences. Lackner, “Von Seibersdorf,” 210–211.

118 Thirring to Weizsäcker, 22 July 1958. Box 35, Folder 1318, HTP.

119 Thirring to Born, 13 April 1958. Box 35, Folder 1828, HTP. Thirring to Schrödinger, 16 November 1959. Box 35, Folder 1293, HTP.



of “neutral” scientific expertise, “well-intentioned people were sent down the wrong track due to a combination of misunderstanding and incorrect interpretation of technical data.”<sup>120</sup> Seeking to counteract communist propaganda, Thirring sought to offer the frightened public an “objective” assessment of radiation exposure both from nuclear weapons tests and from nuclear reactors. He reassured readers of the *Arbeiter-Zeitung* that the research reactor in the Prater was “foolproof” and that levels of radiation arising from the reactor were far below that emitted from natural sources of radioactivity.

In the meantime, Thirring also renewed his attempt to seek out allies among conservative and liberal scientists at home and abroad. In arguing his position, he explicitly warned that public fears of radiation exposure were casting a shadow over the future of the country’s existing and future nuclear research infrastructure. As he explained in a letter to his West German colleague Carl Friedrich von Weizsäcker:

During the Cold War, communists have unquestionably succeeded in arousing fear of the unknown, serving as a means of their well-organized agitation against the (nuclear weapons) tests. Accordingly, broad sections of the population believe that radioactive fallout not only causes inclemency of the weather, but it might also be blamed for any physical discomfort, such as miscarriages, suicides, crime etc. etc. All this would be harmless, if only it strengthened resistance against the nuclear tests and nuclear armament – which is an entirely platonic matter for Austria. Consequently, suspicions arouse, and a resentment towards any use of nuclear energy. There are people who are sceptical about IAEA activities in Vienna. Residents take issue with the construction of research reactors – similar to the case of Karlsruhe in West Germany. They ask (rightly so per se) to pass a radiation protection law. If the spread of alarm continued, and if the law is rigorously implemented, public sector entities like the Institute for Radium Research in Vienna would be placed under a sort of police supervision as a result. That in turn makes it necessary for a person like you [...] to make a public appearance and declare not to throw the baby out with the bath water.<sup>121</sup>

Acknowledging the link between fallout from nuclear weapons tests and radiation fears, but also then downplaying any dangers and separating this out

120 Hans Thirring, “Offener Brief an die G’schreckten: Im Prater keine Atomgefahr,” *Arbeiter-Zeitung*, 13 October 1959. See also “Sind Atomkraftwerke gefährlich?” *Die Weltwoche*, 17 January 1958.

121 Thirring to Weizsäcker, 22 July 1958. Box 35, Folder 1318, HTP.

from the dispute over domestic civil nuclear energy use, Thirring was able to convince a growing number of scientists that they should work together to counter communist anti-nuclear campaigns. The PCSWA, he reasoned, offered the necessary scientific data for those scientists who were willing to help educate the public on nuclear issues. This network of accomplished nuclear experts, he argued, also provided an opportunity for senior scientists to stand up and express their convictions on the responsibility of scientists in the atomic age.<sup>122</sup> If the latter argument was not meeting with a great response among Austrian scientists, Thirring made the case for the PCSWA that it provided a common denominator for Austrian scientists concerned to defend the nascent nuclear energy program against public opposition and protest. Here Thirring enjoyed a degree of success. Gaining the support of the Austrian public for the country's nuclear reactor and research program made a joint approach essential, since a large swathe of the population continued to closely associate nuclear atomic energy with the atomic bomb and nuclear war.<sup>123</sup>

## 6 PCSWA in Austria: Building Credibility, Excluding the Left?

The third Pugwash conference held in Kitzbühel and Vienna in September 1958 was celebrated as great success by the Pugwash leadership.<sup>124</sup> In 1959, shortly after the 4th PCSWA conference in Baden, Thirring instigated the formation of a national Pugwash committee in Austria – the vöw.<sup>125</sup> In mobilizing support for the vöw amongst his peers Thirring emphasized its political neutrality, and that it identified “not in the least with politically partial movements like e.g. the World Peace Council or the Union ‘Fight against Nuclear Death’ [...]” Once again, he reminded his colleagues that:

events to mark the founding of research reactor in the Viennese Prater teach us a lesson on how important it is to have a public interest body with scientific authority, independent of public authority and without

122 Thirring to Schrödinger, 16 November 1959. Box 35, Folder 1293, HTP.

123 “Fürchten sich die Menschen vor der Atomenergie?” *Arbeiter-Zeitung*, 15 December 1959.

124 Russell to Thirring, 29 October 1958. Box 35, Folder 1263, HTP.

125 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). Stephan Albrecht *et al.* eds. *Wissenschaft – Verantwortung – Frieden: 50 Jahre vöw*. (Berlin: Berliner Wissenschaftsverlag, 2009).

any political loyalty – [and] which is capable of countering panic-mongering sensational press news.<sup>126</sup>

Founded in the summer of 1960, the vöw was open to those with an academic background in the natural or social sciences. Hans Thirring aside, only a small fraction of all official vöw members were also Pugwashites during the 1960s.<sup>127</sup> It is telling that nuclear physicist Berta Karlik from Vienna, head of the Institute for Radium Research and a leading figure in the Austrian nuclear energy program, took part in creating the vöw.<sup>128</sup> Her early involvement indicates that she saw the PCSWA principally as a vehicle for advancing the peaceful uses of atomic energy – specifically for pushing civil nuclear energy research in Austria. During its early years, the priority of the vöw was to inform the Austrian public about the risks of the peaceful and military uses of nuclear energy. In order to do so, it provided data on the relative magnitude of the dangers posed to humans from the peaceful application of nuclear energy, test explosions and nuclear war.<sup>129</sup> In later years, the vöw worked, first and foremost, to inform Austrian scientists on PCSWA activities, to pass on Pugwash ideas to the scientists, and to raise money to cover the travel expenses of Austrian Pugwashites.<sup>130</sup>

To the outside world, the vöw promoted the PCSWA agenda within Austria. In 1962, vöw declared that “the clarification of the question on the basic possibility of coexistence without military pressure is of vital importance.”<sup>131</sup> While it promoted international dialogue across ideological boundaries, at the same time it clearly distanced itself from the communist camp. It accepted scientists from across the political spectrum – albeit with the striking exception of communists and those sympathetic to their views. For example, chemical physicist Engelbert Broda never received invitations to vöw meetings, although he had

126 “Einladung zur Bildung einer Vereinigung österreichischer Wissenschaftler,” [undated]. Box Pugwash vöw, File 15, HTP.

127 Jeffrey Boutwell ed. “Participants in the Pugwash Conferences on Science and World Affairs meetings, 1957–2007.” Compiled in preparation for the Pugwash Conference 2007 in Bari, Italy. *Pugwash Newsletter* 44, no. 2 (2007).

128 “Bericht über die Gründung der Vereinigung Österreichischer Wissenschaftler,” [undated]. Box Pugwash vöw, File 17, HTP. Karlik did not participate in Pugwash Conferences. Due to her “work overload” she also did not have any formal function in vöw apart from her membership.

129 vöw *Newsletter* no. 3 (January 1962). Box Pugwash vöw, File 24-25, HTP.

130 vöw, 5. Mitteilung, May 1965. Box Pugwash vöw, File 35, HTP.

131 vöw *Newsletter* no. 3 (January 1962). Box Pugwash vöw, File 24-25, HTP.

joined as a paying member a “long way back.”<sup>132</sup> vöw’s strict anti-communist membership policy was fundamentally at odds with the PCSWA presentation of itself and its agenda on the international stage. This was another point of difference between Pugwash in the Austrian setting and other Western Pugwash groups. As an international collective, Pugwash actively sought the participation of scientists from across the political spectrum: this was key to its self-conception and seen by the leadership as a key asset, not least in bolstering its claims to political neutrality and, from this, its credibility – especially with state actors in the west. This politically inclusive strategy certainly did not work in Austria. The vehement anti-communism at large within Austria and which was central to its political make up precluded the inclusion of communists in the vöw. While the Austrian foreign policy of “permanent neutrality” suggested an openness to dialogue with the communist camp – in practice, within the country, political power, influence and success was possible only for those groups who refused to engage in that dialogue.

Initial worries among Austrian scientists that vöw might be a target for communist infiltration proved unfounded and it began to gain support. Nuclear physicist Karl Przibram served as its first president, with Felix Mainx, head of the Institute for General Biology at the University of Vienna, serving as first vice-president.<sup>133</sup> The vöw gained momentum and proved so popular within senior scientific circles (excluding communists and their alleged sympathizers) that in May 1961, the vöw leadership informed its members that PCSWA events were attracting so much interest, that several applications to participate had to be refused.<sup>134</sup> By the late 1960s, vöw had approximately 60 members, including many distinguished scientists.<sup>135</sup> If communist Austrian scientists shared the values and principles of Pugwash, for years the vöw ensured that they did not have the opportunity to be around the table at the international Pugwash conferences. It was not until the 1970s that the vöw began to open up to former or actual communist scientists.<sup>136</sup>

132 Gerhard Oberkofler, “Engelbert Broda und Stephan Hermlin. Eine Begegnung im Kampf um Abrüstung und Frieden,” in *Über Wissenschaft und Gesellschaft in Österreich. Gesamtelte Studien*, ed. Gerhard Oberkofler (Vienna: Alfred Klahr Gesellschaft, 2011), 171–186.

133 “Bericht über die Gründung,” Box Pugwash vöw, File 17, HTP.

134 Vereinigung Österreichischer Wissenschaftler, 2. Mitteilung, Mai 1961. Box Pugwash vöw, File 19–21, HTP.

135 “Mitgliederliste der österreichischen Wissenschaft,” c. 1970. Box Pugwash vöw, File 42–43, HTP.

136 Broda to Frank, 20 January 1979. Engelbert Broda Papers, Box 51, File 727–2, ZBPh. Following Karl Przibram and then Hans Thirring, Engelbert Broda was appointed president of vöw in 1979, a post he held until 1983. By this time, however, the vöw was waning, not least because of the dwindling contribution of the aging and frail Thirring.

Although claiming to be independent of governmental authorities, the vöw continued to rely financially on the support of the Austrian Foreign Office, and elites from within Austrian business circles.<sup>137</sup> Foreign Minister Bruno Kreisky kept a close eye on PCSWA and explored options as to how best to exploit this increasingly important non-governmental organization to further Austrian foreign-policy interests. In 1964, he even suggested to Thirring that the Continuing Committee relocate its activities from London to Vienna – a move rejected by Thirring, who held great respect for Pugwash Secretary General, Joseph Rotblat, who was based in London.<sup>138</sup> The collaboration between vöw representatives and the Austrian government were and remained very close during the entire 1960s – a feature that distinguished the Austrian Pugwash group from all other Pugwash groups in the west.

Yet the common interest of the government with Austrian Pugwashites had its limits: This was the case when Thirring tried to drive his peace work even further, envisioning a complete disarmament of his country. Although the media picked up the subject, a wide-ranging discussion of his proposal did not take place.<sup>139</sup> Making a case for the unilateral disarmament of Austria and, later on, of Switzerland, Sweden, Finland, and Ireland, he was hoping that the United Nations secured Austria's continued existence as a weapon-free zone. His initiative found some support. The British politician, Labour Party member, active Pugwashite and future winner of the Nobel Prize for Peace, Philip Noel-Baker wrote:

I hope the effort given to your plan would not diminish the effort given by Austria and the other countries to general and complete disarmament. [...] I argued that the smaller and non-aligned nations could play a much more active part. If the Austrian Government would instruct its General Staff and its scientists to prepare a draft Disarmament Treaty, they would render a great service.<sup>140</sup>

137 See records regarding funding of travel expenses for Felix Mainx, Rudolf Steinmaurer, Robert Jungk, Roman Sexl, Peter Weinzierl und Hans Thirring: Bruno Kreisky Archiv Wien, III.8, Box 5.

138 Thirring to Kreisky, 12 January 1964. Box 35, Folder 300, HTP.

139 Wolfgang L. Reiter, "Hans Thirring und Engelbert Broda. Naturwissenschaftler zwischen Nationalsozialismus und Kaltem Krieg," in *650 Jahre Universität Wien – Aufbruch ins neue Jahrhundert* eds. Mitchell G. Ash and Josef Ehmer (Vienna: V&R unipress, 2015), 329–340.

140 Noel-Baker to Thirring, 23 August 1963. Box 35, Folder 1259 (1), HTP.

With this radical pacifist stance, Thirring failed to find the support of the Austrian Foreign Office, let alone other members of the government.<sup>141</sup> Plans for a complete disarmament of Austria never became a reality.

## 7 Conclusion

This chapter has examined the circumstances in which the Austrian Pugwash group formed during the late 1950s and early 1960s amid the anti-communist ambivalence of the Austrian government, and the vehement anti-communism in Austrian society. Comparing the development of Pugwash in Austria with that in other countries in the west, one aspect stands out: the extent to which the Austrian Pugwash group – the vöw – and some of Austria’s leading Pugwashites were closely associated with and seemingly influenced by the government. They were not challenging state government policy, as was the case in the US and UK, and to a lesser extent, in West Germany. On the contrary: they shared the government’s anti-communist position, and they were also more than supportive of its pro-nuclear energy research agenda. This intimate link with governmental authorities distinguished the Austrian group from other Western Pugwash groups.

How can the Austrian Pugwash group’s closeness to Austrian government officials be explained? Several factors underpin this distinctive dynamic. One factor was the specific *foreign policy* situation in Austria. Hosting Pugwash conferences helped to confirm the country’s position as an active mediator between the Cold War blocs. The Austrian government showed its readiness for dialogue with communist regimes, which came close to the Pugwash idea of impartiality. Hans Thirring’s vital interest in matters of peace and nuclear disarmament meshed with high-ranking Socialist government officials’ ambitions to promote the nascent policy of “permanent neutrality.” Thirring functioned as a pivot between the government on the one hand, and the scientific community on the other. Strongly rooted in the Viennese academic world, Thirring made himself an advocate of nuclear research interests, and of the country’s civil nuclear energy program in particular. This program began in the context of the Europe-wide controversy about radioactive fallout from nuclear weapons tests, on-going since 1955, and widespread public protest against both tests and nuclear weapons which reached its height in the late 1950s. The

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141 Vereinigung österreichischer Wissenschaftler, 4. Mitteilung, Juni 1964. Box Pugwash vöw, File 31-32, HTP.

nuclear research community – especially physicists – thus had a vital interest in defending the program against growing public opposition to it. The foregoing analysis highlights the importance of the press, especially newspapers, as a place where this debate played out and was fought in Austria in this period. Thirring managed eventually to convince his colleagues that PCSWA offered an effective framework to counter public nuclear fear raised by communist propaganda. *Domestically* pro-nuclear energy and anti-communist positions trumped the values of PCSWA as an international collective. The Pugwash commitment to including within its ranks scientists from across the political spectrum was not reflected in the Austrian Pugwash group until the late 1960s. Rather, Austrian Pugwash reflected and served a distinctive national context. Moves to ensure the political isolation of communists as a means to regain dominance in the debate and discourse about the country's nuclear energy program profoundly shaped Pugwash here. Austrian Pugwashites stood with the Austrian government on key (nuclear) policies and on the need to keep communists 'at bay.' PCSWA thus owed much of its influence and further development in Austria to the distinctive interplay of foreign policy interests, and ongoing domestic discussions about the civilian use of nuclear energy in this country.

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## Czechoslovak Ambitions and Soviet Politics in Eastern Europe: Pugwash and the Soviet Peace Agenda in the 1950s and 1960s

*Doubravka Olšáková*

During the era of de-Stalinization, the Pugwash Conferences on Science and World Affairs (PCSWA, Pugwash) played an important role in Central and Eastern Europe not only by contributing to the internationalization of Sovietized science, i.e., by stabilizing the international links of local scientific communities, but also by influencing the perception of the social and political role of scientists in non-liberal societies.<sup>1</sup> The notion of scientists as experts and advisers in social and political crises was not unknown in the countries of the Eastern Bloc but had been framed differently than in the West.<sup>2</sup>

The reason why the Pugwash movement reverberated so strongly throughout Eastern Europe is because the late 1950s and the 1960s was a period of de-Stalinization and political liberalization. The search for a new route to socialism became the key phrase of the Prague Spring in Czechoslovakia and in Poland during the years of Władysław Gomułka's *détente*. Political reforms were based on a better understanding of science and society, and researchers often listened to society's wish to find a new, alternative way of governing a 'socialist' society. At the same time, this was a period when the Soviet Union, in the aftermath of Nikita Khrushchev's dismissal, was redefining its foreign policy.

The specific etymology of the official name of Pugwash in Eastern Europe underlines its specific role in Soviet peace policy. The PCSWA was always referred to as the "Pugwash movement" and there was a reason for this: in the official Soviet rhetoric, there existed only one, unified global "peace movement" – and Pugwash was defined as part of it. Soviet peace policy, and therefore also the peace policy of the Soviet Bloc, was presented and described as based on a broad international "popular movement" dominated by three

1 This research paper was supported by a GA ČR research grant nr. 19-04546S to the Institute of Contemporary History of the Academy of Sciences of the Czech Republic.

2 Martin Kohlrausch and Helmuth Trischler, *Building Europe on Expertise: Innovators, Organizers, Networkers* (Basingstoke: Palgrave Macmillan, 2014).

key actors: the Soviet Union, which defined the peace policy of the Soviet bloc, the international workers' movement in capitalist countries, and social movements in so-called Third World countries fighting for national liberation and/or against neo-colonialism.<sup>3</sup> At first, the leading role within the peace policy of the "international workers" movement was assigned to the World Federation of Scientific Workers (WFSW) but later, as this chapter will show, this role was ascribed to the Pugwash movement.

The aim of this contribution is to shed new light on the role of – in Soviet wording – the Pugwash movement in Central and Eastern Europe during this particular phase of the Cold War. Within this region, the analysis focuses on Czechoslovakia. This was the country which, in 1957, was selected by the Soviets to represent the Eastern bloc; as we will see, Poland would assume more importance later on when the Czech position vis-à-vis Moscow changed dramatically following the Prague Spring of 1968. The changing national pattern of Eastern bloc participation in the Pugwash conferences illuminates how the Soviet Union sought to control the international activities of the countries within its alliance system, moving the satellite nations around like chess pieces as part of its overall strategy in regard to both intra- and inter-bloc geopolitical considerations, and how it also sought to exercise influence over the Pugwash movement. This kind of "restricted internationalism" will be described in the opening section.

This is followed by an analysis of the establishment of the Pugwash organization in Central and Eastern Europe as an integral part of the Soviet peace agenda during the period of restricted internationalism, a transitory phase between the Stalinist Sovietization of scientific communities in Eastern Europe and the multilateral cooperation of Eastern Bloc countries in large scale programs under the aegis of the UN or UNESCO (such as the International Geophysical Year (1957–1958), the International Biological Programme (1964 onwards) or the International Hydrological Decade (beginning in 1965)). This section identifies and tracks the principal pro-Soviet peace groups and actors and highlights the attitudes of national communist parties and scientific communities towards Soviet efforts to mobilize support for their Pugwash strategy within the Eastern bloc. As we will see, the impulse to promote Pugwash ideas here came not from the West but from Moscow. The Eastern Bloc group of national Pugwash committees (national groups) was formed at the

3 Doubravka Olšáková, "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 (2018): 210–240.

sixth Pugwash Conference held in 1960 in Moscow.<sup>4</sup> Originally, this comprised three members: the Czechoslovak Academy of Sciences, the Polish Academy of Sciences, and the Academy of Sciences of the USSR in Moscow. The Czechoslovak Pugwash Committee was until 1968 one of the most active national committees in Eastern Europe, and although the Czechs worked in close conjunction with the Soviets, in the 1960s they were able nevertheless to develop their own initiatives within Pugwash.<sup>5</sup> All in all, the USSR benefited from this arrangement. After 1968, when Czechoslovakia lost its privileged status within the Eastern European and Soviet hierarchy, the Polish Pugwash Committee took its place. The experiences of Czechoslovakia and Poland and their changing positions within the Eastern Bloc, underlines the need to clearly differentiate between individual nation states when analyzing the involvement of the countries of the Soviet bloc in international and transnational organizations during the Cold War. Each experienced the controlling hand of Moscow differently, and the dynamics of this relationship changed over time and in ways that defined the limits of each national Pugwash group's independent international initiatives. In the Czechoslovakian case, this included for example, the failed attempts to found an International Peace Institute or an International Institute for Cellular Biology.

The third part of the chapter shows that after the creation of national Pugwash committees in Eastern Europe there followed a period in which the Czechoslovak Pugwash Committee was highly active, including being in the vanguard of moves to address various political and geopolitical problems of Central and Eastern Europe.<sup>6</sup> This time of lively discussions and meetings between leading Pugwashites from the East and the West represented an unprecedented degree of scientific internationalism in Central and Eastern Europe, which ranged from science diplomacy as represented by visits to Czechoslovakia by senior Harvard professors (Paul M. Doty, Henry Kissinger, and Marshall D. Shulman) to multilateral discussions regarding the founding of international institutes in Prague.<sup>7</sup> Here, the argument is made that the Pugwash network was a highly successful tool of science diplomacy but that

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4 For further insights into the Moscow conference see the chapters by Fabian Lüscher and Carola Sachse in this volume.

5 Joseph Rotblat, *Scientists and the Quest for Peace. A History of the Pugwash Conferences*. (Cambridge, MA: MIT Press, 1972), 15.

6 For further insights on this, see the chapter by Kraft in this volume.

7 For a sense of the current, different interpretations of the term "science diplomacy" and its contemporary uses, see for example: The Royal Society, *New Frontiers in Science Diplomacy: Navigating the Changing Balance of Power* (London: The Royal Society, January 2010).

its impact was limited by the restricted internationalism of Soviet foreign policy.

The final part of the chapter explores how these activities had an impact on the functioning of the highly influential WFSW, emphasizing how Pugwash activities inspired the Federation to redefine its own agenda and to probe possible joint actions. This development was mainly pursued by the secretariat of the WFSW, which was located in Prague and had close personal links with senior figures in the London-based Continuing Committee of the PCSWA. The waning influence of Pugwash in Central and Eastern European countries came with the arrival of the Brezhnev doctrine, which resulted in the forced withdrawal of Czechoslovak scientists from the international scene and the re-establishment of full Soviet control over the country. The main argument here emphasizes the role of Soviet policy in the functioning of international science diplomacy as manifest in the case of the Pugwash organization. Soviet science diplomacy proved to be flexible enough to reassess the principal aims of Soviet foreign policy and to develop a new approach based on a win-win strategy.

## 1 Restricted Internationalism: Looking for a Soviet “Peace Plan”

The activities of the Pugwash network in many ways matched the official rhetoric of the Soviet regime, which – using the specific vocabulary of Communist powers – liked to present itself as a “fighter for peace” on the “peace front.”<sup>8</sup> That scientists should be involved in these activities seemed natural and in agreement with the demands of the political regime and its ideology, which required social engagement.<sup>9</sup> Basic research, science for science’s sake, had been rejected under socialism in the Eastern bloc as analogous to bourgeois art for art’s sake. In a new society, scientists were to be actively engaged in social developments and in the fight for a better future.

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Vaughan C. Turekian and Norman P. Neureiter, “Science and Diplomacy: The Past as Prologue,” *Science and Diplomacy* 1, no. 1 (March 2012): 1–5. For a sense of historical scholarship on scientists’ roles in the policy-making realm during the Cold War in the US context see, for example: Ronald E. Doel and Kristine C. Harper, “Prometheus Unleashed: Science as a Diplomatic Weapon in the Lyndon B. Johnson Administration,” *Osiris* 21, no. 1 (2006): 66–85; Julia MacDonald, Eisenhower’s Scientists: Policy Entrepreneurs and the Test-Ban Debate 1954–1958,” *Foreign Policy Analysis* 11 (2015): 1–21.

8 Petr Fidelius, *L’esprit post-totalitaire* (Paris: Bernard Grasset, 1986).

9 Doubravka Olšáková, *Věda jde k lidu!* (Prague: Academia, 2014).

There were various mass movements with an agenda relevant to the ‘struggle for peace’ that were more or less directed or influenced by Moscow and active on both sides of the Iron Curtain. Prominent here was the aforementioned WFSW, the World Peace Council (WPC, formed in 1950) and, beginning in the early 1960s, Moscow sought also to bring the Pugwash conferences in line with the peace front.<sup>10</sup> Soviet strategy relied on an unprecedented and very generous support of these movements, but a closer look at the circumstances surrounding the foundation of the WPC, the WFSW and Pugwash groups within the Eastern bloc shows some features typical of the “Sovietization” policy of the USSR during a period of waning Stalinism, when every important decision had to have Moscow’s consent. The level of trust that the Soviet Union placed in each of these organizations differed.

The WPC represented perhaps the most important organization of the Soviet ‘Peace Front’ that was initiated by Cominform. It was organized in a way that was typical for the Soviets – that is to say, strictly hierarchically. A hierarchical structure, with the internationally constituted WPC at the top and the various “national committees” under it, was established almost immediately after the foundation of the organization. Moreover, within the framework of the WPC, Moscow coordinated the “peace activities” of all mass organizations in the countries of the Eastern bloc whose activities it deemed pertinent to its peace agenda, including for instance various women’s unions. The mass nature of movements linked to the WPC and the fact that they were under strict Soviet control made the WPC the most important peace organization in Eastern and Central Europe.

A second major actor was the WFSW which, after 1948, closely cooperated with the WPC although it was focused mainly on scientists and scientific activities, rather than on mass agitation and propaganda. As the name suggests, the WFSW began as a union of scientific workers, attracting Soviet attention only after 1952, when final negotiations in connection to this took place between the British and the Soviets in Prague. Based on the outcome of these discussions, Soviets then decided to join the WFSW. It is interesting that, to date, the most complete record of the PCSWA in Eastern Europe, including notes from negotiations and correspondence, is to be found in the Czech archives, in the collection of the WFSW Regional Center for Central and for Central and Eastern Europe located in Prague.<sup>11</sup> Frédéric Joliot-Curie (1900–1958), winner

10 For more on the WFSW see the chapter by Geoffrey Roberts in this volume.

11 Archives of the Academy of Sciences of the Czech Republic (hereafter, AAS ČR), File: World Federation of Scientific Workers. See Soňa Spurná, *Světová federace vědeckých pracovníků – Regionální centrum v Praze* (Praha: Ústřední archiv ČSAV, 1981), 4.



of the Nobel Prize for Chemistry in 1935, after 1945 became a 'flagship' for the Soviet "peace front," and was important in shaping Soviet perceptions of the WFSW. He was member of prestigious scientific academies and institutions, but also a leftist French intellectual who played a pivotal role in post-war European political, social and cultural life. During the post-war era, he was the president of two critically important organizations: the WPC (1949–1958) and the WFSW (1946–1957). He was one of the initiators of the Stockholm Appeal (1950) and a signatory of the Russell-Einstein Manifesto (1955). Even for a leftist scientist and a post-war European intellectual, his level of engagement was extraordinary. His work in both the WPC and WFSW had a vast impact on the further development of Soviet policies, and it is not an exaggeration to claim that it was the personality of Joliot-Curie which convinced the Soviets that the investment of time and energy into the WFSW would be worth it.<sup>12</sup>

In order to appreciate the importance of the Soviet decision to join the WFSW, one needs to take into account that since its inception the WFSW, cognisant of its precarious position in a bipolar world, had global ambitions. This was one of the reasons why already at the beginning of the 1950s, it was decided that its International Secretariat would remain in London, while some other functions would be taken over by three regional secretariats. One of these was a secretariat for Central and Eastern Europe, including the USSR and People's Democracies, which was located in Prague and led by Professor Ivan Málek (1909–1994).<sup>13</sup> A respected microbiologist, Málek was for much of the 1960s a leading figure in the Czechoslovak Pugwash Group who between 1965 and 1972 served on the Pugwash Continuing Committee (later renamed the Pugwash Council).<sup>14</sup> Málek's political activities during the Prague Spring brought an end to his engagement and his enforced retirement from his academic career. The creation of the WFSW secretariat for Central and Eastern Europe was agreed upon in 1952 and it started to operate on 1 January 1953; from 1955 onward, it functioned under the name of a "Regional Center for Central and Eastern Europe."<sup>15</sup> Another regional secretariat was that for Western Europe and America, which was divided between Paris and London and

12 Michel Pinault, *Frédéric Joliot-Curie* (Paris: Éditions Odile Jacob, 2000).

13 Martin Franc, *Ivan Málek a vědní politika 1952–1989* (Prague: Masarykův ústav, 2010).

14 "Vytvoření československého pugwashského výboru," 5 September 1961. National Archives of the Czech Republic ČR, (hereafter NA ČR), Central Committee of the Communist Party of Czechoslovakia (hereafter CC KSČ), Politbyro 1954–1962, Vol. 321, arch. unit 408, point 9. Rotblat, *Quest*, 88–90.

15 Other regional centers were established, for instance in Delhi for India, in Cairo for a new revolutionary regime that took the form of a United Arab Republic, and in Havana for Cuba. Cf. Spurná, *Světová federace*.

headed by Dr. E.G. Edwards. The third and last of the three original regional centers was the secretariat for the Far East, which was located in Beijing and led first by Professor T'u Chang Wang and after him by Zhou Peiyuan (both from China).<sup>16</sup>

The PCSWA was the third global network which Moscow counted in its "peace front." Established later than both the WPC and the WFSW, from which it differed in key respects: Pugwash was neither a mass movement nor was it under Soviet control, had been created in the West and was "elitist" in character. Secondly, the Pugwash conferences were not formally institutionalized: strict hierarchical structures were apparent only in the national groups formed within the countries of the Eastern bloc and which reflected the strong influence of Moscow in these settings. This hierarchy was not created out of the blue or independently of structures that were already in place: Moscow used the institutional form of the existing research landscape, which was defined in 1950s in one of the first steps leading to the Sovietization of science and education in Central and Eastern Europe. The structure of national Pugwash groups in this region thus closely emulated the hierarchical structure of the National Academies of Science in this region – and Pugwashites from the Eastern bloc were typically members of these Academies, which stood at the apex of the institutional hierarchy of science in each national setting. The Academies were under the permanent control of the Communist Party and the Presidents of these highly prestigious institutions were very often nominated members of the Central Committee of the Communist Party.<sup>17</sup> In most countries of the Eastern Bloc, the close links between national Pugwash committees and the Academies meant that Pugwash activities were typically incorporated into the agenda of the relevant department or section for international relations.

Current scholarship on the history of peace movements tends to assume that during the period under study, cooperation between the Eastern and Western Bloc either did not exist or was limited and in the Soviet Bloc strictly controlled by Moscow.<sup>18</sup> Hybrid actors, i.e. organizations such as the WFSW which were partly or fully supported and controlled by Moscow, offered

16 For more on Zhou Peiyuan and Pugwash in China, see the chapter by Barrett in this volume.

17 This is apparent in the chapters in this volume by Lüscher and Kraft for the USSR and East German cases, respectively.

18 David Cortright, *Peace: A History of Movements and Ideas* (Cambridge, UK: Cambridge University Press, 2008). Werner Kaltefleiter and Robert L. Pfaltzgraff, *The Peace Movements in Europe and the United States* (Kent, UK: Mackays of Chatham Ltd., 1985). David Gress, *Peace and Survival: West Germany, the Peace Movement, and European Security* (Stanford, CA: Hoover Institution Press, 1985). Alice Holmes Cooper, *Paradoxes of Peace:*

Western researchers or associations relatively large room for manoeuvre and opportunities to implement their own initiatives. It appears, however, that the role of such hybrid actors has been so far either underestimated or viewed in a rather one-sided way, meaning that they have hitherto been seen as passively reacting to external stimuli.<sup>19</sup> For example, the importance and the influence of the WFSW cannot be overestimated. With Western scientists at its helm – in this period, for example, Frédéric Joliot Curie and Cecil F. Powell – it occupied a special position and had novel opportunities to develop a distinctive identity and role. The best way to fully appreciate the uniqueness of its status is by comparing its activities with similar organizations active mainly on the other side of the Iron Curtain. In this context, an analysis of the approach of the WFSW to Pugwash can offer new insights about the development of alternative plans for a structured dialogue between scientists and politicians during the Cold War.

## 2 Beginnings of the PCSWA in Eastern Europe

For the USSR, its official support of Western peace initiatives around 1960–1961 has to be interpreted in the context of its anticipated renewal of nuclear testing – something which came about in September 1961.<sup>20</sup> Mass engagement in peace movements, their institutionalization and hierarchical structure were features which characterized the situation in the Eastern Bloc until 1975. Change came that year with the conference of the Organization for Security and Cooperation in Europe (OSCE) in Helsinki which brought forth challenges to the traditional Soviet self-description as a ‘peace fighter’ and leader of the international peace movement, which led to a split in that movement into official and dissident activities.<sup>21</sup> Returning to the Pugwash movement, as noted, the conference held in Moscow in 1960 marked a turning point in

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*German Peace Movements Since 1945* (Ann Arbor: University of Michigan Press, 1996). Very few publications, however, deal with the World Peace Council and its role in the coordination of peace movements in Eastern and Central Europe. Cf. Jack Rosenblatt, *Soviet Propaganda and the Physician's Peace Movement* (Toronto: Mackenzie Institute, 1988).

- 19 J.P.G. Freeman, *Britain's Nuclear Arms Control Policy in the Context of Anglo-American Relations, 1957–68* (London: Palgrave MacMillan, 1986), pp. 33–36. Clive Rose, *Campaigns Against Western Defense: NATO's Adversaries and Critics* (London: Macmillan, 1986), 54.
- 20 Lawrence S. Wittner, *The Struggle Against the Bomb*, Vol. 1, *One World or None: A History of the World Nuclear Disarmament Movement through 1953* (Stanford, CA: Stanford University Press, 1993), 190.
- 21 Václav Havel, *The Anatomy of Reticence: Eastern European Dissidents and the Peace Movement in the West* (Stockholm: The Charta 77 Foundation, 1985). More recently: Blanka Čísařovská and Vilém Prečan, eds. *Charta 77: Dokumenty 1977–1989*, Vols. 1–3 (Prague:

the engagement of scientists from the countries of the Eastern bloc, notably Czechoslovakia. The timing of this development was crucial in terms of the uneasy situation within the wider peace movement, namely the WPC and the WFSW. At this moment, the WFSW was undergoing profound change as it looked for a new leader to replace Frédéric Joliot-Curie who had stepped down as President in 1957 and had died 1958.

That year, British physicist and Nobel laureate, Cecil Frank Powell was appointed WFSW President, a post he held until his death in 1969. Powell was supported by the president of the WFSW executive board, the British-based Australian physicist Eric H.S. Burhop, whose views on the future development of WFSW differed markedly from those of Joliot-Curie. The WPC was also at this time in crisis, which, as it turned out, it never quite managed to overcome. The turbulence within both the WPC and the WFSW provides a crucial context for and helps to explain Soviet interest in integrating Central and East European countries into the Pugwash initiative at this time. Essentially, involvement in Pugwash could help compensate for the loss of a Soviet platform (the WPC/WFSW) and provide a new setting in which Moscow could continue to exert its influence over the “struggle for peace.” Central and East European participation in the PCSWA was also a reflection of the Soviet strategy of restricted internationalism, a doctrine that went hand in hand with the de-Stalinization of science and culture in the Socialist camp at this time. Of decisive importance were two things: the changed climate between East and West when Khrushchev sanctioned closer cooperation in the aftermath of the Geneva conference in July 1955, and the beginning of a protracted crisis within the WPC. This was associated with the repeated relocation of the WPC secretariat around Europe, necessitated by Western governments’ view that it represented threat to their national security, financial cuts which resulted from the new, post-1955 Soviet foreign policy, and the absence of a real, devoted leader after the death of Frédéric Joliot-Curie.

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Ústav pro soudobé dějiny AV ČR, 2007). Anna Smolka-Gnauck, *Między wolnością a pokojem: zarys historii Ruchu ‘Wolność i Pokój’* (Warsaw: Instytut Pamięci Narodowej – Komisja Ścigania Zbrodni przeciwko Narodowi Polskiemu, 2012). Mariusz Maszkiewicz and Dariusz Zalewski, eds. *Ruch Wolność i Pokój w relacjach międzynarodowych, 1985–90* (Warsaw: Akademia Ponad Granicami, 2012). Detlef Pollack and Jan Wielgohs, eds. *Dissent and Opposition in Communist Eastern Europe: Origins of Civil Society and Democratic Transition* (Aldershot, UK: Ashgate, 2004). Robert Brier, ed. *Entangled Protest: Transnational Perspectives on the History of Dissent in Eastern Europe and the Soviet Union* (Osnabrück: Fibre, 2013). Petr Blažek, “Dejte šanci míru! Pacifismus a neformální mírové aktivity mládeže v Československu 1980–1989,” in *Ostrůvky svobody: Kulturní a občanské aktivity mladé generace v 80. letech v Československu* ed. Miroslav Vaněk (Prague: Votobia – ÚSD AV ČR, 2002), 11–107. Gerd-Rainer Horn and Padraic Kenney, eds. *Transnational Moments of Change: Europe 1945, 1968, 1989* (Lanham, MD: Rowman & Littlefield, 2004).

All these factors had an impact on WPC's operational ability on the international scene and contributed to its transformation into an intra-bloc propaganda tool of no real value for international policy. It was in this context that senior Eastern European scientists had been invited to sign the statement that would become known as the Russell-Einstein Manifesto – although, in the event, the only scientists from the Eastern bloc to sign it was the Polish physicist Leopold Infeld.<sup>22</sup> However, when the PCSWA began two years later, the Soviets were centrally involved from the outset. Bertrand Russell sent invitations to the first conference in Nova Scotia in July 1957 to Piotr Kapitza and Nikolai I. Nuzhdin. However, both were prevented from attending by Moscow, which instead sent Aleksandr Kuzin, Dimitri Skobel'tsyn and Aleksandr Topchiev.<sup>23</sup> This signaled the importance attached to Pugwash by the Soviets, perceiving it as an organization that could potentially combine science, scientific internationalism, and specific political interests. For this reason, Moscow sought also to closely control Pugwash groups in the countries of its alliance system.

The Czechoslovak case provides an example of the way in which the Soviet Union exerted tight control over Eastern European engagement in the Pugwash organization. Czechoslovak participation began at the third conference in 1958 when its scientists joined some seventy colleagues from twenty countries who met in Austria (Kitzbühel/Vienna) in September of that year.<sup>24</sup> That said, it would be six years before the Czechoslovak Pugwash Committee was formed in 1964.<sup>25</sup> Czechoslovak participation in the Pugwash initiative followed a pattern similar to that of its involvement in the International Geophysical Year (1957–1958).<sup>26</sup> First of all, a Soviet decision to join or not was binding for all countries of the Eastern Bloc. For instance, in July 1960, František Šorm, biochemist and President of the Czechoslovak Academy of Sciences, had received an invitation from Russell to the 6th Conference in Moscow later that year but decided to ignore it. On hearing that the participa-

22 Leopold Infeld, *Kordian, fizyka i ja: wspomnienia* (Warsaw: Państwowy Instytut Wydawniczy, 1968). For a discussion of the absence of Soviet signatories to the Manifesto see the chapter by Roberts in this volume.

23 Joseph Rotblat, *Pugwash: A History of the Conferences on Science and World Affairs*. (Prague: Czechoslovak Academy of Sciences, 1967). Rotblat, *Quest*.

24 Brigitte Zimmer and Gabriele Kerber. *Hans Thirring. Ein Leben für Physik und Frieden* (Wien: Böhlau 1992), 129–130. See also the chapter by Fengler in this volume.

25 “Vytvoření československého pugwashského výboru,” 5 September 1961. NA ČR, CC KSČ, Politbyro 1954–1962, Vol. 321, arch. unit 408, point 9.

26 Doubravka Olšáková, “Between Stalinism and Infrastructural Globalism: The International Geophysical Year (1957–8) in Czechoslovakia, Poland and the German Democratic Republic,” *Acta Poloniae Historica* 115 (2017): 97–122.

tion of Czechoslovakia was at risk, the Soviets reacted immediately and forcefully: they consulted with the Central Committee of the Communist Party of Czechoslovakia (CC KSČ) and forced a change of the Czechoslovak position. It is no exaggeration to claim that the entire process of these consultations that took place between July and November 1960 was controlled by the Soviet authorities. Moreover, after demanding Czechoslovak participation at the conference, Moscow dictated which of its scientists should travel to the conference.<sup>27</sup>

The full control that Moscow wielded over the participation of the Eastern Bloc countries in Pugwash, extending even to the composition of their delegations, strikingly evidenced in the Czech experience of the Moscow conference, significantly eased the process by which the Soviets created a network of national Pugwash committees, the activities of which could be readily coordinated. Important in instigating this structure was a meeting of the Soviet, Czechoslovak and Polish Academies of Science at the end of the Moscow conference. Amongst the Soviet delegates was Evgeny Konstantinovich Fedorov (1910–1981), chief scientific secretary of the Soviet Academy of Sciences, and leading member of the Soviet Pugwash group. An expert in the geophysical sciences who had led the Soviet delegation in negotiations leading to the cessation of nuclear weapons tests in 1958, Federov was actively involved in Soviet peace propaganda. In 1965, he was appointed vice-president of the Soviet Peace Committee, serving later as its President between 1979–1981, and between 1970–1976 he was member of the Presidium of the WPC.<sup>28</sup> Polish delegates included Paweł Szulkin (1911–1987), scientific vice-secretary of the Polish Academy of Sciences, president of the Polish Committee of the International Union of Radio Science (URSI) and later, from 1966, director of the UNESCO Division of Technical Training. Szulkin was sympathetic to the idea of coordinating the efforts of the national committees. His views were shared by the Czechoslovak delegation headed by Ivan Málek. Málek had founded the Institute of Microbiology in Prague and for many years served as its director; he was also both a co-founder of the Czechoslovak Academy of Sciences and chairman of the Czechoslovak Society for Microbiology. Interested in the social aspects of science, Málek's career demonstrates the close links between the PC-SWA and the WFSW, since in addition to being an active Pugwashite – indeed, as noted, from 1962 serving as a member of the Continuing Committee – Málek

27 "Dopis Jaroslava Kožešníka Jiřímu Hendrychovi," 24 November 1960. AAS ČR, ŘAS ČSAV, I, inv. nr. 83. The Czech scientists at Moscow were: Professors Rudolf Brdicka, V. Husa and V. Kopal. See: Rotblat, *A history*, 107.

28 "Obituary: Yevgeny Konstantinovich Fyodorov (1910–1981)," *The Current Digest of the Soviet Press* 34, nos. 1–22, 23.

was at the same time actively involved in the WFSW and served as the chief editor of its journal *Scientific World*.<sup>29</sup>

This informal meeting between these senior Soviet, Czechoslovak and Polish scientists after the Moscow conference points to the close ties between the Pugwash movement and Soviet peace initiatives. These links existed at both the highest levels and the lower echelons of these organizations. Perhaps the most interesting Czechoslovak involved in both the WFSW and the PCSWA was Theodor Němec. He began work in the regional WFSW center in Prague already in the early 1950s, and in the early 1960s participated in the foundation of the Czechoslovak Pugwash Committee, serving later as its secretary. In 1967, he was selected to represent Czechoslovakia in the Stockholm International Peace Research Institute (SIPRI; formed in 1966 and known initially as the International Institute for Peace and Conflict Research), serving in the 1980s as vice-director. His stellar career in the WFSW, Pugwash, and SIPRI has to be seen in light of his role as a long-term agent of both the Czechoslovak and Soviet intelligence services.<sup>30</sup>

### 3 Scientific Internationalism: Czechoslovak Activities in the 1960s

Restricted internationalism – which, as noted, followed Stalinism and the early post-Stalinist period and which provided a context for strengthening engagement in Pugwash within the Soviet Bloc – reframed scientific internationalism, which drew heavily on the “spirit of Geneva.” The level of cooperation both within the Soviet Bloc and between the Eastern Bloc and the West at this time depended on, that is to say was controlled and coordinated by, the Soviets which, in turn, depended on the actual priorities of Soviet foreign policy. Changes in the way in which cooperation with the West was conducted and controlled in the smaller Central and East European countries reflected events in the Central Committee of the Communist Party of the Soviet Union (CC CPSU). Critical here in this period was the replacement of Nikita Khrushchev by Leonid Ilyich Brezhnev, who became the general secretary in 1964. Even so, the 1960s witnessed a sweeping and unprecedented wave of international cooperation across the Iron Curtain – which was reflected in both discussions about the further direction of Pugwash activities and the actual agenda of Eastern Europe Pugwash groups in this decade.

29 “Obituary: Ivan Málek (1909–1994),” *Pugwash Newsletter* 32, nos. 2–3 (October 1994/January 1995): 155. Franc, *Ivan Málek*.

30 Archives of the State Police, Czech Republic, Prague, file Theodor Němec, reg. nr. 42281.

Czechoslovak scientists turned out to be amongst the most active Pugwashites from within the countries of the Soviet Bloc. In 1964, due not least to the efforts of Malek and František Šorm, Czechoslovakia hosted the thirteenth Pugwash Conference which took place at Karlovy Vary (Carlsbad) in September: taking part were three former advisers to the recently installed Lyndon Johnson administration, namely Bentley Glass, an advisor to the American Committee for Nuclear Energy, Hans Morgenthau, a permanent adviser to the US State Department, head of the Committee for Europe of the Scientific Board of Wall Street, and Henry Kissinger, permanent adviser of the Joint Chief of Staff of US Armed Forces.<sup>31</sup> The agenda in Karlovy Vary was dominated by three issues: the recognition of Germany's border, which was seen as key to reducing tensions in Central and Eastern Europe, a non-aggression treaty between the countries of NATO and the Warsaw Pact, and the on-going issues surrounding nuclear disarmament.<sup>32</sup>

Discussions at this conference in Karlovy Vary made such a great impact on members of the Czech delegation that their report about it for the CC KSČ included the suggestion that a separate 'peace institute' should be established in Eastern Europe.<sup>33</sup> It is not a coincidence that this idea emerged at this time. In Western Europe, the idea for an institute of this kind had been the subject of much discussion, culminating in 1966 in the formation of SIPRI in Sweden. Aware of these discussions, Czech researchers now sought to launch a similar initiative for Eastern Europe. Spearheading these efforts were the Czechs, in particular Antonín Šnejdárek, the Chairman of the Permanent Pugwash Study Group on Security Issues (PSGE), who was very keen to create a mirror scheme of Peace Institutes in Europe: in the West and in the East.<sup>34</sup>

However, representatives of the Communist Party were not interested in Šnejdárek's proposal and – much worse – Party officials were highly critical of the Karlovy Vary conference report filed by the Czechoslovak delegation.

31 "Zpráva o průběhu a výsledcích 13. Pugwashské konference a další opatření," 30 October 1964. AAS ČR, Presidium of the Czechoslovak Academy of Sciences, file of the 17th Meeting, point VII, f. 302.

32 Eugene Rabinowich, "About Pugwash," *Bulletin of the Atomic Scientists* 21, no. 4 (April 1965), 11. See also archive materials: "Uspořádání 13. pugwashské konference o všeobecném a úplném odzbrojení a mírovém soužití v Karlových Varech," NA ČR, CC KSČ, Presidium 1962–1966, Vol. 62, arch. unit 65, point 17. Also "Průběh a výsledky 13. Pugwashské konference," 23 November 1964. NA ČR, CC KSČ, Presidium 1962–1966, Vol. 87, arch. unit. 91, point 5.

33 "Zpráva o průběhu a výsledcích 13. Pugwashské konference a další opatření," 30 October 1964. AAS ČR, Presidium of the Czechoslovak Academy of Sciences, file of the 17th Meeting, point VII, f. 306.

34 On this Study – or Working – Group (the PSGE), see the chapter by Kraft in this volume.



It seemed that the Czechoslovak Pugwash Committee had gone a little too far. That said, the CC KSČ decided to strengthen the Institute of International Policy and Economics in Prague, which seemingly at this time had a certain potential to become – under the leadership of its new director, Antonín Šnejdárk – a new East-European Institute for Peace and International Policy Research.

Under pressure from Moscow, the CC KSČ decided to abandon the international ambitions of Czech and Slovak researchers and to focus instead on internal policy. It thus rejected all planned follow-ups to the Karlovy Vary conference, including ideas for a group of professors from Harvard University, including Henry Kissinger, Paul M. Doty, and Marshall D. Shulman, to travel to Prague in May 1965 for discussions bearing on international relations. Paul Doty was a key figure in the realm of international, cross-bloc disarmament initiatives: he was not only a member of the PSGE but also since March 1961 had been head of the Soviet-American Disarmament Study Group (SADS). In the event, the idea for this visit was rejected by the CC KSČ, a decision that had far-reaching repercussions for future cooperation between West and East. Meanwhile, a report which Antonín Šnejdárk submitted to the leading representatives of the Czechoslovak Academy of Sciences is interesting for the light it casts on how Pugwash was viewed and utilised within Eastern Europe and on “science diplomacy” activities underway within Pugwash at this time. (Šnejdárk’s report was submitted internally to the Academy, and was not an official report to the CC KSČ – which was certainly also kept up-to-date on the development of Pugwash-related activities). In the report, Šnejdárk claimed that:

- 1) A group of Americans at Harvard University will probably refocus their research regarding the German question and aim their future activities at Poland. Proposals made by this group, especially Kissinger’s most recent proposal (Report, first issue in April 1965), present a new perspective on the recognition of the GDR and the German question and contain some speculative points. The most likely outcome is that since this group cannot discuss these questions with us, they will initiate discussions with experts from another socialist country, most likely Poland.
- 2) The American group around Kissinger will likely distance itself from the Pugwash movement, thus reverting to their original positions held before the thirteenth Pugwash Conference in Carlsbad (Karlovy Vary) and until spring 1964.<sup>35</sup>

35 “Zpráva o odsunu data schůzky s profesorem Kissingerem,” 4 May 1965. AAS ČR, Secretariat of the president Academician František Šorm, file 10, sign. 12.

Active Pugwashites, including social scientists, tried to communicate with their Polish counterparts, since one of the main recommendations contained in Šnejdárěk's analysis was to immediately inform Polish scientists and the Polish Pugwash committee what was likely to happen and to maintain the cooperation on the same level. At the same time, Czech and Slovak political scientists and other Pugwashites maintained pressure on the CC KSČ, which eventually agreed to renew cooperation on security in Europe. A proposal to establish within Pugwash a committee or Study Group on security in Europe gained ground in 1965 and was confirmed at the Sopot conference in 1966.<sup>36</sup> Although institutionalized cooperation with Western scientists within international organizations whilst not outright banned but was strongly discouraged, the Soviets consented to the creation of two Pugwash working groups based on Czechoslovak plans: the aforementioned PSGE and the Pugwash Working/Study Group on Biological Warfare, in which the Soviets were active. A set of Pugwash meetings held in the Czechoslovakian resort of Mariánské Lázně (Marienbad) on 13–16 May 1967 centering around both Study Groups were especially important for Malek's ideas about and plans for new research institutes in Czechoslovakia.<sup>37</sup> The Biological Warfare Study Group focused on the growing danger of bacteriological weapons, which it claimed posed the same level of danger as nuclear war. These talks in Mariánské Lázně took place with Soviet approval and just months after Hungary initiated negotiations on the use of chemical and biological weapons at the United Nations, suggesting the Eastern bloc's commitment to and concern about this matter. Discussions included the use of detection systems and the expedience of their use and a suggestion put forward about creating a joint team of scientists from the East and the West to work together to improve these systems. Two cities were to host research centers: Stockholm and Prague. Meanwhile, the PSGE, was divided into three sections: the first dealt with European cooperation and integration (led by British Professor William Gutteridge), the second was focused on banning nuclear weapons (led by Rolf Björnerstedt, director of SIPRI) with the third section, led by Antonín Šnejdárěk, concentrating on political and military issues in European security. Henry Kissinger and other American analysts were involved in the third section – a planned meeting of which in Czechoslovakia in 1964 had been cancelled by the CC KSČ. Several scientists from CERN in Geneva and

36 On the PSGE see the chapter by Kraft in this volume.

37 Antonín Šnejdárěk, "Pugwash zasedala v Mariánských Lázních," *Mezinárodní vztahy* 2, no. 3 (March 1967): 54–55.

representatives from EURATOM in Brussels also took part in the meetings in Mariánské Lázně. The results of the meeting were straightforward. As part of talks on the integration process and European cooperation, joint research projects were recommended, as was establishing a network across the Iron Curtain. The second section proposed that a treaty banning the proliferation of atomic weapons be made soon. The third section created an agenda for dealing with the main problems of European security, which became the basis for conferences of the directors of European institutes for international relations.<sup>38</sup>

Ivan Málek decided to use the Biological Warfare Study Group to push through another Czechoslovak international initiative – the foundation of an International Institute for Cellular Biology in Prague.<sup>39</sup> He argued that the agenda of the Institute should be related to the research of chemical and biological weapons. Support of this plan was initially, during 1960 and 1962, discussed within the framework of UNESCO; from there the agenda had moved to the Pugwash Conferences.<sup>40</sup> In 1962, the plan was discussed in a closed session at a conference in London and was part of the long-term Czechoslovak initiative, spearheaded by Málek, to establish in Czechoslovakia an international institute for cellular biology. Some years later, it was discussed at length during the Pugwash meetings in Marienbad in May 1967. In the end, all attempts to establish the cellular biology institute failed. What is distinctive and, indeed, noteworthy about this failed project is that unlike the previous pattern of cooperation across the entire Eastern Bloc, here the Czechoslovaks were acting mainly in close cooperation with the Soviets.

#### 4 Contested Cooperation: The WFSW and the Pugwash Organization

In the 1960s, the official Soviet approval of scientific internationalism enabled something that in the 1950s would have been unthinkable, namely the possibility of closer cooperation between the WFSW and the Pugwash Conferences. It is a fact that the WFSW had crucially contributed to the establishment of the Pugwash movement. The recollections of Eric Burhop emphasize the importance of the WFSW for Pugwash, as he put it:

38 Šnejdárek, "Pugwash zasedala."

39 Olšáková, "Pugwash in Eastern Europe."

40 "Mezinárodní ústav pro výzkum buňky," 24 February 1961. AAS ČR, ČSAV, ŘAS, I., sign. 3.1, inv. no. 84.

In fact, it must be said, that the WFSW played a very important but not a lone role in extending over many years in the discussions leading up to the Pugwash movement.<sup>41</sup>

Its role was, however, clearly defined and limited to mediating various contacts and invitations to scientists from the Eastern Bloc. According to Burhop, the WFSW contributed to the functioning of the PCSWA especially by helping to organize the participation of scientists from the Eastern Bloc, mainly from the USSR and China:

I think it would be correct to say that without the strong recommendation from the WFSW, acting particularly through Academician Oparin, it is doubtful whether representation from these countries would have been secured and thus the Pugwash movement could not have come into existence.<sup>42</sup>

In Burhop's view, the biochemist Aleksandr Oparin, a senior and influential Soviet scientist, played a pivotal role. In the strictly hierarchical environment of Soviet institutions, Oparin's request for cooperation of the smaller states of the Eastern Bloc created strong political pressure which resulted in political and ideological support for the initiative.<sup>43</sup>

Although no direct institutional connection between the WFSW and the PCSWA has been established, there existed – as indicated by the initial discussions about the Pugwash idea – some strong links in terms of overlapping involvement of senior figures in both organizations. For example, although the Pugwash Continuing Committee was initially headed by Bertrand Russell, in his (increasingly frequent) absence, this Committee was chaired by Cecil F. Powell, who was at the same time president of the WFSW.<sup>44</sup>

The proposal for more detailed discussions regarding the institutionalization of cooperation between Pugwash and the WFSW came from the regional center in Prague. In November 1965, Theodore Němec, at this time simultaneously executive secretary of the WFSW and secretary of the Czechoslovak Pugwash Group, wrote about his concerns to Pierre Biquard, president of the WFSW. Němec pointed out that in recent years, a number of initiatives had

41 Eric H.S. Burhop, "Relation of the WFSW to the Pugwash Movement," (app. 1961). AAS ČR, papers World Federation of Scientific Workers, file 3, inv. nr. 20, 1.

42 Burhop, "Relation of the WFSW," 3.

43 Olšáková, "Pugwash in Eastern Europe."

44 Spurná, *Světová federace*.

been established whose goals overlapped with those of the WFSW. As examples, he listed the PCSWA, the Society for Social Responsibility in Science, the World Academy of Arts and Sciences, the Society for European Culture, and the organization Professors for World Peace. Němec advocated that some form of official cooperation should be established between these organizations.<sup>45</sup>

Theodor Němec was highlighting a problem about which both the Pugwash Continuing Committee and the WFSW leaders were fully aware. His letter to Biquard was in a sense inspired by the now strengthening Soviet interest in the Pugwash Conferences. As noted, this shift on the part of the Soviets was bound up with both the crisis at the WPC in the mid-1960s, which was not the active force it had once been, and the difficulties presented by the WFSW where continued Soviet dominance within the organization was increasingly hampered by the efforts of its new leadership, most prominently Powell, to maintain a neutral stance. Powell had been anxiously guarding the impartiality of the WFSW in his role first as its chairman and then as its President. In his view impartiality was absolutely essential for the preservation of its influence on the international scene. He believed that the WFSW should avoid participation in all events and actions that might seem to favor one or the other side, and it ought to be especially careful in releasing any statements that “could give the impression that they are ready to become a weapon in the diplomatic struggle between the two power groups.”<sup>46</sup>

Powell's insistence on strict neutrality was a response to the changing environment within the WFSW during the early-mid 1950s. It started when in 1953 the Soviet Union had joined the WFSW, still at this time under Joliot-Curie's stewardship. The Soviets significantly affected the internal dynamics and functioning of the organization, especially in ways that reflected Moscow's power politics within the Eastern Bloc. The Soviet Union's representative on the Executive Council of the WFSW was Academician – and Pugwashite – Aleksandr Oparin. In contrast to our knowledge of the WFSW under Joliot-Curie, we have relatively little understanding of Powell's work during his decade-long presidency of the WFSW.<sup>47</sup> While Joliot-Curie was known for his leftist position and for being somewhat closer to Soviet influence, Powell seemed to steer

45 Letter from Němec to Biquard, 9 November 1965. AAS ČR, papers: World Federation of Scientific Workers, file 3, inv. nr. 20.

46 Cecil F. Powell, Opening Speech, WFSW, Fifth General Assembly, Helsinki, 29 August–2 September 1957, 8.

47 Lawrence S. Wittner, *The Struggle Against the Bomb*, Vol. 2, *Resisting the Bomb: A History of the World Nuclear Disarmament Movement, 1954–1970* (Stanford, CA: Stanford University Press, 1997), 34. Duane Thorin, *The Pugwash Movement and US Arms Policy* (New York: Monte Cristo Press, 1965).

the WFSW towards a more demonstrably neutral position. The same dynamic was apparent within the PCSWA in which he was a member of the Continuing Committee and senior, influential figure. The Pugwash leadership sought constantly to emphasize the organization as politically neutral as part of its strategy to develop for itself as broad a legitimacy as possible, especially in the west. If the Pugwash organization was, as some – including Eric Burhop – have argued, created with the WFSW's support, it went on to become in some ways an alternative to it – although both continued to struggle against negative perceptions of it in the west.

The serious problems facing the WFSW were openly articulated by John Desmond Bernal in 1967 in a paper discussing its future.<sup>48</sup> Bernal believed the crisis within the WFSW in the 1960s was rooted in two factors. First of all, in the aftermath of the Sino-Soviet split, the organization was threatened by disunity and discord amongst the main representatives of the Socialist Bloc. Secondly, the WFSW was challenged by the ever more pronounced division between the advanced, industrialized states and the states of the so-called "Third World." Global actors who could change or attempt to moderate this situation included, according to Bernal, the United Nations, especially the UNESCO which, however, became more of a battlefield than an instrument of global action during the Cold War.

Another important actor in Bernal's view was the PCSWA. That said, Bernal felt the Pugwash Conferences to be weakened considerably by its failure to sustain the involvement of Chinese scientists and also its slowness in bringing more representatives of former colonial territories to the conferences.<sup>49</sup> So, in his view, the only remaining global actor was the WFSW, which, however, suffered many of the same weaknesses as the Pugwash.<sup>50</sup> Bernal noted too that European scientists in the WFSW typically belonged to traditional European scientific elites firmly rooted in their academic environment. Their reluctance to become socially engaged was at least in part due to the challenges to the credibility of science arising from the uses to which it had been put during the Second World War. This had led either to an unambiguous rejection of social engagement or, under the influence of Marxism-Leninism, the adoption of a pro-Communist stance. Equally, Bernal was critical also of those American and Western scientists who did adopt a clear stance within the WFSW, pointing

48 John D. Bernal, "Notes on the Future of the WFSW," December 1967. AAS ČR papers, World Federation of Scientific Workers, file 4, inv. nr. 26.

49 On the engagement of the Chinese with Pugwash in this period, see the chapter by Barrett in this volume.

50 Bernal, "Notes," 1–2.

out that these are but “the relicts” of earlier scientific associations “crushed, but not killed, by the McCarthy Era, although now showing some possibilities of revival around the agitation against the Vietnam War.”<sup>51</sup>

Bernal’s critique of the WFSW and the PCSWA and assessment of the differences and similarities between them affords an interesting perspective on the dilemmas and difficulties both organizations faced during the 1960s. If the PCSWA was to remain just an informal association of independent scientists, its influence would be limited both in geographic terms and in terms of possible activities. In such a case, the WFSW planned to expand its activities and secure its global position. Its markedly leftist image could then be improved by a campaign whose aim was to gain the support of as many new members as possible, especially those from Western Europe. At the same time, the WFSW planned to revise its institutional structure. In addition to Eastern European countries, including Czechoslovakia, the WFSW also had high expectations that it could expand the involvement of Danish and Dutch scientists – who, however, adopted a ‘wait and see’ approach.

Eventually, the idea of a coalition between the WFSW and the PCSWA also came up as part of strategic conversations taking place at this time about the future of WFSW. This was always an unlikely scenario but WFSW’s officials realized that if the Pugwash conferences were to transform themselves into a more formal institution, its influence and efficiency would grow at the expense of the WFSW, which had at its disposal a firmly established network of organizations from member countries and their national councils. As an alternative, the WFSW’s representatives proposed the creation of a “Federation.” It was decided that such a step would be taken in the event of either of the following: If the PCSWA sought to transform itself into a formal institution and invite individual WFSW members – but not the WFSW as an institution – to participate in its activities and/or, secondly, if the agendas of the WFSW and the Pugwash continued to converge. In the event, no such “Federation” emerged – and, in any case, the Pugwash leadership was always clear and firm about its policy of not working together or collaboratively with other organizations.

In Bernal’s 1967 paper, he seemed unsure of the way forward, emphasizing that “the struggle between these different views presents for the moment a choice of almost unacceptable alternatives, yet one of ultimate importance.”<sup>52</sup> For him, the only option was a pragmatic solution centered on the WFSW supporting and cooperating more effectively/strongly with its existing base within

51 Bernal, “Notes,” 2.

52 Bernal, “Notes,” 3.

different countries around the world. In the future, they would form a firm foundation of the WFSW. Bernal viewed the attempts at further cooperation, especially ideas of closer ties with the PCSWA as “illusory.” Even so, he favoured continuing cooperation, although one that would be based on an ad hoc collaboration on particular projects.

## 5 The Brezhnev Doctrine and the End of Impartiality

Bernal was proved correct. Already by the mid-1960s, it was clear that Powell’s strategy of strict neutrality was weakening Soviet understanding of the role of the WFSW. This was noted by another member of the WFSW executive committee Eric Burhop who, after Powell’s sudden death in August 1969, succeeded him as WFSW president. Like Bernal, Burhop gave a great deal of thought the relationship between the WFSW and Pugwash – perhaps even more so. However, the Soviets were becoming uncomfortable with the status quo as the geopolitical situation in Europe changed. The Soviet Union had abandoned the accommodating policy of cooperation in science and science diplomacy and tried to return to the original framework of restricted internationalism in the form in which it had initially taken after the Geneva summit of 1955. This reversal, occasioned by the departure of Nikita Khrushchev and his replacement in 1964 by Leonid Brezhnev, foreshadowed profound changes in the Soviet Union, including in Soviet foreign policy, that would culminate in the events in Czechoslovakia in August 1968. The new foreign policy – later known as the “Brezhnev doctrine” – influenced not only the global geopolitical situation and the strategic interests of the USSR and the Socialist Bloc, but also defined new rules for international cooperation in science and science diplomacy. In particular, the Soviets started to actively campaign even against plans proposed by their own allies whenever such initiatives could strengthen the position and global importance of the Pugwash conferences and weaken the Soviet position in any way, within Eastern Europe and/or globally. This was the case, for instance, with plans put forward by the Czechoslovak Pugwash Committee to establish in Prague a special center for the research of peace issues and/or also to create an international microbiological laboratory whose agenda would be pertinent to research in biological weapons.<sup>53</sup>

In effect, the Brezhnev doctrine ended the brief period during which the hitherto relatively isolated scientific communities in Czechoslovakia and

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53 Olšáková, “Pugwash in Eastern Europe.”



other states of the Eastern Bloc became visible on the international scene and through which their voices were heard. The turning point in the history of the PCSWA in Eastern Europe came at the twenty-ninth meeting of the Pugwash Continuing Committee, which took place in Nice, France, on 9–10 and 14–16 September 1968, that is to say, just two weeks after the occupation of Czechoslovakia by the armies of the Warsaw Pact. The only participant from Czechoslovakia was Theodor Němec, scientific secretary of the Czechoslovak Pugwash Committee, who had been delegated to attend by the Czechoslovak Academy of Sciences.<sup>54</sup> František Šorm, the president of the Czechoslovak Pugwash Committee, and vice-president Ivan Málek, also serving member of the Pugwash Continuing Committee, had both been ordered by the Soviets to stay in Prague. In Nice, Czechoslovakia appeared merely as an item on the agenda of a Pugwash working group called “Current Issues.”<sup>55</sup> Here, Theodor Němec delivered a speech in which he tried to explain and justify Czechoslovak politics of the 1960s and to stress its peaceful intentions. He spoke in a tone of moral accusation, apparent especially in the conclusion of his speech, where he appealed to the basic principle of the “inadmissibility of the use of force in disputes and inadmissibility of armed intervention into internal affairs of other sovereign states.”<sup>56</sup>

The political situation evolved very quickly and by applying a policy of “normalization,” the Soviets soon regained their position of dominance and control over Eastern Europe. In October 1969, just a year later, at the thirty first meeting of the Pugwash Continuing Committee held in the Russian city of Sochi – where the nineteenth Pugwash conference was taking place – Theodor Němec asked all participants not to discuss the issue of Czechoslovakia. His tone was now very different: “We appeal to you not to discuss Czechoslovakia as a separate item because we fear that while doing so you would hardly be able to avoid touching upon our own internal affairs. Such discussion at this time would not help Czechoslovakia [...]”<sup>57</sup>

54 “Pugwash Continuing Committee, minutes of the Twenty-Ninth Meeting held on the 9, 10, 14 and 16 September 1968 at the Plaza hotel, Nice, France.” AAS ČR, file Ivan Málek, Pugwash – Vol. 2, inv. nr. 3397, 4.

55 “18th Pugwash conference on Science and World Affairs,” Nice, September 11–16, 1968. Report of Working Group 3: “Current Problems.” AAS ČR, file: Ivan Málek, Pugwash – Vol. 2, inv. nr. 3397, 2.

56 “Theodor Němec, Československo: Projev na Pugwashské konferenci v Nizze, září 1968.” AAS ČR, file: Ivan Málek, Pugwash, Vol. 2, inv. nr. 3397, 2–3.

57 “Pugwash Continuing Committee, minutes of the thirty first meeting held on the 20, 21, 24 and 27 October 1969 at the Intourist Hotel Sochi, USSR.” AAS ČR, file: Ivan Málek, Pugwash, Vol. 2, inv. nr. 3397, 5.

The end of Pugwash activities in Czechoslovakia was the result of Soviet political pressure. As a matter of fact, no activity of any significance on the part of Czechoslovakian scientists in the PCSWA can be found after 1972. From time to time, Czechoslovakia sent its representatives to various Pugwash meetings, but most members of the Czechoslovak Pugwash Committee were subsequently denied permission to travel and, as such, unable to attend conferences abroad. František Šorm and others were silenced and paid the price personally and professionally. Antonín Šnejdár, chairman of the Permanent Pugwash Working Group on the Study of Security Issues, emigrated to France in 1969, where he was appointed professor at the Sorbonne. Ivan Málek no longer took part in Pugwash activities after 1969. Indeed, tellingly, Málek was replaced by Polish Academician Maciej Nałęcz, who went on to become a long-serving member of the Continuing Committee. Polish scientists – Leopold Infeld, Karol Lapter – had long been active in the Pugwash conferences; but this engagement now became stronger, buoyed by the backing of Moscow. Developments within the PCSWA therefore reflected the major shifts taking place within the Soviet alliance system. Polish scientists now took up a place on the Continuing Committee, signaling both the newly prominent position of the country within the Eastern bloc and its significance to the strategic interests of the Soviet Union, and the very different position of Czechoslovakia.

## 6 Conclusion

The fact that a discussion about a joint future of the WFSW and the PCSWA originated in a Czechoslovak regional center was due to a re-start of international cooperation in the 1960s. It was also, however, a sign of growing self-confidence within the Czechoslovak science community, which had started to develop independent activities in the international arena. After a period of strict Stalinism, this was but one of clear signs of a political thaw, which ended with the enforcement of the Brezhnev doctrine after 1968. The Czechoslovak case illuminates the extent to which it became possible – at least for a time – for countries within the Eastern bloc to exercise a level of independence within the realm of science diplomacy. Arguably, amongst the countries under Soviet control, Czechoslovakian scientists took best advantage of the opportunities afforded to them by the changing strategic interests and policies of Moscow. It illustrates too that the dynamics of Soviet control over national scientific communities varied both through time and across national boundaries even if the countries of the Eastern bloc always remained within the framework of Soviet foreign policy agenda. A fragile *Modus Vivendi* of coop-

eration between the West and the East based on restricted internationalism was tolerated as long as it suited Soviet ambitions. After the crises that took hold of both the WFSW and the WPC in the 1960s, the Soviet Union opted for cooperation with the PCSWA since, in its view, the organization seemed now to offer more advantages to Moscow. The mid-1960s was a period when those scientists who helped to build the WFSW, the World Peace Council, and the national Pugwash groups in Eastern Europe in the 1950s and 1960s, and who remained loyal to the Communist power and ideology were nominated for membership in new international organizations such as UNESCO and SIPRI.

What did Pugwash mean for Czechoslovakia and its scientific community? Actually, a great deal. Although the hierarchical system of national Pugwash committees established in Eastern Europe by the Soviets enabled Moscow to closely control and direct their activities, this control was never total. The transnational nature of the Pugwash Conferences, which, as its leadership constantly asserted, sought to stand outside the main ideological doctrines, rendered full Soviet control impossible. Arguably, the high level of engagement with and activities of Czechoslovakian Pugwashites within the Pugwash organization up until 1968 stands as testimony to this. As examples, one can point to Ivan Málek's long-standing presence on the Continuing Committee and Antonín Šnejdárk's leading role in the PSGE. As we have seen, Antonín Šnejdárk planned several international initiatives to take place in Prague: although, in the event, the only concrete result of his efforts was the establishment of the Czechoslovak Institute of International Policy and Economics in Prague, Šnejdárk's ambitions point to the existence – albeit fleeting – of possibilities for conceiving the means for international engagement within Czechoslovakia independent of Moscow. Ivan Málek's efforts to create an International Institute for Cellular Biology demonstrate a nascent notion of the social responsibility of scientists, a concept that was relatively new in this part of Europe.<sup>58</sup> This new concept emphasized international political engagement and assumed that scientists occupied a privileged position when it came to addressing political issues. This idea differed markedly from the Soviet technocratic approach, which in the end also cut this novel Czechoslovakian “experiment” short. The Pugwash framework did, however, manage to re-establish and stimulate the idea of scientific internationalism, and both its network and its intellectual agenda proved to be an efficient tool of science diplomacy.

The Soviet attitude to Pugwash was somewhat experimental. In the absence of a similar approach in other areas of Soviet foreign policy, one might assume

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58 Olšáková, “Pugwash in Eastern Europe.”

that the Soviets saw the Pugwash conferences as easy pickings, a place where thanks to the participation of its senior scientists and the important roles played by their Central and Eastern European satellites, not least for a time Czechoslovakia, they felt quite at ease. In addition to the WPC – whose agenda focused mainly on garnering broader social support for the Soviet's new 'peace policy' and was complementary with the agenda of the WFSW – the USSR thus gained a new platform for promoting their politics. Soviet science diplomacy showed to be flexible enough to work with all possibilities, nevertheless the appointment of Cecil F. Powell, one of the leading figures of the Pugwash movement, to the presidency of the WFSW, reversed this situation. His insistence on strict neutrality had halted the expansion of the WFSW, and coincided with opportunities for senior, selected, Eastern bloc scientists to participate in the PCSWA. This undoubtedly benefited the Pugwash movement but worked to the detriment of the WFSW. Cooperation between the WFSW and Pugwash was difficult but competition between them was also highly undesirable. The involvement of senior scientists from both sides of the bloc divide in both the WFSW and the PCSWA was advantageous for both organizations and for both power blocs. By allowing these organizations to exert some degree of independence, Moscow and Washington were – at least potentially – able to exercise certain amount of influence in one or the other organization depending on the current – but always shifting – geopolitical situation.

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

*Alison Kraft*

This chapter explores the early history of the Pugwash organization in East and West Germany.<sup>1</sup> 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.<sup>2</sup> 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.

'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.<sup>3</sup>

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.<sup>4</sup> Research into post-WWII science in East Germany and the experiences of its scientists includes that by Kristie Macrakis and Dieter Hoffmann, and by Dolores Augustine.<sup>5</sup> 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).<sup>6</sup> By contrast, the present study reveals and explores the non-MPS

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- 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.<sup>7</sup> 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.<sup>8</sup> 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.<sup>9</sup> 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 II 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).<sup>10</sup> 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.<sup>11</sup> 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.<sup>12</sup> 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, cross-bloc character of that gathering. The British scientists – Bertrand Russell, Cecil

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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 1 (Cambridge: Cambridge University Press, 2010), 133–153.

10 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.<sup>13</sup> 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).<sup>14</sup> 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.<sup>15</sup> 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 Sörm. 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.<sup>16</sup> 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.<sup>17</sup> 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.<sup>18</sup> Beginning in 1961, scientists from the non-aligned countries and Eastern bloc were invited to the meetings.<sup>19</sup> 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.<sup>20</sup> 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.<sup>21</sup> 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.<sup>22</sup> 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.<sup>23</sup> 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.”<sup>24</sup> 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.<sup>25</sup> 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 Sinderman, 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.<sup>26</sup> 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.<sup>27</sup> 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.<sup>28</sup>

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).<sup>29</sup> 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.<sup>30</sup> 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.

30 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 *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.<sup>31</sup> 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.<sup>32</sup> 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.<sup>33</sup> By 1962, West Germans had been at all but two of the ten annual conferences.<sup>34</sup>

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 "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).<sup>35</sup> 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.<sup>36</sup> 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.<sup>37</sup> 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?*<sup>38</sup> 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.<sup>39</sup> 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 super-power 'disengagement' in Central/Middle Europe by way of a regional disarmament agreement.<sup>40</sup> 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.<sup>41</sup> 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.<sup>42</sup> 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."<sup>43</sup> 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.”)<sup>44</sup> 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.<sup>45</sup> 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.<sup>46</sup> 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.<sup>47</sup> 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.<sup>48</sup> Rienäcker’s report on the Vienna conference in September 1958 strongly recommended Pugwash to the Academy of Sciences and the Politbüro.<sup>49</sup> 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 Komitee 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.<sup>50</sup> 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 seemingly elicited little reaction within senior Pugwash circles.<sup>51</sup> 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.<sup>52</sup> 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.”<sup>53</sup> 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.<sup>54</sup>

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.”<sup>55</sup> 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.<sup>56</sup> 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.<sup>57</sup>

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.”<sup>58</sup> 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.<sup>59</sup> 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.<sup>60</sup>

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.<sup>61</sup> 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.<sup>62</sup> 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.<sup>63</sup> 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."<sup>64</sup> 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.<sup>65</sup>

Born and educated in Kiel, Steenbeck had spent the war working for Siemens in Berlin.<sup>66</sup> 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.<sup>67</sup> 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-Ländern 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.<sup>68</sup> 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."<sup>69</sup> 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.<sup>70</sup> 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.<sup>71</sup> 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.<sup>72</sup>

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.”<sup>73</sup> 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.<sup>74</sup> 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.<sup>75</sup>

#### 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.<sup>76</sup> 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).

75 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 “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.<sup>77</sup> (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.<sup>78</sup> 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).<sup>79</sup> 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.<sup>80</sup>

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-

77 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 “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.<sup>81</sup>

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.<sup>82</sup> As Rotblat later wryly noted, “much greater interest was taken in European problems by the socialist bloc countries.”<sup>83</sup> 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.<sup>84</sup>

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

81 “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: X1.12-Burkhardt/X1.13-Steenbeck. RTBT 5/2/1/11 (11). Rotblat, *A History*, 45.

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

83 Rotblat, “Pugwash Movement,” 1975.

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).<sup>85</sup> This was an East–West, including Scandinavian, initiative conceived by Tolhoek, Lapter, Němec, Málek, and Supek, and the Danish lawyer Jens Adler.<sup>86</sup> 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.”<sup>87</sup> 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.”<sup>88</sup> In February 1968, the seventh meeting of the PSGE was held in Kiel – the first formal Pugwash meeting hosted by a German state.<sup>89</sup>

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.<sup>90</sup>

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.<sup>91</sup> Conversations about general and complete disarmament entered a new phase characterized, for example, by a new focus on non-proliferation. 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.<sup>92</sup> 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.

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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 multi-polar 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.”<sup>93</sup> Indeed, Steenbeck seems never to have attended a Pugwash conference.<sup>94</sup>

### 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.<sup>95</sup> 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.<sup>96</sup> 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.<sup>97</sup> 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](http://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.<sup>98</sup> 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.<sup>99</sup>

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.”<sup>100</sup> 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.<sup>101</sup>

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.”<sup>102</sup> 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

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<sup>102</sup> 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 seri-

ous 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 rapprochement, 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.<sup>103</sup> 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.<sup>104</sup> 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 well-spring 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.<sup>105</sup> 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 B43 II 8, 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).”<sup>106</sup> 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.<sup>107</sup>

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 “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.<sup>108</sup> 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.<sup>109</sup> 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.<sup>110</sup> 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 Šnejdárk, 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.<sup>111</sup>

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.

109 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 Jürgen 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.<sup>112</sup>

## 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 Karlovy 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

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<sup>112</sup> Joseph Rotblat, “The future of Pugwash,” 1967, I. 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 hardening 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 cross-bloc 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 long-lasting 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.

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# Blurring the Borders of a New Discipline: The Achievements and Prospects of Pugwash History

*Matthew Evangelista*

VISCOUNT MONCK: My Lords, will my noble friend state (even if I am the only ignorant Member of your Lordships' House) where or what is "Pugwash"?

THE MARQUESS OF LOTHIAN: My Lords, Pugwash – and I am afraid I cannot inform the noble Viscount; I have been trying to find out myself how it got its name – is a conference of international scientists which is held every two or three years, and has been held, I think, for about the last twenty years.

THE LORD CHANCELLOR (LORD HAILSHAM OF SAINT MARYLEBONE): My Lords, perhaps my noble friend Lord Lothian will remind my other noble friend that Pugwash is a humble hamlet in Canada where the first conference was held.

[From a debate in the British House of Lords, September 1972]<sup>1</sup>



When the Pugwash Conferences on Science and World Affairs won the Nobel Peace Prize in 1995, the organization was nearly forty years old. As the editors point out in their introduction, even though Pugwash was hardly a household name, it must have been considered important enough to merit the award. Nevertheless it was apparently not important enough to have merited the attention of historians. To that point the main 'historian' of the organization was the physicist Joseph Rotblat, who ran Pugwash for decades and

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1 Pugwash Conference and Scientists' Rights, *Hansard, HL Deb 22 September 1972 vol 335 cc1406-8*, <http://hansard.millbanksystems.com/lords/1972/sep/22/pugwash-conference-and-scientists-rights>. Accessed 2 May 2019.

was recognized for those efforts as co-recipient of the Nobel.<sup>2</sup> Starting in 1962, Rotblat published periodic histories of the organization's activities, along with proceedings of many of its meetings. He subsequently requested Sandra Ionno Butcher – another Pugwash 'insider,' as the organization's executive director – to conduct research for a more comprehensive history.<sup>3</sup> Already during the 1960s Soviet Pugwashites had published books and articles on the movement, but nothing that would constitute original historical research.<sup>4</sup> In 1961, the US Congress issued a tendentious 'history' of Pugwash, dubbing it a dangerous communist front – a smear that still stuck to the organization when it accepted the prize in Oslo years after the Cold War ended and the Soviet Union had disintegrated.<sup>5</sup>

By the mid-1990s, a few scholars had produced valuable research on Pugwash, based in part on interviews with participants.<sup>6</sup> In his magisterial three-volume study of the world disarmament movement, Lawrence S. Wittner, gave considerable attention to Pugwash.<sup>7</sup> My own work on the Cold War and

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- 2 Joseph Rotblat, *Science and World Affairs: History of the Pugwash Conferences* (London: Dawsons of Pall Mall, 1962); *Pugwash. The First Ten Years: History of the Conferences of Science and World Affairs* (London: Humanities Press, 1968); *Scientists in the Quest for Peace: A History of the Pugwash Conferences on Science and World Affairs* (Cambridge, MA: MIT Press, 1972).
  - 3 <https://pugwash.org/2013/11/06/sandra-ionno-butcher-executive-director/>; Sandra Ionno Butcher, "Pugwash Conferences on Science and World Affairs," in *The Oxford International Encyclopedia of Peace* ed. Nigel J. Young (Oxford: Oxford University Press, 2010).
  - 4 For example: Vladimir M. Buzuev and Vladimir P. Pavlichenko, *Uchenye predostergaiut* (Moscow: Nauka, 1964).
  - 5 *The Pugwash Conferences: A Staff Analysis, Internal Security Subcommittee*, 87th Congress, 1st session (Washington, DC: Government Printing Office, 1961). For further analysis of this report – chaired by Senator Thomas Dodd – see the chapter in this volume by Paul Rubinson; George Melloan, "Oslo's Nobel Peace Message is Mostly Static," *Wall Street Journal*, 16 October 1995.
  - 6 Metta Spencer, "Political' Scientists," *The Bulletin of the Atomic Scientists* 51, no. 4 (July/August 1995): 62–68; Bernd W. Kubbige, *Communicators in the Cold War: The Pugwash Conferences, the US-Soviet Study Group and the ABM Treaty*, PRIF Reports No. 44, Peace Research Institute Frankfurt (Frankfurt am Main, Germany, October 1996). Later contributions include Kai-Henrik Barth, "Catalysts of Change: Scientists as Transnational Arms Control Advocates in the 1980s," in *Global Power Knowledge. Science and Technology in International Affairs*, eds. John Krige and Kai-Henrik Barth, *Osiris* 21, no. 1 (2006): 182–206; Jean Klein, "Atomic Scientists and Disarmament: The Pugwash Movement," in *Individualism and World Politics*, ed. Michel Girard (Basingstoke: Macmillan, 1999), 160–185; Paul Rubinson, *Redefining Science: Scientists, the National Security State, and Nuclear Weapons in Cold War America* (Amherst, MA: University of Massachusetts Press, 2017).
  - 7 Lawrence S. Wittner, *Resisting the Bomb: A History of the World Nuclear Disarmament Movement, 1954–1970* (Stanford, CA: Stanford University Press, 1997); *Toward Nuclear Abolition: A History of the World Nuclear Disarmament Movement, 1971–Present* (Stanford, CA: Stanford University Press, 2003).

transnational efforts to end the Soviet-American arms race focused on particular issues in security policy – antiballistic missile defenses, the testing of nuclear weapons, and conventional armed forces in Europe – and examined the impact of work by scientists associated with Pugwash, along with scientists not associated with Pugwash, medical doctors, peace researchers, women's anti-war organizations, religious groups, and others involved in disarmament activism across borders.<sup>8</sup> I was drawn to the work of the scientists and doctors, in particular, because I knew several of them on the US side and was curious about whether their work was having any impact on the Soviet side. I never intended to write a work of Pugwash History – there was no such field then – or even a book about how the Cold War ended: I started working on transnational scientists' activism at a point when no one anticipated the end of the East–West confrontation or the division of Europe, even though my subjects were working toward those goals.

Because my book took so long to write, it benefitted from the changes in the USSR that opened the country to researchers, even on sensitive topics of security, and I was able to interview Soviet scientists and policymakers and gain access to some archival materials before the dissolution of the Soviet Union provided even more such opportunities. Working later in post-Soviet Russia, I obtained a document in the archives of the Soviet (by then, Russian) Academy of Sciences that gave an indication of how Soviet Pugwash members evaluated that organization's impact on Soviet-American negotiations and the prospects for peace in the nuclear age.<sup>9</sup> I found additional materials in the Foreign Ministry and Communist Party Central Committee archives, relevant to the Pugwash scientists' relations with those organizations. Still, a few documents and several interviews do not constitute Pugwash History, especially by comparison with the impressive research conducted in the wake of the fall of communist regimes in eastern Europe and the end of the USSR that has

8 Matthew Evangelista, *Unarmed Forces: The Transnational Movement to End the Cold War* (Ithaca, New York: Cornell University Press, 1999). For the story of a transnational scientist-activist, unaffiliated with Pugwash, see Jeremy J. Stone, *“Every Man Should Try”: Adventures of a Public Interest Activist* (New York: Public Affairs, 1999). For the transnational activities of government-affiliated scientists, see Carl Kaysen, chair, US National Academy of Sciences, *Review of US-USSR Interacademy Exchanges and Relations* (Washington, DC: National Academy of Sciences, 1977); John Krige, *Sharing Knowledge, Shaping Europe* (Cambridge, MA: MIT Press, 2016).

9 “Proekt (dokladnyi zapiski) v Prezidium Akademii nauk SSSR ob itogakh 15-ti letnei deiatel'nosti Paguoshskogo dvizheniia uchenykh,” September 24, 1972, Mikhail Millionshchikov papers, fond 1713, opis' 2, delo I.5.2, no. 209, Archive of the Academy of Sciences of the Russian Federation, Moscow.

been assembled in this volume, edited by Alison Kraft and Carola Sachse.<sup>10</sup> My goal in this concluding essay is to highlight some of the achievements of Pugwash History as represented by the preceding chapters and to suggest areas of potential future research, even if it entails blurring the borders of an only recently defined discipline. I conclude with some observations on the merits of certain theoretical approaches to understanding Pugwash, following up on the review in the editors' introduction.

## 1 Achievements and Potential of Pugwash History

Three features of the chapters assembled here stand out for me: 1) the impressive use of diverse archives in many countries, making the volume a genuinely international history; 2) the identification and portrayal of fascinating personalities, key figures in the leadership of Pugwash and the national groups/committees; and 3) investigation into the domestic and alliance politics of Pugwash, and, in particular how governments treated scientists who were variously – depending on the country and vantage point – perceived as too close to Soviet policy preferences or acting too independently and at odds with their government's or alliance's positions. Most chapters feature a combination of these strengths.

Alison Kraft, for example, has made excellent use of the extensive collection of materials in Joseph Rotblat's archive at Cambridge University, a source for several other authors as well. In her case, she uses the material to shed light on the important role that relations between scientists from East and West Germany played in debating questions of European security. Travel restrictions imposed by NATO countries on East German scientists prevented them from attending the 10th Pugwash meeting in London in 1962. The paradoxical effect of this, according to Kraft, was to bring the East German scientists into dialogue with their West German counterparts, as she illustrates with a fascinating discussion of the correspondence between Gerd Burkhardt and Max Steenbeck. Inter-German dialogue, in turn, contributed to the creation of a European Security study group under the auspices of Pugwash, which took up important issues such as the Rapacki Plan for European denuclearization and superpower disengagement from central Europe.

10 Russian scholars have also begun exploring the archives for information on Soviet-era Pugwash scientists. See, e.g., Yuri A. Ryzhov and Mikhail A. Lebedev, "RAS Scientists in the Pugwash Movement," *Herald of the Russian Academy of Sciences* 75, no. 3 (2005): 271–77.



Archives of the state socialist allies of the Soviet Union have also proved particularly rich. Doubravka Olšáková makes especially good use of the materials in the Czech Academy of Sciences archive to study the relations between Pugwash, the World Peace Council, and the World Federation of Scientific Workers. She was interested to discover the intentions of the Soviet leadership toward those organizations, as expressed by their directives to and supervision of the Czechoslovak Pugwash delegation. I was particularly struck by her argument that Pugwash was the Soviets' preferred vehicle for promoting its peace proposals. In my own work, I found, at least in the early years, that the Soviet Foreign Ministry much preferred the more clearly communist-friendly organizations to Pugwash, but were eventually overruled by Khrushchev himself; he had met and engaged in correspondence with Leo Szilard and been convinced by Szilard's arguments in favor of Pugwash and the bilateral US-Soviet contacts pursued under its auspices.<sup>11</sup>

I especially admire use of the Russian archives by Fabian Lüscher and Geoffey Roberts. Whereas I had barely scratched the surface in my 1999 book, Lüscher has delved deeply into the materials of the Soviet Pugwash Committee and the papers of its influential leader, Aleksandr Topchiev. He convincingly illustrates the dilemma that Soviet Pugwashites faced as transnational mediators: on the one hand, to convince their Western interlocutors that they were independent-minded (but still influential with their government) and driven by the same concerns of scientific responsibility to reduce the risk of nuclear war; on the other, to "speak Bolshevik" with enough fluency and parrot the official Soviet peace policy adequately to maintain the Communist Party's support for continuation of the Pugwash activities. Roberts' research has uncovered a crucial pre-history of the Pugwash movement in the Stalinist era transnational contacts. Justified as part of a broader peace offensive, and typically coordinated through the World Peace Council (WPC), these efforts involved prominent cultural figures and even economists, as well as scientists.

The authors bring to life the personalities of individuals who played important roles in Pugwash. Roberts concentrates on Frédéric Joliot-Curie, a pivotal figure in several of the communist-oriented international organizations. Roberts illuminates his influence on early developments in the Pugwash

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11 Vladimir Bazykin to Andrei A. Gromyko, memorandum, 25 May 1955, Fond: Ref. po SSha, op. 39, por. 31, pap. 289, no. 194/112, Archive of Foreign Policy of the Russian Federation, Moscow; Andrei A. Gromyko to Central Committee, 20 July 1957, and other documents from the former Central Committee archive, cited and discussed in Evangelista, *Unarmed Forces*, 33–35.

movement, even though Joliot-Curie hesitated to sign the original Russell-Einstein Manifesto and offered various amendments. Carola Sachse's chapter features another central figure in the Pugwash movement: Cyrus Eaton, Nikita Khrushchev's "favorite capitalist," and the person who gave the organization its name. Sachse describes the many ways that Eaton constituted a mixed blessing for the Pugwash cause and how the Pugwash leadership sought to manage the risks and benefits of his involvement. Sachse points out, for example, that Eaton's colorful personality and good contacts with the US media made for a more sensational story than the serious discussions among the scientists (a phenomenon quite familiar in our time). Should Pugwash sacrifice the publicity by trying to muzzle or disassociate itself from Eaton? Or is potentially embarrassing attention to Pugwash better than none at all?

Gordon Barrett draws on the Chinese Ministry of Foreign Affairs archive and materials from leading Pugwash figures such as Dorothy Hodgkin, Bernard Feld, and Martin Kaplan to highlight the role of Zhou Peiyuan. An eminent theoretical physicist, Zhou attended the first Pugwash meeting in 1957, the second (Lac Beauport, 1958) and fourth (Baden, 1959) conferences and that held in Moscow in 1960, when the Chinese government ceased its scientists' participation in the movement; it did not resume until 1985. Zhou, however, maintained contact with his foreign colleagues and served as an intermediary for certain initiatives that Barrett describes. Such activities lead to Barrett's assessment that Pugwash – even when China did not actively participate – contributed to the avoidance and resolution of international conflicts to which China was a party.

The issue of domestic and alliance politics figures prominently in Silke Fengler's fascinating account of Austria's Pugwash movement. Austria is a particularly interesting case, because it shared the Germany legacy of World War II, as part of the *Reich* from the 1938 *Anschluss*, and, like Germany, the country and its capital were divided into zones of occupation by Britain, France, the USSR, and the United States. Unlike, Germany, which remained divided until 1990, Austria was reunited and attained neutral status in May 1955, just two months before the press conference in London that launched the Russell-Einstein Manifesto which subsequently inspired the Pugwash movement. Austria was not a member of either alliance, NATO or the Warsaw Pact. The views of its government and its Pugwash scientists toward the USSR and policies regarding issues such as nuclear weapon-free zones and German re-unification were distinctive. Among the interesting themes Fengler pursues is how the status of Pugwash scientists, suspected by some of communist sympathies, affected the prospects for the Austrian government to play its preferred role as mediator between East and West.

Paul Rubinson draws on the papers of prominent US Pugwash participants Bernard Feld and Victor Weisskopf, senior scientists at the Massachusetts Institute of Technology (MIT) (among other materials), to explore the domestic US politics of anti-communism and how this affected the organization's work. He finds ample evidence to support the discovery that I and others have made that it was not only the Soviet government that kept close tabs on its scientists and objected when they deviated from the official line at Pugwash meetings. The administration of Lyndon Johnson, and particularly his national security adviser McGeorge Bundy, were often quite hostile, and Bundy gratuitously and characteristically nasty. And he did manage to intimidate the scientists, several of whom were his colleagues when he served as Harvard's Dean of the Faculty of Arts and Sciences. When Bundy declined their request to have President Johnson issue an official greeting to the 1964 conference at Karlovy Vary, as his predecessor had done for previous conferences, senior American Pugwashites took it as a shot across the bow. At the subsequent meeting in Venice in 1965, as Bernard Feld wrote in a letter to Eugene Rabinowitch (reported in Rubinson's chapter), "I took much more of the 'establishment' attitude than I would normally have taken had it not been for the fact that I felt that this conference was being regarded in some sense as a test by many people in Washington." Bundy's hostile attitude toward the efforts of Pugwash to transcend Cold War barriers contrasts sharply with his approach to other similar scientific endeavors. I discuss them in the next section to make the case for expanding Pugwash History by linking it to kindred explorations of transnational efforts to end the Cold War. Such efforts at 'broadening' the reach of Pugwash History need not come at the expense of 'deepening' it, on the model represented by the chapters of this volume. In fact several of the authors in this volume are already doing both.

## 2 Deepening and Broadening Pugwash History

This volume offers the most in-depth study of Pugwash available, based on extensive research in multiple archives, in many countries, and addressing a wide range of questions. To their credit, the authors have acknowledged the limits of their sources and have indicated areas where further research could turn up new information. This section adds a few suggestions, and then turns to the topic of how Pugwash History might be broadened to address related questions posed by historians of other transnational organizations of the Cold War era.

To supplement the strong chapters on the USSR, China, and Czechoslovakia, further work into the archives of other East European socialist states, including Yugoslavia, would be welcome. Other West European states deserve study. There is good work on the role of Italian scientists, for example, several of whom participated in Pugwash, and two of whom – Francesco Calogero and Paolo Cotta-Ramusino – eventually became the organization's secretary general.<sup>12</sup> Italian Pugwash members founded the International School on Disarmament and Research on Conflicts (Isodarco) in 1966. They consider it the teaching arm of Pugwash and have conducted winter and summer schools for over thirty years, including many seminars in China. Isodarco's website offers a short history of the institution, but further research by professional historians is merited, the sooner the better, while Carlo Schaerf, one of its founding members, is still alive and active.<sup>13</sup>

Another area that could use further study is the influence of Pugwash on the matters that its members most sought to influence: disarmament and security policy in general and the avoidance of nuclear war in particular. The editors of this volume, in their own contributions, touch on these matters of substance. Carola Sachse, for example, entertains the counterfactual possibility that if the Pugwash meeting planned for Moscow in April 1960 had gone forward, there might have been greater progress on negotiations for a test ban. Alison Kraft's treatment of German-German relations emphasizes the importance of this German-German dialogue for a deepening engagement within Pugwash with key issues relating to European security. Many of the other chapters are curiously devoid of discussions about the actual impact of the Pugwash organization on vital issues of war and peace, even though the danger of nuclear war and how to prevent it was the driving motivation for its inception.

The concerns expressed by Pugwash about the nuclear danger were widely shared at certain key points during the Cold War. There are opportunities for historians of Pugwash to broaden their approach to engage with work that focuses on other organizations that likewise sought a way to overcome the East–West divide and decrease the risk of war. In the wake of the Cuban Missile Crisis of 1962, for example, governments of both the United States and

12 Lodovica Clavarino, *Scienza e politica nell'era nucleare. La scelta pacifista di Edoardo Amaldi* (Rome: Carocci, 2014); "Many Countries Will Have the Bomb: There Will Be Hell": Edoardo Amaldi and the Italian Physicists Committed to Disarmament, Arms Control and Détente," in *Nuclear Italy. An International History of Italian Nuclear Policies during the Cold War*, eds. Elisabetta Bini and Igor Londero (Trieste, EUT Edizioni Università di Trieste, 2017), 245–257.

13 <http://www.isodarco.com/html/history.html>. Accessed 2 May 2019.

the Soviet Union seemed eager to improve relations in order to avoid another crisis that risked catastrophic war. Many of the steps were rather modest, but still meaningful – a “hot line” to establish direct contact in future crises, agreements such as the Limited Test Ban Treaty (1963) and the Outer Space Treaty (1967). Others were intended as ‘bridge-building’ efforts. One such effort was announced at a White House press conference in December 1966 by McGeorge Bundy, Francis Bator and Walt Rostow. The press described a plan “to establish an International Center for Studies of the Common Problems of Advanced Societies,” sometimes provisionally called the East–West Institute. The plan ultimately resulted in the creation of the International Institute for Applied Systems Analysis (IIASA), which opened its doors in Vienna in 1972.<sup>14</sup> This entailed cooperation between scientists from East and West (and, in Austria, in between) to pursue solutions to “common problems of advanced societies” – not unlike the Pugwash focus on the common problem of nuclear annihilation.<sup>15</sup> And, like Pugwash, the IIASA was premised on the assumption that scientists – in this case including specialists in cybernetics, modeling, and systems analysis, as well as various social scientists – could find a common language where political differences could be put aside. Yet the last thing Bundy wanted to do was invoke the Pugwash model. Although he left government in 1966 to head the Ford Foundation, Bundy maintained his anti-Pugwash animus.

As Eglė Rindzevičiūtė describes in her fascinating study of IIASA, “the negotiators were particularly careful not to associate with disarmament activists (or any activists at all), especially the Pugwash movement.”<sup>16</sup> This position represented not only Bundy’s preferences, but also the desire of his Soviet interlocutors to concentrate on the development of systems analysis for application to industrial production, environmental and resource management, and the health sector. Yet on the Soviet side, the leading official involved in the negotiations, Dzhermen Gvishiani, was also close to Pugwash, and knew many Soviet and American Pugwashites. Moreover, his wife Liudmila Gvishiani, a political scientist and specialist on the United States, attended several Pugwash meetings in the late 1960s and early 1970s. She was the daughter of Prime Minister Aleksei Kosygin. Dzhermen Gvishiani’s high-level connections contributed to his successful role as a negotiator (fluent in Italian as well as English, he is also

14 Leena Riska-Campbell, *Bridging East and West: The Establishment of the International Institute for Applied Systems Analysis (IIASA) in the United States Foreign Policy of Bridge Building, 1964–1972* (Helsinki: Finnish Society of Science and Letters, 2011).

15 Riska-Campbell, *Bridging*, 29.

16 Eglė Rindzevičiūtė, *The Power of Systems: How Policy Sciences Opened Up the Cold War World* (Ithaca, New York: Cornell University Press, 2016), 69.

credited with bringing production facilities of the FIAT car company to the USSR in the 1960s). Historians of the origins of IIASA have stressed the importance of the Pugwash connections on the Soviet side, whereas a study based solely on US sources might have missed the connection.

The type of global computer modeling associated with IIASA eventually came to contribute to the understanding of nuclear war – the main area of Pugwash interest – despite the fact that its founders initially sought to avoid the “disarmament activists.” The route was somewhat indirect, but it entailed collaboration in what Rindzevičiūtė calls “networks more or less loosely coupled with IIASA.” One of the nodes of the network of modelers was the team of researchers affiliated with Cornell University astrophysicist Carl Sagan and their study of Nuclear Winter, the catastrophic climatic changes that would follow a nuclear war that would send vast amounts of particulate matter into the atmosphere and block the sun. Another node was the Soviet Academy of Sciences Computer Center in Moscow, led by Nikita Moiseev. In my book, *Unarmed Forces*, I had mentioned the transnational collaboration between Soviet and US climate modelers. Rindzevičiūtė correctly criticizes me for having referred to the public attention to Nuclear Winter as a “fleeting episode,” because I had in mind its impact on the prospects for nuclear arms control and disarmament. She points out that the transnational contacts between Soviet and US scientists had a profound effect *inside* the USSR, because they legitimized an entire field of scientific endeavor, the use of computers for the modeling of global phenomena, and the promotion of “collaborative East–West research on global climate and environment change.” She highlights the entrepreneurial efforts of Nikita Moiseev, the leading figure in the Soviet modeling community. He “mobilized the nuclear winter reports to advance his own innovative thinking, which extended mathematical modeling of the global climate and environment to a philosophy of a wholly new type of governance, one which had nothing to do with Marxism-Leninism, central Party control, or even Cold War confrontation.”<sup>17</sup> Thus, for Rindzevičiūtė, the transnational involvement of Soviet scientists in the IIASA and related networks contributed to the internal transformation of the USSR, a claim comparable to those made by some scholars about the impact of Pugwash.

This example of research on IIASA suggests the merits of putting Pugwash into the broader context of East–West exchanges, a point that some of the authors of this volume also make. As Geoffrey Roberts points out in his chapter, for example, Pugwash was one of many examples of a “massive expansion of East–West cultural, sporting, scientific and technical interactions that

17 All quotes from Rindzevičiūtė on, respectively, pages: 150, 156–157 and 157–158.

developed after Stalin's death in March 1953." In my own work, I have also stressed the importance of the death of Stalin and the subsequent "thaw" promoted by Khrushchev. Yet, considerable research – Roberts' not least – has emerged to suggest the merits of studying contacts that took place even in Stalin's time. Roberts mentions the World Congress of Intellectuals for Peace, held in Wroclaw in August 1948; he considers it the progenitor of the WPC, whose president for many years was Frédéric Joliot-Curie. The Soviet delegation to the 1948 Congress was led by Aleksandr Fadeev, the head of the Soviet Writers' Union, and included journalist and writer Ilya Ehrenburg. Cultural figures such as Pablo Picasso and Bertolt Brecht attended, along with scientists, J.D. Bernal, J.B.S. Haldane, and Julian Huxley, and the historian A.J.P. Taylor.

Most of the subsequent efforts by the Soviet side to sponsor international meetings were carried out under the auspices of the WPC, where prominent celebrities such as Jean-Paul Sartre would often appear. Roberts indicates that the Soviet efforts extended even into the realm of economics and business:

One peace movement initiative of particular note is the little-known Moscow International Economic Conference of April 1952, which derived from a Soviet proposal to the WPC in February 1951. The political aim of the conference was to erode the western cold war economic blockade of the communist bloc. The idea was that the peace movement would utilise its contacts to mobilise support and participation in the conference by economists and business leaders. Particularly active in recruiting support were the British and French peace committees. The conference attracted 470 delegates from 48 countries, including large delegations from Britain and France.

Clearly, such Moscow-inspired initiatives differed from Pugwash, whose non-communist members anyway took great care not simply to mimic Soviet peace proposals, even if they agreed with them on their merits, and who often saw themselves as introducing new ideas and proposals and trying to change minds on the Soviet side.

Yet, historians of Pugwash might ponder just how distinctive "their" organization's approach was. I understand Roberts' goal, in part, to shed light on the communist origins of Pugwash-like efforts (the role of Joliot-Curie, for example), without impugning the motives of the non-communist scientists in the McCarthy fashion. A further question is how much it mattered to the success and longevity of Pugwash that its members were primarily, initially anyway, physicists, chemists, engineers, and natural scientists. Is it true that scientists speak a common language that facilitates transnational understanding

in a way not possible for other professions? Historians have cast doubt on this question, or at least they have suggested that many professional groups – not to mention grassroots people-to-people exchanges – believed that they also could make contributions to breaking down Cold War barriers.

Scholars such as Jeffrey Checkel and Robert English have described how contacts between Soviet and Western social scientists contributed to the “new thinking” in Soviet foreign policy associated with the reforms of Mikhail Gorbachev.<sup>18</sup> Anatolii Cherniaev, Gorbachev’s key foreign policy aide and a longtime Central Committee specialist, described in his memoirs that the attitudes and the international orientation associated with Gorbachev’s *perestroika* reforms had a long pedigree. Cherniaev had been a member of the international editorial board of the journal *Problemy mira i sotsializma*, founded in 1958 and based in Prague. Soviet members of the staff who edited the journal in the early 1960s interacted regularly with European, US, and Third World communists, whose ideas often differed from the orthodox views they were used to hearing at home. Their membership reads as a Who’s Who of reformist officials and academics who became Gorbachev’s brain trust in the second half of the 1980s.<sup>19</sup>

One should not necessarily understand such contemporaneous transnational interactions as alternatives or rivals to Pugwash. Cherniaev, for example, was aware of Pugwash: his first published article was an obituary of Frédéric Joliot-Curie in which he noted the Frenchman’s role as original signatory of the Russell-Einstein Manifesto. His appreciation of Pugwash led him to support the organization and related initiatives during the Gorbachev era, initiatives that contributed to the peaceful end of the Cold War.<sup>20</sup>

Yet thinking in terms of rivalry between Pugwash and other organizations could be a fruitful line of research for Pugwash historians. Alison Kraft mentions in her chapter, for example, the “growing competition that Pugwash was facing as a forum for international dialogue about disarmament,” especially related to issues of European security. In the United States, the Dartmouth Conferences were often considered an alternative to Pugwash, even though

18 Robert D. English, *Russia and the Idea of the West: Gorbachev, Intellectuals, and the End of the Cold War* (New York: Columbia University Press, 2000); Jeffrey Checkel, *Ideas and International Political Change: Soviet/Russian Behavior and the End of the Cold War* (New Haven, CT: Yale University Press, 1997).

19 They include, in addition to Cherniaev himself, Georgii Arbatov, Oleg Bogomolov, Gennadii Gerasimov, and Georgii Shakhnazarov. See Anatolii S. Cherniaev, *Moia zhizn’ i moe vremia* (Moscow: Mezhdunarodnye otnosheniia, 1995); and English, *Russia and the Idea of the West*, esp. 70–73.

20 Cherniaev, *Moia zhizn’ i moe vremia*, 227.



there was considerable overlap in membership; to differentiate itself, Dartmouth tended to focus on resolution of regional conflicts, particularly in the Middle East.<sup>21</sup>

Another sort of rivalry might consist in the question of what kinds of transnational non-governmental exchanges work most effectively to defuse conflictual state-to-state relations? Or in the historical context, to what extent did Pugwash contribute to the peaceful end of the Cold War relative to other types of transnational contacts? Participants in various exchanges have been eager to assert the contributions of their professions or approaches. So, we have, for example, the Chautauqua Conferences on US-Soviet Relations, which brought together ‘ordinary’ US and Soviet citizens in the late 1980s, and the myriad programs sponsored by the US State Department under the rubric of cultural diplomacy.<sup>22</sup> If a “common language” is the key to transnational success, why should the scientists, with their mathematical formulas, be accorded pride of place? A strong case can be made that music or the visual arts constitute an even more universal, non-verbal language, and historians’ work on the role of musicians and artists as transnational ambassadors has produced valuable insights on the relationship between culture and international politics.<sup>23</sup> Perhaps future work by Pugwash historians could attempt to link their findings to this work.

The European Society of Culture is a particularly intriguing organization to compare to Pugwash. It was founded in Venice in 1950, the same year as the Paris-based Congress for Cultural Freedom (CCF), an organization later revealed to have received substantial funding from the US Central Intelligence Agency. Unlike the CCF, the European Society of Culture, known by the acronym SEC from its French (*Société Européenne de Culture*) and Italian (*Società Europea di Cultura*) names, was not explicitly anti-communist. It included communist members, but its founder, the Italian anti-fascist philosopher Umberto Campagnolo – like many of the atomic scientists in the early

21 James Voorhees, *Dialogue Sustained: The Multilevel Peace Process and the Dartmouth Conference* (Washington, DC: United States Institute of Peace Press, 2002).

22 Ross Mackenzie, *When Stars and Stripes Met Hammer and Sickle: The Chautauqua Conferences on US-Soviet Relations, 1985–1989* (Columbia, SC: University of South Carolina Press, 2006); Yale Richmond, *Cultural Exchange and the Cold War: Raising the Iron Curtain* (University Park, PA: Penn State University Press, 2003).

23 S. Frederick Starr, *Red and Hot: The Fate of Jazz in the Soviet Union, 1917–1980* (New York: Oxford University Press, 1983); Penny M. Von Eschen, *Satchmo Blows Up the World: Jazz Ambassadors Play the Cold War* (Cambridge, MA: Harvard University Press, 2006); Simo Mikkonen and Pia Koivunen eds. *Beyond the Divide: Entangled Histories of Cold War Europe* (New York: Berghahn, 2015); Simo Mikkonen and Pekka Suutari, *Music, Art and Diplomacy: East-West Cultural Exchanges and the Cold War* (London: Routledge, 2016).

postwar years – was mainly known for his world federalist views. Campagnolo developed these views while in exile in Switzerland in the 1930s when he came under the influence of the Austrian-born international legal scholar Hans Kelsen, a proponent of world federalism. Campagnolo's experience in the Italian resistance to German occupation during the war influenced his attitudes toward postwar cooperation. Although political rivals, communists and Catholic opponents of fascism co-operated to defeat a common enemy, and Campagnolo found himself among those who hoped that such cooperation could continue afterward.

As the postwar collaboration between the USSR and the United States and Britain broke down and ushered in the Cold War, Campagnolo and his colleagues created an organization they hoped would keep open the prospects for dialogue and co-operation across what Winston Churchill soon dubbed the Iron Curtain. As Nancy Jachec, author of the definitive study of the SEC, characterizes their view, "it fell to intellectuals, working in the spirit of freedom and solidarity unique to culture, to prepare the terrain for the dialogue that could bring about the end of Europe's partitioning." To that end they issued in 1951 an *Appeal to the Intellectuals of Europe and the World* and invoked Campagnolo's notion of the "civilization of the universal" as its basis.<sup>24</sup>

Four years later Joseph Rotblat and Bernard Russell, in issuing the Russell-Einstein Manifesto, seemed to emphasize 'science' over 'culture', and expressed even greater urgency about the East-West divide, owing to the prospect that thermonuclear weapons could destroy the planet. But the spirit of appealing "as human beings to human beings" is similar. In its effort to maintain a dialogue with intellectuals in the emerging Soviet bloc, the SEC differed dramatically from the anti-Soviet orientation of the CCF. Nor, despite its eagerness to forge relations with communists such as the Soviet journalist and writer Ilya Ehrenburg and the Hungarian philosopher Georg Lukács did the SEC resemble the Moscow-directed WPC. Campagnolo's colleagues – mainly French and Italian writers, historians, and philosophers – were sympathetic to Marxism, but to a humanist variant that was scarcely conceivable in Stalinist Eastern Europe. In fact, Jachec considers it a major contribution of the SEC to have brought one prominent member, Jean-Paul Sartre, into contact with humanist Marxists during the post-Stalin Thaw, starting with the "East-West Dialogue" that took place in Venice in March 1956. From his interaction with independent-minded Marxist thinkers, argues Jachec, Sartre developed some of the key themes of his 1957 essay, "Questions de méthode," which in turn

24 Nancy Jachec, *Europe's Intellectuals and the Cold War: The European Society of Culture, Post-War Politics and International Relations* (London and New York: I.B. Tauris, 2015), 57.

provided inspiration for reformist socialist efforts such as the Prague Spring and the human-rights movement that contributed to the peaceful overthrow of Soviet-style communism in the late 1980s.<sup>25</sup> Thus we have yet another contender to consider when analyzing contributions that brought about the end of the Cold War.

### 3 Pugwash and the Limits of Theorizing Transnational Politics

The question of which organizations contributed most to ending the Cold War – states or non-state actors, and, if the latter, which – is unlikely to easily be agreed upon. Explanations that highlight a single cause are typically unsatisfying anyhow. The same holds true for attempts to fit Pugwash into a particular theoretical framework. As the editors suggest in their introduction, there are many contending frameworks, and Pugwash seems to share some features with many of them. In my concluding remarks I would like to focus on the question of whether Pugwash constitutes an “epistemic community.” I have always argued against that claim, as long ago as 1995, yet my work is still commonly cited (unread, perhaps) as an example of the literature on epistemic communities.<sup>26</sup> For not entirely unselfish reasons, then, I would like to reiterate the case for excluding Pugwash from that category, drawing in part on the evidence from this volume.

In his foundational work from 1992, Peter Haas defined an epistemic community as “a network of professionals with recognized expertise and competence in a particular domain and an authoritative claim to policy-relevant knowledge within that domain or issue-area.” They share a set of normative and principled beliefs, shared causal beliefs, shared notions of scientific validity, and a common policy enterprise.<sup>27</sup> They make themselves available to policymakers who face situations of uncertainty in the light, for example, of techno-scientific developments and/or interactions between state actors, and who welcome the advice that emerges from a scientific consensus about a particular problem or situation and its solution. This is probably how Pugwash scientists saw themselves. But the fact that the movement occasioned so much controversy makes one doubt the degree to which governments accepted

25 Ibid., esp. ch. 4, 7, 8.

26 Matthew Evangelista, “The Paradox of State Strength: Transnational Relations, Domestic Structures, and Security Policy in Russia and the Soviet Union,” *International Organization* 49, no. 1 (Winter 1995): 1–38.

27 Peter M. Haas, “Epistemic Communities and International Policy Coordination,” *International Organization* 46, no. 1 (Winter, 1992): 1–35, 3.

Pugwash analyses and policy prescriptions as “authoritative.” Moreover the ideological rigidity of the Cold War world, with its competing political and social norms, raises questions about the extent to which policymakers would readily acknowledge their own uncertainty about policy choices and seek advice from a transnational organization of scientists.

The chapters by Paul Rubinson and Carola Sachse suggest that US political leaders, for example, were indeed inclined to dismiss Pugwash (the US group and the organization more broadly) and its advice as politically tainted because of its links with the communist world. Officials such as McGeorge Bundy criticized his former Harvard and MIT colleagues whenever their prescriptions deviated from preferred US policy, on issues such as the Multilateral Nuclear Force or the nuclear test ban – not to mention on the US war in Vietnam. China’s policy toward Pugwash – refusing to allow its scientists to participate for decades, as Barrett’s chapter describes – hardly constitutes an endorsement of the organization’s authoritative policy expertise.

One way to clarify the degree to which members of a putative epistemic community share causal beliefs or notions of scientific validity is to focus on a particular issue and see whether there is any consensus. Silke Fengler, in her chapter on Austria, for example, points out that in the early years of Pugwash there was considerable disagreement between West German and Austrian scientists on the need to ban nuclear weapons. Yet, she argues, “the situation changed with rising public fears about nuclear fallout, which engendered concerns about radiation exposure including that associated with peaceful nuclear technologies, including energy.” If this were a matter of emerging expert consensus on the danger of radioactive contamination from nuclear testing, one might adduce support for a common causal understanding of the need to ban tests. Yet Fengler’s stress is on public fears rather than scientific consensus – and justifiably so. There was a wide range of views about the impact of radiation on human biology and genetics. At one extreme were the warnings issued by Linus Pauling and Helen Caldicott in the United States and Andrei Sakharov in the Soviet Union about dire consequences of genetic defects that would harm future generations. At the other extreme were the reassuring assessments of government scientists in both countries that radiation at the doses produced by nuclear explosions would produce no lasting deleterious effects.<sup>28</sup> The same training in physics or medicine or biology could

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28 For a sense of this debate in the US, see for example: Caroline Kopp, “Origins of the American Scientific Debate over Fallout Hazards,” *Social Studies of Science* 9, no. 4 (November 1979): 403–422; Jacob D. Hamblin, “‘A Dispassionate and Objective Effort’: Negotiating the First Study of the Biological Effects of Atomic Radiation,” *Journal of the History of Biology* 40, no. 1 (March 2007): 147–177.

yield divergent assessments, none *ipso facto* accepted as authoritative. It was the public outcry that prompted states to deal with the threat of radioactive fallout.

The same pattern repeated itself in most technical debates in which Pugwash scientists were involved. The fact that there were “debates” at all is key here. There was no agreement, based on scientific assessments alone, about what kind of verification system or how many onsite inspections would reliably prevent cheating in a nuclear test ban. There was no agreement about the prospects for successful defense against a ballistic missile attack. On many such issues, scientists of comparable expertise and prestige could take diametrically opposed positions. On these two issues, for example, Hans Bethe and Edward Teller, both senior Manhattan Project scientists, found themselves on opposite sides. Bethe’s Nobel Prize in Physics did not give him the edge over Teller, nor would its Peace Prize accord the assessment of Pugwash and its scientists any greater credibility than that of a government defender of the status quo. As issues discussed at Pugwash conferences became less technical and more political – the merits of a nuclear-free zone in central Europe, disengagement schemes for conventional forces, German unification, non-alignment and neutrality, the physicists’ expertise became a waning asset, as the discussion in Alison Kraft’s chapter makes clear.

Evidently there are some issues where the notion of an epistemic community makes sense, even in the controversial domain of security policy. I have been persuaded by the work of Denise Garcia, for example, who finds the theory useful to account for the emergence of concern about the proliferation of small arms throughout the world following the end of the Cold War and the establishment of a norm favoring limits on arms sales. With its focus on expert advice to governments facing conditions of uncertainty, the epistemic community approach generally seems too technocratic-functional and insufficiently political. Garcia effects a nice theoretical move of separating the knowledge-generating phase of a norm’s emergence on the international agenda (the province of epistemic communities) from its political promotion by advocacy groups and entrepreneurs. In some cases the distinction may appear too neat, but for the realm of small arms regulation, it seems to work. Garcia makes a persuasive case that particular researchers used evidence of the widespread dispersal to conflict zones of Soviet-bloc weapons after the break-up of the USSR and Warsaw Pact to convince state actors of the importance of tracking their distribution and, if possible, destroying them. For the more politically controversial measures, scholarly efforts at disseminating information required support from activist organizations and sympathetic states. Thus, Garcia proposes a two-stage model where the epistemic community of arms researchers helps put the new issue onto the agenda, and transna-

tional advocacy networks promote it and turn it into politically and legally binding agreements.<sup>29</sup>

The Pugwash movement evinces qualities of both an *aspiring* epistemic community – its members want their assessments considered authoritative – and a transnational advocacy group. But because it is an organization of elite scientists and scholars – not really a “movement” at all – it is unlikely to function as a typical transnational social movement. Many episodes during the Cold War show, however, how Pugwash scientists worked with mass movements to promote certain initiatives – a nuclear test ban and restrictions on ballistic-missile defenses being two prominent examples. There is, then, some merit in entertaining the various theoretical frameworks that have been proposed to account for the successes and failures of the Pugwash phenomenon. Whichever theoretical insights eventually prove most useful will be much indebted to the path-breaking empirical research represented by this volume.

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29 Denise Garcia, *Small Arms and Security: New Emerging International Norms* (London: Routledge, 2006).

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