

Cronfa - Swansea University Open Access Repository

This is an author produced version of a paper published in:
Journal of Social History

Cronfa URL for this paper:
<http://cronfa.swan.ac.uk/Record/cronfa32019>

Paper:

Laucht, C. (2017). Transnational Professional Activism and the Prevention of Nuclear War in Britain. *Journal of Social History*
<http://dx.doi.org/10.1093/jsh/shx032>

This item is brought to you by Swansea University. Any person downloading material is agreeing to abide by the terms of the repository licence. Copies of full text items may be used or reproduced in any format or medium, without prior permission for personal research or study, educational or non-commercial purposes only. The copyright for any work remains with the original author unless otherwise specified. The full-text must not be sold in any format or medium without the formal permission of the copyright holder.

Permission for multiple reproductions should be obtained from the original author.

Authors are personally responsible for adhering to copyright and publisher restrictions when uploading content to the repository.

<http://www.swansea.ac.uk/iss/researchsupport/cronfa-support/>

Author Name:

Christoph Laucht

Article Title:

Transnational Professional Activism and the Prevention of Nuclear War in Britain

Author Information:

The author wishes to thank Mark Peel for his encouragement to pursue this topic, Jennifer Haynes, Elena Carter (both at the Wellcome Library), and Alison Cullingford (University of Bradford) for tracking down archival materials, as well as Tomás Irish, Emma Cavell, and the article's anonymous reviewers for their constructive comments on earlier drafts. The research for this article was in part funded through the generous support of a Wellcome Small Grant in Medical Humanities (106456/Z/14/Z). Address correspondence to Christoph Laucht, Department of History, Swansea University, Singleton Park, Swansea, SA2 8PP, Wales, United Kingdom. Email: c.laucht@swansea.ac.uk.

Abstract:

While anti-nuclear weapons activism in Britain and other nations has received considerable historiographical attention, its transnational professional dimensions have so far been neglected. This article thus introduces the concept of “transnational professional activism” as a new lens onto anti-nuclear weapons activism.

“Transnational professional activism” is here taken to mean the ways in which scientific and medical professionals, driven by professional ethos and etiquette, expertise, as well as based on their self-fashioned expert identities, organized themselves into national interest groups that worked within wider transnational networks to act against the perceived threat that nuclear war posed to human society.

Through a comparative analysis of the efforts by two key groups of atomic scientists

and medical professionals to prevent nuclear war at two key moments of the Cold War in Britain, the first Western European nation to acquire nuclear arms, this study examines shifts in the nature of transnational professional activism. In this, it expounds chief aspects in the roles that scientists and medical professionals played in anti-nuclear weapons activism. The Atomic Scientists' Association with its promotion of the international control of nuclear energy from 1945 to 1948 and the Medical Campaign Against Nuclear Weapons, which analyzed the anticipated medical effects of nuclear war in the years from 1980 to 1985, are at the center of this analysis.

Text of Article:

The presence of nuclear weapons, coupled with periods of increased tensions between the superpowers in the Cold War, had a profound impact on the ways in which scientific and medical professionals acted within British and other national societies, fashioned their professional identities, calibrated their moral compasses, and formed non-governmental organizations (NGOs) in science and medicine to prevent the outbreak of nuclear war. These groups often operated within larger networks that transcended national boundaries, inclusive of the geopolitical and ideological fault lines of the Cold War. Yet, historians have largely overlooked the crucial roles that professionals (scientific, medical, and other) have played in anti-nuclear weapons activism.¹

This article focuses on these neglected transnational professional dimensions of scientists' and medical professionals' work for the prevention of nuclear war by introducing the concept of "transnational professional activism" as a new lens onto anti-nuclear weapons activism. "Transnational professional activism" is taken here to mean the ways in which scientists and medical professionals, driven by professional ethos and etiquette, expertise, as well as based on their self-fashioned expert

identities, organized themselves into national interest groups that worked within wider transnational networks to act against the perceived threat that nuclear war posed to human society.² In this, the present article draws inspiration from work on professionalism, professional identities, and expertise more generally, as well as from transnational activism (often focusing on human rights or environmental concerns), NGOs, the public health movement, and medical activism and inequity.³ However, it does not attempt to gauge the impact of transnational professional activism – a problematic task – but is rather concerned with the ways in which it manifested itself and changed over the course of the Cold War.

For heuristic purposes, this study focuses on two stages in the development of transnational professional anti-nuclear weapons activism in Britain, the first Western European nation to acquire atomic arms, in the Cold War. Through an exploration of the attempts by two key British occupational groups to prevent nuclear war at two crucial moments of that conflict, it demonstrates how transnational professional activism shifted during the Cold War, thereby expounding chief aspects of the roles that professionals played in anti-nuclear weapons activism. The Atomic Scientists' Association (ASA), as the chief body of nuclear scientists in Britain between 1946 and 1959 and its promotion of the international control of atomic energy from 1945 to 1948, and the Medical Campaign Against Nuclear Weapons (MCANW), as the main group of concerned medical professionals and its study of the anticipated medical effects of nuclear war during the early 1980s, are at the center of this analysis.

Despite differences in their members' disciplinary backgrounds and the historical contexts in which they operated, the ASA and MCANW shared some ideologies and motivations. In their approaches to transnational professional activism, the two organizations resembled "progressive professionals," as Christopher Moores

classifies activist professionals who positioned themselves tactically in-between non-political insider pressure groups and more politicized mass movements such as the Campaign for Nuclear Disarmament (CND).⁴ As “progressive professionals,” the ASA and MCANW faced similar difficulties in defining the political and operating politically – two central characteristics of their anti-nuclear weapons activism. Moreover, at a very general level of abstraction, the specter of nuclear war framed their actions; for their work for the prevention of nuclear war appeared to be grounded in similar moral regimes that originated from their occupational involvement in preparations for atomic warfare. If many ASA members contributed to the creation of the first atom bombs during the Second World War, many medical professionals – albeit in more abstract and hypothetical ways – were involved in civil defense planning for future scenarios of nuclear war in the 1980s.

Yet, as this article shows, the ASA’s and MCANW’s moral regimes differed fundamentally from one another, depending on the specific Cold War contexts in which they worked for the prevention of nuclear war. To a large extent, this variance was the result of different views by the ASA and MCANW of the “nuclear taboo” – the non-use of nuclear weapons – that was both a chief motivation for and legitimization of their efforts to prevent nuclear war.⁵ In its quest for the international control of nuclear energy, the ASA was active during the transitional period from the Second World War to the Cold War, when the United States held a monopoly on nuclear weaponry, and the formation of an anti-nuclear weapons mass movement still lay about a decade in the future. This period spanned the years from the atomic bombings of Hiroshima and Nagasaki in August 1945, through the formation of the ASA and failed attempts by the United Nations (UN) to establish a system of international control of atomic energy in 1946, to the end of these debates and the

classification of atomic arms as “weapons of mass destruction” by the UN’s Commission for Conventional Armaments in 1948.⁶ Out of the social responsibility that they perceived as having emanated from their wartime work on nuclear arms, 16 scientists, including Patrick Blackett, Harrie Massey, Marcus Oliphant, Rudolf Peierls, and Joseph Rotblat, formed the ASA in March 1946.⁷ Alongside the international control of atomic energy, its chief objectives addressed the public information and education on civilian and military aspects of nuclear power, as well as advising political decision-makers on these matters. With some 140 full and 500 associate members at its peak, the ASA remained a relatively small organization throughout its time of existence.⁸

By contrast, MCANW engaged in its efforts to prevent nuclear war during the so-called Second Cold War from the late 1970s to the mid-1980s. As a consequence of rising tensions between the superpowers, the perceived threat of nuclear war intensified during these years. Especially in the wake of the “double track” decision by the North Atlantic Treaty Organization (NATO), mass protests against the deployment of American intermediate-range nuclear weapons to Britain and other NATO member states erupted across Western Europe. British medical professionals thus founded MCANW in 1980, based on their professional code of ethics.⁹ Besides the existing Medical Association for the Prevention of War (MAPW), MCANW affiliated itself to the International Physicians for the Prevention of Nuclear War (IPPNW) – the main umbrella organization of the transnational medical movement against nuclear war.¹⁰ By comparison with the ASA, MCANW represented a much larger membership that grew from about 1,100 in October 1981 to some 3,500 by September 1985.¹¹ Focusing on MCANW’s main area of expertise (the investigation into the anticipated medical effects of nuclear war), this study traces MCANW’s

activities in the period from its formation in 1980 until 1985 when the group started to widen its agenda beyond this single programmatic issue. Consequently, it demonstrates how, by the early 1980s, transnational professional anti-nuclear weapons activism had shifted since 1948 and continued to shift during the 1980s.¹²

Foundations of Transnational Professional Activism

A set of organizational and ideological pillars that formed the foundations of the ASA's and MCANW's quest to avert nuclear war is crucial for understanding their actions. While some of these evolved independently of the Cold War framework and followed their own logic, the Cold War rendered some of these ideological and organizational foundations of transnational professional activism political and brought the ASA and MCANW into conflict with British government interests, as will be shown below. On a conceptual level, the ASA's and MCANW's anti-nuclear weapons activism dovetailed with Harold Perkin's notions of "professional society" and "professional elites." In particular their self-fashioning of expert identities contained elements of Perkin's "professional society," which was characterized by a marked preference of experts over the untrained and the unskilled.¹³ In order to maintain their standing as "professional elites," the ASA and MCANW embodied "thought collectives," disseminating specific scientific and medical "thought styles."¹⁴ Ultimately, these "thought collectives" contributed to what Peter Haas terms transnational "epistemic communities," that is knowledge-based expert networks that served these two organizations as communication links for the proliferation of information relevant to their causes.¹⁵

The ASA's and MCANW's self-fashioned identities as expert organizations formed part of modernization and professionalization processes that took place in post-war Britain and that radically improved the societal standing of experts and the

role of professional ethics. A trend toward stronger secularization of British society that replaced faith with expertise as one of the fundamental tenets of the work of NGOs contributed to this shift. By focusing on single issues like the international control of nuclear energy or the medical consequences of nuclear war, the ASA and MCANW pragmatically positioned themselves as expert authorities on these matters.¹⁶

To safeguard their elite status as experts, a stringent politics of exclusion was at work within the two organizations. While CND and other groups of the anti-nuclear weapons mass movement accepted members from all professional backgrounds, the ASA's and MCANW's membership delineated along occupational lines. The ASA only admitted "atomic scientists" to full membership status. Although MCANW was, according to its constitution, "open to all health care workers and students of the health care professions," physicians dominated the group in practice. In an attempt to generate additional funds without jeopardizing their standing as expert organizations, the ASA and MCANW permitted non-experts – groups and individuals – to affiliate to their organizations as "associate members" or "Friends of MCANW" respectively.¹⁷

The ASA and MCANW also used their status as "professional elites" to gain access to high-level political decision-makers and to inform or educate the public about their objectives. Some of MCANW's and the ASA's strategies to promote their agendas resembled those of the broader anti-nuclear weapons movement, albeit through a top-down approach. This applied to their attempts to build "societal pressure," as Nina Tannenwald generally observes, by "identifying problems, providing information, framing issues, and shaping discourse."¹⁸ To these ends, the ASA sought to recruit "useful people" in leading positions in the clergy, unions,

higher education, or other important societal roles as “associate members.”¹⁹ A similar, publicity-oriented approach that was common to NGO work, also motivated the election of John Humphrey, a well-renowned immunologist, as MCANW’s first president.²⁰

Apart from publicity, the status of nuclear scientists and medical professionals as independent experts also located them in a powerful position of intermediaries between the British state and society.²¹ The ASA members Patrick Blackett, Sir John Cockcroft, and Sir George Thomson, for example, used their membership in the governmental Advisory Committee on Atomic Energy to promote the association’s objectives to high-ranking government officials.²² In a similar fashion, a programmatic article by IPPNW co-founder Bernard Lown and others referred to an altruistic “educational role in society on all issues pertinent to health and life” that medical professionals occupied. Together with their high-level analytical skills, this marked a chief prerequisite for them to “make up a natural constituency – a potentially forceful, non-political pressure group” to work for the prevention of nuclear war.²³ In line with this self-perceived educational role and based on their professional expertise, the application of a preventative medical approach, as a form of prophylaxis, to the nuclear arms race became a chief characteristic of MCANW’s activism to avert nuclear war. This found expression in so-called medical prescriptions that the group frequently issued as diagnosis of and remedy for the nuclear arms race in conjunction with IPPNW.²⁴

Alongside professional exclusivity, a struggle with defining the limits of the political influenced the ways in which MCANW and the ASA fashioned their professional identities as independent experts. Where British intellectuals such as philosopher Bertrand Russell often perceived of themselves as “public moralists”

from the nineteenth century onward, the ASA and MCANW adopted an ambiguous approach of supposedly objective scientific investigation to political matters.²⁵ On a basic level, a universal ideology of objective (but often subjective) science, shared by scientific and medical experts around the world, informed this concept. Its practitioners applied principles of scientific investigation and medical diagnosis to social and political issues.²⁶

The concomitant of a self-fashioned professional identity as an objective expert organization was the risk of a substantial loss of credibility owing to a failure to take definite political positions, for either overtly politicized or blatantly neutral statements could impinge upon the trustworthiness of the ASA and MCANW as independent and objective expert authorities.²⁷ And it appeared that finding the right balance between objectivity and politicization proved to be an existential question that could potentially jeopardize the existence of expert activist groups. Consequently, MCANW's and the ASA's objective approaches to political matters were not undisputed amongst their members. Internal discussions often centered on the decisive role that trust in authority, as a crucial underlying prerequisite of their objective scientific and medical expertise, played in the formation of their members' identities as professional activists.²⁸ That such groups commonly faced anti-intellectualism further complicated their work.²⁹

The ASA's and MCANW's reliance on objectivity lay partly rooted in multiple allegiances held by some of their members. Since the boundaries separating members' different – and at times conflicting – loyalties were often fluid, a de-politicized approach frequently forced itself upon such professional activist organizations to avoid members' conflicts of interest.³⁰ The roles that Cockcroft and other ASA officers simultaneously held in the association and government

employment prompted the group on numerous occasions to steer away from politicized motions to avoid loyalty clashes. But this entanglement with the government also led the ASA to compromise its independence: in an attempt to build rapport with government offices, the group forwarded statements on contentious issues to the United Kingdom Atomic Energy Authority, the government agency in charge of nuclear energy, for approval ahead of their publication.³¹ In MCANW's case, community physicians found themselves in a situation that was comparable to that of government employees in the ASA because these medical professionals participated in government planning for civil defense.³²

At the same time, questions of partiality versus impartiality reflected constant dilemmas and tensions between national and international allegiances that scientists had faced at least since the late nineteenth century and that repeatedly brought them into conflict with national governments.³³ In postwar Britain, NGOs like MCANW and the ASA often occupied a difficult and ambivalent position, as Hilton and others observe, being “at one and the same time a wing of the state, and an agent acting against it.” The Cold War context often exacerbated these tensions. The ASA encountered criticism from the British government because of its internationalist outlook that defied British national security interests. Whitehall was particularly skeptical of the association’s strong support for the freedom of science across national boundaries, one of the chief underlying principles of ASA proposals for the international control of nuclear energy. Similarly, MCANW – as an affiliate of IPPNW – was subject to accusations of being a pro-Soviet organization because of its striving for the prevention of nuclear war across the blocs. In part, the ASA’s and MCANW’s difficulties in their relationships with the British government stemmed

from a divergence between self- versus external perceptions of their intentions and objectives.³⁴

The ASA's adherence to the principle of objectivity and its refusal to adopt a political stance was one of the association's chief characteristics, distinguishing it not only from key organizations of the atomic scientists' movement in the United States, especially the Federation of American Scientists (FAS), but also contributing to its demise and disbandment.³⁵ Together with ideological motivations, pragmatic reasons were behind the ASA's objective approach, especially the grass-roots democratic decision-making process in its governing council that required unanimous agreement.³⁶ In addition, councilors' opposing political views and loyalties, as well as an increasing polarization of the scientific community into government loyalists and critics during the early Cold War aggravated these tensions. As a result, the ASA came close to impose a depoliticized approach upon itself to ensure its continued functionality.³⁷

MCANW shared some key features of political objectivity with the ASA, vowing in its constitution to be "independent of any political party" and defining itself as a "reference agency for the information" on the medical effects of atomic warfare. Unlike the ASA, MCANW followed a more pragmatic approach to decision-making through the adoption of a two-thirds majority vote. Its governing National Council could "initiate policy decisions" that were then subject to approval by a two-third majority at the subsequent annual general meeting.³⁸ And this gave MCANW flexibility to react to current developments. But the ASA and MCANW followed different paths into the political terrain.

The ASA and the International Control of Nuclear Energy, 1945-48

The ASA and its efforts to prevent nuclear war through the promotion of the international control of nuclear energy occurred during a formative period of transnational professional anti-nuclear weapons activism that bridged the final phases of the Second World War and the early Cold War. During these years, the “nuclear taboo” was still evolving. While many Britons accepted the use of the atomic bombs against Hiroshima and Nagasaki in August 1945, concerns over the deployment of nuclear weaponry grew over the next five years. Particularly the classification of atomic arms as “weapons of mass destruction” in a different category from conventional armaments, by the UN in 1948 represented a decisive moment in the establishment of the concept of the non-use of nuclear weapons.³⁹ The ASA’s views on nuclear arms reflected the embryonic nature of the “nuclear taboo” in this period: the association did not object to the existence of nuclear arms and the concept of nuclear deterrence *per se* but contended, in 1946, in vague terms that “[t]he problem of outlawing atomic warfare [wa]s in the last analysis identical with the problem of outlawing war in general.”⁴⁰ In line with these views, the group set out to prevent nuclear war through proposals for the establishment of an international control regime for nuclear energy.

The ASA’s activism coincided with the emergence of a new wave of internationalism. The recent experiences of two world wars and severe economic problems served as a catalyst for the creation of international organizations with an internationalist agenda – most notably the UN. Ideologically, this postwar internationalism built on principles of national self-determination as postulated by United States President Franklin Delano Roosevelt and British Prime Minister Winston Churchill in the Atlantic Charter (1941).⁴¹ The presence of nuclear weapons,

especially after Hiroshima and Nagasaki, now appeared to make internationalism ever more important.

With its promotion of international control, the ASA followed an ambivalent approach to scientific internationalism. The group tapped into traditions of British liberal internationalist thinking from the interwar years and shared key foundations of scientific internationalism, including the transnational exchange of scientific knowledge, with other groups of the atomic scientists' movement, on the one hand.⁴² Simultaneously, the ASA's agenda contained elements of what Joseph Manzione calls "bipolar scientific internationalism," on the other. The latter found expression in the ASA's prevailing transnational engagement with Western scientists such as the FAS and its predominantly anti-Communist orientation.⁴³ Like the FAS in the United States, the presence of Stalinism dissuaded the ASA from building closer ties with scientists in the Soviet Union.⁴⁴

Partly as a consequence of its pro-Western leaning, the ASA operated within relatively rudimentary "transnational advocacy networks" with groups like the Atomic Scientists of Chicago, the FAS, and the National Committee of Atomic Information in the United States.⁴⁵ The absence of an IPPNW-style umbrella organization that spanned the two blocs, in the ASA's case, perhaps marked the most striking organizational difference between the association and MCANW. With a view to international control, the ASA collaborated at the national level with the New Commonwealth Committee and the UN Association as well as transnationally with the FAS. Amongst other things, the ASA and the FAS reprinted each other's statements in their journals, the *Atomic Scientists' News* and the FAS-affiliated *Bulletin of the Atomic Scientists* respectively.⁴⁶ This served a two-fold purpose for the ASA: not only was the *Bulletin of the Atomic Scientists* widely read, but its editor

Eugene Rabinowitch believed it could serve as a chief forum for fostering internationalism in the early Cold War.⁴⁷ FAS members also attended the ASA's first major conference in Oxford in July 1946 where proposals for international control ranked high on the agenda.⁴⁸

Given their little institutionalized form, the “transnational advocacy networks,” in which ASA members engaged and which often pre-dated the Second World War, relied heavily on individual personal contacts. From 1911, the Solvay Conferences provided an important forum for the advancement of the relatively small field of theoretical physics, particularly in areas relevant to nuclear science.⁴⁹ Research centers represented another site where atomic scientists formed personal contacts. At Leipzig University in Germany, for example, the Manhattan Project scientists Felix Bloch, Klaus Fuchs, Rudolf Peierls, George Placzek, Edward Teller, and Victor Weisskopf had come across each other during the late 1920s and early 1930s as either colleagues or students of Werner Heisenberg.⁵⁰

Where atomic scientists, in their support of internationalism, differed from other professional experts was in their moral regimes: many of them grappled with the moral responsibilities that stemmed from their involvement in the creation of nuclear arms in the British and Allied wartime projects. In particular, Hiroshima and Nagasaki forced many Manhattan Project scientists, in the words of Jon Hunner, “to culturally code switch” to grasp the atom bomb’s moral, cultural, social, and political impacts.⁵¹ To some extent, the situation of many nuclear scientists was comparable to that of chemists such as Fritz Haber who were involved in the development of chemical weapons around the time of the First World War.⁵² Yet, their wartime roles also appeared to give atomic scientists moral authority to speak out as authentic insider experts and discuss ways to prevent nuclear war.⁵³ That much public attention

and even blame focused on nuclear scientists after Hiroshima and Nagasaki enabled them to campaign from a media-effective platform for international control.⁵⁴

Apart from providing the moral basis for their professional activism, many British Manhattan Project scientists, including future ASA members, also formed their initial views on international control during their stay in the United States where they directly witnessed the formation of the American atomic scientists' movement.⁵⁵ By September 1945, several of these scientists took a first step toward organizing themselves in a group to work for the prevention of nuclear war. In a letter, they informed Sir James Chadwick, the head of the British mission to the Manhattan Project, of their intention to follow the example of their American colleagues and issue a declaration on the significance of international control to the British government and media.⁵⁶ The following month, these ambitions translated into a "Memorandum from British Scientists at the Los Alamos Laboratory, New Mexico," which arguably represented the first manifestation of a concerted effort to set up a British atomic scientists' organization. While its signatories did not believe that "outlawing" atomic weapons was a feasible choice, they called for international control through "an international organisation or arrangement for the avoidance of war."⁵⁷ Their acknowledgement of the American monopoly on nuclear weapons while simultaneously calling for an international body to prevent war displayed elements of "bipolar scientific internationalism."

British Manhattan Project scientists brought these ideas and influences back home with them from the United States. In the fall of 1945, several of them formed the Atomic Scientists' Committee (ASC), the direct precursor to the ASA, under the tutelage of the Association of Scientific Workers (AScW) trade union. ASC founding members included J.D. Bernal, Patrick Blackett, Eric Burhop, Harrie Massey, Alan

Nunn May, Nevill Mott, Marcus Oliphant, Rudolf Peierls, and Joseph Rotblat.⁵⁸ If the AScW had briefly discussed international control within the context of scientists' social responsibilities after Hiroshima and Nagasaki, the ASC now devoted more attention to the issue, laying some programmatic groundwork for the ASA. In November 1945, the committee discussed a "Proposal for the Control of Nuclear Energy." The missive identified nuclear scientists as the actors qualified to "take the kind of action required in the time required" and put forth suggestions for an international conference on international control, an international atomic scientists' organization, and a "World University" with "an international institute for research on near-critical masses."⁵⁹

The ASC believed in the capabilities of the UN to implement and police a regime of international control of nuclear energy. It rejected proposals by a group of Liverpool scientists led by Joseph Rotblat and Michael Moore for a world government and a suspension of any research in nuclear science "until mankind [wa]s ready to use scientific achievements for constructive purposes only" in favor of a set of alternative propositions by Eric Burhop.⁶⁰ The latter supported plans drawn up during the tripartite meeting of the British, American, and Soviet foreign ministers in Moscow in December 1945 – and backed by France, China, and Canada – to establish the UN Atomic Energy Commission (UNAEC). In addition, Burhop called on all nations to abandon plans to obtain nuclear arms, including closing down key research facilities, and to accumulate inventories of fissionable raw materials. Scientists were to promote international control through international conferences and scientific exchange across national boundaries.⁶¹

British atomic scientists remained supportive of the UNAEC after the disbanding of the ASC.⁶² By April 1946, shortly after their re-organization in the

ASA, Moon, Oliphant, and Peierls drafted a communiqué on international control for submission to the UNAEC. Growing tensions between the superpowers seemed to make such a statement all the more important. Yet, ASA members' divergent political views and the release of the "Acheson-Lilienthal Report" in the United States complicated the composition of the missive considerably.⁶³

Like the ASC, the FAS, and the British and United States governments, the ASA regarded the UN as the most suitable institution for implementing and safeguarding a system of international control.⁶⁴ But the ASA and the British government disagreed over the framework and terms under which such a scheme should operate. At the heart of this dispute lay the fact that the association – like the FAS, the New Commonwealth Society, and segments of the British news media – embraced the so-called Baruch Plan.⁶⁵

United States President Harry Truman appointed financier Bernard Baruch to present the "Acheson-Lilienthal Plan," as it was originally called, to the UNAEC's first session in June 1946. These proposals promoted international control across a broad range of areas from nuclear weaponry to raw materials such as uranium ore. Baruch, however, amended the plan substantially so that it granted the United States government the right to continue with its nuclear arms research and veto the plan at any time should other nations not implement it properly. Consequently, the Soviet Union rejected the "Baruch Plan" in the UN Security Council, and the concept of international control practically failed by the summer of 1946, marking the start of a nuclear arms race between the superpowers.⁶⁶

The ASA's backing of the "Baruch Plan" revealed both the group's bipolar internationalist orientation and the limits it faced in defining the political. The association attempted to abstain from making outwardly political statements on

international control. As a consequence, the ASA – unlike the FAS – did not lend its support to the “One World” movement, which envisaged a world government as a means to put an international control scheme into action.⁶⁷ Instead, ASA members sympathized with Niels Bohr’s supposedly less politicized proposals for an “Open World.”⁶⁸ Toward the end of World War II, the Danish émigré scientist envisaged that a nuclear arms race could only be averted, provided that the British, Soviet, and United States governments would reach a tri-partite agreement on international control prior to nuclear weapons coming into existence and the end of the war.⁶⁹

If the Cold War framework rendered Bohr’s wartime proposal political, the same applied to the ASA’s support of the “Baruch Plan.” For once, Franklin Lindsay, the Executive Officer of the United States Representative to the UNAEC, thanked Philip Moon on behalf of Baruch “that on nearly all the basic points your Association [wa]s in agreement with the United States policy.”⁷⁰ Conversely, the ASA’s open endorsement of the “Baruch Plan” led British government offices to become suspicious of the association’s position on international control. The ASA’s view of the UN as “a genuine international super-national body with the will and capacity to act as a sort of super state and to override the Governments of sovereign States” represented, in the eyes of one Foreign Office official, “the common weakness when scientists launch out as prophets in the field of international politics.”⁷¹ This critique corresponded with internal views held by several British government departments. Formally, the Attlee Government sanctioned Washington’s proposals in 1946-47. But many British government officials simultaneously harbored feelings of mistrust toward the Truman Administration and worried about the negative impact that the implementation of the “Baruch Plan” might have on Britain’s civilian and military nuclear programs.⁷² This skepticism formed part of a common reluctance that British

governments before and after Attlee have displayed toward surrendering sovereignty to supranational bodies. And it increased after the United States Congress had passed the MacMahon Act (1946), which cut off Britain from vital American nuclear data.⁷³

With negotiations on international control dragging on in the UNAEC until May 1948, the issue remained high on the ASA's agenda.⁷⁴ The ASA members Chadwick, Cockcroft, Massey, Oliphant, Peierls, and Thomson sat on Chatham House's Atomic Energy Study Group. The international relations think tank operated the panel between September 1946 and the summer of 1948. Given its members' diverse political views and professional backgrounds, as well as Chatham House's overtly non-political mission, the output from the Atomic Energy Study Group took the form of an edited collection of papers that examined the matter from different angles, including nuclear physics, politics, and international relations.⁷⁵

Although the implementation of a system of international control was unfeasible and public opinion on the effectiveness of international organizations in stopping the arms race turned more pessimistic, the ASA continued to attach significance to that matter.⁷⁶ And the item featured as a major programmatic message in the group's traveling Atom Train exhibition of 1947-48.⁷⁷ Moreover, the ASA Council decided in July 1947 to set up a study group, comprising Blackett, Mott, Oliphant, Peierls, and Skinner.⁷⁸ The team covered the issue and drafted "non-controversial" articles on the subject.⁷⁹ In July 1948, the ASA Council issued a further statement that called for international control but acknowledged the fact that this ASA objective had practically failed in light of growing tensions between the superpowers.⁸⁰ Recipients included the UN secretary-general, the British and Soviet UNAEC representatives, Prime Minister Clement Attlee and other cabinet members, as well as the AScW and the editor of *Nature*.⁸¹ The fact that the *Economist* magazine

pointed to weaknesses in the association's treatment of political issues, calling the statement "platitudinous," and *Nature* classed it as "lamentably weak," demonstrated the extent to which the ASA's insistence on objectivity and its concern with international control appeared to be increasingly out of touch with the realities of the advancing Cold War.⁸²

MCANW and the Study of the Medical Effects of Nuclear War, 1980-85

MCANW's work for the prevention of nuclear war occurred in an entirely different context. By the early 1980s, the "nuclear taboo" was fully established, with anti-nuclear weapons activists now challenging the very notion of nuclear deterrence itself. Moreover, MCANW operated at a time of widespread anti-nuclear weapons protests.⁸³ When the so-called Second Cold War started in 1979, the United States' monopoly on atomic weapons had been abolished for some 30 years, and Britain had long possessed its own independent nuclear deterrent.⁸⁴

A set of both international and genuinely British political factors helped to initiate the formation of MCANW. Here, MCANW's case illustrates the relationship and dynamics at play between national, transnational, and international issues and initiatives within transnational professional anti-nuclear weapons activism.⁸⁵ Like the ASA, but perhaps more demonstratively, MCANW represented a group of "national internationalists," as Holger Nehring classifies organizations with internationalist objectives that they view simultaneously from national perspectives.⁸⁶ First and foremost, the global nature of the nuclear threat that transcended national boundaries appeared to require a transnational resolution. More specifically, many medical professionals registered a number of strategic developments in Britain, the United States, and NATO with alarm: in their opinion, the adoption of the concepts of "limited nuclear war" and "counterforce" as well as the deployment of cruise missiles

to Britain under the terms of the NATO “double track” decision made Britain and Europe prime targets in a future nuclear war. In addition, the Thatcher Government’s endorsement of the practicability of civil defense and effective medical care during and after nuclear war as well as its decision to acquire the submarine-based Trident nuclear weapons system caused consternation amongst many British medical practitioners. What further appeared to dash hopes for easing tensions between the superpowers was the United States Senate’s refusal to ratify the Strategic Arms Limitation Treaty II in 1980 in the aftermath of the Soviet invasion of Afghanistan and the election of staunch anti-Communist leaders in Britain (Margaret Thatcher in 1979) and the United States (Ronald Reagan in 1980).⁸⁷

Motivated by these developments, medical professionals showed growing concern over the rising likelihood of nuclear war and its medical consequences, leading to MCANW’s formation. In June 1980, *The Lancet* published an influential editorial that pointed to medical professionals “whose services know no frontiers” as quasi predestined transnational actors to “help by resisting or at least questioning the fomenting of distrust between nations” in the intensifying Cold War.⁸⁸ In the fall of the same year, Helen Caldicott, the president of the American Physicians for Social Responsibility (PSR), played a major role in the foundation of the group when she attended a MAPW conference that discussed plans to establish a British version of PSR.⁸⁹ By November 1980, MCANW had come into existence with John Humphrey at the helm.⁹⁰ Alongside PSR (IPPNW was still undergoing its formation and consolidation process at this time), the World Disarmament Campaign, which Philip Noel-Baker and Fenner Brockway founded in the wake of the resolutions of the UN’s First Disarmament Session in 1978, gave another important impulse for the creation of MCANW.⁹¹ From 1982, MCANW also closely cooperated with like-minded

professional groups through its role as a major sponsor of Professions for World Disarmament and Development, which constituted a hub for activists from a range of professional backgrounds.⁹²

MCANW shared some objectives, in particular its rejection of the concept of nuclear deterrence and, in part, its quest for both multi- and later also unilateral British nuclear disarmament, with CND and other groups of the anti-nuclear weapons mass movement.⁹³ In spite of these policies and the fact that many MCANW members held leftwing political views, the campaign sought to uphold a “separate identity” from the broader anti-nuclear weapons movement.⁹⁴ Eventually, MCANW permitted its members to support CND on an individual basis.⁹⁵ But the group often displayed a high degree of ambiguity in its concept of objectivity as through its opposition to British, American, and NATO nuclear weapons policies or its backing of the women’s peace camp at the Greenham Common air base, where United States Air Force cruise missiles were deployed. Other politicized areas included, apart from MCANW’s criticism of the Thatcher Government’s medical and civil defense planning for nuclear war, the group’s advocacy of nuclear non-proliferation, a comprehensive nuclear test ban, and a Nuclear Freeze with the goal of freezing existing numbers of nuclear stockpiles.⁹⁶

One area where MCANW differed fundamentally from the ASA concerned its engagement in more fully formed transnational networks under the aegis of IPPNW, an international NGO, which seemed to be better equipped to work for the prevention of nuclear war in the Cold War than national ASA-type groups. IPPNW’s organizational structure as “a federation” of national affiliates, as IPPNW defined itself in its constitution from 1983, characterized this advanced transnational make-up. An International Council, which comprised representatives from all affiliates,

governed IPPNW.⁹⁷ With their high level of transnationalism that permeated the iron curtain, MCANW and IPPNW were also less rooted in “bipolar scientific internationalism” than the ASA.

The evolution of the MCANW/IPPNW network formed part of a longer developmental process of transnational medical and scientific activism after 1948. It gathered momentum during the nuclear test ban debate of the 1950s when the ASA and groups of the atomic scientists’ movement in the United States like the FAS and the Committee for Nuclear Information, as well as MAPW warned against the environmental and health effects of radioactive fallout from nuclear testing. These activities produced two major outcomes: first, they prepared some of the ground for the emergence of the first cycle of anti-nuclear weapons activism, particularly CND. Second, they led to the creation of the Pugwash Conferences on Science and World Affairs (PCSWA), which represented a chief transnational forum for nuclear and other disarmament issues across the Iron Curtain and influenced the formation of IPPNW, in 1957.⁹⁸

Within some two years of their inception, IPPNW and the press boasted an ambitious comparison of the transnational network with the PCSWA.⁹⁹ While the FAS formed a Committee for Foreign Correspondence to create links with Soviet scientists in the late 1940s, it was the PCSWA that established a crucial platform for transnational exchanges between scientists in the two blocs about nuclear disarmament and other issues.¹⁰⁰ The PCSWA benefitted from the death of Soviet leader Joseph Stalin and the subsequent “Khrushchev thaw” in the Soviet Union because these events now enabled Soviet scientific and medical professionals to engage more actively with transnational networks.¹⁰¹

In hindsight, IPPNW's comparison with the PCSWA appears to be justified, for the PCSWA marked a crucial step in the development of transnational professional anti-nuclear weapons activism, providing an institutional link between the ASA and MCANW/IPPNW. Besides serving as a major inspiration for MCANW and IPPNW, a connection existed between the ASA and the PCSWA through strong staff links. The association cooperated with the PCSWA from their start in 1957.

When the ASA was drawing its last breath in 1959, Joseph Rotblat, a key player in the association and the PCSWA (and later also a supporter of IPPNW), took a leading role in establishing closer ties between the two organizations.¹⁰² What is more, many ASA members joined the PCSWA after their association had disbanded in 1959.¹⁰³

Above and beyond organizational links, MCANW, the PCSWA, and the ASA shared a set of similar issues around national and international allegiances of their members. If the ASA, as a national organization with limited transnational links, had already come under criticism from the British government for its internationalism, the PCSWA and MCANW, and the latter especially through its affiliation with IPPNW, faced a much more complex situation, based on their deep engagement with networks that transcended the two blocs. In particular Soviet members, who normally belonged to the Soviet Academies of Sciences or Medical Sciences and required government approval to attend PCSWA and IPPNW meetings, diluted the composition of these two organizations as independent expert bodies. As a consequence, political analyst Leonard Schwartz pointed to difficulties in defining whether PCSWA conferences, or in fact IPPNW congresses, were “‘officially unofficial or unofficially official’.”¹⁰⁴ But IPPNW’s entanglement with Soviet government institutions also led British tabloids like the *Daily Express* to stigmatize the transnational network as “a bogus organisation, doing more for Soviet propaganda than for peace.”¹⁰⁵ This accusation

exemplified a prejudice that groups of the peace movement often encountered in Cold War Britain.¹⁰⁶

MCANW's transnational activism for the prevention of nuclear war manifested itself perhaps in its most visible form through the group's role within the IPPNW "federation," especially annual international conferences. As in the case of the PCSWA, international congresses represented major sites of transnational exchanges and communication for IPPNW. Here, IPPNW and the PCSWA followed in the tradition of earlier transnational groups of medical peace activists such as Joseph Rivière and the International Medical Association against War (1905) or the International Medical Association for the Prevention of War (1936).¹⁰⁷ Simultaneously, these meetings were important markers of on-going changes in MCANW's anti-nuclear weapons activism.

Shortly after IPPNW's formation in June 1980, plans for its first international conference were under way.¹⁰⁸ Entitled "Last Aid: the Medical Dimensions of Nuclear War," the first IPPNW World Congress took place near Washington, DC, in 1981. In light of the perceived imminence of nuclear war, the meeting focused on the medical effects of nuclear war and marked an important step in the development of transnational medical anti-nuclear weapons activism, particularly the consolidation of its main hub and the formulation of an agenda. British delegates included John Boag, Jack Fielding, Andrew Haines, and Patricia Lindop.¹⁰⁹ In addition, the conference helped MCANW to raise its profile within the IPPNW network because the umbrella organization accepted a British proposal to hold the subsequent IPPNW conference in Cambridge, England.¹¹⁰

IPPNW's Second World Congress, which MCANW organized with support from MAPW in April 1982, epitomized major shifts in transnational professional anti-

nuclear weapons activism that had taken place since the days when the ASA promoted international control, particularly in response to the intensifying nuclear arms race of the Second Cold War, in relation to higher levels of transnational engagement, and the articulation of stronger political statements. Sir Douglas Black, the president of the Royal College of Physicians, Bernard Lown, and Nikita Blokhin, the President of the Soviet Academy of Medical Sciences, co-chaired the Cambridge meeting, which was attended by some 200 delegates from over 30 Eastern and Western bloc countries and non-aligned nations.¹¹¹ Although the Argentinian invasion of the Falkland/Malvinas Islands on the eve of the conference eclipsed the publicity of the event, it still received coverage in the press and medical journals. In fact, MCANW effectively used it as an opportunity to launch its first major advertisement in the national press.¹¹²

Given the mounting tensions between the superpowers, the conference focused on the medical effects that nuclear war might have on the densely populated European continent, as the main battlefield, with its high degree of urbanization and complex infrastructure.¹¹³ Amongst other things, working groups discussed issues pertinent to the development of transnational medical activism. These included the recruitment of members from all areas of the health services and campaigning at the national level, as well as constitutional changes to IPPNW's governance structure.¹¹⁴

“An Appeal to the Physicians of Europe,” which delegates issued at the end of the Cambridge meeting, addressed the development of the IPPNW network. In support of IPPNW’s mission, the missive proposed that physicians across Europe should either engage in the work of its existing affiliates or set up new ones. Furthermore, it urged them to study the medical effects of nuclear war and disseminate related information to the public, the media, and political decision-

makers. Finally, the statement set out to encourage European health professionals to network with their colleagues at home and abroad, a key prerequisite for expanding IPPNW.¹¹⁵

Another important resolution concerned IPPNW's programmatic orientation as expert organization. In a politicized move that jeopardized the credibility and status of IPPNW and its affiliates as objective experts, delegates internationalized the "Frankfurt Declaration," an alternative Hippocratic Oath drawn up by the West German IPPNW section, as "A New Physician's Oath."¹¹⁶ Although the Hippocratic Oath, as an ethical legitimization for medical anti-nuclear weapons activism, was less significant for MCANW, which did not even mention it in its constitution, than for its American and West German sister organizations or IPPNW, the new pledge went to the heart of the fundamental debate over war medicine, thus affecting MCANW.¹¹⁷ One section of the document that justified physicians' right to "object to any kind of training or advanced training in war medicine and refuse to participate in it" proved particularly problematic. Not only did it contravene IPPNW's policy on objectivity, but critics interpreted this as a potential rejection by medical professionals to engage in any training for, let alone, partaking in actual medical emergencies, including natural catastrophes. In West Germany, the "Frankfurt Declaration" consequently prompted calls to revoke signatories' licenses to practice medicine.¹¹⁸ In Britain, it appeared to confirm fears of a politicization of IPPNW, as expressed by John Horder, the president of the Royal College of General Practitioners, ahead of the Cambridge meeting.¹¹⁹

These negative reactions to IPPNW and MCANW policies demonstrated the extent to which the civil defense issue polarized the medical profession into critics and supporters of government policy. Through their roles in civil defense planning,

community physicians were at the center of this debate. MCANW's critique of British government plans initially centered on two Home Office policies: the "Protect and Survive" civil defense campaign and plans for operating British health services during and after nuclear attack in line with the "Home Defence Circular (77) 1" policy document.¹²⁰ The group showed concern about the optimistic assessment of the medical consequences of nuclear war by government agencies, especially their suggestion that effective civil defense against such an attack was, in principle, possible.¹²¹ To study the effectiveness of civil defense from a medical point of view, MCANW had formed a joint Civil Defence Working Group with MAPW in 1981, which published the booklet *The Medical Consequences of Nuclear Weapons* the following year.¹²²

In formulating an official line on civil defense, MCANW struggled, once again, with defining the political. In November 1982, the group passed resolutions on the issue that undermined government policy, declaring that civil defense had "no significant effect in protecting the population from direct nuclear attack." At the same time, MCANW was more cautious than the West German IPPNW section in its "Frankfurt Declaration" because the group differentiated explicitly between unrestricted support for general "disaster planning" and the individual medical professional's right to object "on grounds of conscience" to any "participation in planning for nuclear war."¹²³ Despite these nuances, the British government discarded MCANW's views on civil defense.¹²⁴

MCANW's ambiguous stance on civil defense reflected a growing politicization of the civil defense issue within and a resultant politicization of the medical profession. The British Medical Association (BMA), the main representational body and trade union of medical professionals in Britain, played an

important role in this process; for its indecisiveness on civil defense and unilateral British nuclear disarmament fueled a discussion within MCANW about the campaign's purpose and political mindedness.¹²⁵ Central to the BMA's involvement in the civil defense debate was a report by its Board of Science and Education that undermined the official government line on civil defense: *The Medical Effects of Nuclear War* concluded that the health services would be unable to cope with the consequences of a nuclear attack. After a prolonged debate at the BMA's 1983 annual representative meeting, delegates approved of the report's findings despite their subversive message. Yet, they also acted ambivalently when they voted in favor of the BMA's abstention from taking a political stance in the nuclear debate, that is from commenting on government policies “concerning the manufacture, testing and development of nuclear weapons.” Instead, the meeting carried a resolution that promoted a multilateral nuclear freeze. In this, the 1983 annual representative meeting established the groundwork for the BMA's participation in the nuclear debate of the 1980s, restricting itself to the provision of factual information and refraining from actively supporting MCANW and IPPNW.¹²⁶

At its annual general meeting in June 1983, MCANW followed the BMA's resolution, and delegates decided against the adoption of a unilateral line on British nuclear disarmament in order not to alienate members, “even whilst recognizing that ‘unilateral’ meant taking an initiative.” Instead, the same meeting backed a resolution issued by IPPNW's Third World Congress that urged international governments to implement a multilateral freeze on nuclear weapons production, testing, and siting, as well as their delivery systems, with the ultimate goal of abolishing atomic arms altogether. Furthermore, delegates called on the Thatcher Government to advocate such a multilateral freeze in the upcoming UN Special Session on Disarmament and

to cancel plans for the purchase of Trident and the deployment of cruise missiles on British soil, thereby linking unilateral British with multilateral nuclear disarmament.¹²⁷

MCANW's and the BMA's prioritization of multi- over unilateral nuclear disarmament had pragmatic reasons. Although the early 1980s witnessed an increase in perceived fears of nuclear war and a mobilization of the anti-nuclear weapons movement, MCANW strode against the tide of public opinion with its anti-nuclear weapons activism. The defeat of the Labour Party, which ran on a unilateralist ticket in the 1983 general election, at the polls illustrated this demonstratively. While there existed short-lived mainstream disapproval of Trident and cruise missiles, a majority of Britons, eventually, put up with the deployment of these weapons systems.¹²⁸

Multilateralism thus seemed to go down more favorably with mainstream public opinion than an orthodox unilateralist stance.

MCANW continued to follow a more de-politicized line for another year or so, before abandoning it by late 1984. This move went hand in hand with a diversification of the group's agenda to incorporate the broader issues of social inequality, public health, and foreign aid.¹²⁹ These changes occurred in tandem with programmatic developments within IPPNW and the BMA and mirrored a general trend amongst British NGOs. At its Fourth World Congress in 1984, IPPNW started to widen its agenda to include the study of weapons of mass destruction more broadly.¹³⁰ The fact that IPPNW amended its constitution the following year, referring to itself now as a ““non-partisan”” rather than a ““non-political”” organization, appeared to sanction the release of stronger value statements from MCANW.¹³¹

The BMA, too, seemingly legitimized MCANW's development into a multi-issue campaign with stronger political views. In 1984, its annual representative

meeting overrode its previous decision to abstain from issuing political statements, calling instead for a world-wide re-allocation of defense to health service budgets. But the fact that the BMA framed this anti-militarist argument multilaterally was aimed at making it more acceptable to its membership base with its diverse political leanings.¹³² And this move illustrates the limits of the association in adopting a more politically minded approach.

In September 1985, MCANW combined these lines of development in its first national campaign. “Treatment Not Trident” called on the British government to shelf its plans for procuring the Trident nuclear weapons system and to divert these funds toward health care and foreign aid.¹³³ These developments not only demonstrate how, by the early 1980s, transnational professional anti-nuclear weapons activism had shifted since the late 1940s, but how it continued to shift in the mid-1980s.

Conclusions

A comparative analysis of the ASA’s and MCANW’s efforts to prevent nuclear war at two pivotal moments of the Cold War exposes major shifts in transnational professional activism, thus revealing key aspects of the roles that professionals played in anti-nuclear weapons activism. The threat of nuclear war provided the abstract contextual frame of their activities. While the two groups ostensibly shared similar moral regimes to avert atomic war, based on their occupational roles in the preparations for nuclear warfare, their moral regimes differed in fact significantly, depending on the particular Cold War context in which they acted.

The ASA promoted the international control of nuclear energy to avoid a nuclear arms race and, ultimately, nuclear war during a transformative period for transnational professional activism: the United States held a monopoly on nuclear weapons, many scientists still attempted to make sense of atomic arms, and the notion

of the “nuclear taboo” only started to emerge. The ASA’s views on nuclear arms mirrored that embryonic state of the notion of the non-use of nuclear weapons, as the association did not categorically object to the existence of nuclear weapons and the concept of nuclear deterrence. Moreover, the ASA’s engagement with transnational networks was still relatively rudimentary, displaying elements of a predominantly pro-Western and anti-Communist “bipolar scientific internationalism.”

By contrast, MCANW’s activism took place during the Second Cold War, which was characterized by relatively strong anti-nuclear weapons protests and an intensifying nuclear arms race. The group studied the medical effects of atomic warfare and adopted, in line with its members’ professional ethos, concepts from preventative medicine to the nuclear arms race. Unlike the ASA, MCANW challenged the concept of nuclear deterrence itself, calling for multi- and later also more explicitly unilateral British nuclear disarmament. In this, MCANW’s views partly resembled those of groups of the broader anti-nuclear weapons movement like CND, revealing MCANW’s stronger politicization, by comparison with the ASA.

In their quest to prevent nuclear war, these two groups of “progressive professionals” relied on their professional expertise. Yet, they struggled to define the political. The ASA generally adhered to a strict line on objectivity in political matters and remained a single-issue campaign to its end in 1959.¹³⁴ Therein, the association differed from other atomic scientists’ groups, especially the FAS, which had diversified its objectives by the early 1950s, and MCANW.¹³⁵ Not only did MCANW issue relatively politicized statements, in contrast to the ASA, but, from 1984, the group, in conjunction with IPPNW, also started to investigate broader issues such as health spending in relation to defense expenditure on both nuclear and conventional armaments. After the end of the Cold War, MCANW took a most pragmatic step to

ensure its survival when the group merged with MAPW in 1992 to form the multi-issue campaign Medical Action for Global Security (MEDACT), which remains Britain's sole IPPNW affiliate to the present day.¹³⁶

Although the ASA and MCANW intended to stay clear of any political entanglement in order not to jeopardize their status as “professional elites,” the Cold War framework occasionally politicized some of their supposedly unpolitical statements. And, what is more, the two groups also frequently compromised their depoliticized approaches. The ASA clashed with the Attlee Government over its support of the “Baruch Plan.” Similarly, MCANW’s criticism of official planning for medical care in the event of nuclear war, including civil defense measures, brought the group into conflict with the Thatcher Government. The fact that several ASA members also held posts at British government research facilities and community physicians in MCANW were involved in civil defense planning further complicated the situation for these two groups.

Finally, the two groups exposed fundamentally different levels of engagement with transnational networks. Through its membership in the IPPNW “federation,” an international NGO, with a sophisticated governance structure and established channels of transnational communication across two blocs, MCANW displayed a much deeper involvement in such networks than the ASA. In this context, the PCSWA marked both a key model for IPPNW and an organizational link between the ASA and MCANW/IPPNW; for many ASA members joined Pugwash when their association disbanded, and MCANW/IPPNW drew inspiration from the PCSWA. The fact that IPPNW (and MCANW) received the Nobel Peace Prize in 1985 – only five years after their inception and ten years before the PCSWA – serves as an indicator of the relevance and high level of the transnational activism that medical professionals

displayed in the early 1980s by comparison with atomic scientists in the immediate post-war years.¹³⁷

1 The very limited space that Lawrence Wittner devotes to professionals in his global history *The Struggle against the Bomb*, 3 vols. (Stanford, 1993-2003), 3 (2003): 229, is indicative of this general trend. Yet, even the historiography of scientific and medical activism has largely neglected these transnational professional dimensions. See Sarah Bridger, *Scientists at War: The Ethics of Cold War Weapons Research* (Cambridge, MA, 2015); Andrew Brown, *Keeper of the Nuclear Conscience: The Life and Work of Joseph Rotblat* (Oxford, 2012); Michael Egan, *Barry Commoner and the Science of Survival: The Remaking of American Environmentalism* (Cambridge, MA, 2007); Matthew Evangelista, *Unarmed Forces: The Transnational Movement to End the Cold War* (Ithaca, 1999); Greta Jones, “The Mushroom-Shaped Cloud: British Scientists’ Opposition to Nuclear Weapons Policy, 1945-57,” *Annals of Science* 43 (1986): 1-26; Claudia Kemper, *Medizin gegen den Kalten Krieg: Ärzte in der anti-atomaren Friedensbewegung der 1980er Jahre* (Göttingen, 2016); Nick Lewer, *Physicians and the Peace Movement* (London, 1992), pp. 63-97; Paul Rubinson, “The Global Effects of Nuclear Winter: Science and Antinuclear Protest in the United States and the Soviet Union during the 1980s,” *Cold War History* 14 (2014): 47-69; Lisa Rumiel, “Exposing the Cold War Legacy: The Activist Work of Physicians for Social Responsibility and International Physicians for the Prevention of Nuclear War, 1986 and 1992,” in *Environment, Health, and History*, ed. Virginia Berridge and Martin Gorsky (Basingstoke, 2012), 224-43; Rebecca Slayton, *Arguments that Count: Physics, Computing, and Missile Defense, 1949-2012* (Cambridge, MA, 2013); Alice Kimball Smith, *A Peril and a Hope: The Scientists’ Movement in America, 1945-1947* (Chicago, 1965).

2 This article relies on Joseph Nye's and Robert Keohane's seminal definition of “transnational interactions” as “the movement of tangible and intangible items across state boundaries when at least one actor is not an agent of a government or an intergovernmental organization;” “Transnational Relations and World Politics: An Introduction,” *International Organization* 25 (1971): 332.

3 See Konrad Jarausch, *The Unfree Professions: German Lawyers, Teachers, and Engineers, 1900-1950* (New York, 1990); Harold Perkin, *The Rise of Professional Society: England since 1880*, new ed. (London, 2002); Harold Perkin, *The Third Revolution: Professional Elites in the Modern World* (London, 1996); Sean Johnston, *The Neutron's Children: Nuclear Engineers and the Shaping of Identity* (Oxford, 2012); Martin Kohlrausch and Helmuth Trischler, *Building Europe on Expertise: Innovators, Organizers, Networkers* (Basingstoke, 2014); Roy MacLeod, ed., *Government and Expertise: Specialists, Administrators and Professionals, 1860-1919* (Cambridge, 1988); Nico Stehr and Reiner Grundmann, *Experts: The Knowledge and Power of Expertise* (London, 2011); Astrid Mignon-Kirchhof and Jan-Henrik Meyer, “Global Protests against Nuclear Power: Transfer and Transnational Exchange in the 1970s and 1980s,” *Historical Social Research* 39 (2014): 165-90; Sarah Snyder, *Human Rights Activism and the End of the Cold War: A Transnational History of the Helsinki Network* (Cambridge, 2011); Matthew Hilton et al., *The Politics of Expertise: How NGOs Shaped Modern Britain* (Oxford, 2013); John Duffy, *The Sanitarians* (Urbana, 1990); Christopher Hamlin, *Public Health and Social Justice in the Age of Chadwick* (Cambridge, 1998); Eleanor Davey, “Famine, Aid, and Ideology: The Political Activism of Médecins Sans Frontières in the 1980s,” *French Historical Studies* 34 (2011): 529-58; Paul Farmer, *Infections and Inequalities: The Modern Plagues* (Berkeley, 1999).

4 Christopher Moores, “The Progressive Professionals: The National Council for Civil Liberties and the Politics of Activism in the 1960s,” *Twentieth Century British History* 20 (2009): 539.

5 Despite its focus on the United States, many key arguments put forth by Nina Tannenwald in *The Nuclear Taboo: The United States and the Non-Use of Nuclear Weapons since 1945* (Cambridge, 2007) also apply to Britain.

6 Nina Tannenwald, “Stigmatizing the Bomb: Origins of the Nuclear Taboo,” *International Security* 29 (2005): 18-20.

7 Arrol to Rotblat, March 27, 1946, attached: “Draft Pamphlet to Prospective Members of the Association of Atomic Scientists,” n.d., the Papers of Professor Sir Joseph Rotblat, Churchill Archives Centre (hereafter RTBT), K.21; “Committee of Atomic Scientists: Suggested Organization,” February 28, 1946; “Articles of Association of the Atomic Scientists’ Association,” 1946, attached to letter, Arrol to Rotblat, June 5, 1946, all in RTBT, K.22; ASA, “Report of Activities of Provisional Committee,” n.d., 1, attached to letter, Moon to ASA members, July 15, 1946, RTBT, K.25.

8 Christoph Laucht, *Elemental Germans: Klaus Fuchs, Rudolf Peierls and the Making of British Nuclear Culture 1939-59* (Basingstoke, 2012), 131-50; Rudolf Peierls, “The British Atomic Scientists’ Association,” *Bulletin of the Atomic Scientists* 6 (1950): 59. Kelly Moore differentiates between the relatively unbiased act of “informing” and the more politicized “educating” in *Disrupting Science: Social Movements, American Scientists, and the Politics of the Military, 1945-1975* (Princeton, 2008), 97.

9 Fred Halliday, *The Making of the Second Cold War*, 2nd ed. (London, 1986); Leopoldo Nuti et al., ed., *The Euromissile Crisis and the End of the Cold War* (Stanford, 2015); Christoph Becker-Schaum et al., ed., “*Entrüstet Euch!*”

-
- Nuklearkrise, NATO-Doppelbeschluss und Friedensbewegung* (Paderborn, 2012); John Humphrey, “The Development of the Physicians’ Peace Movements,” *Medicine and War* 1 (1985): 92-95.
- 10 Patricia Craig, “Gesundheits – statt Rüstungswettlauf – Die britische Medical Association for Prevention of War (MAPW),” in *Äskulap oder Mars? Ärzte gegen den Krieg*, ed. Thomas Ruprecht and Christian Jenssen (Bremen, 1991), 425; Douglas Holdstock, “MAPW and MCANW: Towards Unity,” *Medicine and War* 7 (1991): 81; Alex Poteliakoff and Patricia Craig, “Four Decades of the Medical Association for Prevention of War,” *Medicine and War* 7 (1991): 173-84; Lewer, *Physicians and the Peace Movement*, 65, 82.
- 11 “MCANW National Council Meeting. Sunday 25 October 1981, 10.30 am: Minutes,” 1, Medact Archive, Archive and Manuscript Collection, Wellcome Library, London, United Kingdom (hereafter SA/MED), SA/MED/C/1/1/1; MCANW, “Press Information: 23rd September 1985, Background information on MCANW,” SA/MED/F/4/4.
- 12 MCANW and MAPW, *The Medical Consequences of Nuclear Weapons* (Cambridge, 1982).
- 13 Perkin, *The Rise of Professional Society*, 2; Perkin, *The Third Revolution*, 1.
- 14 Ludwik Fleck, *Genesis and Development of a Scientific Fact*, ed. Thaddeus Trenn and Robert Merton; trans. Fred Bradley and Thaddeus Trenn (Chicago, 1979), 39-51, 125-45.
- 15 Peter Haas, “Introduction: Epistemic Communities and International Policy Coordination,” *International Organization* 46 (1992): 3 note 4, 5, 27.
- 16 Hilton et al., *The Politics of Expertise*, 62-63, 228.

17 ASA, *Atom Train: Guide to the Travelling Exhibition on Atomic Energy* (London, 1947), unpaginated; “Minutes: MCANW National Council Meeting. Saturday 8 May 1982, Stepping Hill Hospital, Stockport,” 6, SA/MED/C/1/1/1; MCANW, “Constitution,” July 1983, The Craig Medical Peace Movements Archive, J.B. Priestley Library Special Collections, University of Bradford, Bradford, United Kingdom (hereafter CMPMA), 3/3; Jane Dibblin, “Anti-Nuclear Nurses,” *Sanity* 8 (1986): 44.

18 Tannenwald, “Stigmatizing the Bomb,” 12-13.

19 Jones to Rotblat, January 27, 1947, RTBT, K. 26; “Editorial,” *Atomic Scientists’ News* 4 (1950): 1.

20 Hilton et al., *The Politics of Expertise*, 149; Hugh Middleton, “Die ‘Medizinische Kampagne gegen Kernwaffen in Großbritannien’,” in *Die Überlebenden werden die Toten beneiden: Ärzte warnen vor dem Atomkrieg*, ed. Bayerische Ärztinnen und Ärzte gegen Atomenergie, Berliner Ärzteinitiative gegen Atomenergie, and Hamburger Ärzteinitiative gegen Atomenergie (Cologne, 1982), 120.

21 Charles Thorpe, “Disciplining Experts: Scientific Authority and Liberal Democracy in the Oppenheimer Case,” *Social Studies of Science* 32 (2002): 533.

22 “Advisory Committee on Atomic Energy: Composition and Terms of Reference. Note by the Secretary of the Cabinet,” August 20, 1945, the Papers of Sir James Chadwick, 1914-1974, Churchill Archives Centre, Churchill College, University of Cambridge, Cambridge, United Kingdom (hereafter CHAD), CHAD I/15/6; Peierls to Massey, May 14, 1946; Peierls to Anderson, May 29, 1946, all in the Papers and Correspondence of Sir Rudolf Peierls, 1907-1995, Department of Western Manuscripts, Bodleian Library, University of Oxford, Oxford, United Kingdom

(hereafter Peierls Papers), MS Eng. Misc. b. 223, F 4; Mary Jo Nye, *Blackett: Physics, War, and Politics in the Twentieth Century* (Cambridge, MA, 2004), 86.

23 Bernard Lown et al., “The Nuclear-Arms Race and the Physician,” *New England Journal of Medicine* 304 (1981): 728.

24 MCANW, “Nobel Peace Prize: A Turning Point for Medical Campaigners,” n.d., 2, CMPMA, 3/14; Bernard Lown and John Pastore, “A Medical Prescription for Survival,” *The Lancet* 326 (1985): 1285; “A Medical Prescription for International Physicians for the Prevention of Nuclear War,” n.d., CMPMA, 2/13.

25 Stefan Collini, *Public Moralists: Political Thought and Intellectual Life in Britain 1850-1930* (Oxford, 1991).

26 Lorraine Daston and Peter Galison, *Objectivity* (New York, 2007), 51-53; Mark Walker, “Legenden um die deutsche Atombombe,” *Vierteljahrsshefte für Zeitgeschichte* 38 (1990): 54.

27 Jessica Wang, “Scientists and the Problem of the Public in Cold War America, 1945-1960,” *Osiris*, 2nd Series, 17 (2002): 332; Steve Watkins, *Medicine and Labour: The Politics of a Profession* (London, 1987), 20-21.

28 Marcus Oliphant, “Control of Atomic Energy,” *Nature* 157 (1946): 679; Kathleen Lonsdale, “Use of Atomic Energy: The Choice Before Scientists,” *Atomic Scientists’ News* 1 (1947): 47; “Medical Campaign Against Nuclear Weapons: Policy Making Conference, 13 & 14 November 1982,” CMPMA, 3/2.

29 Hilton et al., *The Politics of Expertise*, 19.

30 Geoffrey Finlayson, “A Moving Frontier: Voluntarism and the State in British Social Welfare, 1911-1949,” *Twentieth-Century British History* 1 (1990): 183; Hilton et al., *The Politics of Expertise*, 188-217.

31 Fishenden to Schonland, April 4, 1957; Cockcroft to Plowden, April 16, 1957; Fishenden to Schonland, February 10, 1958, all in the National Archives, Kew, Richmond, United Kingdom (hereafter TNA), AB 27/6.

32 Lewer, *Physicians and the Peace Movement*, 86-87.

33 A.G. Cock, "Chauvinism and Internationalism in Science: The International Research Council, 1919-1926," *Notes and Records of the Royal Society of London* 37 (1983): 249-88; Robert Friedman, *The Politics of Excellence: Behind the Nobel Peace Prize in Science* (New York, 2001); Daniel Kevles, "'Into Hostile Political Camps:' The Reorganization of International Science in World War I," *Isis* 62 (1971): 47-60.

34 Hilton et al., *The Politics of Expertise*, 16, 108-45, 184; Laucht, *Elemental Germans*, pp. 117-22; Lewer, *Physicians and the Peace Movement*, 80.

35 Laucht, *Elemental Germans*, 151-71.

36 Peierls to Chadwick, March 12, 1946, CHAD I/24/2. Rudolf Peierls, *Bird of Passage: Recollections of a Physicist* (Princeton, 1985), 283; Peierls, "The British Atomic Scientists' Association," 59.

37 "Election of Officers," *Atomic Scientists' News* 1 (1947): 2; Jones, "The Mushroom-Shaped Cloud," 7; Nye, *Blackett*, 161; Thomson to Peierls, April 24, 1950, RTBT, K.49C; Cherwell to Champion, February 11, 1950, Peierls Papers, MS Eng. Misc. b. 223, F 6; Egan, *Barry Commoner and the Science of Survival*, 61.

38 MCANW, "Constitution," July 1983, CMPMA, 3/3.

39 Tannenwald, "Stigmatizing the Bomb," 14-20; George Gallup, ed., *Gallup International Public Opinion Polls: Great Britain 1937-1975*, 2 vols. (New York, 1976), 1: 132, 183-84.

40 Philip Moon and Eric Burhop, *Atomic Survey: A Short Guide to the Scientific and Political Problems of Atomic Energy* (n.p., [1946]), 28; Tannenwald, “Stigmatizing the Bomb,” 17.

41 Paul Kennedy, *The Parliament of Man: The United Nations and the Quest for World Government* (London, 2006); Glenda Sluga, *Internationalism in the Age of Nationalism* (Philadelphia, 2013), 5, 79-80

42 Waqar Zaidi, “‘A Blessing in Disguise.’ Reconstructing International Relations Through Atomic Energy, 1945-1948,” *Past and Present*, 2011, Supplement 6: 331.

43 Joseph Manzione, “‘Amusing and Amazing and Practical and Military’: The Legacy of Scientific Internationalism in American Foreign Policy, 1945-1963,” *Diplomatic History* 24 (2000): 31, 49-52.

44 Evangelista, *Unarmed Forces*, 29; Laucht, *Elemental Germans*, 119.

45 ASA, “Report of Activities of Provisional Committee,” 1. According to Thomas Davies, “transnational advocacy networks” comprise “actors in multiple countries united by shared ideals and linked by exchanges of services and information,” *NGOs: A New History of Transnational Civil Society* (London, 2013), 2.

46 “Atomic Energy Control,” *The Times*, January 21, 1947, 4; “British Atomic Scientists’ Proposals for International Control of Atomic Energy,” *Bulletin of the Atomic Scientists* 3 (1947): 42-43, 49; “Statements on the Second Anniversary of Hiroshima,” *Bulletin of the Atomic Scientists* 3 (1947): 236; Zaidi, “‘A Blessing in Disguise,’ ” 316-18.

47 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 (2012): 114-42.

48 ASA, "Oxford 29th -31st July 1946: Final Meeting and Reception," Simon to Rotblat, June 25, 1946, both in RTBT, K.26; ASA, "Oxford Conference, July 29th – 31st, 1946: First Session, Monday, July 29th, 1946, 3 p.m., at Jesus College, Oxford. Professor R.E. Peierls, Executive Vice-President, in the Chair;" "Tuesday, July 30th, 10 a.m. Chairman Professor Pryce. Subject: 'Atomic Power.';" "Open Meeting, Wednesday, July 31st, 1946. In the Chair, Professor Mott;" all in RTBT, K.27.

49 Helge Kragh, *Quantum Generations: A History of Physics in the Twentieth Century* (Princeton, 1999), 70-72; Gabriele Metzler, *Internationale Wissenschaft und nationale Kultur: Deutsche Physiker in der internationalen Community 1900-1960* (Göttingen, 2000), 52-53.

50 Laucht, *Elemental Germans*, 35, 63.

51 Jon Hunner, "Reinventing Los Alamos: Code Switching and Suburbia at America's Atomic City," in *Atomic Culture: How We Learned to Stop Worrying and Love the Bomb*, ed. Scott Zeman and Michael Amundson (Boulder, 2004), 34.

52 Friedman, *The Politics of Excellence*, 113-15; Henry Harris, "To Serve Mankind in Peace and the Fatherland in War: The Case of Fritz Haber," *German History* 10 (1992): 24-38.

53 Stehr and Grundmann, *Experts*, 45-46, 115.

54 Paul Boyer, *By the Bomb's Early Light: American Thought and Culture at the Dawn of the Atomic Age* (New York, 1985; repr. Chapel Hill, 1994), 59-64; Mass-Observation, *Peace and the Public: A Study by Mass-Observation* (London, 1947), 8.

55 Boyer, *By the Bomb's Early Light*, 59-64; Margaret Gowing, *Britain and Atomic Energy 1939-1945* (London, 1964), 233-319; Laucht, *Elemental Germans*, 128; Matt Price, "Roots of Dissent: The Chicago Met Lab and the Origins of the Franck Report," *Isis* 86 (1995): 222-44; Smith, *A Peril and a Hope*.

56 Titterton et al. to Chadwick, September 6, 1945. They attached an untitled statement by Robert Christy and other American Manhattan Project scientists, both in CHAD IV/12/2.

57 Bretscher et al., "Memorandum from British Scientists at the Los Alamos Laboratory, New Mexico," n.d., attached to letter, Marley to Rickett, October 23, 1945, CHAD IV/12/2.

58 Innes to Rotblat, December 13, 1945; Arrol to Rotblat, March 27, 1946, attached: "Draft Pamphlet to Prospective Members of the Association of Atomic Scientists," RTBT, K.21; "Present Members of the Committee of Atomic Scientists," January 1, 1946; "Committee of Atomic Scientists: Suggested Organization," February 28, 1946; "Articles of Association of the Atomic Scientists' Association," 1946, attached to letter, Arrol to Rotblat, June 5, 1946, all in RTBT, K.22; AScW, "Press Statement: Committee of Atomic Scientists," January 21, 1946, attached to Innes, "Minutes of the Second Meeting of the Committee Held on Saturday, 19th January, 1946 at 2.30 p.m. at Gas Industry House, London, S.W.1," RTBT, K.23.

59 Fremlin to Branches, Areas, Executive Committee and other offices, "The Atomic Bomb: Statement at the Request of the Executive Committee for Discussion," August 27, 1945; "Proposal for the Control of Nuclear Energy," November 23, 1945, 1, 2, 7, both in RTBT, K.21.

60 "Plan for Control of Nuclear Power," January 1, 1946, 2; attached to letter, Rotblat and Moore to Innes, January 1, 1946, RTBT, K. 20; Innes, "Minutes of the Second Meeting of the Committee Held on Saturday, 19th January, 1946 at 2.30 p.m. at Gas Industry House, London, S.W.1," 1-2, RTBT, K. 23; Kurti to Rotblat, February 9, 1946, RTBT, K.24.

61 AScW to ASC, January 15, 1946, RTBT, K.21; Dimitris Bourantonis and Edward Johnson, "Anglo-American Diplomacy and the Introduction of the Atomic Energy Issue in the United Nations: Discord and Cooperation in 1945," *Contemporary British History* 18 (2004): 12-16.

62 "Atomic Scientists' Association," n.d., RTBT, K. 25; Innes, "Minutes of the Third Meeting of the Committee Held on Saturday, 23rd February, 1946 at 5.0 p.m. at 15 Half Moon Street," 2, RTBT, K.23.

63 "International Control of Atomic Energy (I)," *Nature* 157 (1946): 820; Gallup, ed., *Gallup International Public Opinion Polls*, 1: 115, 132, 183-84. Rotblat to Burhop, April 11, 1946; Burhop to Rotblat, April 17, 1946, attached: "Proposed Alterations to Memorandum to U.N. Atomic Energy Commission," n.d.; Burhop to Rotblat, April 30, 1946; Joint Honorable Secretary to Rotblat, April 30, 1946, attached: "Memorandum to United Nations Atomic Energy Commission," n.d., all in RTBT, K. 22; ASA, "Report of Activities of Provisional Committee," n.d., 3, attached to letter, Moon to ASA members, July 15, 1946, RTBT, K.25.

64 Bourantonis and Johnson, "Anglo-American Diplomacy and the Introduction of the Atomic Energy Issue in the United Nations," 1-21; Smith, *A Peril and a Hope*, 445.

65 Arrol and Burhop, "Minutes of the First General Meeting of the Atomic Scientists' Association Held at the University, Edmund Street, Birmingham, on June 15th, 1946, at 2.15 p.m.," 3, RTBT, K.25; "International Control of Atomic Energy (I)," 817; "Atomic Energy Legislation: The Atomic Scientists Back the MacMahon Bill," *Bulletin of the Atomic Scientists of Chicago* 1 (1946): 1, 4-5; "The American and Russian Proposals...," *Bulletin of the Atomic Scientists* 2 (1946): 1, 24; Zaidi, "'A Blessing in Disguise,'" 312-18.

-
- 66 Barton Bernstein, “The Quest for Security: American Foreign Policy and International Control of Atomic Energy, 1942-1946,” *Journal of American History* 60 (1974): 1003-1044; David Holloway, *Stalin and the Bomb: The Soviet Union and Atomic Energy, 1939-1956* (New Haven, CT, 1994), 161-65; Grégoire Mallard, *Fallout: Nuclear Diplomacy in an Age of Global Fracture* (Chicago, 2014), 72.
- 67 Dexter Masters and Katharine Way, ed., *One World or None: A Report to the Public on the Full Meaning of the Atomic Bomb* (New York, 1946; repr. New York, 2007); Akira Iriye, *Global Community: The Role of International Organizations in the Making of the Contemporary World* (Berkeley, 2002), 53-54.
- 68 Rudolf Peierls, Interview by Charles Weiner, August 11-13, 1969, 152, Oral History Collections, Niels Bohr Library and Archives, American Institute of Physics, College Park, Maryland, United States; Boyer, *By the Bomb's Early Light*, 71-72.
- 69 Martin Sherwin, *A World Destroyed: Hiroshima and Its Legacies*, 3rd ed. (Stanford, 2003), 6, 91-98.
- 70 Lindsay to Moon, January 10, 1947, RTBT, K.30.
- 71 Ward to Rickett, June 17, 1946; Rickett to Ward, June 24, 1946, both in TNA, CAB 126/209.
- 72 John Baylis, *Ambiguity and Deterrence: British Nuclear Strategy 1945-1964* (Oxford, 1995), 37-45; Susanna Schrafstetter, “‘Loquacious ... and pointless as ever?’: Britain, the United States and the United Nations Negotiations on International Control of Nuclear Energy 1945-48,” *Contemporary British History* 16 (2002): 87-108.
- 73 Simon Ball, “Military Nuclear Relations between the United States and Great Britain under the Terms of the McMahon Act, 1946-1958,” *Historical Journal* 38

(1995): 439-54; Vernon Bogdanor, “Footfalls Echoing in the Memory: Britain and Europe. The Historical Perspective,” *International Affairs* 81 (2005): 689-701.

74 Zaidi, “‘A Blessing in Disguise’,” 318.

75 Henry Dale, “The Objective,” in *Atomic Energy: Atomic Energy: Its International Implications. A Discussion by a Chatham House Study Group*, ed. Royal Institute of International Affairs (London, 1948), 18; Zaidi, “‘A Blessing in Disguise’,” 326-27.

76 Gallup, ed., *The Gallup International Public Opinion Polls*, 1: 126, 185, 192; Mass-Observation, *Peace and the Public*, 31-32; “Banning of Atomic Weapons: Request for International Authority,” *The Times*, March 8, 1947, 4; “Mr. Gromyko’s Speech at the U.N.A.E.C. Meeting of June 11th,” *Atomic Scientists’ News* 1 (1947): 3-5; Cuthbert Daniel and Arthur Squires, “The International Control of Safe Atomic Energy,” *Atomic Scientists’ News* 1 (1947): 9-10; “Statements on the Second Anniversary of Hiroshima,” *Bulletin of the Atomic Scientists* 3 (1947): 236.

77 ASA, *Atom Train*, unpaginated.

78 Moon, “Minutes of the tenth Council meeting held at the University of Birmingham, Edmund Street, on Saturday, 21st June at 11.45 a.m.,” July 17, 1947, 2, RTBT, K.31.

79 Jones, “Minutes of the eleventh Council meeting held at the University of Birmingham, Edmund Street, on Wednesday, 30th July, 1947 at 11.45 a.m.,” August 2, 1947, 2, RTBT, K.31.

80 “The International Control of Atomic Energy. Statement by the Council of the Atomic Scientists’ Association, July 1948,” *Atomic Scientists’ News* 2 (1948): 13-14.

81 Kurti to Cadogan, July 12, 1948; Kurti to Gromyko, July 12, 1948; Kurti to Innes, July 10, 1948; Kurti to Strauss, July 13, 1948; Kurti to Alexander, July 13, 1948;

-
- Kurti to Bevin, July 12, 1948; Kurti to Attlee, July 12, 1948; Kurti to Trygve Lie, July 13, 1948; Kurti to the Editor, *Nature*, July 10, 1948, all in RTBT, K.48.
- 82 “Dilemma of the Atomists,” *Economist*, July 24, 1948, 140; “Science and Its Social Relations,” *Nature* 162 (1948): 236.
- 83 Tannenwald, *The Nuclear Taboo*, 283.
- 84 Lorna Arnold and Mark Smith, *Britain, Australia and the Bomb: The Nuclear Tests and Their Aftermath*, rev. ed. (Basingstoke, 2006), 10.
- 85 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 (2012): 331.
- 86 Holger Nehring, “National Internationalists: British and West German Protests against Nuclear Weapons, the Politics of Transnational Communications and the Social History of the Cold War, 1957-1964,” *Contemporary European History* 14 (2005): 559-82.
- 87 John Humphrey, “Preface,” in *The Human Cost of Nuclear War*, ed. Stephen Farrow and Alex Chown (Cardiff, 1983), 1-2; John Baylis and Kristan Stoddart, *The British Nuclear Experience: The Role of Beliefs, Culture, and Identity* (Oxford, 2015), 167.
- 88 “Military Expenditure versus Social Welfare,” *Lancet* 315 (1980): 1225.
- 89 “The Threat of Nuclear War,” *The Lancet* 316 (1980): 1061-1062; Humphrey, “The Development of the Physicians’ Peace Movements,” 91; Lewer, *Physicians and the Peace Movement*, 80-81; MCANW, “Press Information: Sep 24.85, Report on Launch of Campaign Treatment Not Trident,” SA/MED/F/4/4.
- 90 Humphrey to the editor of *The Lancet*, RE: “Nuclear War,” *The Lancet* 316 (1980): 1143.

91 Lewer, *Physicians and the Peace Movement*, 81-82. MAPW, “Appeal for Phased World Disarmament, Both Nuclear and Conventional,” *The Lancet* 316 (1980): 739.

92 Alex Poteliakhoff, “The Rise and Fall of Professions for World Disarmament and Development,” *Medicine, Conflict and Survival* 24 (2008): 194; Professions for World Disarmament and Development, “Information Sheet: March 1987,” CMPMA, 3/7.

93 MCANW, “Constitution,” July 1983, 1, CMPMA, 3/3; Tannenwald, “Stigmatizing the Bomb,” 32.

94 “MCANW National Council Meeting. Sunday 25 October 1981, 10.30 am: Minutes,” 4, SA/MED/C/1/1/1; Watkins, *Medicine and Labour*, 69.

95 “MCANW Executive Meeting. Thursday 10 June 1982 at 6.00 pm,” 2; “No. 8. Minutes. Executive Committee Meeting, Thursday 2nd June 1983, 6.30 pm, University College Hospital, London WC1,” 2, both in SA/MED/C/2/1/1.

96 “Minutes: MCANW National Council Meeting. Saturday 22 January 1983. St David’s Hall, Cardiff,” 6, SA/MED/C/1/1/1; MCANW, “Press Information: 23rd September 1985, Background information on MCANW,” SA/MED/F/4/4; Wittner, *The Struggle against the Bomb*, 3: 75-76.

97 John Boli and George Thomas, “World Culture in the World Polity: A Century of International Non-Governmental Organizations,” *American Sociological Review* 62 (1997): 171-90; Frank Castillo, “The International Physicians for the Prevention of Nuclear War: Midwife of World Peace,” *Medicine and War* 6 (1990): 266; IPPNW, “International Physicians for the Prevention of Nuclear War. IPPNW,” n.d., CMPMA, 3/3; “International Physicians for the Prevention of Nuclear War,” *The Lancet* 326 (1985): 1289.

98 Brown, *Keeper of the Nuclear Conscience*, 135-48; Evangelista, *Unarmed Forces*; Jones, “The Mushroom-Shaped Cloud,” 10-11, 16; Christoph Laucht, “Scientists, the Public, the State, and the Debate over the Environmental and Human Health Effects of Nuclear Testing in Britain, 1950-1958,” *Historical Journal* 59 (2016): 221-51.

99 “Do the Physicians Have the Power to Cure the Nuclear Warmongers?,” *Guardian*, April 1, 1982, 19; IPPNW, “International Physicians for the Prevention of Nuclear War. IPPNW.”

100 Evangelista, *Unarmed Forces*, 27, 32.

101 Evangelista, *Unarmed Forces*, 29; Laucht, *Elemental Germans*, 119.

102 Powell, Bullard, and Rotblat to Allan, March 16, 1959; Allan to Cockcroft, April 26, 1959, both in TNA, AB 26/7; Brown, *Keeper of the Nuclear Conscience*, 135-47, 241; Joseph Rotblat, *Science and World Affairs: History of the Pugwash Conferences* (London, 1962), 8-11; Patricia Lindop and Joseph Rotblat, “The Consequences of Radioactive Fallout,” in *Last Aid: The Medical Dimensions of Nuclear War*, ed. Eric Chivian et al. (New York, 1982), 249-79.

103 Richard Dalitz, “Peierls, Sir Rudolf Ernst (1907–1995),” in *Oxford Dictionary of National Biography*, Oxford University Press, Sept 2004; online ed., Jan 2008 <<http://www.oxforddnb.com/view/article/60076>> [accessed 6 February 2017]; Peierls, “Britain in the Atomic Age,” 95-96.

104 Brown, *Keeper of the Nuclear Conscience*, 172-73; Leonard Schwartz, “Perspective on Pugwash,” *International Affairs* 43 (1967): 504; Rubinson, “The Global Effects of Nuclear Winter,” 65-67.

105 “A Prize Blunder,” *Daily Express*, December 9, 1985, 8.

106 Weston Ullrich, “Preventing ‘Peace’: The British Government and the Second World Peace Congress,” *Cold War History* 11 (2011): 341-62; Holger Nehring and

-
- Benjamin Ziemann, “Do All Paths Lead to Moscow? The NATO Dual-Track Decision and the Peace Movement – a Critique,” *Cold War History* 12 (2014): 1-24.
- 107 Patricia Craig and Christian Jenssen, “Zwischen Utopie, hilfloser Analyse und Kriegsvorbereitung – Ansichten und Aktivitäten britischer Ärzte in den dreißiger Jahren,” in *Äskulap oder Mars*, ed. Ruprecht and Jenssen, 311-13; Nick Lewer and Peter van den Dungen, “Joseph Rivière: Physician and Peacemaker,” *Medicine and War* 6 (1990): 96-97.
- 108 IPPNW, “International Physicians for the Prevention of Nuclear War.”
- 109 IPPNW, *Proceedings of the First Congress of International Physicians for the Prevention of Nuclear War. Arlie, Virginia, March 20-25 1981* (Boston, 1981), 10-12, Archive of the Medical Association for Prevention of War, J.B. Priestley Library Special Collections, University of Bradford, Bradford, United Kingdom (hereafter MAPW Archive), I.1.
- 110 IPPNW, “International Physicians for the Prevention of Nuclear War.”
- 111 IPPNW, “International Physicians for the Prevention of Nuclear War;” “Minutes MCANW Conference Committee Meeting for the Second IPPNW Congress, Tuesday 7 July at 7.30,” 1; “Minutes UK Organising Committee for the Second IPPNW Congress, Saturday 1 August 1981 at 11.00 am,” 1, all in MAPW Archive, I.2; Humphrey, “The Development of the Physicians’ Peace Movements,” 93-94; Alan Taman, “IPPNW Congress – Cambridge April 3-6 1982,” *MCANW National Newsletter* 5 (1982): 5-7, CMPMA, 3/12.
- 112 “Conference Report: The Second Congress of International Physicians for the Prevention of Nuclear War, Cambridge, 3-7 April,” *Journal of the Royal College of General Practitioners* 32 (1982): 373-82; “Doctors Meet in England on Effects of Nuclear War,” *New York Times*, April 4, 1982, 15; “The Final Epidemic,” *British*

Medical Journal 284 (1982): 1140; “International Physicians for the Prevention of Nuclear War,” *Lancet* 319 (1982): 900-902; “Do the Physicians Have the Power to Cure the Nuclear Warmongers?,” *Guardian*, April 1, 1982, 19; Steven Ratiner, “Doctors Appealing for a Freeze in Atomic Arsenals,” *New York Times*, April 8, 1982, A13; Pearce Wright, “Doctors Want End to Nuclear Arms Race,” *The Times*, April 8, 1982, 3; MCANW, “‘Do You Know the Medical Consequences of Nuclear Weapons?’,” *The Times*, April 2, 1982, 9.

113 Fielding to Poteliakhoff, January 9, 1982, MAPW Archive, I.2

114 WG 10, “The Role of Physicians and Their National Organisations in the Prevention of Nuclear War,” n.d.; WG 11, “The Role of International Physicians for the Prevention of Nuclear War,” n.d., both in MAPW Archive, I.2; Taman, “IPPNW Congress,” 7.

115 “International Physicians for the Prevention of Nuclear War,” 900-902.

116 Rainer Jogsches, *betrifft: Ärzte gegen den Atomkrieg: Ein Porträt des Friedensnobelpreisträgers* (Munich, 1986), 36-37. MCANW distributed the document to local branches; “Minutes: MCANW National Council Meeting. Saturday 8 May 1982, Stepping Hill Hospital, Stockport,” 3, SA/MED/C/1/1/1.

117 MCANW, “Constitution;” Jenny Hazelgrove, “The Old Faith and the New Science: The Nuremberg Code and Human Experimentation Ethics in Britain, 1946-73,” *Social History of Medicine* 15 (2002): 109-35; Humphrey, “The Development of the Physicians’ Peace Movements,” 87-90; David Cantor, ed., *Reinventing Hippocrates* (Aldershot, 2002); Fritz Allhoff, ed., *Physicians at War: The Dual Loyalties Challenge* (Dordrecht, 2008); Roger Cooter and Steve Sturdy, “Of War, Medicine and Modernity: Introduction,” in *War, Medicine and Modernity*, ed. Roger Cooter, Mark Harrison, and Steve Sturdy (London, 1999), 1-21.

-
- 118 Koch, memorandum, n.d.; “Notes on the Discussions with Professor Lown 7/8/9 January 1982. Prepared by Jack Boag,” 2; “2nd Congress IPPNW. Guidelines for Participants. Prepared by Prof. Humphrey and re-drafted by Jack Fielding,” all in MAPW Archive, I.2; Jogsches, *betrifft*, 36-37.
- 119 “Summary of Council Meeting,” *Journal of the Royal College of General Practitioners* 32 (1982): 123.
- 120 Lewer, *Physicians and the Peace Movement*, 81-82, 86-87.
- 121 John Humphrey et al., “Letter to the Editor,” *British Medical Journal* 281 (1980): 1497.
- 122 “MCANW National Council Meeting. Saturday 4 July 1981. Frenchay Hospital, Bristol. Minutes,” 4; “MCANW National Council Meeting. Sunday 25 October 1981, 10.30 am: Minutes,” 2; “Minutes: MCANW National Council Meeting. Saturday 8 May 1982, Stepping Hill Hospital, Stockport,” 3-4, all in SA/MED/C/1/1/1; Joint Committee on the Medical Effects of Nuclear Weapons, “Parliamentary Work: Report and Proposals,” October 1984, 1, CMPMA, 3/4; MCANW and MAPW, *The Medical Consequences of Nuclear Weapons*.
- 123 “War Planning and Civil Defence: Resolutions,” n.d.; “Nuclear War Planning & Civil Defence, MCANW Policy Conference, November 13/14th, 1982,” both in CMPMA, 3/2.
- 124 “Conference on ‘Human Cost of Nuclear War,’ Cardiff, 21 January 1983. Note by the Foreign and Commonwealth Office,” January 12, 1983, CMPMA, 3/3.
- Humphrey, “Preface,” in *The Human Cost of Nuclear War*, ed. Farrow and Chown, 2.
- 125 Ryle, “Editorial,” in “Interim Report: Summer 1983,” 1, SA/MED/C/1/1/1
- 126 BMA, *The Medical Effects of Nuclear War: The Report of the British Medical Association’s Board of Science and Education* (Chichester, 1983), ix-x, 124; David

-
- Josephs, "1983 to 1988 – The BMA and the Nuclear Issue," *Medicine and War* 5 (1989): 139-40.
- 127 "Annual General Meeting. MCANW. Minutes: AGM 25th June 1983, at Thomas Lewis Lecture Theatre, University College Hospital, Gower Street, London W1," in "Interim Report," 6-7.
- 128 Josef Joffe, *The Limited Partnership: Europe, the United States, and the Burdens of Alliance* (Cambridge, MA, 1987), 100; Philip Sabin, *The Third World War Scare in Britain: A Critical Analysis* (Basingstoke, 1986), 115-16.
- 129 "Minutes No. 20. MCANW Executive Committee Meeting held on Saturday 15th December 1984, 10.00am-3.00pm at Friends International Centre, 1 Byng Place, WC1," 2, SA/MED/C/2/1/1.
- 130 "International Physicians for the Prevention of Nuclear War: 4th Congress Meets in Helsinki," *The Lancet* 323 (1984): 1363-364; Hilton et al., *The Politics of Expertise*, 218-19; Kemper, *Medizin gegen den Kalten Krieg*, 159-71.
- 131 "Minutes of Meeting. International Council. IPPNW. 27 June 1985, Budapest, Hungary," 3, MAPW Archive, I.7b.
- 132 Watkins, *Medicine and Labour*, 150; Josephs, "1983 to 1988," 142-43.
- 133 Su Maddock, "Trident Or Health: Campaigning Notes. 'Getting the Message Across' for the National Campaign 85/86 on Health Needs and Trident," June 1985, 1, SA/MED/F/4/4.
- 134 Laucht, *Elemental Germans*, 151.
- 135 Megan Barnhart Sethi, "Information, Education, and Indoctrination: The Federation of American Scientists and Public Communication Strategies in the Atomic Age," *Historical Studies in the Natural Sciences* 42 (2012): 26.

136 Shirley Freeman, “Medical Action for Global Security (MEDACT): Founding Statement,” *Medicine and War* 8 (1992): 131-32; Douglas Holdstock, “MAPW and MCANW: Towards Unity,” *Medicine and War* 7 (1991): 81-83.

137 “All Nobel Peace Prizes,”

<http://www.nobelprize.org/nobel_prizes/peace/laureates/> [accessed 6 February 2017].