

British Pugwash Group

Annual Report of the Executive Committee 2011

The British Pugwash Group is the UK arm of the [Pugwash Conferences on Science and World Affairs](#), an international network of scientists and others concerned about the social impact of science, with particular emphasis on abolishing weapons of mass destruction and war. With its reputation for absolute integrity and lack of nationalistic bias, Pugwash helped to make possible international agreements such as the Partial Test Ban Treaty, the NPT, the ABM Treaty, the Conventional Forces in



Europe
Treaty and
the Chemical
and
Biological
Weapons
Conventions.

*Joseph Rotblat
(rt) with
Bertrand Russell*

In addition to its work to help create the conditions for, and to encourage progress towards a nuclear-weapon-free world, Pugwash is also engaged in dialogue to build bridges between the US and Iran, in the Middle East, North Korea, Afghanistan and Kashmir. Together with one of its founders, Joseph Rotblat, it was awarded the Nobel Peace Prize in 1995.

British Pugwash activities range from private meetings with officials to regular public discussion meetings; and from in-depth publications and books to letters to newspaper editors. We also work in collaboration with other institutions and NGOs with similar aims.

In the past year, British Pugwash has continued to be active in all its traditional areas of interest. It has also conducted a major review of its strategy, seeking to prioritise its resources. At its strategy meeting on 7 July 2011, the Executive Committee concluded that it should continue to give top priority to:

- **Nuclear weapons-related issues** with particular emphasis on the UK position. We remain concerned that the UK Government's intention to proceed with renewing its submarine-based Trident nuclear weapons system seriously undermines its position in calling for movement towards a world free of nuclear weapons, though we welcome the UK Government's current review of 'Alternatives to Trident'.
- **Non-proliferation and disarmament issues**, particularly our work on the Disarmament Institute concept (and topics within that agenda, such as Verification of dismantlement), Nuclear-weapon-free-zones (e.g. MEWMDZF), and Chemical/Biological Weapons issues.

On all these topics we agreed that an important part of our work was raising public awareness, and that we should continue to work through the WMD Awareness Programme.

We also decided that British Pugwash should seek to expand into two areas of public policy which are of particular concern to the younger generation today – environmental and energy policy. Within these very broad areas we identified two specific issues where the Pugwash approach might be helpful:

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- **Planetary Boundaries** – how humankind can live sustainably on this planet
- **Pathways to 2050** – what are the energy options open to the UK consistent with its international commitments on carbon emission reduction.

On both of these issues, we have launched new ventures.

This report summarises many of the activities of British Pugwash during the calendar year 2011. More details can be found on our website: www.britishpugwash.org

1 Projects

Pathways to 2050: Options for future energy policy

In July 2010 the Department of Energy and Climate Change published *2050 Pathways Analysis*. This document sets out its view on the range of possible energy policy strategies which would enable the UK to balance its supply of and demand for energy between now and 2050 without reneging on its commitment to reduce our emissions of greenhouse gases by 80 per cent by 2050. The department also published software which would help individual members of the public to construct their own preferred ‘pathway’.

This British Pugwash project aims to facilitate an informed public debate on this issue, taking account of its multi-dimensional character. Economic, environmental, social, safety, nuclear proliferation and other issues all combine to make it an inescapably controversial subject. Recognising that consensus on a single way forward will be very difficult to achieve, we have invited three experts to ‘champion’ credible options. We will then publish a report containing both their advocacy and the views of a ‘devil’s advocate’ on each option. We hope this document will contribute positively to the debate on how best to achieve the UK’s 2050 target.

The Nuclear Weapons Policy Liaison Group

Convened in 2008, this group of experts from academia and NGOs has continued to meet monthly to coordinate interactions with decision makers and officials on UK nuclear weapons issues, particularly in relation to the renewal of the UK’s Trident nuclear weapons system. Further funding during the year from the Network for Social Change enabled us to appoint a coordinator in addition to the existing Parliamentary Liaison Officer. Four parliamentary briefings were produced and an excellent meeting on alternatives to Trident was held at the Liberal Democrat Party conference.

Realising the Disarmament Institute

This project, started in 2009 with funds from the legacy of the late Professor John Ziman, aims to explore the potential of a proposed UK Disarmament Institute. If we are ever to achieve a nuclear-weapon-free world, many technical and political difficulties will need to be overcome. One way to approach these problems would be to establish a UK Centre of Excellence which would bring together the UK expertise on the nuclear non-proliferation, arms reduction and disarmament implementation problems that need to be tackled on the road to a nuclear-weapon-free world. We are currently engaged in defining the terms of reference for such a Disarmament Institute, and we plan to hold a workshop for key Academic, NGO and Government organisations which can help us to achieve this.

Verification of nuclear weapon

dismantlement: One specific topic which is potentially within the scope of a Disarmament Institute is the verification of compliance with international agreements involving the dismantlement of nuclear weapons. Verification has proved to be a stumbling block on the path towards such agreements, because influential groups or individuals cast doubt on the bona fides of the party offering to dismantle some weapons. So the verification techniques used

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have to be highly reliable, and proof against malpractice of all kinds.

Unfortunately, the design of suitable procedures is complicated by (perhaps over-strict) interpretations of the Non-Proliferation Treaty, under which the ‘dismantling’ nation is prohibited from revealing to anyone (even international inspectors) any information which might assist a third party in the design of such weapons..

In March 2011, British Pugwash held a workshop in collaboration with the UK MoD, involving participants from Government, British NGOs and Universities, on *Verification of nuclear weapon dismantlement: where next for the UK?* This one-day workshop gave a group of invited experts an opportunity to comment on the achievements of recent UK work on verification, and on plans being developed for future UK work in this area. We plan to continue work in this area, aiming to identify issues which might be raised by the UK at the 2015 NPT Review Conference.

WMD Awareness Programme

This Pugwash-led collaboration with other NGOs (www.wmdawareness.org.uk), funded generously by the Joseph Rowntree Charitable Foundation and the Network for Social Change, aims to reach out to the public on nuclear weapons issues.

A series of events organised throughout the year all carried the message that nuclear abolition is possible, and that right now we have a unique opportunity to progress towards this goal. The events are carefully tailored to resonate with different key audiences in the UK. The annual Joseph Rotblat event at the **Hay Festival**, where Dr El Baradei gave the lecture this year, is a good example (see p 4).

The ‘1,000 Reasons’ project uses the beautiful iconic white **Peace Crane** to engage people with the continuing problem of nuclear weapons and to promote the growing momentum for global nuclear disarmament.



The Peace Crane at Glastonbury supporting Nuclear Disarmament

WMDAP’s ‘**Don't Buy it!**’ project launched three new films to hundreds of thousands at the 2011 Glastonbury festival. They star Alistair McGowan, James Redmond, Katherine Ryan and Heydon Prowse and urge people to think again about Trident renewal.

Programme staff continue to engage with decision makers at all levels, both within the UK and internationally.

2 Discussion Meetings

The Future of Trident

At this British Pugwash Group meeting in February, **Dr. Nick Ritchie** described the current status of the UK’s Trident replacement programme. He said that technological momentum has gathered pace, with submarine concept and design work moving forward in the UK and through collaborative programmes with the US.

Political momentum is less defined, with the Conservatives committed to a like-for-like replacement and the categorical necessity of continued possession of nuclear weapons, while their Liberal Democrat Coalition partners are much more equivocal. Financial momentum remains comparatively fragile due to the ‘thin strategic rationale’ for what could be a £30-billion investment, and the increasing budgetary constraints faced by the MoD.

Sir Hugh Beach argued that the UK does not need nuclear weapons, and dismissed the

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argument that non-nuclear weapon states (NNWS) are vulnerable to coercion from nuclear weapon states (NWS). Not only have NNWS initiated military attacks despite facing nuclear-weapons threats, but nuclear weapons have often failed to guarantee military victories for NWS. Nuclear deterrence also failed in cases such as Argentina's attempted annexation of the Falkland Islands in 1982. Finally, Sir Hugh argued that the UK's nuclear programme is too expensive to act as an 'insurance policy'.



Dr Richard Garwin (right) visits British Pugwash, March 2011

Joseph Rotblat Memorial Lecture 2011

This year's [lecture](#) at the Hay Festival featured **Dr. Mohamed El Baradei**, former Director General of the IAEA, live from Cairo in discussion with Jon Snow. Dr. El Baradei's book, *The Age of Deception: Nuclear Diplomacy in Treacherous Times*, the 'Arab Spring', and Dr. El Baradei's candidacy in the forthcoming Egyptian elections were among the subjects covered. Dr. El Baradei provided forthright answers to questions from members of the 700-strong audience, and made several references to the need to implement Sir Joseph Rotblat's vision of a world free of nuclear weapons. The lecture was organised by British Pugwash's WMD Awareness Programme.

Royal Society of Edinburgh, 'Trident – should we keep it?'

Together with the WMD Awareness Programme, British Pugwash co-sponsored this 'mock trial' of Trident in Edinburgh on 23 June. **Professor Michael Clarke**, Director of the Royal United Services Institute, made the 'no' case, with the 'yes' arguments being put by former UK Defence Secretary and Secretary

General of NATO, **Lord Robertson of Port Ellen**. In a powerful speech, Michael Clarke not only came out very strongly and persuasively against renewing Trident, but also undermined superbly the very theory of nuclear deterrence. British Pugwash's Hon. Secretary **Dr Nick Ritchie** and the **Right Reverend Richard Holloway** (previously Bishop of Edinburgh) gave powerful 'witness' statements for the 'no' case. Lord Robertson, together with former Defence Minister **Lord Moonie** and **Dr Paul Cornish** from Chatham House argued strongly for retaining the system. The [proceedings](#) are available on the RSE website.

Planetary Boundaries

On 6 July, **Professor Johan Rockström** of Stockholm University addressed a well-attended British Pugwash Group [meeting](#), outlining the concept of planetary boundaries developed by an international group of earth scientists and systems analysts. They examined evidence of the complex impacts of growing anthropogenic pressures on the planet. They propose nine planetary boundaries and argue that each of these, if breached, risks causing a catastrophic failure of earth systems. There is now growing understanding of non-linear change, which is already evident in the complex interactions between these planetary boundaries.

The research has quantified seven of the nine boundaries and estimated 'tipping points' to avoid catastrophic change. These are: climate change, ocean acidification, stratospheric ozone, the biogeochemical nitrogen cycle, global freshwater use, land system change, and rate of biodiversity loss (seen as the most important). Exact boundary levels have yet to be determined for chemical pollution and atmospheric aerosol loading.



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Professor Rockström concluded that there is still a window of opportunity to remain within ‘the safe operating spaces’ inside these boundaries.

Mark Lynas, author of *The God Species*, looked at the implications of trying to remain within those safe spaces. While the precise nature of planetary boundaries may be challenged, ‘either we accept the scale of our impact on the planet or lapse into denial. If we keep in mind all the planetary boundaries, we are less likely to address one while exacerbating another.’

He argued that many of our responses so far, especially those focused on climate change, will be ineffective. The majority of emissions growth is going to come from developing countries, not the old industrial countries, so the focus of the environmental movement is on the wrong place. He saw the elimination of poverty as critical to meeting planetary boundaries and staying safe. He challenged the notion that urbanisation is a negative development and questioned exaggerated concerns over expanding nuclear power. A lively panel debate followed the presentations with representatives from a range of environmental organisations.

This important meeting stimulated British Pugwash to initiate a new project on future energy options (outlined in Section 1 above).

Rotblat – a nuclear physicist in the public eye 1944-1957

On 18 July, at the Annual Conference of the British Society for the History of Science in Exeter, British Pugwash organised a [session](#) which stimulated interesting discussions.

Andrew Brown, who has just completed Jo Rotblat’s biography, gave a fascinating talk on what he has learned from the Rotblat archive about Jo’s leaving the Manhattan project.

John Finney gave a presentation on the Atomic Train – an early (1947) project to raise awareness of nuclear issues. British Pugwash Treasurer **Kit Hill** presented a joint paper with **Sandy Butcher** (Director of the [Pugwash History Project](#)) on Jo’s involvement in the

founding of the Pugwash movement. Finally, a paper by **Martin Underwood** discussed Jo’s return to Liverpool University, the Chadwicks and the development of nuclear physics in the UK.

A Middle East Weapons of Mass Destruction Free Zone

On 24 October 2011, the Sixth London Conference on this important and difficult issue was organised by the Centre for International Studies and Diplomacy at SOAS, and co-sponsored by British Pugwash.

Stable at Zero: Maintaining a World Free of Nuclear Weapons

On 29 September **Ward Wilson**, Senior Fellow at the James Martin Center for Nonproliferation Studies, Monterey Institute of International Studies returned to address a British Pugwash Discussion [meeting](#) at University College London. Experts argue that a world without nuclear weapons would be inherently unstable. Ward Wilson rejected this contention. In a pragmatic analysis, he showed that if nuclear weapons were abolished **today**, such a world would be inherently stable. He argued that the problems confronting a potential cheater would be insurmountable, and much of the concern about instability comes from an inflated sense of the importance of nuclear weapons.

3 Publications

The Management of the UK’s Plutonium Stocks

In November 2009 the British Pugwash Group published a report of its working group on *The Management of Separated Plutonium in the UK*. Since then DECC, the Government department responsible for the management of the plutonium stockpile, has been undertaking investigations of the three options discussed in the BPG report.

In February 2011 it published its preliminary conclusions, and launched a ‘consultation’ on those conclusions, in the form of seven specific questions about its general approach.

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BPG submitted its response on 9 May 2011 and now that DECC has informed us that it has no objection, [the evidence](#) is available on our website. We understand that DECC intends to publish the result of this consultation shortly.

Mapping Disarmament in the UK

The British Pugwash Mapping Project was updated during the year and produced a [directory](#) of the UK-based NGOs and individual experts involved in nuclear, chemical and biological disarmament in the UK. It provides a valuable resource for both the NGO community and policy makers.

'What price nuclear blackmail?'

([Blackaby Paper No 9](#), Abolition 2000 UK), General Sir Hugh Beach challenges the doctrine of nuclear deterrence, arguing that nuclear weapons have never acted as a 'credible' deterrent. Citing several historical cases of conflicts in which nuclear weapons failed to play a strategic role, the paper criticises the UK's commitment to maintaining nuclear weapons, and calls Trident 'a White Elephant that is not worth its keep'. Available by mail for £3.50.

'Nuclear Research and Development Capabilities'

In British Pugwash written evidence to the House of Lords Science and Technology Select Committee [inquiry](#), Dr. Ian Crossland, Dr. Christine Brown and Dr. Christopher Watson call for strong government leadership on the UK's long-term energy policy, focusing on the need for the government to coordinate and support nuclear R&D. They argue that current R&D capabilities are insufficient if the contribution of nuclear energy to total UK energy production is to reach between 38 and 110 GW by 2050. The Committee has now reported with [conclusions](#) generally in line with our recommendations.

Briefings on Nuclear Security

A series of [background briefings](#), produced in conjunction with the Nuclear Weapons Policy

Liaison Group (see above), aims to inform British parliamentarians on the UK's nuclear weapons policy and its context. For updates on developments relating to the **UK and US Trident replacement programmes**, follow Nick Ritchie's Twitter feed at <http://twitter.com/UKTrident>

4 International Pugwash Activities

International Pugwash Responsibilities

John Finney is a member of the Pugwash Council and Executive Committee. Robert Hinde serves as a trustee of the Geneva-based Pugwash Foundation. Sandra Ionno Butcher is Director of the Pugwash History Project.

International Pugwash Discussions

Sir Hugh Beach, John Finney and Nick Ritchie participated in the **59th Pugwash Conference: European Contributions to Nuclear Disarmament & Conflict Resolution**, held in Berlin, from 1-4 July. This International Pugwash Conference was attended by over 300 participants. The plenary sessions covered most areas in the world where there are real risks of conflict and nuclear weapons are potentially a complicating factor. An impressive number of high-ranking officials in governments from East to West, together with independent experts gave presentations, generating interesting discussions in the plenaries and on the margins.

The Hodgkin Lecture on *The Fukushima Nuclear Accident: Lessons learned (so far) and possible implications* was given by **Dr. Tatsujiro Suzuki**, Vice Chair of the Japan Atomic Energy Commission, and previously a member of Pugwash Council. He kept subscribers to the Pugwash email forum informed of what was happening in the weeks after the Fukushima accident. **Dr. Victor Gilinsky**, former Commissioner of the US Nuclear Regulatory Commission followed up with some fascinating observations on nuclear safety issues.

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Six working groups addressed a range of science- and security-related issues.

Nick Ritchie gave a short presentation on the UK Trident replacement programme to the 'European Security and Disarmament' working group, while **John Finney** chaired the 'Social Responsibility of Scientists' working group. A positive outcome was an agreement that International Pugwash should re-form its 'standing working group' on this issue – if you are interested, please let Sarah in the office know. Fuller reports of the conference can be found on the Pugwash website.

http://www.pugwash.org/reports/pic/59/general_information.htm

5 Other Meetings and Conferences

Carol Naughton attended the **Carnegie International Nuclear Policy Conference** in Washington on 28th and 29th March and spoke at the 'Generation Prague' Conference hosted by the US State Department and held in the State Department building. The conference was open to young graduates and students as well as members of the arms control and disarmament community.

Carol also represented British Pugwash at two international conferences at **Wilton Park** this year: 'The NPT: bridging the North-South Divide' in October (together with Dr Nick Ritchie); and 'Challenges to the nuclear non-proliferation regime' from 12-16 December.

6 The Pugwash History Project

The Pugwash History Project, run by the International Pugwash secretariat, brings information about the organization's history to a wider audience. Project director, Sandra Ionno Butcher, maintains a [blog](#) that posts relevant material. [Thinkers' Lodge](#), in Pugwash, Nova Scotia, the site of the founding 1957 conference, has been undergoing

restoration. Sandy has been serving as an advisor on the interpretative displays, and has spoken at two different events there in 2011, including the October unveiling of the national historic site plaque. An [opinion piece](#) by key international and Canadian Pugwashites appeared on the day of the unveiling. An independent workshop at the University of Vienna, entitled 'Writing Pugwash Histories from Hiroshima and Nagasaki to Kabul and Gaza' is planned for 10-12 May 2012. Pugwash is pleased to be working in cooperation with Institute for Contemporary History, University of Vienna, and Arbeitskreis Historische Friedensforschung (AKHF), sponsors of this exciting workshop.

International Pugwash and British Pugwash have teamed up in 2011 to work with an intern, Nara Improta, who is preparing a photo archive, and plans are underway to digitise the Pugwash newsletter.

7 Other Public and Educational Outreach

PeaceJam.UK

[PeaceJam UK](#) is a voluntary peace education programme devised and led by Nobel Peace Laureates. 2011 has been an exciting year of development for the programme.



Participants at the 2011 PeaceJam conference

The annual conference at the University of Bradford was the largest and most diverse in the history of the programme so far. There were 250 young people with their teachers and youth

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workers, not only from many parts of the UK, but also from as far away as Norway, Azerbaijan, Armenia, and Nagorno Karabakh. Betty Williams, our Laureate this year, received the 1976 Nobel Peace Prize jointly with Mairead Corrigan Maguire in recognition of their extraordinary action to end the sectarian violence in Northern Ireland, and for their dedication to building a foundation for a peaceful future. With great power and humour, she explored the issues of community-based solutions to violence. The young people found her truly inspirational, and the weekend was filled with interactive sessions exploring this topic and the meaning behind these issues, working towards creating 'solutions from the bottom up'.

With generous support from the University of Bradford and their many student mentors and volunteers, the Co-operative Movement, our new partnership with the Rotary, and our many sponsors we were able to continue to develop the curriculum and expand, enrich and embed our work in more schools and groups throughout the country. Currently, we are in the process of applying for independent charitable status.

British Student/Young Pugwash

Poul Christensen, who has headed Student/Young Pugwash since 2010, returned to Canada during the summer of 2011. We thank him for all his work with the Group.

British Pugwash is currently working in collaboration with the International Network of Emerging Nuclear Specialists and UNA UK to launch an initiative in 2012 with key universities to encourage students to take a greater interest in nuclear security issues.

Executive Committee 2011

President: Prof. Robert Hinde CBE, FRS, FBA

Chair: Dr. Christopher Watson

Deputy Chair: Carol Naughton

Hon. Secretary: Dr. Nick Ritchie

Hon. Treasurer: Prof. C. R. Hill FInstP, FIEE

General Sir Hugh Beach, GBE, KCB, MC

Dr Ian Crossland

Prof. John Finney FInstP, FRSC

Dr Caitriona McLeish

Prof. John Simpson OBE

For International Pugwash: John Finney

For PeaceJam: Sally Milne

For the WMD Awareness Programme: Carol Naughton

For Nuclear Weapons Policy Liaison Group:

Ben Moody (to November 2011)

For British Student/Young Pugwash:

Poul Christensen (to July 2011)

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