

# QUINQUENNIAL REPORT 2007-2013

# 1. Development and change 2007-13

In the UK, the last Quinquennium has been dominated by economic recession. Consequent budget cuts have focused attention on some issues of particular concern to Pugwash, for example, the spend on both nuclear and conventional arms. Since the 'in principle' decision to renew the UK's Trident nuclear weapons system was made in 2007, this issue has been a particular focus of British Pugwash's work, and the UK government's decision to postpone the 'main gate' decision on renewal by several years – one of our aims during this period – has heartened us.

Following a series of op-eds by the US 'Gang of Four' (George Shultz, William Perry, Henry Kissinger and Sam Nunn), highlighting the aim of a nuclear weapon free world, this view has become increasingly accepted both by the UK public and by politicians, with Foreign Secretary Margaret Beckett's 2007 Carnegie speech 'A World Free from Nuclear Weapons' setting out an encouraging UK position. Defence Minister Des Browne's subsequent commitment to use UK technical expertise to help solve the dismantlement verification problem resulted in UK government work with the Norwegian government to explore issues relating to nuclear warhead dismantlement verification.

The Quinquennium has also seen the formation of the Top Level Group of UK Parliamentarians for Multilateral Nuclear Disarmament and Non-proliferation (TLG) as well as the increasing involvement of other non-governmental organisations in challenging the UK government's 'logic' on Trident renewal.

The outcome of the 2010 NPT RevCon was relatively positive, with its (unfortunately not yet realised) commitment to a conference on



Amb. Jayantha Dhanapala (centre) with British Pugwash President, Prof. Robert Hinde and Cambridge students, 2009

a Middle East WMD Free Zone and its proposed work plan leading up to the 2015 conference. UK contributions to the latter included specific work on dismantlement verification in which British Pugwash has been involved.

The experience of prolonged expeditionary wars in Iraq and Afghanistan, and the growth of insurgencies have created a growing aversion among military powers, including the UK, to 'boots on the ground'. This has encouraged the development of methods of warfare that entail fewer military casualties among these nations' military forces. With the increasing use of 'drone' and robotic technologies, the lack of clear ethical guidelines covering the use of these technologies is a matter of rising concern.

Finally the challenges of climate change have increased over the Quinquennium, with the growing body of evidence that global warming is in progress and man-made. In the UK, this has intensified a debate on a looming crisis in domestic energy supply, following some two decades of drift in government planning and policy making on energy issues.

#### The role of British Pugwash

British Pugwash seeks to influence and inform public opinion and government policy in areas of Pugwash concern (traditionally, where science has relevance to policy). However, finite human and financial resources have forced us to limit the scope of our work, and to select a few key issues of concern. The challenge has been to keep the balance right between reiterating our long-held beliefs, whenever people seem to be listening, and addressing current priorities. In this Quinquennium, with its rapidly shifting political landscape, we have chosen to focus on three specific areas – Nuclear weapons, Energy policy and Ethical issues in 'modern' warfare.

Since the 100<sup>th</sup> anniversary of Jo Rotblat's birth in 2008, we have also been increasingly aware of the need to document Pugwash's history and achievements by organising and making available to the public the large volume of archive material that Pugwash has accumulated.

British Pugwash continues to engage with three key audiences:

- governments and policy makers, by strengthening their independent scientific inputs;
- the general public, by raising awareness of nuclear weapons issues. Depending on the target audience, we achieve this through public meetings, letters to the newspapers and publications, and through the work of WMD Awareness programme, which makes use of electronic media and other forms of social networking;
- the scientific community, by exploring the implications of its research projects and encouraging its work on social responsibility.

#### How we work

The British Pugwash Group (BPG) is a membership organisation. Its annual general meeting elects an Executive Committee which takes decisions on strategy and deals with the day to day direction of its work. Including project staff, it currently employs three members of staff, two of whom are part-time. The British Pugwash Trust is the group's charitable arm, through which fund-raising is conducted and the organisation's charitable funds are managed.

As a small organisation with limited resources, it works in collaboration with other organisations, both within and beyond Pugwash structures.

## British Pugwash Group Executive Committee 2013

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#### These include:

- o International Pugwash
- o Other national Pugwash groups
- Other scientists especially in working groups for research projects
- o Politicians (both within and outside Government) and policy makers
- NGOs and individual experts working on issues of common concern.

In addition to the core work of British Pugwash, we have at any one time a number of grantfunded projects to further the organisation's aims. These include two associated organisations, both initiated by Jo Roblat.

WMD Awareness (WMDA), launched with Mikhail Gorbachev in 2004, engages in public outreach work. Most recently it has focused particularly on the 18-34 year age group, which we recognise as having a vital role in generating social change.

**PeaceJam UK** carries out work with young people who are inspired by working with Nobel Laureates, holding regular conferences and working with schools.

#### Working with International Pugwash

John Finney is a member of the Pugwash Council and its Executive Committee and, since 2011, has been responsible for the Standing Pugwash Working Group on the Social Responsibility of Scientists. Robert Hinde serves as a trustee of the Geneva-based Pugwash Foundation. Sandra Ionno Butcher is Director of the Pugwash History Project.

During the Quinquennum, two British Pugwash Executive Committee members, Professor Julian Perry Robinson and Dr Caitriona McLeish served on the Steering Committee of the Pugwash Study Group on Implementation of the Chemical and Biological Weapons Conventions, which has organised several International Pugwash workshops on CBW issues during this period.

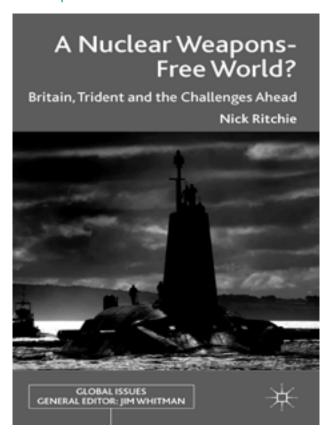
#### 2. Core themes

## Nuclear Weapons, Non-Proliferation and Disarmament

In its 2011 strategy review, the British Pugwash Group's Executive Committee confirmed its top priorities as:

First, nuclear weapons-related issues with particular emphasis placed 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.

Second, non-proliferation and disarmament issues, particularly those relating to the Disarmament Institute concept. This includes Verification of dismantlement, Nuclear-weapon-free-zones (for example, a Middle East WMDFZ), and Chemical/Biological Weapons.



#### **Nuclear weapons**

On nuclear weapons, the most immediate challenge facing the UK at present is Trident renewal. Our current work on this topic draws together a number of strands. Our Executive Committee members Nick Ritchie and Carol Naughton have been playing key roles in formulating and publicising ideas on this subject.

The government's recently-published *Trident Alternatives Review* indicates that some of our ideas are beginning to filter through, and ideas on how the UK can begin to 'step down the nuclear ladder' (including significant de-alerting) are now part of Liberal Democrat policy. However we continue to criticise aspects of the *Alternatives Review*, and in the run-up to the 2015 General Election, we anticipate expending much effort on arguing for a stronger movement towards the abandonment of the UK's 'independent' nuclear deterrent.

In 2013 we held a series of public meetings on aspects of the Trident issue. Nick Ritchie's timely book *A Nuclear Weapons-Free World? Britain, Trident and the Challenges Ahead,* launched on 12 March at a British Pugwash discussion meeting, explores the arguments used by supporters of the planned like-for-like replacement of the existing system – particularly the UK's commitment to nuclear deterrence: the role of our deterrent

in defining our national identity; the 'special relationship' with the US; and the submarine-building industry. He also analyses the arguments against renewal, including the defective logic of deterrence, the NPT commitment to nuclear disarmament, cost, and public opinion. He explores the various alternative nuclear weapons policies which the UK might adopt in the short- to medium-term. A growing number of influential UK politicians and senior military figures are becoming convinced by the arguments against.

On 13 March, we collaborated with the International Institute of Strategic Studies (IISS) in promoting a public debate on UK policy, led by senior UK opinion-formers, and we held a further British Pugwash discussion in September 2013 on the theme 'Do "proliferating nuclear threats" justify Trident renewal?' which was led by former British Ambassador to the IAEA, Peter Jenkins and Shashank Joshi, a Research Fellow at the Royal United Services Institute (RUSI).

British Pugwash Executive Committee member General Sir Hugh Beach has taken a leading role over the whole period in public statements relating to UK nuclear weapons. Most notably, his background work led to a letter to the *Times* of June 30, 2008 from Douglas Hurd, Malcolm Rifkind, David Owen and George Robertson – the first of a series of influential letters from politicians in other countries following the US 'Gang of Four' initiative.

He has continued to challenge the value of Trident from a military perspective, most notably in his letter to the *Times* on 21 April 2010, together with Field Marshal Lord Bramall, General Lord Ramsbotham and Major General Patrick Cordingley, 'Money spent on Trident can't go on troops'.

Sir Hugh has also written articles in military-related publications such as the RUSI Journal. In 2011 he published *What price nuclear blackmail?* (Blackaby Paper No 9, Abolition 2000 UK). 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". Sir Hugh was also a signatory to the 'Getting to Zero' declaration and attended the Global Zero Summit on 2-4 February 2010 in Paris.

Alongside our public-facing activities, the work on Trident (non)renewal has been enhanced by the activities of the Nuclear Weapons Parliamentary

#### Hans Blix at the Hay Book Festival



Dr Hans Blix, the former UN Chief Weapons Inspector in Iraq in 2002-3, with broadcaster John Snow. Dr Blix gave the **ninth Joseph Rotblat lecture** on 26 May 2013 at the Hay Literary Festival. He said of Britain's Trident system: "Today the UK is contemplating a new generation of Trident nuclear submarines. Washington is not pushing for this costly procurement. Is it required to protect UK independence? Or pride? Japan and Germany seem respected even without nuclear weapons. I would vote for a place for the UK in the Guinness Book of Records, if it dropped the plan."

Liaison Group, convened by British Pugwash in 2008. Working informally, this group of NGO and academic experts aims to interact positively with decision makers on the technical and political issues involved in the UK nuclear deterrent and its (non)renewal. The Group's Parliamentary Liaison Officer enhances its effectiveness at Westminster.

In parallel with the above focus on policy makers, the WMD Awareness Programme (WMDA) concentrates on making a wider range of people aware of the issues surrounding Trident replacement. Nine years ago, it initiated the annual Joseph Rotblat lecture at the Hay Literary Festival, the first lecturer being Robert McNamara. The most recent lecture was given by Hans Blix in May 2013. Other lecturers have included Mohamed el-Baradei (by videolink from Cairo in 2011), and Rose Gottemoeller in 2012.

## Non-proliferation and disarmament issues The Disarmament Institute

In 2007, Margaret Beckett called for the UK to "be at the forefront of both the thinking and the practical work" that would be required if we are to move towards a world free of nuclear weapons,

calling for the UK to be a "disarmament laboratory". Following up this initiative, in December 2008 British Pugwash made a proposal that aimed to define more precisely the 'disarmament laboratory' concept, and proposed the establishment of a UK Centre of Excellence which would bring together the UK's 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. In July 2009, the Network for Social Change awarded British Pugwash a grant from the legacy of the late Professor John Ziman – a long-standing Pugwashite – to take forward this idea.

Interestingly, the UK government took up some of our ideas in the National Nuclear Centre of Excellence which it proposed in the run-up to the 2010 NPT RevCon, though that initiative did not survive the change of government in May 2010. We are now defining the terms of reference for such an Institute, and we plan to hold a workshop for key Academic, NGO and Government organisations which can help us to achieve this.

#### Towards a nuclear weapon free world

Implicit in British Pugwash's work this Quinquennium has been discussion of the implications of a nuclear weapon free world. President of International Pugwash, Amb. Jayantha Dhanapala, who chaired the 1995 Review and Extension Conference of the Nuclear Non-Proliferation Treaty, addressed a meeting on 1 December 2009 at the Royal Society on 'Connecting Inconvenient Truths: The Urgency of Nuclear Disarmament in a World of Pressing Problems'.

The meeting, organised by British Pugwash, was hosted and introduced by the President of the Royal Society Lord Rees of Ludlow, with Baroness Williams of Crosby, a special advisor to the Prime Minister, in the Chair. In his address Amb. Dhanapala linked the need to free resources



Amb Dhanapala (left) and Lord Rees of Ludlow (right) at the Royal Society meeting 1 December 2009

for environmental and humanitarian challenges with the urgency of a nuclear-weapon-free world. He discussed the need to build dialogue across political, economic and religious divides as a precondition for creating a more peaceful and prosperous world community.



In British Pugwash's public discussion meetings, the defence value of nuclear weapons has also been questioned, most notably by Ward Wilson, Senior Fellow at the James Martin Center for Non-proliferation Studies, Monterey Institute (pictured above). In a talk delivered on 4 November 2010, setting aside the many moral arguments that can be made, he addressed the pragmatic question of whether nuclear weapons are effective and of economic or political value.

In a second public talk in September 2011 he further developed his argument. In 'Stable at Zero: Maintaining a World Free of Nuclear Weapons', Ward Wilson rejected the contention that a world without nuclear weapons would be inherently unstable. 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.

Professor Robert Hinde, President of British Pugwash from 2008-2013, has also addressed the wider Pugwash goal of ending war, in addition to several published critiques of the rationale of British possession of nuclear weapons. In *Ending War: A Recipe* (2008), based in part on his experiences in World War 2, he discussed possible ways to end reliance on war as a means of resolving international disputes.

#### Supporting the NPT

British Pugwash also took advantage of Amb. Jayantha Dhanapala's presence in 2009 as a visiting scholar at St John's College Cambridge to develop a project to promote European dialogue for progress in the May 2010 NPT Review Conference. One of the project's most important contributions was to the very significant progress made in implementing the Middle East Resolution, on which Amb. Dhanapala had specifically worked during his time in Cambridge.

#### **NPT: Reaching Consensus Project**

In a FCO-supported project to explore future prospects for the NPT, a British Pugwash team, led by Carol Naughton, conducted a project based on 29 one-to-one interviews with representatives of 24 key NPT states parties, as well as a diplomatic roundtable. The aim was to identify possible grounds for a new consensus on the link between non-proliferation and disarmament in the context of the Nuclear Non-Proliferation Treaty, with consideration of the potential role of the UK. The results are available in a recently published report: *The link between non-proliferation and disarmament in the NPT: is there consensus behind the conflict?* (May 2013).

#### Middle East WMD Free Zone

Since 2006, under the direction of General Sir Hugh Beach, British Pugwash has co-sponsored, with the Centre for International Studies and Diplomacy (CISD) at the School of Oriental and African Studies (SOAS), high-level meetings exploring the issues relating to the creation of a WMD Free Zone in the Middle East.

#### Making the scientific case

Getting evidence-based messages across to



policy makers and the public is a major key to Pugwash's effectiveness. The issue was raised in sessions at Europe's major science festival. On 19 July 2008 at the Barcelona Euroscience Open Forum, British Pugwash, French Pugwash, and WMD Awareness cosponsored 'Evidencebased policy or policy-based

evidence? Nuclear weapons decision making in Europe. At the Dublin Forum in July 2012, WMDA and British Pugwash ran a further session entitled 'Lost in Translation', which posed and discussed the question of why scientists fail to get their messages across on key issues such as disarmament and climate change, and looked at how we can frame our messages to create resonance with the intended audience.

#### Management of Separated Plutonium in the UK

A BPG working group, established in 2008 to explore options for the management of separated plutonium in the UK, published its

report in November 2009. Since then, the UK government's Department for Energy and Climate Change (DECC), which is responsible for the management of the plutonium stockpile, undertook 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. BPG submitted its response on 9 May 2011 and its evidence is available on the British Pugwash website.

## The Role of Independent Scientists in WMD Threat Assessment

British Pugwash co-sponsored a NATO Advanced Research Workshop with the Croatian Pugwash Group, 13-16 November 2008 in Zagreb. Senior scientists and policy advisors from NATO, Partner, and Mediterranean Dialogue countries explored ways to strengthen the advice governments receive on weapons of mass destruction. A book from this workshop, co-edited by then BPG Chair John Finney, was published in 2010.

#### Verification of nuclear weapon dismantlement

A topic which is within the scope of our proposed Disarmament Institute is the verification of compliance with international agreements involving the dismantlement of nuclear weapons. During 2011, the UK MoD invited British Pugwash to carry out an independent peer review of the work which MoD has carried out during the past decade in this area, and to comment on its future plans. Following a joint workshop with the UK MoD, involving participants from Government, British NGOs and Universities, a team of experts assembled by British Pugwash was briefed by experts from AWE and MoD on their programme, and raised guestions in the light of those briefings. The final report was submitted to MoD, and published in November 2012. It was presented at an international meeting of the International Panel on Fissile Materials at Chatham House in 2013.

#### Mapping disarmament in the UK

The British Pugwash Mapping Project has produced a directory that gives an overview of the UK-based non-governmental organisations and individual experts with a focus on the non-proliferation and disarmament of nuclear, chemical and biological weapons.

The project began in 2008, in response to a request from Baroness Shirley Williams for a summary of who was doing what in the UK's non-governmental nuclear disarmament community.



Professor Rockström speaking on Planetary Boundaries at a British Pugwash meeting in July 2011

#### 3. New directions

# Climate change, planetary boundaries and energy policy

Our 2011 strategy review also decided that British Pugwash should seek to expand into two new 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: climate change and future energy options in the UK.

At a highly successful public meeting on 6 July 2011, Professor Johan Rockström of Stockholm University addressed the concept of **Planetary Boundaries** – how humankind can live sustainably on this planet. He outlined this concept, which has been developed by an international group of earth scientists and systems analysts who have 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.

As a result of that meeting, we decided to take a first step into energy policy, and in October 2011 set up an expert Working Party to produce a report on options for UK energy policy to 2050, which was published in February 2013. It aims to define possible energy pathways for the UK, consistent with its international commitments on carbon emission reduction.

Recognising that consensus on a single way forward would be very difficult to achieve, we invited experts to 'champion' three credible options, ranging from High Nuclear to High Renewables. The resulting report, *Pathways to 2050: Three possible UK energy strategies*, was launched at a public meeting on 14 February 2013 and was also presented at a meeting of the Oxford Energy Society on 8 May. It will feature in a presentation at the 27-30 October 2013 conference of the European Physical Society (EPS)

in Budapest. The report has provoked a lively debate at the meetings between the protagonists of the three possible pathways.

### 4. Social responsibilities of scientists

#### Military robotics

At a British Pugwash public meeting in May 2010, Prof. Jürgen Altmann of the Faculty of Physics, Technische Universität, Dortmund drew attention to the military uses of robots, particularly unmanned aerial vehicles, and the associated problem of arms control. We returned to this theme in 2012 when, following a discussion at the 2012 meeting of UNESCO's World Commission on the Ethics of Scientific Information and Technology (COMEST), on which Pugwash has a seat, a new strand of work was developed to address the ethics of modern military robotics, an issue that is highly relevant to British Pugwash's concern with ethical and humanitarian constraints on the conduct of warfare.

Consequently, on 21-22 March 2013 an expert workshop, hosted by the Birmingham University Institute for Conflict, Cooperation and Security, discussed the ethical and legal issues involved and how these might be addressed by COMEST. Participants included Christof Heyns, UN Special Rapporteur on extrajudicial, summary or arbitrary executions, who subsequently presented a report on autonomous weapons at the Human Rights Council. A **short report** on the workshop was presented to the COMEST meeting in Bratislava in May, when COMEST accepted a recommendation that they consider including this issue in its future work plan. At a follow-on conference on Emerging Ethical Issues in Science and Technology, a joint British Pugwash/COMEST session raised further informed discussion on the ethics of the use of modern robotics.



Ranking Roger of The Beat in 'Get Up Stand Up!' at Glastonbury 2010 (see p 8)

### 5. Reaching the next generations

WMD Awareness (WMDA) as part of its strategy of reaching new audiences, has over the years put on events at public festivals, including comedy shows at the Edinburgh Fringe, talks and performances at Glastonbury and other music festivals, and the annual Hay Book Festival Joseph Rotblat memorial lecture mentioned previously. In early 2012 the Tricycle Theatre – a popular arts venue in north London – ran a season of plays, films and exhibitions relating to nuclear weapons, in which WMDA collaborated extensively.

Hannah Cornford, the new Communications Manager, is further developing its strategy to engage younger audiences through social networking. As part of this work, people were encouraged to post '1000 Reasons why the UK Government should abandon Trident'. Ongoing initiatives include **Back to the 1980s** which reminds people that the Trident nuclear weapons system was born in the 1980s, and is therefore 'old hat', and challenges the need to spend an estimated £100 billion on renewing such an inappropriate technology.

**PeaceJam UK** is an educational programme that empowers young people to work for positive



change in themselves, their communities, and the world through the inspiration of the Nobel Peace Laureates. In addition to running programmes for teachers and students throughout the year, the highlight has been a series of annual conferences held at Bradford University where students were inspired by laureates and the spirit, skills and wisdom they embody - Rigoberta Menchú Tum from Guatamala (2008); Shirin Ebadi, the Iranian human rights lawyer and activist (2009); José Ramos-Horta President of East Timor (2010); Betty

Williams, a peace campaigner from Northern Ireland (2011), and Adolfo Perez Esquivel, Argentinian teacher, professor of architecture, human rights activist and artist (2012).

British Student and Young Pugwash (BSYP) had a change of chair in April 2009, with Luca Ciciani (Imperial College) stepping down to be replaced by Poul-Erik Christiansen (School of Oriental and African Studies). Along with the Cambridge and Oxford groups, BSYP helped launch the revamped Rotblat Essay/Video Competition 2010, on Science, Ethics and Politics. Poul-Erik stepped down in 2011 and British Pugwash is currently reviewing new ways of engaging with students that will fit with their concerns and changing ways of engaging with scientific and political issues.

### Documenting the history of Pugwash

To mark the 100th anniversary of Jo Rotblat's birth, in December 2008 British Pugwash and International Pugwash co-hosted the European premiere of *The Strangest Dream*, a major documentary about Joseph Rotblat and Pugwash, produced by the National Film Board of Canada. Several memoirs were published during the Quinguennium including Joseph Rotblat: Visionary for Peace (Wiley VCH, 2007) with Robert Hinde and Sally Milne among the editors. Professor Kit Hill published *Professor Pugwash:* The Man Who Fought Nukes (2008), for people of all ages, with the science accessibly explained. On 8 February 2012 British Pugwash, together with Oxford University Press, launched Andrew Brown's biography Joseph Rotblat, Keeper of the Nuclear Conscience at a packed meeting in University College London.

Over this five-year period, almost all the Archives of Pugwash and Joseph Rotblat have been catalogued and housed in the Rotblat archive at Churchill College Cambridge. Only a few additional boxes of material are still to be transferred from the British Pugwash office. At the same time, British Pugwash, in cooperation with the Pugwash History Project, has launched an initiative to digitalise and archive the many photos that bring to life the history of Pugwash.

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