Advancing Human Security

Raporteur's Report by Dr. Erika Simpson of a meeting held by Pugwash Canada at Thinker's Lodge, Pugwash, Nova Scotia, Canada July 17-19, 2002

The Annual General Meeting (AGM) of Pugwash Canada at Thinker's Lodge in Nova Scotia focused on the general themes of technology and human security, in part to prepare for the international Pugwash meeting on "Advancing Human Security," to be hosted by Canada in Halifax in 2003. This year's AGM was attended by 25 Pugwashites from across Canada (hereafter referred to as the Group). It featured keynote speaker Ms. Jill Sinclair from Canada's Department of Foreign Affairs and International Trade (DFAIT), as well as four workshops reflecting human security themes. The morning session was chaired by Ambassador (ret.) Geoffrey Pearson, President of the United Nations Association in Canada and Senator Douglas Roche, chairman of Pugwash Canada, presided over the afternoon workshops and ensuing discussion.

The keynote speaker was introduced by the chair, Mr. Geoffrey Pearson, as the Director General, International Security (IDD), at DFAIT. Most recently, Ms. Sinclair was the Coordinator of the International Commission on Interventional and State Sovereignty. She has also served abroad in numerous positions, including at Canada's mission to the United Nations (UN). In her fifty-minute presentation, Ms. Sinclair highlighted general and specific objectives and concerns of the Department of Foreign Affairs; addressed conceptual issues surrounding the concept of human security; and suggested roles and initiatives that could be undertaken by individuals, non-governmental organizations (NGOs) such as Pugwash Canada, and the international community. She also emphasized the importance of using emerging technologies appropriately in order to deal with human security concerns. Accordingly, she drew the Group's attention to the imperative of understanding and opposing current and future plans to weaponize outer space.

In her wide-ranging overview of many of the traditional and 'less-traditional' human security challenges facing countries now, Ms.Sinclair mentioned problems ranging from HIV/AIDS to illegal drugs to non-existent social safety nets. Notably, countries and regions were defining human security in terms that resonated with them; as a 'people-centred' approach to increasing individual security, it was important to appreciate that others, particularly in the Third World, might not conceive of human security challenges in typically Canadian ways. While Ms. Sinclair emphasized the need in Canada and abroad to conceive of new technological 'fixes' to deal with all types of human security problems, she also underlined the necessity to engage with industries, corporations, and businesses to develop solutions that appealed to their 'enlightened self-interest' and market interests (*e.g.* a new technology to enable diamond fingerprinting conceived of in Canada might be introduced at the UN in two years, thus saving lives in conflict-ridden areas like Sierra Leone and satisfying the monetary concerns of diamond industries such as DeBeers and Antwerp).

While Ms. Sinclair acknowledged that the links between technology, science, and advancing human security were endless, she thought it worthwhile to focus the Group's attention on three issues where the links between technology and human security were particularly acute: namely the Comprehensive Test Ban Treaty (CTBT); the weaponization of outer space; and issues surrounding international treaty compliance and verification.

As Ms. Sinclair pointed out, the CTBT was a global effort that effectively engaged science and technology to develop the most sophisticated verification system heretofore possible. While political stonewalling delayed the CTBT negotiations for years, until 1997, scientific work and experimentation continued apace. The final result—a still-born treaty—was due ultimately to a failure of political will, particularly in the United States. Nevertheless, an important lesson was that intense scientific efforts could possibly lay the groundwork for future successful treaty negotiations. An important task for a group like Pugwash, with its strong scientific background, would be to help advance similar solutions to human security challenges.

Turning to recently-emerging American plans to weaponize outer space, particularly plans espoused by US Defense Secretary Donald Rumsfeld to achieve 'full-spectrum dominance', Ms. Sinclair asked whether Pugwash might use its scientific expertise and understanding to study the surrounding issues, marshal various arguments, and press government representatives, as well as users of satellite technology (e.g. agriculturalists, businesses, farmers) to avoid the militarization of space. Whereas various technological and military security interests in the United States could be expected to pursue longerterm funding for space-based programs, there were other sectoral interests in the United States not yet aware of the underlying issues and inherent security threats in any race to weaponize outer space (e.g. interdependent, telecommunication satellite systems could be threatened). Ms. Sinclair wondered whether Canadian voices opposed to American plans to weaponize space--yet sympathetic to legitimate American fears surrounding rogue states' possible plans for attack--might be strengthened by seeking allies within the U.S., especially among American senators, as well as within Europe and Japan. In other words, might a policy of 'relentless engagement' with Americans, including the current democratically-elected US administration, lead, eventually, to an international decision to ban the militarization of space?

It would also be important in the near- and long-term future to use technology to ensure effective international treaty compliance. Many Americans had warranted (and unwarranted) concerns relating to treaty compliance—concerns, for example, that were sufficient to jettison the CTBT and the Biological Toxins and Weapons Convention. Traditional Canadian appeals to remember our humanity and trust might not resonate with Americans and others (*e.g.* Indians, Pakistanis) but reasonable, non-ideological explanations of the trustworthiness of emerging treaty compliance verification systems could.

In her concluding comments, the speaker pointed out that Canada's multilateralist approach continues to make 'security sense' for members of the international community and the community as a whole; the benefits of working together in associations of three or more to increase security can break the 'simplemindedness' of traditional strategic thought. Similarly, taking a 'hard-headed' human security approach helps undermine the strategic myths to which many realists adhere, so that individuals, states, and the international community can develop the capacity to move to the next level. While such 'capacity-building' is important, as is education for peace, from Pugwash's perspective, probably science and technological developments are the most promising. These "have given human beings powers that far outstrip their collective good judgement," but, as Senator Roche said so often during the Cold War, "we can never allow ourselves the luxury of despair"—we can control science and technology, and, in Sinclair's view, "Pugwash is the best place to start."

During the Group's extensive discussion following Ms. Sinclair's presentation, a wide variety of questions and comments were raised. For the sake of clarity, these have been grouped here into five major themes:

Major Themes

1. The militarization of outer space and the development of National Missile Defense

One of the principal themes brought forward during the discussion concerned the underlying objectives of US plans to build a National Missile Defence (NMD) and more extensive Theatre Missile Defenses (TMD), as well as their implications, particularly for the peaceful uses of outer space and for Canadian defence and security. It was argued that Canada was 'fence-sitting' on the NMD issue, while others pointed out that those opposed to fence-sitting tend to be NMD proponents. The government representative from DFAIT suggested that taking more time to reflect and think about the issue was wise rather than misguided, especially as the United States was developing more concrete ideas about the methods, timeframes, and deployment of such a system, and undertaking a global tour to assess different views of its NMD plans. Some pointed out, too, that since public opinion in Canada was divided, politicians would be reluctant to take a stand in the near future.

2. The merits and demerits of 'incessant' or 'constructive engagement'

Many emphasized the advantages of pursuing a Canadian strategy of 'incessant' or 'constructive engagement, especially when dealing with the current American administration's defense plans. Participants noted as well the demerits of devoting considerable energy to a policy of constructive engagement and quiet diplomacy, rather than 'megaphone diplomacy'. In the final analysis, there was always a danger that government departments, such as DFAIT and DND, would capitulate to American plans given issue linkages (*e.g.* free trade, soft wood lumber negotiations, and Canada's membership in the UN and NATO). On the other hand, outright withdrawal from NATO

and declaratory (self-righteous) criticism of the US would also serve little purpose, especially given the short-sightedness of such strategies. The key would be to recognized "when to push publicly and when to engage." Learning to use concepts, vocabulary, and pre-emptive tactics synonymous with a strategy of 'incessant engagement' could pay dividends.

3. Avoiding a more divided, dangerous world

There was considerable debate about the role and responsibilities of Canada's peacekeeping forces. Some members of the Group argued strongly that human security priority areas for Canada should remain focused on UN peacekeeping, especially the concept of a UN rapid reaction capability, while others maintained that Canada's contribution to NATO's peacekeeping troops in IFOR and Afghanistan constituted a legitimate or illegitimate commitment to peacekeeping. Several general principles were enumerated by participants regarding Canada's peacekeeping role, namely: Canada should improve its current status as 33rd on the list of troop contributors to the UN; the Department of Defence should act swiftly to close the commitment-capability gap by mandating more personnel to peacekeeping duties and acquiring long-range capabilities suitable to peacekeeping (*e.g.* helicopters); and the Canadian government should be careful to continue in its tradition of providing troops for peacekeeping missions mandated by the UN.

4. The scientific community's research agenda

Members agreed that while scientific technology could advance human security, scientific knowledge could also destroy mankind's future. Just as individual scientists had been mandated to create the original nuclear weapon, individuals might be persuaded by rogue states, or non-state actors such as terrorists, to help transform nuclear, biological, or chemical materials into bombs. As a society, should we allow scientists to follow their own research interests and individual pursuits? Or should we present them with the problems to solve that we want them to address? The list of human security problems that society and scientists should be concerned about will grow given global warming, biotechnology's implications, stem cell technology, and issues concerning genetically-mutated foods.

5. *Maintaining and enhancing international regimes and treaties*

In its discussion, Group members spent considerable time discussing recent American plans to withhold support from different international regimes, such as the CTBT and the Ottawa Land Mines Process, and to 'unsign' various international treaties such as the ABM Treaty and the International Criminal Court. To be sure, there are minor technical and political difficulties with all these types of formal and informal regimes. In the end, however, the most effective strategies for achieving a more secure, peaceful world will be those that enhance, rather than undermine, modes of international cooperation. Indeed, there was general unease about the unilateralism of the US and the heedless manner in

which it seems to be damaging or discarding agreements and regimes of great import and meaning to others.

Workshops

The afternoon session featured four workshops relating to technology and human security which were conducted by various experts: disarmament (Senator Douglas Roche); conflict (Dr. Walter Dorn); the environment (Dr. Adele Buckley); and development (Ms. Reford).

Disarmament (presented by Senator Douglas Roche)

Senator Roche argued that technology is a 'two-way sword' which makes possible a treaty like the CTBT, yet also renders new types of Weapons of Mass Destruction (WMD) possible. Scientific knowledge and technology, on their own, cannot solve all types of political problems. Therefore, whereas Pugwash consists of many 'pure' or 'hard' scientists, the contribution of other types of scientists—and more importantly, human will, determination, and the human desire to abolish nuclear weapons in the 21st century, are paramount. The central goal for Pugwash must remain the elimination of the scourge of nuclear weapons, including their elimination from the stockpiles, minds, and hearts of the Nuclear Weapons States (NWS), especially the P5 (*e.g.* the US, Russia, China, France, U.K.)

In keeping with Canada's position as the United States' closest neighbour, it is important to discourage the US from pursuing its current 'hyperpower' policy. For example, the Moscow treaty, which purportedly reduced (but actually merely redeployed thousands of strategic nuclear weapons), needs to be criticized for its 'sleight-of-hand' disarmament. The US government's reluctance to live up to its Article VI commitment to the Non Proliferation Treaty is also alarming; as the UN Under-Secretary General for Disarmament points out, the NPT is being ignored, bypassed, and thus eroded.

Senator Roche also expressed dismay that the NWS have refused to start down the path recommended by the New Agenda Coalition (which seeks the total elimination of nuclear weapons through a 13 Step program); that the US and Russia have withdrawn from the ABM Treaty; that the NWS refuse to support the CTBT; and that evidence is mounting the US may resume nuclear testing and seek 'full-spectrum dominance'. What is to be done? Senator Roche's long history of involvement in disarmament (at the UN as Canada's Ambassador for Disarmament and as Chair of the Middle Power Initiative) taught him that the moral and legal arguments against nuclear weapons are most persuasive. The abomination of nuclear weapons and the horrors of Hiroshima and Nagasaki are the moral foundation upon which our whole argument must rest—but the legal arguments (e.g. as put forward by Charles Moxley *Nuclear Weapons in the Post-Cold War World*) and as contained in the Nuclear Weapons Convention provide a necessary legal basis for the elimination of nuclear weapons.

Finally, the Senator acknowledged that Canada is caught in a massive contradiction between its loyalty to the UN and its commitment to NATO. The UN seeks to eliminate nuclear weapons while NATO's Strategic Concept claims they are 'essential'. Alone, Canada cannot make a significant contribution but in partnership with other like-minded states, especially through the New Agenda Coalition and the Middle Power Initiative, perhaps in a process reminiscent of the Ottawa Land Mines Process, Canada could make significant progress toward a nuclear weapon-free world.

Conflict (presented by Dr. Walter Dorn)

Dr. Dorn reminded the audience of the 1955 Russell-Einstein manifesto which counselled us to "remember your humanity and forget the rest.... If you cannot, there lies before you the risk of universal death." While one of the ongoing tasks of Pugwash has been to bear in mind the perils of technology, at the same time technology holds considerable promise to help solve humanity's human security challenges. While many will be discouraged in the present tense climate, due in part to September 11 and the threat of nuclear war between India and Pakistan, we should remember that we have a great deal to be thankful for in comparison to the tense and dangerous 1980s. The Cold War standoff has ended, the UN Security Council is no longer paralysed, proxy wars are no longer being conducted in Africa and Asia, *etc.*. Clearly Pugwash played an important role, along with significant leaders like Mikhail Gorbachev, to end the Cold War and engineer a 'common security' approach.

Dr. Dorn explained that Canada was the first country that had the capability and knowledge to manufacture or acquire nuclear weapons, yet decided to rid itself of them. Canada's history of delegitimizing nuclear weapons could be relevant to persuading other countries to follow our example. At the same time, we need to keep in mind that other agents of mass destruction (*e.g.* anthrax, biological weapons, chemical weapons), as well as new types of conventional weapons (*e.g.* small arms) are being developed and have already killed thousands of people. Pugwash needs to remember that nuclear weapons are the ultimate evil, however other types of weapons also need to be abolished.

Turning to his recommendations for ameliorating conflict, the speaker suggested that technology could usefully serve to end disputes peacefully (*e.g.* it could be used to help gather intelligence, monitor ongoing disputes, detect illicit smuggling, *etc.*). New technologies are constantly being developed to improve aerial reconnaissance, enhance satellite communication, and protect peacekeepers. Other useful initiatives would include an 'Open Skies' agreement (similar to President Eisenhower's original proposal); a UN Rapid Reaction capability; and a strengthened Stand-by High Readiness Brigade (SHIRBRIG).

The Environment (presented by Dr. Adele Buckley)

Dr. Buckley's presentation focused primarily on four environmental factors affecting human security: population pressure; development; global change; and conflict &

terrorism. Population pressure entails all the trends in human population growth affecting consumption and the earth's biological productivity (*e.g.* experts generally agree the world's population will level off at about 10 billion by 2050 but we are already living beyond the planet's capacity for biological productivity). Consequently, political stability will be affected by resource competition and 'environmental refugee-ism'. Access to water could be the fundamental issue of the 21st century given current needs, trends and deficiencies. But the developed countries are not renewing their aging water infrastructure nor are the developing countries able to devote more funds to treating and obtaining more water. New methods of conservation, forest and watershed management, pollution prevention, and global waste management will be needed.

Turning to other environmental factors that affect human security, Dr. Buckley focused on growing energy security needs and global warming. Examples illustrating the problem are that the earth's warming will continue--it is predicted that it will rise by 2-8 degrees Celsius--yet in 2050, 40 percent of the world's consumption will still be reliant upon fossil fuel. One option is nuclear power but nuclear waste promises to be a major human security issue given that the US is the only country with a proposal to establish a nuclear waste dump site. Nuclear plants, under terrorist attack, could release radioactivity putting high density population areas in danger. With nuclear energy comes the associated production of weapons; moreover, the prevention of acquisition by terrorists of nuclear materials is an intractable problem. Nevertheless, coal (the alternative in India and China) results in local smog and global pollution problems. New methods of energy conservation, alternative technologies, and creative political and organizational initiatives will be needed.

Clearly, the challenges facing humanity in this century are unprecedented. Is there technology to support change and adaptation? Dr. Buckley asserted that new technology for management will be needed, including a 'science of integration' and a vastly-improved structure of global environment and development institutions. Given that human changes to the earth's system do not operate in simple cause-effect relationships, we can expect that a single type of change triggers a large number of responses, which then reverberate or cascade through the system. Evidently, the types of large-scale global changes that have been outlined will have an interactive and cascading effect on human security. Therefore, it is most important that we call the Russell-Einstein manifesto's admonition to 'remember your humanity and forget the rest.'

Development (presented by Ms. Stephanie McCandless Reford)

Ms. McCandless-Reford worked with young people for forty years in order to bring world affairs to high schools and teachers. This experience led her to reflect upon the meaning of 'development'. Development can mean raising money for good causes, inciting growth and expansion, increasing GDP, or working to increase a country's standing on the UN's human development index. She has concluded that development relates to all these topics but most importantly, Canadians need to recall they are 'internationalists'. It is our responsibility to restore a sense of hope, especially since the powerless feel such a painful sense of great opportunities lost. Unfortunately, the great

hope and promise of democracy has declined, the 1948 Declaration of Human Rights has faded, and while 40 percent of the world lives in relative democracy, the situation has never been worse.

The speaker spoke passionately in favour of the idea that the leadership potential of children is the greatest resource that we have. We need 'hope of leadership' for the next generation and in order to do that, we need to build a leadership building initiative on a global scale. "Be the change you want to see in the world" said Ghandi, leading Ms. McCandless Reford to outline for the Group her proposal to initiate a 'Global Youth Leadership Training Initiative'. Her proposal, in the form of a letter written to the UN Secretary-General, is intended to inspire youth to recognize that their ideas and energies are valued by the leaders of today.

A first step to establish this initiative would be a conference to bring together committed leaders of today who share the view that youth are a resource, not a problem. From this conference, a series of youth leadership goals could emerge, as well as recommendations for infrastructure and support for coordination in participating countries, and from within the UN itself. The speaker outlined many of her ideas to help establish such an initiative in a detailed proposal attached to her letter to the UN Secretary-General. She concluded with the suggestion that a meeting take place between UN representatives and selected youth training program leaders to discuss the merits of the concept, the direction it should take, and the requirements to make it effective.

General Discussion

During the Group's general discussion following the workshops, a broad range of questions and comments were put forward. For the sake of clarity, these have been grouped here into four major themes, generally reflecting the subjects of the workshops:

1. Disarmament

Discouragement was repeatedly expressed about the near-disappearance of the antinuclear movement and the absence of an informed and concerned public. Many of the dark clouds on the horizon relating to nuclear weapons were directly, or indirectly, traced to the policies and behaviour of the US, and more immediately to the attitudes and approaches of the Bush administration. Consequently, the Group spent considerable time discussing the merits of returning to 'moral considerations' and a strategy of 'constructive engagement' when dealing with American and Canadian elected officials, as well as the media.

2. Conflict

It was suggested that new ways of thinking, including 'horizontal management' and 'holistic thinking' could help establish the new structures that are needed to eliminate war as a social institution and produce creative policy-making within government, academe,

and NGOs. How do we engage the US in a broader discussion beyond merely the prevention of terrorism? Perhaps more attention needs to be paid to understanding the root causes of war and terrorism in human behaviour. It was strongly asserted that nuclear weapons cannot be eliminated in a vacuum. It will require an 'architecture' on many matters relating to the causes of war, including the development of more international institutions and the strengthening of international law. The problems that must concern Pugwash members are inter-related and wide-ranging; a narrow focus on eliminating nuclear weapons should be Pugwash's primary, but not its sole objective.

3. The Environment

There was very wide agreement within the Group that mitigating the effect of negative environmental factors would be very important to ensuring human security. But there was disagreement about the sustainability of nuclear energy as a technological solution to the problem of energy security. In particular, concerns were raised about the possibility of developing a nuclear waste site in the Canadian shield with its attendant implications (e.g. \$13 billion price tag, terrorist threats, long-term storage problems, leakage, etc.).

General Recommendations

In discussing future roles for the Canadian government and Pugwash Canada, many specific recommendations were put forward by individuals though these were not placed before the Group for endorsement as a whole. These can be broadly grouped into five recommendations to:

- encourage Pugwash Canada to discuss its broad-ranging concerns with representatives of government, the private sector, and universities; for instance, it would be important to establish closer links with European scientists, the Union of Concerned Scientists, and deans and departmental chairs of Canadian universities. DFAIT's new 'Fast-talk' initiative was also mentioned and some Pugwashites expressed strong interest in participating;
- mandate Pugwash Canada to develop a written statement outlining its general
 concerns and recommendations with respect to US unilateralism; in particular,
 members unanimously endorsed the statement "Sleight-of-Hand Nuclear
 Disarmament: How Pugwash Should Respond," prepared by Senator Douglas
 Roche, on behalf of Pugwash Canada, for the upcoming International Council
 meeting in La Jolla, California;
- explore initiatives to avoid the weaponization of outer space, including establishing an 'International Scientific Board' that would oversee research projects, subject them to transparent review, and have strict powers to halt certain technologies; obtaining more signatures for a 'space preservation treaty'; opposing the Pentagon's plans to control weather patterns; and distributing Helen Caldicott's new book, *The New Nuclear Danger*. Moreover, there was very wide agreement in the Group that Pugwash Canada hold at least one Working Group next year on the subject of the weaponization of outer space.

- broaden Pugwash's focus from the abolition of all types of weapons, especially WMD, to deal with all types of problems in order to establish a 'new paradigm for policy-making'. Such an endeavour might entail Pugwash's endorsement of all types of proposals, ranging from the 'Tobin Tax' to the 'Global Youth Training Initiative'. But, most importantly, it would require attention to a whole range of human security challenges and 'interactive' views, including a greater focus on moral obligations;
- finally, there was general sentiment in the Group in favour of involving more young Canadians in Pugwash's activities, whether by encouraging more Pugwash-sponsored activities at the university level, recruiting more young scientists, or by inviting less senior and established people into Pugwash Canada.

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