Pugwash at 50: Much To Do and How To Do It

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Pugwash, of course, had its origin in the town of the same name in Nova Scotia in 1957. Over the years I was particularly close with Jo Rotblat, Paul Doty, and with Ruth Adams, three of the original founders of Pugwash, but I did not attend my first public Pugwash meeting until perhaps 1965. I had been working about half-time from 1950 with the US government in national security and technology-- in nuclear weapons during the summers at Los Alamos Scientific Laboratory and then from 1956 or so with the President's Science Advisory Committee, first as a consultant and then for two 4-year terms for Presidents Kennedy, Johnson, and Nixon.

I specialized in military-related matters, but was thoroughly involved with other activities of PSAC, including the problems of insecticides and pesticides; the question of US production of individuals with advanced degrees in science, engineering and mathematics; nuclear power; and the like. On the military side, I chaired panels in antisubmarine warfare, naval warfare, military aircraft, a limited-warfare panel, and one in air traffic control. PSAC and its panels were very serious business. The parent committee of 18 members met for two days each month, and each of my panels met an additional two days per month, with a liaison officer to the Department of Defense who ensured that we received the briefings that we requested. In addition, he arranged field trips and contacts not only with the military department concerned, but with the Department of Defense itself and with industry.

At my first Pugwash meeting, having worked with some of the greatest scientists—Enrico Fermi, Hans Bethe, I.I. Rabi--I was most impressed with the integrity of the Pugwash leadership, in particular Jo Rotblat and Dorothy Hodgkin, who made it clear by their words and deeds that Pugwash had to be held to a higher standard than governments or individual scientists if it was to have credibility and effectiveness. Experience demonstrated that this was so, although the highest standard does not in itself guarantee effectiveness; nor does credibility result in the public or governments actually giving credence to Pugwash reports or statements. Money and rank command attention; ideas and analyses do not.

From the first, Pugwash focused on the threat of use of nuclear weapons and attempted to eliminate this threat by the elimination of nuclear weapons, and until that could be accomplished, by responsible activities to reduce their number and to improve their command and control. A main concern of Pugwash for many years was to prevent or quench a nuclear arms race, and Pugwash was early in identifying the dynamics of such an arms race, if not offensive weapons vs. offensive weapons for reason of national prestige, then defensive weapons vs. offensive weapons in a mandatory response to overwhelming a defense. It was at a Pugwash session in 1964 (Udaipur, India) that Soviet scientists recognized some merit in the paradoxical thought that defensive systems against nuclear-

armed ballistic missiles could lead not only to confrontation but to the outbreak of devastating nuclear war. Pugwash participants deserve great credit for the landmark US-Soviet ABM Treaty of 1972 and the accompanying Agreement on limitation of strategic ballistic missiles.

As this audience knows well, a principal benefit of Pugwash is the mutual acquaintanceship engendered by participation in the annual meetings or working groups, with the potential for interaction outside of or in association with Pugwash. This was evident and important during the Cold War, when Soviet scientists found it possible to have meetings with their US counterparts at the venue of a Pugwash meeting, but either before or after for a day or two. On the Soviet side, such activities were led by A.V. Topchiev and after his death by M.D. Millionshchikov. The American leadership consisted of Paul Doty, together with participation by Jerome B. Wiesner, Marshall Shulman, George Rathjens, Henry A. Kissinger, and others.

A partial history of this activity has now been told[1] and I know from my participation in this activity that by dint of personality and personal relationships on the US side (and presumably on the Soviet side) it was highly effective in creating an agenda for arms control and disarmament. This was particularly important when Jerry Wiesner became Science Advisor to President John F. Kennedy, with a principal concern for preventing nuclear war and nuclear proliferation, and for control and reduction of nuclear weapons.

I had previously participated (1958) in the Conference of Experts in regard to underground nuclear tests, and in the work of the President's Science Advisory Committee in understanding and then supporting the Limited Test Ban of 1963 that banned nuclear explosions except underground. I was a member of the US delegation to the 10-Nation Conference on Prevention of Surprise Attack, which after six weeks managed to agree on the title of the Conference, but not on the agenda. This activity in 1958, however, did lay the basis for closer contacts and negotiations in the arms control field between the United States and the Soviet Union, and the ABM Treaty and Limited Offensive Agreement of 1972. I served also the unexpired term on the Pugwash Council after the death of Herbert A.(Pete) Scoville and became acquainted with how difficult it is to keep an organization such as Pugwash fresh and true to its ideals. There is always a pressure to broaden the appeal of Pugwash and surely there are many good causes to which the attention of Pugwashites might be drawn. Among such important causes are the reduction of conflict, the provision of health care, and the humanitarian problems posed by the use of landmines in conflict. More specifically, in analogy to nuclear weapons, the attempt to eliminate chemical and biological weapons worldwide is a worthy cause on which progress has been made, with Pugwash a major contributor. I could be most effective, by virtue of my experience and involvements, with the elimination of nuclear weapons and their control before that, including the topic of missile defenses and, nuclear explosion testing, and the like.

My recent involvement with Pugwash has not been such that I can fairly draw a balance as to where the organization stands and the welcome role of Student Pugwash. I do know that among you are many with great capability in substance and in organization, and that the world and Pugwash would be poorer if it did not take advantage of your passion and your skills.

Recent years have seen a burgeoning of terrorism, directed at civilians not at all involved in the conflicts of the day. But civilians who would be victims of a nuclear war were not directly involved in those potential conflicts, either. The forces for destruction have grown stronger by the use of widely available technology such as explosives to

be used in vehicular bombs, suicide vests, and improvised explosive devices-IEDs-or roadside bombs. The tools of modern communication, especially the Internet, allow unprecedented contacts, interactions, and support worldwide, which are naturally used for destructive purposes.

The Internet hosts many sites that provide motivation for destruction, instructions for fabricating and planning such operations, and a tool for command and control of individual collaborations or operations. The Internet and the worldwide web it supports can be a force for good as well.

I recall that when I was on the Pugwash Council in 1985 I pushed hard for the use of fax and then email to aid Pugwash communication, one of the problems at the time being that a good many states important to Pugwash did not have ready access to such electronic communications. Now, of course, every organization recognizes the benefit of Internet access, and Pugwash makes use of it as well. Naturally, my participation in this event was arranged almost entirely by email, my first indication being an invitation from Christine Rovner.

But not only are email and websites useful for organization and collaboration in the Pugwash context, they are a vital tool for influence.

The low cost of email has brought its own problems including billions of spam messages per day, that are a burden on the recipient and that devalue the benefit of such communication. In addition, individuals with official responsibilities, such as members of Congress or of a Parliament, may receive so much non-spam email that they add additional filters before reading it or having it brought to their attention. Thus in the United States it is conventional for a representative (whose district now has about 700,000 individuals) to require that the originator of email be one of his or her "constituents." And senators may not even receive and most pay less attention to emails that come from individuals who are not residents of the particular one of the US 50 states represented by that senator.

Successful commercial organizations may spend a couple percent of their income on "research" in order to understand what kinds of products are possible and might sell, then perhaps 10% on development and the rest of their funds on organization, sales force, advertising, and the like. Whether the organization is a normal profit-seeking corporation or a non-profit, its board of directors or trustees must be concerned about the employees, and the future of the organization. So a non-profit hospital or a "mutual" insurance company is not so different from a normal corporation in the same field. The primary purpose of a corporation is to make money for its stockholders, and that has become much more evident in past decades. Previously it was more common to have a set of goals for the organization, to benefit the stockholders, the employees, and the general public, but now the professed goal is primarily to benefit the stockholders, although it is perfectly clear that management often benefits far more.

Pugwash has almost no paid staff, so its requirements are somewhat different. Still, the generation of ideas, the translation of ideas into proposed action, and the implementation of that action have much in common with the research, development, and sales functions of a normal corporation.

In general, each of these elements must be done efficiently and in a timely manner, and that involves the use of modern information technology that may go beyond email and topical websites. Unfortunately, I know little about such tools as FaceBook or even podcasting, although I am a strong advocate of the latter. This means that Pugwash should

welcome to its ranks not only those who are committed to its goals, but also those who, while sharing that commitment, are more interested or more capable in the tools of organization, communication, public relations, than in the result. There are hazards in this approach, as evidenced in the early computing activity at Los Alamos during WW II, when a physicist Stanley Frankel was put in charge of the nascent electromechanical computers there and developed such a fascination for the tools that he needed to be replaced by Richard Feynman, who had his priorities right-to use the tools to build a nuclear weapon in the shortest possible time to defeat the Nazi goal of conquest and genocide.

In seeking to optimize its development of ideas into plans for action and for public influence, Pugwash needs to reach out to those people who have the means to support themselves in their Pugwash activities and the experience and drive to help accomplish the goals of Pugwash. In large part, this will mean people who have retired from the commercial or even the non-profit sector, active members of the academic and public interest communities where they exit, but also students and young people with such energy and interest that they cannot help but throw themselves into the Pugwash activity.

Restraining such people is sometimes a problem, and imbuing them with not only the goals but also the subtleties and desired behavior of Pugwash. It is fundamental to the Pugwash movement that individuals exercise integrity and charity-that they do not attempt to accomplish their goals in support of Pugwash by tearing down others. It is important to understand the origin of opposition to Pugwash goals and proposals. Often it will be impossible to persuade those in opposition, but there are usually a much larger number of people who are uninformed or unconvinced, and they are typically a better target for persuasion, explaining the arguments of the opponents and showing where they err.

So I am calling for more attention to involvement and support of Pugwash. Retaining the principle that only the Pugwash Council speaks for Pugwash, there should nevertheless be a more efficient way of preparing Pugwash resolutions and conclusions by means of a virtual meeting of the Council rather than requiring a meeting in real space. What might be different, though, is a larger outreach program the world over, with a tailoring of the means for publicizing and gaining adherence to the resolution or conclusion, as is appropriate for the individual country and society. The project to translate Pugwash materials into Arabic and Farsi is a good example.

On the same theme, a few weeks ago Tom Friedman[2] concluded, referring to the constructive interaction of the group Environmental Defense with the giant Texas power company, TXU, that resulted in a vast reduction of its plans for coal-fired power plants.

"Message to young activists: If you do your homework, have your facts right and the merits on your side, and then build a constituency for your ideals through the Internet, you, too, can be at the table of the biggest deal in history. Or as Mr. Krupp [the president of Environmental Defense] puts it: the TXU example shows that truth plus passion plus the Internet 'can create an irresistible tide for change.'"

So I, too, advocate Pugwash that continues to generate and value ideas and analyses, but expands its commitment to dissemination. A more equal balance of thinking and doing. But there are hazards. Somehow this reminds me of the probably apocryphal story about the beautiful dancer Isadora Duncan and the great playwright and author George Bernard Shaw. Duncan suggested that she and Shaw should have a child together, "Think of it!" she said, "With your brains and my body, what a wonder it would be." Shaw thought for a moment and replied, "Yes, but what if it had my body and your brains?"

Too many organizations do sacrifice purpose for mechanism, subordinating ideas to fund raising and implementation, and are the worse for it.

As for balance between the gray hairs and the younger generation of thinkers and doers Pugwash needs to draw ideas and energy where it can find them, and individuals should not hesitate to adopt someone else's proposal and make the opportunity to bring it to the attention of those in government or in government-associated think tanks who can in principle bring it closer to reality.

We are attempting nothing less than the biggest deal in history—the control of the most destructive capabilities and impulses. During 50 years of experience and struggle, we have made progress toward this goal. We must renew our ranks and strengthen our efforts with ingenuity, dedication, and technology.

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2. Thomas L. Friedman, OpEd, "Marching with a mouse," The
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