

The control of biological weapons and the work of the Pugwash Conferences

Richard Guthrie

CBW Events / British Pugwash / JRMT

richard@cbw-events.org.uk

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Assumptions

- The audience has some understanding of:
 - what a biological weapon is
 - the Biological Weapons Convention
 - the Pugwash Conferences
- BW = biological warfare and biological weapons are tools to carry this out

Issues to be dealt with:

- Definition of defensive as opposed to offensive work on BW
- Utilization of existing international channels for guarding against military applications of newly acquired microbiological knowledge
- Problem of allegations of BW attack
- Composition of inspection teams, terms of reference and method of work
- Equipment required by inspection teams and technical processes for BW detection
- Usefulness of partial and complete declassification as a means of control

Issue 1

Definition of defensive as opposed to offensive work on BW

- Defence against BW needs knowledge of how an attack might take place and so needs an understanding of offensive BW research
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Issue 2

Utilization of existing international channels for guarding against military applications of newly acquired microbiological knowledge

- Understandings of how the processes work that underpin life can be used to intervene either positively or negatively

Issue 3

Problem of allegations of BW attack

- How to distinguish a naturally occurring disease from one that has been deliberately induced?

Issue 4

Composition of inspection teams, terms of reference and method of work

- Perceptions of fairness and objectiveness
- Where the technical meets the political
- “After detection – what?”

Issue 5

Equipment required by inspection teams and technical processes for BW detection

- Appears at first glance to be a technical issue but decisions about what capabilities are sufficient are deeply political

Issue 6

Usefulness of partial and complete declassification as a means of control

- Historically, openness about past programmes has provided greater confidence that they have been eliminated
- BUT: information availability should enhance security not diminish it

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STUDY GROUP ON BIOLOGICAL WARFARE

The 5th Pugwash Conference in 1958 was devoted to an assessment of the potential of biological and chemical weapons in comparison with nuclear weapons. Informal discussions at the Dubrovnik and Udaipur Conferences on the same topic led to the setting up of an ad hoc study group which met during the Karlovy Vary Conference to decide whether, in the light of new knowledge, Pugwash had something further to contribute in this field. The conclusions of this group were presented to the Conference, and it was agreed that a group to continue studying this problem should be convened within Pugwash, with special reference, in the first instance, to a possible inspection system for biological warfare preparation.

The first meeting of the study group took place in Geneva on 31st January 1965. The following took part: Prof. A. A. Buzzati-Traverso (Italy), Dr. R. Goldwasser (Israel), Dr. C.-G. Hedén (Sweden), Dr. J. Humphrey (U.K.), Dr. M. Kaplan (U.S.A.), Dr. Patricia Lindop (U.K.), Prof. O. Maaløe (Denmark), Acad. I. Malek (Czechoslovakia), Dr. H. Marcovich (France), Prof. M. Meselson (U.S.A.), Dr. K. Raska (Czechoslovakia) and Prof. J. Rotblat (U.K.). It was felt that sufficient progress can be made on specific topics by April to warrant a further discussion during the preparatory meeting to be held in Trieste. It was agreed that the topics to be discussed in Trieste will include the following:

- (a) Definition of defensive as opposed to offensive work on B. W.

- (b) Usefulness of partial and complete declassification as a means of control.
- (c) Composition of inspection teams, terms of reference and method of work.
- (d) Utilization of existing international channels for guarding against military applications of newly acquired microbiological knowledge.
- (e) Problem of allegations of B. W. attack.
- (f) Equipment required by inspection teams and technical processes for B. W. detection.
- (g) Review of Western Union experience in inspection control.

It was felt that now was the time at which some form of slowing down of the biological warfare programmes could be made. The period over which this might be effective was, however, finite, and some technological breakthrough could make inspection and control as envisaged as practical now, impossible. An analogy was shown between the lost opportunity for controlling the spread of nuclear weapons in the past, and the present situation in relation to biological warfare.

The meeting in Geneva was organized by Martin Kaplan with his usual efficiency. Both he and Mr. James Wise contributed financially to the meeting.

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Note:

- This was before the BWC negotiations had even started and while there were still overt BW programmes
- Illustrates the on-going nature of disarmament efforts

Retrospective

The efforts of WHO and Pugwash to eliminate chemical and biological weapons — a memoir

Martin M. Kaplan¹

The World Health Organization and the Pugwash Conferences on Science and World Affairs (Nobel Peace Prize 1995) have been involved in questions concerning chemical and biological arms since the early 1950s. This memoir reviews a number of milestones in the efforts of these organizations to achieve the elimination of these weapons through international treaties effectively monitored and enforced for adherence to their provisions. It also highlights a number of outstanding personalities who were involved in the efforts to establish and implement the two major treaties now in effect, the Biological Weapons Convention of 1972 and the Chemical Weapons Convention of 1993.

Voir page 154 le résumé en français. En la página 155 figura un resumen en español.

Introduction

Growing up in a large American city — Philadelphia — in the 1920s, one could not but observe the ravages of mustard and chlorine gases among soldiers who had

destruction will be highlighted here in the form of a memoir recalling some of the outstanding personalities involved.

¹financed by Cyrus Eaton, a Canadian/American railroad magnate who was born in the village of Pugwash (7).

was Assistant Director-General Sir Sahib Singh Sokhey, a former Major-General in the medical

Pugwash BW activities (1)

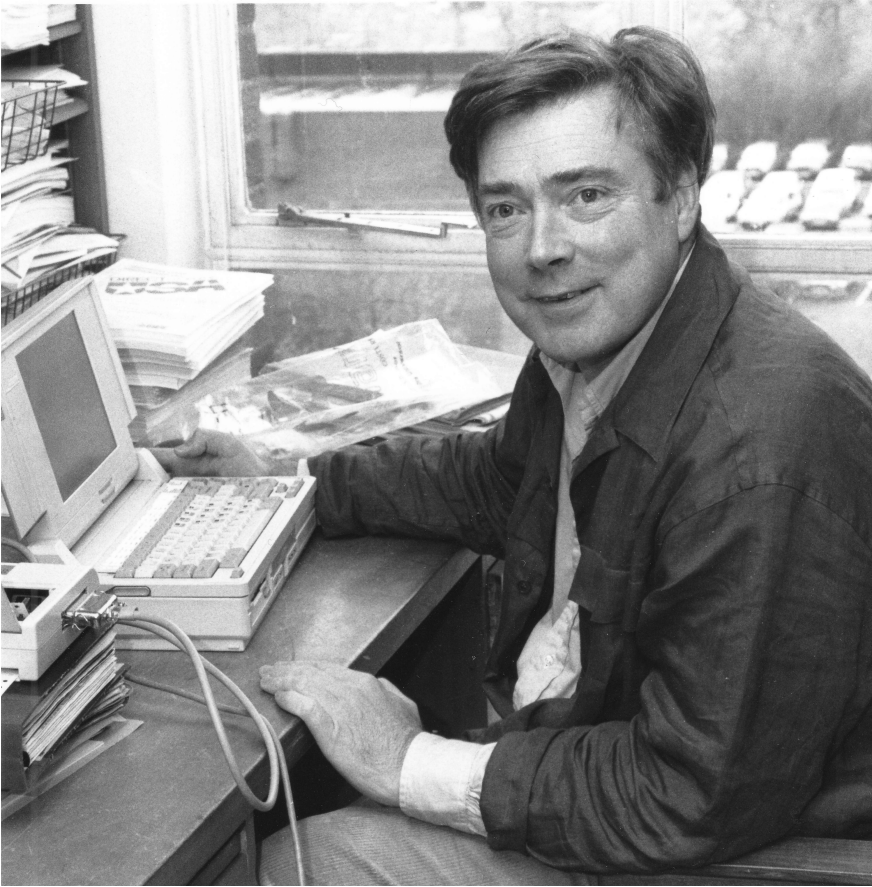
- Korean War BW allegations
- Contributions to the BWC negotiations
- Disproving Yellow Rain allegations
- Confirming Sverdlovsk allegations
- Contributions to implementing and strengthening the BWC

Pugwash activities (2)

- “an enduring open framework for East-West dialogue on security-related issues at a time when exchanges of mutual suspicions and propaganda were clogging the more conventional channels of communication”

J. P. Perry Robinson, “The Impact of Pugwash on the Debates over Chemical and Biological Weapons”, in: *Scientific Cooperation, State Conflict: The Roles of Scientists in Mitigating International Discord, Annals of the New York Academy of Sciences*, Volume 866, 30 December 1998, pp 224-52.

Julian Perry Robinson (1941-2020)



Pugwash CBW methodology (1)

- “To provide occasion for person-to-person contacts between people with well-informed things to say that might bear on policy-making for CBW ...”
- “Would the [BWC], for example, in fact have come about at all without those contacts between such people as Heden, Humphrey, Kaplan, Meselson and Neild on the one hand, and Kissinger and Mulley on the other?”

Pugwash CBW methodology (2)

- “... to give continuity to the contacts. Through its CBW Study Group, Pugwash provided the requisite structure.”
- “This offered, furthermore, a private channel of communication between governments and was, it seems, occasionally used as such.”

Pugwash CBW methodology (3)

- “... to conduct research into options for policy when this has appeared necessary.”
- “At one level the purpose has been to undertake tasks which should have been, but apparently were not being, done by government. At another level the purpose has been to strengthen the hand of policy-level members of the Study Group or of recipients of its reports.”

Pugwash CBW methodology (4)

- “... the function of communication: of reaching beyond the policy makers to the world at large, with the aim of adding political weight to whatever influence Pugwash might be able to exert more privately.”
- “The problem here is that such publicity can be counterproductive, as when solid research findings become portrayed as political propaganda, which was not a rare occurrence during the Cold War years.”

Looking to the future

- The need for all four working methods remains important
- Coherence of approach of one informal network being able to carry out all four

Three priority areas

- Methodologies for investigation of alleged use of BW
- Oversight of scientific and technological developments relevant to the control of BW
- Promotion of peaceful uses

Methodologies for investigation of alleged use of BW

- Much work already being done in relation to the UNSG Investigation Mechanism
- However, vast majority of this by Western governments
- Need for global acceptance of methodologies
- Risk of existing work not being built on for the BWC if not a global approach

Oversight of S&T developments

- Much work has been done on an S&T review mechanism within the BWC
- S&T mechanism, if adopted, will be valuable
- There will still be a place for external, independent commentary on S&T developments to help ease political processes
- Pugwash is ideally positioned to do this

Promotion of peaceful uses

- Internationally, there are many barriers to utilization of S&T developments in the life sciences for peaceful purposes
- International engagement can help with this adoption while at the same time keep awareness levels high on the need for responsible science and prohibition of misuses

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