

Biological Weapons Convention

Confidence, the prohibition and learning from the past

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Summary

It is vital to revisit how confidence in the Biological Weapons Convention (BWC) can be strengthened. To do that we need to ask challenging questions about what limits the relevance of Confidence Building Measures,¹ and we need to identify what else is needed to establish and maintain confidence between states parties. This paper enables reflection on how those involved in the BWC process collectively assess issues affecting the convention. It focuses on the prevalence of defensive reasoning, which inhibits robust enquiry and encourages anti-learning practices. It argues that instead of more of the same, alternative types of discussions needed to be nurtured.

THE BIOLOGICAL WEAPONS

Convention (BWC)² seeks to completely exclude the possibility that biological agents and toxins will be used as weapons. In recent years many states parties to the convention have expressed unease about its accomplishments since 2001 and its future direction.

It is the contention of this paper that it is vital to revisit how confidence in the convention can be strengthened. In recent years much of the consideration of confidence has been couched in terms of the limited engagement of states parties with confidence-building measures (CBMs).³ Years of consideration in intersessional meetings, however, have arguably not adequately improved these measures' standing. As some

have argued, it is now necessary to ask challenging questions about what limits the relevance of CBMs⁴ and to ask what else is needed to establish and maintain confidence among states parties.

It is a further contention of this paper that promoting confidence requires something other than further discussion and refinement of CBMs. In many respects the nature of discussions to date have served ultimately to limit the terms of how CBMs are handled in the BWC. Thus, simply expending more energy on CBMs might ultimately prove to be counterproductive; instead of more of the same, alternative types of discussions needed to be nurtured. These discussions should question what is meant by 'confidence', what

type of confidence is needed today, and how it can be cultivated in the current international environment.⁵ All too often the specific operational measure of CBM forms have been conflated with what is required to improve confidence in the prohibition measures, and in so doing have served to restrict the scope of discussions about how to foster confidence.

While several cases could be used to illustrate the conditions that act to limit discussion of the BWC process, the arguments presented in this paper are supported through detailed examination of the lack of a revision of South Africa's declaration of a past biological weapons programme. The apartheid-era chemical and biological warfare (CBW) programme

has been documented through public hearings of the Truth and Reconciliation Commission (TRC), the criminal trial of the former head of the programme, and most recently through a disciplinary hearing by the Health Professionals Council of South Africa. As such, information about the programme is in the public domain, illustrating South Africa's commitment to distancing itself from its apartheid past. This case has been chosen because of the authors' familiarity with it. But it is by no means the only instance of when information in the public domain calls into question the accuracy of a state's CBM submission.

so as to foster more deliberation about what steps are useful in preventing biological agents and toxins from being used as weapons.

Evolution of the inquiry

In 2013 the authors of this report received a research grant award from the Economic and Social Research Council, the Defence Science and Technology Laboratory, and the Arts and Humanities Research Council under the 'Science & Security' programme. Entitled 'The Formulation and Non-formulation of Security Concerns', the project was set

What is 'confidence' in the convention and how can it be cultivated?

The paper asks what lessons can be learned from this case – lessons for the declaration of past activities in the CBMs, for confidence building in general, and for wider communications on the BWC. Rather than only offering a history of the (non-)recognition of one programme, this paper intends to enable a wider process of consideration and change that can enhance reflection on how diplomats, non-governmental organisations (NGOs), scientists, civil servants, academics and others collectively assess issues of concern affecting the BWC. A contention is that investigating the 'whys' and 'hows' of historical erasure offers the potential at least for improving ongoing discussions. For if the convention is not able to address the past, it is not clear that it can build a future.

This paper is structured to make the reasoning informing the authors' assessment explicit. This is intended to encourage such practice elsewhere. The expectation is that this practice can enable mutual understanding and learning. We invite readers to question our reasoning about the uses of history

up to assess what is *not* taking place in relation to the analysis of the implications of science for security.⁶

One of the research focuses under this programme was the apparent 'historical erasure' of the South African biological programme. We set out to describe and examine the limited attention to the former South Africa programme within: i) the diplomatic proceedings of the BWC and ii) the life scientists and professional science associations in South Africa. In relation to both, consideration was to be given to the 'whys' and 'hows' by which this offensive programme became rendered a non-issue.

Under the code name Project Coast, between 1981 and 1995 South Africa established and maintained a CBW programme. This programme has been the subject of a number of publications and public hearings.⁷ Notably the Truth and Reconciliation (TRC) Commission examined the programme and held a public hearing on it in the late 1990s.⁸ In addition, in 2002 the United Nations Institute for Disarmament Research and Centre for Conflict Resolution published

1981–
1995



PROJECT COAST
CHEMICAL AND BIOLOGICAL
WARFARE PROGRAMME

Late 1990s: examined by SA Truth
and Reconciliation Commission
2002: report by UN Institute
for Disarmament Research
and Centre for Conflict Resolution

a 300-page report entitled *Project Coast: apartheid's chemical and biological warfare programme*, co-written by one of the authors of this briefing paper.⁹ This report drew on documentary evidence in the public domain to show that the biological warfare component of Project Coast included both offensive and defensive research and development.¹⁰

How did an offensive programme become a non-issue?

Despite the details of the activities of Project Coast having been made public, no offensive biological research and development programme has been declared as part of South Africa's BWC CBMs. Moreover, little or no mention has been made of this non-recognition in BWC proceedings by other states.

A starting concern for the project was that the lack of official recognition of this CBW programme may have had implications for the quality of current diplomatic, professional and educational attempts to prevent the malign application of the life sciences. Investigating the 'whys' and 'hows' of historical erasure offered the potential at least for improving ongoing discussions. The question for our research was how to ensure that this was realised.

Another starting point, based in part on the authors' attendance at Meetings of Experts and Meetings of States Parties of the BWC as observers, was the view that Form F of the CBMs (entitled 'Declaration of past activities in offensive and/or defensive biological research and development programmes') had received little attention as part of efforts to improve the accuracy and comprehensiveness of CBMs in recent years, even when they were formally part of the agenda. Not only did this mean that the lack of attention to the past South African programme was only one

case among several, but the absence of explicit recognition of the non-declaration also called into question how, if at all, Form F declarations function to foster confidence among states parties to the convention. This in turn drew our attention to questions of what confidence means in the context of the BWC and whether confidence is predicated on

CBM declarations or discussion of these declarations in BWC meetings, or on other factors outside the BWC process.

As will become apparent, during the course of the research for this paper the focus changed in several ways. These changes were informed both by what respondents were telling us, and by a concern to contribute something novel and constructive to discussions relating to the BWC.

Confidence, transparency and the past

In order to test whether there has been an absence of attention to past programmes overall and the South African one in particular, in mid-2013 we undertook a review of documents from the BWC Meetings of Experts and Meetings of States Parties between 2007 and 2012, associated preparatory events in the build-up to the Seventh Review Conference in 2011 (such as those in Montreux, Berlin and Beijing), and other related events (e.g. notes meetings held under the Geneva Forum in 2009–2010). On the basis of this documentary review we concluded:

(1) The role of CBMs has been largely justified through restating their formal purposes of enhancing transparency and building confidence.¹¹

(2) Discussion about CBMs since 2007 has been preoccupied with significant – but largely technical – issues of how to improve the quality and quantity of states parties' submissions.¹² This was an outcome of a 'track-two' approach agreed by states parties whereby efforts were made to first improve the user-friendliness and relevance of the CBM forms by the 2011 Review Conference and then to revisit more wide-ranging questions about their purpose in the intersessional process that followed.¹³

(3) Form F has been not been the subject of any significant attention in terms of its content or the need for revisions in recent years.¹⁴

(4) The status of South Africa's declaration has received little, if any, attention in states parties' discussions, nor have other declarations related to specific past offensive programmes,¹⁵ in addition, the failure to mention either in formal BWC proceedings themselves has not been mentioned.

As such, we found it difficult to reconcile the CBMs' stated goals of transparency and building confidence with the case of South Africa's Form F declarations. Given the reality that national assessments would be made in capitals, and may be raised in bilateral meetings between states, the absence of a revision to South Africa's Form F declaration suggested that something other than the declaration was functioning to establish confidence in South Africa's adherence to the treaty.

Outside of states parties, Form F has attracted little recent attention in recent years from those concerned with biosecurity. One notable exception is the Hamburg Centre for Arms Control's 2006 occasional paper authored by Nicolas Isla, which provided a detailed analysis of six countries' declared CBMs across varied activities, as summarised in Table 1.¹⁶

Table 1: Level of transparency provided for the different activities in the past offensive BW programmes of states, 2006

Activity	Canada	France	Iraq	Russia	South Africa	United Kingdom	USA
Administration	Medium	Medium	Medium	Medium	Medium	Medium	High
Research	Medium	Medium	Medium	Medium	Medium	Medium	High
Development	Medium	Medium	Medium	Medium	Medium	Medium	High
Testing	Medium	Medium	Medium	Medium	Medium	Medium	Medium
Production	High *	Medium	Medium	Medium	Medium	Medium	High
Stockpiling	High *	Medium	Medium	Medium	Medium	Medium	High
Military doctrine	Medium	Medium	Medium	Medium	Medium	Medium	Medium
Conversion	Medium	Medium	Medium	Medium	Medium	Medium	High

 No transparency, information on the particular activity is missing or appears contradictory to open sources
 Medium level of transparency; the particular activity is mentioned as having taken place (or not taken place), but no detail is provided or important detail is missing
 High level of transparency; detailed information on the particular activity is provided

* Production and stockpiling in Canada are afforded the highest level of transparency, because neither has occurred

Source: Isla, Transparency in past offensive biological weapon programmes, 29.

As Isla argues,

there is not necessarily a correlation between a consistent, longstanding and active support for the BWC and a high level of transparency in regard to past activities. Providing only a limited level of transparency or no transparency at all undermines the CBMs and puts into question the commitment of a state to the full implementation of the BWC.¹⁷

Isla further suggests that ‘For [CBMs] to function efficiently, all BWC member states have to participate regularly and submission quality has to be improved. One way to help improve the quality of submissions is to assess, and if necessary revise, the individual CBM forms.’¹⁸ In relation to Form F, the Isla’s recommendations included encouraging new state submissions (as in the case of South Africa), maintaining the open-answer format for this form while also including necessary categories for information, promoting submission

updates, and fostering dialogue platforms for discussion.

Diplomatic processes are nuanced, and consist both of what is seen, declared and discussed in open forums and interactions among states and their representatives that are less visible or deliberately invisible. This raises the question of whether Isla’s assertions are accurate, i.e. that providing a limited level of transparency undermines the value of the CBMs or – indeed – calls into question states’ commitments to implement the BWC. These are issues that we raised in discussion with several interviewees and will be discussed later in this paper.

How to deal with what is unsaid?

In August 2013, in the first phase of field research, we undertook six interviews with individuals from South Africa as well as leading contributors to recent CBM discussions. From these we hoped to gain an initial sense of what interviewees *would* (and *would not*) say about the

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2013



FIRST PHASE OF FIELD RESEARCH FOR THIS PAPER BEGAN WITH INTERVIEWS WITH SOUTH AFRICANS AND LEADING CONTRIBUTORS TO RECENT CBM DISCUSSIONS

history of the South African programme, as well as a sense of what they thought what should (and should not) be said about it. In terms of the latter, if this research was going to assist ongoing deliberations around the BWC process and elsewhere, it had to be done with an awareness of individuals' assessments of what was and was not helpful.

Isla's belief in the value of transparency as a means of holding states to account is reflective of a broad global consensus, particularly in civil society, that the more information that is publicly available the better. Wikileaks is perhaps the best-known expression of this belief in the value of information as a means to prevent states – and even non-state actors (such as large corporations) – from behaving badly.¹⁹

In the context of confidence building, it is quite common to hear that transparency is the basis for or fundamental to confidence, as Hunger and Isla state:

To be able to regulate the behaviour of states and assess regime effectiveness, actors must have information about the activities they want to regulate. Transparency about and the willingness to explain the biological activities performed in a given country are of utmost importance in increasing confidence in their peaceful nature and preventing suspicion, hostility and aggression among states.²⁰

According to this view, there is a direct relationship between a lack of transparency or information sharing and a lack of confidence.

Yet the absence of a formal declaration about the offensive aspects of South Africa's apartheid-era CBW programme seems not to have had this effect. Indeed, it has not even warranted comment in the context of the BWC. This being the case, it appeared to us that merely 'outing' or challenging South

Africa publicly (in Geneva) to alter or amend its declaration of past activities was unlikely to have the effect of either convincing the country to submit a new CBM F declaration or increasing confidence among BWC states parties. On the contrary, calling for increased transparency in this way could have the opposite effect. So while, as a best-case scenario, pressure might result in South Africa submitting an amended CBM F, it might also lead to states being more cautious of what they declare or how openly they share their CBMs for fear of the risk of embarrassment or having to answer questions that diplomats may not be equipped to answer.²¹ In addition, there seems little value to be gained for the BWC in singling South Africa out for this kind of treatment, particularly in light of the active engagement of the country in BWC meetings over many years since the end of apartheid. It would also not

Is transparency essential to confidence and accountability?

take us any closer to understanding what does build confidence and how this might be enhanced to strengthen the convention.

'Outing' as a goal was also problematic because, even in these limited number of interviews, respondents offered substantially divergent assessments about fundamental issues:

Whether South Africa had an 'offensive' or 'state-offensive' bioweapons programme. While most of those interviewed unproblematically characterised the apartheid-era programme as 'offensive', this was not universal. This suggests that what counts in the category of an 'offensive programme' cannot be assumed to be shared. For instance, state officials made comments such as:

It wasn't actually an offensive programme; it was efforts to try to find assassination weapons (interviewee (INT) 5).

[W]hen I followed the process of the South African programme, I often had doubts that in the context of the Biological Weapons Convention it was really something which, at that time was really a state-driven programme, or if it was something where people... did something on their own (INT1).

Similarly, another interviewee (INT8) later recounted discussions within his government in the past about whether an 'assassination programme' counted as offensive. Part of this deliberation turned on who was an object of attack. Since Project Coast was largely intended to attack the African National Congress (ANC) and its supporters, many did see it in the same light as other state programmes. At least for some officials,

'offensive' as far as the BWC was concerned was largely perceived as the offensive use of weapons against other states. This raises a number of questions not directly relevant to the subject of confidence, but to the issue of what is considered acceptable and by whom. In particular it raises the question of whether the diplomatic silence about the South African programme related to the victims being South Africans or other Africans. If this were the case, it raises questions about the functional definition of biological weapons and whether using biological assassination weapons against 'your own people' equates to offensive use or not. Such an approach might be informed by considerations of sovereignty and the question of whether assassination weapons might

be considered to fall outside the scope of the treaty.

Whether the lack of an offensive declaration is of concern. When asked whether current state delegates to the BWC were knowledgeable about South Africa's past bioweapons activities, interviewees consistently perceived low levels of knowledge by officials participating in the BWC process. These perceptions ranged from one per cent to less than ten per cent of officials having any knowledge of the past programme. The interviewees differed, however, in their views of whether this mattered. The reasoning for alternative evaluations pointed to different assessments about what the BWC is for, as well as to how politics, truth, and pragmatics should figure in its operation.

Biological Weapons Convention is the progress in science. And even with the progress of science, I think the focus is only more or less on the potential of misuse of the science itself and less on possible state programmes. So you always have very selective views of items and especially what was past in programmes. And this is something [i.e. South Africa's CBW programme] that is past—it's over.²²

Others arrived at a different assessment, e.g. arguing that the lack of declaration mattered, 'Because I think that's what the BWC is all about: to prevent such programmes to happen [sic] again. If you don't really know the past, how can

Building a future for the Convention requires us to deal with the past

For instance, in response to being asked whether it mattered that one interviewee estimated that five per cent of delegates attending the BWC knew of South Africa's programme, he responded:

INT1: No more today.

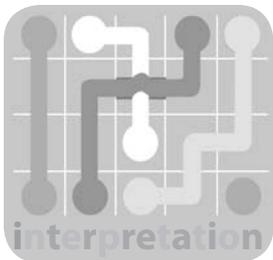
Brian Because it's the past and not
Rappert: germane or ...?

INT1: I think today the focus is on something else. It's similar to what, if you compare it with the Chemical Weapons Convention, the focus is no more on the old programmes and their destruction, even if it's not finished. But it's not where the focus ... the focus today is Syria, or something. Nobody knows exactly if it's right or wrong to have the focus on Syria for the Chemical Weapons Convention, but today the focus of the

you prevent the very same things from happening again? So I think that's a big issue' (INT3).

Such differences complicate any simple effort to 'come clean' about the past – what that would entail and whether it would be advisable or contribute in any meaningful way to improving confidence in South Africa's commitment to the BWC.

As result of the considerations in the previous paragraphs, our plan for the research needed a rethink. The revised goal became to seek to display the reasoning that informed such divergent assessments. We intended to analyse the interviews for the data, assumptions, meanings, and inferences that informed individuals' evaluations of the absence of an offensive declaration by South Africa and the lack of consideration of this absence in the BWC process. By drawing on interview material we



IN THE INTERVIEWS FOR THIS PAPER, RESPONDENTS OFFERED SUBSTANTIALLY DIVERGENT ASSESSMENTS ABOUT FUNDAMENTAL ISSUES

hoped to display the often-privately held considerations informing individuals' assessments of CBM-related issues. By then making these topics open to collective consideration through presentations and publications, the aim was to generate greater mutual understanding and scrutiny.

On relistening to the interview recordings, however, it became apparent that this strategy would not be feasible. Firstly, in the interviews it was frequently the case that the data, assumptions and inferences that informed assessments were not aired. Instead, evaluations were often simply stated. In part, the prevalence of evaluations over detailed arguments stemmed from the structure of the interviews, which did not test thinking rigorously enough.

As another related reason, defensive reasoning was also prevalent. Interviewees conveyed that in the course of their work they avoided making statements that were threatening or could cause political embarrassment to others. This implied that some issues would not be open for research by outside experts such as academics or NGOs. Also, on reflection we also noticed that we as researchers were also engaging in such defensive behaviour. In the interviews we avoided issues that we thought would be too personally or professionally threatening so as to maintain rapport (e.g. with regard to probing the role of some interviewees in the South African non-declaration). At times this manifested in our hinting at concerns through asking particular questions of which the listener was supposed to recognise the meaning without our explicitly stating the meaning we attached to them. Neither we nor the interviewees mentioned that this was taking place. At times we also failed to press interviewees where we thought they made contradictory statements in order not to antagonise them.

What frustrates progress on the issue?

In light of such experiences we decided to revise our approach. In the next stage of our research we took the prevalence of defensive reasoning as our focus. In doing so we drew on the work of scholar Chris Argyris and others under the heading of 'Action Science'.²³ Based on efforts to foster organisational change, Argyris concluded that many forms of interaction foster self-reinforcing and self-sealing defensive routines that inhibit robust inquiry. As he argues, 'Defensive reasoning is omnipresent and powerful'²⁴ and can be found across cultures and at all levels of organisations.

A central distinction in this line of work is between the two forms of learning given in Table 2: Model I (how people act in practice) and Model II (how people generally think they are acting).²⁵

This disjuncture between how people act and how they think they act has substantial implications for our ability to learn from past experience. Attempts to stay in control of situations and avoid oneself or others being threatened means there is often little testing of the basis for views and evaluations. Defensive reasoning leads to the use of covert attributions of motives, scapegoating, the treatment of one's own views as obvious and valid, and the use of unsupported evaluations. The silences and feelings of disempowerment that form around certain issues can easily spread.²⁶ The

result is the potential reproduction of (potentially invalid) assessments and inferences that decrease possibilities for changing thinking and behaviour through self-reinforcing and self-sealing routines.

The overall prescription stemming from research into Action Science is not to overtly test out reasoning (even about embarrassing or threatening issues), but also to conduct research in a way that fosters further inquiry into the basis for claims. This can require fostering counter-intuitive thinking, developing the practical skills necessary for improving learning and incorporating positive normative goals into research. Such conditions call for social researchers to:

- Adopt a form of investigation open to revision based on experience and experimentation
- Identify binds faced by interviewees (such as constraints to articulating certain positions) in order to inquire how those might be overcome
- Pose questions that are directly relevant to choices about action
- Test the inferences and assumptions behind the choices advocated
- Openly inquire into any voiced inconsistencies
- Attend to how and whether we and interviewees encouraged inquiry
- Employ as many forms of feedback as possible.

Table 2: Contrasting learning models

Model I	Model II
<ul style="list-style-type: none"> • Offer unsubstantiated attributions and evaluations 	<ul style="list-style-type: none"> • Ensure reasoning is explicit and publicly test for agreement at each inferential stage
<ul style="list-style-type: none"> • Unilaterally assert evaluations 	<ul style="list-style-type: none"> • Advocate a position in combination with inquiry and public reflection
<ul style="list-style-type: none"> • Make covert attributions 	<ul style="list-style-type: none"> • Publicly reflect on reactions and errors
<ul style="list-style-type: none"> • Protect inquiry from critical examination 	<ul style="list-style-type: none"> • Inquire into their impact on learning

These aspirations are highly demanding. As a first step we revised the interview schedules to ensure that respondents' reasoning was as explicit as possible. This meant committing ourselves to engaging with potentially threatening or embarrassing issues. But this was only an initial step.

For Argyris one technique for exploring and altering learning patterns involves the production of so-called 'action maps'.²⁷ These seek to identify the interrelated variables that individuals identify as relevant to their learning – notably those self-maintaining and self-reinforcing patterns that limit learning.²⁸ In this way they provide a basis for understanding the conditions of knowing. As hypotheses to be debated and refined over time, action maps also provide the basis for building agreement about what is taking place (and not), why, and what needs to be done to alter such circumstances. The latter objective can be obtained if action maps are used in cycles of dialogue, reflection and intervention that can foster alternative situations. Bringing about such desirable change, however, might well require new skills and competencies.

An action map: the 'how' of what is unsaid

In light of our assessment of the importance of Argyris's views, by mid-2013 our research strategy became two-fold:

- (1) To produce a map of the practices and conditions that rendered the South African CBM non-declaration a non-issue in the BWC process
- (2) To use the formation and discussion of this map as the basis for encouraging reflection among government officials, members of civil society, and others about what

would need to take place to alter the South African non-declaration, the lack of discussion about non-declaration and the lack of discussion about the lack of discussion in the BWC process

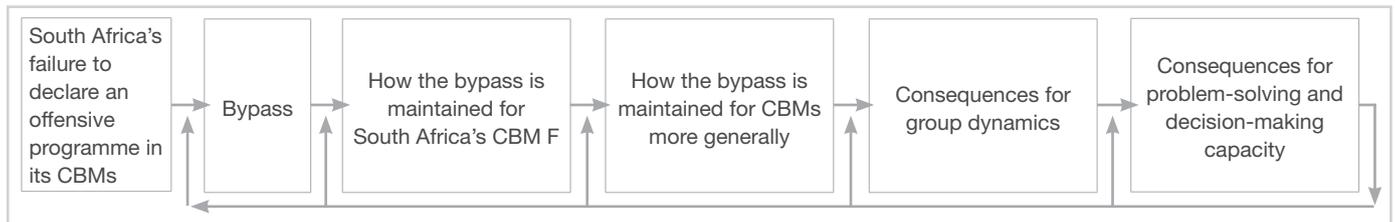
In doing so our hope is to enable collective deliberation relevant to how a range of issues are addressed in the BWC process, not to focus particular attention on South Africa. This is evident in the topics of concern in the action map (see Figure 2). As conceived, the ways in which the South African past programme and declaration became non-issues are just part of a much wider set of countervailing pressures and competing imperatives in the BWC process that have negative consequences for international relations and weapon prohibitions, including how little time and opportunity there is for collective discussion.

Figure 1 provides a listing of headline concerns and their interrelation regarding South Africa's failure to declare an offensive programme and how this became a non-issue in the BWC process (in the map we refer to non-discussion about the CBM F as a 'bypass'). Moving from left to right, we sought to identify the factors specific to the case of South Africa that our interviewees thought contributed to the lack of recognition or relevance of the past programme. The map then identified more general issues that led to some CBM-related concerns becoming non-issues. We then mapped the consequences interviewees identified in terms of group dynamics, which then have consequences for problem solving and decision making in the BWC process. As indicated by the flow of arrows, each set of issues shapes the others. For instance, the inability to identify that there is a problem that ought to be addressed – at least in the opinion of some interviewees – makes it more difficult to build a process in which CBMs are discussed and, where necessary, queried.



THE LIMITED CIRCULATION OF MATERIALS AND IDEAS CREATES DISPARITIES IN TERMS OF WHO KNOWS WHAT. SOME STATES ARE THEN EXPECTED TO LEAD INITIATIVES, WHICH IN TURN CAN MEAN THAT OTHERS FEEL DISEMPOWERED.

Figure 1: Headline schematic of interviewee-identified anti-learning dynamics



This in turn negatively impacts the ability to collectively identify problems, because there is no multinational forum in which to raise such problems.

Figure 2 provides a detailed mapping with each of the issues listed, while corresponding endnotes provide examples.

As shown in Figure 2, a set of 'general governing conditions' influence and inform interactions among states and define possibilities for action and constraints on action by officials across the topics covered in the BWC process. As indicated, the work of civil servants and diplomats is characterised by demands, circumstances, time and contexts of relevance that often limit the scope for action. This includes, for instance, the fact that individual members of specific government ministries need to negotiate their positions on matters (such as CBMs) with those in other ministries with different concerns and priorities.

In Figure 2 factors related to the lack of a changed official declaration by the post-apartheid government, despite widespread discussion of the programme,²⁹ are shown under the heading 'How the bypass is maintained for South Africa's CBMs'. Here we list constraints on the accessibility of historical documentation in the BWC process as one of the reasons cited for inaction by officials. Other reasons include, for instance, that officials would only raise the non-declaration in specific contexts; that they did not test their

views about South Africa's CBM with others; that they assumed others do not know about the programme; and that they would not raise concerns about the lack of discussion about the unchanged CBM in the BWC process.³⁰

The lack of discussion about the South African CBMs is just one example of how certain questions do not get raised about CBMs more generally. In the third

We looked for patterns of interaction that limit learning

column in Figure 2, under the heading 'How the bypass is maintained for CBMs more generally', we offer the reasons cited for this. These include the limited remit in the BWC process for examining CBMs in recent years; the way in which states rarely openly raise concerns about other states (whether in or outside their regional grouping) for fear of the consequences of doing so (including appearing uninformed and being accused of making political attacks); and the lack of national capacity to analyse CBMs.

The way in which these issues shape and constrain discussion in the BWC process has follow-on implications for how states and others interact. These are listed under the heading 'Consequences for group dynamics' in Figure 2. Many of these consequences relate to how individuals and organisations are perceived. For instance, the limited circulation of materials and ideas creates

disparities in terms of who knows what, which in turn means some people/states are deferred to as being in a position to lead initiatives, which in turn can mean that others feel disempowered. More generally, the previous issues reinforce existing groupings and coalitions.

Individuals or groups that do wish to raise contentious or challenging matters face binds in doing so. To do so would

single oneself out in a way that might well not be welcomed, but not to do so has the effect of making oneself and the matters at hand less relevant. While state officials might be constrained by various diplomatic considerations, much the same could be said of members of civil society. While they are perhaps more free to point out 'non-issues', doing so risks making them appearing oppositional, a role that could reduce their ability to bring about sought changes to the BWC.

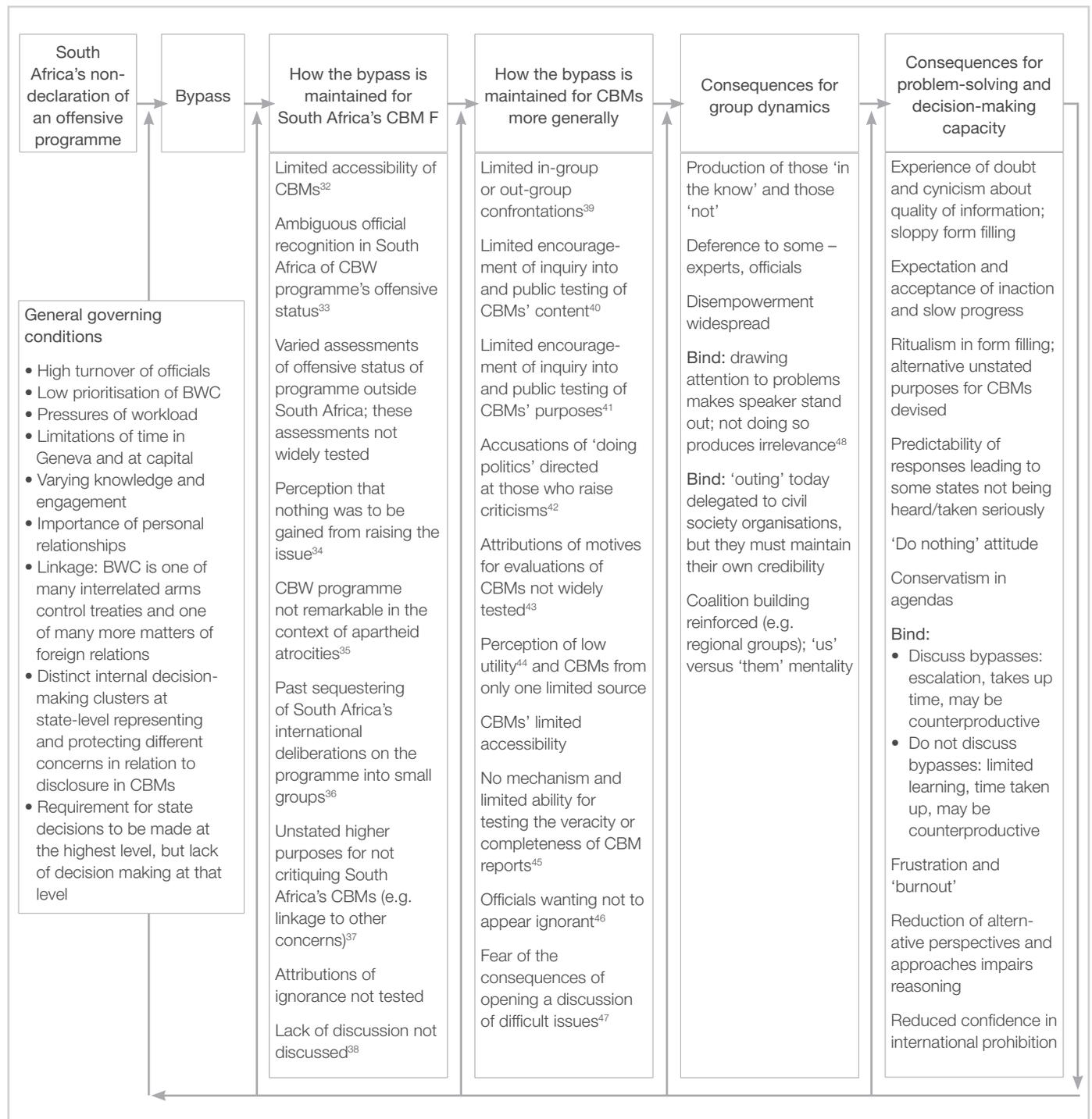
Finally, we reflect the consequences of all of these constraints and conditions for problem solving and decision making. The furthest right-hand column in Figure 2 indicates the implications of the issues and groups dynamics noted in the other columns for the ability of the BWC process to identify and satisfactorily address challenges that arise. These implications include low expectations of the quality of CBMs, low expectations as to what can be achieved through CBMs

and ritualism in filling them in. Anyone seeking to raise fundamental concerns wrestles with a basic bind: if they do raise points of concerns with what is (or is not) being discussed, then these are likely to be seen as politically motivated posturing. Drawing attention to

awkward matters could also be seen as counterproductive to achieving positive reforms. Yet, if points of concern with what is (or is not) being discussed are not raised, then it is also impossible to achieve positive reform. In these difficult situations, frustration and withdrawal

are likely. Without the airing of varied perspectives, alternative options and conflicting viewpoints, collective reasoning is impaired.³¹ All these factors taken together reduce individuals' confidence in the international prohibition of biological weapons.

Figure 2: Action map



The value of process

In the spirit of inquiry previously noted, the map in Figure 2 is not an end point; rather, it provides the basis for more questioning. After its initial production based on initial interviews, we set out:

- (1) To discuss the map in subsequent interviews in order to refine it further and test our thinking about how to proceed with the research
- (2) To present the map where possible and use these occasions as a basis for testing it and our approach
- (3) Through (1) and (2) to develop a group of individuals who regard the action map as an appropriate diagnosis of the interactional limitations of international biosecurity discussions and the basis for moving ahead
- (4) To make the action map a matter of collective discussion at BWC meetings in a way that helps explain why little or any attention is paid to issues that, on the face of it, ought to be of concern, given the stated object and purpose of the CBMs, as well as what is required to move beyond them.

There is no multilateral forum to discuss difficult issues

During the last quarter of 2013 we conducted another set of purposefully selected interviews and presented our emerging thinking about the action map strategy at two biosecurity-related meetings: 'The Convergence of Chemistry and Biology and the Biosecurity Education of Life Scientists: Synthetic Biology, Neuroscience and Recent Educational Advances' conference on 14–15 October held at Bradford University and the Biological Security sub-Working Group of the Global Partnership Working Group held on 22 October at Lancaster House.

Discussions at the interviews led to an incremental revision of the action map. While its content was largely confirmed, some modifications were made (mostly in terms of adding new points). It was also suggested that we needed to be clear in our work regarding how the action map could improve positive reform of the CBMs.

Responses to the presentation at the Bradford conference did not contradict the content of the map, but offered mixed evaluations about whether the basic research design would be productive or counterproductive in the diplomatic setting of the BWC. As researchers we think this was to be expected, given we are trying to find ways of discussing issues that might be intractable, threatening or embarrassing. Indeed, criticism is to be welcomed because it provides an opportunity for testing why some issues are treated as intractable, threatening or embarrassing, while also clarifying intentions.

Responses to the presentation at the Global Partnership Working Group were

not directly related to the themes of this briefing paper.⁴⁹

Additional consultations with officials both in and outside South Africa raised a similar set of concerns as to whether it is appropriate and useful to focus on South Africa to frame a discussion about CBMs and confidence – and, indeed, whether there is any utility in discussing CBMs at all. For some states, focusing a discussion on CBMs is considered to be a way of avoiding or bypassing more difficult discussions about verification.

In the spirit of encouraging further inquiry about what needs to be done, below

is a response to some of the points of concern raised.

Why are you undertaking a 'witch hunt' of South Africa? Have other states not filled in their Form F properly?

While in many ways the South African case offers an easy and unthreatening entry point for testing the reasoning behind CBMs and the role they play in the BWC process, it also presented some difficulties. South Africa has played a positive and constructive role in the BWC process at least since the early 1990s, and drawing attention to the South African CBMs and raising questions about their honesty may undermine this role. It also may be construed as somewhat 'unfair' to point fingers at South Africa when the CBMs about the past activities of a number of other states have also been called into question, the most common example raised in interviews being that of Russia.

The intention is not to single out South Africa. Ironically, it is precisely because South Africa has played a constructive role in the BWC that it can be discussed without it being detrimental. In addition, the fundamental change in government in South Africa after 1994 provides some distance between the present state and the actions of the former state. We have also used South Africa as a starting point because of our own experiences; particularly author Chandré Gould's nearly two decades of experience in South Africa trying to prevent the malign application of the life sciences. We believe that this case provides a basis for identifying much more widespread communication dynamics that limit current international efforts in diplomacy, and for stimulating a more open, forward-looking and ongoing discussion about transparency and confidence-building requirements in the context of the BWC.

What does bringing up the issues of the action map add to current discussions? Why aren't you asking in a more positive spirit how the CBMs can be improved?

From our interviews and past experience we would contend that current international discussions about CBMs are stymied. This is the case despite the significant investments of time and money undertaken in recent years to improve them. As a result, alternative strategies are needed.⁵⁰ Our hypothesis is that addressing many of the reasons for this requires dealing with matters of process: how diplomats, NGOs,

date had ultimately served to limit the terms of how CBMs were handled in the BWC process. This in itself points to one of the challenges faced in the BWC (and other disarmament treaties) – that it is easier to obstruct or disagree with suggestions than it is to come up with alternatives or push for action. This implies that simply focusing more attention on CBMs at the BWC meeting might ultimately prove counterproductive.

This is illustrated in the working papers submitted to the BWC for the States Parties Meeting in December 2013. Many of those papers continued to attend

The South African case provides a good basis for identifying constraints and stimulating discussion

scientists, civil servants, academics, and others collectively have in the past discussed and currently discuss issues of concern. The action map indicates processes for breaking out from the defensive thinking and routines that constrain possibilities for positive action.

States will immediately be turned off by the language.

Earlier versions of the action map used a language of 'cover up and bypass' to characterise the non-discussion of the South African non-declaration. This language was directly taken from Argyris's work on the practices of leading companies in the US. As it was suitable and arguable accurate in such contexts, we initially adopted it for this diplomatic setting. However, based on this concern, we revised the wording to simply 'bypass'.

It follows from the points above that we conclude that moving forward in promoting confidence and transparency in the BWC process would require something else than just more discussion of and time spent on CBMs. In many respects the nature of discussions to

to fairly technical concerns about the practicalities of submitting and producing CBMs that were discussed in preparation for the 2011 Review Conference (e.g. enabling electronic submission).⁵¹ While perhaps useful in encouraging or stimulating participation, undertaking reforms to improve the user-friendliness of the CBM forms is arguably not sufficient to address the current malaise surrounding CBM participation. Some have even identified that participation has worsened recently.⁵² Instead, as some have argued,⁵³ it is necessary to ask challenging questions about what limits the relevance of CBMs.

This point was raised in the last round of interviews we held in the second quarter of 2014. On reading an early draft of this paper, one interviewee (INT15) emphatically asked us: 'Why, why, why focus on CBMs?' Instead, he thought attention should be directed at securing a verification protocol. This interviewee also reiterated concerns that South Africa was being singled out when other states had failed to make declarations in their CBMs. On these points, as noted above, we do



4 PART STRATEGY IS NEEDED

- 1 CONFIDENCE BUILDING BEYOND CBMS
- 2 RECOGNISING THE NEED FOR A PROCESS OF TRANSFORMATION
- 3 RECOGNISING THE NEED FOR INTERACTIONAL TRANSFORMATION
- 4 PROMOTING ATTENTION TO CONFIDENCE

not wish to conduct a witch hunt of one state. We hope that the basis for this is clear in the final version of this paper. In relation to the reason for focusing on CBMs, our intention is to situate CBMs in broader discussions of confidence. It is our contention that without addressing the communication dynamics that delimit the deliberation of issues at the BWC meeting – perhaps especially for a topic such as verification that has proved contentious in the past – the scope for reform will be diminished.

What can be done?

In the statements by states parties to the BWC, CBMs are often taken to serve the purposes of enhancing transparency and building confidence, as set out in the mandate of the Second Review Conference in 1986.

This paper has proposed that they may not serve this purpose, or, more accurately, the potential for the process of submitting CBMs to serve such a purpose is constrained by other conditions pertaining to the BWC. These are expressed in an ironic tension. In terms of the defensive reasoning and action in the BWC process, it is the lack of transparency that is often taken by those interviewed as a requirement for maintaining confidence. As such, no direct relationship is perceived between a lack of information sharing and a lack of confidence. And yet, in the longer term, the incentives and disincentives associated with defensive reasoning were also regarded as having significant negative consequences that could undermine or have undermined confidence in the international prohibition of biological weapons.

An important prediction follows: in the absence of attention to which issues are and are not raised in the BWC process today, attempts to enhance confidence through greater participation in CBMs are likely to have limited potential.

Indeed, without addressing why some matters become ‘non-issues’, greater participation in CBMs might well result in more matters being sealed off from consideration because of defensive reasoning. Rather than simply redoubling efforts, then, it is necessary to question what action should be undertaken.

Given the problems in Geneva in securing agreement for more ambitious reviews of the CBM process, we need to think about approaches that might elicit a more productive outcome. In the remainder of this paper we suggest a four-part strategy.

1. Confidence building beyond CBMs

The practice of equating CBM participation with confidence is arguably commonplace in recent BWC deliberations, at least by most states parties. This presumption expresses itself through attention to fostering greater participation as an immediate priority. Such thinking has been subject to critique in the past. For instance, in a mid-1990s report for the Canadian Non-proliferation, Arms Control, and Disarmament Division of the Ministry of Foreign Affairs and Trade, James Macintosh argued that discussions at that time frequently conflated CBMs with confidence.⁵⁴

In contrast, he argued that CBMs were only one possible operational measure of confidence and so should not be mistaken for it. Focusing on the former might help improve the political atmosphere for international relations, but the gains are likely to be modest and temporary unless the factors that foster a lack of confidence are addressed. As part of this he contended that enhancing transparency is not the ultimate objective for arms control and disarmament. More information need not lead to better understanding or less suspicion. Indeed,

it could increase misunderstanding and suspicion.

2. Recognising the need for a process of transformation

In place of a focus on filling in CBMs, Macintosh argued that confidence entails a ‘comprehensive process of exploring, negotiating, and then implementing tailored measures, including those that promote interaction, information exchange and constraint’.⁵⁵ The goal is transformation: restructuring relations, improving cooperation, shifting dispositions and changing security expectations. Greater participation in CBMs might follow from such transformations, but this should not be taken as their end goal.

In the BWC process suggestions for significant change have been advanced from time to time. South Africa itself has argued that CBMs have ‘limited utility nationally and in terms of the building of confidence among States Parties The purpose and use of the whole system needs to be analysed and revised for States Parties to consider fulfilment of the obligation.’⁵⁶ Indeed, it has been argued that the focus on CBMs distracts from a broader, more meaningful discussion about confidence that can only take place in the context of a discussion about how to verify compliance with the treaty.

It follows from Macintosh’s argument that the investigation of purpose needs to go far beyond CBMs themselves to ask more fundamental questions about how confidence can be achieved in the prohibition of biological weapons.

Macintosh saw seven supporting conditions as essential to being able to achieve such transformation in confidence:

- (1) ‘Security management fatigue’, i.e. the perception that there have been too many years of stand-off

- (2) Unease and dissatisfaction with status-quo security policies
- (3) Concern about the domestic costs of maintaining the status quo
- (4) A group of experts (an epistemic community) that would wish to explore confidence building
- (5) A new generation of more flexible and sophisticated policymakers
- (6) A forum for discussion and interaction
- (7) Perhaps, a 'leap of faith' initiative by at least one key senior policymaker that is capable of crossing a key emotional and conceptual threshold⁵⁷

This is a conclusion also supported by wider existing academic analysis that maintains that the conditions that foster inactions and silences can have a corrosive effect on the ability of organisations to effectively respond to emerging situations.⁵⁸

The challenges associated with redressing defensive reasoning and routines in the BWC process can be emphasised further. Argyris advises that action maps should be produced with the committed enrolment of those involved in a process of organisational reform.⁵⁹ Yet in this case we as

The goal is transformation: restructuring relations, improving cooperation, shifting dispositions and changing security expectations

Whether all of the conditions hold today in the case of the BWC is an open question. As suggested above, certainly in recent intersessional processes it is possible to find evidence for some level of security fatigue, unease with the status quo and concerns about its costs. Reflection on the other supporting conditions identified by Macintosh is presented below.

3. Recognising the need for interactional transformation

Before doing this, we want to highlight an additional necessary condition – one that at best is only implicit in Macintosh's list. This is the need to address what in this paper have been referred to as defensive reasoning and routines that inhibit dialogue and learning. It follows from the analysis above that fostering confidence requires attention to both interactional dimensions and process-related ones. In other words, concerns about what is discussed by whom and where need to be complemented with regard for how discussions take place.

investigators were the ones presenting this non-declaration as a matter of concern (rather than government officials serving in delegations to BWC meetings).

4. Promoting attention to confidence

How, then, can we foster new possibilities and actions that could help improve confidence?

The previous analysis offers a number of entry points. Take Macintosh's supporting conditions: in addition to those pertaining to unease with the status quo and the will to change it, he identified the following:

- (4) A group of experts (an epistemic community) that would wish to explore confidence building
- (5) A new generation of more flexible and sophisticated policymakers
- (6) A forum for discussion and interaction
- (7) Perhaps, a 'leap of faith' initiative by at least one key seniors policymaker that is capable of crossing a key emotional and conceptual threshold.⁶⁰



OVERCOMING
WELL-ENTRENCHED
CONSERVATISM AND
SUSPICION
OF CHANGE IS A
CHALLENGE IN THE
BWC CONTEXT

With regard to (4), many states parties' experts, members of civil society, and others have worked to find ways of building confidence, but primarily through amendments and changes to the current CBM regime. This discussion needs to be expanded to allow for other, perhaps new ways in which confidence can be promoted and sustained. It seems likely that a sufficiently large group of informed experts could be brought together to do this. In relation to (5), whether a new generation of more flexible and sophisticated policymakers is needed seems an open question, but some inspired leadership is likely necessary.

Macintosh's sixth requirement, for a forum for discussion and interaction, could in theory be met as part of or outside the meetings of the BWC. However, the action map above referred to a number of limitations associated with using formal BWC structures. In any case, the established agenda of intersessional processes does not allow formal time dedicated exclusively to CBMs or to confidence building more generally; the next opportunity for direct consideration does not arise until the Eighth Review Conference in 2016. A variety of informal or quasi-formal settings might provide the necessary forum in the interim. In the case of CBMs, for instance, meetings were held under the Geneva Forum in 2009–2010 to promote dialogue about what should be done. A similar forum addressing confidence more broadly might prove useful.

What would be required of any such effort would be a commitment to address the interactional concerns noted above. That would mean promoting different types of inquiry (such as described in Model II in Table 2). Producing environments that are more conducive to contemplating change and taking the necessary actions is demanding because it means confronting and overcoming

ingrained attitudes. One litmus test that stems from this paper is whether a forum such as a BWC intersessional is able to address difficult matters – such as the reasons for South Africa's failure to declare an offensive programme – or whether they would be ignored (and the ignoring of them ignored).

The very factors that explain why issues are not being addressed in the BWC process might actually provide another set of possibilities. Overcoming well-entrenched conservatism and suspicion of change is a challenge in the BWC context, but (stemming from the action map) possible measures that might help overcome such inertia may include:

- Promoting the accessibility of CBMs
- Consideration of whether and why the South African case (and others) merits attention in the context of the convention and the object and purpose of CBMs as originally expressed in 1986
- Reducing the tendency to make speculative attributions about the reasoning of those that raise evaluations and questions and increasing the advocating of positions in combination with inquiry and public reflection by officials and non-officials (NGOs) alike

The discussion needs to be expanded to allow for new ways for confidence to be sustained

- Lowering the barriers to the airing of concerns, with particular reference to regional groupings. For example, this could be done by creating a forum or forums in which issues concerning the content of CBMs can be raised in a non-confrontational or non-accusatory way and which would involve experts from all regions. Ideally, this would allow for reflection on errors and reactions

- An increased willingness to admit to a lack of awareness, uncertainty and unknowns
- Creating a climate in which candour is not penalised or seen as a weakness or admission of failure or even guilt, although this will take time and needs to take into account differing cultural and political norms
- Expanding the range of subjects open for discussion at BWC meetings and allowing space for new issues to emerge
- Increasing the number of inclusive, informal consultations and discussions outside the BWC process. These should be 'safe spaces' that could be facilitated by inter-governmental organisations and/or NGOs and should allow for substantial discussion even about contentious issues

Without a curtailment of the anti-learning practices noted in previous sections, however, attempts to establish alternative forums or novel initiatives to help develop an understanding of what confidence is required or to negotiate what needs to be done or implemented could become counterproductive.

To take a concrete example, Revill provides an in-depth analysis of how

the BWC could draw on examples from elsewhere to help give effect to a concept first proposed by France at the Seventh Review Conference in 2011 to introduce a peer review process as part of a wider effort to improve implementation of the convention.⁶¹ By undertaking peer reviews of how states parties are complying with the terms of the convention (rather than verification inspections), the goal is to improve levels

of transparency and confidence. The philosophy that underlines the various possibilities for review are in line with aspirations for a confidence-enhancing process noted above. Peer review objectives here would be ‘identifying deficiencies, showcasing and fostering best practice, sharing experiences, and improving individual and collective performance’; all this suggests clearly that learning is central to this process.⁶² As noted by Hitchens, peer review processes ‘would need to be highly consultative and cooperative.

Rather than involving inspections or audits primarily aimed at fault-finding, the process would be designed as a collaborative method of assisting states in improving their compliance and their practices’.⁶³ Such a process would also need to avoid reproducing factors that constrain the active participation of some states in the BWC, including, for example, through reinforcing unequal power relations between developed and developing countries.

However, it is also necessary to consider what a peer review process along these lines can do as well as what it might not be able to do. A potential concern is that, given the arguments aired earlier in this paper, such a review system could exclude some matters from scrutiny as states mutually avoid uncomfortable issues in ways that are self-reinforcing. Our thesis suggests that the CBM experience shows how certain issues can be ignored for a variety of reasons. Thus, whether or not reports of peer reviews are made publicly accessible, past experience suggests that old attitudes might prevail if this process were to be more widely adopted by states parties; in short ‘confidence building’ could be interpreted to mean not raising concerns. This could have detrimental effects on the responsiveness of the BWC to the challenges of preventing the deliberate spreading of disease.

Conclusion

The intention of this paper is to contribute to identifying factors that hamper progress in the BWC process. While the focus of discussion has been on CBMs, our intention is not to promote CBMs as a way to build confidence, but rather to suggest the defensive reasoning that binds states parties and constrains action, and to promote discussion about these factors themselves and draw attention to the need for a different kind of discussion about how confidence may be fostered and sustained in the BWC. As we have mentioned, civil society actors are bound by similar constraints and subject to the same kind of defensive reasoning affecting states. For this reason we have chosen to challenge ourselves in the same way we hope to challenge states parties – by discussing a difficult and sensitive issue, and by indicating our own thinking on the subject and how it has been influenced as we have progressed through the research process.

Although the challenge of moving beyond entrenched positions and the danger of reinforcing defensive routines are considerable, recent developments in arms control and disarmament more broadly suggest grounds for optimism. In recent years a number of attempts have been made to devise forums that provide opportunities for non-traditional forms of interaction between officials and civil society. The Oslo Process that led to the signing of the Convention on Cluster Munitions in 2008 and the ongoing efforts to address the humanitarian consequences of nuclear weapons outside the Treaty on the Non-Proliferation of Nuclear Weapons illustrate the ability of groupings of interested parties to devise novel forums for action. In their substantive focus, location, governing rules, participation and duration such forums have provided a basis for taking forward demanding

matters. Novel and productive means of moving forward can similarly be found for the BWC.

Notes

- 1 For instance, Switzerland. 2013. “Confidence-building measures: enabling fuller participation” BWC/MSP/2013/MX/WP.13 Working Paper submission to the 2013 States Parties Meeting 9 August.
- 2 Full title: Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on Their Destruction, opened for signature 10 April 1972, entry into force 26 March 1975, <http://www.unog.ch/bwc>.
- 3 For instance, see Australia, Canada, Japan, Malaysia, New Zealand, Republic of Korea and Switzerland, Step-by-step approach in CBM participation, BWC/MSP/2013/WP.7, 6 December 2013, and United States of America, Confidence-building measures: time to redouble efforts for effective action, BWC/MSP/2013/WP.1, Working Paper submission to the 2013 States Parties Meeting, 3 December 2013.
- 4 For instance, Switzerland, Confidence-building measures: enabling fuller participation, BWC/MSP/2013/MX/WP.13, Working Paper submission to the 2013 States Parties Meeting, 9 August 2013.
- 5 As expressed in United Kingdom, Confidence-building measures: next steps to enable fuller participation, BWC/MSP/2013/MX/WP.3, 29 July 2013.
- 6 For further information, see <http://people.exeter.ac.uk/br201/Research/Bioweapons/Non/index.htm>. Note: the views and opinions expressed in this report are not those of the funding bodies.
- 7 C Gould and A W M Hay, A decade of deceit: the South African biological weapons programme, in M Wheelis, M Dando and L Rosza, *Deadly cultures: biological weapons since 1945*, Boston: Harvard University Press, 2005; C Gould and P Folb, The South African chemical and biological warfare program: an overview, *Nonproliferation Review* 7(3) (2000).
- 8 TRC (Truth and Reconciliation Commission), *Truth and Reconciliation Commission of South Africa report, volume two*, Cape Town: TRC, 1998.
- 9 C Gould and P Folb, *Project Coast: apartheid’s chemical and biological warfare programme*, Geneva: UNIDIR and Centre for Conflict Resolution, 2003.
- 10 Ibid, 2; S Burgess and H Purkitt, *The rollback of South Africa’s chemical and biological warfare programme*, Alabama: USAF Counter Proliferation Center, Air War College, Air University, Maxwell Airforce Base, 2001.
- 11 For instance, see *Report of the Meeting of Experts*, BWC/MSP/2012/MX/3, 3 August

- 2012, Annex 1, 43–48.
- 12 See Final Document of the Seventh Review Conference, BWC/CONF.VII/7, 13 January 2012.
- 13 To be sure, matters of some significance have been discussed, including access to the database of CBMs and the public availability of the forms, e.g. see Canada, Proposals to strengthen the existing confidence-building measure submission and review process, BWC/MSP/2010/WP.2, 6 December 2010.
- 14 Although some states have urged others to complete this part of the CBM, e.g. see South Africa, Confidence-building measures, BWC/CONF.VII/WP.19, 25 October 2011, while the UK offered a recent update of its Form F.
- 15 An oblique reference to the issues of the declaration of past programmes was made in a 2011 working paper designated 'Working Paper on the Confidence Building Measures - Submitted by Norway, Switzerland and New Zealand' (BWC/CONF.VII/WP.21; see [http://www.unog.ch/_80256ee600585943.nsf/\(httpPages\)/f1cd974a1fde4794c125731a0037d96d?OpenDocument&ExpandSection=1](http://www.unog.ch/_80256ee600585943.nsf/(httpPages)/f1cd974a1fde4794c125731a0037d96d?OpenDocument&ExpandSection=1)). On page 3 it stated: 'There is very little public information on how individual States Parties use the CBM returns once they have accessed them. There is one significant exception to this: one State Party produces, through statutory requirement, a public compliance report that not only provides an assessment of its own adherence to arms control, nonproliferation and disarmament agreements, but also an assessment of the adherence of other States to their obligations. These reports state that CBMs are central to the compliance assessments made, and they regularly note whether certain States Parties have yet to submit a CBM return, that some only do so intermittently, and that while some States do submit returns these have either not declared past offensive programmes or current biological research and development activities.'
- 16 N Isla, Transparency in past offensive biological weapon programmes: an analysis of confidence-building measure Form F: 1992–2003, Occasional Paper 1, Hamburg: Hamburg Centre for Biological Arms Control, June 2006.
- 17 Ibid.
- 18 Ibid, 30.
- 19 An extract from the Wikileaks website describing the purpose and function of the organisation makes this link very clearly:
Publishing improves transparency, and this transparency creates a better society for all people. Better scrutiny leads to reduced corruption and stronger democracies in all society's institutions, including government, corporations and other organisations. A healthy, vibrant and inquisitive journalistic media plays a vital role in achieving these goals. We are part of that media.
Scrutiny requires information. Historically, information has been costly in terms of human life, human rights and economics. As a result of technical advances particularly the internet and cryptography – the risks of conveying important information can be lowered. In its landmark ruling on the Pentagon Papers, the US Supreme Court ruled that 'only a free and unrestrained press can effectively expose deception in government.'
We agree. See <http://wikileaks.org/About.html> (accessed 30 January 2014).
- 20 I Hunger and N Isla, Confidence-building needs transparency: an analysis of the BTWC's confidence-building measures, *Towards a Stronger BTWC: Disarmament Forum 3* (2006), http://www.biological-arms-control.org/projects_improvingtheconfid/2006DisarmamentForumArticle.pdf.
- 21 This was suggested as a direct outcome of the criticism offered in Isla, Transparency in past offensive biological weapon programmes.
- 22 In a later interview, INT9 argued that 'Does it matter? [pause] I think the answer is probably no. I mean, because I don't feel it's a festering sore, you know, so whether [pause] ... and I don't think South Africa today would even dream of going down that route for any reason. I don't know. I mean, you asked the question; you are making me think.'
- 23 C Argyris, *Knowledge for action*, San Francisco: Jossey-Bass, 1993; C Argyris, R Putman and D M Smith, *Action science*, London: Jossey-Bass, 1985; C Argyris and D Schön, *Organizational learning II*, London: Addison Wesley, 1996.
- 24 C Argyris, *Reasons and rationalizations*, Oxford: Oxford University Press, 2006, 212.
- 25 E.g. see Argyris et al., *Action science*, 230.
- 26 E Morrison and F Millike, Organizational silence, *Academy of Management Review* 25(4) (2000), 706–725.
- 27 C Argyris, *On organisational learning*, London: Blackwell, 1999.
- 28 Note that this focus on what activities were not taking place posed certain challenges. In order to foster a general testing of assumptions and reasoning, Argyris advocates that the entries in maps should be based as much as possible on citable observable data. Neither of these expectations could be met in this case. That we have been *initiating* dialogue rather than *reflecting* on current organisational interaction also meant we played a large role in framing discussions. Also, because our primary focus was with what had not come up in discussions in almost any respect, documenting observable behaviour proved problematic in many ways. Therefore, it was not possible to emulate all of the conditions and practices in place to follow the types of Model II interventions proposed by Argyris.
- 29 While the government has not officially acknowledged an offensive programme, ANC statements at the time of the TRC hearings did so. See J Netshitenzhe, Statement on TRC hearings on the CBW programme, government communication, 15 June 1998.
- 30 In contrast, for instance, it would be readily apparent to anyone attending the BWC meetings in recent years that a verification protocol is not being discussed. This is an example of how discussion can take place about the lack of discussion.
- 31 For an overview on organisational studies literature relevant to this point, see Morrison and Millike, Organizational silence.
- 32 *Limited accessibility of CBMs*. INT3 said: 'Actually I had a quick look back in the CBM history. In this year's declaration South Africa just ticked off "nothing new to declare" for Form F and refers to the "year of last declaration" as being 1994. Unfortunately, I don't have access to that declaration. This technicality shows one of the problems that [our government] constantly repeats and delivers in its statements: how good it would be to have electronic access to all CBMs back to 1986, to have them searchable, and so on and so forth. So this could be a very good way of having better access to the information that's available.'
- 33 *Ambiguous official recognition in South Africa of CBW programme's offensive status*. Some interviewees reported not knowing if the country had declared a programme or they were unable to definitively determine this before their interview.
- 34 *Perception that nothing was to be gained from raising the issue*. INT8 contended that while CBMs should be comprehensive, in the end this did not matter so much because it was not clear who was reading them (the implication being that the CBMs are not widely read, let alone analysed). This interviewee also speculated that there was a wider set of international political developments between his country and South Africa at the time and that arms control was only one facet of relations. The ANC government was highly supportive of arms control and disarmament (in the lead-up to the NPT Extension Conference in 1995), so broader politics might have meant that the Form F declaration was not very important – or even that raising this may have a negative effect in other areas. The BWC CBM was really just a small issue.
- 35 *CBW programme not remarkable in the context of apartheid atrocities*. This stems from a suggestion taken from notes made in the interview with INT7.
- 36 *Past sequestering of South Africa's international deliberations on the programme*

into small groups. The former US ambassador to South Africa, Princeton Lyman, recounted how the US and UK held closed talks with the South African government both during the apartheid era and post-apartheid (see P Lyman, *Partner to history*, Washington, DC: United States Institute of Peace Press, 2002, 189–194, 249–254). INT9 recalled the spirit of these meetings in suggesting, ‘We went to South Africa and my recollection – because I realise you are interested in this one – was we went very much in a mode of “What will the South Africans tell us?” I wasn’t briefed or told, “Oh no, there is such and such, such and such, such and such”. It was more to let them tell us what they wanted to tell us and I recall that what I saw as our role was to try and spell out what could usefully be put in CBMs, and really sort of trying to make [communicate] the message, “You can build confidence by putting in details about what you’ve done” and so on. And it was – again, my recollection – very much left to the South Africans to decide what to do.’

37 *Unstated higher purposes for not critiquing South Africa’s CBMs.* INT8 indicated that his government saw South Africa as having instituted sufficient reforms and playing a constructive role in protocol negotiations. As such there was no appetite to rattle the cage by making an issue of its CBMs.

38 *Lack of discussion not discussed.* Many interviewees indicated a complete lack of conversation about the non-declaration of Project Coast, as well as other states parties’ content in Form F more generally. When asked whether anyone had ever raised the history of the South Africa programme in his experience with the BWC, INT10 indicated, ‘Not in my memory, no. No, no, no!’ In turn, this lack of attention was itself subject to more or less circumscribed attention. For instance:

INT3: To put it very bluntly, like when for instance the German/Norwegian/Swiss initiative started to discuss the CBMs with a view towards making things progress at the Seventh Review Conference, basically in the very first meeting it got very clear that discussions on Form F should be left out, because that would kill any other effort towards improving the CBMs.

Brian Rappert (BR): Because it would be contentious?

INT3: Well, it was like a gentleman’s agreement: we don’t want to talk about Form F, because we really want to improve the CBMs at

last. In the end, the consensus position that was shaped by this process was basically something to water further down and, yeah, in the end we didn’t achieve much at all at the Seventh Review Conference.

As another example, INT8 indicated that in his experience the South African non-declaration was not a matter of discussion by his government or in Geneva since the mid-1990s.

39 *Limited in-group or out-group confrontation.* INT1 argued that attention to Form F is ‘highly driven by the view of the members of the different groups. You know we are working here in different groups, which are groups of like-minded states. It’s [a] Western group or it’s [an] Eastern group. Maybe it’s not as like-minded if you go to the NAM [Non-Aligned Movement], but if you look on what you want, a majority interest in the CBM F is looking on what the opposite side has done. So to say, to look more from the Western side to what was declared by the Russians, and from the other side what was declared by the US or by the UK. With this constellation it was implicit that a challenge of what was maybe declared by Western states under F would not have been done by members out of this group. So similar[ly] on the opposite side. And everybody understood what the sensitivities are inside the group to be able to deal with these issues. From my point of view it created the entire situation where it was a lack of interest to attack the declaration that came from a member from the opposite group. You didn’t want that in the same way as you may have challenged the Russian declaration, that maybe done from the Eastern group on what is declared by the United States or what is declared by the UK or, if you look on the old programmes, Canada and France. I think nobody had an interest to push the button.’

40 *Limited encouragement of inquiry into and public testing of CBMs’ content.* Both (as previously noted) with regard to Form F and more generally, the content of CBMs was said not to be widely scrutinised. For example:

INT3: Well, the point is, you just mentioned the word ‘discussion’. As long as I [have been] involved in the BWC process, there has never ever been any kind of open discussion, especially not on content, with other states parties, although one might have questions for them. Well, we heard yesterday from the Americans that they actually do approach other states parties on a bilateral basis, but there has never, to my know[ledge] in the last few years, been any kind of discussion ... about a particular state

party’s CBM submission. It just doesn’t take place.

and

BR: Do you have any sense of having a relationship to the past programmes from the various kinds of conferences you have been [at] in the past?

INT2: Past programmes don’t get a lot of attention. Not a lot of people talk about past programmes. And I’ve certainly never heard of the South African one being mentioned. The only one that’s ever got any mention is the British one because they keep updating it.

41 *Limited encouragement of inquiry into and public testing of CBMs’ purposes.* Prior to 2013, discussions about CBMs in the BWC process since 2007 have been preoccupied with significant – but largely technical – issues of how to improve the quality and quantity of states parties’ submissions. This was an outcome of a ‘two-track’ approach whereby efforts were made to first improve the user-friendliness and relevance of the CBM forms by the 2011 Review Conference, and then to revisit more wide-ranging questions about their purpose in the intersessional process after 2011.

42 *Accusations of ‘doing politics’ directed at those who raise criticisms.* This refers to how the questioning of another state’s CBMs are often interpreted as an act of politics and, more generally, how claims made in CBMs are politically interpreted. On the latter, for example, INT5 argued that ‘the thing is, in a CBM you can write whatever you want and there is no way that anybody can determine whether it’s the truth or whether it’s complete or not without some on-site activity, a visit or whatever. And on the one hand, if you don’t want to believe what I am going to write, I can write whatever I want to on that piece of paper and you are not going to believe it, because you don’t want to believe it. And that all depends on the political issues. Let’s take, for instance, Iran can do what they want, say what they want ... and I don’t say they are lying, I’m not saying they are lying or not lying, but they can say what they want, they can tell the truth, the whole truth, the holy truth, every truth, but nobody will believe them!’

43 *Attributions of motives for evaluations of CBMs not widely tested.* Despite the points made in the previous endnote, claims about why states say what they say are not widely tested, e.g. by asking the officials in question why they said what they did. For instance, INT5 said: ‘I know why [the US] hammer so much on fuller participation and so on because it’s a few countries[’ CBMs] that the Americans want ... to see. They want to see CBMs from Pakistan, but now, you know, there’s a huge amount of pressure on Kenya and I mean, even us, and Namibia and they always say, Solomon Islands. ... they

- don't even know that they have to submit that thing! What difference does it make? And I think, to make this whole debate more sensible is, let's concentrate then on the countries and put them in hierarchies, and say, right, from these countries we want CBMs. But now the politics doesn't allow you to do that, unfortunately. Now you have to moan and groan, there's only 65 countries, and so on. Does it really matter? I don't think so.' However, it would seem these attributions were not tested.
- 44 *Perception of low utility and CBMs from only one limited source.* Many of the interviews suggested that CBMs were regarded as highly limited in the usefulness, thereby diminishing the need to examine them closely.
- 45 *No mechanism and limited ability for testing the veracity or completeness of CBM reports.* The lack of processes for testing CBMs meant that gaps and missing elements could go unchecked. One interviewee (INT8) indicated that while an incorrect Form F does absolutely undermine the purpose of the forms, which is to promote transparency, very few people actually read these forms and there is no forum for discussing the CBMs anyway. In response to this situation, INT3 responded that 'one of the things that I'm pushing for is the forum in which we would discuss the CBMs, because at the moment there is no discussion, there is no mechanism whereby states parties can provide any sort of feedback or ask questions about submissions, about other states parties' submissions, ask about guidance for their own submissions – there is no such forum. So that's the sort of thing I'm pushing for. I'm pushing for a forum in which they can be discussed.'
- 46 *Officials wanting not to appear ignorant.* INT8 indicated that the filling in of CBMs was hampered by a cultural problem, because states do not want to look incompetent in public, which is why he encourages them to come and talk to his government privately.
- 47 *Fear of the consequences of opening a discussion of difficult issues.*
BR: But I was thinking more in terms of the discussions about revising the CBMs that have happened in recent years. I mean, a lot of the forms were ... well, I mean, some of the forms were revised – I suppose at the Review Conference – but it didn't seem to me that Form F got any kind of ... well, much of any kind of discussion at all during any of that. I mean, is that your understanding?
INT9: Yeah, I think that's fair and I suspect that there was a recognition there that if you started playing around with it, you were only going to get consensus agreement to provide less information, not more information! You know, it's like the argument about the Iranian proposal
- to amend the convention to explicitly prohibit use. Perfectly rational, everybody agrees with the aim, but once you
- BR: Open that up – yes, yes.
- 48 *Drawing attention to limitations makes speaker stand out; not doing so produces irrelevance.* One interviewee stated that the predictability of who complains in the BWC process means that those who do complain are effectively no longer heard. The interviewee also said that in the diplomatic world it is distasteful to point out the inadequacies of others. This may extend to it being distasteful to point out the inadequacies of the BWC process in general.
- 49 It is tempting to take the lack of response by state officials to the issues raised in the presentation (as opposed to the interviews) as part of the difficulty of promoting collective discussions on the limitations of CBMs, though this would also be a speculative inference.
- 50 See also United Kingdom, Confidence-building measures: next steps to enable fuller participation, BWC/MSP/2013/MX/WP.3, 29 July 2013.
- 51 Australia, Canada, France, Germany, Netherlands, the United Kingdom of Great Britain and Northern Ireland, and the United States of America, Getting past yes: moving from consensus text to effective action, BWC/MSP/2013/WP.4, Working Paper submission to the 2013 States Parties Meeting, 6 December 2013.
- 52 United States of America, Confidence-building measures: time to redouble efforts for effective action, BWC/MSP/2013/WP.1, Working Paper submission to the 2013 States Parties Meeting, 3 December 2013.
- 53 For instance, Switzerland, Confidence-building measures: enabling fuller participation, BWC/MSP/2013/MX/WP.13, Working Paper submission to the 2013 States Parties Meeting, 9 August 2013.
- 54 J Macintosh, Confidence building in the arms control process: a transformative view, *Arms Control and Disarmament Studies* 2, Ottawa: Canadian Non-proliferation, Arms Control, and Disarmament Division, 1996.
- 55 Ibid, vii.
- 56 South Africa, Implementation of the BTWC in South Africa, BWC/MSP/2013/MX/WP.10, 7 August 2013.
- 57 Adapted from Macintosh, Confidence building in the arms control process, vii.
- 58 Morrison and Millike, Organizational silence'.
- 59 This is central to enabling Model II-type interactions. While being explicit about the goals of the research, communicating with a view to publicly testing reasoning and avoiding as best as possible Model I forms of interaction might all foster relatively robust forms of inquiry, they cannot substitute for the type of sustained, trust-rich commitments required to foster Model II interactions.
- 60 Adapted from Macintosh, Confidence building in the arms control process, vii.
- 61 See J Revill, *A peer-review mechanism for the Biological and Toxin Weapons Convention*, UNIDIR/2013/1, Geneva: UNIDIR, 2013.
- 62 Ibid, 7.
- 63 T Hitchens, 'Forward', in Revill, *A peer-review mechanism for the Biological and Toxin Weapons Convention*.

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