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Notions of Justice in the Biological Weapons Control Regime

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1. Introduction¹

1.1 Justice: Concept and Operationalisation

The potential role that different conceptions of justice may play in existing and emerging arms control and disarmament regimes is at the centre of PRIF's new research programme "Just Peace Governance" and of its research project "The Transformation of Arms Control. Norm Dynamics and Notions of Justice in Arms Control, Disarmament and Non-proliferation".² This working paper, which is based on research carried out for this project, represents an exploratory study of notions of justice in the biological weapons control regime. It applies the terminology and methods as developed for the project (cf. Müller 2010a). Accordingly, a justice claim is defined as the conviction of a given actor to be entitled to a certain good (cf. Welch 1993). Justice, "a state of affairs where actors obtain what they are entitled to" (Müller 2010b: 2), is hence a moral category that goes beyond mere material interest and that is connected with a normative claim: "Once an actor believes that she is entitled to obtain or maintain something, this goes beyond a simple interest in something. An entitlement means that the term ‚suum cuique‘ applies. With that, a justice claim is made" (Müller 2010a: 4, original emphasis). Interests, on the other hand, are defined for the purposes of this project as the strive for national security, defence or enhancement of one's power status, and for the gain or maintenance of economic advantages; references need to be void of normative components, since in such instances a justice claim could potentially also be identified.³

Consistent with the new PRIF research programme, instead of presuming an 'objective', externally given standard of justice, this study takes the viewpoint that it is of theoretical and analytical benefit to acknowledge different notions of justice held by different actors within the same institutional framework and to investigate their impact (cf. Müller 2010b: 3-4). Such notions of justice can refer to the distribution of material and immaterial goods such as economic resources (substantive dimension), recognition, or representation and participation in decision-making processes (procedural dimension) (cf. Müller 2010a: 12; Müller 2010b: 2-3). The procedural dimension also includes discursive relevance, i.e. the possibility to shape and participate in discourses beyond established decision-making structures (e.g. agenda-setting) (Müller 2010a: 12). In these three dimensions, notions of justice may be analysed empirically and scrutinised regarding their relevance in a given policy field, in this case the control of biological weapons.

1.2 Justice and Arms Control

Arms control and justice have so far hardly ever been considered in combination (exceptions are Albin 2001; Müller 2010c). This is not surprising given the rather functional focus of traditional

1 A German version of this paper will be published as: Una Becker-Jakob: Gerechtigkeitsvorstellungen im Regime zur Kontrolle biologischer Waffen, in: Claudia Baumgart-Ochse, Niklas Schörnig, Simone Wisotzki, Jonas Wolff (eds.): Auf dem Weg zu Just Peace Governance. Vorarbeiten zum neuen HSKF-Forschungsprogramm, Baden-Baden: Nomos 2011 (forthcoming). The author is grateful to Harald Müller, Richard Price, Nicholas Sims, Wolfgang Wagner and the editors of said volume for helpful and constructive feedback.

2 The project is funded by the Cluster of Excellence "The Formation of Normative Orders" of the University of Frankfurt.

3 This narrow definition is not meant to suggest that interests exist independent of normative ideas; rather, it is assumed that both are often interdependent (Müller 2010b: 6). However, despite the "ontological blur" caused by a definition such as the one used here, this delineation seems useful for analytical reasons, since it helps to identify different frames of argumentation with or without references to justice (on the relation of justice and interests cf. Müller 2010b: 4-6).

concepts of arms control and disarmament on strategic stability and threat reduction (cf. e.g. Bull 1965; Schelling/Halperin 1984) and the predominant notion that this issue of ‘hard security’ is mainly driven by national (security) interests and not open to moral considerations of justice. Even after the concept as well as the practice had started to reflect a “widening and deepening” of arms control and disarmament (Croft 1996) and a number of social constructivist studies opened the field for the consideration of normative aspects⁴, issues of justice have rarely been addressed explicitly.

One exception, however, is the discussion of compliance politics and effective verification measures which in order to be successful are assumed to require equal and appropriate standards for all, a just balance of rights and obligations, and fair procedures (Müller/Schörnig 2006: 145-149). While one primary motive of states for entering arms control negotiations in the first place might be security self-interest, in order to be concluded successfully, agreements must not be perceived as unfair or unjust. Moreover, “arms control is about mutual obligations and mutual rights”, and against this background the question of compliance “raises particularly stark issues of justice and fairness” (Albin 2001: 184)⁵ – such issues are, according to Cecilia Albin, frequently not only connected with compliance in general but also with verification measures designed to ensure compliance and to detect non-compliance in a non-discriminatory way (Albin 2001: 184). Compliance measures would thus appear as one possible area to scrutinise in empirical studies in order to examine the impact of notions of justice on arms control and disarmament.

Since arms control and disarmament mostly take the form of international regimes, it seems also sensible to approach the issue from the viewpoint of regime justice. Several studies have discussed aspects of justice or fairness in regimes in various ways.⁶ For instance, successful regime formation and regime effectiveness have been connected with the (perceived) justness of the regime (e.g. Young 1989: 369; Puchala/Hopkins 1983: 250-251). Regime justice can pertain to questions of procedural justice, i.e. equal participation rights and equal access to decision-making processes in international regimes, or distributive justice, i.e. just distribution of or access to goods (cf. e.g. Mayer 2006; Müller 1993; cf. also Müller 2008: 125-153). Moreover, discursive justice can play a role if the question at issue is to what extent actors can participate in and/or shape discourses beyond institutionalised procedures. Empirical studies on regime fairness have been carried out for other issue areas (e.g. Mayer 2006; Zürn 1987). However, of the few regime theoretical analyses of security regimes – and in particular of the regimes on weapons of mass destruction – (cf. Kelle 2003; Müller 2010c, 1993, 1989; Becker et al. 2008), only Müller (2010c) has attached importance to notions of justice. If such notions are assumed to play a role for the success of arms control and disarmament, it appears fruitful to include a regime theoretical perspective in any conceptual and empirical study and to look at the extent to which elements of procedural and distributive (in-)justice are embedded or reflected in the regime.

Finally, it seems worth investigating whether there is an impact of diverging conceptions of justice beyond specific regime features and institutions. Hence, the focus of this study will not be limited to the set-up of the biological weapons regime (and to notions of justice that might be embedded in its specific principles, norms, rules and procedures), but it will also consider how more general notions of justice might affect the working of the regime.⁷ As is true for all regimes controlling weapons of mass destruction, there is a potential tension between obligations to prevent the proliferation of the weapons in question and the requirement for unhampered development and the peaceful use of the respective technologies. Conflicts along this line usually occur between developed and developing countries in particular, which suggests a link with the more general

4 Cf. e.g. Price (1998, 1997, 1995); Tannenwald (2005, 1999); Price/Tannenwald (1996); cf. also several other contributions in Katzenstein (1996).

5 Albin (2001), like other authors, uses the terms „justice“ and „fairness“ synonymously (cf. e.g. Müller 2010a: 2); this approach will be followed here, too.

6 For an overview cf. e.g. Mayer 2006.

7 For a discussion of justice and international security cf. Müller 2008.

theme of development and socio-economic status. This is thus another area in which the relevance of conceptions of justice might be analysed.

This Working Paper approaches the issue of biological weapons control from a perspective of justice. I will first give an overview of the biological weapons control regime and describe those dynamics that are relevant to this study. After that, I will turn to two crucial norm conflicts that have impacted on the effectiveness of the regime, namely the one about verification and compliance and the one about technological exchange, cooperation and development.⁸ Following a brief description of the methods used for the empirical analysis, I will analyse these two conflicts with regard to the question to what extent different notions of justice are identifiable. The paper will conclude with some reflections on the role of justice in (biological) arms control and some implications of the results for further research.

2. The Biological Weapons Control Regime⁹

Biological warfare is the intentional use of pathogens or toxins with the aim of inflicting disease or death on humans, animals or plants. Norms against biological warfare can be traced back to pre-Christian times and can be found in various cultures (Zanders 2003, S. 392-400). International legal regulations date back to the late 19th century, and for more than 35 years there has existed an international disarmament and non-proliferation regime for biological weapons, mainly based on two international treaties. The Biological Weapons Convention (BWC), which was concluded in 1972 and entered into force in 1975, is at the core of the regime and will be in the focus of this study. As of June 2011, it had 164 members. It is complemented by the so-called Geneva Protocol of 1925 which initially only prohibited the (first) use of chemical and biological weapons (CBW) in war for its members but whose provisions have meanwhile entered international customary law and are hence now universal (Boserup 1973, S. 99-140).¹⁰ Additional regime elements include inter alia export controls, confidence-building measures (CBMs), annual meetings of experts and states parties (since 2003), and an Implementation Support Unit (since 2006).

Based on the principles of a biological weapons taboo, of the complementarity of the BWC with the Geneva Protocol and of the right to the widest possible peaceful use of biotechnology as well as to biodefence, the Biological Weapons Convention proscribes the development, production, retention and proliferation of biological weapons (and, though only implicitly and through additional understandings of the states parties, their use¹¹). These prohibitions are not tied to certain definitions, materials or biological agents but are rather defined through the purpose of an agent's or equipment's application (General Purpose Criterion). In contrast to the nuclear Non-Proliferation Treaty (NPT), the BWC is hence non-discriminatory. Moreover, the prohibitions contained in the BWC are comprehensive and remain valid regardless of any new technological or scientific developments. The norms of biological weapons prohibition (Article I), disarmament (Article II) and non-proliferation (Article III) are solid and uncontested, a few known cases of non-compliance and some more suspected ones notwithstanding¹²; they have been reaffirmed and strengthened in all Final Declarations of the Review Conferences since 1980.¹³

8 Albin (2001: 187) briefly discusses the importance of these issues and their connection with fairness and justice in the context of the negotiations of the Chemical Weapons Convention and of the BWC Compliance Protocol.

9 This section applies the classic definition of international regimes as coined by Krasner (1983). For a regime theoretical analysis of the BWC regime cf. also Kelle (2003).

10 The texts of both treaties are available at <http://www.opbw.org> (last accessed 09.08.2011).

11 Cf. BWC/CONF.IV/9 Part II, 15 (1996); BWC/CONF.VI/6, 8-9 (2006).

12 The Soviet Union, South Africa and Iraq (then a signatory) are known to have violated the BWC (Wheelis/Rósza/Dando 2006); the US lists several other countries as possibly conducting illegal activities, though only very few countries are attributed the capability to actually produce biological weapons and the number has been declining (US Department of State 2005, 2010). Some US research endeavours of the G.W. Bush era were criticised for hovering on the brink of legality (Wheelis/Dando 2003).

13 BWC Review Conferences (RevCons) were held in 1980, 1986, 1991, 1996, 2001/02 and 2006; the next one is scheduled for December 2011. The RevCon in 2001/2002 did not produce a Final Declaration; however, in the draft declaration

Another norm of the regime as codified in the BWC is the obligation to cooperate in the peaceful use of biotechnology and to foster development in this area (Article X). Given the dual-use character of many biological and biotechnological materials and processes, this norm stands in potential conflict with the non-proliferation obligation. This, as well as differing assessments of the relative importance of both norms within the regime, are the sources of significant conflicts which have troubled the regime for many years (see section 3.2).

While the BWC regime arguably rests on a rather solid normative basis – at least as far as the basic prohibition of biological weapons is concerned – it is weak on the procedural side, and it also suffers from a lack of institutionalisation (e.g. Sims 2006). There is no international organisation that could facilitate communication and interaction in the regime. While states parties established a small secretariat, the Implementation Support Unit (ISU), in 2006, its mandate remains limited, and its continued existence will depend on a decision by states parties at the next Review Conference in 2011. Problem-solving procedures (Article V), though elaborated in 1991, remain weak since they depend on the cooperation of all parties involved and lack an independent authority or fact-finding procedure. The same is true for the complaint procedure: Article VI postulates that in cases of suspicions of non-compliance, states can lodge a complaint with the UN Security Council which would then decide on further action. This procedure contains the well-stated problem that any decision e.g. on investigations could be vetoed by one of the five permanent members, and again, there are no independent fact-finding capacities.¹⁴

The lack of any verification measures remains one of the gravest problems of the regime, and a satisfactory solution does not seem to be in sight. In an effort to mitigate this problem, in 1986 and 1991 states parties agreed on a set of confidence-building measures that were intended to increase transparency in the regime. However, participation in the information exchange has been poor (cf. Hunger/Isla 2006: 29-30). Negotiations for a compliance protocol were held between 1995 and 2001. In addition to an elaborate verification system, the protocol would have set up an international organisation tasked with verification and the promotion of international cooperation in various areas. However, the negotiations had been hampered by significant political differences, by a reluctance to accept intrusive verification measures on the part of a number of states and by questions about the general verifiability of the BWC in particular by the US (Littlewood 2005). With the US's rejection in 2001 of the whole approach of strengthening the BWC through a legally binding document, the negotiations ended without any results. Moreover, the Review Conference in 2001 had to be adjourned for one year in reaction to a highly controversial US proposal in order to prevent its complete failure (Rissanen 2001a).

As a way out of this crisis, in 2002 states parties agreed on a new intersessional process with annual meetings of experts and of states parties, respectively, and with a mandate to discuss a fixed set of topics mostly related to national measures aimed at improving implementation of the BWC, at increasing biological safety and security¹⁵ and at raising awareness among life scientists of the potential for misuse of their work. This process was also intended to keep the dialogue within the regime alive. While in hindsight it can be stated that this new so-called 'intersessional process' did indeed contribute to mitigating the crisis and improving the working atmosphere in the regime (cf. Becker 2007: 9; Khan 2007), the way it came about, in connection with the history of the compliance protocol, created new political tensions or at least reinforced existing ones that have affected the functioning of the regime in a significant way. This complex conflict represents the second case for the empirical analysis of this study (cf. section 3.3).

the sections on the pertinent articles had already been agreed (Rissanen 2001a). For all documents from BWC RevCons cf. <http://www.opbw.org> and <http://www.unog.ch/disarmament/bwc> (last accessed 09.08.2011).

14 Only in the case of alleged biological weapons use can the UN Secretary-General carry out an investigation (cf. Littlewood 2006).

15 Biosafety denotes the protection against the accidental release of pathogens or other laboratory accidents, whereas biosecurity refers to the protection against theft or illegitimate access to biological materials.

3. Notions of Justice in the Biological Weapons Control Regime

3.1 Methodology

The following sections are based on an empirical analysis of a total of 75 statements that were held by 17 states at the BWC review conferences in 1980, 1986, 1996, 2001/02 and 2006 and that are available in English and online.¹⁶ States were selected from all three regional groups – the Group of Western European and Other States (WEOG), the Group of Eastern European States and the Group of Non-Aligned and Other States (NAM).¹⁷ Selection criteria included: a medium to high level of activity in the regime; statements held at a minimum of three of the five conferences under scrutiny and in different phases of the regime's evolution; representatives of different positions within the regional groups; location in different regions of the world; different state of development in general and in biotechnology in particular. This produced the following sample:

WEOG	NAM	Eastern European Group
Canada	Brazil	Hungary
Germany	Cuba	Russia
Japan	India	Ukraine
Sweden	Indonesia	
USA	Iran	
	Malaysia	
	Nigeria	
	Pakistan	
	South Africa	

For the qualitative content analysis, a methodological instrument was used that is also being applied in the PRIF research project „Transformations of Arms Control“. Based on the assumption that justice claims are speech acts which either postulate certain topics as justice-related or provide additional justification for such claims (Müller 2010a:11; cf. also Welch 1993), a typology of potential types of justification was created for the project. These types cover various elements of justice, such as equal treatment (including equality before the law), equal distribution, equal opportunity, compensation or egalitarianism (cf. Müller 2010a: 12-18). A list of roughly 50 ‘signal terms’ is intended to help identify relevant text passages.¹⁸

With the help of this instrument it could be determined to what extent justice claims are made at all in the statements and of which kind they are, and it was also analysed which other arguments are used with regard to the two regime conflicts identified above. Categories were formed inductively that sum up the relevant phrases, which allowed for a systematic analysis from a justice perspective. All those categories that contained a reference to justice could then be attributed to one of the types of justification and be described in terms of their sort of justice claim (procedural, substantive, discursive).

3.2 The Conflict Between Non-Proliferation and Technological Exchange

Like other international disarmament and non-proliferation treaties, the BWC contains two potentially conflicting norms: the obligation for states parties to prevent the proliferation of

16 All statements used here are available at <http://www.opbw.org> (14.02.2011). Statements are not available for the 1991 conference and only partly for 1996. The author is grateful to Elizabeth Boshold for research support. The analysis of the conferences in 2002 and 2006 was supplemented by the author's personal observations. Any conclusions and assessments derived from these observations are solely those of the author.

17 While the group names still represent the structure of the Cold War, in particular regarding this conflict it is today much more the socio-economic status of industrialised versus developing countries, largely coinciding with the traditional group membership, than the status of alignment that constitutes the conflict parties.

18 Signal terms most relevant for this study were, e.g., “(non-)discriminatory”, “violation”, “objectivity”, “impartiality”, “balanced”, “arbitrary”, “hamper [development]”.

biological weapons (Article III) and the obligation to promote technological exchange, cooperation and development (Article X). While the validity and legitimacy of neither norm is questioned in principle¹⁹, we nevertheless see a norm conflict in which some actors, especially in the WEOG, emphasise the primacy of the security (or regulatory) aspects of the regime as contained *inter alia* in Article III; others, in particular in the NAM, attribute equal importance to the promotional aspects as provided for in Article X.²⁰ The WEOG countries, while acknowledging that Article X was included as an incentive for developing countries to join the treaty, and while recognising its role in the regime and emphasising their own implementation of it in official statements²¹, stress the security aspects as the ‘true’ purpose of the regime (cf. Sims 1992: 18). However, this is hardly ever reflected in official statements. NAM members emphasise that the BWC represents a ‘composite whole’ and should be treated as such through equal implementation of all its provisions.²² The contentions resulting from this different prioritisation have repeatedly hindered constructive efforts to strengthen the regime in other regards.²³

From the beginning, developing countries attached high hopes to the issue of technology transfer and cooperation. Nicholas Sims (2009: 12) ascribes this to the impact of the NPT which codifies the right to the peaceful use of nuclear technology in return for the non-nuclear-weapon states’ renunciation of nuclear weapons; however, Sims also emphasises the fundamental differences between the two fields and the technologies concerned which render a direct transfer of the NPT provisions and practices to the BWC impracticable (Sims 2009: 12). Moreover, unlike the NPT, the BWC does not define possessor status for some states and non-possessor status for others; hence, there is no ‘grand bargain’ according to which some states renounce a weapons option that others may retain at least for the time being and which could hence lay the basis for compensatory claims. The issue of technological cooperation apparently gained even more saliency in the wake of the First UN Special Session on Disarmament in 1978 which had included the connection between disarmament and development in its discussions and recommendations.²⁴ The end of the Cold War, when the claims to a ‘peace dividend’ were extended to biological disarmament, added further to this development (Sims 1992: 6). Developing countries had also successfully insisted on including Article X-related elements in the mandate for the protocol negotiations (Zaluar/Monteleone-Neto 1997; for a critical view cf. Ward 2004), so that the conflict was transferred to these negotiations as well.²⁵

One characteristic of this field, namely the dual-use character of biotechnology, comes to bear here in a particular way. In addition to the many benign applications of biotechnology in medicine and pharmacology, the same technology can also be misused for hostile purposes. In today’s globalised world, the uncontained spread of naturally occurring infectious diseases poses challenges for global health and health security that are at least as great as, if not greater than, those posed by the deliberate dissemination of biological agents by states or bioterrorists. Hence, the promotion of technology and research to combat diseases and the implementation of improved biosecurity have

19 Cf. e.g. India, 4th RevCon, November 26th, 1996; “We also attach considerable importance to Articles III and X – these two articles, read together would appear mutually contradictory, but, in fact provide the two mutually inseparable aspects of any disarmament agreement that deals with a dual-use technology, and both would need to be strengthened in order to promote the objectives of the Biological Weapons Convention”; cf. also Canada, 5th RevCon 2001, p. 3.

20 Cf. e.g. Brazil, 4th RevCon 1996; South Africa, 5th RevCon 2001.

21 Canada, 4th RevCon 1996 and 5th RevCon 2001 (also BWC/CONF.V/3/Add.6, pp. 3-5); Germany, 6th RevCon 2006; Japan, 5th RevCon 2001; Sweden, 2nd RevCon 1986, BWC/CONF.II/SR.7, p. 3; USA, 2nd RevCon 1986, BWC/CONF.II/SR.3, p. 5.

22 Cf. e.g. Iran, 5th RevCon, November 19th, 2001, p. 3.

23 One recent example was the failure to agree on an “Action Plan for National Implementation” at the Review Conference in 2006 (cf. Becker 2007: 28; Guthrie 2007: 25-28): The plan was supposed to improve national implementation of the BWC (as required under Article IV anyway) but would only have been accepted by the NAM on the condition that a supplementary “Action Plan on Implementation of Article X” had been agreed, too.

24 Cf. e.g. Brazil, 1st RevCon 1980, BWC/CONF.I/SR.7, 2-3.

25 For a description of the different positions in this conflict in the Ad Hoc Group and during the 4th RevCon cf. Kelle (1997: 20-25; 28-32) and Littlewood (2005: 147-161).

to be carefully balanced, which makes the conflict about technological exchange particularly salient.

The rapid growth of the biotechnology sector from the 1980s onwards further contributed to Article X-related issues taking centre stage: Developing countries increasingly claimed their right to (bio)technological cooperation and stressed more vigorously the developed countries' obligation to share their (bio)technological know-how. In the national statements of the sample analysed here, five different types of argumentation can be identified that relate to justice to differing extents. Firstly, the view that improved cooperation would strengthen the BWC does not contain any reference to justice.²⁶ Secondly, positions that maintain that international cooperation and technology exchange were necessary to combat diseases (internationally or in the speaker's own country) and bioterrorism are, in the way they were presented, often not explicitly connected with justice claims.²⁷ Rather, in this group statements that refer factually to the necessity of combating disease (e.g. Nigeria 1986; South Africa 2001, 2006) can be distinguished from those that connect this with a legal claim (Indonesia 2001) or from those that see disease control in developing countries hampered by an insufficient implementation of Article X (Iran 2006). Only the latter two contain a reference to justice. While it is easily conceivable that justice-related motivations (such as an assumed universal right to protection from disease or to sufficient medical care) also inform the objective of improved capacities to fight diseases, the statements analysed here are on their own not sufficient to prove this. The same is true for statements that, thirdly, call for increased international cooperation and full implementation of Article X without any further elaboration.²⁸ Fourthly, the demand for more intensive cooperation aimed at narrowing or closing the growing gap between industrialised and developing countries²⁹ can be read as an economically-driven goal as well as a justice-related claim to equal opportunity or egalitarianism as regards the peaceful use of biotechnology. Finally, there are statements that explicitly refer to the states parties' (legal) right to cooperation and the peaceful use of biotechnology, as derived from BWC Article X³⁰, or to a more general entitlement.³¹

For a considerable period of time, the conflict manifested itself predominantly in the controversy over Western export control regulations. After 1991, the so-called Australia Group decided to coordinate and harmonise their export controls and tighten their regulations also in the area of biological materials. As of August 2011, the Australia Group consists of 40 mainly Western states and the European Commission.³² Its members see their activities as implementation of the nonproliferation obligation under BWC Article III (cf. Littlewood 2005: 147). They have repeatedly rejected the calls to abolish the Group or to accept unrestricted trade among BWC members. This was in part informed by compliance concerns vis-à-vis some states parties, but may also have been due to economic considerations. At the same time, as the content analysis showed, the members have frequently rejected the allegation that their export controls had hampered trade and economic development and have emphasised their own activities in technology transfer and the promotion of biotechnological development in the Global South (cf. Kelle 1997: 21-22).³³ Developing countries, on the other hand, have frequently and vigorously criticised the Group's export controls as being a deliberate attempt by industrialised countries to hamper

26 Hungary, 2nd RevCon, BWC/CONF.II/SR.4, p. 7.

27 Indonesia, 5th RevCon 2001; Iran, 4th RevCon 1996 and 6th RevCon 2006; Malaysia, 6th RevCon 2006; Nigeria, 2nd RevCon 1986, BWC/CONF.II/SR.7, p. 16; South Africa, 5th RevCon 2001 and 6th RevCon 2006; USSR, 1st RevCon 1980, BWC/CONF.I/C/SR.5, p. 5.

28 Brazil, 1st RevCon, BWC/CONF.I/SR.7, p. 3; Pakistan, 2d RevCon 1986, BWC/CONF.II/SR.4, p. 10.

29 India, 2nd RevCon, BWC/CONF.II/SR.7, pp. 12-13 and 6th RevCon 2006; Malaysia, 6th RevCon 2006.

30 Brasil, Meeting of States Parties (MSP) to the BWC 2003; Indonesia, 5th RevCon 2001, MSP 2003 and 6th RevCon; Iran, 6th RevCon 2006.

31 Cuba, 1st RevCon 1980, BWC/CONF.I/SR.8, pp. 6-7.

32 Cf. <http://www.australiagroup.net> (last accessed 17.02.2010).

33 The Western and NAM positions in this area as presented in the Ad Hoc Group and at the 4th RevCon are summarised in Kelle (1997: 20-25; 28-32) and Littlewood (2005: 139-161).

biotechnological development and hence as a violation of BWC Article X (cf. Littlewood 2005: 139–161).³⁴ This criticism was often connected with the legal claim to technological exchange under BWC Article X and with calls for non-discriminatory procedures that should replace the Australia Group regulations which NAM members view as discriminatory.³⁵ This discourse thus entails demands for procedural justice in the form of equal treatment and equal access to biotechnology. At the same time, the claim that export controls must not hamper economic development³⁶ again appears to contain the notion of a general entitlement to development, i.e. an element of substantive justice.

When the protocol negotiations ended in 2001, the topic was still highly contested. Today, the issue of export controls has lost some of its saliency. In recent years, a slow acceptance of their utility became discernible even among some of their formerly most adamant opponents (Becker 2007: 15). Yet, this does not mean that the old tension between Articles III and X has disappeared. To the contrary, NAM countries continue to insist on the full implementation of Article X as vigorously as ever. Several leading NAM states have connected any new issue that appeared on the – largely Western-dominated – agenda since 2002 with the demand to implement Article X more effectively, and they have tried to add a cooperation and assistance dimension to any measure that came into focus (such as national implementation, biosecurity and even improvement of the confidence-building measures).³⁷ In 2009, the NAM introduced a proposal for an Article X Mechanism “for the full implementation of the Convention”.³⁸ This proposal was not supported by Western states; however, in recent years they have seemed to be more willing to at least discuss Article X-related issues more seriously and in more detail than it used to be the case.³⁹ It remains to be seen in which way, if at all, this will carry over to the upcoming 7th Review Conference in December 2011.

Several possible sources for the NAM’s insistence on Article X implementation are conceivable: First, in the post-Cold War world, in which the question of (non-)alignment has lost much of its relevance, this position has arguably become a constitutive element for the collective identity of the NAM (which is otherwise a very heterogeneous group); second, it serves as a proxy for more general political tensions between the WEOG (i.e. ‘the West’) and the NAM (i.e. ‘the Global South’ or some of its regions) in general and is also instrumentalised by some members of both groups to fight their specific political battles (this has been particularly visible between the US and Iran; cf. for the 6th review conference Khan 2007); third, it reflects an actual need for improved disease surveillance, prevention and control as well as for better access to medication and vaccines in many countries of the Global South. Economic interest in one of the most rapidly growing sectors of technology may also play a role. In addition to these more tangible motives, however, there are also competing notions about the basic functions of the regime and their appropriate consideration. Moreover, experiences with Western countries’ reluctance to comply with transfer obligations in other regimes such as the Convention on Biological Diversity (CBD) and limits

34 Cf. e.g. Brazil, 5th RevCon 2001; Iran, 5th RevCon 2001; Pakistan, 5th RevCon 2001.

35 Cf. e.g. India 4th RevCon, November 26th, 1996, para. 13; Iran, 4th RevCon, November 26th, 1996, p. 6; cf. also Kelle (1997: 20–21).

36 India, 4th RevCon 1996; Iran, 4th RevCon 1996, 5th RevCon 2001 and 6th RevCon 2006; on the potential negative consequences of export controls for economic development cf. also Brazil, 5th RevCon 2001; India, 4th RevCon 1996.

37 Cf. Iran, MSP 2008, December 1st, 2008: “Naturally, it [the CBM process, U.B.] should increase the confidence among States Parties and thus facilitate cooperation in the field of peaceful biological activities; otherwise the advantage of annually participating in such transparency measures might be put into question. [...] In contrast, achieving necessary standards in the fields of bio-safety and bio-security requires international cooperation and strengthening the implementation of Article X of the Convention. In this line, we would like to reiterate that bio-safety and bio-security should not serve as a pretext to hamper peaceful international cooperation enshrined in Article X of the Convention [...].”

38 BWC/MSP/2009/MX/WP.24 (25 August 2009).

39 Cf. e.g. the current US position in “Common Ground on the BWC: An Interview With U.S. Special Representative Laura Kennedy”, interviewed by Daniel Horner and Jonathan B. Tucker, Arms Control Today, June 2011, http://www.armscontrol.org/act/2011_06/Kennedy_ACT (last accessed 09.08.2011).

placed on biotechnology transfer by the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) (Dhar 2002) might have provided a basis for developing countries to generally mistrust ‘the West’.⁴⁰ Finally, the NAM position seems to be connected to a general notion of an entitlement to development and equal distribution, embodied here by a (more) just distribution of biotechnology and its products, that has in the developing countries’ perspective yet to be fulfilled in the regime.⁴¹ Hence, in addition to some interest-based motivations, elements of regime fairness, and more general notions of fair access to biotechnology, medication and vaccines as well as of a just distribution of biotechnological equipment and know-how figure in the discourses in this particular issue area.

3.3 The Conflict About Verification and Transparency

The complete lack of verification measures and the weak compliance mechanisms have posed problems for the biological weapons control regime from the beginning. The deficit became even more obvious in the early 1990s when several arms control and disarmament treaties were equipped with elaborate compliance and verification systems, e.g. the Chemical Weapons Convention (CWC) and the Comprehensive Test Ban Treaty (CTBT), and when several cases of violation of the BWC became known (cf. Wheelis et al. 2006).

From the outset, several smaller and non-aligned countries had voiced their concern about the fact that the only existing complaint mechanism for the BWC to be applied in cases of suspected treaty violations was through the UN Security Council (UNSC). They saw an unequal distribution of chances between the permanent UNSC members with their veto power (and their allies) and other, smaller and/or non-aligned states to lodge a complaint that would be followed up by a non-discriminatory investigation.⁴² This can hence be seen as an example for perceived procedural injustice; demands for a “non-discriminatory”, “objective” and “impartial” compliance procedure – and hence for equal treatment and equality before the law – marked the 1st and 2nd review conference and also the negotiations of the compliance protocol.⁴³

The push for improved compliance measures gathered momentum in particular after the end of the Cold War, with intensified suspicions about the Soviet Union’s non-compliance with the BWC (which were confirmed in 1992), and with revelations of offensive biological weapons programmes in South Africa, a treaty member, and Iraq, then a signatory (cf. Wheelis et al. 2006). In 1994, BWC members initiated negotiations for a legally binding compliance protocol in the so-called Ad Hoc Group (AHG), but these negotiations were protracted and hampered by various political differences, and they finally foundered on the US rejection of the draft protocol in July 2001 (cf. Littlewood 2005; Rissanen 2001b). A controversial last-minute proposal by the US regarding the future of the AHG threatened to derail the 5th Review Conference held later the same year and rendered the regime in a state of existential crisis (cf. Rissanen 2001a). The way in which the US

40 The author owes this point to Thilo Marauhn. On the possible implications of TRIPS and the CBD for the implementation of BWC Article X cf. Dhar (2002). The TRIPS agreement contains provisions for patenting and patent protection that explicitly cover biotechnology and microorganisms (Dhar 2002: 295–296), and Dhar claims that these limit the possibilities for technology transfer to developing countries (Dhar 2002: 398–399; 407). He also maintains that even the transfer obligation as contained in the CBD might be contravened by initiatives taken in the intellectual property rights protection regime (Dhar 2002: 406). For a different view on the connection between this regime and development cf. Shadlen (2007). For more recent developments in the nexus of both issue areas cf. May (2007).

41 The latter interpretation is supported e.g. by the following quote from the NAM Working Paper on a mechanism for the implementation of Article X: “The membership of the Convention is not homogenous in terms of the States’ Parties abilities. There are marked disparities that result from asymmetries in the development of the States Parties. The Article X of the Convention is the fundamental tool to overcome this situation” (BWC/MSP/2009/MX.WP.24, p. 2, para. 3, 25 August 2009).

42 Brazil, 4th RevCon 1996 and 5th RevCon 2001; Canada, 1st RevCon 1980, BWC/CONF.I/C/SR.3, pp. 4–5; Indonesia, 5th RevCon 2001; Iran 1st RevCon 1980, BWC/CONF.I/C/SR.3, p. 5; Pakistan, 1. ÜK 1980, BWC/CONF.I/C/ SR.3, 8; Sweden, 1st RevCon 1980, BWC/CONF.I/SR.3, pp. 7–9 and BWC/CONF.I/C/SR.3, p. 2, 2nd RevCon 1986, BWC/CONF.II/SR.7, p. 4.

43 Brazil, 5th RevCon 2001; India, 2nd RevCon 1986, BWC/CONF.II/SR.7, p. 12; Canada, 1st RevCon 1980, BWC/CONF.I/C/SR.3, pp. 4–5; Nigeria, 1st RevCon 1980, BWC/CONF.I/SR.7, p. 5; Sweden, 1st RevCon 1980, BWC/CONF.I/SR.3, pp. 7–9 and BWC/CONF.I/C/SR.3, p. 2.

presented its position and pursued its objectives angered many actors in the regime. Moreover, the uncompromising US posture of the time allowed several states to hide behind it and safely express their support for an approach that they had been reluctant to accept earlier. Verification subsequently became – and remains until today – a (rhetorical) priority for many political opponents of the US and the WEOG, including e.g. Russia, Cuba, Iran, India and Pakistan, while the other WEOG members who still supported legally binding verification measures kept a low profile in order not to alienate the US any further from the regime. The continuing calls for legally-binding verification measures are frequently connected with qualifiers such as “balanced” and “non-discriminatory”, which might point to the presence of notions of procedural justice; however, given the lack of concrete proposals and initiatives these phrases could also be merely rhetorical and “habitualised” (cf. Müller 2010a: 7).

In order to maintain some form of cooperation in the regime after 2001, several Western states supported and promoted a proposal to hold annual meetings mandated only to discuss certain topics which the Bush administration had previously identified as their new priorities (cf. Tucker 2004: 30). Many non-Western states were reluctant to accept what they saw as a detraction from the protocol approach and as yielding to US hegemonic policy, but they finally accepted the ‘new process’ after intense behind-the-scenes lobbying and diplomatic pressure.⁴⁴ Today, this process is considered as having been useful by many actors even in the NAM (Sims 2009: 46). Yet, its establishment was accompanied by a high degree of frustration at the highly intransparent decision-making process to which only a few states had access and at the presentation of the proposal as a “take it or leave it” package. Moreover, the fact that the destructive US posture determined the new direction of the regime while (from a NAM perspective) legitimate NAM concerns were not touched upon added to a feeling of injustice.⁴⁵

As the above analysis shows, this conflict is connected with two issue areas: first, the Article VI complaint procedure via the UN Security Council that grants unequal chances of success to BWC members and, second, the fate of the compliance protocol and the new intersessional process that were significantly shaped by only one state party. While they are both interlinked, they shed light on the different dimensions in which notions of justice can enter the play. The former issue is related to questions of procedural justice as embedded in the regime structure (as codified in Article VI); the latter also reflects the power structure of the international system (with the de facto dominance of the US) beyond the regime proper. The conflict thus appears as an amalgam of issues of procedural justice and equal treatment (as in demands for a non-discriminatory compliance system and for multilaterally negotiated measures), of broader political conflicts, and of discursive justice, namely frustration with the unequal distribution of discursive power in the regime (as demonstrated by the sole remaining superpower’s disproportionate discursive power in a regime that formally operates on the consensus principle). Criticism of the regime’s procedural injustice regarding compliance issues can be found in the positions of Western states, too, whereas the second conflict about compliance is mainly between WEOG (in particular the US) and NAM states and thus also contains a superordinate (external) political dimension.

44 Due to the nature of diplomatic intercourse, this situation is hardly reflected in official statements. See, however, the following comment in India’s statement to the 2003 Meeting of States Parties to the BWC, November 10th, 2003 (emphasis added): “Questions have been asked whether ‘promoting common understanding’ [as stipulated by the mandate for the meetings, UBJ] also implies ‘achieving common understanding’. [...] Terminology parsing of this nature reflects the fragility of the consensus, a fragility exposed in the interpretative statements made after the adoption of the Report last year.”

45 Cf. e.g. the statement of Brazil at the 2003 Meeting of States Parties to the BWC, November 10th, 2003: “Unfortunately, there has been selectiveness in the setting of the agenda for this follow-up mechanism, Brazil has nonetheless decided to participate actively in the meetings [...], in spite of its limited scope, with the understanding that no selective implementation of the BWC is viable, nor should it be allowed.”

4. Conclusions

The introductory conceptual consideration and the review of the existing secondary sources showed that a consideration of arms control and disarmament from a perspective of justice appears useful. The results of this exploratory empirical study support this impression. As regards the regime theoretical perspective, its application to the BWC regime revealed that even though at first glance the regime appears more just in its principles and norms than for instance the NPT regime due to its less discriminatory nature, there are nevertheless certain normative and procedural features that leave room for diverging interpretations and prioritisations, so that different notions of justice may come to bear and impact upon the dynamics of the regime.

The qualitative analysis of statements and the evolution history of the regime suggest that some notions of justice and fairness not tied to the specific BWC regime set-up impact upon the functioning of the regime, too. Claims to sharing the benefits of biotechnological advances, while they might also be rooted in material needs and interests, also appear as principled claims to development that are readily transferred to any new issue arising in the regime discourses. The particular nature of the technology in question, with its close connection with benign applications in disease control and health care, seem to make this generic claim all the more salient in the BWC regime. This is particularly true in a time in which the uncontrolled spread of infectious diseases is seen as one of the primary global health and biosecurity challenges. Finally, the de facto discursive hegemony of some actors over others, though not institutionalised, is an additional source of frictions in the regime.

In addition, this study points out some theoretical and methodological challenges as well as some remaining questions for future empirical research. First, it illuminated the difficulty of identifying possible notions of justice in cases where they are not uttered explicitly but where there is a well-founded expectation – derived from contextual knowledge or otherwise deduced – that they might play a role. Second, the research revealed that the delimitation of interests and notions of justice, which is difficult on a theoretical level anyway, may pose certain problems for empirical research, too.⁴⁶ Third, uncovering elements of discursive justice can pose a major challenge if – as in the case of the BWC regime – they are hardly reflected in official statements but rather have subliminal effects.

On a theoretical level, it will be necessary to deal even more intensely with the delimitation and the interplay of interests and notions of justice than has been done so far (Müller 2010b: 4-6). In addition to the qualitative content analysis, other methods such as interviews and observation/participant observation could be employed and their results triangulated in order to better cope with the challenges described above, and in order to put the theoretical discussion on a more solid empirical basis. Moreover, data could also be gathered on other aspects of the BWC regime or from thematically related areas and fora beyond arms control and disarmament (for the BWC, this could be the Confidence-Building Measures as well as data from the World Health Assembly or the Convention on Biodiversity and its Cartagena Protocol on Biosafety).

Finally, the results achieved so far suggest that it might be fruitful to put even more emphasis on actor-centred analyses. In the present study, notions of justice were more likely to be voiced openly by NAM members (in both conflicts under scrutiny) and by smaller states (in the conflict about compliance measures), whereas in the statements of the bigger (Western) and Eastern European states no such notions could be found. This corresponds to the results of other empirical studies about notions of justice in international relations (cf. Müller 2010a: 22-29; Müller 2010b: 10) and leads to the question to what extent notions of justice are specific to ‘their’ regimes, typical of certain classes of actors, or can be traced back to idiosyncratic (e.g. cultural or identity-based) characteristics of single actors. A more actor-specific approach in addition to a structural regime

⁴⁶ It is not relevant here whether justice-related arguments actually stem from genuine convictions or are employed rhetorically to pursue interests (cf. also Müller 2010b: 9).

and/or conflict analysis also promises an enhanced understanding of the origins of different conceptions of justice.

A comparison of the discourses in various regimes as it is being undertaken for the PRIF project “Transformations of Arms Control” could yield additional insights. Preliminary results of the project suggest that while there are some arguments that seem to be specific to certain regimes and/or actors, and while justice concerns appear to impact upon the regime dynamics to different extents, there might also be generic justice-related patterns of argumentation in the regimes to control weapons of mass destruction – for instance regarding the conflict about development, international cooperation and technology transfer – which differ from those in humanitarian arms control. In the latter, moral arguments play a greater role, while the problems of peaceful use and of dual-use goods simply do not exist. Moreover, in the BWC regime, fair and non-discriminatory procedures are a prominent issue whereas the NPT regime is dominated by the debate about the unequal (nuclear weapons) status of states parties as embedded in the regime (cf. Müller 2010c).

The research results so far suggest that adding notions of justice to the analysis of regime conflicts might contribute to an enhanced understanding of the dynamic and persistence of regime conflicts. It provides an advantage especially in a ‘hard-security’, allegedly ‘interest-driven’ field such as weapons of mass destruction, in that it helps understand even conflicts that appear closed off from mere balances of interests. Such an understanding allows formulating policy options that are based on a more complex view of conflict dynamics and that take into account the key actors’ notions of justice alongside of material interests and other normative orientations. While this is not to neglect the importance of political bargaining and balancing of interests, it adds a particular communicative and argumentative perspective (cf. e.g. Deitelhoff 2006; Müller 1994) that might allow the inclusion of appropriate policy options geared not only towards short-term reactive strategies but also towards long-term transformations in order to facilitate strengthening the international regimes to control weapons of mass destruction. Applying the framework of PRIF’s new research programme to arms control and disarmament, including by tackling the remaining challenges and open research questions listed above, thus holds the prospect of contributing to the theoretical, empirical-analytical and praxeological levels of “just peace governance”.

References

- Albin, Cecilia 2001: *Justice and Fairness in International Negotiation*, Cambridge: Cambridge University Press.
- Becker, Una/Müller, Harald/Seidler-Diekmann, Tabea 2008: Die Regime zur Kontrolle nuklearer, biologischer und chemischer Waffen, in: *Die Friedens-Warte*, Heft 2-3, 2008, 57-80.
- Becker, Una 2007: Light at the End of the Tunnel? The Sixth Review Conference of the Biological Weapons Convention, PRIF Reports No. 79, Frankfurt: PRIF.
- Boserup, Anders 1973: CBW and the Law of War. The Problem of Chemical and Biological Warfare. Volume III, Solna: SIPRI.
- Bull, Hedley 1965: *The Control of the Arms Race. Disarmament and Arms Control in the Missile Age*, New York: Frederick A. Praeger.
- Croft, Stuart 1996: *Strategies of Arms Control*, Manchester/New York: Manchester University Press.
- Dhar, Biswajit 2002: The Global Patent Regime: Implementing Article X, in: Wright, Susan (ed.): *Biological Warfare and Disarmament: New Problems/New Perspectives*, Lanham et al: Rowman&Littlefield, 391-412.
- Deitelhoff, Nicole 2006: Überzeugung in der Politik. Grundzüge einer Diskurstheorie internationalen Regierens, Frankfurt: Suhrkamp.
- Guthrie, Richard 2007: Rising Out of the Doldrums: report on the BWC Review Conference, in: *Disarmament Diplomacy* 84, 16-28.
- Hunger, Iris/Isla, Nicolas 2006: Confidence-Building Need Transparency: An Analysis of the BTWC’s Confidence-Building Measures, in: *Disarmament Forum* 3/2006, 27-36.
- Katzenstein, Peter J. (ed.) 1996: *The Culture of National Security. Norms and Identity in World Politics*, New York: Columbia University Press.
- Kelle, Alexander 2003: Strengthening the Effectiveness of the BTW Control Regime – Feasibility and Options, in: *Contemporary Security Policy* 24/2, 95-132.
- Kelle, Alexander 1997: Atombombe des kleinen Mannes? Die Bekämpfung der Weiterverbreitung von biologischen Waffen nach der Vierten Überprüfungskonferenz des Biowaffen-Übereinkommens, HSKF-Report 6/1997, Frankfurt a.M.

- Khan, Masood 2007: The 2006 BWC Review Conference: The President's Reflections, in: Disarmament Diplomacy 84, 13-16.
- Krasner, Stephen D. 1983: Structural Causes and Regime Consequences: Regimes as Intervening Variables, in: id. (ed.): International Regimes, Ithaca, NY, 1-21.
- Littlewood, Jez 2006: Investigating Allegations of CBW Use: Reviving the UN Secretary-General's Mechanism, Compliance Chronicles 3, Canadian Centre for Treaty Compliance, Ottawa
- Littlewood, Jez 2005: The Biological Weapons Convention: A Failed Revolution, Aldershot: Ashgate.
- May, Christopher 2007: The World Intellectual Property Organization and the Development Agenda, in: Global Governance 13:2, 161-170.
- Mayer, Peter 2006: Macht, Gerechtigkeit und internationale Kooperation. Eine regimeanalytische Untersuchung zur internationalen Rohstoffpolitik, Baden-Baden: Nomos.
- Müller, Harald 2010a: Justice in International Diplomacy, Paper prepared for the Workshop 'Unclenching Fists', Hamburg, 3.-5. Juni 2010.
- Müller, Harald 2010b: Justice and Peace: Good Things Do Not Always Go Together, PRIF Working Paper No. 6, Frankfurt a.M. (<http://www.hskf.de/fileadmin/downloads/Arbeitspapier0610.pdf>, letzter Zugriff 14.02.2011).
- Müller, Harald 2010c: Between Power and Justice: Current Problems and Perspectives of the NPT Regime, in: Strategic Analysis 34: 2, 189-201.
- Müller, Harald 2008: Wie kann eine neue Weltordnung aussehen? Wege in eine nachhaltige Politik, Frankfurt: Fischer.
- Müller, Harald/Schörnig, Niklas 2006: Rüstungsdynamik und Rüstungskontrolle. Eine exemplarische Einführung in die Internationalen Beziehungen, Baden-Baden: Nomos.
- Müller, Harald 1994: Internationale Beziehungen als kommunikatives Handeln. Zur Kritik der utilitaristischen Handlungstheorien, in: Zeitschrift für Internationale Beziehungen 1: 1, 15-44.
- Müller, Harald 1993: Die Chance der Kooperation. Regime in den internationalen Beziehungen, Darmstadt: Wissenschaftliche Buchgesellschaft.
- Müller, Harald 1989: Regimeanalyse und Sicherheitspolitik, in: Kohler-Koch, Beate (ed.): Regime in den internationalen Beziehungen, Baden-Baden: Nomos, 277-314.
- Price, Richard 1998: Reversing the Gun Sights: Transnational Civil Society Targets Land Mines, in: International Organization 52: 3, 613-644.
- Price, Richard 1997: The Chemical Weapons Taboo, Ithaca/London: Cornell University Press.
- Price, Richard/Tannenwald, Nina 1996: Norms and Deterrence: The Nuclear and Chemical Weapons Taboos, in: Katzenstein 1996, 114-152.
- Price, Richard 1995: A Genealogy of the Chemical Weapons Taboo, in: International Organization 49: 1, 73-103.
- Puchala, Donald J./Hopkins, Raymond F. 1983: International Regimes: Lessons From Inductive Analysis, in: International Organization 36: 2, 245-275.
- Rissanen, Jenni 2001a: Left in Limbo: Review Conference Suspended On Edge of Collapse, in: Disarmament Diplomacy 62 (<http://www.acronym.org.uk/dd/dd62/62bwapp.htm>, 15.06.09).
- Rissanen, Jenni 2001b: A Turning Point to Nowhere? BWC in Trouble as US Turns Its Back on Verification Protocol, in: Disarmament Diplomacy 59, 11-17.
- Schelling, Thomas C.; Halperin, Morton H. 1985²: Strategy and Arms Control, Washington u.a.: Pergamon Brassey's.
- Shadlen, Kenneth C. 2007: Intellectual Property, Trade, and Development: Can Foes Be Friends? in: Global Governance 13:2, 171-177.
- Sims, Nicholas A. 2009: The Future of Biological Disarmament: Strengthening the Treaty Ban on Weapons, Abingdon/New York.
- Sims, Nicholas A. 2006: Strengthening Structures for the Biological and Toxin Weapons Convention: Options for Remediying the Institutional Deficit, in: Disarmament Forum 3/2006, 17-26.
- Sims, Nicholas A. 1992: Biological and Toxin Weapons. The 1972 Convention and the Reinforcement of Its Disarmament Treaty Regime (DTR) Through the Review Conferences of 1980, 1986 and 1991, Vredesonderzoek 6/1992. Brüssel: De Vrije Universiteit.
- Tannenwald, Nina 2005: Stigmatizing the Bomb. Origins of the Nuclear Taboo, in: International Security 29:4, 5-49.
- Tannenwald, Nina 1999: The Nuclear Taboo: The United States and the Normative Basis of Nuclear Non-Use, in: International Organization 53: 3, 433-468.
- Tucker, Jonathan B. 2004: The BWC New Process: A Preliminary Assessment, in: The Nonproliferation Review 11:1, 26-39.
- US Department of State 2010: Adherence to and Compliance with Arms Control, Nonproliferation and Disarmament Agreements and Commitments. Washington, D.C. (<http://www.state.gov/documents/organization/145181.pdf>, letzter Zugriff 12.01.2011)
- US Department of State 2005: Adherence to and Compliance with Arms Control, Nonproliferation and Disarmament Agreements and Commitments. Washington: US Department of State.
- Ward, Kenneth 2004: The BWC Protocol – Mandate for Failure, in: The Nonproliferation Review 11:2, 1-17.
- Welch, David 1993: Justice and the Genesis of War, Cambridge.

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- Wheelis, Mark/Lajos Rósza/Malcolm Dando (eds.) 2006: Deadly Cultures: Biological Weapons Since 1945. Cambridge, MA: Harvard University Press.
- Wheelis, Mark/Dando, Malcolm 2003: Back to Bioweapons, in: Bulletin of the Atomic Scientists 59: 1, 40-46.
- Young, Oran R. 1989: The Politics of International Regime Formation. Managing Natural Resources and the Environment, in: International Organization 43:3, 349-376.
- Zaluar, Achilles/Monteleone-Neto, Roque 1997: The 1972 Biological Weapons Convention – A View From the South, in: International Review of the Red Cross 38: 318 (available at <http://www.icrc.org.proxy.ub.uni-frankfurt.de/web/eng/siteeng0.nsf/html/57JNPD>, 10.06.2009).
- Zanders, Jean-Pascal 2003: International Norms Against Chemical and Biological Warfare: An Ambiguous Legacy, in: Journal of Conflict & Security Law 8/2, 391-410.
- Zürn, Michael 1987: Gerechte internationale Regime. Bedingungen und Restriktionen der Entstehung nicht-hegemonialer internationaler Regime untersucht am Beispiel der Weltkommunikationsordnung, Frankfurt: Haag+Herchen.

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