The nuclear taboo, *Battlestar Galactica*, and the real world: Illustrations from a science-fiction universe

Marco Fey/Annika E Poppe/Carsten Rauch

Abstract

The nuclear age has been characterized by an emerging and now well-established norm of nuclear non-use, the 'nuclear taboo'. In the realistic and naturalistic setting of the science-fiction TV series *Battlestar Galactica*, however, nuclear weapons are used frequently and at times massively. Claiming that science fiction can function as an illuminating 'mirror' for international relations scholarship and that we can learn something from 'second-order' (fictional) worlds, this article explores potential in-show reasons that render the absence of a nuclear taboo plausible within the universe of *Battlestar Galactica*. We turn to the central pillars of the nuclear taboo in the real world and find them reversed in the show: nuclear weapons are (depicted as) 'clean', international institutions are absent, and the enemy is socially constructed as a 'radical other', thus rendering the possibility, if not likelihood, of nuclear war plausible. With these insights, we return to our world and argue that, particularly during the years of the George W Bush presidency, the erosion tendencies of the nuclear taboo were indeed quite serious: technological progress and growing political inclination expedited plans to develop usable nuclear weapons, arms control regimes came under considerable strain, and opponents were portrayed as 'unjust enemies' or 'rogues'.

Keywords

Battlestar Galactica, international security, norms in international relations, nuclear taboo, nuclear weapons, popular culture

Introduction[1]

Popular culture and international relations have become regular acquaintances. For years now there have been panels at International Studies Association (ISA) Annual Conventions and other conferences covering a wide range of pop-cultural phenomena, ranging from *The Lord of the Rings* to *Star Trek* to *The Simpsons*. Whole books have been devoted to the relevance of zombies and Harry Potter,[2] and even major publishers have not shied away from explorations of the interplay between these two disciplines.[3] Articles are published in renowned journals,[4] and academic blogs such as *Duck of Minerva* prominently link popular culture to world politics on a regular basis.[5] **[p. 349]** Steve Saideman (2012) even wonders whether academics live in a 'golden age of pop culture'. As these publications demonstrate, popular culture can influence the real world; it can serve as a tool for theorizing about international relations; it can be mined for empirical data, for example in dis- course analyses; and it is a well-suited tool for active teaching and learning approaches in the classroom (Dixit, 2012: 290).[6] Consequently, the case has been made that international relations scholars' engagement with popular culture is fruitful and even necessary.

The re-imagined version of the television series *Battlestar Galactica* is built around a world that resembles ours more closely than most other science fiction productions. This feature makes the series highly suitable for scholarly analysis. Indeed, the show has transcended the closed circle of its fan community. Controversies about the show's presentation of torture, detainee policy, occupa- tion practices, civil–military relations, and religion stimulated discussions within the military establishment, human rights groups, and even the United Nations (Kiersey and Neumann, 2013b: 1). *Battlestar Galactica* has arrived in the world of academia too, including in the field of international relations.[7] Given the realistic setting of *Battlestar Galactica*, however, one feature of the series is puzzling: nuclear weapons are used frequently and at times massively. In fact, they carry the plot of the series, which begins with a nuclear holocaust and in which a second nuclear holocaust her- alds the show's ending. Claiming that science fiction, and *Battlestar Galactica* in particular, can function as a 'mirror' for exploring a specific real-world phenomenon, we set out in this article to inquire into the in-show reasons that render plausible the massive use of nuclear weapons within the universe of *Battlestar Galactica*. We start by identifying the central pillars that, in our world, once facilitated the emergence of and now sustain what Nina Tannenwald (1999, 2007) has called the 'nuclear taboo'. We then show how the absence of these pillars in the show turns the logic behind the nuclear taboo upside down, rendering the possibility, if not likelihood, of nuclear war plausible: nuclear weapons are (depicted as) 'clean', international institutions are absent, and the enemy is socially constructed as a 'radical other'. Returning to the real world and looking at the recent past, we find that the nuclear taboo was put under even heavier pressure than generally per- ceived, particularly during the eight years of the George W Bush presidency. With its advocacy of developing 'clean' nuclear weapons, its unilateral and arms control-hostile policy, and its penchant for Manichean rhetoric, the Bush administration facilitated the very same developments that give credibility to the extensive use of nuclear weapons in *Battlestar Galactica*.

The outline of this article is as follows. We first establish whether science fiction contributes in any way to international relations scholarship and distinguish our approach from existing ones. We then briefly introduce the reader to *Battlestar Galactica* and take a closer look at the elements con- stituting its puzzling contradiction: on the one hand, *Battlestar Galactica*'s explicit claim to being 'naturalistic science fiction' and, on the other, the significant use of nuclear weapons throughout the series. Asking which of the central pillars of our world's nuclear taboo are different in the series' universe, the third part shows that

the complete lack of nuclear restraint in *Battlestar Galactica* is consistent with the reversed logic of the real-world nuclear taboo. Prior to concluding, we return to the real world and argue that many policies of the Bush administration echo the taboo-damaging phenomena that we have uncovered in the series. Our analysis of the fictional universe of *Battlestar Galactica* thus raises awareness of the contingent nature of the real-world nuclear taboo.

(Science) fiction and international relations: A promising match

International relations scholars for some time now have found it fruitful to draw upon pop culture – fictional, fantasy and science fiction accounts in particular – for their analyses. The underlying premise is that there is an 'intertext' (Weldes, 2003), meaning that there are 'socially constitutive energies' between the 'first-order' (or the 'real') world and 'second-order' worlds (Kiersey and Neumann, 2013b: 1) worth exploring for international relations. Science fiction is a particularly **[350]** interesting field for international relations scholars because it depicts a second-order world that is, from the audience's perspective, a plausible extrapolation of the real world into a technologi- cally more advanced future.[8] The potential connections between the two worlds of science fiction and international relations, however, need theorization. Three broad approaches – helping us to conceptualize different, but not mutually exclusive, forms of engagement – can be identified, differing with regard to the assumed link between (science) fiction and the real world, the aim, and the object of analysis.[9]

The first approach starts from the premise that science fiction can shape the real world. The aim of the researcher is to assess the direct or indirect impact on those exposed to the cultural artifact; the object of analysis is thus the audience, ranging from specific political decision-makers to the general population. For example, films or books can 'make certain topics more salient' (Fischer, 1997: 119). Cases in point are President Reagan, who in 1983, after watching ABC's *The Day After*, noted in his diary that the film had left him 'greatly depressed' and that 'we have to do all we can [. . .] to see there is never a nuclear war' (Reagan, 1990: 585),[10] and Egyptian protesters who, during the 2011 revolution, repeatedly included *Battlestar Galactica* in their political discussions, such as on the role the military should play during the revolution (Carpenter et al., 2013; Kiersey and Neumann, 2013b: 4–5). Indeed, a panel at the 2015 ISA Annual Conference on '*Game Of Thrones* And World Politics: Empirical Investigations', convened by Charli Carpenter and Dan Drezner, launched a new research agenda that focuses 'specifically on empirical investigations of the circulation of pop culture ideas in "real-world" foreign policy / global processes.'[11]

The second and to date most prominent approach is of a reflectionist nature. Rather than the audience's reception, the actual text, its meaning, and the author's motives are of concern to the scholar. Science fiction here is often, but not necessarily, employed in emancipatory efforts to change social norms and relations. Scholars want to understand how science fiction produces com- mon sense and how it thereby either helps to create and sustain social orders ('normalization') or challenges taken-for-granted concepts by providing alternative scenarios and meanings ('invariance- bursting') (Kiersey and Neumann, 2013b: 5; see also Weldes, 2003: 6; Dixit, 2012: 290–292). An example of normalization is *Star Trek*'s universe which resembles and thus reifies a Westphalian international system (Buzan, 2010: 176). The first interracial kiss on television between Captain Kirk and Lt Ohura in 1968 (Bramlett-Solomon, 2007: 87) or the smirking but strong critique of capitalism in the portrayal of the 'ultra-mercantile Ferengi [. . .] with a measure of contempt'

(Buzan, 2010: 177) in the very same universe are instances of invariance-bursting. Authors as well as scholars, therefore, can use science fiction worlds to actively engage in critiquing 'mainstream representations' (Dixit, 2012: 290), 'challenge the status quo' and 'the boundaries of common sense' (Weldes, 2003: 6–7), or, through dystopias, 'criticize the trends of contemporary politics' (Weldes, 2003: 10).[12]

A third promising point of departure for international relations scholars – and the one we pursue in this article – is to use science fiction worlds to illustrate real world phenomena, thus following a direction that Nexon and Neumann (2006: 10–13) have called the 'mirror approach'. Whereas the mirror approach also encompasses 'pedagogical' aspects, we focus here on the 'analogical' use of artifacts (Nexon and Neumann, 2006: 12): 'IR scholars can examine popular culture as a medium for exploring theoretical concepts, dilemmas of foreign policy, and the like.' 'Second-order' worlds, following this approach, 'can force us to reflect on our theoretical and pedagogical assump- tions' (Nexon and Neumann, 2006: 12). Fictional worlds thus allow us to change a few parameters, trace the repercussions of such changes, and emphasize how contingent taken-for-granted concepts in our world really are (Farrell, 2012; Kiersey and Neumann, 2013b: 1; Weldes, 2003: 6). While the immediate object of analysis is the text, the idea here is that we can use the analysis of a 'sec- ond-order' world in order to illustrate real-world phenomena. Not every science fiction production is suited to such an approach. The given universe needs to be carefully designed; only a cognitively **[351]** coherent storyline in which few parameters differ from the world that we know allows for making reasonable claims. The closer the 'second-order' world is to ours, the more powerful is an analysis based on it. With the *Battlestar Galactica* universe we have a particularly suitable pop-cultural rendition for this approach (see also Dyson, 2015: 6).

In this article, we are interested in the real-world phenomenon of the nuclear taboo and its non- existence in the otherwise very similar universe of *Battlestar Galactica*. In our *Battlestar Galactica* 'mirror', we know the repercussion – the massive use of nuclear weapons – and look for the parame- ters changed in the mirror as compared to the real world. We suggest that pursuing the in-show reasons for the absence of a nuclear taboo in *Battlestar Galactica* is a fruitful exercise that provides us with illustrative material on the factors underpinning or weakening the strong norm of nuclear non-use.

Battlestar Galactica as naturalistic science-fiction and the puzzling use of nuclear weapons

Battlestar Galactica is a science-fiction franchise originally created by Glen A Larson at the end of the 1970s. In this article, we are concerned with the re-imagined version developed by Ronald D Moore and produced by Moore and David Eick. It first aired in 2003 on the cable television channel Sci-Fi, beginning with a two-part mini-series. Between 2004 and 2009 it aired as a widely watched weekly series, which ran for four seasons and received extensive critical acclaim and many awards.[13]

The story centers on a fleet carrying the remnants of human civilization ('Colonials') in a distant galaxy. Humanity is on the run from a cybernetic enemy of its own creation, the 'Cylons', who have launched a sudden and devastating nuclear first strike against the Colonial homeworlds, the Twelve Colonies. The Colonial fleet consists of the few survivors on board a couple of civilian space vessels and what appears to be the only remaining capital military ship, the 'Battlestar Galactica'. Under Commander William Adama, the military leader, and President Laura Roslin, the head of the civil- ian government,[14] the Galactica leads the small

fleet into space in search of a fabled refuge known as Earth, while being pursued and constantly attacked by superior Cylon military forces.

The series has, however, less in common with its science-fictional genre fellows than one might assume from the storyline at first glance. Ronald Moore (as cited in Hodgman, 2005) describes *Battlestar Galactica*'s setup as follows:

> We take as a given the idea that the traditional space opera, with its stock characters, techno-double-talk, bumpy-headed aliens, thespian histrionics and empty heroics has run its course, and a new approach is required [. . .] Call it 'naturalistic science fiction'.[15]

Naturalistic science fiction moves the genre away from the topic of adventure tales and steers it towards the genre of drama. It foregoes one-dimensional portrayals of heroes and foes, simple ideas of good and evil, as well as futuristic 'technobabble' and '*deus ex machina*' mechanisms. Dan Martin (2007) notes: 'In making the humans look, talk, shag, smoke and govern themselves so closely to how we do ourselves the show went way beyond sci-fi.'

The element of naturalistic science fiction in *Battlestar Galactica* extends to the spheres of technology as well as society. As to the first, Colonial technology is modestly realistic with the exception of an advanced level of artificial intelligence and space travel (Ryman, 2010: 37–40). There are, for example, no food replicators and when the fleet runs out of drinking water, it is forced to search for a planet that provides a new supply. Instead of using beaming technology, people need to use shuttles to move between planets and ships. Communication technology stays firmly analog. Instead of futuristic weapons such as phasers or light sabers, there are ordinary guns and bullets, and instead of photon torpedoes there are nuclear warheads. Also in contrast with other **[352]** science fiction series, the universe appears almost empty, with the odds of meeting other intelligent species practically non-existent (Rawle, 2010: 130).

As to the second sphere, *Battlestar Galactica* is explicitly meant to be 'an allegory for our own society, our own people and it should be immediately recognizable to any member of the audience' (Moore, 2003).[16] Indeed, the series tackles current real-world issues, including civil–military rela- tions, political decision-making, governmental succession in the case of emergency, election cam- paigns and fraud, terrorism, legitimacy of torture and general civil liberties crackdowns, and the role of religion. The allegorical character of the show is particularly strong with regard to the post-9/11 world, the 'global war on terror', and the occupation of Iraq (see e.g. Leaver, 2008).[17]

It is thus striking that one of the most important features of real-world international politics is missing: the strong norm of nuclear non-use, the nuclear taboo. Indeed, nuclear weapons are a recurrent theme in *Battlestar Galactica*, and the creators of the show frequently employ nuclear weapons to advance the plot. The story begins with a nuclear holocaust: a massive Cylon nuclear first strike devastates the planets of the Twelve Colonies, killing up to 50 billion people and destroying almost the complete colonial military. This is, to our knowledge, the largest nuclear strike ever depicted in popular culture. During the initial attack, Caprica City, the capital of the Twelve Colonies, is hit by a 'thermonuclear device in the 50 Megaton range', Adama informs his crew in the series' pilot. The warhead is thus within the range of the most powerful nuclear device that has ever been detonated or constructed in our world, the 1961 Soviet 'Tsar Bomb'.[18]

Thereafter, nuclear weapons play a role in at least 20 more episodes as well as in the two *Battlestar Galactica* television films (*Razor* and *The Plan*) and the prequel *Blood & Chrome*. Logics of nuclear use include 'counterforce' (e.g. in episode S01E13)[19] and 'countervalue'

attacks (e.g. S02E11), terrorism (e.g. S02E20), coercion (e.g. S03E11), proliferation (e.g. S02E13), and peaceful use (e.g. S01E03). At times, the Colonials as well as the Cylons discard their plans of using nuclear weapons, but they do so for purely instrumentalist reasons, such as the fear of dam- aging precious resources or radiological detection (e.g. S01E10). With the exception of one inci- dent, in which a Colonial officer refuses to release a biological weapon that is supposed to eliminate the entire Cylon race (S03E07), there are no moral qualms at all with respect to the use of weapons of mass destruction (WMD). We also learn in the middle of the fourth season that nuclear war extends far beyond the civilization we come to sympathize with in the show; nuclear war had already erased another civilization, the inhabitants of a fabled Earth (S04E11). Following the cycli- cal nature of historical progression in *Battlestar Galactica* – 'all of this has happened before, and all of it will happen again', as the Cylons constantly remind us – the nuclear (almost-)annihilation of humanity seems to be a constant in the universe.

The use of nuclear weapons indicates the absence of a nuclear taboo and is thus a puzzling dif- ference from the real world in the otherwise very similar conception of the *Battlestar Galactica* universe. In the following sections we will explore the parallels, or indeed the lack thereof, between nuclear weapons as they exist and are used in the show and the nuclear taboo as it exists in the real world. As we will show, the absence of a nuclear taboo in the *Battlestar Galactica* universe is ren- dered plausible by the non-existence of the pillars that were crucial for the emergence and continu- ance of the taboo in the real world.

The nuclear taboo and its absence in *Battlestar Galactica*: 'Clean' nuclear weapons, lack of international institutions, and 'radical others'

Scholars consider the non-use of nuclear weapons after World War II to be 'the single most impor- tant phenomenon of the nuclear age' (Tannenwald, 2007: 1). More than 70 years have passed since **[353]** two B-29 bombers dropped *Little Boy* and *Fat Man* over Hiroshima and Nagasaki. Although more countries have acquired nuclear weapons, not a single nuclear weapon has exploded since (other than for the purpose of weapons testing). A whole body of literature deals with this phenomenon and a wide range of explanations are given, including the lack of military utility on the battlefield (Mueller, 2010: 14f), the tradition of non-use (Sagan, 2004; Paul, 2010), and – most prominently – deterrence (e.g. Brodie, 1959).

Recent constructivist accounts of non-use have convincingly pointed out flaws in such rational- ist explanations (Tannenwald, 1999, 2007; Wilson, 2008; Sauer 2015: 8–71). To explain the phenom- enon of non-use, constructivists argue, one has to take into account ideational factors. Tannenwald claims that, rather than rationalist cost–benefit calculations, it is extraordinary strong norms of non-use that explain nuclear restraint. The 'nuclear taboo' denotes a strong normative and absolute belief, collectively held by the international community, in the inappropriateness of the use of nuclear weapons (Tannenwald, 1999, 2007; Rosert and Schirmbeck, 2007).[20] It can be argued that the nuclear taboo is built on three pillars: (1) the properties of the weapon itself, namely the horrendous effects of nuclear weapons; (2) the properties of the system's structure, namely the presence of international institutions; and (3) the properties of the actors in play, namely the notion that we, as human beings, feel some degree of empathy towards all other human beings, even our worst enemies. In the following paragraphs, we show that indeed all of these three pillars are turned upside down in the *Battlestar Galactica* universe, rendering plausible the

non-emergence of a nuclear taboo and the occurrence of nuclear war: nuclear weapons are (depicted as) 'clean', there are no international institutions, and the opponents portray each other as 'radical others'.

'Clean' nuclear weapons: Taking the horror out of the bomb

The first pillar of the taboo rests on the understanding that nuclear devices are weapons of a particular quality because of their horrendous effects (Tannenwald, 2007: 113). When a nuclear weapon is detonated, huge amounts of energy are released in three different forms: about half of the energy of the bomb is expressed in an intense shock wave; around a third of the energy is spent as intense heat; finally, approximately 15 per cent of the energy accounts for radioactivity in the form of prompt radiation during the explosion as well as delayed radiation known as 'fallout' (Koplow, 2010: 107). While the blast as well as the heat wave and the ensuing fires should be suf- ficient to label the effects of a nuclear weapon as horrendous, the mid- and long-term effects of radioactive fallout on the human body is what most people consider to be the most gruesome aspect of these weapons.[21] Early on in our nuclear history, an analogy emerged between radiation and poison gas: the bomb has been discursively linked to terrible and inhumane means of warfare, chemical and biological weapons, thereby classifying it as an unconventional weapon of mass destruction (Tannenwald, 2007: 95–105). Thus, 'radiation effects ultimately became central to the widespread understanding of nuclear weapons as uniquely terrible and have likely contributed to the formation of a nuclear "taboo"' (Malloy, 2012: 518).

In *Battlestar Galactica*, however, as far as the viewer is concerned, nuclear weapons seem sim- ply to be 'bigger bombs' and thus of no different quality than conventional explosives. The blast of a nuclear bomb's explosion is portrayed as tremendous and is depicted spectacularly in the destruc- tion of Dr. Baltar's lake house – a scene that viewers are constantly reminded of in the show's opening credits. We also witness multiple mushroom clouds piling up over the Twelve Colonies, learn that up to 50 billion die during the nuclear attacks – accounts vary – and that humankind has been reduced to only about 50,000 survivors. Patrick Di Justo and Kevin Grazier (2011: 132) have found evidence for a firestorm on the planet Aerilon after the nuclear attacks, and the television film *The Plan* devotes longer sequences to showing the destruction that blast and fire have caused, **[354]** among them charred bodies and complete cities in ruin. The first two consequences of nuclear explosions are thus dramatically visualized in the series.

But in contrast to countless pop-cultural productions since nuclear weapons were created,[22] viewers are curiously never exposed to the horrendous effects that radiation brings.[23] Survivors of the nuclear holocaust, for example, arrive at a rescue ship with surface wounds such as cuts and bruises from flying debris, but at no point do we learn that any of them have or develop typical symptoms such as 'nausea, vomiting, malaise, diarrhea, epilation (loss of hair), fever, and hemor- rhaging' (Malloy, 2012: 521).[24] Neither does Caprica's environmental system seem much affected by the massive nuclear detonations – be it contamination by fallout or nuclear winter.[25] While watching the Cylons time and again operating on the planet, we learn that they are rebuilding a city and planting gardens, and the depictions presented are completely devoid of reminders that a nuclear holocaust has taken place a few weeks earlier (S02E18).

As the series progresses, we learn that radiation does play a role as a threat to human beings – although one that can fairly easily be warded off by passive defensive measures. Radiation shields on the Galactica, for example, ensure protection for the crew if a nuclear bomb hits the ship.[26] Anti-radiation medication is part of a pilot's medical kit and a

character left behind on Caprica regularly injects himself with it, allowing him to roam the radiated planet without further compli- cations (S01E01 and S01E13). We also learn that survivors raid supply depots for anti-radiation medication (S02E04). While the dependence on such medication is certainly not pleasant, neither does the show portray it as a particular problem.

The overall impression that the *Battlestar Galactica* audience is left with in relation to nuclear weapons is that they are fairly 'clean', causing massive and immediate death and destruction but sparing the survivors the gruesome experience of radiation sickness.

Lack of international institutions and an international community

The taboo's second pillar concerns the properties of the system's structure. Tannenwald (2004, 2007: 56) emphasizes the crucial role of the international community and its institutions in facili- tating the nuclear taboo's emergence. Our world is characterized by an international system with almost 200 sovereign actors who have indeed installed a multitude of intergovernmental treaties, regimes, and organizations, and who are engaged in constant discourse about governance struc- tures. The use of two types of WMD, biological and chemical weapons, is explicitly prohibited. While the use of nuclear weapons is not explicitly prohibited by an international treaty, there is a tight web of international discourses, norms, court opinions, treaties, regimes, organizations, and state practice – the United Nations[27] and the Nuclear Non-Proliferation Treaty (NPT)[28] of 1970 at its very center – that contribute to the nuclear taboo.

The crucial point is that the proliferation, possession, and (to a certain degree) use of nuclear weapons have been condemned and rendered illegal by the *international* community (Tannenwald,1999: 436–437), thus 'enhance[ing] the normative presumption against nuclear use' (Tannenwald,2007: 57) and underlining the nuclear taboo. International arms control commitments played an important role as well. Jozef Goldblat (2002: 3) includes in his definition of arms control, among others, measures that aim to reduce the risk of accidental war and build up confidence among actors. Antagonistic relations do not preclude arms control from taking place. In fact, many arms control agreements decidedly served the purpose of easing the tensions between antagonists, for example several treaties and measures were drawn up between the Soviet Union and the United States during the Cold War and between India and Pakistan after both had acquired nuclear weapons.

In *Battlestar Galactica* there is no international (or rather inter*planetary*) community. Once, the Twelve Colonies of Kobol indeed formed sovereign worlds. The descendants of Kobol, the **[355]** ancestral homeworld where humanity presumably evolved, lived separately and were frequently at war with each other for 2,000 years.[29] Between 58 and 52 BCH (*Before Cylon Holocaust*, the calendar unit used in the *Battlestar Galactica* historiography), the first Cylons of the Twelve Colonies were created. They were supposed to serve on the battlefields and help with daily routines. But in 52 BCH they revolted. When the Colonies faced this common enemy, they united by signing the Articles of Colonization, becoming *one* federal republic.

From that point onward the international system of the *Battlestar Galactica* universe consisted of only two parties: The Colonials and the Cylons. There were no institutions, let alone arms con- trol agreements, between them. We do, however, learn about one potential exception to the lack of institutions – albeit one that failed early on. After an armistice, the Cimtar Peace Accord, had ended the First Cylon War in 40 BCH, the Cylons left for a world of their own. In the very first scenes of the series' pilot, we learn that a remote space station was built where Colonials and Cylons were supposed to meet annually in order to maintain

diplomatic relations. Following Goldblat's defini- tion, the Armistice Station, then, had the potential to be an important exception from the observa- tion that there is no arms control in the *Battlestar Galactica* universe. It could have functioned as both a confidence-building measure and a measure to reduce the risk of accidental war. But while the Colonials sent one officer each year, the Cylons sent no one. Had the annual meetings taken place, the enemies could have started a diplomatic process. Less antagonistic relations – maybe eventually even a peace accord – could have resulted from this. But since the Cylons never showed up for the annual meetings, there was no chance for such positive developments to take place. There was no talking, no diplomacy, and hence no institution-building.

Of slaveholders and 'frakking toasters': Constructing radical others

The third pillar is a certain degree of empathy for others. Tannenwald (2007: 58–59) identifies the 'moral intuition that it is wrong to kill non-combatants, or more generally, the innocent' as belong- ing to the core of the nuclear taboo: neither friend nor foe should be subject to inhumane suffering. Only if we recognize that the ones who might be exposed to nuclear attack are worth being pro- tected from its horrendous effects, will we engage in institutionalizing and honoring strong norms of non-use. Empathy is a necessary condition without which the other two factors cannot take full effect. It can, however, be disabled by processes that construct enemies as radical others.

'Othering', or the construction of an enemy as an essentially other being, as 'beyond the pale' and 'evil', is a common mechanism and has been dealt with extensively in the literature (e.g. Neumann, 1996; Abdel-Nour, 2004; Geis, 2006; Bukh, 2009). The destruction of the radical other is considered not only prudent but also morally imperative: mere defeat is not enough as an evil enemy is 'an irrational, uncontrollable and highly destructive actor or force that can only be defeated by elimination' (Geis and Wunderlich, 2014: 466). Wars against evil are seen as 'just wars' by those who conduct them and all means can be used to destroy an evil enemy.[30] Consequently, nuclear weapons are deployable. Effective othering became, for example, vividly manifest in the portrayal of the Japanese people during World War II. Some have argued that effective and far- reaching dehumanization of the Japanese people by both the US government and by the media facilitated the decision to use the atomic bombs on Japan.[31]

In the universe of *Battlestar Galactica*, othering is a strong mechanism at play; both sides por- tray each other as radically different and, indeed, 'evil' (Wilcox, 2013: 79; cf. Bohland, 2013: 104). The Cylons consider humanity a race of degenerate slaveholders. Originally, Cylons were intro- duced into Colonial society not only as convenient and effective soldiers on the battlefields, but also as workers, nurses, gardeners, butlers, or servants. Only shortly after their creation, the machines developed self-awareness and became sentient. Feeling that their own existence resembled a race **[356]** of slaves, they rebelled against their masters and decided to kill them.[32] In *Caprica*, a spin-off prequel that takes place about 58 BCH, we learn that the abolitionist motive was pivotal for the rebellion. In the finale of *Caprica*, we see a human cleric preach to a congregation of Cylons:

> Are you alive? The simple answer might be: you are alive because you can ask that question. You have the right to think and feel and yearn to be more, because you are not just humanity's children, you are God's children. We are all God's children. [. . .] In the real world, you have bodies made of metal and plastic, your brains are encoded on wafers of silicon, but that may change. In fact, there is no limit on what you may become. No longer servants, but equals. Not slaves, or property, but living beings with the same rights as those who made you.[33]

While the Cylons refer to themselves as 'humanity's children' and in fact try 'to recreate them-selves in the image of man' (Kiersey and Neumann, 2013b: 3), they believe that their creators are seriously flawed. One of the Cylons explains that 'parents have to die. It's the only way children will come into their own'[34] (Wilcox, 2013: 85). Their initial rebellion and later the Second Cylon War have the purpose of eradicating the entire human race.

The Colonials on their part, initially, cannot see any shred of humanity in their creation's being. The Cylons are socially constructed as unfeeling machines that merely follow their software pro-gramming – and thus as a radical other. The series' characters 'were immediately gripped with an us-and-them mentality, the ragtag fleet of human beings fighting their mechanical enemies' (Leaver, 2008: 133), who are constantly and derogatorily called 'frakking toasters'. The Colonials are used to referring even to humanoid Cylons as 'it' or 'that thing' and repeatedly dismiss the Cylons' claim that they have feelings.[35] Karl 'Helo' Agathon denies the conceivability of the Cylon Athena's love for him when telling her 'You have software' (S01E13); President Roslin ridicules Athena's feelings by maintaining 'She *thinks* she's in love' (S02E06); and Kara 'Starbuck' Thrace, upon being told of Athena's pregnancy, exclaims 'You can't have a baby with a machine'[36] (Moore, 2008: 105; Wilcox, 2013: 82–83). Moreover, the Cylons represent an unrelenting enemy who, initially, has no interest whatsoever in accommodation with the Colonies or in establishing ground rules for a peaceful co-existence. They do not honor the armistice agreement that ended the First Cylon War, and when they finally return after 40 years, they immediately attack on a massive scale, intent on eradicating human-ity and unwilling to negotiate,[37] even after President Adar offers to surrender unconditionally.

From the human perspective, then, the Cylons are evil and fall 'beyond the pale',[38] and all means of warfare are considered legitimate. This includes employing nuclear weapons, consider-ing genocide by exposing the Cylons to a fatal virus, and using torture and rape as a means of breaking a prisoner's will, gathering information, and revenge. When, for example, Starbuck inter-rogates the Cylon Leoben, she repeatedly refers to him as 'just a machine' and severely tortures him (Leaver, 2008: 134). A Number Six model who is a prisoner on the Battlestar Pegasus is tor-tured and raped but, as one of the perpetrators casually explains, 'You can't rape a machine'.[39] Other Cylons are instantly killed ('airlocked') once they are captured instead of being kept as prisoners of war.[40]

Of course, by the time many of these scenes happen, the dichotomy between human beings struggling for survival and inhuman machines hell-bent on genocide has already begun to unravel, and not only the audience but also many characters in *Battlestar Galactica* have begun to under-stand that the Cylons have, indeed, a subjectivity and conscience, and are beings deserving of the same treatment as humans. As the show progresses, inhumane acts – as well as humane acts – are committed on both sides, and strongly embedded images of the other fall apart. How little 'real' differences matter and how much of the enmity is indeed socially constructed is brought into sharp relief when, at the end of the series, the remaining Colonials and part of the Cylon population settle together on an uninhabited planet and become *one* civilization. **[357]** So far, we have argued that the non-emergence of a nuclear taboo in the *Battlestar Galactica* universe is consistent with the theoretical underpinnings of the taboo literature.[41] The three pillars on which the taboo rests in our world are turned upside down in the series. First, horrendous effects of nuclear weapons, crucial for the emergence of the taboo in our world, are, if present at all, significantly mitigated in *Battlestar Galactica*. Second, in our international system, a tight web of discourses, regimes, and institutions facilitated the emergence of strong norms against the use of nuclear weapons. The *Battlestar Galactica* universe does not know such institutions,

and no functioning arms control measures are in place. Third, even if the universe of *Battlestar Galactica* had known the horror of radiation effects and the terrible suffering it causes, and even if strong discourses and norms against the use of such weapons had existed, the fact that both actors, Cylons and Colonials, socially construct each other as a 'radical other' renders possible – and even calls for – the goal of destroying the enemy with no means precluded.[42] In the following and final section of this article, we take the insights from our excursion into the universe of *Battlestar Galactica* and return with them to the real world in order to illustrate the condition that our own nuclear taboo is in.

The real-world nuclear taboo in danger?

It may be no coincidence that we can observe such a 'taboo-hostile' environment in a pop- cultural production that was developed during the first years of George W Bush's presidency. From 2001 onwards, the US administration implemented a policy that damaged the three pillars of the nuclear taboo and resembled developments that we have uncovered in *Battlestar Galactica*. With regard to the first pillar, under the Bush presidency we witnessed clear tenden- cies in the direction of developing 'cleaner' nuclear weapons. Many senior administration offi- cials advocated the development of a new generation of warheads, including a Robust Nuclear Earth Penetrator (RNEP), sometimes called 'bunker buster', which was supposed to detonate only far below the surface, thereby unleashing its energy on deeply buried targets and destroy- ing them. Another warhead debated was the 'mini-nuke' with yields of only a few kilotons. The idea behind these warheads was, inter alia, to increase precision and reduce the amount of radioactive fallout, thereby making them 'cleaner' and reducing collateral damage when used close to populated areas (Koplow, 2010: 104–131). Tannenwald (2007: 383) sees this as an 'especially damaging development' as the new warhead types blurred the line between conven- tional and nuclear weapons. Elvira Rosert and Sonja Schirmbeck even go one step further and rate the debate about mini-nukes and the RNEP as a 'clear breaking of the taboo'; not only did it obscure the distinction between conventional and nuclear weapons, but, even more impor- tantly, via 'discursive differentiating' it facilitated the drawing of a new line between 'old' and 'new' nuclear weapons – with only the former being subject to the taboo (Rosert and Schirmbeck, 2007: 272, authors' translation).

In relation to the second mechanism, the Bush years marked a clear departure from a decades- old majority consensus among US foreign policy elites that arms control is worthwhile. The administration's contempt for multilateral instruments led to the withdrawal from the Anti- Ballistic Missile Treaty in 2001 and their decision not to reintroduce the Comprehensive Nuclear- Test-Ban Treaty (CTBT) for ratification by the Senate. Its policy was also responsible for serious crises within, among others, the Biological Weapons Convention and the NPT. The administra- tion preferred flexible, speedy, and informal 'coalition of the willing' approaches instead, such as the 2003 Proliferation Security Initiative (Fey et al., 2013). Tannenwald (2007: 385) calls this a 'new interpretation of US hegemony' according to which 'norms that constrain other nations would not necessarily apply to the United States'. Furthermore, the intended development of **[358]** new warheads weakened the whole non-proliferation regime, as the non-nuclear weapon states consider qualitative improvement of nuclear arsenals to be diametrically against the disarma- ment norm embodied in the NPT. Regarding the third mechanism, President Bush himself brought the long-existing '"Manichean" strand in US foreign policy' discourse back to the fore (Kennedy, 2013: 626). In his and his

administration's rhetoric, the world is regularly and dis- tinctly painted in terms of 'good' and 'evil', depicting a constant struggle of biblical proportions between the good and pure forces of freedom on the one hand, and the evil and utterly destruc- tive forces of terror and tyranny on the other (Poppe, 2010: 24–25). 'Evil men, obsessed with ambition and unburdened by conscience' (Bush, 2005) seek to eradicate everything the liberal world stands for: 'Take almost any principle of civilization,' the president is convinced, 'and their goal is the opposite' (Bush, 2007). Not 'allowing the violent to inherit the Earth' (Bush, 2006) is the duty of the brave and valiant defenders of liberty. This struggle is definitive and concessions are worthless (see e.g. Bush, 2005). Painting the enemy in sinister colors – presenting an evil and uncontainable threat to the free world – allowed the Bush team to underline and justify the dire necessity for its controversial counteractions (Geis, 2006: 150). The latter included a preemptive doctrine and nuclear strike plans against the so-called rogue states North Korea, Libya, Syria, Iran, and Iraq in the 2001 Nuclear Guidance Review and the 2002 Nuclear Posture Review. Whereas the official position of the Bush administration was to decrease the role of nuclear weapons in US strategic policy, it in fact increased the number of targets and contingen- cies for nuclear use (Lebovic, 2007: chapter 3; Kristensen, 2007).

It is thus fair to say that the Bush administration's policy, as it shook the foundation of all three pillars, posed a severe threat to the nuclear taboo. This disturbing development came to a – at least temporary – halt with the end of the Bush presidency. Still, a considerable part of the US foreign policy and defense establishment continues to downplay the prudence of arms control and inter- national multilateral institutions, advocates the development of 'cleaner' nuclear weapons, and has an inclination to divide the world into 'us and them', 'good versus evil', and into the 'civilized world' and the 'harbingers of terror'.

Conclusion

This article set out to come to terms with a seeming curiosity: the fact that the naturalistic sci- ence fiction series *Battlestar Galactica* – highly acclaimed and often praised for its relevance to our society – so heavily and unabashedly draws on the use of nuclear weapons. Arguing that science fiction can function as a 'mirror' for international relations scholarship, we took a closer look at the central pillars of the nuclear taboo in our world and inquired into their existence in the universe of *Battlestar Galactica*. Indeed we find them to be largely reversed: in *Battlestar Galactica*, nuclear weapons are (depicted as) 'clean', international institutions are absent, and the enemy is socially constructed as a 'radical other'. Moreover, we argued that international relations scholarship's examination of science fiction can be productive for elucidating phenom- ena of our own world. Using the insights we have gained from our excursion into the universe of *Battlestar Galactica* and applying it to the real world, our analysis draws attention to the gravity of the threat that the Bush administration's policy posed to the nuclear taboo as it weakened all three of its pillars.

The show's messaging as a critique of the real world provoked plenty of discussion and contro- versies among the audience, including many scholars. It is fascinating that few people have prob- lematized the absence of the nuclear taboo in *Battlestar Galactica* despite the existence of the taboo in the real world, a taboo that is supposedly as strong as the one on torture. The lack of controversy suggests that the taboo might be suffering from a creeping loss of significance. **[359]**

This is alarming. The nuclear taboo is one of the great achievements of civilization. Without it, and with more than 15,000 nuclear warheads in the arsenals of the nuclear

powers, *our* Earth might well suffer the fate of the original Earth in *Battlestar Galactica* – be destroyed by nuclear war. The producers of *Battlestar Galactica*, on a somewhat pedagogical note, have even chosen to warn us explicitly about this possibility. As we learn in the series' finale, the planet that the fleet decides to settle on is indeed *our* Earth – 150,000 years in the past. The epilogue, with an eye to the series' claim that history is cyclical, shows us today's New York and challenges the audience in the final dialogue: 'All of this has happened before... But the question remains: does all of this have to happen again?'

Acknowledgments

Notes

1. We emphatically recommend watching the highly acclaimed series, but readers should be aware that this article is full of 'spoilers'.
2. See, for example, Drezner (2011) and Nexon and Neumann (2006). On science fiction and world politics, see Weldes (2003).
3. Routledge even introduced a series called 'Popular Culture and World Politics'. See http://www.routledge. com/books/series/PCWP/.
4. See, for example, Auden (1968); Muller (2008); Grayson et al. (2009); Buzan (2010); Davies (2010); Hall (2011); Dixit (2012); McKevitt (2012); Rowley and Weldes (2012).
5. http://whiteoliphaunt.com/duckofminerva.
6. See also (or rather listen to) the 'Science Fiction and the Pedagogy of International Relations' Round Table at the 2012 ISA–Northeast convention, featuring Henry Farrell, Dan Nexon, Jennifer Lobasz and Patrick Thaddeus Jackson. Podcast available at: http://duckofminerva.dreamhosters.com/wp-content/ uploads/DoM-Episode_12.m4a.
7. Books and articles deal with *Battlestar Galactica* and philosophy (Steiff and Tamplin, 2008; Eberl,2008), science (Di Justo and Grazier, 2011), the role of religion (Wetmore, 2012), and critical studies (Potter and Marshall, 2008). Recent volumes (Dyson, 2015; Kiersey and Neumann, 2013a) look at *Battlestar Galactica* from an explicit international relations perspective. Carpenter (2011) considers this a most welcome development, as '[t]he one true pop-cultural allegory for the global system as we are coming to know it is not some fearsome zombie epidemic but rather the rise of humanity's cybernetic overlords.'
8. Kiersey and Neumann (2013b: 2) explain that

   one of the great virtues of science fiction is its ability to pose fictional worlds that, while cognitively coherent on their own unique terms, nevertheless inevitably maintain a link with the experiences we share in our world. *Battlestar Galactica*, and any other second-order world for that matter, is certainly part of our world, in the sense that it is an artifact that belongs to this world.

   For a discussion on the particular merits of using science fiction in international relations research, see also Weldes (2003: 8–13).

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9. Carpenter (2016), Dyson (2015: 5–9), and Neuman and Nexon (2006: 6–20) offer similar typologies.

10. Apparently, Reagan's thinking on nuclear abolishment was also inspired by the 1951 sci-fi movie *The Day the Earth Stood Still* (Lewis, 2015).
11. See http://duckofminerva.com/2014/05/friday-nerd-blogging-call-for-isa-paper-proposals-on-game- of-thrones.html. A follow-up panel at the 2016 ISA Annual Conference, convened by Charli Carpenter and Patrick Thaddeus Jackson, examined

    the relationship between the Star Wars franchise and socio-political dynamics in the area of international security, broadly defined. In other words, this panel focused specifically on the inter- relationship between pop culture ideas and "real-world" security-seeking processes and practices;

    http://duckofminerva.com/2015/05/friday-nerd-special-call-for-isa-proposals-on-star-wars-and- international-security.html.

12. Examples of the application of science fiction in critical security studies are Rowley and Weldes (2012) and Dixit (2012).
13. An 18-episode prequel to the re-imagined series, *Caprica*, was aired in 2010. A second spin-off, *Blood & Chrome*, was broadcast in 2013.
14. At the start of the plot, Roslin is Secretary of Education. President Adar, along with most administration members, is killed during the Cylon attack. Roslin is the highest-ranking surviving government official and thus sworn into office.
15. Elsewhere, he emphasizes the intent to 'eschew the usual stories about parallel universes, time-travel, mind-control, evil twins, God-like powers and all the other clichés of the genre' (Moore, 2003).
16. Moore emphasizes this point again in 2005:

    Galactica is both mirror and prism through which to view our world. It attempts to mirror the complexities of our lives and our society in turbulent times, while at the same time reflecting and bending that view in order to allow us to extrapolate on notions present in contemporary society but which have not yet come to pass, i.e. a true artificial intelligence becoming self-aware and the existential questions it raises. Our goal is to examine contemporary culture and society, to challenge (and sometimes provoke) our audience, but not to provide easy answers to complex problems.

17. Stoy (2010: 7), moreover, points to the parallels between Colonial President Laura Roslin and US President George W Bush: 'Roslin's place in the succession – forty-three – is an oblique reference to George W Bush's presidential number, and her fundamentalist ties are most certainly meant to evoke the former American president.'
18. See http://nuclearweaponarchive.org/Russia/TsarBomba.html. With a yield of 50 megatons, it equaled
    1,400 times the combined power of the bombs dropped on Hiroshima and Nagasaki.
19. We abbreviate episode references. Episode 13 of season 1, for example, reads 'S01E13'.
20. 'The nuclear taboo can be characterized as a moral norm. At its core is the belief that nuclear weapons, because of their immense destructive power, flagrantly violate longstanding moral principles of discrimi- nation and proportionality in the use of force' (Tannenwald, 2007: 58).
21. For a detailed description, see Malloy (2012: 518–522).
22. To name just a few film and television productions: *Testament* (1983), *The Day After* (1983), *Threads* (1984), *Jericho* (2006–8). The movie *On the Beach* (1959) is one of the exceptions, but here the audience learns that people are planning their suicides in order to avoid dying of the gruesome effects of radiation.
23. There is one exception, but it is unrelated to the use of nuclear weapons: in the episode 'The Passage', a pilot dies from radiation sickness after having spent too much time in a highly irradiated star cluster (S03E10).

24. Apparently in reaction to viewers' concerns about a group of survivors on Caprica, a special feature entitled *Battlestar Galactica: The Story So Far* claims that they died of radiation poisoning (see http:// en.battlestarwiki.org/wiki/Answered_Questions_from_Season_1_(RDM)#33).   This information was,

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however, not originally part of the story, is never visualized, and seems to have been offered only after viewers repeatedly posed the question.

25. At a much later stage of the show we do learn that the planet called Earth was made uninhabitable by nuclear war 2,000 years earlier; when the Colonials arrive, they find a nuclear wasteland still so strongly contaminated that life cannot be sustained there (S04E11). Di Justo and Grazier (2011: chapter 14) speculate on the reasons for this stark difference to Caprica which seems to be immediately habitable after the massive nuclear attacks, and find the potential answer in the make-up of the nuclear weapons as neutron bombs. We find that rather unconvincing, as the classic depiction of the mushroom clouds, very well visible from space, indicates the standard high ratio of explosive energy uncharacteristic of neutron bombs.

26. Mini-series *Night 1* and *Night 2*.

27. According to Tannenwald (2007: 66), the 'United Nation's role as an institutionalized forum for the expression of anti-nuclear weapons norms was critical to the creation of the taboo'.

28. Although the NPT does not tackle the question of the use of nuclear weapons, it represents a strong norma- tive framework against nuclear weapons – not least because of the disarmament obligation under Article VI.

29. Moore (2005) explains that

> the Colonies functioned more or less on their own, possibly with various attempts at alliances or even complete Colonial government over the centuries since the exodus from Kobol, none of which were successful. When the first Cylons were created, individual Colonies still warred against one another and it wasn't until the Cylon rebellion that the Twelve Colonies finally came together in a permanent way

(see http://web.archive.org/web/20080505053711/http://blog.scifi.com/battlestar/archives/2005/04/index.html#a000025).

30. Facilitating the nuclear taboo is, according to Tannenwald (2007: 46), an actor's urge to be a 'civilized' member of the international community. If the enemy is portrayed as radical other – outside of the civi- lized international community – attacking it with nuclear weapons might not be deemed 'uncivilized'. Othering reduces enemies to 'barbarians' against which 'the laws of war, which aimed to bring a mini- mum of humanitarian standards to the battlefield, could be dispensed'.

31. Japanese – or 'Japs' as they were mostly referred to – were generally considered and portrayed as racially inferior and mindlessly collectivist in their devotion to the Emperor (e.g. Boyer, 1985: 20). They were prominently depicted as rat-faced or as insects in war propaganda films, for example in *The Mask of Nippon* from 1942 (see Weingartner, 1992).

32. http://en.battlestarwiki.org/wiki/Cylons_%28RDM%29#They_Rebelled.

33. *Caprica*, S01E18.

34. S01E03.

35. This is also visible before the Cylon assault. In the series finale of the *Battlestar Galactica* prequel *Caprica*, an interviewer jokingly asks Daniel Graystone, the inventor of the Cylons, when he should expect his daughter to bring home a Cylon fiancé. Graystone's answer is: '[. . .] Cylons are simply tools, nothing more. To forget that, to blur the distinction between man and machine, and attribute human qualities, is folly' (Caprica, S01E19).

36. S02E01.

37. Mini-series *Night 1*.

38. As a Colonial character explains to a Cylon: 'You slaughtered my entire civilization. That is sin. That is evil. And you are evil' (S01E08).
39. S02E12.
40. See, for example, *The Plan*.
41. Could there have been a nuclear taboo between and among humans in the pre-Cylon era? The Twitter account of Serge Graystone, the robot-butler of Daniel Graystone in the *Battlestar Galactica* prequel *Caprica*, confirmed in reply to several viewers' questions that there were at least inter-colonial trea- ties and institutions (see http://twitter.com/SergeGraystone, tweets from 4 March 2010, 06:39 pm,

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9 March 2010, 06:40 pm, 30 April 2010, 01:41 am, 3 June 2010, 9:31 pm, 10 June 2010, 10:44 pm). Thus, we cannot rule out the presence of the second pillar. There is, however, circumstantial evidence for the absence of the nuclear taboo in pre-Cylon times: whenever we see Colonials violate other taboos in the series (e.g. the rape and torture of Cylon prisoners) there are signs of remorse or inner conflict. The Colonials seem aware of their violation of strong norms. We do not observe similar behavior when it comes to their using nuclear weapons – not even against potentially civilian Cylon structures.

42. On the basis of this analysis, we cannot, of course, assess the relative impact of each of the three factors or whether any one or a combination of two would have sufficed for the non-development or absence of the taboo.

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Marco Fey is a research associate at the Peace Research Institute Frankfurt (PRIF) and the EU Non- Proliferation Consortium. He is a doctoral candidate at Goethe University Frankfurt. In his research, he focuses on strategic weapons, non-proliferation, and US foreign and security policy. Email: fey@hsfk.de

Annika E Poppe is project director and research fellow at the Peace Research Institute Frankfurt (PRIF). Her research focuses on international democracy promotion, normative and political change, US foreign policy, and the US–Egyptian relationship. She is also the coordinator of the Leibniz-funded German Research Network 'External Democracy Promotion'. During the period in which the research for this article was carried out, she held a doctoral scholarship from the German National Academic Foundation. Email: poppe@hsfk.de

Carsten Rauch is a research fellow at the Peace Research Institute Frankfurt (PRIF). His research focuses on, inter alia, the rise and fall of great powers, revisionism in the international system, democratic peace and power transition theory, as well as India's nuclear weapons policy. Email: rauch@hsfk.de