

## **Shots of Ambivalence: Nuclear Weapons in Documentary Film**

Casper Sylvest  
Associate Professor  
University of Southern Denmark  
[csy@sam.sdu.dk](mailto:csy@sam.sdu.dk)

*Abstract.* Nuclear weapons have been a fertile theme in documentary film making since 1945. These films are deeply political and derive their significance from providing access to and information about a fear-inducing yet increasingly ethereal phenomenon. Drawing on the cultural history of the nuclear age and contemporary security theory the paper analyses the political significance of nuclear docs in three periods: the early nuclear age, the years bracketing the pinnacle of the nuclear disarmament movement in the mid-1980s, and the post-Cold War period. Government propaganda films shot through with ambivalence, of which “Duck and Cover” was perhaps the most (in)famous, dominated the genre in the first period. During the second period I focus on two reflexive films, *The Atomic Café* (1982) and *Radio Bikini* (1988), that use irony and shock as strategies of exposure and exploit the deep ambivalences of nuclear politics as a strategy of political dissent. While contemporary nuclear documentary is diverse, advocacy films like *Countdown to Zero* (2010) and *Nuclear Tipping Point* (2010) that draw on and speak to contemporary security discourse and its associated visual imagery illustrate the complexity, constraints, and dissonances in nuclear politics. I argue that nuclear documentaries reflect and shape nuclear politics by providing access to an increasingly virtual phenomenon. The conclusion offers a few reflections on the political potential of nuclear documentary.

Paper presented at Danish Political Science Association  
Vejle, 25-26 October 2012

# Shots of Ambivalence: Nuclear Weapons in Documentary Film

Casper Sylvest

*The film is the art form that is in keeping with the increased threat to his life which modern man has to face. Man's need to expose himself to shock effects is his adjustment to dangers threatening him.*

Walter Benjamin, 'The Work of Art in the Age of Mechanical Reproduction' (1936)

## I. Introduction

Among cultural historians, it is not uncommon to speak of a pendulum in cultural reactions to nuclear weapons technology, a pendulum moving between two extremes of *denial* and *paranoia* (Shapiro, 2002: 8). Whatever the value of this image, a variety of cultural mores shape our reactions to nuclear weapons and nuclear energy, including the thinking that govern their (non-)use and the values and risks associated with these technologies. Arguably, the filmic medium is particularly important in this respect, which is due to the danger that nuclear weapons embody *and* the fact that they lend themselves more to *representation* than *experience*. In Derrida's words, nuclear war is a '*fabulously* textual' phenomenon that can only be 'the signified referent, never the real referent (present or past) of a discourse or text'. Although this fantasy or fable of nuclear war is different from the 'massive "reality" of nuclear weaponry' (Derrida, 1984: 23), the opposition is far from clear cut. Nuclear *weapons* also possess an element of hyper-textuality, at least in the general public. They exist *alongside* us, but we have little or no experience *with* them. Film is the primary medium through which their momentous destructive power is mediated and for that reason the cultural and political impact of such material is considerable: indeed, it has been argued that filmic representations of nuclear weapons continue to govern not only our understanding of these weapons but also our response to 'natural' disasters

more widely (Masco, 2008; Masco 2010). It is a truism that representation matters. But in the realm of nuclear politics representation arguably matters most.

One aspect of visual representations of the bomb concerns fiction and fiction feature films, particularly as manifested in Hollywood productions (and by extension literary and other non-filmic fictions of nuclear disaster) (Sontag, 1964; Broderick, 1991; Evans 1998; see also Dowling, 1987). It has been argued that '[a]tomic bomb cinema remains an unmined resource of information about our culture' (Shapiro, 2002: 6). The same is true of documentary films, I shall argue, although the modalities and regimes of visibility that these productions make use of differ in, sometimes obscure, ways from the fictional narrative; a phenomenon that is closely tied to the truth-claim that, arguably, defines this genre (van Munster and Sylvest, forthcoming; Platinga, 2005). Given the nature of nuclear weapons – a technology that demands authoritarian political practices (Winner, 1980) – and given the close association between filmic representation and political authority in the early nuclear age, the documentary can provide a fascinating glimpse of the historical development and deep ambivalences of nuclear politics.

Against this background, my aim in this essay is to use nuclear documentaries as a prism on nuclear politics with a view to explaining not only how the documentary *reflects* nuclear politics but also how it provides access to a political but increasingly virtual phenomenon – the bomb – thereby helping to *create* a particular kind of nuclear politics with its own constraints and opportunities. Various modes of documentary have different ways of making the international visible, and these 'regimes of visibility' and the filmic and narrative modalities they deploy with their audiences involve distinct political strategies. In short, documentary films reinforce, disrupt, or expose a range assumptions and value judgments about nuclear politics. Since, there is within contemporary security studies a growing interest in the study of images (Williams, 2003; Vuori, 2010), a subsidiary aim of the paper is to probe the value of one of these approaches – the theory of securitization associated with the Copenhagen School – in relation to nuclear documentaries.

I begin with a brief discussion of the visual and sensory qualities of nuclear weapons, including their historicity and political implications, before going on to examine the “technoaesthetic” spectacle of nuclear weapons and nuclear technology in Western documentary film at three diachronic points: the early nuclear age, the years bracketing the pinnacle of the nuclear disarmament movement in the 1980s, and the post-Cold War (and in particular the post-9/11) period. Nuclear documentaries not only reflect and shape important features of nuclear politics in these periods, they also replicate or unsuccessfully try to overcome the profoundly ambivalent and incomprehensible character of nuclear politics. In contrast to a view which holds filmic representation to inevitably expressing an ideology of war and conflict through aestheticizing a particular violent form of conflict (Benjamin, 1936), the analysis draws out the variety of politics in the open-ended genre of documentary filmmaking. A brief conclusion sums up the findings.

## **II. “Technoaesthetics” and Security Politics**

In his highly acclaimed history of *American Technological Sublime* (1994), David E. Nye demonstrated how Burkean and Kantian concepts of the sublime were translated into a particularly technological form in an American context. These new forms of the sublime were not ‘absolute categories of aesthetic experience but ... contingent categories within social and political systems’ (Nye, 1994: xvii). A central part of the classic concept of the sublime was direct sensory experience, whereas the technological sublime rested on a form of identification of man and machine. Various technologies were received and exploited within American religious or national culture through the combination of feelings like awe, pleasure, pride and exceptionalism that sublime technologies produced. In a fascinating chapter on the atomic bomb and the space race, Nye (1994: 225) argued that ‘[a]t the deepest level, the existence of atomic weapons undermined the relationship to both natural and technological objects’. ‘[W]hen human beings themselves create something infinitely powerful that can annihilate nature’ the classic sublime was made impossible. Nuclear

weapons did not lend themselves to direct sensory experience except for the few (scientists and officials), and the technological sublime also appeared compromised due to lack of identification with the bomb (cf. Ferguson, 1984). This is not to say that the successive American administrations and government agencies like the Atomic Energy Commission (AEC) or the Federal Civil Defense Administration (FCDA) did not (as we shall see) try to impress American citizens with more positive aspects of atomic energy or atomic science. Yet the unfathomable destructiveness of the bomb, which in the early nuclear age increased rapidly, could hardly be ignored. Attempts to focus on the (often wildly exaggerated) potential of nuclear energy were, therefore, always haunted by existential fear. The technological sublime gave way to ambiguity and anxiety.

Nuclear fear has, however, waxed and waned like many other social phenomena. In order to contextualize and historicize some of these dynamics, I shall draw on Masco (2004) and use a simple chronology of nuclear testing regimes as way into the subject. Focusing on the sensory politics of nuclear weapons, Masco shows how scientists, government officials, and the few members of the wider American public that experienced nuclear blasts, reacted to the bodily experience of a “test-shot”. In the period 1945-1992 the US conducted 1,054 nuclear tests. Roughly three quarters of these were above ground and took place until 1963. In this above ground testing regime, direct experience of tests led to a particular kind of professional and political sensibility in which the terrifying nature of nuclear weapons pointed, paradoxically perhaps, towards a potential for peace.

Masco argues that understandings of the bomb shifted with the test regimes that have governed the sensory experience of these weapons. The underground test regime (1963-1992) ultimately secured a continued reliance on nuclear weapons for American national security by literally concealing from view and experience the most disturbing aspects of the bomb, including fallout, radiation effects, and their impact on (human) nature. According to Masco, the invisibility of the blast meant that the bomb was turned into an increasingly abstract and virtual phenomenon. For scientists this led to a normalization of nuclear weapons – they were turned into a professional,

scientific challenge – but on a wider cultural canvas it resulted in the domestication of the bomb. Finally, in the Science-Based Stockpile Stewardship regime, Masco argues, the bomb has not only been removed from direct sensory experience but has become virtual. Detonations are simulated and visualized in ways that are essentially depoliticizing and favour a narrow, technical focus. Scientists becomes stewards, who break down ageing, complex weapons systems into technical compartments which are dissected, diagnosed, treated, and given life extensions with a view to making them “safe” and “reliable”. Rather than being associated with violence nuclear weapons metamorphoses into an insurance policy. But since the only available testing is virtual, qualities of mystique and uncertainty become dominant and are in turn handled through a process of virtually re-enacting nuclear explosions in a highly sanitized form (Masco, 2004: 358-67).

In the discussion below, I follow this chronology and focus on the representations and understandings of the bomb that representative documentary films and their ‘regimes of visibility’ make possible, the audiences to whom they are directed, and their role in nuclear politics.<sup>1</sup> I hope to show that the political import of nuclear documentary is not straightforward. The subject, the authors, the sponsors, the audiences, the intentions, the reception, the circulation, and the context into which they injected are just some of the aspects of film making that matter a great deal. In making this claim I draw on and probe the vocabulary of one of the most influential theories in the burgeoning field of Critical Security Studies: the theory of securitization (Buzan *et al.*, 1997). The theory is based on an understanding of security as a speech act, where three conditions are essential for successful securitization: (i) the positing of an existential threat to a referent object, (ii) the positing of extraordinary (often non-democratic) measures and (iii) accept from the relevant audience. Through a thriving research program attention has also been directed against the role of visual images in securitization processes (e.g. Williams,

---

<sup>1</sup> Although the selected films fall largely within the sub-genre of advocacy (either as official propaganda or as statements of the nuclear disarmament movement), many productions are – as many documentaries in general – hybrid forms (see van Munster and Sylvest, forthcoming).

2003). As will become apparent in the remainder of this paper, however, using securitization theory in the context of visual nuclear politics is not without complications.<sup>2</sup>

### **III. Government Propaganda in the Atomic and early Thermonuclear Age**

It is hard to fathom just how much of our common visual imagery of nuclear weapons stem from the early nuclear age. There are the recurrence of certain clips iconic blast clips; for example the “shot” (in cinemascope) of the M65, 280mm nuclear cannon (used recently in Errol Morris’ Oscar-winning feature *The Fog of War*) or the many, many blast pictures of heat and shock waves from nuclear weapons running over almost any conceivable artifact or natural object familiar to modern civilization. It has even been claimed that the above-ground testing period with its mixture of war-fighting, civil defense, and weapons science, ‘not only engineered the US nuclear arsenal but ... also produced and fixed American visual understandings of the technology on film’ (Masco, 2010: 10). Another scholar argues that the documentary film and footage of this era ‘show the high-water mark of militarization of American culture’ (Mielke, 2005: 35).

While far-reaching, these claims are not entirely implausible. First, the increasingly militarized form of US Cold War statehood enjoyed a virtual monopoly on production and access to footage of nuclear weapons tests. As part of the scientific and military development of nuclear weapons capabilities, the various civil and military government agencies invested huge sums in the photographing of nuclear weapons tests and associated activities. The most startling example of this is the 1352<sup>nd</sup> Photographic Group of Lookout Mountain Air Force Station, California, a clandestine film studio that in little over twenty years, commencing in 1947 produced an astonishing 6,500 documentary films. The productions were often second to none,

---

<sup>2</sup> On this point, see also Vuori’s (2010) excellent article on the “Doomsday clock” that have prided the *Bulletin of Atomic Scientists* since 1947,

since Lookout Mountain were lavishly funded and could draw on technical support from the military, which meant that they could take a technological lead in testing new camera technologies.<sup>3</sup> This meant, secondly, that the quality of some of the de-classified footage (which still is only a fraction of the total production) is startling. In short, to the extent that nuclear explosions can be seen as evincing a culturally shared sense of the “American technological sublime”, the quality of government produced filmic material is immensely important. Finally, various branches of the US government were deeply involved in the production of educational and informational films that intended to (biopolitically) govern sections of the population (for example military personnel) or the population as a whole.<sup>4</sup> Thus, the US Army and Agencies like the FCDA placed great emphasis on these educational initiatives. Still, as argued by David Nye, the nuclear sublime is at bottom unstable, which most of the documentary films of this period demonstrate. To argue along these lines is not incompatible with accepting that this type of government propaganda was initially successful in achieving its biopolitical objectives.

If we turn first to educational and information films made by the U.S. military for internal or wider public use, it is true, as Bob Mielke (2005) has pointed out, that they are not from a filmic point of view extraordinary. Their most interesting aspect is, arguably, the strategies used to deal with the inescapable uneasiness or paradox which follows from the total nature of nuclear weapons. Indeed, the governing binary of their narratives is between the nuclear (weapons) technology as scientific advancement and a savior of peace or as the harbinger of civilizational destruction. As the “voice-of-God” argues in *Operation Buster/Jangle* (1951), a DoD documentary, preparing (it appears) US military personnel for increasing superpower competition and atomic warfare:

---

<sup>3</sup> *The Atomic Filmmakers Behind the Scenes* (dir. P. Kuran, 1999, USA), 46 mins. The studio was closed in 1969.

<sup>4</sup> The emphasis that was put on such initiatives emerges clearly from FCDA annual reports issues in the mid to late 1950s (e.g. 1956-1958; all available at <http://training.fema.gov/EMIWeb/edu/>). See also Homeland Security National Preparedness Task Force (2006).



“Today whatever you are, whatever you do, wherever you may go, you are a part of atomic warfare. It involves you – personally. In laboratories, and in the field, in little known places and ways, units of the defense establishment of the United States are learning to work with atomic weapons. Learning to strike. Learning defense against the effects of atomic weapons. Blast. Heat. Light. Radiation. ”

Putting the individual viewer centre stage confers responsibility. At the same time, the inexorable is uneasily conjoined with the conscious harnessing of great, overwhelming power. But the incompatibility of these underlying tropes leaves only naked uneasiness in between. Similarly, many of these productions tread softly around questions of radiation, safety, and war. Production teams appear to want to reassure their audiences, but the nature of the subject and the secrecy surrounding nuclear weapons facilities means that while little is said, much is implied. On the other hand, messages of seriousness, loyalty and sacrifice are clearly conveyed but also constantly undermined by the prospective destruction involved in nuclear war. As one Department of Defense film argues in relation to the Bikini tests of 1946, “Although a beautiful sight, this swirling, boiling mushroom cloud is certain death to any living thing which approaches too close to its edge.”<sup>5</sup>

A consistent theme in the productions of this period concerns safety and survivability. Again, documentaries are uneasily poised between messages of deep anxiety, optimistic postulates about the possibility of surviving nuclear war, and the obligations (often dressed up as choices) of citizens that followed from these postulates. Educational films for use within the military went to great length to establish that the safety of the personnel was a prime concern and that tests and atomic warfare was possible if handled by well-meaning authorities. In the area of civil defense, the regime of visibility of these films was characterized by similar tendencies. The FCDA film *Let's Face It* (produced by Lookout Mountain) began with a chilling description of the thermonuclear threat before urging its audience to “face it”:

---

<sup>5</sup> <http://www.youtube.com/watch?v=4wWSTVaHIZo> (at 3:15)

'Let's face it. Your life. The fate of your community and the fate of your nation depend on what you do when enemy bombers head for our cities. And that is why civil defense was organized'. This was in line with the central message of 'all government civil defense materials'; namely that 'you could survive an atomic attack if you learned the preparatory steps and took the correct actions' (Jacobs, 2010: 26). But the dissonance and ambivalence was hard to gloss over, since a positing of existential fear was the essential action-inducing ingredient that threatened to make all civil defense measures irrelevant. Messages of reassurance and specific recommendations for minimizing physical harm – epitomized in the legendary *Duck and Cover* film of 1952 (Jacobs, 2010) – coexisted with the use of nuclear weapons testing as attempts to 'nationalize nuclear fear and install a new civic understanding via the contemplation of mass destruction and death' (Masco, 2008a: 376). In this sense, civil defense was a mixture of collective emotion management and a form of nation building (Masco, 2008a; Masco, 2008b), but it was ultimately built on shifting sands.

This is not to say, however, that the films were not politically powerful. In the case of atomic and early thermonuclear age documentaries produced by the US government the effect was arguably a rhetorically unstable but politically powerful *normalized securitization* of nuclear weapons, which involved a far-reaching militarization and extension of state authority made possible through a domestication of an extraordinary, revolutionary weapons technology. The secrecy and unchecked exercise of authority involved in this project exposed many American citizens to physical danger and severely challenged civil liberties. While it is difficult to discern the precise impact of educational and informational films produced during these years, watching them makes it hard not to conclude that they provided an ideological rationale for such encroachments. While the US government has since issued apologies and paid reparations, the current administration of filmic material from the early post-war decades arguably evinces remnants of early nuclear age ambivalences. Thus the "Nuclear Weapons Film Declassification Project" under the Department of Energy's (DoE) openness initiative aims to make publicly available films about the U.S. nuclear weapons program. In presenting the program on their website, the DoE

argues that '[i]n hindsight, the AEC and the DoD made many mistakes in the testing program, such as underestimating the effects of fallout and deploying troops in areas of excessive radiation. Despite the errors in the early testing efforts, the U.S. surged ahead of all other nations in nuclear weapons capabilities, and gained the expertise which now sets the standard for what is "safe."<sup>6</sup> The modality of fear-induced reassurance dies hard.

#### **IV. Advocacy as Irony: Exposing Ambivalence**

The Limited Test Ban Treaty of 1963 can be seen as the beginning of the end of the period of fallout worry and extreme Cold War anxiety. Clearly there was a popular lag involved and many important cultural products about nuclear weapons emerged in the 1960s, including most famously *Dr. Strangelove* (1964) (Bliddal, forthcoming). Documentaries produced independently of nuclear weapons state agencies did not at this stage play a great role, although there are arguably two important exceptions: Peter Watkins' award-winning and horrifying *The War Game* (1965), which investigated the social and physical consequences of a nuclear attack on Britain and the eye-opening *Hiroshima-Nagasaki, August 1945* that circulated new footage about the human effects of the bombings (Barnouw, 1988).

To the extent that documentaries dealt with nuclear weapons in the following decade, however, they were mainly informational films. Again, we see how the state and dynamics of nuclear politics is reflected in documentaries on the subject. But this was not a one-way street. The resurgence of the nuclear disarmament movement occurred as détente faltered and the Cold War got colder in the early 1980s during the hard-line nuclear policies of President Reagan's first term. An important precondition for this revitalization was a new level of critical awareness of nuclear weapons technology and its actual and potential consequences (Wittner, 2009, chs. 6-7). In this context, documentaries seem to have played a role. Although it is impossible to

---

<sup>6</sup> <http://www.nv.doe.gov/library/films/fulltext/0800000.aspx>

ascertain the precise impact of these films, it is clear that there emerged a greater supply of informational and critical films about the theme in the late 1970s and early 1980s (see particularly Nicholls, 1986; Barnouw, 1993: 306-14; McEnteer: 2006: 38-40). An important factor in this development was the abolition of the AEC in the mid-1970s that saw a few skeletons tumbling out of the nuclear-state closet.

It is not possible to do justice to the wealth of documentary films on nuclear weapons in the decade from the late 1970s in the context of this short paper. Important trends stand out, however. While the majority of these films had an informational or educational objective, they almost invariably had an anti-nuclear slant. From being a prerogative of the government the documentary genre became an important weapon of the governed in their persistent questioning of nuclear policy and its implications. However, as a result of the underground test regime, the films of this period were constrained by the availability of footage, which meant that they often meditated on “found” or recently declassified government material.<sup>7</sup> Films that combine these traits and arguably illustrate and epitomize the dynamics and spirit of (anti-)nuclear politics of the period are *The Atomic Café* (1982) and *Radio Bikini* (1988). What is central to these movies is a deliberate use of a mixture of irony, ridicule, revelation, and shock through a disingenuous use of government footage.<sup>8</sup>

In so doing they fed off and contributed to a radically different *Zeitgeist*. What used to signal authority, authenticity and public obligation became sources of tragicomedy, disbelief, and a sarcastic, resigning form of political opposition. One example of this is the narration in early advocacy films made by the US government. Official interviews or voiceovers (the so-called voice of God) in such footage involved a preposterous positing of authority and truth that now signaled the opposite of what was intended in the 1950s. Thus, when in *The Atomic Café*, the editors play excerpts

---

<sup>7</sup> One important, but more intentionally apolitical, precursor here was *Hiroshima-Nagasaki, August 1945* (See Barnouw, 1988).

<sup>8</sup> A television documentary entitled *Clouds of Doubt* aired by KUTV in Salt Lake City in 1979 seems to have pioneered this ironic use of government footage (Nichols, 1986: 2, 14).

from a statement by AEC Chairman Lewis L. Strauss explaining what went wrong during the disastrous Bravo test in 1954,<sup>9</sup> the editing in conjunction with the altered context issues in a de-masking of authority that feeds reflection, suspicion, and critique. Similar effects are achieved when towards the end of the film the directors of *The Atomic Café*, Jayne Loader and Kevin Rafferty, simultaneously distort original clips and music from *Duck and Cover*, either by sampling the soundtrack or by interspersing images of major “nuclear figures” like (Eisenhower, Nixon, (a young) Reagan, Einstein, and Oppenheimer).

Robert Stone’s *Radio Bikini*, produced six years later when the Cold War had thawed somewhat under Reagan-Gorbachev relations, deals with the impact of 1946 Bikini atmospheric tests on the Marshall Islands population and US military personnel, but it makes use of similar tactics (Koppes, 1995). In this case, however, the use of irony competes more equally with the use of cinematic shock techniques. As many other nuclear documentaries of the period, the general drift is opposition to nuclear weapons and their consequences. Indeed, the final clip of the film is of Bernard Baruch, US representative to the United Nations Atomic Energy Commission and author of the Baruch Plan for the international control of atomic energy, Manichean argument that “we must select world peace or world destruction”. Still, there is little by way of direct calls to action in the film. But clearly the material is organized in a way that is aiming for particular effects on its audience: reflection, critique, and protest. In one of the climactic scenes of the film, an audio-interview with John Smitherman, a veteran of the Bikini tests, is played to images from the time. A sudden cut directs the attention of the audience towards a normal looking, middle-aged Smitherman now appearing on the screen as he begins to speak of his physical disabilities, particularly swelling, produced by his participation in the tests. When the camera zooms out, the rolling images reveal the veteran’s enormously swollen and

---

<sup>9</sup> The Bravo test was plagued by a series of problems, including most fatally the fact that the test was 2,5 times more powerful than expected and that meteorological forecasts that were used to predict fallout patterns were inaccurate. The test was ‘the worst radiological disaster in U.S. history’ (Light, 2003, n.99) and arguably inaugurated what Paul Boyer has called the period of ‘fallout worry and test ban activism’ (Boyer, 1998: 86).

hideously disproportional left hand. Only gradually does it dawn on the viewer that the veteran is also in a wheelchair and has had both his legs set off as a result of his exposure to radiation. The plight of the interviewee is truly shocking when set against footage of young people enjoying life or smiling innocently to the camera on board a vessel at Bikini Atoll.

The satire, irony, and shock in films like *The Atomic Café* and *Radio Bikini* is achieved by editing, sometimes at reduced pace, found footage that has a particular political drift (typically in favour of government policies or institutions) or by combining such footage with new or old oppositional viewpoints or facts. What Mielke has argued was 'a relentlessly cheery use of smiles and metaphors to naturalize the uncanniness of these weapons and their testing' in the era of government propaganda film is not merely a matter of spent energy in the 1980s; the smiles and metaphors have become weapons of the anti-nuclear campaigners. The political impact of these films were, therefore, at least twofold. On the one hand, they inaugurated a form of oppositional, subversive nukespeak during the 1980s. Paul Chilton (1982) used the term nukespeak to refer to the existence of a 'specialized vocabulary for talking about nuclear weapons and war with habitual metaphors' that undergirded the existing nuclear culture and had political implications for how people formed opinions about the matter. By exposing the hyper-textual, visual nukespeak of official documentaries, films like *The Atomic Café* and *Radio Bikini* refused to accept the domestication of the bomb. On the other hand, the point of this exercise was to *re-politicize* nuclear weapons technology and the wide range of political institutions and social practices that governed their existence; indeed, it was an effort to reintroduce these questions to a wider public, democratic sphere.

The theoretical vocabulary of the Copenhagen School is arguably less relevant for understanding such processes. In particular, the perspective seems to suffer from a kind of "authority-centrism" that makes it particularly insightful for analyzing securitizing actors in positions of authority but less attuned to studying securitizing moves by movements and actors that have access to less tangible forms of power (see also Vuori, 2010: 265). As a result, the school's continuum of nonpoliticized,

politicized, and securitized issues appear unable to capture the dynamics of cases where (securitizing) actors have little access to extraordinary measures and are concerned with questions of universal scope.<sup>10</sup> With some success, *The Atomic Café* and *Radio Bikini* sought to re-politicize nuclear weapons by exposing and questioning the political logic of their securitization.

## V. Zealous Advocacy

Although the 1990s did witness the release of important and acclaimed documentaries – in particular Peter Kuran’s *Trinity and Beyond* (1995), *The Atomic Filmmakers* (1998), and *Atomic Journeys* (1999)<sup>11</sup> – their political importance was marginal not least because, as Ken Booth argued at the time, ‘[i]n the 1990s Cold War-level fears of a global nuclear Holocaust almost entirely disappeared’ (Booth, 1999: 2; see also Weart, 2010: 234). While Booth acknowledged that the new anxieties associated with the risks of the proliferation of nuclear weapons emerged towards the end of the decade, particularly the 1990s was clearly the least politically intense decade in the nuclear age (if one of the more successful, as the 1995 decision to indefinitely extend the Nuclear Non-Proliferation Treaty illustrates). In this section I shall, accordingly, focus on more recent nuclear documentaries. I begin by briefly touching on the continued production of sophisticated, reflexive documentaries dealing with nuclear weapons technology and nuclear energy. However, I place more emphasis on films that are politically important in terms of mobilization; namely, recent films produced by the nuclear disarmament movement. At the outset, it is worth remarking that due to the virtual monopoly of footage of nuclear explosions from Lookout Mountains, such footage continues to figure prominently, and while it

---

<sup>10</sup> A good examples here is the wide variety of non-state or transnational actors that have tried to securitize climate change. As Wæver has put it, the theoretical paradox here is that these actors securitize in order to politicize (Wæver, 2009).

<sup>11</sup> The 1991 production and short-documentary academy award winner *Deadly Deception: General Electric, Nuclear Weapons and Our Environment* also deserves mention in this context.

evokes a certain familiarity and sense of Cold War futility, it also – alongside the filmic style and political emphases – restrain the potentially radical messages of these films.

It is appropriate to begin with the general increase in the production and wider circulation of documentaries in the post-Cold War period, which means that there is a greater variation of the nuclear documentaries available than I can do justice to. For example, the 60th anniversary of the bombing of Hiroshima and Nagasaki led to the production of both TV and feature documentaries. Moreover, as documentary film making has increasingly become a medium for critically examining societal problems or goods produced or administered by corporations or government authorities, it is noticeable that nuclear energy and associated waste problems are accorded quite sophisticated treatment in recent documentaries, for example in Michael Madsen's *Into Eternity* (2010). At the same time, historical documentaries on Cold War security politics has also focused on the dangers, absurdity, and existential questions raised by nuclear weapons and nuclear weapons technology. For example, one of the most powerful and imaginative films of the recent decade – Errol Morris' academy-award winning *The Fog of War* (2003) – gave voice to former U.S. Secretary of Defense Robert S. McNamara's (1916-2009) deep concerns about nuclear weapons.<sup>12</sup>

McNamara's *volte face* on the uses and dangers of nuclear weapons is part of a larger pattern in U.S. politics in which many former U.S. statesmen of the Cold War period has become involved in a campaign for universal nuclear disarmament. The intellectual lead is provided by the so-called “four horsemen of the apocalypse” –

---

<sup>12</sup> For a more detailed analysis of this film and its importance for the study of international relations, see Sylvest (forthcoming). More sarcastic treatments of nuclear weapons in documentary film also still appear. Using “found recordings”, the 2009 documentary feature on Daniel Ellsberg and the Pentagon Papers, *The Most Dangerous Man in America*, used this conversation between Nixon and Kissinger during the Vietnam War to drive home the absurdity of the Cold War security imagination: *President*: “See, the attack in the North that we have in mind, power plants, whatever's left - POL [petroleum], the docks. And, I still think we ought to take the dikes out now. Will that drown people?; *Kissinger*: About two hundred thousand people. *President*: No, no, no, I'd rather use the nuclear bomb. Have you got that, Henry? *Kissinger*: That, I think, would just be too much. *President*: The nuclear bomb, does that bother you?...I just want you to think big, Henry, for Christsakes.”



George P. Schultz, William J. Perry, Henry A. Kissinger, and Sam Nunn – and the idea has received support from the American president (Obama, 2009). While the views behind this push for “nuclear zero” are clearly not all idealistic – is it not, after all, in the interest of a waning superpower in a world plagued by proliferation? – and while there are divergent personal reasons and rationales for behind such campaigning (Taubman, 2012), the nuclear disarmament movement is once again on its feet and in visible in the public sphere. In the area of documentary film these developments are reflected in the release of two productions - *Countdown to Zero* (2010) and *Nuclear Tipping Point* (2010). In the following I shall argue that these films reproduce some of the more salient features of contemporary nuclear and security politics and that viewed as *speech-acts*, they evince powerful, short-lived rhetoric but also some deeper problems associated with the nature of campaigning on these issues. Three themes are important in this context.

First, *Countdown to Zero* and *Nuclear Tipping Point* differ somewhat from earlier productions sympathetic to the cause of nuclear disarmament by virtue of their strong institutional backing from the nuclear disarmament movement and through their explicit association with advocacy. *Nuclear Tipping Point* is a high profile production narrated by Hollywood actor Michael Douglas and produced by The Nuclear Security Project (NSP), the institutional expression of the joint efforts of Schultz, Perry, Kissinger, and Nunn. NSP in turn backed by the The Nuclear Threat Initiative (NTI) and The Hoover Institution. *Countdown to Zero*, a film produced by Participant Media<sup>13</sup> and the team behind *An Inconvenient Truth* led by Lawrence Bender, is a cog in a wider advocacy campaign run from websites like [globalzero.org](http://globalzero.org) and [takepart.com](http://takepart.com). Both films end by explicitly encouraging their viewers to take part in the campaign by donating, distributing the films, or contacting their political representatives.

---

<sup>13</sup> This company is run by Jeff Skoll, one of the founders of the internet auction website eBay. For insight into his vision of activist film making, see [http://www.ted.com/talks/jeff skoll makes movies that make change.html](http://www.ted.com/talks/jeff_skoll_makes_movies_that_make_change.html)

Second, the regimes of visibility, the imagery and the narrative structure of these advocacy films borrow heavily from the structure of contemporary security discourse. On the one hand, the planetary imagery that has almost become synonymous with the fight to stem climate change is heavily invoked. As Joseph Masco (2010: 7; see also Kerckhove, 1984) has pointed out, the rapid development of the earth sciences in the US context was an ‘unintended by-product’ of the Cold War nuclear project. In the end, therefore, the planetary imagery produced by the space race (e.g. Poole, 2008) and given concrete meaning through the earth sciences in post-war America also issued in a form of post-Cold War competition for attention. Indeed, it is striking how these new films invoke the planetary imagery that today (and certainly after *An Inconvenient Truth*) is almost exclusively associated with climate change. The commercial packaging of *Countdown to Zero* is a visual merger of these discourses: the core of an atom-pictogram is a blue marble photo of the planet accompanied by the traditional “WARNING”. In the case of the NSP-production the use of the term “tipping point” in the title is a clear attempt to latch on to a threat-discourse enjoying more political attention.

On the other hand, both films but in particular *Nuclear Tipping Point*, base their strongest claim to attention on making the threat of nuclear terrorism a central point of reference. Due to the enormous hold that the terrorist threat has had on Western and particularly American security discourse since 9/11 this obviously attracts attention. Following an endorsement from former Secretary of State, Colin Powell, *Nuclear Tipping Point* opens with footage from terrorist attacks on the World Trade Center (1993), USS Cole (2000), New York and Washington (2001), Bali (2002), Madrid (2004), Beslan (2004), London (2005), Mumbai (2006, 2008).<sup>14</sup> Set to dramatic music, the film immediately asks “What if they get a Nuclear Weapon?” Moreover, both in the film and on its front cover, *Nuclear Tipping Point* makes use of a statement from the 9/11 Commission Report that ‘Al Qaeda has been seeking nuclear weapons for 10 years’. Indeed, it can be argued that the centre of gravity of nuclear

---

<sup>14</sup> *Countdown to Zero* opens in similar fashion, but is more rounded in its treatment of other risks, including dangers arising from miscalculation and failure of nuclear weapons safeguards.

politics in the post-Cold War period has indeed been the fear of nuclear terrorism and/or the proliferation of nuclear weapons to “rogues” (that earn this description through their association with terror). In the contemporary public mind nuclear terrorism and its associated imagery contains ‘a special emotional power’ and ‘does trump all’.<sup>15</sup>

Finally, as a result of this structure of their advocacy the films’ political messages are confined within an irreducible ambivalence that mirrors the nature of nuclear politics. Partly this relates to the format and the recurrent use of fear-inducing blast footage. In *Countdown to Zero* frightening shots open and close the movie and viewers are presented with a series of terrifying facts about the almost supernatural powers of nuclear weapons. After examining the dangers of nuclear terrorism, accidents and miscalculation, *Countdown to Zero* calls for prioritizing substantial reductions in American and Russian stockpiles (that make of more than roughly 96% of all nuclear weapons). Nevertheless, the film is still short on more specific policy recommendations or discussions of the problems associated with a dramatic reduction in numbers of nuclear weapons. Given the downright *reasonableness* of the argument for nuclear disarmament, it is noticeable that the film almost ignores the essential intransigence of the political context that has so far rendered the argument ineffective. Moreover, the film balances a view of nuclear weapons that is primarily Western (if not American) in its portrayal of particularly the threat of nuclear terrorism and the need for a universal and revolutionary cosmopolitan culture. This opens a gap between the new START treaty that calls for significant reductions of the 20,000+ nuclear weapons of the two states and the means that can continue this (increasingly difficult, one would suspect) journey towards nuclear zero. Ignoring difficult and technical questions about the potential design of verification systems, fuel banks and the political enigma of getting from, say, 100 to zero nuclear weapons, the film merely employs the metaphor of the mechanic and unstoppable clock (i.e. countdown) yet still closes with a (local American) call to political action. While

---

<sup>15</sup> Weart (2010: 251, 256). For a fine analysis of the shifting meanings and connotations of nuclear terrorism, see Weart (2010: 254-58).

explicitly an attempt to reclaim nuclear politics for citizens (of the world), the film's representation of nuclear weapons as both awe-inspiring, catastrophic, outside human control and yet on a teleological track for elimination or Apocalypse may no longer carry the same political force. It is as if the awe-inspiring footage of the nuclear age have a different political yield when replayed in the early twenty-first century. It is a spectacle, surely, but also only faintly real.

*Nuclear Tipping Point*, on the other hand, is plagued by constraints of a more overtly political nature. The film comes close to willfully ignoring *the* central political problem in contemporary nuclear politics: the broken bargain at the heart of Non-Proliferation regime (NPT) by which the nuclear haves in return for securing the horizontal non-proliferation of nuclear weapons commit themselves to disarmament (vertical non-proliferation) (Price, 2007). Henry Kissinger's appearance in *Nuclear Tipping Point* is particularly illustrative in this respect. According to Kissinger, the logic of the NSP is that the US cannot 'keep asking other societies to restrain their participation in the nuclear field if we [are] not prepared to accept limits to our own activities'. There is, then, a need for concrete steps. And yet these steps are not very specific; only one of them speaks specifically and vaguely about 'reducing substantially the size of nuclear forces in all states that possess them'. Moreover, Kissinger equivocates on the interests that such a step would serve. He mentions both US national security interests and the interests of humanity at large, before going on to argue that because the process is long, 'the US must have nuclear weapons as long as any other state or group possesses them'. In this sense, *Nuclear Tipping Point* can be seen as forming part of the 'nuclear proliferation complex' that has recently been criticized for clinging to zero as a mere mantra – 'like a hare at a dog track' – while contributing to a suspicion among the have-nots that this kind of anti-nuclear politics is 'just a cover to allow the nuclear powers to perpetuate their advantage' (Craig and Ruzicka, 2012: 37-38).

What is, then, the political significance of these films? Again, the vocabulary of the Copenhagen school is not straightforwardly applicable to an analysis of speech-acts (or combined image-speech-acts) of movements or non-governmental actors.

How should such calls for stronger non-proliferation or nuclear disarmament policies be conceptualized? In his analysis of the Bulletin of Atomic Scientists and its doomsday clock, Vuori (2010: 270) has spoken of a 'failure' to securitize nuclear weapons. But this seems counter-intuitive. First, nothing has been securitized like nuclear weapons. Nothing has been posited as an existential threat, removed from conventional political procedures, and achieved widespread accept by the relevant audiences, even if many aspects of the lives of people were transformed by the highly invasive nature of the military-industrial complexes that fought the Cold War. Secondly, the question is whether these actors are actually seeking to securitize nuclear weapons. If anything, their strategy is perhaps better described as *politicization and desecuritization through co-securitization*. Thus, the aim of these movements is to return reasonable and democratically legitimate decisions to the field of nuclear weapons technology, i.e. to re-politicize and de-securitize these artifacts and the aura of exceptionality in which they are shrouded. But they do so by latching on to contemporary (and largely successful) attempts to securitize other themes including terrorism and climate change.

## **VI. Conclusion**

In this essay I have used nuclear documentaries as a prism on the nature and logics of nuclear politics since 1945. I have illustrated not only how such documentaries provide access to a political but increasingly virtual phenomenon but also how they reflect and shape nuclear politics. Using contemporary security theory and drawing on the cultural history of nuclear weapons, I examined films from three periods that align with above-ground, underground, and virtual testing regimes since 1945. In the first period, documentaries were characterized by government propaganda, indoctrination, education, or information about technical aspects of nuclear weapons and the impact of blasts on humans, society and nature - a project that reflected the ongoing militarization and expansion of the US state apparatus. Many of these films were secret, but the few that circulated in the public domain ultimately led to a

(counterintuitive) *depoliticized or normalized securitization* of nuclear weapons. In the second period, a group of critical documentary films symbolized and helped revitalize the nuclear disarmament campaign. The general effect of these films was a *repoliticization* of nuclear weapons, nuclear technology, and their consequences. Finally, recent documentary films on nuclear weapons and nuclear technology include important reflexive films, but campaign films are arguably dominant. The latter group of films is like their ironic predecessors of the 1980s part of an attempt to breathe new life into the political project of nuclear non-proliferation and disarmament, but their strategy is radically different. Against the backdrop of a crisis-ridden nuclear non-proliferation regime, nuclear weapons dropping off the political and cultural radar of the 1990s, a new planetary awareness, and a fear of terrorism following in the wake of 9/11, these films latch on to the dominant contemporary security discourses in order to undergird the project of nuclear zero. I termed this *de-securitization as co-securitization* and illustrated the rhetorical difficulties and political costs associated with this strategy.

In a fine essay on 1950s and 1960s science fiction movies, Susan Sontag (1964: 215, 220) argued that the filmic medium was partly responsible for our 'greatly enlarged imagination of disaster'. Such cultural products might have provided ideological support to the emerging US nuclear state apparatus and its wide range of governmentalities, but they were also shot through with fear, anxiety, and ambivalence. Documentaries dealing with monumentally destructive weapons technology display a different, though not entirely dissimilar, logic. Paraphrasing Bob Mielke, one can argue that all nuclear documentaries need an explosion (Mielke, 2005: 35), but whether the aim is to reassure, repoliticize, or securitize nuclear weapons the ambivalence between the awe-inspiring spectacle they evoke and the existential threat such blasts represent is hard to overcome. Why is this so? First, because nuclear weapons 'have come to exist primarily as political constructs' (Masco, 2004: 349). Second, because (particularly recent) documentaries anticipate a non-event (or a not-yet-event) and seeks to portray it as a real or possible threat. In the context of fiction feature films about 9/11 Daniel Mendelsohn (2006) has discussed the

'complicated relationship between history and art, fiction and – an increasingly vexed word, these days – “reality” and the difficulties of turning “reality” into fiction or drama. Recent nuclear documentaries arguably face the opposite problem of turning fiction or the anticipated catastrophe into actionable “reality” and in doing so they rely on iconic, awe-inspiring but also somehow unreal images of nuclear test detonations to structure audience reactions.

Iconic blast footage is now, perhaps, a relic that risks bringing us closer to an antediluvian ground zero than to project us towards nuclear zero? Or, to twist Susan Buck-Morss' phrase, in advocacy nuclear-aesthetics can become nuclear-anesthetics (Buck-Morss, 1992). There appears, at least, to be a political impediment involved in the almost compulsory spectacle that nuclear documentaries employ when reproducing visual imagery of the exploding bomb. This suggests that in our contemporary political culture the most constructive role that documentary can play in the realm of nuclear politics is by taking ambivalence as their starting point and seeking, instead of overcoming it, to exploit it with a view to move audiences to reflect on the absurdities, paradoxes, and inconsistencies of nuclear politics. It is this specific quality that gives a film like *The Atomic Café* its contemporary resonance. So while I have argued that most nuclear documentaries are shots of ambivalence that both reflect and shape nuclear politics, they are so in markedly different ways.

## References

### Films

*Atomic Café*. Dir. Jayne Loader and Kevin Rafferty. ###, 1982. 86 min. (online at [http://www.ovguide.com/movies\\_tv/the\\_atomic\\_cafe.htm](http://www.ovguide.com/movies_tv/the_atomic_cafe.htm))

*Atomic Journeys: Welcome to Ground Zero* (1999, USA), 52 mins:  
<http://www.youtube.com/watch?v=xucDEmbz6Ww>

*The Atomic Filmmakers Behind the Scenes* (dir. P. Kuran, 1999, USA), 46 mins.  
<http://www.imdb.com/title/tt0366195/>

*Countdown to Zero*. Dir. Lucy Walker. USA, 2010. 91 min.  
*The Fog of War*. Dir. Errol Morris. USA, 2003. 103 min.  
*Hiroshima-Nagasaki, August 1945*, USA, 1970, 15 min.  
<http://www.youtube.com/watch?v=61YNsljMOW4>  
*An Inconvenient Truth*. Dir. Davis Guggenheim. USA, 2006. 100 min.  
*Into Eternity*. Dir. Michael Madsen. Denmark, 2010. 75 min.  
*Let's Face It*, USA, FCDA, 195#, [http://www.youtube.com/watch?v=0D6VTX\\_LBF8](http://www.youtube.com/watch?v=0D6VTX_LBF8)  
*The Most Dangerous Man in America*. Dir. Judith Ehrlich and Rick Goldsmith. USA, 2009. 92 min.  
*The Mushroom Club*. Dir. S. Okazaki. Japan, 2005. 35 min.  
*Nuclear Tipping Point*. Dir. M. Goddard, USA, 2010, 57 min.,  
*Operation Buster Jangle*, USA, 1951, ## min.  
*Operation Cue*, USA, FCDA, 1964 [1955], 15 min. -  
<http://www.youtube.com/watch?v=zU9lCKDzKSY>  
*Operation Ivy*, USA, 1952, 28 min.  
*Radio Bikini*. Dir. Robert Stone. USA, 1988. 56 min. (online at  
<http://video.google.com/videoplay?docid=-6964047559871098453&hl=en#>)  
*Rokkasho Rhapsody*. Dir. Hitomi Kamanaka, Japan, 2006, 119 min.  
<http://www.zakkafilms.com/film/rokkasho-rhapsody/>  
*Silent Storm*. Dir. P. Butt, Australia, 2004, 52 min.  
*Trinity and Beyond: The Atomic Bomb Movie* (dir. P. Kuran, 1995, USA), 92 mins.  
*The War Game* (dir. P. Watkins, 1965, UK), 48 mins.  
*White Light, Black Rain: The Destruction of Hiroshima and Nagasaki* (USA, dir. Steven Okazaki, 2007, 83 min.)  
A series of de-classified films: <http://www.nv.doe.gov/library/films/film.aspx?ID=81>  
Photos and other stuff: <http://www.atomcentral.com>

## Bibliography

Bliddal (forthcoming), 'The Joke's on You: International Relations and Stanley Kubrick's *Dr. Strangelove*', in H. Bliddal, P. Wilson and C. Sylvest (eds), *Classics of International Relations*. London: Routledge.  
Barnouw, Eric (1988), '*Hiroshima-Nagasaki: The Case of the A-bomb Footage*', in A Rosenthal (ed.), *New Challenges for Documentary* (Berkeley: University of California Press, 1988), 581-91.



- Barnouw, Eric (1993), *Documentary: A History of the Non-Fiction Film*, second revised edition. Oxford: Oxford University Press.
- Benjamin, Walter (2007[1936]), 'The Work of Art in the Age of Mechanical Reproduction', in Benjamin, *Illuminations*, ed. H. Arendt. New York: Schocken Books, pp. 217-42.
- Booth, Ken (1999), 'Nuclearism, Human Rights and Constructions of Security (Part I)', *The International Journal of Human Rights*, 3, 1-24.
- Boyer, Paul (1998) *Fallout: A Historian Reflects on America's Half-Century Encounter with Nuclear Weapons*. Columbus: Ohio State University Press.
- Brians, Paul (2006), *Nuclear Holocausts: Atomic War in Fiction* – available at <http://public.wsu.edu/~brians/nuclear/>
- Broderick, Mick (1991), *Nuclear Movies: A Critical Analysis and Filmography of International Feature Length Films Dealing with Experimentation, Aliens, Terrorism, Holocaust and Other Disaster Scenarios, 1914-1989*: London: McFarland.
- Buck-Morss, S. (1992), 'Aesthetics and Anesthetics: Walter Benjamin's Artwork Essay Reconsidered', *October*, 62, 3-41.
- Buzan, B., O. Wæver and J. de Wilde (1997), *Security – A New Framework for Analysis*. Boulder, CO: Lynne Rienner.
- Chilton, Paul (1982), 'Nukespeak: Nuclear Language, Culture and Propaganda', in G. Aubrey (ed.), *Nukespeak: The Media and the Bomb*. London: Comedia, 94-112.
- Craig, Campbell and Jan Ruzicka (2012), 'Who's in, who's out?', *London Review of Books*, 23 February 2012, pp. 37-38.
- Derrida, Jacques (1984), 'No Apocalypse, Not Now (Full Speed Ahead, Seven Missiles, Seven Missives)', *Diacritics*, 14, 20-31.
- Dowling, David (1987), *Fictions of Nuclear Disaster*. London: Macmillan. s
- Evans, Joyce A. (1998), *Celluloid Mushrooms: Hollywood and the Atomic Bomb*. Boulder: Westview Press.
- Ferguson, Frances (1984), 'The Nuclear Sublime', *Diacritics*, 14, 4-10.
- Homeland Security National Preparedness Task Force (2006), *Civil Defense and Homeland Security: A Short History of National Preparedness Efforts*. U.S. Department of Homeland Security.
- Jacobs, Bo (2010), 'Atomic Kids: *Duck and Cover* and *Atomic Alert* Teach American Children How to Survive Atomic Attack', *Film & History*, 40, 24-44.

- Jacobs, Robert (2010), 'Target Earth: The Atomic Bomb and the Whole Earth', in R. Jacobs (ed.), *Filling the Hole in the Nuclear Future*. Lanham: Lexington Books, 187-205.
- Kerckhove, Derrick de (1984), 'On Nuclear Communication', *Diacritics*, 14, 71-81.
- Koppes, Clayton R. (1995), 'Radio Bikini: Making and Unmaking Nuclear Mythology', in Robert A. Rosenstone (ed.), *Revisioning History: Film and the Construction of a New Past*. Princeton: Princeton University Press, pp. 128-36.
- McEnteer, J (2006), *Shooting the Truth: The Rise of American Political Documentaries*. Westport: Greenwood Publishing.
- Munster, Rens van and Casper Sylvest (forthcoming), 'Documentary Film and International Relations: Images, Regimes of Visibility and the Creative Treatment of Global Actuality', Paper presented at the BISA - ISA Joint International Conference Edinburgh 20-22 June 2012.
- Maguire, Lori (2009), 'The Destruction of New York City; A Recurrent Nightmare of American Cold War Cinema', *Cold War History*, 9, 513-24.
- Masco, Joseph (2004), 'Nuclear Techno-aesthetics: Sensory Politics from Trinity to the Virtual Bomb in Los Alamos', *American Ethnologist*, 31, 349-373.
- Masco, Joseph (2008a), "'Survival is Your Business": Engineering Ruins and Affect in Nuclear America', *Cultural Anthropology*, 23, 361-98.
- Masco, Joseph (2008b), 'Target Audience', *Bulletin of the Atomic Scientists*, 64, 22-31.
- Masco, Joseph (2010), 'Bad Weather: On Planetary Crisis', *Social Studies of Science*, 40, 7-40.
- Mendelsohn, Daniel (2006), 'September 11 at the Movies', *New York Review of Books*, 21 September 2006.
- Mielke, Bob (2005), 'Rhetoric and Ideology in Nuclear Test Documentary', *Film Quarterly*, 58, 28-37.
- Nicholls, Leanne (1986), *Nukes and Anti-Nukes: A Selective Filmography on Nuclear Weaponry and the Anti-Nuclear Movement*. Melbourne: publisher unknown, 1986 [A copy of this filmography is available in Harvard University Library].
- Nye, David (1994), *American Technological Sublime*. Cambridge, MA: MIT Press, 1994.
- Obama, Barack (2009), 'Remarks by President Barack Obama, Hradcany Square, Prague, Czech Republic, 5 April 2009, available at [http://www.whitehouse.gov/the\\_press\\_office/Remarks-By-President-Barack-Obama-In-Prague-As-Delivered](http://www.whitehouse.gov/the_press_office/Remarks-By-President-Barack-Obama-In-Prague-As-Delivered).
- Platinga, Carl (2005), 'What a Documentary Is, After All', *The Journal of Aesthetics and Art Criticism*, 63, 105-17.

- Price, Richard (2007), 'Nuclear Weapons Don't Kill People, Rogues Do', *International Politics*, 44, 232-49.
- Shultz, George P., William J. Perry, Henry A. Kissinger and Sam Nunn (2007), 'A World Free of Nuclear Weapons', *Wall Street Journal*, 4 January 2007; Page A15
- Shapiro, Jerome F. (2002), *Atomic Bomb Cinema: The Apocalyptic Imagination on Film*. London: Routledge.
- Sontag, Susan (1994 [1965]), 'The Imagination of Disaster', in Susan Sontag, *Against Interpretation and Other Essays*. New York: Vintage, ##-##
- Sylvest, Casper (forthcoming), 'Interrogating the Subject: Errol Morris' The Fog of War', in H. Bliddal, P. Wilson and C. Sylvest (eds), *Classics of International Relations* (London: Routledge, forthcoming).
- Titus, A. Costandina (1983), 'Back to Ground Zero: Old Footage through New Lenses', *Journal of Popular Film and Television*, 11, 2-11.
- Taylor, Bryan C. (1993), 'Fat Man and Little Boy: The Cinematic Representation of Interests in the Nuclear Weapons Organization', *Critical Studies in Mass Communication*, 10, 367-94.
- Vandercook, Wm. F (1986), 'Making the Very Best of the Very Worst: The "Human Effects of Nuclear Weapons" Report of 1956', *International Security*, 11, 184-95.
- Vuori, J. A. (2010), 'A Timely Prophet? The Doomsday Clock as a Visualization of Securitization Moves with a Global Referent Object', *Security Dialogue*, 41 (2010), 255-277
- Weart, Spencer (2010), 'Nuclear Fear 1987-2077: Has Anything Changed? Has Everything Changed?' R. Jacobs (ed.), *Filling the Hole in the Nuclear Future*. Lanham: Lexington Books, 229-65.
- Williams, Michael C. (2003), 'Words, Images, Enemies: Securitization and International Politics', *International Studies Quarterly*, vol. 47 (2003), 511-531.
- Winner, L. (1980): 'Do Artifacts have Politics', *Daedalus*, vol. 109, 121-36
- Wittner, Lawrence S. (2009) *Confronting the Bomb. A Short History of the World Nuclear Disarmament Movement*, Stanford: Stanford University Press.
- Wæver, Ole (2009), 'Klimatruslen – en sikkerhedsteoretisk analyse', *Tidsskriftet Politik*, 12, 5-26.