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Alexis-Martin, Becky, Sandys, Katherine and Mulvihill, Michael (2019) 'Mine are the Dead Spaces': A Discussion of Bunker Work's Atmospheres, Limits and Routines. *Journal of War & Culture Studies*. pp. 1-21. ISSN 1752-6272

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**Downloaded from:** <https://e-space.mmu.ac.uk/624392/>

**Version:** Accepted Version

**Publisher:** Taylor & Francis

**DOI:** <https://doi.org/10.1080/17526272.2019.1688496>

Please cite the published version

<https://e-space.mmu.ac.uk>

# ‘Mine are the Dead Spaces’: A Discussion of Bunker Work’s Atmospheres, Limits and Routines

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The abandoned bunker is burdened with dereliction, haunted by catastrophe averted. Yet a repurposed former place-for-war can facilitate a peaceful working afterlife. Here, the nature of this afterlife is considered through curated discussion between those who have worked within and/or who have created across repurposed bunker spaces: Becky Alexis-Martin (an emergency planner turned academic), Michael Mulvihill (an artist), and Kathrine Sandys (a theatre practitioner). An exploratory conversation-based approach is undertaken to reflect the labyrinthine nature of bunkers, with twists and turns as discussants strive to create a collective sense of understanding. Examining atmosphere, light and routines in recreating, reinterpreting and reusing former bunkers, the authors problematize any singular view of enduring place-for-war valence for the bunker’s afterlife. Instead, they propose a bunker continuum to reflect quotidian and dramatic entanglements. Any notion of a segmentation is disrupted, as they realize that war and peace are enmeshed and replicated across time.

KEYWORDS bunker, nuclear war, reuse, illumination, arts practice, conversation, Churchill War Rooms

While often haunted by their original purpose and design, abandoned bunkers can be repurposed to enable a multitude of peacetime working afterlives, ranging across pragmatic adaptation for office or storage uses to the creative spectacles of art, theatre and museum. This article explores the quotidian and sublime nature of these afterlives in the form of a curated discussion between three people who have

worked within and/or been responsible for creating repurposed bunker spaces: Becky Alexis-Martin (an emergency planner turned academic), Michael Mulvihill (an artist), and Katherine Sandys (a theatre practitioner). This paper presents a conversation-based and exploratory approach that is purposefully designed to reflect the labyrinthine nature of the bunker itself, with twists and turns as the three discussants strive to explore a collective sense of bunker understanding. Ranging across accounts of our experiences and engagements with a variety of bunkers, our discussion centres upon exploring the role of atmosphere, light and routines in recreating, reinterpreting and reusing these physically and culturally awkward spaces. Our emergent insights problematize any singular view of either the enduring place-for-war valence of the bunker, or of how the bunker is experienced in its afterlife. Accordingly, we show the multiplicity of modes and aims at work in the cultural production of ‘post-war’ meanings and uses for these places.

### **In Churchill’s bunker**

Whilst the focus of our experiences with bunkers is primarily concerned with the after-use of Cold War era nuclear bunkers, we took the opportunity to undertake our discussion within the bowels of a Second World War bunker complex. Buried beneath London’s Whitehall government district, ‘The Churchill War Rooms’, are now an underground bunker museum, an established heritage attraction, which is part of the Imperial War Museums’ national portfolio of war-related heritage (War Rooms, 2019). Formerly styled the ‘Cabinet War Rooms’, in recent years the opportunity has been taken to rename this attraction, to emphasize its association with British wartime leader Winston Churchill and thereby access valuable visitor appeal and cultural capital inherent in Churchill as a metonym for national identity and survival against the odds. Portions of this bunker’s void space have been repurposed as a Churchill museum, presenting accounts of his life and times, but a section (‘the Cabinet War Rooms’) remains curated as this place’s locus as the cramped, gloomy cockpit of wartime governance. The governmental bunker space is a complete tableau with artefacts arranged to suggest a bunker still in use. Here a stoic ‘wartime’ atmosphere is summoned through original features, secret documents spotlighted within cabinets and signs of inhabitation *in extremis* (pristine bunkbeds with woollen sheets). In doing so, this staging produces a modern simulacrum of this wartime experience, making this underground facility visible for public education and historical significance. We strolled around and gazed at these refurbished articles in the Cabinet War Rooms, before entering the museum’s main hall. In stark contrast to the replication of previous rooms, the main hall offered an interactive and carefully illuminated homage to Churchill’s life. As we tapped giant touchscreens and skimmed across innumerable digital archives concerning his long career, our first conversations about bunker space emerged as consideration of the significance of perceived light in a completely dark place.

Sandys has personally engaged with the Imperial War Museum as a work in-place, having curated and designed the lit atmosphere for the *Winston Churchill Design Competition* (2013) at the Churchill War Rooms, and the award winning *52 Degrees South* (2002) at Imperial War Museum North. Both projects responded to the materials and environments in which they were presented, inspired by historical figures of war (Churchill and Falklands War veterans respectively), rather than museum recreations or interpretations of history. Walking through the War Rooms, recognizing the obvious tension between curating history and aestheticized artefacts helpfully drew out the difference between each of our experiences of the bunker, and how they had become meaningful to us. Whilst Sandys' perspective is drawing attention to the phenomenological experiencing of decommissioned bunker architecture, Mulvihill's engagement has been as an artist-researcher at an active military bunker. Meanwhile, Alexis-Martin's vantage point is as an unwitting resident of a Cold War bunker's prosaic after-use, unwitting because her bunker appeared indistinguishable from the above-ground council offices to which it was a subterranean appendage.

Mulvihill has recently completed doctoral research as the Artist in Residence at RAF Fylingdales, a working radar station that forms part of the US-UK Ballistic Missile Early Warning System (BMEWS). During the Cold War, RAF Fylingdales was the home of the Four Minute Warning, an essential component of a militarized assemblage of nuclear warfare and civil defence. RAF Fylingdales continues to watch for signs of nuclear missile attack, and monitor 43,000 human-made objects in orbit around the Earth. Mulvihill has presented artwork within the bunkers of RAF Fylingdales since 2016, drawing upon its Cold War-era archive and artefacts, but doing so amongst the confines of a still-active military facility.

In contrast, Alexis-Martin has had a more mundane experience of a former bunker. She worked as an emergency planner in a facility that would have protected local government from nuclear attack during the Cold War but had since been re-purposed as a County Emergency Centre. This metamorphosis from civil defence for nuclear war preparedness to an all-emergencies approach meant that the building's Cold War features subsequently became neglected, ignored and concealed. Message hatches stayed closed, *Protect and Survive* pamphlets were locked away in filing cabinets, and bunk beds were long-removed, to be replaced by the cheerful optimism of planning (in the run up to 2012) for Olympics Resilience.

Having shared the experience of walking through a heavily curated bunker-atmosphere, we sat down to talk about our research and work experiences in the office of the founder of the Churchill Museum and Director Emeritus — Phil Reed. In contrast to the museum's public area, this was found to be a warm, very human room behind a locked door, jumbled with neoclassical furniture, piles of books, artefacts and exhibition memorabilia: a prosaic, incidental space more reminiscent of the bunkers known to Mulvihill and Alexis-Martin (Figures 1–3).

Our ensuing conversation considered the significance of atmosphere, light and routines in recreating, reinterpreting and reusing former bunkers. Aspects of our conversation have subsequently been curated, reformed and refolded through a collaborative process of writing and reflection, in order to tease out our analysis. We have also added points of summation and critique, where we reflexively interrogate the text of our conversation as it moves between themes, in order to link the conversation into wider concepts and debates.

## Bunker atmospheres

Alexis-Martin: There is an astonishing quantity of visual installation work across the Churchill War Rooms, to highlight the authentic features of the bunker that we are in and create an atmosphere. These lightscapes made me think of your work, Kathrine, could you tell me a little more about what you do?

Sandys: I draw on different things all the time, so I find it tricky when people ask me ‘what do you do?’ I find myself working at thresholds all the time, so I can’t



FIGURE 1 Michael Mulvihill and Dr Kathrine Sandys exploring The Churchill War Rooms exhibition, a repurposed bunker space (Alexis-Martin, 2018).

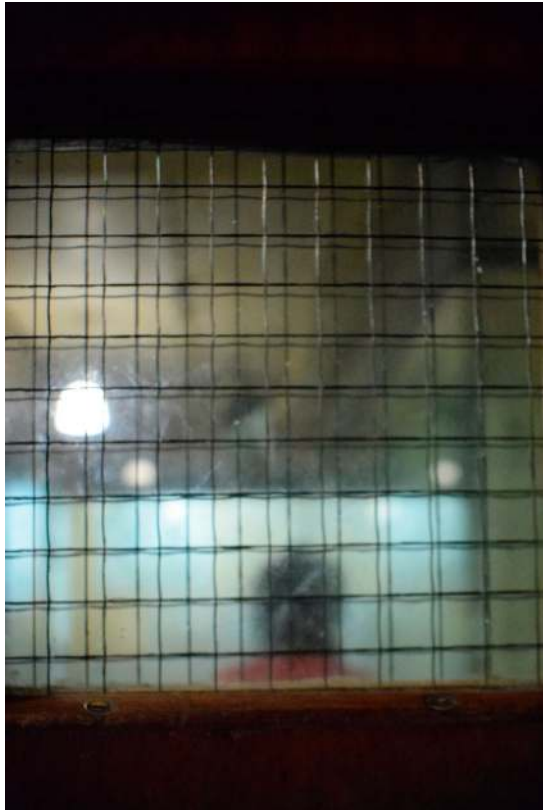


FIGURE 2 Interior window as ontological threshold. The Churchill War Rooms (Alexis-Martin, 2018)



FIGURE 3 'When you have the one configuration it is a piece of home electronics, you just adjust it slightly and it becomes this other thing'. Light switch, Churchill War Rooms (Alexis-Martin 2018).

define exactly what my practice is, just that my media are light, sound and space, applied within the context of the place. Actually, maybe it is in the nature of being a researcher, you are continually scouring and finding things. It's like your fascination (to Michael) with the mundane aspects.

Mulvihill: I like how actions and worlds are produced by mundane things — you know, when you say something like, 'producing worlds', you think of something marvellous or unearthly but it's actually due to much more mundane process such as administrative work, which I find fascinating. I like Deleuze, and I think through my practice in terms of playing with ontological thresholds, by which I mean things are not absolutely one thing nor another. For me these thresholds provide an area of indeterminacy between something that's an artwork, and is completely a part of everyday life, like administration, and everyday cultural production.

Sandys: I get that, how you might have many ideas and work across different media, for me it's about elemental things, and I think that's how I find myself returning to physical geography all the time. I'm fascinated by bleak landscapes, volcanic landscapes, deserts. I think it is the elemental nature of the thing; it is how you boil something down into the fundamental fabric of what you are working with, rather than the narrative that has been built up around it.

*The elemental is a concept that pertains to the simple and basic, but also to agencies, forces or phenomena of a physical nature. In Sandys' work, this manifests in material explorations that reveal the nature of the bunker through light and sound, and which identifies the bunker as a place in which our sensory bodies can detect distinctive atmospheres. However — perhaps surprisingly — both Sandys and Mulvihill appear drawn to bunkers by their mundanity, rather than their exceptionality.*

Mulvihill: It makes me think back to my charcoal art. I was influenced by a piece of information that came from the late Dr Kate Pyne, at the Atomic Weapons Establishment. It was an incidental piece of information that came from a talk the historian gave at the Tadley Historical Society. There is a strange threshold, when a huge monolithic structure like the nuclear weapons industry comes together with a local historical society. She explained that the tips of the Polaris warheads were made of birch wood, which I found very surprising. When you actually look into these things, you discover that hardwoods and birch woods are quite common materials for heatshields on spacecraft, because they turn to charcoal and char, and the charring carries the heat away to protect the weapon on the inside. However, I think it is surprising because materials like wood have meaningful associations with things other than high-tech spacecraft and nuclear weapons.

*Here, Mulvihill refers to the fundamental nature of drawing materials, and the way that his archival work has extended this into social connotations that traverse usual epistemological domains. Charcoal production is necessary for nuclear weapon design, creating commonalities and intersections between his artistic practice and the art of nuclear warfare. It demonstrates Deleuzian indeterminacies and imperceptibilities, an ambiguity of connection (Voss, 2013). All technological*

*assemblages must originate from somewhere, no matter how elemental or organic. Uranium emerges as an ore from the ground, chunks of rock. Technologies emerge as we repurpose the natural into the unnatural, and then try to dig ourselves into the ground, to penetrate the earth and create bunkers to hide from our more lethal creations. Therefore, that bunkers themselves turn out to be a strange combination of prosaic and exceptional material and symbolic features should not really surprise us. If we expect singularity from bunkers, in terms of their dark and exceptional essence, then that is more likely to be a product of our editing the phenomenon down, rather than something that lurks there at the heart of these places.*

Sandys: I think that is why it is environments, not just bunkers — it's military environments that draw my attention. I use the architecture itself. The media I work with historically as a practitioner is lighting and sound. In my field people tend to work with one or the other, as a lighting-designer or a sound-designer, but for me the two of them sit together because it's energy — the wave energy — that I'm interested in. With design in performance you are continually looking at the way the light sculpts the body. When it comes to making these installations, it's really about the way that the light does or does not penetrate the body. Going back to my very first bunker piece, back in 2004, that piece was all about creating this illusion (because again it's theatre really) creating this illusion of apparently natural light penetrating this seemingly impenetrable building. It's all staged of course. But that's what it's all about — that was my first exploration into this kind of weird dialogue between these two seemingly impossible things happening. It is about the elemental nature of light, or infrasonic sound frequencies, as a visceral energy.

*Working with light and sound has allowed Sandys to explore the relationship between light, material culture and social experiences, where light is a 'powerful social agent' (Vasseleu, 2002; Irigaray, 2004; Bille and Sorenson, 2007: 263). In Sandys' work, the role of luminosity and light energy (or sound pressure) is to reveal and make visible the invisible, in a naturalized way. She creates light/soundscapes that give insights into the shifting valences of bunker space, avoiding inscription but creating unease and nervousness, with sound 'often understood as generally having a privileged role in the production and modulation of fear' (Goodman, 2010: 65).*

Alexis-Martin: That is interesting, the idea of the invisible and making audible what is also unheard, from the perspective of sonic art and creating frequencies that are not audible. It brings you back to weaponry, via sonic weapons.

Sandys: We were talking before about sound, the sound that you, Michael, have heard at Fylingdales.

Mulvihill: It is quite loud when you first enter the site, this thrumming noise of the power station that powers the radar at RAF Fylingdales. The power station is able to supply the electricity to the whole of Whitby. However, after a while the sound becomes imperceptible, or it merges with birdsong and becomes invisible, there is a threshold change. I was talking to one of the former radar operators and he



said that although the radar is part of an early warning and space tracking system, he said you could also use radar as a television aerial. Ontologically speaking you can change this or that setting and the radar becomes a television. I'm fascinated by how these spaces are always shifting — they come into military focus and then out just as quickly.

*Mulvihill describes the future lives of bunker technologies, exploring how change is affected from militarization to civilian repurposing. It gives another insight into the Deleuzian assemblages of nuclear warfare, and their strange afterlives* (Bousquet, 2014).

Alexis-Martin: What are the processes and constraints behind undertaking creative bunker work, of inventing the bunker's afterlife through light, sound and atmosphere?

Sandys: To a certain extent it is actually the opposite, as the architecture leads my work. That's how the first piece that I made came about, because it was about using the properties of the bunker architecture. It is about responding to the space because, with sound, it's about the properties of the spaces. In the first bunker, it was about the decay, the sound of an impact. Not all bunkers sound the same. Here [at the Churchill War Rooms], it sounds really dead and very dry. It is about the material, it can be about the damp, it's not always about size necessarily, it can be affected by many different materials and surfaces. Therefore, that's what makes it interesting to play with.

The thing about the *Hush House* piece, I mean that particular building was a hardened shell, it was not a bunker. That building was designed specifically with acoustic insulation to suppress sound anyway. Therefore, this enormous, cavernous aircraft hangar has a relatively dead sound to it, which you do not expect. So again, this is where the interesting thing about military architectures and their design for purpose, there is often a contradiction between how it appears visually and how it appears sonically. So that becomes interesting as well.

*Hush House was an installation made by Sandys in 2010, a site-specific sound installation in a former Cold War U.S Airbase, commissioned by Aldeburgh Music. It worked with the materialities of space, testing preconceived notion of the space. In that sense, it disrupted the notion that the hangar was a particular type of place. Place is usually defined by an ascribed utility, in this case testing aircraft engines. However, using the acoustic properties it is a primal repurposing — distilling a once complex workspace down into the raw capacity of it as a sonic space.*

Alexis-Martin: That is interesting, the sonic disparity between its function and form. How did you make the most of this?

Sandys: That's what's interesting, because that's when you can really play around with the notion of authenticity by introducing sound frequencies back in that actually may have existed, or maybe not — because you wouldn't necessarily know unless you'd worked in that environment. Therefore, again you can create an

entire illusion around what that would have sounded or felt like, combined with a desire for what we want it to reflect.

Mulvihill: With RAF Fylingdales, the audience is inevitably small because of restriction upon the space because it is an operationally active site and subject to procedures of national security. Which means thinking around how the art work operates without an audience, so rather than the art work being exhibited in a particular context it must be shaping something newer. For me this is about producing new discourses out of assemblages composed of military, civilian and artistic parts. I think it is interesting when you are talking about air pressure, and the bunker spaces. Nevertheless, in some ways, that is exactly what they are designed to do, to absorb this sort of impact. It is interesting the tacit engagement with the space you describe, because this shakes something new out of the bunker's intended design.

Sandys: It's the elemental thing, I think, it's coming back to that elemental nature and what purpose is it serving.

Mulvihill: You will know more about this than me being an artist working with sound, but the first music synthesizer, the RCA Victor 2, was originally built to United States Air Force specifications. I have an understanding that this device is very much linked to equipment in Fylingdales. There's a machine there called the 'Electronic counter-counter-measure machine'. It was built because there was fear of the radar being jammed by Russian trawlers of the coast of Whitby. However, they designed and built it within the same research factory that the music synthesizer came out of.

*The RCA Mark II Sound Synthesizer, nicknamed Victor, was the first programmable electronic synthesizer and the flagship piece of equipment at the Columbia-Princeton Electronic Music Centre.*

Sandys: They probably would have, wouldn't they? All the components would have been made in the same place, why would they have been in separate environments?

Mulvihill: When you look at pictures that put machines together you can see that they are using the same components and dials. Again, for me the ontological reality of places like RAF Fylingdales, or bunkers is a matter of thresholds. When you have the one configuration it is a piece of home electronics, you just adjust it slightly and it becomes this other thing. These thresholds can be conceptually adjusted through creative engagements.

Alexis-Martin: Thinking about the idea of staging and performance, could you both give me some insight into what it is like to perform art within the bunker?

Sandys: I guess it ties back to the idea of ... thinking about the fact that we are in a museum, where there are levels of interpretation on top of the acquisitions that have to be preserved in their original form. There are two approaches to interpretation in the museum. You can either set up a very carefully curated heritage presentation, where everything is as it would have been, and you see everything as it was. Actually, that can sometimes be too abstract, out of context and does not tell the story. Of course, you then actually add a layer, not of theatricality, but a layer of illusion.

Illusion is fundamentally what theatre is, and the illusion is just focusing attention toward the story we want to hear. That is the important thing, telling the story, so it is actually about how we draw people's attention.

Alexis-Martin: How does that fit into the heritage of the bunker? I think it is an interesting connection, the idea of concealment and illusion.

Sandys: There might be things that were too confidential and had to be destroyed, or things that have deteriorated, or have just been lost. Alternatively, people don't remember them, because they were just places of work and don't exist anymore. So, it's how you contextualize the gaps. I suppose with heritage, it's not about trying to have everything as complete as it was, but actually having fragments of things, so you then have enough information for people to fill the gaps with their own narrative.

Mulvihill: In terms of Fylingdales work, what is interesting is that it is not technically a heritage site, in that it is a current operational site. It is not that there are not a lot of different performative elements going on in the site, though. Military sites have layers and layers of performativity. For instance you perform being military, or you perform securities. As you start peeling away these performed identities at RAF Fylingdales, identities of things become much more indistinct than you imagine. I prefer to place emphasis upon practice a lot more than the theory, as a performer, for me it is about the making of the work rather than the artwork itself — interrupting performed meanings at the site. There is also how the site provocatively interrupting my art making practices, so something extra emerges out of these processes of resistances and affordances. I end up having to negotiate with the site (in many senses), so I guess it becomes a kind of performance art in a way. I think my presence as an artist in residence doesn't so much hold a space to question, but what we're seeing shakes out new stories, so it's not that you're creating a dialectical situation, you're just introducing something into the site that's incongruous, which creates a dissonance or a resonance that turns preconceived notions of what the site represents upside down. What I like to think with the Fylingdales work is that you're folding the site inside out. You're bringing the exterior in and the interior out.

Alexis-Martin: I like that idea, like a Mobius strip of a place.

*Folding space and changing space through the body within bunker brings us on to considerations of disruptive presences and the bunkered body.*

*Bunker assimilation has been a lifelong process for Michael. For many in the Global North who grew up in the shadow of the Cold War, it felt like a dominating 'everywhere war', whereby one small change in the international dynamic could precipitate a plunge into nuclear warfare. However, this perspective neglects the decidedly 'hot war' experience of the Global South during this time.*

Mulvihill: There are these two threads. My work has always dealt with the Cold War. It has extended from a very particular experience of the Cold War felt as a child during the 1980s, particularly the notion of the Four Minute Warning. It wasn't a personal traumatic experience because it was shared by everybody within my age

group, and shared with rest of the world. Later in adulthood and looking back I wanted to unpick what constituted that monolithic fear, or this monolithic disquieting, and to discover the faces and names of the politicians or scientists and engineers, what are the materialities, that composed the nuclear deterrence assemblage. This line of thought led to me producing a piece of work about a Vulcan bomber which I exhibited at the *North East Land Sea and Air Museum* in Sunderland. It's very strange there, because you have a residential housing estate, overlooked by this large Vulcan bomber.

Sandys: That is really bonkers. That's crazy.

Mulvihill: Nuclear weapons on a housing estate. Which thinking about it is exactly what's going on at RAF Fylingdales with spaces being folded together.

Sandys: Placing them closer together than they naturally would be. Alternatively, what we perceive to be natural, I guess.

*The description of 'natural' nuclear warfare is thought provoking, as is the placement of a bomber plane in a suburban setting. Is nuclear warfare a distinctly visually militarized pursuit, or can it be concealed and mundane? How are military and domestic spaces folded together so that the nuclear military becomes quotidian?*

Mulvihill: The work on the Vulcan bomber was as an Arts Council project with the Northern Gallery of Contemporary Art and Northumbria University. I was given a copy of Luke Bennett's 'Bunkerology' article (Bennett, 2011) — that's when everything cascaded. The article looked at the motivations of people who explore the Royal Observer Corps (ROC) nuclear bunkers. These are really discrete bunkers. ROC bunkers are hidden in plain sight and look like waterworks or gas works, or other pieces of civilian infrastructure. They don't have the artillery slits or the battlefield pillboxes, they don't have those kinds of militarized attributes. But they were there for the purpose of observing nuclear attack on the UK. They were also staffed by semi-civilians who were, supposedly, secretly trained by the RAF. So, you have this bunker that is a fold of a domestic space within a military space. This was my lead-in to bunker work, where the common or garden meets something very different and extraordinary.

Mulvihill: I have become very good at just spotting a Royal Observer Corps bunker from a car.

Sandys: Exactly, it is like, hang on a second, military. That is not a real waterworks, its illusion. It's the illusion thing. At RAF Bentwaters. They were building big, hardened shelters after the Second World War. Because it's a 'secret' Cold War site — they were building these shelters disguised to look like barns, because it's a rural landscape, but being a U.S site, they built them in the vernacular style of American barns, not East Anglia!

Alexis-Martin: That's interesting!

Sandys: They really stick out. It's like 'What?! How is that a better disguise than just building a bunker?

Mulvihill: What about Kelvedon Hatch then?

Sandys: Ah yes, the bunker disguised as a bungalow.

*Attempts to make the aboveground traces of the bunker visually mundane often have the most outrageously incongruous outcomes, as military architects opt for standardization or inauthentic architectural styles.*

Alexis-Martin: Is there a feeling of intentional restraint for you, by engaging with the confined space of the bunker for your work? Does this intentionally mirror the historically restrictive and controlled nature of the bunker? How does this relate to the somatic experience of the Cold War?

Sandys: I think there is something about having grown up through the Cold War. We are what Luke Bennett refers to as the ‘Cold War kids’ (Bennett, 2017: 36).

Alexis-Martin. Do you think that you create art in these residual Cold War places, to give contemporary meaning and reflection on your personal memories of Cold War dread?

Sandys: For me I think it is. It really is. And it absolutely wasn’t intentional, it took a while before I realized absolutely where the work I was creating had come from.

*This work was not intentional, but instead emergent — arising organically and perhaps unexpectedly from prior experiences and perceptions of growing up during the Cold War.*

Sandys: But it partly meshed with films, you know. At the end of the ‘70s beginning of the ‘80s. The sort of films, the sort of stuff that has been spoken about before, written about before, Science Fiction, Fantasy films ...

Mulvihill: That’s really interesting you say that because it’s very specific to films like ‘*The Day After*’ and ‘*Threads*’ these were big events in school the day after they were broadcast. People were like ‘Did you see that film last night?’

Sandys: Yeah. It was genuinely terrifying.

Mulvihill: At school, they would occasionally test the air raid warning sirens. They must have only sounded it for a few seconds. However, when it stopped everybody was like ‘Oh!’ The sense of the imminence of the end of the world was ...

Sandys: ... omnipresent. We didn’t have siren testing at all. But there were certain frequencies and pitches that can be almost a split second, but you recognize it, it’s anamnesis. Two particular sounds — *Protect and Survive*, which was the 3-tone; and the one that had the sound of what the fallout, like a white noise.

Sandys: Hearing a fraction of second of that now, that’s equally terrifying.

## **Nuclear anxiety**

*Nuclear anxiety is a response to a perceived threat of nuclear warfare, and is amplified by civil defence. Nuclear bunkers form an important part of the architecture of nuclear anxiety.*

Alexis-Martin: Do you consider yourself to be an embodiment of the afterlife of the bunker, in a sense? You lived through the threat, but we all began your bunker work when it was the most peaceful time, after the Cold War.

Sandys: There was always the anticipation of what would happen. It was always about Russia, of course. Always.

*The idea of imminence of threat and anticipated threat are crucial to exploring nuclear anxiety.*

Alexis-Martin: So you have this impending sense of dread that has become heightened rather than desensitized during peacetime. Comparing your experiences to my atomic veteran research (Alexis-Martin, 2019); I think their experiences offer a parallel underlying anxiety. I wonder if the bunker had a life at all?

Sandys: Well no, they were in it though, they were right in it. They were living it. They were doing the nuclear weapon testing, whereas as civilians we were just experiencing the unknown and the ridiculous speculation around the unknown.

Mulvihill: The bunker-spaces ... I don't know whether you can compare them, because they've never had a life. With Cold War bunkers, the war was always something that was planned for, that was imminent and imagined in the future. They were never actually used for their purpose. They occupy this strange threshold space. For me, coming into the bunker spaces and working within RAF Fylingdales is about seeing into what was an unknown imminent threat that was perpetually just in the future.

Sandys: always *just* in the future. It's a Four Minute Warning.

Mulvihill: Four minutes. Even more scary, was when I spoke to people who worked at Fylingdales. I expected them to go 'well y'know, it wasn't *that* imminent'. And maybe it wasn't as bad as everyone thought. Nevertheless, they went 'no, we were trained to go from peace to nuclear war in four minutes.'

## **Bunker routines**

Alexis-Martin: That is astonishing. Do you think Fylingdales people are still occupying that Cold War space that you are restructuring and reinterpreting now? You change and reinvent these spaces, but some members of these communities have remained there in similar roles, while time has moved on and the Cold War has ended. Do you think they've retained the same mentality? I personally didn't experience bunker dread in my previous working life. I found it mundane actually!

Sandys: Has this come from civilian work?

Alexis-Martin: My introduction to the existence of the nuclear industrial establishment and the idea that there could have been a Cold War did not occur until I was in my early twenties. It seemed pretty safe and mundane. I was reassured that the Cold War had ended and that nuclear deterrence existed for the sole purpose of threat without substance. I think it is my age, I did not realize the significance of the repurposed nuclear bunker that I worked in, as a local government emergency planner, until I went into academia.

*The play 'Faslane' by Jenna Watts begins with this age gap, and how the appropriation of the Campaign for Nuclear Disarmament (CND) logo as a capitalized 'Peace' sign has obscured its original meaning (Eschle, 2016). This split is discerned*

*through a generational gap, where many of those over forty recognize the CND logo, whereas many of those under forty think of it as a 'peace sign'.*

Alexis-Martin: ... it's stark, isn't it? Emergency planning was a hectic and fun job, my work was very much focused on multi-emergency response, rather than emergency planning's darker past as civil defence. It was hectic, I was learning about risk management, we had lots to organize and do, as we were preparing for the 2012 Olympics. Many meetings to prepare for commonplace scenarios such as flooding, as well as control of major accident hazards, and radiation emergency preparedness. The repurposed bunker, the emergency centre, it was a bland and functional place, but still included Cold War features. A defunct filtration system. Hatches to pass messages about. A massive metal cupboard filled with our old nuclear war preparedness plans ... that I never explored. My old boss gave me a huge box of Cold War emergency preparedness literature that he had salvaged from our emergency centre, when I went back to visit after finishing my PhD.

It was a quotidian experience for me, working in the repurposed bunker. Highlights included me training incident loggists during the Olympics, several long and tedious meetings, making tea for myself in the old kitchen, and remembering that I'd brought an apple down and therefore didn't need to climb four flights of stairs to retrieve one from my office. It was a normal workplace, just subterranean. Being a mid-80s child, I had skipped the whole idea of nuclear anxiety, and the closest I got to the Cold War was civilian plans for nuclear accident preparedness. My dread and anxiety related to terrorism rather than nuclear warfare, I vividly remembered 9/11 and 7/7.

However, I remember participating in several training and exercising events before the Olympics. I was there and I was part of it, usually on Bronze Control, so operational. I would watch the exercise play out, and for longer exercises, you would develop a creeping sense of dread, even though you knew that, the worst-case scenario was not real. That we were preparing for an implausible instance, something that relates to that kind of moment where things could suddenly change and all go wrong. That is the thread that still links emergency planning with the Cold War and that sense of foreboding, the urgency of preparing for the worst while hoping for the best. The architecture that surrounded me during my work was a hidden afterlife of something else, an unnoticed heritage. We just did not talk about it, that past was not relevant (or at least did not seem so) to what we were doing. We did not talk about history or culture, in that sense.

Mulvihill: Yes, this is particularly interesting for me, the idea that the Cold War just, disappeared. It stopped. The decades of the imminent End of the World seem to literally end on the day that the Berlin Wall came down. It was not taught in schools, it was not talked about. All of these experiences, all of this anxiety and what this anxiety represented, and how it was constructed, seemed to vanish. It was just 'Oh well, that's done'.

Alexis-Martin: For me, coming into my career in the mid-to-late 2000s, I had no idea that the previous incarnation of my career was preparedness for nuclear war, under the old legislation. The Civil Contingencies Act completely neutralized that, and our teaching started from this point at the Emergency Planning College. It was all about multi-emergency planning, and filled with gentle acronyms that make plans lose their significance, in a way. For instance, you had SAGS, which were Strategic Advisory Groups, and in a way that makes it more mundane. You also had LEMAs and NEMAs. We would joke about the acronyms, because they sound funny, but they were Local Emergency Mortuary Arrangements and National Emergency Mortuary Arrangements. It normalizes it, we'd have casual conversations, 'Oh, how's the LEMA going?' that sort of thing.

Sandys: But that is the same, that language, those acronyms become a language.

Mulvihill: ... SS20, Pershing-II, you know, Polaris, Trident-2. They were not acronyms, but during the 1980s, they made a kind of teatime nuclear war sensoria through the television. In my experience of the Cold War, the news constantly showed a sequence composed of newsreader, atomic explosion; Margaret Thatcher ... was it desensitizing?

## Bunker limits

*Nuclear technologies are changing how we understand the bunker. Simulated detonations available via the Nukemap simulation program (<https://nuclearsecrecy.com/nukemap/>) are creating a greater awareness of the changes in civil defence that have occurred since the Cold War, encouraging reflection on historic resilience or otherwise. They highlight that bunkers were often designed for the survival of state rather than society. They are the digital aspect of bunker work, as they reimagine Cold War catastrophe for a new generation.*

Alexis-Martin: What do you think about *Nukemap*, the performative element of it, and the way you can select anywhere to simulate nuclear warfare?

Mulvihill: I've used *Nukemap* for making artwork, for the work I undertook in the York bunker, and it made the nuclear war I imagined as a child much worse. I combined it with Stan Openshaw's data for nuclear attack on the UK, and it is magnitudes worse than I could have possibly imagined.

*Nukemap does not give an accurate idea of the scale of destruction, similarly to Bunge's *Atlas of Nuclear War* (Bunge, 1989). Mulvihill spoke to an ex-fireman who in the 1980s was trained to deal with the effects of a nuclear attack on Tyneside. They were being trained to deal with two weapons being dropped at the top and bottom of the Tyne. One weapon in this exercise would have been dropped in the harbour, 1 km away from his old school. The other would have been detonated near Prudhoe. The intent was that they would have produced two tidal surges that could have destroyed all manufacturing on the riverbanks. Maps give an impression rather than presenting the realities of warfare. A misrepresentation of nuclear war, that is sanitized and less catastrophic.*



Alexis-Martin: I think that perception of risk and effect is becoming more important than the actuality, with the conflation of science and populism. In the context of things like *Nukemap*, we are dealing with hypothetical post-nuclear and post-truth spaces and reconstructing them, to create a new form of nuclear anxiety. *Nukemap* is fun and interesting, but in a sense it is one-dimensional. It can never provide personal experience or testimony of nuclear effects. What does the renaissance of these sorts of bunker-related artefacts and maps mean to your art, to your productions, and the current cultural climate?

Sandys: I don't know about you, but for me it feels different. I think it's too different. It's a different type of anxiety. In the 1970s, the Cold War, it felt as though there was some sort of lag. Then, we reach 2001 and 9/11 and suddenly there isn't a lag anymore, we are actually getting it live, aren't we? That's the thing, there's an expectation of immediacy. Look at the Arab Spring — that was absolutely live. So, we believe absolutely in what we see through that screen portal now, and there's no longer the same perceived separation between the fictional and the non-fictional. Both are happening in the same place.

Alexis-Martin: I want to know more about the kind of language that you use to describe your bunker work, when you think about 'deterrence' rather than bombs, for example and the nuclear military paraphernalia that surrounds it. You know, it's a bomb, not a deterrence. It's a euphemism.

Sandys: It's the passive language isn't it?

Alexis-Martin: Very. Do you think 'post-bunker' work has a specific language? How do you think that this affects the atmosphere of the bunker and the way it is described? I think that the word 'bunker' in itself is very evocative. How does this inform how you think about its afterlives?

Mulvihill: Well, it's interesting. The York Cold War bunker is an administrative site, it was part of the Home Offices preparation for nuclear war, and each explosion had corresponding paper work for documentation. Fylingdales is an above-ground bunker, so would be described as 'operational' space or similar. The term 'bunker' is not really used as much as you'd think. In the bunkers that I've encountered, I get the sense of them being inverted offices, a tower block going down. It is fascinating how mundane the bunker space is. It's an administrative space. It's a hardened administrative space.

Sandys: 'Bunker' is over-used, you're right. One might be called a shelter. Another might be called a munitions store — the site of my first 'bunker' piece. That's the thing, they have specific titles based upon their function, in common with all the military architectures that I've used for my work, based around the purpose of the architectures.

Sandys: The purpose of the space follows the style of the architecture, but we use this overall word, 'bunker', don't we?

Mulvihill: I think it unnecessarily simplifies.

Sandys: It's reductive, isn't it?

*The term 'bunker' is complex. John Beck's 'Concrete Ambivalence' argues that there should be a generalized definition of the bunker, but it is multifaceted and diverse (Beck, 2011). There is also an element of contrived or perceived bunker 'exoticism'.*

Sandys: There's an exotic nature to 'the bunker', which they just aren't.

Mulvihill: Popularly the bunker evokes some sort of strong, impenetrable space, this is certainly conveyed in computer game depictions of bunkers that have this fortress-like impregnability to them.

Alexis-Martin: Like the *Fallout* bunkers ...

Mulvihill: Whereas encountering the actual 'bunker' space. You cannot help but feel they are incredibly vulnerable spaces. The vulnerability of a bunker is, I think very tangible when you are in one.

Alexis-Martin: Yeah, and especially within the decommissioned bunker. The bunker that is now living in the emergency space, or living in theatre, or whatever else it becomes, right? If hypothetical World War III arrived, on the discovery that my old workplace was an old bunker, I'd probably get out of there quickly and find a cellar beneath one of the sturdier old buildings.

Sandys: Yeah, it's similar to the London tube system in that picture there (points toward a photograph of a tube platform during WWII air raid). During World War II, everyone slept down in the Underground, because actually it was deeper and safer than purpose-built shelters... It is interesting, considering this in the context of Fylingdales, because there are restrictions put on public access. Therefore, we come back then to the nature of licencing for opening to the public, health and safety restrictions, risk assessment. I do not know about you, but in making and showing my work, the administration and bureaucracy can take up more time than making the work itself. In a way, it is quite interesting to go through that process, because you are perpetuating the very nature of the myth that surrounds the inaccessibility of these spaces, albeit for different motivating reasons (national security concerns having morphed into health and safety considerations).

Mulvihill: You already know how I like to make visible the administrative and bureaucratic processes involved in making artwork. My residency at Fylingdales has produced plenty of this particular type of administration and documentation: quite a different form of cultural production than I am usually expecting as an artist! RAF Fylingdales captured all onsite activities in documents called 540, I imagine that some of the artistic activity on site will become captured and then restricted for thirty years under the Official Secrets Act before it goes into the National Archives. The thing is that the artwork isn't a secret, but it generated a document that by default is treated as classified.

Sandys: So your bunker work becomes an official secret!

Alexis-Martin: So, it gets interesting! From folding our bunker experiences together from the confidential planning for civil emergency in the repurposed

nuclear bunker, to the production of secret documents, in order to display art in the bunker.

Sandys: It is fascinating the nature of this secrecy, as you are working within an active space.

Alexis-Martin: In my case, I was working to protect the public and ensure that they're prepared for emergency, in a repurposed nuclear bunker, without knowing the heritage and the legacy of what I was doing: that emergency planning has its roots in planning for nuclear war, and that I was carrying out my role within a place originally designed for managing the Great British nuclear apocalypse (well, in so far as the end of world related to the county of Dorset!).

Sandys: Mine are the dead spaces, wrapped up in the annihilation project of nuclear warfare, but secondly abandoned and purposeless — they are functionally dead, Michael and Becky, to take us back to where we started this conversation, they are fundamentally *mundane* spaces for you too: in and of themselves, utilitarian spaces that have a dullness — a boredom almost — at their core, they are dead in that sense too.

*Its paradoxical how these spaces of survival become dead spaces, and are then reinvigorated by bunker work in their afterlives.*

Alexis-Martin: Without knowing its history, my workplace was just a strange environment. It had little hatches in the walls ...

Sandys: I love that though, I love the fact that these places are alive and functioning.

Alexis-Martin: They are, aren't they?

Mulvihill: It has been interesting working with Fylingdales. I think in some ways these spaces have become more accommodating.

Alexis-Martin: You camped overnight at Fylingdales as part of your artwork creation, didn't you? I think that is fascinating.

Mulvihill: Yeah. They suggested that it would be better if I stayed overnight, rather than driving down from Newcastle having only a few hours in the RAF Fylingdales Archive. Wouldn't it be better for me to start at eight in the morning and then return to Newcastle in the evening? The work has developed as a relationship: a co-production. Flt Lieutenant Richard Weeks, who is the Media Engagement Officer at RAF Fylingdales, has been working in the capacity of a curator to develop an exhibition in the SSPAR (Solid State Phased Array Radar) radar building at RAF Fylingdales. This building contains the radar and space operations rooms, which is a bit like mission control at NASA, where objects being tracked are visualized.

Sandys: Oh nice!

Mulvihill: There's this fascinating space within the radar complex, that I was shown while deciding how to site the artwork in the SSPAR. It is a network of decontamination chambers. Fylingdales was built to last for a minute into World War III. However, there was a fear during the latter part of the Cold War that the Fylingdales could come under attack from chemical or biological weapons. The idea being that the station would be attacked in a way that could kill and injure people operating the

radar, while reducing the risk of nuclear retaliation. The decontamination chambers have been repurposed as a gym now; it is amazing the contrast between notions of the rooms as a decontamination complex, which are now actually used for health and fitness.

Alexis-Martin: What sort of surveillance were you under, during your evenings at Fylingdales? Perhaps you can't answer this, but wouldn't it be interesting to see any CCTV of your activities in the bunker at night, as a very literal form of performance art? It could have a very interesting quality, an allegoric idea of sleepwalking in the bunker into nuclear catastrophe. In that dream-like state when it is late at night and surreal. Repurposing the bunker as bedroom, in addition to workplace.

Mulvihill: I think that is what is interesting is how implicitly your behaviour is adjusted by the site. It's not just me it's everybody, I think, who works there. For example, there is a heightened awareness of devices such as cameras.

Sandys: It feels wrong?

Mulvihill: Yes it feels wrong, but in a really embodied way. There is an archival video about the closure of the old radar site — the Golf Ball site. The story is that some of the engineers were held back from retirement, just to maintain the running of the old radar until the brand new SSPAR became operational. One of the engineers was allowed to video the switch, but despite having permission he narrates that having a video camera just feels wrong and uncomfortable.

Sandys: There are rules, in a way. There's a privacy rather than a secrecy that surrounds these military spaces.

Mulvihill: It's embodied. The secrecy is embodied rather than represented or performed. It's embodied and coded. That's what it is.

*With these closing thoughts on the pervasive power of secrecy and self-censorship hovering in our minds, we finally left the Churchill War Rooms, emerging from the Director's Office into Green Park on a beautiful warm day, blinking in the sunlight. We soon parted ways, descending back into the shelter of the earth, speeding in different directions through the London Underground.*

*Through our conversations, we had learned that the wartime and peacetime uses and stagings of bunker spaces are far more similar in nature and paraphernalia than we had all previously assumed. The bunker continuum stretches across purpose, past, present, and deep into the future of spatial use and affect. The bunker is simultaneously haunted by warfare and peace, yet also enveloped by the (in)visibility of its supposed duality. Thus, rather than having its own agency, it has become a passive space of projection by the occupant — whether they are an emergency worker, artist or other creative professional. From our three accounts, it has been as interesting to learn what we take from our bunkers, as much as what the bunker impresses upon us.*

*The bunker has been characterized as having some universal essence, and these 'bunker-ish' qualities are superimposed upon what is functionally an underground office block. Thus, bunker exceptionality arises from the projects that are played out within these spaces, and the nature of the 'exceptional' projects that have*

been projected onto the bunker's blank walls by planners of military genocide, multi-agency emergency workers, urban explorers and playful artists alike. However, the entangled meaning of the bunker, this bunker continuum, may pose problems from an ethical perspective — as the intersection and blurring of the arts and former military space may lessen its moral distinctiveness. It may almost be too easy to instrumentalize and play with the uses and meanings of bunker space. When we consider the atmospheres, routines and limits of this space in the context of our contemporary geopolitical climate, it is anything but dead.

## Notes on contributors

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Dr Kathrine Sandys is Head of Theatre Practice and a Principal Lecturer Theatre Practice at the Royal School of Speech and Drama, University of London. Her publications include 'Sublime Concrete' in: *In the ruins of the Cold War bunker: affect, materiality and meaning-making*. (2017) (Rowman & Littlefield).

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## References

- Alexis-Martin, B. 2019. *Disarming Doomsday: The Human Impact of Nuclear Weapons since Hiroshima*. London and Chicago: University of Chicago Press.
- Beck, J. 2011. Concrete Ambivalence: Inside the Bunker Complex. *Cultural Politics*, 7(1):79–102.
- Bennett, L. 2011. The Bunker: Metaphor, Materiality and Management. *Culture and Organization*, 17(2): 155–173.
- Bennett, L. 2017. *In the Ruins of the Cold War Bunker: Affect, Materiality and Meaning Making*. London: Rowan & Littlefield International.
- Bille, M. and Sørensen, T.F. 2007. An Anthropology of Luminosity: The Agency of Light. *Journal of Material Culture*, 12(3):263–284.

- Bousquet, A. 2014. Welcome to the Machine: Rethinking Technology and Society through Assemblage Theory. In: *Reassembling International Theory*. London: Palgrave Pivot, pp. 91–97.
- Bunge, W. 1989. *Nuclear war Atlas*. Oxford: Blackwell.
- Eschle, C. 2016. Faslane Peace Camp and the Political Economy of the Everyday. *Globalizations*, 13(6): 912–914.
- Goodman, S. 2010. *Sonic Warfare: Sound, Affect and the Ecology of Fear*. Cambridge: MIT Press.
- Irigaray, L. 2004. To Paint the Invisible. *Continental Philosophy Review*, 37(4):389–405.
- Vasseleu, C. 2002. *Textures of Light: Vision and Touch in Irigaray, Levinas and Merleau Ponty*. New York: Routledge.
- Voss, D. 2013. The Philosophical Concepts of Meat and Flesh: Deleuze and Merleau- Ponty. *Parrhesia*, 18: 113–124.
- War Rooms. 2019. Accessed 11/03/2019 <https://www.iwm.org.uk/visits/churchill-war-rooms>.