COLD WAR MUSEOLOGY

Edited by
Jessica Douthwaite Holger Nehring
Samuel J. M. M. Alberti

Routledge

Cold War Museology

Cold War Museology is the first volume to bring together interdisciplinary and international contributions from leading practitioners and academics specialising in Cold War museology.

  Bringing the most recent historiography of the Cold War into conversation with museum theory and practice, chapters within the volume analyse the current condition of Cold War museology. By unpicking some of the unique challenges facing museum specialists dealing with the Cold War, this book takes a lead in developing the collection, display and interpretation of this history. The chapters question what makes a Cold War object; address the complexity of Cold War time; face up to questions of Cold War race, gender and imperialism; and reveal how to materialise the Cold War imaginary in museums. Most importantly perhaps, the volume demonstrates that a consideration of the interconnecting forces of global twentieth-century history enables experts to add important complexity and nuance to the narratives with which they work and improve visitor understandings through innovative interpretations.

  Cold War Museology will encourage readers towards a more nuanced, holistic and inclusive approach to Cold War materiality in museums. It will be of great interest to academics, museum professionals and students engaged in the study of museums, heritage and the Cold War, as well as those with an interest in archaeology, media, culture and memory.

Jessica Douthwaite is Postdoctoral Research Fellow at the University of Stirling working on the AHRC-funded collaboration with National Museums Scotland, "Materialising the Cold War." Her Collaborative Doctoral Partnership PhD based at IWM London and the University of Strathclyde was titled "Voices of the Cold War in Britain, 1945–1962" and awarded in 2018. She is currently writing a monograph that explores how the national and international landscapes of post-war Britain contextualised and influenced civilian experiences of Cold War security. She specialises in museum studies, ethnographic and interview methodology, and gender and international histories.

Holger Nehring is Professor of Contemporary European History at the University of Stirling. He has published widely on the history of social movements in a

transnational and global context as well as on the conceptual history of the Cold War. Together with Sam Alberti, he has been the Co-I for the AHRC-funded project "Materialising the Cold War."

Samuel J. M. M. Alberti is Director of Collections at National Museums Scotland and Honorary Professor in Heritage Studies at the University of Stirling. After training in history of science and teaching museology, he worked at the intersection of museums and universities, first at the Manchester Museum, and then as Director of Museums and Archives at the Royal College of Surgeons of England (including the Hunterian Museum). With Holger Nehring, he has been leading the AHRC-funded research project, "Materialising the Cold War."

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Contributors

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Holger Nehring is Professor of Contemporary European History at the University of Stirling. He has published widely on the history of social movements in a transnational and global context as well as on the conceptual history of the Cold War. Together with Sam Alberti, he has been the Co-I for the AHRC-funded project "Materialising the Cold War."

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Acknowledgements

1   Making and Unmaking the Cold War in Museums

Holger Nehring, Samuel J. M. M. Alberti and Jessica Douthwaite

In the twentieth-century history gallery of the Deutsches Historisches Museum in Berlin, two cars are displayed at jaunty angles. They are both small, affordable, mass-produced automobiles in shades of green, both parked on a slope above a selection of consumer goods available in their country of origin. They are both instantly recognisable to those who lived through this period in history, and indelibly associated with the nation that produced them. But they are displayed for their contrasts as much as their similarities. One is a Trabant, produced in East Germany from 1957 until 1991; the other a Volkswagen Beetle, produced between 1938 and 2003 and after the Second World War in the West German town of Wolfsburg (Figures 1.1 and 1.2).

The Museum displays them to demonstrate visually the parallels between the two Germanies split during the 40 years of superpower conflict from the late 1940s known as the Cold War. The Federal Republic of Germany (and its Volkswagens) in the west was allied to the United States and the German Democratic Republic (with its Trabants) was a satellite of the Soviet Union in the east. These two blocs participated in a nuclear arms race to develop weapons so devastating that they would never be used; rather, their very existence was intended to deter an attack.

A generation since its conclusion with the dissolution of the Soviet Union and the unification of these Germanies, the Cold War is often characterised in popular culture by this nuclear standoff and the accompanying global politics.[1] At a glance, however, the cars and the goods displayed below them in the Deutsches Historisches Museum show rather the everyday experience of the Cold War.[2] In contrast to the fear of nuclear Armageddon, they are intended to generate nostalgia (or in the case of the Trabant, *Ostalgie*) and affection from those who remember, and perhaps curiosity from their children as to why these humble automobiles were so fetishised.

Elsewhere in museums, other vehicles, too, stand in as material metonyms for the superpower conflict. These tanks and spy planes sit alongside uniforms, banners, flags and fragments of the wall that split the German capital. These collections are deployed by curators in an attempt to address the difficult task of manifesting a war that did not happen, a four-decade phenomenon that (in the Global North at least) was an "imaginary war."[3] Their efforts are the subject of this book.

Figure 1.1 and Figure 1.2 Cold War exhibits at the Deutsches Historisches Museum. ©
DHM/Indra Desnica

Materialising the Cold War

Making the Cold War in museums, it transpires, is not simple.[4] As anniversaries roll around, twenty-first-century museums habitually commemorate global conflicts from the previous century. The First World War was the subject of considerable heritage activity in the United Kingdom and elsewhere during its four-year centenary. At the time of writing, we approach the eightieth anniversary of the conclusion of the Second World War, and the response is not so coherent. Still less so was the sector response in the lead-up to the thirtieth anniversaries of the fall of the Berlin Wall and the collapse of the Soviet Union in 2019 and 2021. For the Cold War was a complicated, sprawling entity and its commemoration likewise complex.

To understand this, Cold War heritage has become a focused topic in its own right and there has been a steady growth in studies of how the Cold War has been remembered and represented.[5] Alongside these sub-fields have emerged analyses of Cold War culture, including empirical work taking stock of Cold War remains in a heritage context and the infusion of everyday objects – like the cars above – with ideologies.[6] Work on the memory of the Cold War has, with some notable exceptions, mostly focused on its verbal and textual representations rather than its material markers.[7] Elsewhere there has grown a sophisticated scholarship on the material cultures and museology of war and violence more generally.[8]

As the anniversaries loomed, however, we discerned at the intersection of these fields a lacunae in the critical analyses of the material culture of the Cold War in museums. Not that we are short of primary sources: 40 years of preparation and readiness endowed a significant material legacy not only in the built environment and infrastructure but also in objects. In the exhibition halls and collection stores of museums are to be found thousands of items manufactured and crafted during the Cold War, for the Cold War and in response to the Cold War. A minority are on display in the small number of dedicated exhibits, but the majority are not.

Intrigued by the role of museum objects in the understanding of the Cold War and its commemoration, we set out to sample existing museum practice in Europe and North America in two projects. The first was a doctorate undertaken by Sarah Harper as a collaboration between the University of Stirling and National Museums Scotland, using the collections of the latter. As a proof of concept, this evidenced the considerable multi-disciplinary potential of museum objects to access not only the military experience of the Cold War but also the material manifestation of peace movements, readiness and technical developments.[9]

We also undertook a survey of existing Cold War interpretative practice in the United Kingdom, Norway and (West) Germany.[10] We examined how the conflict is portrayed, how buildings, images, text and artefacts interact in museums and exhibitions and how they generated specific interpretations. As with more traditional displays relating to the First and Second World Wars, we found that displays in military museums emphasised the importance of moveable technological artefacts: weapons, machines planes, cars and tanks serve as placeholders for the war-like character of the Cold War. But the real or potential use of these weapons is

rarely discussed. Other kinds of objects featured in a more limited way in military museums and, occasionally, elsewhere. Overall, we found these emplotments to be diverse and fractured: each museum chose different paths to staging the Cold War.

Nonetheless these findings led us to posit the distinct practices involved in manifesting a superpower contest that in the region we studied existed as an "imaginary conflict," which we dubbed "Materialising the Cold War." Under this banner, we set out to find out more in a multi-year project in collaboration with the RAF Museums and Imperial War Museums in the United Kingdom, with the Allied Museum in Germany and with the Norwegian National Aviation Museum. We set out to assess collections, analyse existing displays and evaluate user responses in order to understand how the Cold War is produced and consumed in these European museums. We were curious to see how the characteristics of the Cold War find fixed representations with and around objects and how these have been negotiated (especially compared to the World Wars). We wanted to analyse the relationship between museum objects related to the Cold War and visitors' experiences.

Thus, we hoped to suggest a new framework for Cold War Museology, which we put forward in outputs including an exhibition and an accompanying volume on *Cold War Scotland*, a professional toolkit and a range of digital products.[11] We were keen, however, to engage with scholars and practitioners beyond our partner organisations, so we invited interested parties to an international conference in 2023. From the papers there that focused on the collecting, displaying and consumption of Cold War objects in museums, the chapters in this volume emerged.

The analyses that follow are key in developing a shared understanding of Cold War museology. In particular, they provide an analysis of broader range of objects, institutions and audiences, which gives greater comparative purchase than the research of the core team and our immediate partners. The geographical scope is greater, although we remain focused on Europe rather than the superpowers of the Global South: most of our case studies come from British museums, but we have also included material pertaining to northern Europe, in particular Denmark, Sweden and Norway, because Cold War displays are especially well developed there.[12]

We are able to explore a greater variety of organisations, from national museums to local bunkers. We engage with different methodologies, including tourism studies and critical heritage studies, and different professionals, with authors based in universities and different parts of the heritage sector. The material culture we analyse spreads across the disciplinary spectrum from ephemera to high technologies. Perhaps most importantly of all, the studies here cover heritage practices that engage with a significant range of audiences.

In short, this book is about what it means to bring the Cold War into the museum: what happens when we interpret museum objects through the lens of the Cold War, how curators and audiences assign significance and value to objects as *Cold War* objects and what this process tells us about the memory of the Cold War in early twenty-first-century societies. We bring heritage and museum scholars into a conversation with Cold War historians to explore some key parameters of a Cold War museology. With this volume we seek to embed the Cold War into museum studies to the sophisticated level it has reach in studies of the built heritage.[13]

Remembering the Cold War

Our intended readership is, therefore, relatively broad: from heritage and museum professionals and theorists to historians interested in material culture and science and technology as well as to those working in and with museums as volunteers or collectors. Some of our case studies might also appeal to those generally interested in the objects we introduce, and the places we have visited.

Our approach in this volume builds on the (no longer so) new museology of the 1990s, which moves beyond the technicalities of collection management and categorisation of objects. Instead, like the new museologists we explore how these key tasks for museum professionals are embedded in wider political, social and cultural practices and also reflect cultures of memory and memorialisation.[14] Museums, thus framed, have been key agents for reflecting and forging collective memory.[15] But as most recent scholarship on memory has emphasised, memory is not simply out there, like an abstract idea; memory is a process in which different people and organisations take an active part.[16] This has been especially the case for the memory of the Cold War.[17] While scholars have long interpreted the conflict as a binary, homogeneous and stable tension centred around the nuclear confrontation that structured international and domestic politics from the end of the Second World War to the collapse of the Soviet Union in 1991, research now emphasises its complexity and differentiation.[18] The binaries of the Cold War are seen as less fixed, and some of the most innovative research now emphasises the connections between the blocs within the broader framework of political and military confrontation.[19]

Researchers have also started to emphasise more systematically the agency of non-Western actors beyond what had previously been seen as the transatlantic American-European core of the Cold War: rather than appearing as proxy wars of an essentially European and transatlantic conflict, the violence in Africa, Asia and Latin America during this period now appears as part of "world making after Empire" that was anchored in the superpower confrontation rather than directly caused by it.[20]

Most recently, scholars have also paid less attention to political ideologies – the conflict between liberal capitalism and democracy, on the one hand, and state-socialist authoritarianism, on the other hand. Rather, they have moved towards analysing how the Cold War happened primarily through people's imaginations: scenarios of a nuclear war that never happened, of friends and enemies and of utopias of a better world.[21] These imaginary superstructures were not simply opposed to the material structures, as classic Marxist analysis would have it. Rather, they were deeply sutured to and enmeshed with the material world and often helped create it in the first place – they allowed people to make sense of the Cold War and associate emotions with it.[22] From this perspective, the Cold War then appears not only as a period of twentieth-century history but also as a political, socio-economic and cultural constellation.[23]

This state of the field leaves Cold War museology with a number of challenges that go beyond what heritage scholars have focused on in the built

environment and archaeologists have faced when addressing challenges of the Cold War. The fundamental challenge is how to materialise ideas and imaginaries in the museum context: how do we collect, display and interpret ideas and imaginaries?[24] From this fundamental question flow a number of other issues that pertain to the material-imaginary nexus that a Cold War museology needs to wrestle with.

The first of these is the question of a potentially limitless profusion of objects that can be deemed to be Cold War: a fighter jet, a nuclear submarine, a submachine gun and a rocket to a soldier's uniform, a lapel badge, a can of Coca Cola, a peace movement banner or a computer, everything is potentially "Cold War." We might therefore arrive at categories of analysis that turn every museum of twentieth-century material culture into a Cold War museum, simply because they collect and display object that pertain to the period of the Cold War. Cold War museology needs to grapple with what Paul Cornish has called "the extremes of collecting."[25] This is not only a practical issue of collection management, but it also has conceptual implications about how to display such diverse objects and with what stories. In particular, it is important to reflect on the extent to which museum collections and displays reflect some of the core assumption of this Cold War constellation, especially with regard to military masculinity, the gendered division of labour within societies and the racial hierarchies of international relations.[26]

The second complex of issues a Cold War museology needs to grapple with revolves around the question of display and audience engagement. Given that some of the key features of the Cold War are highly abstract, showing the Cold War through objects is especially challenging. One way around this, especially popular in war museums, has been to rely on the aura of large technological objects to communicate the war-like character of the Cold War. But as with displays and exhibitions on other conflicts, this method raises the question of whether "war machines" turn museums into "gigantic children's toyshop[s]."[27] For the victims of weapons of war are rarely, if ever, shown.[28]

Third, the abstract nature of the Cold War also raises questions around the ways in which museums display experiences – and the authenticity of the experiences they purport to show. This has often been framed as a conflict between the "reconstruction" of experiences and authenticity, on the one hand, and their "simulation," on the other hand.[29] But these two sides are best seen as poles on a spectrum or ideal types as opposed to actual positions. For showing experiences through museum objects is always a process of taking stuff out of one context and placing them into another, of constant decontextualisation and recontextualisation as museum objects always have "multiple context-bound affordances."[30] Just as there is "interplay between various forms of remembering" with artefacts,[31] there is also an interplay between various experiences when diverse audiences consider exhibitions.

Cold War museology therefore refines our understanding of Cold War history as well: it unsettles the stable and static nature of the Cold War and has the potential to highlight a much less settled "everyday geopolitics."[32] This core characteristic of the museology of war and conflict can often be uncanny and unsettling for audiences.[33]

Locating the Cold War

A museology of the Cold War also requires us to think about the relationship between material objects and space. In particular, in this collection we are interested in the relationship between landscapes, physical infrastructures and other immovable features of Cold War heritage, on the one hand, and moveable objects, on the other hand. What happens when objects are taken from their original site to the museum? And what happens when objects from multiple sites are reassembled at a specific site, such as a bunker museum, to create a specific feeling of authenticity?

This general museological question has particular relevance for the Cold War. Just as the Cold War seems limitless conceptually, so it also appears as without clear boundaries geographically: the Cold War stretched from underground to outer space and everything in between. Many of the social and cultural theories that emerged during the Cold War posited the irrelevance of space (most prominently perhaps Paul Virilio); however, as some of the most innovative research on Cold War heritage has shown, spaces and places mattered significantly for the Cold War as "conflict produces and redefines space," in the case of the Cold War also spaces of the mind.[34]

The Cold War worked, first, in delineating military from civilian spaces within society, leading to a system of "parallel landscapes" of the Cold War where military activities where assigned to "defined sites and spaces"[35]; second, it does this through the representation of spaces and places in maps; and, not least through the way in which spaces and places were "embedded in material practices."[36] Like other forms of heritage scholarship, a Cold War museology should therefore overcome the binary of materialism versus constructivism when thinking about the authenticity of objects displayed in spaces.[37] This will also allow for more systematic considerations of different layers of time that frame the experiences and memories of museum audiences.[38]

The built heritage of architectural and environmental Cold War structures is often defined by decay, recovery and restoration – a heritage in decline that is deemed to require protection. In fact, the field of built Cold War heritage is more advanced partly because it was a response to the decommissioning of military sites at the end of the Cold War that demanded criteria that could be used to determine which sites were significant as Cold War sites and for what reasons. Given that mainly airforce sites, bunkers and some radar stations were affected by the decommissioning it is perhaps no coincidence that it is these fields that most research on Cold War heritage has focused so far.[39]

Such official initiatives often responded to – or were accompanied by – local explorations and projects by enthusiast groups, such as bunkerologists or aircraft enthusiasts. These individuals and groups highlighted the value of preservation and often founded local museums, many of which have now become extremely popular visitor attractions and profitable businesses.[40] As Steven Leech has noted, it was often such initiatives for local museums at former Cold War sites that endowed such sites with significance as Cold War heritage.[41]

In tackling the issue of the relationship between spaces and objects, inspiration can be drawn from how heritage scholars have forged new ways of understanding the presence of conflict and trauma in the built environment and what this means for conceptualising the impact of war on everyday life in diverse, global locations (past and present).[42] For example, Sharon Macdonald defines "difficult heritage" as that which does not fit the "selective and predominantly identity-affirmative nature of heritage-making"; events and material that are thus silenced, ignored or destroyed.[43]

Museums exist at and between places and spaces, meaning not only that their material contents can bridge markedly distinct Cold War locations, events and actors but also that the stories that museums might tell through objects lack the kind of coherence that audiences might appreciate. In particular, for the standard Cold War interpretation of a frozen conflict, it is difficult to identify heroes and villains in the ways that war museums have done for other conflicts.[44]

Networks, Narratives and Values

To return from places to things, as Odd Arne Westad reminded us in his keynote lecture at the conference that gave rise to this book: the Cold War was essentially about material, about stuff, big and small.[45] It was about the ways in which states competed in making more material than their respective opponents or enemies: more nuclear missiles, more bombs, more guns, more tanks, more uniforms; this is the aspect that conflict archaeologists have summarised under the term "matériel culture," the culture of objects with a direct relationship to military mobilisation.[46] The Cold War was about the competition of states, about access to the material required to make this stuff as well – and about the competition about who produced the best stuff, from guns, to planes to kitchen to other everyday consumer goods.[47] But it was also about the many everyday items that protesters might use or repurpose to give a voice to their concerns, such as the rattle bottle that the Scottish protester Kristin Barrett carried with her on peace marches in the 1980s, repurposing a blue mass-produced and mass-consumed fabric softener bottle.[48]

Our book provides some responses to Westad's observations and the challenges outlined above by highlighting how the Cold War is made, unmade and remade through materialisation in museums. We suggest three elements of a museology of the Cold War, each of which engage more general museological questions, while highlighting Cold War specificities.

The first theme, and section of the volume, we dub "networks of materiality." Contributions discuss how artefacts were or became part of broader networks, either of objects or systems, or of humans and things.[49] The theme is especially apparent in Sarah Harper's chapter on Cold War objects in the collections relating to the Royal Observer Corps at National Museums Scotland. By problematising the relationships and networks between objects and the places in which they are collected and displayed she engages with a fundamental question of all museum and heritage scholarship: the location of the authenticity of objects and the issue of who has a say over that authenticity.[50] Meanwhile, Johannes-Geert Hagmann's, Holger

Nehring's and Samuel Alberti's chapters highlight through object biographies how artefacts from the period of the Cold War defy straightforward historiographical and museological definitions and how their Cold War meanings are created by and through interactions between people, places and other things.

Nehring's chapter raises an important point about Cold War classification in museums: it is slippery and while inherently material, it also resides in the people who deal with the material not the objects themselves. Similarly, while an object (like a computer) might appear inherently Cold War, that era was also inconsistent in its reach and we cannot assume automatic qualification for Cold War categorisation. Hagmann weaves together the biographies of one object – the Bell Systems travelling-wave maser – to argue that Cold War displays must evolve with developing perspectives on existing collections. The travelling-wave maser becomes a case study of the multi-dimensional opportunities presented by objects once collected for one reason (in this case history of science) and reinterpreted in light of new angles (society and social value, for example). Finally in this section, Alberti demonstrates how a quintessential Cold War artefact – a British Vulcan bomber, capable of carrying nuclear weapons – was never deployed in an explicitly Cold War context and how the Cold War meanings that attach to it emerge from the stories that museum curators as well as former crew tell about it.

Our second theme builds on these approaches by asking what it means for these material networks if and when they are displayed and interpreted in museums. Here we explore the relationship between spaces, places and things, a relationship that Alberti's and Harper's chapters already touch upon. This section engages the key museological question we began to unpack above, of the relationship between moveable objects and the location at which they are displayed and what it means if objects are removed from the spaces at which they were originally used.[51] These chapters are not only about how the material fits within the museum collection but also the relationships with the people who have touched and been touched by them – the range of expectations, meanings and intentions bound up by each object. For example, Jim Gledhill highlights the ways in which three museums in Berlin engage use objects to reveal previously secret matters of espionage, highlighting the importance of multi-perspectival approaches to the Cold War.

Authors in this section also demonstrate how the landscape of material afterlives – whether that be the museum display case, airfield or a refurbished bunker – differentiates meanings and alters how the Cold War features in an object's curatorial narrative. Rosanna Farbøl's chapter, considering Denmark, offers an analytical survey of what happens when bunkers pass from use as parts of the defence infrastructure into part of national heritage – and then become museums. Also for Denmark, Bodil Frandsen and Ulla Varnke Egeskov provide a fascinating report on how, as curators, they created a Cold War Museum from scratch at the former government bunker Regan Vest.

Two of the chapters in this section consider the ways in which private experiences are reflected in museums and collecting more generally. Peter Johnston's study of the British Army on the Rhine and its limited material presence in museums emphases the human dimension of material that deals with the absence of

conflict and a perpetual state of preparation. He advocates for the importance of capturing personal stories associated with events that never happened. Similarly, Grace Huxford takes us away from the military aspects of a Cold War museology by exploring the private and personal museums that British Army personnel posted in West Germany created to preserve their memories of the conflict. Such an exercise of de-centring spaces and private place making also brings groups into focus that might otherwise be neglected in a Cold War museology based around military and technological objects: women and children and their engagement with the military components of the Cold War. Johnston's and Huxford's chapters also highlight that the imaginary of the Cold War was not necessarily utopian and infused with meanings of hope and fear. Neither author finds expectations of a better world or an impending apocalypse, but objects pertaining to a continuous present that often manifested as boredom.[52] Closing the section, Adam Seipp considers the ways in which popular local history, heritage, museum objects and landscape interact at a popular German Cold War museum site, Point Alpha at the former West–East German border.

Our third theme addresses the values and representations that such discussions about the relationships between objects and things give rise to. Cecilia Åse and her colleagues problematise the relationship between military displays in Swedish museums and political culture and highlight some of the problematic aspects related to it, especially regarding the status of a particular form of military masculinity in contemporary Swedish political culture.[53] In particular, they analyse how different conceptualisations of time have been used in museums to generate various normalising and standardising narratives of Sweden's Cold War. Those temporal interpretations rely heavily on masculine and masculinised notions of Cold War experience, a gendered framework that the authors argue skews audience views of this history. Karl Kleve's chapter offers a case study about the relationship between local and national memories in the Norwegian Aviation Museum in Bodø in Norway and the ways in which they create social values. He considers the local memory of the U2 incident in 1960, when an American spy plane was shot down by the Soviet Union on its route from Peshawar to Bodø and its pilot captured and how this became embedded in the town's identity.

Peter Robinson and Milka Ivanova highlight the ways in which tourism to museums at Cold War sites in Britain and Bulgaria turn such museums into "arenas of articulation" of values and broader socio-economic questions around the question of "dark heritage" and "dark tourism."[54] Finally, Jessica Douthwaite's chapter tackles the central museological question of how values are assigned to objects in alerting us to the ways in which images of colour help us understand museum display of the Cold War and how certain colours and colour combination have an impact on the experiences and emotions of the Cold War in museums.[55] Douthwaite uses a feminist approach inspired by critical heritage studies to interpret the range of colours that museum practitioners associate with this era. Being attuned to the colour of collections, displays and design, she argues, punctures stereotypical interpretation, while questioning predominant colourways also adds complexity to seemingly obvious narratives.

Cold War Absences

We offer these studies as one step towards a Cold War Museology. Other steps are called for: it is important to reflect on what is missing, the silences and absences of collections and how one might address them. Rhiannon Mason closed the conference that gave rise to this volume by reflecting on the museal silences that she and Joanne Sayner identified. This was as an apt lens to reflect this concern, where "silences in the historical record as collected by museums" have combined with the ways in which museums' "structures of knowledge… produce silence."[56] Only the simplest, most memorable, much popularised signifiers – the military hardware, visions of nuclear apocalypse, elite-level politicking and the fact and fancy of espionage – are visible in most museums that deal with the Cold War. While military, political and technological topics represent Cold War time, geography, affect and memory, their over-emphasis belies a plethora of silenced interpretations as-yet under-examined by museum practitioners and researchers alike. As Alberti and Nehring have argued elsewhere, through a collaborative, reflective Cold War museology, "there is *potential* energy to harness, not only across different kinds of collections, but also across different media."[57]

The countless Cold War feelings and perceptions of individuals, communities and nations may never be materialised in the simple sense, but in this volume we demonstrate how the intangible might be grasped through techniques specific to museums and the museological approach. In this sense, we argue that contemporary museums have an opportunity to lead the way in debunking and demystifying mainstream interpretations about the Cold War. We also argue that we need to think about time when materialising the Cold War in museums. As the Cold War stretched across several decades and it was not homogeneous, there needs to be attention to the importance of chronological contexts, so as to give audiences an idea as to how these contexts have framed emotions, perceptions and ideas. This will also sharpen awareness of how legacies of the Cold War have continued into our own world, and how they have influenced memories. In this respect, there is an omission in this collection that seems glaring at the time of writing: the relationship between Cold War heritage and interpretations of Russia's war against Ukraine as the start of a new Cold War. We hope that our studies will aid in the formulation of these analyses in due course.

For while museology can push the boundaries of social and cultural memory, it can never be entirely independent of it – museums cannot remove themselves completely from their own societies, cultures and assumptions. In particular, they cannot simply generate collections that fit their museological preferences: while we would like to see collections that are more inclusive of non-Western experiences, of experiences of people of colour and women and while we strongly advocate a de-centring of a Cold War museology away from military and technological objects, we are challenged by the partial history of collecting during and after the Cold War. And that history of collecting mostly focused on such objects because it – and they – reflected assumptions about nationhood and technological development that the later new museology came to critique. This is why the preponderance

of chapters in our volume still consider technological or military objects or analyse objects in their specific (military) locations. It is therefore perhaps no coincidence that science and technology museums in the broadest sense: collecting, displaying and telling stories about "curious devices and mighty machines" have given them a heightened sense for the challenges of abstraction and complexity that come with science and technology.[58] It will take a generation of retrospective collection development to reflect a greater diversity of voices in the stories of the Cold War.

Another important issue our book does not address is the role of museums and exhibitions during the Cold War itself – a rewarding question that historians have begun to address.[59] There is great potential to build on these and our studies to explore the ways in which material objects in museums are related to the Cold War confrontation. Possible examples include the ways in which museum collections were influenced significantly by donations from a ministry defence or key industries for the purposes of Cold War propaganda. This has been especially the case for nuclear devices.[60] Questions arise here as to the political role of museums, or the ways in which their collections and displays can become part of political controversy.[61]

Furthermore, a potential and especially controversial avenue for exploration is the relationship between museum collections and conflicts. This concerns the ways in which museum objects reached the museums, and in particular whether they had been looted or stolen as part of military operations.[62] Inter-disciplinary scholars such as Christine Sylvester and Lisa Yoneyama have provided us with stimulating studies of how the Cold War proxy wars in Asia and elsewhere have been dealt with in western and non-western memorialisation practices. Sylvester and Yoneyama encourage us to examine "the larger question of war authority" when it comes to the memories and material curated for museum display.[63] Similarly, Eastern Europe is emerging as a distinct and important field within museological scholarship and, influenced by anthropological and ethnographic approaches, has raised important points of reflection about how museums in "the West" have reified notions of Western superiority in the Cold War, while at the same time harnessing images of an authentic life under socialist dictatorships.[64]

Such museological challenges are not specific to the Cold War – Cold War objects are but one of the many types of objects for which such questions of provenance, cultural responsibility and power arise. If there is a specific Cold War challenge to interpreting what Frederik Rosén calls the "heritage-security nexus," it is that the concept of "Cold War" tends to make relationships of power and violence invisible.[65] Through our approach of "materialising the Cold War," we sharpen our awareness for these questions of provenance and power.

Cold War museology – like heritage more generally – is as much about the present and the future as it is about the past.[66] It makes sense of a key period of twentieth-century history in our time – and in the negotiation about assumptions about what Cold War museums might look like in the future, what objects are likely to be deemed significant and which ones are not. This is not simply a negotiation about a set of criteria that we might devise on what does and does not constitute "Cold War significance."[67] Apart from practical questions of which objects can be

kept and displayed, it also involves a reflection of what kind of museum and what kind of stories and experiences are needed and wanted to engage diverse audiences.

Throughout this volume, our contributors explore how memory – whether individual or collective – influences construction of historical narratives in museums. The cumulative effect of these chapters is to highlight where and how comfortable memories of the European Cold War affect museum interpretation, while revealing how museums work to destabilise such comfort through challenge, dispute and disturbance.[68] These endeavours are especially significant where the silences are invisible or unknown; comparative memory-work addressing a loosely related geographical terrain provides the context in which to unearth diverse museological absences. This finding chimes with the work of the Unsettling Remembering and Social Cohesion in Transnational Europe (UNREST) project which assessed "dominant" approaches to war and conflict across a selection of European museums.[69]

The case studies in this volume address the politics of Cold War memory in Europe explicitly and robustly. Yet authors are also cognisant of the realities of the museum setting, in which as UNREST researchers came to find, the "complex and multi-layered roles" undertaken by museums are "major constraints" on institutions' abilities to apply agonistic memory as an interpretative framework.[70] Our chapters highlight that curatorial difficulties are often rooted in contemporary Cold War events and experiences that were and remain secret, unknown or obscured today, or which have become increasingly contentious due to emerging twenty-first-century geopolitical concerns. Again, national identity – and its Cold War roots – frames how institutions assess both those tricky contemporary narratives and translate for present-day audiences, in these cases Scandinavian, German and British.

The cumulative intent of the chapters in this volume is to call for a reflective museology, in which the difficulties associated with forming judgements about Cold War history are foregrounded to encourage active management of museum practice and museology of this period. As part of that process of materialising the Cold War in museums, we encounter the ways in which the Cold War was both made and unmade, the spaces and places where this happens and what this means for museum collections, interpretation and audience engagement. This is what a Cold War museology is about.

Notes

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 4 We draw museological inspiration from the historical approach in Thomas G. Paterson, *On Every Front: The Making and Unmaking of the Cold War* (New York: Norton, 1992).

5 Wayne Cocroft and Roger J. C. Thomas, eds., *Cold War: Building for Nuclear Confrontation 1946–1989* (Swindon: Historic England, 2003); Jon Wiener, *How We Forgot the Cold War: A Historical Journey Across America* (Berkeley: University of California Press, 2012); David Lowe and Tony Joel, *Remembering the Cold War: Global Contest and National Stories* (London: Routledge, 2012); Paul Betts, "The Twilight of the Idols: East German Memory and Material Culture," *Journal of Modern History* 72, no. 3 (2000): 731–65; Kryštof Kozák, György Tóth, Paul Bauer and Allison Wanger, eds., *Memory in Transatlantic Relations: From the Cold War to the Global War on Terror* (Abingdon: Routledge, 2019).

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8 Thomas Thiemeyer, *Fortsetzung des Krieges mit anderen Mitteln: Die beiden Weltkriege im Museum* (Paderborn: Schöningh, 2010); Anna Cento Bull, Hans Lauge Hansen, Wulf Kansteiner and Nina Parish, "War Museums as Agonistic Spaces: Possibilities, Opportunities and Constraints," *International Journal of Heritage Studies* 25, no. 6 (2019): 611–25; Jörg Echternkamp and Stephan Jaeger, eds., *Views of Violence: Representing the Second World in German and European Museums and Memorials* (New York: Berghahn, 2019).

9 Sarah A. Harper, "Bombers, Bunkers and Badges: The Cold War Materialised in National Museums Scotland" (PhD thesis, University of Stirling, 2022) as well as her chapter in this volume.

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Part 1

Networks of Materiality

2 Readiness for Red Alert

Engaging with the Material Culture of the Royal Observer Corps

Sarah A. Harper

Since the Cold War ended, historians and heritage professionals have endeavoured to preserve tangible examples of how Britain prepared for and anticipated a nuclear attack. The efforts to prepare and plan became "itself a key battlefield of the Cold War."[1] The Royal Observer Corps (ROC) was pivotal to this state of readiness by preparing to monitor and communicate the effects of a nuclear attack from their underground monitoring posts across Britain. Fortunately, their service was never activated.

As the Cold War ended, the ROC became redundant and was subsequently dissolved as an organisation. Landowners and farmers became the new owners of unusual underground monitoring posts, as their leasehold land was returned. Senior Observers were advised to remove all equipment from the posts and return items to their Group Headquarters. Many Observers felt they too had been abandoned. However, in the years following stand-down, through their shared identity and memories, former Observers have reunited to commemorate the ROC and their Cold War role through heritage projects.

There are various stakeholders who are interested in and have made efforts to preserve ROC heritage. The Royal Observer Corps Association and other smaller ROC heritage groups have worked together to collate histories and memories as well as sourcing ROC material culture, restoring posts and donating objects to museums. Museums like National Museums Scotland (NMS) have become custodians of ROC material culture which have come to represent the Cold War in the collection.

These museums, former Observers and other enthusiasts have made significant efforts to preserve Cold War era ROC objects and the associated built environment. This chapter aims to explore the formation of the ROC as heritage and how museums and amateur heritage groups have developed their ROC collections. Furthermore, I will consider how museum professionals and amateur heritage enthusiasts approach ROC heritage through collecting, interpreting and displaying ROC history in order to examine how these approaches influence how the public perceive the Cold War.[2]

As material culture is at the core of this research, I used an object biography approach to appreciate the life of an object from its creation, through its use-life to eventually becoming a museum object.[3] The range of people involved in an object's

life changes when it enters the museum as it becomes subject to observation from curators, researchers and visitors who each ascribe their own personal meanings and connections to the object. This method is useful in comparing the museum life of ROC objects with those ROC objects owned by heritage groups and enthusiasts. The next section will give context to the Cold War role of the ROC and highlight how important ROC objects and equipment were in monitoring and communicating the effects of a nuclear attack.

The Royal Observer Corps

The ROC was a uniformed civilian organisation under the control of the Royal Air Force.[4] The roots of the ROC can be traced back to the German Zeppelin raids during the First World War, when volunteer Observers would watch the skies with searchlights. During the Second World War, the ROC lived up to their motto "Forewarned is Forearmed" especially during the Battle of Britain where they received credit for their aircraft recognition abilities, after which they were granted "Royal" status.[5]

The ROC was temporarily disbanded in May 1945, but increasing tensions with the Soviet Union and the development of jet aircraft justified their reformation in January 1947. At this time the Air Council was making plans to improve British air defences by reactivating Second World War era ROC posts to create the ROTOR early warning network. These prefabricated Orlit above-ground posts were fitted with specialist equipment to track and report aircraft movements. However, as Nick McCamley argues, this system was "technologically obsolete even before it was implemented" as the capability of nuclear weapons became a bigger threat than conventional weapons.[6]

In 1953, the Home Office conducted studies to investigate the potential effect of a nuclear attack across the country, resulting in the creation of a network of shadowgraphs fitted to ROC post which would record any bomb blasts.[7] Subsequently, in 1955 the Home Office created the United Kingdom Warning and Monitoring Organisation (UKWMO) by integrating the Air Raid Warning Organisation with the ROC.[8] The UKWMO would confirm a nuclear strike on Britain, warn the public of imminent fallout radiation and advise national authorities.[9]

The role of the ROC needed to adapt to combat the new nuclear threat. To protect Observers from lethal exposure to radiation in the aftermath of an attack, posts were buried underground to provide shielding. The role of the ROC was then to report any nuclear bomb bursts within range of their posts and monitor the resulting fallout.[10] Observers reported to their designated Group Headquarters the predicted size of the yield of the bomb and the distance from the ground zero which would be triangulated with the other underground posts within a cluster.

The ROC was issued an inventory of equipment specially designed for their role and to cater for the Observers. The context of an underground monitoring post is important in order to appreciate the uniqueness of the space and to show how the environment is key to the biography of ROC material culture. Underground monitoring posts, totalling 1,560 across Britain, were constructed from 1957 onwards of

the same uniform design and equipment supplied. Posts were grouped into clusters of two to five posts, approximately 8 miles apart with one acting as the master post.[11] They had a 15 ft entry shaft with a ladder down into two small rooms, a chemical toilet cupboard and a larger 15 ft by 7 ft room.[12]

By designing and constructing over a thousand underground monitoring posts, the British Government attempted to prepare and defend the nation during the Cold War. The contents of these posts also embody this inherent readiness, particularly as these objects were brought together or created in response to the need to prepare for a nuclear attack. Each post was allocated an inventory of monitoring and communications equipment required to fulfil their role as well as domestic items and furniture to cater for the Observers. The small room underground was minimally furnished with a cupboard, instrument shelf and fold down table to accommodate the technical equipment, and a set of bunkbeds and chairs.[13]

Although all posts were issued with an identical inventory, each post to some extent was shaped by the Observers who inhabited this unusual setting. Personalisation of the posts varied, with some simply making time saving alterations for using the equipment or making the space more comfortable. For example, some collapsed the bunkbeds to make it easier for sitting and brought along books and playing cards to occupy themselves during quieter periods.

The equipment provided underground worked in tandem with the minimum visible infrastructure above ground. Aside from the entrance hatch and air vent, specific physical features and fixtures were designed to enable the equipment used below ground to function without the need for Observers to expose themselves to radiation. This included the baffle plates which connected to the Bomb Power Indicator, an opening for the Fixed Survey Meter and fittings to attach the Ground Zero Indicator to a dedicated space next to the entrance shaft.[14]

Since the end of the Cold War, heritage bodies, museum professionals and enthusiastic amateurs have made substantial efforts to preserve sites of various Cold War activities. Most Cold War sites have transitioned from being active, to their abandonment, then in some cases being rescued by heritage-minded individuals. However, this process is not inevitable. It takes agency and action of various stakeholders to, in some ways, reactivate these sites for a new purpose. There are a wide range of Cold War sites which have completely disappeared or decayed, including hundreds of ROC posts. As Inge Hermann examined in her study of Cold War heritage and tourism, many site managers and local groups claim to have heroically "discovered" or "saved" these neglected sites for future generations.[15] There are a number of "lay" participants who advocate the preservation of Cold War sites as a means to celebrate the achievements of the scientists, the military and civilians in protecting peace and preventing war with the Soviet Union. These tend to be veterans, former employees, or local people who believe their Cold War efforts can now and should be shared. Groups such as Subterranea Britannica, who have collated extensive research on all underground structures in Britain, are drawing increasing attention to these former Cold War installations.[16]

However, as Gregory Ashworth warns: "our built environments are increasingly cluttered with the museumified artefacts, monumentalised buildings and

sacralised sites that previous societies believed were worthy of preservation for us and for future generations stretching into infinity," highlighting the perils of over-enthusiastic heritage site restorers.[17] Due to the previously secret nature of these sites, many enthusiasts are attracted to the excitement, risk and discovery of the former intended uses for these installations. ROC monitoring posts are a prime example of this drive to preserve Cold War heritage. However, there are significant differences in how accredited museums and amateur heritage groups have preserved ROC heritage.

Differing Approaches to ROC Material Culture

The approach to ROC material culture differs between NMS and amateur restorers who are both influenced by the parameters imposed on them. NMS is an accredited museum which, unlike many smaller accredited museums, has increased access to resources, funding and expertise due to its status as a national museum. These aspects influence the life of objects entering the museum as they are exposed to different organisational policies and people. Curators are naturally influenced by their own specialisms and interests when acquiring objects, but few will have direct experience or emotional attachments to ROC objects in the same way some ROC restorers and enthusiasts do.

Post restorers are often former Observers, this means their approach to the objects is informed by their experience using the objects when they were functioning. Their decision-making in preserving and displaying objects is not based on accepted methods of preventive conservation, unlike the museum policies which NMS museum professionals adhere to. These museum policies influence how curators make decisions which alter the museum life of the objects. In comparison, amateur restorers have more flexibility in their approach to material culture, but often feel constrained by their lack of resources and credibility when developing former ROC posts into heritage sites. The following section will explore where these differences in approaches to ROC material culture are in terms of collecting, storing, restoring and displaying ROC collections. Firstly, it is important to consider what motivates the different organisations to preserve ROC material culture.

Motivation for Preserving Royal Observer Corps Material Culture

The motivations for preserving and collecting ROC material culture differ between NMS and the post restorers. NMS endeavours to collect objects which represent the history and people of Scotland. By preserving the ROC material, the museum is representing the Scottish branches of the ROC and the influence of the Cold War on the Scottish landscape and the lives of civilians. Although the museum was not actively seeking ROC objects for the collection, they were willing to accept the acquisition from a group of Observers from the Edinburgh Group Headquarters who donated examples of almost all equipment required to run an underground monitoring post. The collection ranges from monitoring and communications equipment to domestic items and uniforms, as well as a wide range of associated

documentation and even fixtures and fittings such as the bunkbeds and internal door. The biographies of these objects are interesting as, even during their active lives, they were never actually used in the circumstance in which their use was imagined. As these objects became redundant, they began to be viewed in a new light and valued for their qualities as museum objects rather than their original function. Due to the movability of these objects, there is now a disconnect between them and their original environments of the underground post, which also separates the objects from their historical context.

While former ROC Observers, enthusiasts and restorers also collect material culture to commemorate the efforts of the ROC, they also do it for their own enjoyment and to make tangible connections to their personal experiences. The sense of personal attachment and identity making is evident in the significant endeavours of post restorers and ex-Observers in gathering and preserving ROC artefacts and restoring sites. By doing this, they solidify their legacy and role in the Cold War and also encourage future generations to acknowledge the efforts that were made to protect Britain against nuclear attacks. There is also a desire to restore the former community of ex-Observers who were part of the wider network of Observers across the country. The Observer network stretches not only geographically but across generations, whereby different people joined for long- or short-term roles and often moved between posts. Most restored posts have their own websites or social media platforms where they can share updates on restoration, ask for support and advertise open days and tours. For example, the Skelmorlie restored post in Ayrshire and the 28 Group Observed restorers in Dundee regularly update their website and social media platforms with information about their latest renovations, events and fundraising appeals.[18]

Collecting ROC Objects

The methods of collecting differ significantly between the museum and ROC enthusiasts. The museum is governed by collecting policies determined at senior levels to ensure the objects collected are representative of Scottish society and are deemed to be significant in global and national history. In 1992, shortly after stand-down, a group of ex-Observers delivered the collection to the National Museum of Flight. These objects were placed in long term storage, spread across several shelves, each labelled with their accession number and an object name. The ROC collection was offered to the museum rather than being actively sought out by curators.

Although museum curators are more limited in their freedom to acquire objects, they too are driven by passion, shared interests and understand the potential for objects to tell a unique story when they seek out new items for their collections. In contrast, enthusiasts are very active in their quest for ROC artefacts and information as they enjoy the chase of finding unique or rare artefacts. Some share information about their finds with fellow enthusiasts in online forums and social media groups. Online auction sites such as eBay have enabled items to be traded, bought and sold easily between enthusiasts. There is a sense of community among regular purchasers of ROC material culture despite the element of competition.

For example, through networks such as the Royal Observer Corps Association and social media such as the Facebook group "Royal Observer Corps (All Groups/ Posts)," members discuss their desires and share information about where they might source the items they are looking for.[19]

Geographically, ROC posts are spread across the United Kingdom in varying conditions. Although a small but growing number of posts are being restored, the majority have been abandoned or destroyed. In some cases, objects can still be found in abandoned ROC posts and have been adopted to furnish restored ROC posts. Due to the standard inventory of equipment provided to each post, items can integrate seamlessly into posts they were not originally used in, unless they have been marked with post names or numbers.

When restorers do discover items that are original to their post, they feel a sense of achievement and attachment to this tangible link to their past. One restorer in Northern Ireland described, aside from what had been left, he only has one piece of equipment that "belonged" to his post. He mentioned his delight: "I managed to get back a piece of training equipment that I found in the NI Governments former Nuclear Bunker in Ballymena, it still had my post's designation number written on it and it was a fantastic feeling to put it back on the desk in the post where it had originally sat."[20] The act of returning this object to the post it originated from is a way of re-establishing the network between objects and place.

However, most post restorers do not take account of the fact that most of their objects are not original to their post, preferring to at least have an example of the object than not at all. As the Skelmorlie post restorer remarked: "well it was standard equipment so it wouldn't make any difference, a Ground Zero Indicator is a Ground Zero Indicator."[21] Another post restorer described "completing" his collection, highlighting the importance of gathering an example of all ROC items regardless of their origins.[22] In contrast, the museum is not actively trying to "complete" their ROC collection to the same level as a functioning post as arguably there is ample material to explain an Observer's role.

With these new opportunities to purchase and collect, ROC objects have become exposed to new audiences. Many of these people have not previously been familiar with these objects during their use-life or were former ROC Observers.[23] Former Observer Lawrence Holmes reflected on the emergence of ROC heritage in an article for the Royal Observer Corps Association newsletter. Holmes recognised the wide range of ROC posts being restored across the country by volunteers, commenting, "perhaps strangely, many of the posts have been acquired for preservation by non-ROC people and members of Subterranea Britannica are amongst the most avid ROC post owners."[24] This highlights his surprise that non-ROC Observers have taken an interest in these unusual spaces and are restoring them, despite not have any first-hand experience of the posts in action.

Storing and Restoring ROC Objects

As well as differences in approaches to collecting objects, the way the artefacts are stored, documented and catalogued is also noticeably different between the

Figure 2.1 The Royal Observer Corps collection at the National Museum of Flight. Photo by National Museums Scotland

museum and the amateurs. In accredited museums, there is more emphasis and duty to document, store and display objects appropriately to ensure their conditions are maintained throughout their lives rather than a more fluid existence in a community led heritage group. Each object is assigned an accession number, labelled, catalogued in physical and digital acquisition registers and stored appropriately in an environmentally controlled location. At NMS, the ROC objects have become part of a national collection where they are now treated and viewed as irreplaceable and special objects in this new context. The museum processes influence the biography of the object as they are categorised and given a label based on the interpretation of the responsible curator. This classification could be subjective, and objects could be included in multiple descriptive categories. As the ROC objects are now disconnected from their original environment of the underground bunker, they are now influenced by the "museum effect" whereby an object, isolated from its original setting, is transformed into something to be viewed as art and appreciated for its creative aspects rather than its original functions. Subsequently, the objects are under the constraints of collections care and conservation policies, meaning their functionality is reduced and they will no longer be used as they were originally intended (Figure 2.1).[25]

The records relating to the museum life of the ROC collection held by the National Museum of Flight are somewhat sparse. A former curator recalled Observers bringing items from the Edinburgh Group Headquarters, but there is little further information on the donors or their motivations for donating this collection. The collection ranges in age from Second World War equipment to the underground monitoring equipment used from the late 1950s to the early 1980s. The ROC collection at the museum is currently in long term storage. However, a small selection of key objects such as the Bomb Power Indicator, Ground Zero Indicator and a

model of an ROC post will be displayed in the 2024 *Cold War Scotland* exhibition at the National Museum of Scotland.[26] As the collection is arranged on shelves by size rather than in connection to each other, it is difficult to appreciate how these objects would have worked together in the underground space.

The well-established restored ROC posts, such as those at Skelmorlie and Arbroath, contain all the assigned equipment but with additional "museum" space on site.[27] Both Skelmorlie and Arbroath have converted shipping containers on site to act as a visitor centre, a display space and to store additional ROC related material. These spaces are packed tight with display cases, mannequins modelling uniforms and walls covered in photographs, posters and other documents connected to the ROC. Although there is great care shown to their collections, they are not obligated to adhere to environmental controls, cataloguing or documentation practises an accredited museum is. This means amateur collections are at risk of theft and damage without clear monitoring of collection items, and they are more likely to deteriorate in unstable environments. Despite this, most restorers are proud of their large collections and prefer the public to see as much of their collections as possible.

Furthermore, unlike NMS where there is a presumption against operating accessioned items, ROC restorers have endeavoured to render ROC equipment functional or have worked collaboratively to create realistic and functioning replicas. They have done this by adapting new technologies to achieve the same output as the original. For example, the Teletalk network has been re-established using sim cards so that anyone can tune in to their frequencies and communicate again. This technological success means visitors to the posts can experience to some extent what the Observers would have, through hearing the same sounds and reading the outputs from the devices.

The challenging conditions of ROC sites prior to restoration and the difficulty in retrieving objects previously dispersed from the post highlights the extensive efforts of restorers to preserve ROC heritage. Given that these are independent and privately owned sites, it is unclear what their legacy will be when the former Observers or enthusiasts are no longer active. Some restorer groups have become charities, meaning that they have further opportunities for funding and an obligation to stipulate contingency plans if the group folds in future. The small group of core restorers of 28 Group Observed in Dundee became a charity for these reasons and recognise the potential issues of having ageing members, describing the need to recruit younger people for succession planning. The Dundee group has ambitions to become an accredited museum which would also require them to address plans for the future of the building and the corresponding collection. This shows the desire for amateur restorers to gain credibility for their sites through following professional museum standards to future-proof ROC heritage (Figure 2.2).

Displaying Royal Observer Corps Objects

For former Observers, restored posts and the associated material culture have become tangible places and things from which they can connect their personal experiences to. As Jillian Rickly-Boyd describes, "heritage sites function as

Figure 2.2 Inside the restored ROC post at Skelmorlie, West Scotland. Photo by National
          Museums Scotland

conduits between the past and present," emphasising the importance of opening
unusual and previously private places like monitoring posts and giving them new
life in the present.[28] Material culture is a significant part of the heritage experience
as increasing emphasis is placed on not only the objects but the stories they mani-
fest and inspire.

    In most cases, restorers or heritage groups are made up of former Observers or
their families and usually those who had been assigned to this post.[29] These former
secretive posts are usually advertised as living history museums and encourage
visitors by enticing them to visit their "secret bunkers."[30] Visitors to restored posts
often find their enthusiastic guide dressed in an ROC uniform and will listen to
detailed descriptions of the role of the ROC and the equipment they used. The
stories attached to the objects add a sense of genuineness or aura to the objects
which, as Sian Jones argues, highlight the "web of relationships" between people
in the past and the present.[31] Additionally, as Samuel Alberti and Holger Nehring
suggest, the restored ROC posts somewhat rely on the "aura of the objects" and
of the formerly secret underground location to enable visitors to imagine what the
Cold War was like.[32]

    At these open days, the Observers are to some extent taking on the role as his-
toric re-enactors where "their credibility is measured by their conversancy with
period minutiae and their fidelity to the 'authentic'… and they uniformly believe
that re-enactments bring history alive."[33] However, former Observers do not see
their interpretation as re-enactment: they claim that they were the ones who actually
conducted these roles and feel they have legitimacy in their knowledge due to their
experience, meaning that they are to some extent reliving rather than re-enacting.
These personal stories about the practicalities of being an Observer "do not change
the big picture of the Cold War, but rather complement it by adding individual and

human dimensions 'from below'."[34] Their motivations for recreating their ROC past are ostensibly for the benefit of the public and engaging with the ROC as heritage, but also for themselves and to add to their own identity as a member of a now exclusive group of former Observers. Bella Dicks highlights the "performance" element presented by the ex-miners in their tours of mining museums for visitors where they include elements of their own biographies "to capitalise on the symbolic value of their own authenticity."[35] In this way, ex-Observers and ex-miners have the ability to be themselves and share their personal connections with the environments they are showing visitors.

Seeing the relationships between ex-Observers and their shared passion for preserving ROC history humanises the unusual underground space for visitors. Ex-Observers share their personal experiences with visitors to give them a sense of what preparing for a nuclear attack was like. They can easily answer any questions visitors may have and add a human element by sharing anecdotes of their experiences. Luke Bennett explored the attachment between former Observers and their posts and observed that "through weekend training exercises and weekly crew meets, these contingent places acted as local clubhouses for their crews, with an ensuing sense of attachment to the sociality of performing these places."[36] Bennett also comments on "bunkerology" as a predominantly masculine pastime and suggests the connections to the military, the organisational process of ticking off bunkers visited and interests in technology as drawing more men to taking up bunker hunting as a hobby.[37] This masculine presence was something I noticed in my visits to monitoring posts, not only among post restorers at the same post but also in the wider network of predominantly male restorers who were keen to share their skills and discoveries, perhaps for their own sense of validation and commitment to preserving ROC history.

As NMS preserves the movable material culture rather than the physical post environment, the connection to the build environment and the associated actors are diminished. Instead, the objects and instruments that furnished the space have the capacity to be moved and to be seen out of their original context. There are few physical variations that distinguish where a piece of equipment originated as all the equipment was standard and rolled out to every post, which makes ROC objects even more mobile. Some objects are marked with the post name or number which does offer a tangible link to its past. In his study of Neatishead, Steven Leech found some museum volunteers considered equipment from other sites as "imposter consoles" and that these objects "do not fit in" as they are not unique to this site.[38] This differs with the opinions of ROC post restorers who are grateful for any new additions to their posts regardless of their origins. However, their responses may be different because of the uniformity of the contents of an ROC post in comparison to a specialist radar centre.

Conclusion

This chapter has demonstrated how the material culture of the ROC has become part of Cold War heritage through the lens of the professional museum, NMS,

and the efforts of amateur heritage enthusiasts. The Cold War meanings attached to these objects are dependent on the individual people and places in which these objects are viewed. Most amateur restorers have assigned personal attachments and nostalgia to the objects and the underground environment, and they are passionate about sharing the history of the ROC. Museum professionals also recognise the rich history associated with these objects, but they also view them in the wider context of the Cold War.

As Alberti and Nehring argue, "by placing artefacts in specific spaces, illustrating them with texts, images and film, or by simulating Cold War experiences" NMS and ROC heritage groups are actively making Cold War heritage.[39] In addition to this, although differing in approach, both organisations are creating and curating Cold War heritage through their collecting, cataloguing, displaying and interpretation of ROC material culture. Furthermore, these approaches guide how each organisation interprets the Cold War, which ultimately influences how their audiences come to define what the Cold War was.

The visitor's response to an ROC museum exhibition and a visit to an underground post is inevitably going to evoke different reactions to the topic. The unusual physical environment of an ROC post, often in a difficult to reach locations, heightens the view of the Cold War period being a time of illusiveness and secrecy. However, the lived experiences shared by Observers provide a different perspective. In reality, these were civilians with their own careers and families, who volunteered to prepared to react if Britain had been attacked. These human stories are somewhat absent in NMS' ROC collection as well as there being a disconnect between the objects and their original environment. Museum professionals and amateurs each face restrictions in their approaches to ROC objects, but both would benefit from being able to collaborate with each other to share knowledge, advice and a mutual desire to preserve the history of the ROC.

This story of the ROC material culture scratches the surface of the sheer breadth of Cold War material culture in museums and heritage sites. This poses a challenge to museum professionals and enthusiastic amateurs as to how to identify Cold War objects and how to interpret this period of history. In many cases, Cold War objects in museums remain unidentified and some Cold War stories are difficult for museums to represent because of the absence of tangible objects. Fortunately for the ROC, their Cold War legacy lives on in museums and dedicated heritage sites.

Notes

1 Matthew Grant and Benjamin Ziemann, eds., *Understanding the Imaginary War: Culture, Thought and Nuclear Conflict, 1945–90* (Manchester: Manchester University Press, 2016), 4.
2 Sheila Watson, "Why Do Emotions Matter in Museums and Heritage Sites?," in *Sensitive Pasts : Questioning Heritage in Education*, eds. Carla Van Boxtel, Maria Grever and Stephan Klein (New York: Berghahn Books, 2016), 79–80.
3 This method is inspired by Arjun Appadurai and Igor Kopytoff's research in *The Social Life of Things* which, akin to a human biography, aims to go beyond the surface of the object to understand the circumstances which brought objects to their current position.

Arjun Appadurai, *The Social Life of Things: Commodities in Cultural Perspective* (Cambridge: Cambridge University Press, 1988).

4 Royal Observer Corps, *Monitoring Posts Instructors' Manual*, July 1985, Chapter 2, 1.

5 Mark Dalton, *The Royal Observer Corps Underground Monitoring Posts* (Monkton Farleigh: Folly Books Ltd, 2011), 3.

6 Nick McCamley, *Cold War Secret Nuclear Bunkers: The Passive Defence of the Western World During the Cold War* (Barnsley: Pen and Sword, 2002), 123.

7 Wayne Cocroft and Roger J. C. Thomas, *Cold War: Building for Nuclear Confrontation 1946–1989* (Swindon: English Heritage, 2004), 176.

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9 Robert Clarke, "Landscape, Memory and Secrecy: The Cold War Archaeology of the Royal Observer Corps" (PhD, University of Exeter, 2016), 152.

10 Simon Craine and Noel Ryan, *"Protection from the Cold": Cold War Protection in Preparedness for Nuclear War* (Sheffield: Wildtrack, 2011), 91.

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12 Derek Wood, *Attack Warning Red: The Royal Observer Corps and the Defence of Britain, 1925 to 1975* (London: Macdonald and Jane's, 1976), 222.

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18 Skelmorlie Secret Bunker, accessed 1 March 2024, https://www.skelmorliesecret-bunker.co.uk; 28 Group Observed, "Home," accessed 1 March 2024, http://28group.org.uk.

19 Royal Observer Corps Association, accessed 24 May 2024, https://www.rocatwentytwelve.org/home.html; Facebook, "Royal Observer Corps (All Groups/Posts)," accessed 24 May 2024, www.facebook.com/groups/royal.observer.corps.

20 Email correspondence between Sarah Harper and Alan McDonald, 3 February 2020.

21 Email correspondence between Sarah Harper and Fred Allen, 2 September 2020.

22 Email correspondence between Sarah Harper and Alan McDonald, 3 February 2020.

23 For example, many of the 28 Group Observed charity restoring the 28 Group Headquarters in Dundee were not former ROC members, but instead took on the project as a hobby.

24 Lawrence Holmes, "Royal Observer Corps Heritage: Museum and Displays, Preserved Posts and Other ROC Mementoes," July 2010, https://www.rocatwentytwelve.org/uploads/1/2/9/1/12917554/roc_heritage_part_1-_used_jul_10.pdf.

25 Valerie Casey, "The Museum Effect: Gazing from Object to Performance in the Contemporary Cultural-History Museum," *Archives & Museum Informatics* 2 (2003): 7.

26 The *Cold War Scotland* exhibition 13 July 2024–26 January 2025.

27 Skelmorlie Secret Bunker, accessed 24 May 2024, https://www.skelmorliesecretbunker.co.uk; Royal Observer Corps Association, accessed 24 May 2024, http://www.roc-heritage.co.uk/scotland.html.

28 Jillian M. Rickly-Boyd, "'Through the Magic of Authentic Reproduction': Tourists' Perceptions of Authenticity in a Pioneer Village," *Journal of Heritage Tourism* 7, no. 2 (2012): 129.

29 Robert Clarke, "Landscape, Memory and Secrecy: The Cold War Archaeology of the Royal Observer Corps" (PhD, University of Exeter, 2016), 134.

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31 Siân Jones, "Experiencing Authenticity at Heritage Sites: Some Implications for Heritage Management and Conservation," *Conservation Management of Archaeological Sites* 11, no. 2 (2009): 137.
32 Samuel J. M. M. Alberti and Holger Nehring, "The Cold War in European Museums – Filling the Empty Battlefield," *International Journal of Heritage Studies* 28, no. 2 (2022): 195.
33 Vanessa Agnew, "Introduction: What Is Re-enactment?" *Criticism* 46, no. 3 (2004): 330.
34 Tony Axelsson, Anders Gustafsson, Håkan Karlsson and Maria Persson, "Command Centre Bjorn: The Conflict Heritage of a Swedish Cold War Military Installation," *Journal of Conflict Archaeology* 13, no. 1 (2018): 14.
35 Bella Dicks, "Performing the Hidden Injuries of Class in Coal-Mining Heritage," *Sociology* 42, no. 3 (2008): 6.
36 Luke Bennett, "Cold War Ruralism: Civil Defense Planning, Country Ways, and the Founding of the UK's Royal Observer Corps' Fallout Monitoring Posts Network," *Journal of Planning History* 17, no. 3 (2017): 220.
37 Luke Bennett, "Who Goes There? Accounting for Gender in the Urge to Explore Abandoned Military Bunkers," *Gender, Place & Culture* 20, no. 5 (2013): 633.
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3 Anchoring Museum Objects in the Cold War

The Hidden Meanings of a Transatlantic Telephone Cable

Holger Nehring

Introduction

This chapter is, fundamentally, about the relationship between artefacts or material objects, language and meaning – and what this relationship involves for a Cold War museology. It discusses an object from National Museums Scotland (NMS): a short (ca. 20 centimetre long) sample of the first transatlantic telephone cable (TAT-1).[1] National Museum Scotland internal curatorial classification lists the piece of cable as an artefact relating to "communication."[2] The piece of cable is on display in NMS's communications gallery, somewhat hidden close to the floor in a display cabinet showing different cables and linking these to what is shown as the progressive advancement of telecommunications. A Cold War context is not directly evident from the interpretation provided, although some visitors might expect that context, given that the cable was laid during the time of the Cold War.

I first encountered this object on a visit to NMS's collection centre in Granton, a suburb of Edinburgh, when the "Materialising the Cold War" project team visited the site in winter 2021 to gain a first impression of NMS collections related to the Cold War. The then curator for communications, Alison Taubman, had brought out another version of TAT-1 together with some other objects as she thought that it had potential of having meaning for our project. This sample was mounted on a shiny wooden pedestal with a bronze plaque. It was mainly the curator's creative choice on the day that turned these items from devices linked to the communications infrastructure to the Cold War, although we did not at the time discuss her reasons to include TAT-1 in her selection. Subsequent discussions also left the Cold War connections somewhat ambiguous, so I found myself wanting to know more about how these two artefacts were connected to the Cold War and how we might evidence this relationship in the context of a museological investigation.

But what does it mean to classify a museum artefact as a Cold War object? One way is to take an ontological position and simply designate objects as "Cold War" because of their provenance and use, or because of the structures within which they have emerged. The German cultural theorist Friedrich Kittler has championed such an approach in the longue durée. For him, all objects relating to communication and writing since around 1800 are objects forged by wars. Hence, computers as

well as other communication devices such as radios or undersea cables are artefacts made for war and produced during wars.[3]

While it is possible to tell the story of TAT-1 in this way, even a superficial enquiry shows that things are more complex with TAT-1: there is no obvious or explicit Cold War context of development, and it would stretch the imagination to link the laying of a transatlantic cable directly to the hidden hand of the military-industrial complex on both sides of the Atlantic. Ontologies require a firm structural foundation – but where would this foundation come from? Alison Taubman, when asked about how objects create meanings, referred to the stories people tell about them.[4] But in this case, the readily available stories more or less completely ignore the context of Cold War history.

This chapter therefore seeks to move beyond either ontological or narrative approaches by considering more closely the role of these objects in connecting the Cold War to Scotland and Scotland to the Cold War. For as philosopher Rom Harré observed, whether artefacts are seen "as active or passive in relation to people […] is [...] story-relative"; and there are multiple stories that can or cannot be told about an object. This means that "material things as potentially social objects […] have multiple context-bound affordances."[5] In line with this observation, I want to highlight some of the complexities of the ways in which these objects have generated and acquired meaning over time as well as at the same time. While object-biographical approaches emphasise the artefacts' movements and the social relationships through space and time,[6] they tend to be less attentive to the multiple meanings – and layers of meanings – that these objects have at the same time. One object might have multiple meanings for the same or different users of audiences – and these defy the simple binary classification of Cold War/not Cold War.

So, I propose to enrich an object-biographical approach with a recent concept developed in the context of the history of science and technology: the approach of "Technologies as Anchors for Societal Conflicts" (TASC) developed by Christian Götter. TASC is interested in highlighting how debates about developments in science and technology are "rather loosely anchored" to the actual developments as opposed to "being necessarily rooted within" them. The concept of anchoring is relevant for a Cold War museology as well since it allows us to discuss artefacts in the context of the Cold War without necessarily arguing that the Cold War is the predominant feature.[7]

This chapter is based on research in the collections and connected papers of National Museums Scotland, the British Telecom Archives in London and the British National Archives in Kew as well as the examination of some media reporting at the time. While TAT-1 has found scholarly attention before, it has not yet been interpreted systematically in the context of a Cold War museology.[8] When the first transatlantic cable was inaugurated, the Cold War remained absent – and, apart from a brief mention of the "hotline" between the White House and the Kremlin – the Cold War also remains absent in the current display in the Communications Gallery on level 3 of National Museums Scotland in Edinburgh's Chambers Street. Yet if we look more closely, Cold War meanings emerge that have been hidden.[9] This chapter tells the story of discovering these Cold War meanings through TAT-1.

TAT-1 – Part of a "Coaxial Cold War"?[10]

On 25 September 1956, the chairman of the American telecommunications company AT&T called his counterpart, the United Kingdom's Postmaster General: "This is Cleo Craig in New York calling Dr. Hill."[11] These words were the beginning of the first transatlantic telephone call. The call passed through a cable that looked like this model (Figure 3.1), kept and displayed in National Museums Scotland. Some of the cable's layers have been peeled back to enable everyone to see the composition of the cable. Looking at the cable and its interpretation in National Museums Scotland on their own, it appears that Cold War meanings were not present at the creation of this artefact. In September 2006, the cable received recognition as a key milestone in twentieth-century engineering from the Institute of Electrical and Electronics Engineers.[12]

We have no evidence how and why NMS acquired TAT-1, though its importance for engineering as well as relevance for Scotland – because of is landing point near Oban on the Scottish west coast – seem clear. It is likely that it came to what was then the Royal Scottish Museum via the General Post Office (GPO, later British Telecom) as they regularly donated objects to the museum. There is also a history of collecting telecommunication artefacts in Edinburgh: George Wilson (1818–1859), the Regius Professor of Technology at the University of Edinburgh and the first director of what was then the Industrial Museum of Scotland, was especially interested in telegraphy.[13]

In NMS's exhibition, the cable forms part of the Communications Gallery. Surrounded by the sounds of telephones and telegraphs, visitors can explore the cable's role in connecting Scotland to the world. The interpretation embeds the cable in a progressive history of the growth of telecommunications in Scotland since the nineteenth century and in connecting Scotland to the world. Interactive screens allow users to explore the networking of the world at different stages, with maps showing the connections. The cable's connection to Scotland is shown as rooted in its location: it arrived in Oban in a specially constructed facility. Across from the case where TAT-1 is displayed, visitors can see a model of one of the GPO's cable-laying ships, the *CS Alert* (built in 1960), used for laying undersea cables, though not the *Monarch* that was used for laying TAT-1.[14] The Cold War connections remains in the background – the explanatory text on the interactive screen mentions briefly that TAT-1 carried the communications so-called hotline between the White House and the Kremlin that was established in 1963 following the Cuban Missile Crisis.

The story that NMS tells its users today tracks closely the account that the GPO and contemporary commentators told of the cable when it was first laid. It highlights how the "presentation of science was as important as the science itself in creating a narrative around British prestige."[15] This account has several elements: it emphasises British engineering prowess and "defiant modernism"[16]; it shows the cable as an example of technology and human bravery overcoming the challenges of the natural environment; and it stresses the importance of the transatlantic cable in connecting Britain to the world, with Britain as one of the leading powers in

Figure 3.1 Cable sample, TAT-1 deep sea type, 1955. Made by Submarine Cables Ltd (NMS
          T2003.269), National Museums Scotland

Alison Taubman, "Talking Technology," National Museums Scotland blog, accessed 27 May 2024,
https://blog.nms.ac.uk/2018/05/17/talking-technology-how-machines-learned-to-speak. See the equiv-
alent object in the Science Museum, London: https://collection.sciencemuseumgroup.org.uk/objects/
co33334/specimen-of-the-first-transatlantic-telephone-cable-1956-cable.

the global network of communications. TAT-1 emerges from this interpretation as an artefact that represented the high period of what David Edgerton has called "techno-nationalism" of British political culture: a political culture that emphasised engineering prowess and single invention as opposed to incremental progress and the labour of maintenance; and a political culture that hid the military components of its civilian innovations. At the same time, the placing and display of TAT-1 reproduces common "techno-globalist clichés about a shrinking interconnected world."[17]

While a transatlantic telegraph system had existed since the nineteenth century, there had not yet been a telephone connection between the American continent and the United Kingdom. A "radio-telephone service" had existed between the United States and the United Kingdom since 1927, but the GPO had predicted that it would run out of capacity by 1960.[18] At the opening ceremony in the autumn of 1956, stories about the triumph of engineering and collaboration dominated: the British Postmaster General Dr Charles Hill celebrated the "triumph of patient research and great engineering skill" and thanked his American counterparts for the good collaboration.[19] The US ambassador stressed the importance of the transatlantic relationship. And the High Commissioner for Canada highlights benefits for Commonwealth beyond United Kingdom and Canada.[20] The new transatlantic connection offered a significant increase in the capacity of information that could be transmitted. Whereas there had been no speech (that is, telephone) lines across the Atlantic and only three telegraph circuits, the new cable offered 36 speech circuits, each of which could be converted into eighteen telegraph circuits.[21]

Contemporary reporting in the United Kingdom stressed the technical difficulties of laying a cable under water and how they had been overcome by both engineering and the masculine courage of the sailors on the cable-laying shift, braving the high seas.[22] One report describes the positive contribution of the transatlantic cable with metaphors that equal the quality of sounds with the characteristics of the weather and the sea: the new cable would now be able to transmit the "high-frequency virtuosity of the human voice" with "pristine prescience and lucidity" as opposed to the "rather battered and baffling shape" it had with the previous connection.[23]

Engineers highlighted less the quality of the transmission but the technical properties of the cable that enabled it. The American Dr. O. E. Buckley, commenting on a presentation about the new cable at the Institute of Electrical Engineers called the TAT-1 cable the "most radical and important advance yet in the old and conservative art of transoceanic cables." The cable as a whole was itself a highly complex structure characterised by the "incorporation in the cable structure of a complicated assembly of electronic equipment precisely designed to compensate for the characteristics of the cable over a wide range of frequencies."[24]

But comparing these stories to the way in which NMS presents the TAT-1 – and the fact that this particular cable was specifically produced to be displayed – highlights how these stories already started the process of musealisation while the object was still in use: they were produced with an eye for the importance of the occasion and to be remembered. The Post Office and its research station at Dollis Hill used the occasion to advertise its work and show

its importance for the nation. While the cable was still being laid, the BBC approached the Post Office with an idea for a radio programme, stating the "world-wide importance and world-wide interest" in the project.[25] Such an interpretation is mirrored in the 27-minute promotional documentary "Voice beneath the Sea" (1964), to which the General Post Office contributed some material after the idea of an own promotional film did not materialise because of the costs involved compared to the expected benefits. The British government's Central Office of Information, part of the United Kingdom's Cold War state, was involved in these discussions and coordinate work with the Foreign Office and other government departments.[26] One idea was to restage the "English [sic!] signing ceremony" for the film as no appropriate footage of it existed.[27]

In light of the considerable research and engineering effort and the realisation that such a film could "maintain British prestige," the GPO's overall assessment of the importance of such a promotional film was, because of the costs involved, rather downbeat: the most significant elements were the more technical aspects which were of little interest to a general audience, while the "broad processes are familiar": "Posterity can hardly learn from it anything which cannot be equally, or better, learned otherwise."[28] Submarine Cables Limited, the company that had produced the cable, found it appropriate to send a TAT-1 ashtray to the Postmaster General "as a memento of the great project."[29]

Such contemporary perception in Britain was in remarkable contrast to discussions in the United States: although contemporary publications celebrated engineering prowess as well and especially emphasised how engineers had overcome the forces of nature when building the cable on land and on sea, traversing very rough terrain during inclement weather, adverts and assessments also emphasised the importance of the transatlantic cable for the national security of the United States.[30] These assessments came close to what Nicole Starosielski has called the "coaxial Cold War."[31]

TAT-1's Multiple Cold War Meanings

And yet, the story of TAT-1 was a more complex one from the very beginning. From the archival record, we can see how a lot of work went into concealing the Cold War background of the cable by not discussing it in public. The media played a key role in hiding Cold War connections: When the BBC first approached the Post Office about producing a documentary about TAT-1 in 1955, it concedes that "quite a number of points may come under security," but still wishes to proceed, essentially leaving those aspects out altogether, "entirely guided" by the Post Office.[32]

Although the project for a transatlantic telephone cable was anchored in war and Cold War, public representations presented the cable as a civilian project. Since the invention of the telegraph and the construction of a national and international communications infrastructure in the nineteenth century, communications systems and telegraph lines have served military purposes and their construction, use and regulations were themselves part of great power competition.[33] The project of laying telegraph tables was integral to British imperialism and projection of power

more generally: "secure lines" were "needed to maintain…ties" across the Empire and project power globally.[34]

Plans for a transatlantic telephone cable stem from the 1930s, but the project could not be implemented because of technical issues, mainly to do with the question of how to maintain the signal strength under water over an extensive distance.[35] The Second World War slowed the project down, too, though it also created some of the conditions for later success. With new developments in the design of cables and new research into the transmission of information as part of the United Kingdom's and the United States' war effort, plans for such a cable now became more realistic. Planning for the project started in the early 1950s, and plans were announced to the public on both sides of the Atlantic in late 1953. AT&T had tested a line between Florida and Cuba; and in February 1951 the GPO trialled its own development in the Bay of Biscay.[36]

What came to be known as TAT-1 (and to be followed by TAT-2 and so on as well as a line called CANTAT that provided a telephone line to Canada) was part of an assembly of objects, both mobile and immobile, organisations and people – and actually consisted of two cables that ran between Oban on the West coast of Scotland to Newfoundland and from there via Canada to the United States. The connection across open water in the Atlantic was around 1,950 nautical miles (roughly 2,200 standard miles) in length. The cable was as low as 2.5 miles under the sea level at its deepest points. It is easy to be impressed by the feat of engineering that made it possible to build a telephone line that could provide a service under these conditions – until TAT-1 was constructed, the longest telephone line across open water had measured 300 miles.[37] The cable had been developed by a team engineers from the Post Office's Research Branch to be especially "lightweight," but still resilient.[38] It was the consistent use of polythene as one of the layers of insulation that made this possible.[39] The planning, production and laying of the table was the result of a matrix of organisations that was typical for the Cold War: there were the parastatal telephone companies of the three countries involved: the United Kingdom's GPO, the American Telephone & Telegraph Company (AT&T) and the Canadian Overseas Telecommunications Corporations (COTC); all these coordinated their work closely with various government agencies, also through their research arms; and they subcontracted production to an archipelago of private companies.[40]

The approach to work on a transatlantic cable had come in the early 1950s from Cleo Craig, the President of AT&T, to Postmaster General Herbrand Sackville, Earl de la Warr.[41] The United Kingdom wanted to take longer to develop the project, whereas AT&T wanted to move forward more swiftly. This had implications for the cable design since the United Kingdom feared that they would lose out to another partner if they did not agree to AT&T's proposals. As one person involved with planning the project remarked at the time: "political rather than technical consideration might well be the deciding factor on which system was agreed."[42] The GPO and AT&T involved the Foreign Office and the State Department from the early discussions about cable routing and requirements.[43] During the discussions, Canada raised concerns with its counterparts in the United Kingdom about the impact of this new telecommunications infrastructure on the integrity of its domestic lines

and proposed a bilateral Canadian-UK initiative instead – Canada feared that the United States' involvement in maintain the links and repeaters on the stretch from Newfoundland to the US-Canadian border could be used to "penetrate into the Canadian Communications domestic network."[44]

The general public learned little about the military implications and uses of the proposed telephone cable, and the specific relationship between civilian and military aspects of the cable was not settled among those involved in planning the cable either. And even the Post Office was "disturbed" and taken by surprise by initial plans for a transatlantic telephone that the private Telegraph Construction and Maintenance Company, the American State Department and the British Joint Staff Mission in Washington knew about but no one at GPO appeared to have been aware of.[45] When planning was further advanced, the Post Office set up a study group on the project and, in light of the "strategic and security value of such a cable," kept the Ministry of Defence informed of developments.[46]

Nonetheless, the British Embassy in Washington, DC, which had picked up rumours on plans for a new transatlantic telephone cable, was, in February 1953, still unclear about this aspect of plans, musing that a "Stewart of B.J.C.E.B. [British Joint Communication-Electronics Board] may have heard something through his U.S. military confreres."[47] In May, a GPO employee enquired again with the Telecommunications attaché at the British Embassy in Washington, DC citing "hints" that a "coaxial cable" was going to be laid "for the U.S. Air Force from Greenland to Iceland, and possibly from there to Europe, under what is described as 'Operation Eskimo'."[48] Yet the Chiefs of Staff Committee and the British Joint Communication-Electronics Board (JCEB), an organisation that connected the British intelligence services and the GPO,[49] were closely involved in tracking progress in the plans for such a cable from the beginning, even before the cable plans received Cabinet approval in November 1953.[50] The chair of the JCEB had stressed the "real importance" of the new telephone cable "from a defence point of view" early on.[51]

In the United Kingdom, the Chiefs of Staff were the first in the government to be consulted on the plans, and a Ministry of Defence official noted that such a telephone cable was a "most valuable asset in war, and no doubt some military advantage from time to time in the present troubled peace."[52] The existing telegraph lines and radio circuits were liable to interruption from bad weather or sun activity – and hence also far less secure than a telephone cable would be. In a paper from September 1954, discussed at the Chiefs of Staff Committee on 11 September 1954, the JCEB proposed a division between the military and civilian uses of the new telegraph line in the context of the international haggling about who should be able to have exclusive use of how many of the new circuits. The regulations for underwater cables stipulated giving a preference for "the common user," but such common use worked against the secrecy requirements of various official agencies.[53]

This anchoring of civilian uses in military and defence interests came to matter when TAT-1 broke down because of trawlers hitting the cable or other technical issues.[54] Internal discussions at the GPO then highlighted how the US Air Force insisted on keeping all lines of the reserve capacity – and how AT&T's was driven by that line. At the same time, staff at the GPO suspected that AT&T had strong commercial interests in the distribution of line capacity when things broke down.[55]

TAT-1 as a Product of Cold War Research and Development

The cable was not only connected to US and UK command and control systems, but it also highlights the nature of the research and development in the Cold War. The GPO Research Station in Dollis Hill that led on the development of the cable was an "important node in the 'secret state.'"[56] The Joint Speech Research Unit at GCHQ, the United Kingdom's signals intelligence agency, was led by a GPO engineer and worked on scrambling systems, vocoders and other related technologies.[57]

There were also close links between Dollis Hill and the US military-civilian research and development at Bell Labs, essentially AT&T's research arm.[58] The funds made available for this project also sustained a network of highly private companies that were involved in making different components of the cable and the overall cable system. Most of the cable was manufactured by Submarine Cables Limited, a company owned by Siemens Brothers and Co. and Telegraph Construction and Maintenance Co. Ltd., at a new factory in Erith, Kent.[59] The cable on the whole used "2700 tons of copper, 1400 tons of polythene, 11000 tons of steel wire, 1800 tons of jute yarn and 2400000 yard of cotton cloth."[60] Another factory, run by the Telegraph Construction and Maintenance Company in Greenwich, was responsible for production of the conductor.[61] Yet another site produced some of the repeaters (most were produced in the United States), a complex construction that was necessary to maintain signal strength across such a long distance. Media reporting at the time stressed the modernity of the factories and the laboratory-like cleanliness and precision – and skill of the technicians – that produced the components.[62] It was "such a precise piece of construction," *Reader's Digest* reported at the time, "that communications engineers speak of it almost with awe."[63]

Unintended Meanings

The "perceived security" of coaxial cables such as TAT-1 was not complete, however.[64] The cable, closely anchored to the American, Canadian and British Cold War states, could also be used to subvert the stated interests of these states. On 26 May 1957, the American civil rights activist and singer Paul Robeson, since the 1930s under scrutiny by the authorities for his links to Communism, performed in St Pancras Town Hall in London. But he did not do this in person because the State Department had cancelled his passport. Rather, he did this through transmission of his concert via TAT-1[65]:

> American Telephone and Telegraph, in New York, and the General Post Office, in London, last night between them helped to make the United States Department of State look rather silly... Last night some of [Robeson's] words and music escaped, alive, through the new high-fidelity transatlantic telephone cable.[66]

Around six years later, TAT-1 became one of the key facilitators for Cold War détente. From 1963, it carried the line that connected the White House in the United States with the Kremlin in Moscow. Symbolised by another artefact, a red telephone, this "hot line" was not a telephone line at all, but a telex line that sent messages, most of them senseless, to constantly test the line for the rare cases

for which it was needed. Nanz has called the "red telephone," although a fiction, "perhaps the bipolar medium par excellence."[67] TAT-1 ceased operations in 1978 because more recent technology had made it obsolescent. The building, on top of a beach on a private beach, is now derelict.[68]

TAT-1's end of service encourages us to reflect on the cable's location in the landscape and in the environment – unlike the piece of cable on display to the public, that location is now a derelict building on private land.[69] Oban's War and Peace Museum, run by volunteers, incorporates the story of the cable in the context of its location, though the main focus of the museum is commemorating the town's role during the Second World War.[70] Plans by the owners of the land to create a museum on site have not, at the time of writing this chapter, materialised.[71]

Connecting the cable to its original location leads us to another series of connections that highlight how the cable was physically anchored in the Cold War through that location and its relationship to the landscape.[72] In the process of anchoring, the Cold War was not merely an "external force" – the anchoring created local meanings of the Cold War through the infrastructure, the objects and the landscape.[73] Planners in the British War Office were at first rather sceptical about landing the cable in Oban: the cable would have to pass through landlines via Glasgow on its way to London, making the connection less secure; and the "remoteness" of the location meant "its possible vulnerability to attack by parachute." The War Office ultimately withdrew its objection when it was persuaded that the other options would compromise the overall reliability of the cable.[74] When the project came to working on the landing site, engineers at the General Post Office argued that the building that housed the cable infrastructure requires "'strategic' protection to be arranged by the Ministry of Works" and claimed a parallel to "inland defence works."[75] While this was surely also for financial reasons, the structure that survives looks like a bunker, complete with blast doors. It was, therefore, "shaped by […] the determination of a radically bounded area, a unified place defined by a central struggle."[76]

It was in the run-up to the London Olympic Games in 2012, another event that was characterised by an overlap between British nationalism and global interests, that the Scottish folk musician and songwriter Aidan O'Rourke rediscovered the Cold War in the cable and the surrounding landscape when he was commissioned to write a song for it:

> I remembered a building built during the Cold War on Gallanach Bay just outside Oban and the stories about the TAT-1 project from my Dad and we decided it was a strong idea that through modern telecommunications, the London Olympics you could experience from anywhere in the world.

Each of the songs touches on one of the layers of meaning the cable carried, in each original sounds provide the background for some of the music:

> The first on *TAT-1* is Mrs MacDougall on Gallanach speaking down the cable to a gentleman in Canada. On *Hotline* it's Khrushchev's speak to the [United Nations] intertwined with a JFK speech about the Soviet nuclear armoury.

> On *Monarch* you can hear excerpts from an interview on the laying of the cable. On *Clarenville* you can hear the water dripping in the chamber and also the crunch of my Dad's footsteps on the rotted vinyl flooring.[77]

The album cover, with its faux cyrillic script in white against a red background, shows a muscular statue, flag in hand, lurching forward from right to left. It mirrors Gustav Klutsis and Sergei Sankin's poster "1 May Solidarity," a photomontage from 1930. It thus evokes positively one ideological component of the Cold War and its social anchoring in the building up of communism in the Soviet Union of the 1930s.[78] TAT-1's heritage, through commodification as a record, contains echoes of the ideological elements of the Cold War.

Conclusion

TAT-1 is not only an artefact in the history of communications. It has also enabled communication about the Cold War in museums, just as the TAT-1 cable system enabled communications during the Cold War.[79] Anchoring a telecommunications object such as TAT-1 in its Cold War history highlights a key conundrum of communications more generally: the objects cannot create meaning without their materiality, but their materiality alone cannot create information or communication by itself.[80]

This chapter has unpacked the different layers of this historical conjuncture by highlighting the many different stories that attached to objects like TAT-1. Anchoring TAT-1 in the Cold War connects these artefacts across traditional collection divides: from film footage, sounds, cables, computers, electricity, ships (and ship models) to concerns about the placing of objects in environment and landscape. This, in turn, has implications for how we write the history of these objects.

Museums act as "spaces for research" that provoke historians to ask questions that would otherwise not readily emerge.[81] The historian of telecommunications and radio Wolfgang Hagen observed that telecommunications do not connect places, but that connections create places.[82] This means that the place of the Cold War in the museum is where we establish these connections through the interpretation of artefacts – it is there that the anchoring of objects in a specific context of interpretation happens. Seen from this perspective, the Cold War becomes less of an abstract category for a period of history and less of an analytical device that comes with certain core of assumptions. Instead, we can treat "Cold War" as an organising device, but one that is less rigid and more capacious than a search term in a collections database. This means treating the artefacts as "boundary objects": their status is not fixed but a result of discussions and negotiations between their properties, on the one hand, and the stories that museum visitors, historians and curators tell about them, on the other hand. Treating artefacts like TAT-1 as boundary objects means focusing on the process of production of Cold War objects through anchoring them in their political, social, cultural and organisational surroundings.[83]

Through anchoring, museums under Cold War aspects bring hidden or secret aspects into the public domain. They highlight aspects of the history of

telecommunications during the Cold War that the "process of virtualisation" that accompanied Cold War developments pushed into the background.[84] By bringing the hardware of communication back into focus, museum collections remake a key aspect of Cold War history – the collecting of communication objects thus becomes the beginning rather than the end of history writing.[85]

These findings have three implications for a Cold War museology. First, this chapter has made the case for seeing the Cold War not as a category of classification in the museum context, one that can be applied to objects from a certain period of history without further interrogation. Instead, this chapter has highlighted how it is more rewarding to think about this in terms of a process of production (or co-production) of an object as a specifically Cold War object – where one object can simultaneously be Cold War and not Cold War, depending on the context in which we interpret it – and also on the context in which it is kept and preserved. Cables like TAT-1 can also serve as metaphors for a key insight that such an approach to Cold War museology brings: "With its intertwined strands, the cable gains its strength not by having a single golden thread that winds its way through the whole. No one strand defines the whole."[86]

Second, this approach that emphasises multiplicity raises issues about how museums display artefacts from the period of the Cold War. The challenge here is less the issue of pluralism of moral interpretations or value judgements in the way that museologists working on the First World War have highlighted in the context of commemorating the violence of war.[87] Rather, the issue is the plurality of chronological contexts in which these objects can have meaning.[88] There has been some discussion about whether object biographies are an appropriate analytical tool – and some scholars have proposed object itineraries as an alternative.[89] I would like to take this one step further and argue that the biography and the path an object has travelled matter less than the multiple stories and paths that lead us to its meanings. In other words, we need to explore not how places were connected, but how the connections created the places.[90]

Third, this is why I suggest that a Cold War museology might benefit from is a "mobile museum" in which "materiality emerges through interaction."[91] We might harness the institution of the museum which places an object completely outside the context in which it was created to think about how meanings and stories have moved around with it – and how they can be produced and re-produced, made and re-made. A cable anchored in the Cold War thus turn museums into spaces where knowledge from different fields and eras is synthesised when general knowledge of that synthesis has been lost.[92]

Acknowledgements

Notes

1 The objects are classified under T2003.269. Related objects are also available in the Science Museum in London. See for example, David Hay, "Global Telephone Calls for

All," 25 September 2014, accessed 21 May 2024, https://blog.sciencemuseum.org.uk/global-telephone-calls-for-all.

2   See "Export for HN," 23 December 2022, extract from collections database provided by Samuel J. M. M. Alberti, Director of Collections, National Museums Scotland, Edinburgh.

3   See, for example, Friedrich A. Kittler, "Signal-Rausch-Abstand [1988]," in *Die Wahrheit der technischen Welt. Essays zur Genealogie der Gegenwart*, ed. Friedrich Kittler (Berlin: Suhrkamp, 2013), 217; Friedrich A. Kittler, *Grammophon, Film, Typewritrer* (Berlin: Brinkmann & Bose, 1986), 352. See also Wolfgang Hagen, *Das Radio. Zur Geschichte und Theorie des Hörfunks – Deutschland/USA* (Munich: Wilhelm Fink, 2005), 83.

4   Interview with Alison Taubman, online via MS Teams, 17 January 2023.

5   Rom Harré, "Material Objects in Social Worlds," *Theory, Culture & Society* 19, no. 5/6 (2002): 23 and 27.

6   See, for example, Igor Kopytoff, "The Cultural Biography of Things. Commoditization as Process," in *The Social Life of Things. Commodities in Cultural Perspective*, ed. Arjun Appadurai (Cambridge: Cambridge University Press, 1986), 64–92; Chris Gosden and Yvonne Marshall, "The Cultural Biography of Objects," *World Archaeology* 31, no. 2 (1999): 169–78; Alexander A. Bauer, "Itinerant Objects," *Annual Review of Anthropology* 48 (2019): 335–52.

7   Christian Götter, "Technologies as Anchors for Societal Conflicts. An Outline of the Concept," *Technikgeschichte* 89, no. 1 (2022): 26.

8   There has been some excellent work on the history of cable infrastructures and related issues, such as Post Office Research and Development and environmental history: Nicole Starosielski, *The Undersea Network (Sign, Storage, Transmission)* (Durham, NC: Duke University Press, 2015); Jacob Ward, "Oceanscapes and Spacescapes in North Atlantic Communications," in *Histories of Technologies, Environment, and Modern Britain*, eds. Jon Agar and Jacob Ward (London: UCL Press, 2018), 186–205; Rachel Boon, "'Research Is the Door to Tomorrow': The Post Office Engineering Research Station, Dollis Hill, 1933–1958" (PhD thesis, University of Manchester, 2020); Alison Taubman, "TIM, PAT and ISAAC: Synthetic Speech on Display at National Museums Scotland," Powerpoint Slides for Telecomms Heritage Conference, Salford, 22 June 2019, accessed 17 May 2024, https://nms.iro.bl.uk/concern/conference_items/8feccefb-ed28-4f5e-a1ee-0a3662784e8b?locale=en.

9   On silences in the museum see Rhiannon Mason and Joanne Sayner, "Bringing Museal Silence into Focus: Eight Ways of Thinking about Silence in Museums," *International Journal of Heritage Studies* 25, no. 1 (2019): 5–20.

10 Nicole Starosielski, *The Undersea Network (Sign, Storage, Transmission)* (Durham, NC: Duke University Press, 2015), 37.

11 Jon Gertner, *The Idea Factory: Bell Labs and the Great Age of American Innovation* (London: Penguin Books, 2012), 179. Voice recording available at https://www.youtube.com/watch?v=KvpdWsjjMyM, at 2:46, accessed 27 May 2024.

12 "Milestones: The First Submarine Transatlantic Telephone Cable System (TAT-1), 1956," accessed 2 May 2024, https://ethw.org/Milestones:The_First_Submarine_Transatlantic_Telephone_Cable_System_(TAT-1),_1956.

13 Interview with Alison Taubman, 17 January 2023. See also: Geoffrey N. Swinney, "George Wilson's Map of Technology: Giving Shape to the 'Industrial Arts' in Mid-Nineteenth-Century Edinburgh," *Journal of Scottish Historical Studies* 36, no. 2 (2016): 165–90.

14 NMS T2021.2.

15 Rachel Boon, "'Research Is the Door to Tomorrow': The Post Office Engineering Research Station, Dollis Hill, 1933–1958" (PhD thesis, University of Manchester, 2020), 220.

16 Rachel Boon, "'Research Is the Door to Tomorrow': The Post Office Engineering Research Station, Dollis Hill, 1933–1958" (PhD thesis, University of Manchester, 2020), 191 and 224, following Robert Bud, "Penicillin and the New Elizabethans," *British Journal for the History of Science* 31, no. 3 (1998): 313.

17 David Edgerton, *The Shock of the Old. Technology & Global History since 1900*, updated edition (London: Profile, 2019), xv. As an example for the combination of both elements for TAT-1 see "£ 12,500,000 Deal Signed," *Daily Mail* 2 December 1953: 7.

18 Rachel Boon, "'Research Is the Door to Tomorrow': The Post Office Engineering Research Station, Dollis Hill, 1933–1958" (PhD thesis, University of Manchester, 2020), 214.

19 BT Archives [BTA] Reading Room Reference Material Network/Cable/Submarine Cables/Transatlantic, W04/03: "Notes for P.M.G.'s speech leading up to inaugural conversations," n.d.; Rachel Boon, "'Research Is the Door to Tomorrow': The Post Office Engineering Research Station, Dollis Hill, 1933–1958" (PhD thesis, University of Manchester, 2020), 225; British Telecom Archives [BTA] BTA Ref Material Box in Searchroom W04/03, Network/Cable/Submarine Cables/Transatlantic: "Ceremonies Marking the Opening of Service Over the Transatlantic Telephone Cable System," New York, NY, September 25, 1956.

20 BTA Reading Room Reference Material Network/Cable/Submarine Cables/Transatlantic, W04/03: "Speeches at the Opening of the Transatlantic Telephone Cable. To be checked against delivery," n.d.

21 The National Archives, Kew [TNA] DEFE 4/54, COS(54) 301, 11 September 1954.

22 "Telephone cable to N. America. Engineers' Dream Approaches Reality," *Manchester Guardian* 15 March 1955: 13. On this point see Jacob Ward, "Oceanscapes and Spacescapes in North Atlantic Communications," in *Histories of Technologies, Environment, and Modern Britain*, eds. Jon Agar and Jacob Ward (London: UCL Press, 2018), 191 and Jacob William Ward, "Information and Control: Inventing the Communications Revolution in Post-War Britain" (PhD thesis, University College London, 2018), 218–22.

23 Alistair Cooke, "Speaking Across the Atlantic. Start in Laying Submarine Cables," *Manchester Guardian*, 10 June 1955: 7. Cf also his earlier "Transatlantic Audibility. Sequel to Mr Bell's Invention," *Manchester Guardian*, 27 September 1956: 9.

24 "Discussion Before the Institution," 4 November 1954, responding to Mervyn J. Kelly, G. Radley, G. W. Gilman and R. J. Halsey, "A Transatlantic Telephone Cable," *Proceedings of the Institution of Electrical Engineers* 2, part B, no. 2 (March 1955): 130.

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26 "Building the First Transatlantic Telephone Cable: 'Voice Beneath the Sea'," available at https://youtu.be/OILtQ_Szvt8?feature=shared, accessed 21 May 2024; Rachel Boon, "'Research Is the Door to Tomorrow': The Post Office Engineering Research Station, Dollis Hill, 1933–1958" (PhD thesis, University of Manchester, 2020), 227. See BTA TCB176/33/1: C. C. Duncan to R. J. Halsey, 9 August 1954; Memo to D.D.G., November 1954, highlighting that Submarine Cables Ltd. had already done some filming; Raylton Fleming to Frank Shelton, 2 November 1955.

27 BTA TCB 176/33/1: Transatlantic Telephone Cable Film, 26 June 1956.

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29 BTA TCB 2/433: John Dean, Chairman and Managing Director, Submarine Cables Limited to Dr. Hill, Postmaster General, 26 September 1956.

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48 TCB TCB 176/3/2: W. A. Wolverson to D. L. A. Wade, 13 May 1953.

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4 Beyond Janus-Faced Narratives

Object Lessons from the Travelling-Wave Maser

Johannes-Geert Hagmann

In ancient Roman mythology, Janus was revered as the deity of transitions, of beginnings and endings, anthropomorphising expressions of duality and antagonism. Throughout the Cold War era, the characterisation of science and technology as "Janus-faced" became a popular narrative to describe their dual potential for creation and destruction. On an economic and geopolitical scale, no technology exemplified this notion more profoundly than the dual-use applications of nuclear fission. While the impact of science and technology on the origins of the Cold War remains a matter of historical debate, the entanglement of science and technology in the arms race of world powers is well established.[1]

Although some commentators argue that, as a consequence, technology is neither good nor evil but determined by human interaction, historians of technology offer at a different perspective, concisely summarised by Melvin Kranzberg in his first "law": "Technology is neither good nor bad, nor is it neutral."[2] As Eric Schatzberg has highlighted in his reappraisal of Kranzberg's law, technology, as a form of human activity, inherently includes moral judgement.[3] Hence, describing scientific or technological accomplishments as Janus-headed may seem to invoke the possibility to seperate from ethical assessment of their application. However, such narratives fall short of the complexities of human pursuit including social and cultural judgements, or as Schatzberg summarises, "technology is infused with human values, both good and evil."[4]

To offer their audiences a richer perspective of history, museums dedicated to the history of science and technology in the twentieth century need to consider the social and cultural dimensions in the display of their artefacts rather then presenting the more peaceful face of Janus only. Public historians are required to navigate what Dorothee Serries graphically conceptualised as the "payload of history" in her discussion of the controversies on exhibiting the Second World War origins of space research.[5] Neglecting these aspects would not only draw criticism from academics: today, contextualisation – that is, the organisation of memory and meaning in museum exhibitions – is also in demand by an informed public.[6] Lorraine Daston has likewise highlighted the "malleability of interpretation" during the process of recontextualisation of artefacts.[7] This effect is well known to historians and museum professionals alike but it often overlooked by some visitors who may view exhibitions as factually objective. However, even before interpretation begins, the

mere act of selection for exhibition purposes already disrupts any imagined balance with a material representation of the world. Consequently, exhibitions and the public representations of history – for our purposes here the display of science and technology – are inherently political in nature, as Sharon Macdonald and others have emphasised.[8]

This chapter reflects on the construction of historical narratives – the "faces" – connected to a specific case of Cold War technology with applications for both defence and fundamental scientific research: the travelling-wave maser. I argue that the object's biography offers a path to reconcile previously disjunct contexts of use and attributions of historical signficance within the Cold War context.

The story of the Maser's significance can be told forwards and backwards in time, depending on the emphasis the narrator wishes to express. In the next section, I initially adopt a chronological perspective highlighting the Cold War dimension of the artefact in the 1950s and early 1960s. Subsequently, I restart this exercise in the Section titled "The Travelling-Wave Maser and the Migration of Scientists to the United States" in the reverse order, taking a crabwalk in time from the discovery of the cosmic background radiation in 1964. Ultimately, I argue in the Section titled "Exhibiting the Maser – Reunification of Artefacts and Changing Interpretations Over Time" that for exhibition purposes, a focus on the objects' biography leads to highlighting the human endeavour in research, offering a complementary perspective to highlighting either the scientific or the military dimension of the artefacts.

The Travelling-Wave Maser – a Cold War Amplifier

The development of radar systems as a novel means of enemy detection exerted profound influence on warfare across land, air and sea (Figure 4.1).[9] Consequently, the generation, detection and processing of microwaves remained focal points of research after 1945 and during much of the Cold War era. As part of their efforts to bolster their military strength, both the United States and the Soviet Union initiated

Figure 4.1 Deutsches Museum Collections Inv.Nr. 2014–2060: Travelling-wave maser. Photo: Deutsches Museum

missile development programmes in the immediate aftermath of Second World War, building in part on German rocket research programmes and their relocated personnel. Throughout the 1950s, both powers intensified their efforts, leading to increasing missile range and higher payloads being able to carry nuclear and subsequently thermonuclear warheads. In 1957, the USSR successfully tested its R-7 Semyorka rocket system, capable ofpropelling a warhead to the United States, thus becoming the world's first intercontinental ballistic missile (ICBM).[10]

In response to this threat, the United States established military research and development programmes with the aim of devising countermeasures to intercept these missiles airborne, prior to reaching their intended target. Before the doctrine of deterrence through massive retaliation and mutually assured destruction became dominant in the mid-1960s,[11] then, considerable efforts and resources were directed toward the development of a defence system for the US territory. This endeavour, however, also led to rivalry and duplication of efforts between different branches of the military, leading to separate research development programmes of the US Army (Nike) and the US Air Force (BOMARC).[12]

The US Army's surface-to-air missile interception programme can be traced back to the end of Second World War when efforts began to develop a system for intercepting enemy aircraft. The initial rockets in this series, Nike-Ajax and its follow-up Nike-Hercules, were developed by major industrial contractors Bell Laboratories, Western Electric and Douglas Aircraft. These systems became operational in the early 1950s.[13] To protect major cities and strategic sites from airborne threats, batteries of Nike missiles were positioned near these areas. Starting in 1960, similar missiles were also installed in Western Europe and delivered to NATO allies. As early as 1955, the Army directed its contractors to include requirements for possible future ICBM threats in their research.[14] Developing such a system posed formidable challenges, including the need for extended interception range, the capability to target high-speed incoming missile warheads and the requirement to track and detect projectiles that were much smaller than conventional aircraft. Consequently, the system required major improvements on detection and tracking through radar, the processing of flight data in order to predict the ICBM trajectory, and an automatic launch system to expedite interception. As an additional difficulty, the possibility of discriminating the use of decoys obscuring the trajectory of the warhead had to be included in the radar system design.[15]

Increasing the range and the accuracy of radar systems required using electronic components with low noise-to-signal ratio – low-noise amplifiers for electromagnetic waves. The emergence of new electronic components became possible by recent scientific discoveries made simultaneously and independently both in the United States and the Soviet Union[16]: microwave amplification by stimulated emission of radiation. The American inventor, physicist Charles Hard Townes (1915–2015), attributed his idea to radar work performed for the Office of Naval Research (ONR).[17] To some historians of physics, notably Paul Forman, the development of the maser in Cold War America can be interpreted as a manifestation of a more general trend for the "enlistment and integration" of physical research into the quest for military preparedness.[18]

The first working devices known as MASERS were bulky and operated in laboratory settings using ammonia gas as an amplifying medium. For several reasons including a lack of available bandwidth to operate with, these devices were unsuited for amplification purposes.[19] In 1956, several research groups conceived the idea of creating masers that utilised solids as the amplification medium with a three-level atomic excitation scheme. Within a few months, several solid-state masers were successfully demonstrated on this basis on different active media. However, one crystal material stood out for its spectral and material properties, but also for its ready availability: artificial ruby (chromium-doped aluminium oxide). During the Second World War, Linde Air Products Company in East Chicago had initiated artificial sapphire production and continued manufacturing artificial gems, such as the "Lindé star sapphires" after the war.[20]

The maser research group at Bell Laboratories also transitioned to ruby as a key component in their amplifier design. Instead of constructing a cavity for amplification, their design incorporated a slow-wave structure that significantly reduced the velocity of propagation of electromagnetic waves. To achieve this, the Bell scientists devised a comb-like structure and employed a trick involving the polarisation of the electromagnetic field to ensure amplification to be unidirectional – waves would travel from input to output while the opposite direction was suppressed by absorption.[21] This device operated at cryogenic temperatures of liquid helium temperature and had to be placed into a Dewar system to insulate the amplifier from the thermal environment. In the documented experiments, the maser provided a net forward gain of 23 db at a negligible noise contribution from the maser itself.

The military celebrated the achievement and the introduction of a superior electronic component. In his biannual report, the Acting Secretary of the Air Force Malcom A. MacIntyre (1908–1992) praised in the report's section dedicated to basic research "This new device [the solid-state maser] may have as many military applications as the transistor, although not to the same uses."[22] For the ICBM interception system Nike-Zeus, which represented the subsequent development stage of the missile programmes involving approximately 20 contractors across the nation – the travelling-wave solid-state maser emerged as a pivotal component for the improvement of radar systems.

The complete Nike-Zeus ICBM interception system employed three distinct radar systems, each of them equipped with a maser amplifier. These included a discrimination radar to differentiate multiple objects in the sky and track them simultaneously, a target track radar for determining the position of the incoming target and a missile track radar monitoring the path of the interception missile. In case of the target track radar, the utilisation of the maser amplifier extended the range of the receiver from 380 to 580 nautical miles.[23] Assuming that a warhead would travel at 7 kilometres per second, this extension translated to a time advantage of about 50 additional seconds for reaction and interception. Following comprehensive system simulation at Bell Laboratories in Whippany and development testing of the rockets, the contractors and the Army planners identified a remote location for the deployment of a full-scale interception test system in the Marshall Islands, the Kwajalein Atoll.[24] At the time of the Cuban missile crisis, 13 American ICBMs

were fired between June 1962 and November 1963 from Vandenberg Air Force Base in California some 4,800 miles away from Kwajalein.[25]

Although the first interception attempt failed, subsequent interceptions were partially or fully successful from the Army's perspective. However, in 1963 the Department of Defense decided to stop further development of the Nike-Zeus. The military advisor to President Kennedy, General Maxwell D. Taylor (1901– 1987), had earlier advised against the deployment of the Nike-Zeus system, citing expected limitations of the system to defend against attacks including penetration aids such as decoys. Moreover, his arguments included an estimated cost of $15 billion for the defence of major population centres.[26] As early as 1959, a report from the Weapons Strategic Evaluation Group (WSEG)[27] concluded that the proposed missile system's effectiveness against decoys and cluster warheads was low. Furthermore, despite Nike-Zeus contributing to the national strategic posture toward the USSR, measures to protect the population from fallout, including the construction of shelters, were considered far more effective in protecting the US population on a short-term basis against nuclear attacks.[28] In 1960, the National Security council seconded these assessments, highlighting the low kill altitude of the Nike-Zeus missiles: "Active protection from blast and all other direct effects of nuclear attack would be of little overall advantage if the persons saved from death by blast and fire were subsequently to die from fallout."[29] Despite this early scepticism, the US government decided to complete the test system as it augmented its political position in the conflict with the USSR, while sending a psychological signal of envisioned protection against new threats to the US population. Yet, as a single advanced component within a vast, intricate and complex system of military technology, the maser became a Cold War amplifier in a literal and metaphorical sense.

Shifting the focus away from a rejected military technology – the first "face" of the maser – this chapter now moves on to a scientific experiment conducted in its aftermath. I outline how to narrate a different, and seemingly unconnected, scientific history of the use of maser technology in radioastronomy and thus its other "face," before we finally turn toward the biography of a specific maser artefact tying the threads together.

The Travelling-Wave Maser – a Sensor for the Origin of the Universe

The account of the discovery of cosmic background radiation, arguably one of the most profound scientific discoveries in the twenieth century, is a tale of surprise, frustration and serendipity.[30] Initially, Bell Labs radio astronomers Arno Penzias (1933–2024) and Robert Wilson (b. 1936) did not set out to uncover a fundamentally important support for the Big Bang model, and thus the origin of our universe. Quite the contrary, the signal they discovered at first appeared to them as a flaw in their experiment. The physicist employed the large horn antenna built by Bell Labs at Crawford Hill Laboratory, Holmdel, New Jersey, with the aim of measuring signals emanating from the halo radiation of our galaxy away from the Milky

Way. The antenna had initially been built as a low-noise ground station receiver for NASA's Project Echo, a passive satellite experiment in which Bell participated as a contractor.[31] In this project, a station in California transmitted radio waves to passive communication satellite, which were then reflected and received by the station in Holmdel. Later, the station had also been used measurements with the next generation of active communication satellites in Project Telstar.[32]

In 1963, the horn antenna was released from use for satellite work, allowing scientists to utilise the receiver for basic research in radio astronomy.[33] The 15-metre-long horn antenna was designed to capture microwave signals from the sky at a frequency of 4,080 MHz (equivalent to a wavelength of 7.35 cm). A waveguide transmitted the signal to a travelling-wave solid-state maser, serving as an ultra-sensitive pre-amplifier. This particular maser had been purpose-built for the Telstar experiments,[34] and followed up on the design of solid-state masers developed in the Nike-Zeus programme. To prepare for their measurements, the scientists initially sought to characterise all possible sources of noise in the system.

Any object with a temperature above absolute zero emits heat energy in the form of electromagnetic radiation. Astronomical radio sources can therefore be characterised by their thermal noise. Their noise power is quantified in form of an equivalent noise temperature that a resistor would produce to the measuring device. To differentiate noise sources within the antenna from astronomical signal, Penzias and Wilson meticulously calibrated their setup to a reference noise system and systematically scrutinised all possible sources of noise in the antenna. However, much to their surprise and frustration, their measurements conducted between the summer of 1964 and spring of 1965 produced a value 3.5K (with an error bar of 1K) higher than expected.[35] Moreover, the measured excess radiation proved to be isotropic and unpolarised throughout the sky and did not change over the period of their measurement campaign. A group of theorists at Princeton University provided the solution to the mystery: the almost uniform cosmic microwave background radiation, later established at the more precise value of 2.7K, is a relic of the creation of the universe and strong evidence for the Big Bang theory.[36] For their discovery, Penzias and Wilson were awarded with the Nobel Prize in Physics in 1978.[37] The horn antenna was designated as a National Historic Landmark in December 1989. Today however, it faces an uncertain future as the privately owned land is considered for redevelopment and housing construction.[38]

While the Telstar experiments are referenced by Wilson in his Nobel lecture and can be found in many articles describing the history of the discovery, very few connections have been drawn to the military maser development programme at Bell Laboratories.[39] Despite both applications of maser technology originating from the same source – the solid-state maser research programm at Bell Labs (the two narratives) maser technology for the ICBM interception program and the use of the maser in radioastronomy – have been typically presented separately in the past, appearing as two unrelated aspects or "faces" of scientific and technological research at Bell Laboratories during the Cold War.

To move beyond presentations that emphasise the one or the other, it is beneficial to seek a common thread. This connecting element can be identified through a closer

look at the biographies of the scientists involved in this research at Bell Labs, not in its forefront but in the second line. This will involve recalling a chapter in the use of scientific workforce in Cold War history – the attraction and the migration of scientific talent from Europe to the United States in the aftermath of the Second World War.

The Travelling-Wave Maser and the Migration of Scientists to the United States

Due to the persecution and violence that marked the era of National Socialism in Germany and the Second World War, tens of millions of individuals fell victim to violence and murder. Additionally, many people were compelled to flee their homes and seek refuge in other countries, including the United States, prior or during the war. Following The Second World War and with the commencement of the Cold War, the United States pursued a strategy to secure the knowledge of specialists in science and technology by implementing targeted immigration pro-grammes that also would deny access to their knowledge to their adversary, the Soviet Union.[40] Consequently, research laboratories in universities, governmental institutions and military facilities would become places of unexpected encounters between specialists who had been forced into emigration, and another group of scientists and engineers seeking careers in the United States after the war. This is the context in which Erich Otto Schulz-DuBois (1926–2018) commenced his career.

Erich Schulz-DuBois was born in Frankfurt in 1926. He studied physics in Frankfurt and obtained his Ph.D in 1954 at the Physikalisches Institut, led by Marianus Czerny (1896–1985).[41] Czerny then helped Schulz-DuBois to find a postdoctoral position at Purdue University in the United States. In 1956, Schulz-DuBois moved to research in industry, first being recruited at Raytheon Manufacturing Co. before joining Bell Laboratories at Murray Hill, New Jersey, in 1957. Both companies at the time were strongly involved in defence-related research and contracts. At Bell Labs, Schulz-DuBois became a member of the maser research team led by Henry Scovil (1923–2010) who had co-built the first solid-state maser.[42] The team developed the travelling-wave maser with Robert De Grasse (1929–2018) for the Nike-Zeus radar equipment. In its later form it was modified for the Holmdel horn antenna by William J. Tabor and John T. Sibilia, two other Bell scientists.

In September 1959, Schulz-DuBois participated in the First International Conference on Quantum Electronics organised by Charles Hard Townes (1915–2015), together with a large delegation of scientists from Bell Laboratories that included the young physicist Arno Penzias. In 1967, Schulz-DuBois returned to Europe and eventually became a professor of physics at the University of Kiel, where he taught until his retirement in 1991.

Exhibiting the Maser – Reunification of Artefacts and Changing Interpretations Over Time

Arno Penzias was born in Munich in 1933. In 1939, he and his brother escaped from Germany to the United States via England, where he eventually would

Figure 4.2 Deutsches Museum Collections Inv.Nr. L1992–3T1: Control box with maser
and pre-amplifier

become a citizen in 1946.[43] Even though he was quite young when he left Munich,
he retained memories of visiting the Deutsches Museum in his early childhood.[44] In
the early 1990s, when the Deutsches Museum approached him to request artefacts
for the renovation of its permanent gallery of astronomy, Penzias facilitated a loan
from telecommunications giant AT&T for the museum. The museum received the
registration station from the Holmdel antenna, consisting of three large electronic
racks and including the closed maser Dewar. To replace the missing large antenna,
which remained at the Holmdel location, a short horn antenna was added to the
receiver (Figure 4.2).

In 2011, a 1:25 scale model of the 20-ft horn antenna, built in the workshops
of the Deutsches Museum, was added to the display, prominently featured at
the entrance of the astronomy gallery on the museum's third floor. As a Nobel
Prize-winning experimental setup, the objects featured among the highlights of the
exhibition at the Deutsches Museum.

In their text discussion of the discovery, the curators at the time emphasised
the scientific aspects along the lines outlined in the Section titled "Exhibiting the
Maser – Reunification of Artefacts and Changing Interpretations Over Time." In
around 400 words on the text label, a word count which was already larger than
usual for single object units as compared to other the descriptions of other artefacts

at the museum. Still, the text primarily focussed on the various components of the receiver, their function as well as the profound significance of the microwave background measurement for astronomy. However, the presentation elided any connection to satellite communication projects, as well as omitting Cold War military research at Bell Labs.

In 2014, Schulz-DuBois donated the travelling-wave maser models to the collections of the Deutsches Museum. The museum thus received a new artefact that created a connection to an already existing exhibit at the Deutsches Museum, the Penzias and Wilson equipment. The models had been placed in a small black suitcase at Bell Laboratories for transportation and display purposes and had remained therein ever since. Their transportation to Munich in airplane hand luggage caused some prompted irritation and some discussions at the security check owing to the sharp edged of the objects but finally arrived safely in Munich as an addition to the collection waiting to go on display. Finally, in 2019, the Deutsches Museum began planning a new exhibition on twentieth-century laser physics and quantum optics, as part of a major ongoing renovation project. The new exhibition, *Light and Matter*, scheduled to open in June 2024, is the research and outreach contribution of the Deutsches Museum to the research excellence cluster "Munich Center for Quantum Science and Technology," funded by the German Research Foundation (DFG) from 2019 to 2025. The collaboration includes partners from the two Munich universities, the Max-Planck-Society and the Bavarian Academy of Sciences.[45] Like all exhibitions of the Deutsches Museum, *Light and Matter* serves educational purposes, however the exhibition also takes a historical approach to explore the convergence of spectroscopic research aftee the Second World War with laser physics, ultimately leading to the emergence of a new scientific field often referred to as "quantum optics." The exhibition's curators (including this chapter's author), wanted to emphasise that a number of the scientific advances presented in the exhibition are closely linked to hybrid military-civilian research during or after The Second World War, a connection known to historians but much less so by the public at large. In particular, the laser served as a major new scientific tool of the second half of the twentieth century. Its development owes to the intensified maser research with major sponsorship from military funding agencies.

The exhibition presents the travelling-wave maser, offering historical context to government sponsored maser research in the United States in the context of Cold War science. Alongside an explanation of its function, the maser is accompanied by a 1961 Bell Labs advertisement video that provides a contemporary (and biased) view of the contributions of the Nike-Zeus missile system to the Cold War efforts.[46] The new labels for the the maser therefore now read:

In the late 1940s, with the onset of the Cold War between the Soviet Union, the United States and their respective allies, a process of bloc formation also began in the scientific communities. The circulation of knowledge was restricted, and competition between two different systems led to a military and scientific race. Both superpowers invested significant sums in research, including in the field of microwave technology. In the early 1950s, a new

microwave amplifier called the maser was simultaneously developed in both blocs. The acronym stands for "microwave amplification by stimulated emission of radiation". It served as a low-noise amplifier and a precise clock in radar and satellite technology. […] Initially, these devices were used in radar systems for the Nike Zeus intercontinental ballistic missile defense system. Using the same amplifier, cosmic microwave background radiation was discovered in 1964 (large display case).[47]

In an attempt to establish connection with the biographies of scientists that migrated to the United States after the Second World War, the exhibition also features a Stoelting Deceptograph lie detector system. These devices were extensively used to screen foreign scientist entering military research laboratories during the 1950s and early 1960s. Furthermore, the exhibition outlines features of economic warfare due to export control into the Soviet Union through the CoCom lists, including laser equipment.

During the long course of the project, the Cold War dimension of the exhibition has changed in significance in light of the ongoing Russian war on Ukraine. The Deutsches Museum will run visitor evaluations of the exhibition through our museum education department, seeking not only to understand the visitor's perspectives but also to explore their connections to the world's present situation when confronted by these historical aspects in the museum.

Take-Away Object Lessons

As DeWitt H. Parker emphasised nearly a century ago, the definition of value does not reside within "any object of any interest," but rather in "any interest in any object."[48] Consequently, artefacts, particularly museum objects, derive significance and value when placed in an exhibition – a concept of social construction that Michael Thompson distilled in his "Rubbish Theory."[49] The travelling-wave solid-state maser, a Cold War era device, has traditionally been projected in a one-dimensional manner presenting a single facet: either as an exemplar of military electronics in the US-Soviet Union arms race, or a fundamental component in a groundbreaking scientific experiment. The discussion of the dual-use potential of the solid-state maser – both in military applications and fundamental research – is not unique to the case of Bell Labs. Benjamin Wilson and David Kaiser have previously traced the history of solid-state maser development at the MIT's Lincoln Laboratories for their usage both in the early warning radar systems and tests for the general theory of relativity.[50]

As explained in the introduction, museums dedicated to science and technology have frequently avoided aspects of military history in the history of invention and discovery in the past. This has been evident for the display of the scientific equipment used for the discovery of microwave background radiation at the Deutsches Museum, where the maser served as a key component. However, upon closer examination of its development, we discover that the many dimensions of an object – scientific, military, aesthetic – are equally embodied in the artefact.

Through its contexualisation with other artefacts, documents and audiovisual matrial in the exhibition, these aspects presents a certainly more complex but also more rich story to the visitors. This multi-faceted presentation offers different entrance points for resonating with the object and its Cold War history.

By highlighting the human dimension of research exploring the individual paths of scientists, the maser imparts a lesson on transcending one-sided or dichotomous narratives. Rather than seeking to explain contingent developments through abstract aspects of Cold War policy, it is enlightening to look at the personal motivations of historical actors and their choices – the decision of a young German scientist to pursue a career within the military-industrial complex in th United States or the motion of a Nobel Prize Winner to give an artefact to a country he had to escape from persecution. As we decided to present and narrate things differently in the next exhibition, the maser underscores how the interpretation assigned to a single artefact evolves over time: what will people see in the maser in 10 or 20 years from now, with even more distance from the Cold War, remains unknown.

Notes

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5 The Vulcan's Voice

Multiple Meanings of a Cold War Artefact

Samuel J. M. M. Alberti

At 10 am on 12 April 1984 at East Fortune airfield in south-eastern Scotland, aviation enthusiasts craned their necks for a first glimpse. Looking south, they were rewarded by a distinctive delta-shaped silhouette against the cloudy sky. Spewing twin streams of dark smoke, an ageing bomber roared overhead, banked left, then swept round to approach the airstrip. It touched down for a moment, only to leap skyward again at an alarming angle. On the aircraft's second approach, it remained earthbound, billowing out a parachute to bring it to graceful arrest.[1]

Those assembled admired its 30-metre length – not counting the conspicuous refuelling probe protruding from its elongated nose – and its 34-metre wingspan. At the front, just visible from the ground, was the blister-shaped cockpit canopy, and at the rear the tail fin towered 9 metres high. Letterbox air intakes gaped from the front of each wing, cooling four mighty Olympus engines that had for the last time just delivered up to 20,000 lb of static thrust each via the exhausts embedded in the wings, flanking the tail. Red and blue RAF roundels adorned its cheeks over the grey-green camouflage. From its belly emerged its five crew: a navigator, a radar operator, an electronics officer, a co-pilot and their pilot, Group Captain Bill Burnett.

This was Avro Vulcan XM597, which had flown 170 miles from Royal Air Force (RAF) Station Waddington in Lincolnshire. This was its final journey: East Fortune was its destination because it housed the Museum of Flight, which was to be the Vulcan's home after 22 years of service (Figure 5.1). (The first aborted approach had been to test the landing – and no doubt to thrill the onlookers.)

That April day was important: the transition from the Vulcan's active career to a museum career of four decades (and counting). For while we know a great deal about the use-life of bombers like these, they have rarely been framed in their museological context by exploring their heritage afterlives.[2] This chapter will therefore trace this artefact's biography before and after arrival to understand the fate of the Vulcan and other material relics of the Cold War, outlining its pre-museum story, the work invested in the object at the museum, and its reception.[3] Alongside other such biographies in this volume by Hagmann, by Kleve and by Nehring, this will help us to understand the materiality of this "imaginary conflict" and how it has manifested in the heritage sector since. I will explore the contradictions inherent in this giant artefact, and what this can tell us about the changing and contested meanings of artefacts associated with a war that never happened. XM597 was a bomber

Figure 5.1 Vulcan B2 XM597 at the National Museum of Flight

built for nuclear war that in two decades fought only once, with conventional bombs; a tool of death that became beloved; an instrument of fear that brought delight; a highly valuable piece of technical Cold War equipment parked outside; a howling fire god silenced on a *dreich* Scottish airfield.

Origins and Use-Life

The roots of XM597 and the other Vulcans can be traced back to the aftermath of the Second World War.[4] When Britain's nuclear plans departed from those of the United States, the Government identified the need for heavy bombers to dispatch the nuclear weapons under development. In 1947, the Air Ministry therefore commissioned a fleet of nuclear-capable jet bombers, which gave rise to the "V-force." The Ministry accepted design briefs from engineering company Vickers for what would become the "Valiant"; from aerospace manufacturer Handley Page for the precursor of the "Victor"; and design briefs for "Type 698" from Hawker Siddeley subsidiary Avro, famed for producing Lancaster Bombers during the Second World War.

For three years, Roy Chadwick and Stuart Davies at Avro developed prototypes and scale models with revolutionary "delta" shape before embarking on production of its bomber, which took its first flight in 1952 as the "Vulcan." In four years, the first operational "B1" versions were delivered, by which time Avro was already working on the enhanced B2 version with a wider wingspan, a slight kink in the pure delta shape and more powerful engines. B2 took its first flight in 1958 and was delivered in 1960. By this time, the Americans were developing the Skybolt system of air-launched ballistic missiles, for which the Vulcans were intended to be adapted. In 1962, however, the United States unilaterally cancelled Skybolt, and the Vulcans were instead adapted for the (British) nuclear stand-off Blue Steel missiles with Red Snow thermonuclear warheads.

Whatever they were armed with, the 140-strong V-Force was constructed at great expense and considerable visibility as a deterrent – hopefully never to be used, but a key part of the doctrine of mutually assured destruction. (Arguably, the closest these bombers came was their standby role in 1962 during the 13 tense days of the Cuban

Missile Crisis.[5]) This was a British plane for British defence and as such was idolised and fetishised, thrilling at air shows from its first appearance as a prototype at Farnborough in 1952, and gracing magazine covers throughout the 1950s.[6]

Airframe XM597 entered service on 27 August 1963, having rolled off the line at Avro's Woodford factory in Cheshire, built with parts manufactured in Chadderton near Oldham, 1 of 134 production B2 Vulcans produced between 1960 and 1965. It was initially painted with anti-radiation flash white paint distinctive of the V-force, and although it had a redundant Skybolt hardpoints, it was equipped with Blue Steel missiles. Like all Vulcans its five crew had snug quarters – for the navigators "like sitting in a darkened cupboard flying backwards" – with limited window visibility and an alarmingly small hatch from which to bail out if needs be (having climbed around the nosewheel).[7]

Joining the nine squadrons of Vulcans, XM597 was first stationed at RAF Coningsby, Eastern England (until December 1964), then at RAF Cottesmore in the Midlands (until April 1968), and finally, RAF Waddington near Lincoln for the rest of its military career. XM597 spent the 1960s in a perpetual state of vigilance, "Quick Reaction Alert" (QRA). Its crew were continuously prepared, ready to take off at 15 minutes notice – or even four minutes in heightened periods – before taking off to deliver their deadly payload.

One Vulcan captain remembered life as a "human button" and its "huge responsibilities. … When I think about it, it staggers me now. In a way I suppose we were automatons [and] the philosophy was – this deterrent thing, if we do it properly, we won't have to think about."[8] As a result of not thinking about it, life for the Vulcan crew on QRA was actually surprisingly mundane:

> you had to go out first thing in the morning, check it, check the aircraft, check the weapon, make sure intercom worked and all that sort of thing, just basic little checks. And then you'd stand down for the rest of the day. And most of us used to do a bit of training in the morning, and table tennis in the afternoon, or snooker, or darts, or watch the Test Match; relax, because then you need your rest just in case in the sort of million-to-one chance you got scrambled. But I don't think you really needed to rest, because if you got scrambled you had so much adrenalin going round you, you wouldn't sleep for a week.[9]

By the time XM597 reached Waddington, the Vulcan's role had switched from high altitude to sub-radar, and the aircraft were therefore painted in camouflage for lower level flying. During this period, one Vulcan Navigation Plotter summed up the experience of serving in a Vulcan: "Five Man – Four Fan – 14 Can – all aloominum – stacks of room in 'em – hot-shit pursuit ship."[10]

XM597 stood down from QRA in 1969 when the Royal Navy took over the United Kingdom's nuclear deterrent with Polaris submarine missiles. "I felt a bit sad," a crew member remembered,

> because part of our role had gone [that is,] maintaining the deterrence [to] stop a sneak attack on the UK. The chances of us getting through were

absolutely remote, but we were still there, and they still had to think about us. And you had a role.[11]

The following year, the RAF withdrew Blue Steel missiles from service, and the Vulcans were re-purposed as freefall bombers. During the 1970s, V-Force aircraft were deployed internationally, for example in Indonesia-Malaysia. They took part in bombing and navigation training competitions to keep the crews sharp: in 1975, for example, XM597 took part in Exercise Forearm in Cyprus.[12] Vulcans were also popular elements of the "Red Flag" aerial combat training exercises in the United States. XM597's role as a nuclear deterrent, if not forgotten, was certainly camouflaged, "Because the air force was a bit of a flying club," remembered one crew member, and you used to concentrate on enjoying your flying, and becoming more professional at it, that you didn't really think too much about the Cold War."[13] Designed and built to threaten the Soviets, the Vulcans were now used to compete with the Americans – in both cases, playing an important role in exhibiting national pride.

In 1981, when most had seen two decades of service, the RAF began the phased withdrawal of the Vulcans. And yet surprising turn of fate awaited XM597. In April 1982, Argentina invaded and occupied the Falkland Islands (*Las Malvinas*) in the South Atlantic, whose sovereignty Buenos Aires disputed. The Royal Air Force, keen to evidence its relevance as the Royal Navy led the offensive, planned the longest bombing raid in history.[14] The best examples within the three surviving squadrons of Vulcans were to be the spearhead, refuelled by their old sister aircraft the Victors, which had been re-purposed as tankers after withdrawing from their nuclear function. Allegedly the Vulcan airframes were by now so outdated that their refuelling systems had to be reinstated and some parts had to be sourced from museums and, in one case, from use as a crew room ashtray.[15] XM597 was one of only five Vulcans that retained the appropriate mechanisms for the weaponry required.

The re-convened V-force was based at Wideawake airfield on in the mid-Atlantic Ascension Island from which the 4,000-mile "Black Buck" missions would launch. They took off in complete radio silence, wary of the Soviet intelligence-gathering ship moored close to the Island – a Cold War shadow in the fire of the hot war.[16] Of the seven sorties to the Falklands capital Port Stanley, XM597 participated in three: it was initially involved in Black Buck 4, but after refuelling problems it turned back. On 30 May, however, piloted by Squadron Leader Neil McDougall, armed with US-supplied Shrike missiles, XM597 flew all the way to the Falklands and struck a surveillance radar aerial at Port Stanley airfield. Then, in Black Buck 6 on 2–3 June, two of XM597's Shrikes destroyed a Skyguard radar and killed four Argentine personnel – two soldiers, a sergeant and an officer – and injured another two or three.[17] After 19 years in service, the aircraft had generated its first (and only) human casualties. Upon his departure from the squadron, the officer who fired the missile was commended by his commanding officer: "You have a place in history as the first man to fire a missile in anger from a Vulcan."[18]

For the crew, however, Black Buck was not over. On the return leg to Ascension, a refuelling probe sheared and, running low, McDougall was forced to divert to Rio

de Janeiro's Galeão airport. Although Brazil was officially neutral in the conflict, Britain – and McDougall – suspected tacit support for Argentina, so the crew jettisoned secret documents out of the crew hatch under the nose. They fired the two remaining Shrike missiles, but one of them became stuck on the pylon under the wing. This was removed by their Brazilian hosts (minus one of the fins and some cabling, secreted by the crew when the missile was disconnected) as XM597 spent a week in Rio while diplomats speedily tried to diffuse a potentially embarrassing international incident.[19] Eventually, the crew and airframe were released on 11 June, on condition they play no further part in the conflict (and, it later emerged, after the UK Government agreed to sell helicopter parts to Brazil). The Shrike missile was confiscated by Brazilian authorities. (In 2016, when he learned I was planning to visit the Museu Aeroespacial near Rio in my capacity as a National Museums Scotland curator, my aviation specialist colleague Ian Brown asked me to check whether the missing Shrike missile was on display there – it was not, having already been returned to the RAF.)

MacDougal won the Distinguished Flying Cross for landing XM597 safely: meanwhile the Brazilian sojourn is inscribed on the airframe itself as a small flag (see Figure 5.2), next to two stylised Shrike missiles: visual evidence of its lethal history as one of only two Vulcans to fire weapons in anger. This marks the Vulcan as an element of *difficult heritage*, a theme runs through Cold War material culture, but rarely so directly and explicitly.[20] Exploring XM597's museum afterlife will reveal the extent to which this element of its trajectory has surfaced since.

Heritage Afterlife

After a two-year renewed lease of life spurred by the Falklands conflict, the Ministry of Defence finally disbanded 50 Squadron in 1984; and so XM597 took its final 45-minute flight from Waddington on that grey April morning. Pilot Bill Burnett had inspected East Fortune in advance and was concerned about the length of the runway and the location of temporary structures and trees that had grown up since the active use of the airfield. The landing was not simple:

> As we came into land, it was obvious our approach would have to be steeper than normal if we were to keep clear of the tops of the trees. We then had to make a sideways step to give the portacabins a wide berth and once we were down I had to stand on the brakes to avoid negotiating the roundabout [that was built on the runway]. We burst a tyre taxying up the cart-track to the edge of the museum fence; in fact we parked the nose over the fence.[21]

To the delight of the enthusiast onlookers, the Vulcan had now arrived safely at its new home, 1 of 19 surviving Vulcans.[22] These include all four of the Black Buck aircraft and, given their popularity there in the 1970s, four that reside in North America. Cared for either by dedicated aviation heritage organisations or by specific groups (such as XL426 managed by the Vulcan Restoration Trust at Southend Airport), most are dormant. Three, however, can still run their engines, and one,

XH558 (now named *Spirit of Great Britain*) thanks to the Vulcan to the Sky Trust, flew until 2015.

XM597 was not destined to run again, however. Its new home, the Museum of Flight, was a branch museum of the Royal Scottish Museum, based at Chambers Street in the centre of Edinburgh some 20 miles west of East Fortune. A traditional civic museum of art and science with its roots in Enlightenment collecting and Victorian educational ideals, since early in the twentieth century the Royal Museum had been one of the first museums to display aviation.[23] This collecting accelerated after the Second World War, including an aviation gallery from 1966, and in time including Cold War hardware such as a Skylark rocket.[24] An iconic Supermarine Spitfire arrived in 1971 after a dinner encounter between the museum's director Ian Finlay and a senior air force officer, at which point it became clear that further space was needed.[25] This demand was met by the Property Services Agency, which allocated the museum space in a hangar at East Fortune airfield. After a role in airship deployment in the First World War and as a training hub during the Second World War, East Fortune had been used as a depot for civil emergency supplies such as biscuits during the Cold War.

Over the 1970s and early 1980s, the aviation collection grew apace, including three Royal Navy jets and in 1981 a de Havilland Comet airliner. Under the rubric of the Royal Scottish Museum, and with the active help of the Aircraft (later Aviation) Preservation Society of Scotland, an enthusiast group of retired engineers and others that had first met in 1973, the footprint at East Fortune grew, including access to a second hangar from 1982, which allowed small exhibitions. Eventually, all four surviving hangars were branded as the Museum of Flight.

To enhance the Museum of Flight with near-contemporary examples, in January 1983, the Royal Museum wrote to the Ministry of Defence requesting a Vulcan upon decommissioning. The Secretary of State agreed, subject to the right to plunder the airframe for parts if ever needed (having learned the lessons of 1982), and assigned XM597.[26] It arrived with its logbook, which Burnett ceremonially handed over upon arrival.[27] Always significant in the use-life of any aircraft, this ritual transfer had extra meaning during this exchange because it marked the end of the Vulcan's career and the beginning of its museum afterlife. XM597 experienced what anthropologists dub "The Museum Effect": when an object is radically dislocated from its point of origin and previous use, rendered a frozen work of art in the surrounds of the museum.[28] No longer would this Vulcan roar.

Rather, it was assigned the accession number T.1984.47.1 – the first element of the 47th item acquired in the technology collections in 1984 – and a physical (and later digital) object file to gather a penumbra of documentation: newspaper clippings, technical reports and photographs, and any relevant correspondence.[29] A vehicle capable of travelling 4,000 miles at up to 600 miles an hour was then tugged to its new location a few hundred metres away among the hangars of the museum, closest to the military aviation displays. Its nose faced the de Havilland Comet, and it was eventually accompanied by a Blue Steel missile. Its bomb doors were left open to show the capacious interior, and the physical traces of its varied career remained on show: the hardpoints for Skybolt, the Black Buck inscriptions.

Despite a repaint in 1994, the Scottish weather worked against the aircraft's integrity.[30] Museums battle entropy every day, for every object, large or small, inside or out. APSS members, curators and conservators worked on the Vulcan for 40 years, including inspections, hosing down and regular emptying the dehumidifier inside the cockpit.[31] Nevertheless, time has taken its toll. "XM597 was once very well-maintained but has unfortunately lacked some attention," observed one enthusiast:

> Many panel lines are sealed against the weather and her undercarriage bays have mesh across them to stop birds from nesting there. … The paint is flaking very badly, especially around the nose. There is also a fair amount of corrosion around the exhausts, but this is often the area that begins to corrode first.[32]

In 2017, NMS began to consider more substantially the fate of the three large aircraft that remained outside: not only the Vulcan but also the Comet and a BAC 1–11 passenger airliner, "Lothian Region," which had been used on the shuttle service between London and Edinburgh. The museum proposed a further hangar just off the museum's site that would hold Concorde, the Comet and the 1–11; the Vulcan would then take Concorde's place in the largest existing hangar. The vulnerability of the aircraft, the visible decay, was a central plank in the justification for the build:

> The need to move the three aircraft currently displayed outdoors to a permanent home is becoming increasingly urgent. Creating a covered and appropriately environmentally controlled space to conserve and display these significant objects of the national collection is a vital aspect of the Renewed Masterplan. All of these aircraft are deteriorating rapidly[.][33]

The project progressed well, securing provisional support from the National Heritage Lottery Fund. In 2019, however, objections from local residents led East Lothian Council to deny planning permission because the work would have involved removing ancient trees on the perimeter of the site, and the plan was parked.[34] Instead, after a delay caused by the COVID-19 pandemic and the subsequent economic climate, NMS implemented a rolling conservation plan for the outside aircraft to address the deterioration of the outside aircraft. At the time of writing, this "curated decay" is the only viable approach available to the Museum.[35]

Reception and Response

This use-life and museum context are only parts of the story of an object; to understand its meanings we need to consider how it was and is received. For museum personnel are not alone in breathing life into the aircraft. Visitors imbue artefacts with meaning. An object on display has relationships not only with other items and with its collectors and curators but also with its audiences. Viewers observe

and react to an object, and these responses (and their traces) are symptoms of the relationship between thing and observer.

Museum staff facilitate this relationship: as well as the physical work invested in the aircraft, the Vulcan like other museum objects on display is subject to considerable interpretative work. The most obvious evidence of this are museum labels – in the case of outside objects, this tends to involve large, weather-proof display panels. Previous examples have not survived, which is not unusual; the current boards have been in place since 2016. The panels are written in the museum voice with no identified author, like most public signage and almost all museum labels.

"God of Fire," the panel begins, and immediately immerses the visitor into the Cold War origins of the aircraft, which was a fearsome machine "designed to drop nuclear bombs."[36] This focus on readiness, on alert, is the opening message: "If war broke out, their mission was to destroy key [un-named] enemy targets with nuclear bombs." The second panel celebrates the technical accomplishments of the aircraft: facts and figures including its payload: "21,000 lbs internal bomb load or one Avro Blue Steel nuclear missile." An example until recently been displayed beside the aircraft – the bomb doors remain open so that the taller visitor may stand where the nuclear device once hung. There is a focus on the technical development of the wing shape, and links to the Concorde displayed in the nearby hangar – an explicit reference to the civilian benefit of this military development.

The signage shifts to historical present tense for its final passage, breathlessly detailing the fate of the Vulcan (now feminised): "while re-fuelling … she fractured a fuel probe. … seized by Brazilian authorities[,] XM597 is eventually released on condition she takes no further part in the hostilities." The focus is exclusively on the return journey, with no mention of Port Stanley airfield nor the casualties there.

The panels however are only one of number of ways that museums seek to facilitate audiences' engagement with museum objects. As well as a digital presence on the museum's website,[37] physical visits are sociable experiences, and museums like this one especially so: in 2022, 83% of visitors were motivated to visit the National Museum of Flight as a social experience.[38] The demographic at East Fortune involves a high proportion of inter-generational groups, and the Vulcan has been explained to many children by parents, carers and (perhaps especially) grandparents. Like other museum objects, the Vulcan is also brought to life for schoolchildren by their teachers and by museum learning officers. Others may engage with the collections in tours and talks offered by curators, or by experts brought in by the museum, especially during the air shows that were staged at East Fortune until 2019. In the case of the Vulcan, these have included talks by David Carrington, a Ground Engineering Officer at Waddington who had worked on Vulcans included XM597; and Wing Commander Bob Wright, radar plotter on XM607 during the Black Buck missions who also flew in XM597.[39] A number of crew members attended the museum to mark the 40th anniversary of the Falklands Conflict, including Rod Trevaskus, XM597 Air Electronics Officer during the Black Buck missions. Standing underneath the delta wing, their living memories connected the historic artefact to the visitors.

This sociability forms a soundscape around the Vulcan. Museums are sensory spaces: they are not only highly visual but also offer aural experiences. There are other surviving Vulcans that offer a more varied sensory experience – those that growl while taxi-ing, those that volunteers can become involved in maintaining – but even though XM597's howl was silenced as it entered the collection, it has a soundtrack of talks and dialogue. It also offers a haptic experience, albeit illicit. The same "do not touch" prohibition applies to objects outside cases and outside buildings, but on the airfield there is little in the way of policing and despite barriers, many visitors succumb to the temptation to caress the underside of the wing. "Vulcan is outside," reported one enthusiast, "and you can touch the tyres."[40] Its brute materiality can be experienced first-hand.

Many have done so. A conservative estimate would then be that the site has welcomed over two million visits since the Vulcan arrived.[41] There is no evidence of how many visitors would walk across the site to look at the airframe up close, but few can have missed seeing it even if only from across the field, and many have been drawn closer. Most of those who engage with the Vulcan, like any object, leave no trace – their response lost to history.[42] But there are repositories of response available. Visitor surveys elicit opinions from those "Amazed at the aircraft Britain developed during the Cold War especially the Vulcan as it was like something out of the future."[43] Online reviews of the National Museum of Flight often mention the Vulcan in the frequent trope of a list of highlights aircraft, second only to Concorde. "Seeing the Vulcan bomber was great," enthused one visitor, "and the story that goes along with it even better."[44] The Falklands story tended to attract attention rather than its Cold War associations: "loved the history of the Vulcan" commented one "Falklands veteran"; for another family group, "Our main reason for attending were the events for the 40th Anniversary of the Falklands, and it was great to hear from the people who were on the Black Buck missions themselves."[45] A recurring theme in visitor response is that the Vulcan is considered an "icon" and a "piece of proud British history!!"[46]

Not all were so glowing, however, and there is growing evidence of the Vulcan's decay impacting upon the visitor experience. One visitor for example was

> disappointed with, and a bit saddened by … the Vulcan. This epic, majestic, historically magnificent aircraft is just so powerful to see; yet up close it's really in a sorry state of repair; paint flaking off, grubby, deflated. I wish it was maintained to a decent level so that when you approach it from afar, it's an increase in excitement, not a de[s]cent into disappointment.[47]

This sentiment has increased in online reviews since 2016, especially in reference to XM597's individual history:

> The big disappointment for me was the condition of the outside exhibits [reported another visitor,] to see several parts of history sitting static, tyres flat and cracked, paintwork weathered and peeling and slowly but surely succumbing to both time and the elements soured the whole experience. …

I would like to see the Vulcan moved indoors. Given the history of this particular aircraft, it needs to be preserved and cared for properly. We owe it that![48]

Another found the state of the Vulcan "Sacrilegious."[49]

The Vulcan prompted a range of emotions, then, from awe to outrage.[50] Among the individual reactions prompted by the display, one who responded powerfully was Mike Holder, who had served in XM597 as a navigator. Visiting the aircraft reminded him of comrades he had lost during his time in the RAF:

the Vulcan just brought it all back again. I was also thinking about a couple of chums who were killed in the Vulcan that crashed in Malta. Also the state of the aircraft was rather sad – the 54 years since I had flown it had not done it any favours; not that the years have done me any favours either. Perhaps I was looking at my own decrepitude and not the aircraft's. … it was clearly a powerful and important response elicited by the aircraft.[51]

From technical correction to memento mori, this museum object continues to generate and channel dialogue.

Museum Meanings

Clearly, the Vulcan has had and continues to have many meanings afforded to it. Assessing the past and present of the object as a biography has shown how rigid steel belies polysemic flexibility. In this volume, we are concerned with how Cold War material culture came to be in museums, how it is used, and how it is "consumed."[52] Like other museum objects, the Vulcan experienced a semantic and functional schism upon arrival. As its engines shut down in April 1984, it shifted from mobile (and very fast) roaring globe-trotting vehicle to mute, stationary relic. But it nonetheless continued to change and adapt, layers of meaning arriving with its document penumbra, with each new panel and each visit. Unsurprisingly it means different things to former crew ("hot-shit pursuit ship"), to curators (museological challenge) and to museum visitors (whether fetish or disappointment).

In this respect, the Vulcan both supports and disrupts patterns discerned in other chapters. In common with other objects, it is interesting that its Cold War meaning is by no means fixed. The V-Force's role in nuclear deterrent accounted for only six years of the Vulcan's two decades of use-life, and one-tenth of its total existence. Especially in its original white anti-flash livery, the aircraft embodied mutually assured destruction, materialising the fear of living with the four-minute (or at least the 15-minute) warning. But for the crew, the Vulcan was redolent of a QRA more about the boredom or readiness and bursts of adrenaline than it was about fear of apocalypse. In the camouflage paint that replaced the white, it visualised the risk of low-level bombing. In this livery, the Vulcan engaged in competitions with the American Air force, a symbol of national provide, British engineering and skill. In either guise, the aircraft is a fetishised British icon.

In both schemes, most surviving Vulcans manifest the Cold War *as it was imagined*.[53] Unusually for Vulcans and for Cold War matériel more generally, however, *this* Vulcan is more closely associated with an active war, the Falklands Conflict. (Although it occurred during the Cold War and involved some of the principals, the fight for *Las Malvinas* stood in contrast to the prevailing superpower contest.[54]) As a Black Buck veteran, and especially with the Brazilian detour, XM597 carries a particular set of meanings and a beguiling tale of heroism and international intrigue, the immediacy of the actual conflict obscuring its early history in an imagined war. For the crew, it represented "the highest achievement" in their career.[55] More sombrely, it also carries with it the echoes of the four Argentinian service personnel killed by its Shrike Missiles. Unlike most Cold War objects, it is an actual instrument of death rather than threat. The subtler Cold War heritage layers around this object are overshadowed for many by a hot war.

Clearly, a technical artefact can have many more-than-technical meanings; and these can be loaded with emotion. From what little survives of visitor responses, it is not the casualties caused that provoked strong responses, but rather the physical decay of the aircraft. This prompted melancholy and more from those most closely involved in the biography of the aircraft and those who flew it, and even anger and disgust from some visitors, for whom the state of the airframe was a dereliction of duty and an affront to proud heritage.

But for others the Vulcan elicited a more positive emotional register: awe in those who had not previously encountered vehicles like this, pride in those who had. Like many military and transport artefacts, the Vulcan attracts dedicated enthusiast communities and hobbyists: the "Vulcan to the Sky" initiative seeks to restore XH558 with the hope of flying it. Fetishising also manifests on smaller scales: there are commemorative postcards, including one of XM597 taking off for Black Buck 6; XM597 is reimagined in its Black Buck mission on the cover of the Vulcan volume of the popular *Osprey Combat Aircraft* hobbyist series; and the Airfix model making company have recently re-issued a 1:72 scale buildable plastic model of XM607, also of Black Buck fame.[56] The Vulcan's complex Cold War meanings and memorialisation are also visualised and manifested in the ecology of ephemera.

And the associations of the Vulcan continue to surprise. On 17 August 2021, Raven Thompson and Ross Kenmuir held their wedding at the National Museum of Flight. Kenmuir serves in the Royal Navy, had visited East Fortune as a child, and had taken Thompson to the museum on an early date. She became as enamoured with aircraft as he was:

> Our favourite attraction has always been the Vulcan for many reasons, some of which is due to its amazing history (the aircraft at the museum especially) and how unique it is. One of the major features we both truly love is the harmonics from the intake causing the signature howl. This was not planned in the design however it quickly captured spectators' hearts. Unfortunately Raven never experienced seeing a Vulcan in flight but every time we visit XM597 it sets us both aback in wonder of how engineering at the time could

Figure 5.2 Raven Thompson and Ross Kenmuir declaring their wedding vows in 2021

> create such an amazing aircraft that should still be in the skies today. Its stature and presence demand passers-by to stop and marvel at this bomber like no other. … As the museum is such a special place to us and the Vulcan will forever hold a place in our hearts, we can think of nowhere we would love more than to get married underneath this beautiful piece of history.[57]

On that bright summer Tuesday, they made their vows underneath the nose of the Vulcan. Its howl silenced for nearly 40 years, what was once a Cold War technology – an instrument of death and an artefact of fear – was now an object of great affection and the backdrop for declarations of love.

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Part 2

Spaces, Places and Things

6 Cold War Through the Looking Glass

Espionage Objects, Authenticity and Multiperspectivity

Jim Gledhill

Introduction

Although typically anonymous and existentially denied by their respective states, spies have been immortalised in popular literature, cinema, television series and now increasingly in museums. A patriot doing his or her national duty or a traitor betraying their homeland for ideological or financial motives, the spy is ever-present in the narrative whilst never being wholly in focus. Eva Horn comments that intelligence gathering during the Cold War was a political act taking place within "a gray zone between preventing and preparing war."[1] The spy embodied this ambivalence in a nuclear armed balance of power when knowing what the enemy was thinking, as well as doing, was paramount in preserving military parity between the opposing sides. As with other facets of modern warfare, espionage is a controversial subject for museums because it can bring them problematically close to official secrecy and the moral morass of state-sanctioned violence. David Graeber and David Wengrow have argued that modern states combine sovereign power with administrative bureaucracy. After Max Weber, they reason that the modern state's control of violence and information – including official secrets – has made the secret agent its "mythic symbol."[2] Like military combatants, spies carry out acts of state with a legal basis, but official secrecy typically prevents public oversight and is politicised by wider awareness of democratically unaccountable behaviour. In the context of museums, visitors of one nationality may associate another country's espionage with violence and illegality, particularly in relation to the Cold War during which spies committed violent acts covertly when conventional attack was impossible. For museums, the crux in representing spies is thus to authenticate histories that form part of the mythological superstructure of the state itself.

Social practices and technologies are central to the art of maintaining secrecy.[3] Hence, physical objects, such as cameras and audio recording devices, and clandestine techniques associated with their use are fundamental to an authentic museum representation of espionage. Given the secret aura of these practices and the necessity of agents remaining anonymous unless "burned" (publicly exposed), objects with verifiable provenance are rare in museum collections. The absence of material culture connected to spying presents a challenge for museums wishing to tell the stories of individuals and their role in historic events. To obtain artefacts associated

with real-life spies, museums require either direct contact with the individual or their current/former agency. Given the professional and ethical obstacles to establishing such relationships, museums have tended to rely on generic objects or replicas to represent the spy's tradecraft. In contemporary European public museums, originals and reproductions are subject to strict classification with only the former usually on display.[4] Facsimiles may of course be used as surrogates where original materials are too fragile for prolonged exposure or the object is temporarily out on loan; the visitor nevertheless remains conscious of institutional possession and the cultural authority conferred by it. Museums may also make copies of objects in the form of scale models for the purposes of historical documentation alongside drawings and photographs as an extension of archaeological practice.[5] I argue that in opening an exhibitionary portal to the secret world of espionage, however, museums must observe Walter Benjamin's dictum of the "authority of the object": only originals can convince the visitor that what they are seeing is fact and not fiction.[6]

Below I will consider three case studies that are atypical because they feature material culture associated with burned spies and open secrets. The Allied Museum, the Stasi Museum and the German Spy Museum are located in Berlin, a city that has been the focus of voluminous scholarship on the subject of Cold War history and memory.[7] Museums have become central to the processes of remembrance and memorialisation in unified Germany, particularly around emotive forms of heritage, such as the Berlin Wall.[8] The German capital has also long been associated with espionage in fact and fiction.[9] Given the controversial nature of espionage, and the analogous politics of Germany's Cold War heritage after unification in 1990, the spy will be considered in this specific context. In recent decades, *Multiperspektivität* (multiperspectivity) has been influential on German museum practice when dealing with the mnemonic heritage of the Second World War and subsequent Cold War division.[10] A multiperspectival approach can create more balance in terms of representing divergent opinions or experiences, but it is not a generically applicable technique and its effectiveness depends on the exhibition's curator(s), subject and social context.[11] This is especially pertinent for German museums wherein exhibition narratives may link the subject to contemporary themes of justice and democratic rights.

This essay asks the basic question as to whether museums *can* exhibit an authentic material culture of espionage as they do with other functions of national security, such as the armed forces. It will furthermore examine if a multiperspectival approach to interpreting the heritage of Cold War espionage can be a valuable means of coming to terms with the legacy of conflict in a divided society. I conducted field visits to the museums discussed, semi-structured interviews with curators and undertook photographic documentation of sites and exhibits. My intention was to discover more about the provenance of objects and collecting methodologies, but also the significance of the sites within the political topography of Berlin. Both the architecture and location of museums are vital to our understanding of their epistemological approach.[12] The Allied Museum and the Stasi Museum are both contained within historic buildings, respectively in the former American and Soviet sectors of Berlin. Indeed, in the case of the latter, the building itself is the principal

object as the former nerve centre of East German intelligence. The location of the German Spy Museum, contrarily, is important for its historic immateriality as the space once known as the "death strip": the no-man's land that separated the two Germanies on the fault line of east–west tension until 1990. An object's authenticity will thus be considered from the standpoint of the museum exhibit, but also in relation to the topography of Berlin itself as a political landscape in which heritage takes the form of monumental structures and passing traces, preserved officially or by accident of history.

Archaeology of Secrets

The Allied Museum is housed in the former US Army Outpost cinema on Clayallee in Zehlendorf, which remains the American diplomatic quarter in Berlin today. The Museum was established between 1993 and 1996 as a federal project under the aegis of the German Historical Museum.[13] Dedicated to the history of the British, American and French presence in Berlin from 1945, the Museum's foundation collection was acquired with the assistance of the departing allied armed forces.[14] One of its most important objects, however, arrived later as an archaeological find unearthed from beneath Berlin's once contested territory. Amid the atomic tension of the 1950s, the American Central Intelligence Agency (CIA) and British Secret Intelligence Service (commonly known as MI6) hatched a plan codenamed "PBJointly" (also Operation Stopwatch/Gold) to tap Soviet military telephone lines between the Red Army's headquarters in Wünsdorf and Moscow. They agreed to build a tunnel from a new American radar station in the southern suburb of Rudow across the border into Altglienicke in the Soviet sector. US Army engineers began digging the approximately 450-metre tunnel in early 1955; the tap chamber at the terminus below Schönefelder Chaussee was constructed by the Royal Engineers. Unbeknownst to the western allies, their plan had already been betrayed to the Soviets by the MI6 mole George Blake in early 1954. To protect the identity of their double agent, the KGB decided not to expose the tunnel until April 1956. In 1997, a section of the tunnel was unearthed during roadworks in the former border area, and along with another section excavated in 2005, entered the Allied Museum's collection.[15] In 2012, the afterlife of the Berlin tunnel took another twist when the Allied Museum was informed by a member of the public that other pieces of the tunnel were buried in woodland at Pasewalk in Mecklenburg-Vorpommern. The Museum learnt of the disinterred fragments from retired National People's Army Pioneers who were tasked with breaking up the tunnel in 1956 for re-use in military manoeuvres around the German Democratic Republic (GDR).[16] These discarded remains were excavated and are now kept in storage on the former Tempelhof airport site where the Museum plans to relocate.

At present, the Museum's spy tunnel exhibit is housed in the Major Arthur D. Nicholson Jr Memorial Library adjacent to the main museum. In dealing with the subject of German defeat and the allied occupation of Berlin between 1945 and 1994, the Museum employs the technique of multiperspectivity. For example, at the start of the permanent exhibition, the conflicting attitudes of Berliners are projected

onto a blown-up photograph of a street scene from July 1945 as British tanks arrive in the bombed-out ruins. Perspectives are polarised between those who welcomed the allies as liberators and those still loyal to the Nazi regime who regarded occupation as defeat. Before the spy tunnel exhibit an interactive display allows the visitor to vote on whether they consider espionage during the Cold War to have been necessary to ensure "security" or a "risk" to the population. The spy tunnel is displayed as an archaeological find excavated and restored by the Museum, with its original ducts and cabling along with the track used to transport the excised earth in a cart (Figure 6.1). As well as the main object, other artefacts recovered from the

Figure 6.1 Section of the Berlin spy tunnel on display at the Allied Museum, Zehlendorf. Photograph by the author

tunnel section excavated in 2005 are displayed in a glass floor case. Through maps, the tunnel's geographical location and its transgression of the border are plotted to contextualise the key object. The tunnel's materiality is enhanced by a digital tour that allows the visitor to walk through it virtually. Its construction is illustrated through archival photographs declassified for the Museum by the CIA.[17] The tunnel's discovery, a propaganda exercise staged by the KGB, is explored through the international press coverage that followed the Soviets' official invitation to visit the site on the East German side. George Blake's career in espionage, from his recruitment by the KGB in North Korea to life in Moscow after his dramatic escape from Wormwood Scrubs prison in 1966, are explained through secondary sources in the absence of personal artefacts. The exhibit concludes with the rediscovery of the tunnel in 1997 and the historic meeting of former enemies, ex-CIA officer David Murphy and KGB officer Sergei Kondrashev, brought about by this unexpected turn of events.

Although the narrative of the spy tunnel focuses on the superpower standoff in 1956, there is an important German document on display. To accommodate international visitors and curious GDR citizens, the tunnel was dug out by border troops of the National People's Army. At the time, an East German photographer, Heinz Junge, was co-opted by the Ministry of State Security (Stasi) to record the tunnel's interior. A digital facsimile of the annotated photograph album represents the East German interest in the spy tunnel saga, which was ignored at the time for political expediency.[18] Visualising East German agency is significant for supplanting a binary perception of the incident in the superpower conflict. It demonstrates that the Warsaw Pact was not politically monolithic; nor did the Soviet Union consider the East German state an equal when it came to sharing intelligence.

The Berlin spy tunnel is a historic and authentic example of Cold War espionage material culture collected through battlefield archaeology. In this subterranean conflict zone, spies advanced into enemy territory where conventional land forces could not. As a story mirroring the world of fictional espionage, the exhibition narrative roots the drama in the archaeological facts underground. In doing so, the exhibit avoids sensationalising an episode that was an extraordinary outcome of both sides' insatiable thirst for intelligence at a time of rapidly evolving military strategies. Through physical and digital interpretation, the object is located spatially in the political topography of Cold War Berlin, situating the now excavated artefact in the once contested landscape surrounding the Museum. As contemporary archaeology, this is of paramount importance because it connects the now accessioned museum object to the extant material fabric of the Cold War in the city, such as the former US National Security Agency listening station at Teufelsberg and Stasi headquarters in Lichtenberg.[19]

Haus 1: The Thing Itself

In the beleaguered but gentrifying East Berlin district of Lichtenberg stands the monumental complex of the former Stasi headquarters. The buildings are of plain design

in the modernist style, their linear uniformity weathered by time and urban pollution. Finished in 1963, Haus 1 contained the offices of the Minister of State Security, Erich Mielke. After Mielke's downfall in 1989, the headquarters were occupied by protesters from the New Forum, an umbrella of East German opposition groups, on the night of 15 January 1990. In August that year, the GDR's final, freely elected *Volkskammer* (People's Chamber) passed a law granting every citizen access to their personal Stasi file and calling for all state employees to be screened for previous Stasi involvement. The central tenets of the law were incorporated into the unification treaty; in 1991 the Stasi Records Act was passed by the Bundestag. Joachim Gauck, a former East German dissident, was appointed by the German government as the first Federal Commissioner for the Stasi Archives. Problematically, Gauck's Commission did not reveal the nature of an individual's relationship with the Stasi, offering only a binary yes or no as to their involvement.[20] Moreover, in some cases Stasi officers may have exaggerated their networks for careerist motives or with malicious intent to discredit individuals, recording them as informants without their knowledge.[21] The Stasi Museum in Haus 1 was established by the activist group Anti-Stalinist Action after the upheavals of 1990.[22] Next door, Haus 7 accommodates the central Stasi Archives, part of a regional network under the auspices of the German Federal Archives. Blurring the lines between fact and fiction, both buildings feature prominently in the acclaimed 2006 film *Das Leben der Anderen* (The Lives of Others), the makers of which claimed was an authentic portrayal of the Stasi.[23]

The origins of the Stasi Museum and Archives mark them out as highly politicised bodies linking the right-wing of the East German protest movement in 1989–1990 and the state-sponsored heritage sector in the Federal Republic. Throughout the permanent exhibition, boundaries are disrupted between a professional museum displaying official archives and an activist endeavour promoting a private collection with a political agenda. Visitors enter the Museum via a grand red-marble foyer where they are greeted by statues of Karl Marx and the first chief of the Soviet Cheka, Felix Dzerzhinsky. At the foot of the tall staircase, a Stasi prisoner transport van is parked incongruously off to one side. The presence of the van, a historically external object, appears inauthentic in the overall presentation of the building as the thing itself – the primary artefact preserved *as found*.[24] The permanent exhibition begins with a darkened display featuring haunting backlit photographs of Stasi agents at large in the public realm. These include snapshots of spies shaping world historic events: Günther Guillaume whispering in Willy Brandt's ear in 1972 and the hitherto unidentified Markus Wolf burned whilst travelling incognito to Stockholm in 1978. Alongside infamous spies are the *inoffizielle Mitarbeiter* (unofficial collaborators), such as the East German musician Tatjana Besson playing with the punk band Die Firma (The Firm) in the Friedrichstadt-Palast.[25] The exhibition continues with a history of the Stasi from its foundation in 1950 as the "sword and shield" of the Socialist Unity Party. The narrative portrays German communism as a Soviet-implanted ideology and Erich Mielke's pivotal role from the early years of the GDR, prior to his becoming the Minister of State Security in 1957. Mielke's own cadre file card is displayed, detailing his long list of official commendations for faithful service to the state. In what is presented as the Stasi's

paranoid pursuit of enemies within and without, we glimpse through the endless trail of paper and photographs a society on a constant war footing. The technologies of a spy's tradecraft – covert cameras, telephone wiretapping equipment, bugs and surreptitiously copied door keys – objectify this perpetual state of paranoia, alongside matériel issued to the uniformed Felix Dzerzhinsky Guards Regiment, responsible for protecting the border, state buildings and events.

There is, however, no attempt to explain individual motives for joining the Stasi or its vast web of informers. Interviews with ex-Stasi officers have recorded idealistic convictions among the generation who experienced the horrors of National Socialism and were thereafter conditioned by their government to defend the young East German state from what they believed was an existential threat.[26] In the exhibition, officers are portrayed solely as marginal men bent on personal gain and social privilege. Many unofficial collaborators faced a complex ethical dilemma in a society where the Socialist Unity Party's rule was broadly, if not enthusiastically accepted.[27] Mary Fulbrook has coined the term "honeycomb state" to describe the widespread participation of ordinary citizens in the GDR's vertical power structures.[28] A significant portion of the Stasi's unofficial collaborators would fall into this category as unwilling or unwitting participants in the "honeycomb cells" of civil society. In the exhibit on unofficial collaborators, individuals are identified alongside their Stasi handlers, but with their faces partially obscured. Their collaboration is materialised through the Stasi's card index system and personnel files that logged informers' activities without any detailed background information.

The centrepiece of the Museum is the "Minister's Level" that previously served as the offices of Erich Mielke and his personal staff. Mielke's life history as the personification of political fanaticism and tyranny permeates the exhibition. The Stasi's general is omnipresent in his uniformed pomp, commanding the state's ideological shock troops. Visitors learn of his pre-war communist activism, but also about his love of football and the Stasi-sponsored club Berliner FC Dynamo. Mielke's voice echoes in audio recordings of speeches made to his acolytes behind closed doors. At no point, however, does the narrative penetrate the man's official persona to illuminate his true motivation as an activist who chose a closeted life obsessively collecting other people's secrets. The Museum claims that the rooms on this floor are preserved as they were left after Mielke's removal in 1989 when the building was sealed for official investigation by the GDR government. Inside certain rooms, reinforced metal cupboards are left open to reveal bare shelves and the antique paternoster lifts are suspended in mid-flight between floors. An archival photograph of one of the cupboards shows a red suitcase which is now on display in a glass case. When found in 1989, the suitcase contained potentially incriminating documents from the Nazi-era trial of Erich Honecker and his cell of the underground Young Communist League. Alongside the suitcase are pages from the Stasi's own internal evaluation of the case which concluded that Honecker's testimony had compromised one of his fellow defendants.

Mielke's personal pedantry and obsessive regulation of his work and domestic spaces have been documented by historians.[29] Office interiors, including that of Mielke's close confidant Hans Carlsohn, are preserved with onscreen digital displays

outlining individual career histories. Equipment, such as telephones, typewriters and safes, along with furniture, radios and televisions remain in situ, but no personal items identify the people who once worked in these spaces. There are no ash trays, coffee cups nor any evidence of normal office lives. In the kitchen where Mielke's meals were prepared, there is a facsimile of a card found in his secretary Ursula Drasdo's desk, detailing how Mielke ate his breakfast each day with a precise table layout. Before entering Mielke's vast office, visitors pass through Drasdo's own where the hotline connecting the Stasi headquarters to the sinews of state power is preserved in an atmosphere of drab bureaucracy. In Mielke's rectangular wood-panelled office, the bureaucratic scent is all pervasive, his desk replete with multiple telephones (Figure 6.2). There is a conspicuous shredding machine and another bare cupboard behind, its secret contents lost to history. An open cabinet reveals a radio and reel-to-reel tape recorder; vital devices for the spymaster-general at the summit of the state. Next door is Mielke's private study and bedroom for when he needed to stay overnight in Haus 1, away from his home in the exclusive party leadership compound at Wandlitz. An archival photograph, taken shortly after Mielke's departure in 1989, shows his meagre personal possessions, including an armchair which remains in a different position. A bucolic painting hangs on the wall and the bed and television have been left undisturbed, but the private life of the man is missing; perhaps appropriately the secret policeman has vanished, almost without trace. The "Minister's Level" is therefore an

Figure 6.2 Interior of Erich Mielke's former office in Haus 1. Photograph by the author

incomplete time capsule edited, and partially re-arranged, by unknown actors before its preservation. As such, its sparse surfaces and isolated objects speak only of bureaucracy in the absence of real human voices.

In contemporary German museum exhibitions, the Stasi frequently inhabits the dark corners of GDR history in a duotone of terror and kitsch.[30] Paul Betts has cautioned against adopting a "Stasicentric" view of everyday life in the GDR.[31] Similarly, Ina Merkel contends that the East German socialist experience cannot be explained purely with recourse to the binary of "conformity and resistance."[32] Retroactive persecution of former Stasi employees has stimulated *Ostalgie* among East Germans and a malingering discontent over criticism of GDR life from West Germans who never experienced it. In 2006, when a statute of limitations was applied to the screening of public employees for any Stasi involvement, polling of East Germans indicated 78.1% in favour of abandoning the practice entirely.[33] Many East Germans have come to view the state-led revanchism that followed unification as annexation and "victors' justice," particularly given the uneven development of the former socialist economy.[34] In these social conditions, the Stasi Museum can only be seen as a revanchist political institution in which the common experience of the GDR and its societal disintegration is framed as a binary narrative of socialist trauma and democratic *Träume*. The ambiguity of the Museum's status as an activist body established following the occupation in 1990, but with an official link to the Federal Archives, is highly problematic when dealing with the nationally contentious heritage of the Stasi. This is vividly apparent where unofficial collaborators are burned in the exhibition, alongside officers who made the conscious ethical choice to join the Stasi, without explanation of either's motives. Visitors hear no non-dissident East German voices except prominent political actors; in particular, there are no oral history recordings of ordinary ex-Stasi employees talking about their motives, experiences and retrospective feelings. Non-dissident East Germans – whether ideologically committed to the regime or not – are politically excluded from the narrative and thus the GDR's injustices and tragedies are neither humanised nor explained.

The Stasi Museum's activist genesis and the political reconfiguration of Haus 1 as public heritage therefore problematise its authenticity and official status as the federal repository for Stasi heritage. At present, many East Germans, and particularly the large Stasi diaspora, would be unlikely to contribute artefacts or memories to what they perceive as a politically biased organisation. Haus 1 is an authentic object and as a historic socialist era building represents a legitimate priority for official preservation. Nonetheless, when historic buildings are converted into museums their original contents become integral to their value as heritage. Haus 1's partisan interpretation detracts from its authenticity by casting doubt on the Museum's claim to have preserved its interior *as found*. My final case study offers an opportunity to appreciate the curatorial advantages of avoiding this kind of partisan approach.

Two-Way Mirror

In contrast to the Outpost Cinema and Haus 1, the building now containing the German Spy Museum did not exist in 1990 – in fact there was nothing there at all.

In a corner of the Leipziger Platz, the Museum's stylish luminous green façade can be seen amid the upmarket hotels, cafes and banks that have transformed the former "death strip" previously watched over by East German border troops. A narrow brick line marks out the former progress of the Berlin Wall and the contours of the liminal space that existed between two countries and systems. The Spy Museum was founded as a private venture in 2015 by the Berlin journalist Franz-Michael Günther. Upon entering, visitors are confronted by a bank of screens displaying the flickering apparitions of surveillance, including camera feeds from inside the Museum itself. The exhibition is accessed through air-lock doors and charts the history of espionage from the ancient world to the present day. The evolution of espionage during the world wars is considered at length, but unsurprisingly the bulk of the narrative is dedicated to the Cold War and its German dimension specifically.

Given its commercial imperative, the Museum is built around a flashy design concept and regular interactive elements, calculated to appeal to young audiences. The interactive features explain the practices and technologies of spying as well as providing opportunities for play, such as the Laser Maze game. Moving into the Cold War era, however, the exhibition adopts multiperspectivity at regular junctures as both historians and burned spies talk on camera as *Zeitzeugen* (time witnesses). Major figures in the history of Cold War espionage, such as Markus Wolf's successor at the Stasi's Main Intelligence Directorate Werner Großmann and ex-KGB agent Jack Barsky, recall their exploits and describe the clandestine internal workings of their agencies. The narrative is interspersed with ingenious gadgets alongside the more practical tools of tradecraft. Given its subject matter, the exhibition contains numerous facsimiles, including a sophisticated digital display around a replica of the umbrella allegedly used by a Bulgarian agent to assassinate dissident Georgi Markov on London's Waterloo Bridge in 1978. Here the copy compromises the Museum's cultural authority; the event itself is clouded by supposition and the absence of material evidence casts doubt on its veracity. Many original objects have no specific provenance nor association with individual spies in a reflection of the near total anonymity of the profession. Most of the Stasi-related artefacts are taken from the Museum's Vreisleben and Baum collections, which were purchased from two West German collectors unconnected with espionage. The Museum is also occasionally contacted by ex-Stasi employees offering objects for sale.[35]

The exhibition describes the indigenous development of intelligence agencies in the two new German states after 1949. In the exhibits, spies speak freely of their experiences, without the Museum applying any overt political bias in its narrative. Ex-Stasi officers can speak without fear of reprisal because they are burned, but also their state no longer exists to sanction them. In the case of Rainer Rupp, a former agent of the Main Intelligence Directorate, this vocality accompanies personal objects in a rare display of material culture connected to a key player in world historic espionage. Under the codename "Topaz," Rupp worked at NATO headquarters in Brussels, from whence he was able to pass highly valuable intelligence to the KGB when the world was on the brink of nuclear confrontation in the early 1980s. According to the exhibition, this human intelligence included documents which in 1983 convinced the KGB that NATO's Exercise Able Archer was not

a pre-emptive strike on the Soviet Union, thus averting all-out nuclear war. The exhibits include Rupp's NATO security pass, the Canon camera he used to copy documents and a Sony shortwave radio to which his handlers sent coded messages. Among Rupp's collection is the prized Scharnhorst Order awarded in his absence in 1988 and passed onto him by his handler after 1990.[36]

Although enjoying institutional relationships with the contemporary German intelligence services, the Museum adopts an even-handed approach in dealing with controversies arising from the Cold War.[37] In particular, the infamous Abwehr officer Reinhard Gehlen's wartime career on the Eastern Front, including his work with the SS, is connected to the CIA's post-war tutelage of his nascent West German foreign intelligence service.[38] Symmetrically to his East German counterpart Markus Wolf, Gehlen had a talent for remaining anonymous and no personal objects represent his life in the shadows. There are, however, several objects on loan from the Federal Intelligence Service (BND), retrospectively legitimising the heritage of its predecessor the Gehlen Organisation, codenamed "Zipper" by the CIA. For example, a vinyl record used by Gehlen's clandestine radio operators in the GDR to practice sending Morse code messages is disguised as an East German socialist youth anthem. Elsewhere, Gehlen's secret war is personalised through a more surprising loan from the BND – the 1956 pocket calendar of Heinz Felfe, a former SS officer recruited by Gehlen in 1951. Felfe was subsequently promoted to be head of Soviet counterintelligence but, disastrously for the BND, was exposed as a KGB double agent in 1961.[39]

The German Spy Museum's balanced approach to Cold War espionage history recognises the fundamental moral ambiguity in the practice of spying. In reality, the Museum expresses what the Federal Constitutional Court in Karlsruhe was forced to rule in the cases of Markus Wolf and Werner Großmann in 1995: East German spies could not face prosecution for simply doing what their West German counterparts had done as acts of state. In this respect, the Museum confronts the ethical contradictions of the early Federal Republic that are personified in Reinhard Gehlen's post-war career. Hence by permitting multiperspectivity on the Cold War, the Museum allows visitors to perceive German society through the looking glass. Engaging with former spies and recording their stories has furthermore facilitated rare access to material culture connected to world historic espionage. Hence where authentic objects of an individual spy's tradecraft are on display, the Museum's cultural authority is confirmed; where replicas stand in for originals, the line between fact and fiction is unclear.

Conclusion

Museums can exhibit an authentic material culture of spies as they do for other agents of national security but as with all professional museum practice, ethical boundaries, institutional relationships and cultural authority are vital to the process. In these German case studies, I have argued the museological imperatives of collecting and displaying objects associated with individual spies and employing narrative multiperspectivity to interpret the realities of Cold War espionage. In this context, however, the multiperspectival approach should be accompanied by

a grand narrative promoting democratic society as a precondition for confronting controversial and potentially divisive heritage. What constitutes democracy should also be open to debate in public museums and there are few more appropriate themes than espionage for doing so. In this sense, Germany's present situation is relevant to other countries where official secrecy continues to pose an ethical dilemma between protecting our liberty and national security.

In its Berlin spy tunnel exhibit, the Allied Museum displays an authentic object, collected as an archaeological find and contextualised physically and digitally within the city's political topography. That the unearthing of the tunnel's sub-merged remains brought retired American and Soviet spies together, suggests that this artefact has a latent multivocality as a transnational symbol of peace and rec-onciliation. Conversely, as an activist project the Stasi Museum has petrified the animosities of 1990, problematising its status as a federal heritage repository as well as Haus 1's authenticity as a historic building. Here partisan interpretation and the absence of multiperspectivity prevents an objective reappraisal of the GDR past that could allow those Germans who feel nostalgic for a moribund society to adopt new perspectives on a shared future. Without political bias, the German Spy Museum allows burned spies to speak freely of their experiences and in doing so, has gained access to rare espionage objects and the personal stories of spies who used them – something currently impossible at the Stasi Museum. As with all controversial heritage, acquiring and displaying espionage objects necessitates a degree of institutional risk-taking by museums. It requires museums to recognise the multivocality of objects associated with state-sanctioned violence – military or otherwise – but also their value as heritage connected to world historic events. The heritage of spies is socially valuable for the responsible dispelling of myths, but also for accepting the undeniable divergence of truths.

Acknowledgements

Notes

1 Eva Horn, *The Secret War* (Evanston, IL: Northwestern University Press, 2013), 230.
2 David Graeber and David Wengrow, *The Dawn of Everything* (London: Penguin, 2022), 366.
3 Katherine Verdery, *Secrets and Truths* (Budapest: Central European University Press, 2014), 81–82.
4 Gordon Fyfe, "Reproductions, Cultural Capital and Museums," *Museums and Society* 2, no. 1 (2004): 51.
5 See Olav Hamran, "Documentation, Representation, Restoration," in *Museums as Cultures of Copies*, eds. Brita Brenna, Hans Dam Christensen and Olav Harman (London: Routledge, 2019), 52–53.

6 Walter Benjamin, "The Work of Art in the Age of Mechanical Reproduction," in *Illuminations*, ed. Hannah Arendt, trans. Harry Zorn (London: The Bodley Head, 2015 [1955]), 215. See also Martin Hall, "The Reappearance of the Authentic," in *Museum Frictions*, eds. Ivan Karp, Tomas Ybarra-Frausto, Lynn Szwaja and Corinne A. Kratz (Durham, NC: Duke University Press, 2006), 70–101; Siân Jones, "Negotiating Authentic Objects and Authentic Selves," *Journal of Material Culture* 15, no. 2 (2010): 189.

7 See, for example, Brian Ladd, *The Ghosts of Berlin* (Chicago: University of Chicago Press, 1997); Karen E. Till, *The New Berlin* (Minneapolis: University of Minnesota Press, 2005); Janet Ward, *Post-Wall Berlin* (Basingstoke: Palgrave Macmillan, 2011).

8 Anna Saunders, "Remembering Cold War Division," *Journal of Contemporary European Studies* 17, no. 1, (2009): 9–19; Hanno Hochmuth, "Contested Legacies: Cold War Memory Sites in Berlin," in *The Cold War: Historiography, Memory, Representation*, eds. Konrad H. Jarausch, Christian F. Ostermann and Andreas Etges (Berlin and Boston: de Gruyter, 2017), 283–99; Hope M. Harrison, *After the Berlin Wall* (Cambridge: Cambridge University Press, 2019).

9 See Sven Felix Kellerhoff and Bernd von Kostka, *Capital of Spies: Intelligence Agencies in Berlin During the Cold War*, trans. Linden Lyons (Oxford: Casemate, 2021).

10 For the conceptual origin of multiperspectivity see Eileen Hooper-Greenhill, *Museums and the Interpretation of Visual Culture* (London: Routledge, 2000), 152. Concerning the heritage and memory of the Nazi era see, for example, Gavriel Rosenfeld, *Munich and Memory: Architecture, Monuments and the Legacy of the Third Reich* (Berkeley: University of California Press, 2000); Sharon Macdonald, *Difficult Heritage: Negotiating the Nazi Past in Nuremberg and Beyond* (London: Routledge, 2008).

11 Fiona Candlin, *Micromuseology: An Analysis of Small Independent Museums* (London: Bloomsbury, 2015), chap. 3.

12 Stephanie Moser, "The Devil Is in the Detail: Museum Displays and the Creation of Knowledge," *Museum Anthropology* 33, no. 1 (2010): 24.

13 Author's interview with Bernd von Kostka, 8 September 2022; Florian Weiss, 9 September 2022.

14 The Soviet story is told elsewhere in the Museum Berlin-Karlshorst. The Museum opened in 1967 in the building where the Wehrmacht high command signed the instrument of surrender on 8 May 1945.

15 On the history of the tunnel see David Stafford, *Spies Beneath Berlin* (London: John Murray, 2002); Kellerhoff and von Kostka, *Capital of Spies*, chap. 3. For first-hand accounts of the project by CIA and KGB officers involved, see David E. Murphy, Sergei A. Kondrashev and George Bailey, *Battleground Berlin: CIA vs. KGB in the Cold War* (New Haven, CT: Yale University Press, 1997), chap. 11. Although MI6 has never formally acknowledged the tunnel's existence, George Blake later described his role in the affair. See George Blake, *No Other Choice* (London: Jonathan Cape, 1990), 180–82.

16 Von Kostka, interview.

17 Von Kostka, interview.

18 Markus Wolf, chief of the East German foreign intelligence service, did not learn of the "technical marvel" beneath Altglienicke until late April 1956. See Markus Wolf, *Man Without a Face*, trans. Anne McElvoy (London: Jonathan Cape, 1997), 89–92. According to Sergei Kondrashev, the East Germans also believed the Soviet subterfuge that the tunnel was discovered accidentally after heavy rains. See David E. Murphy, Sergei A. Kondrashev and George Bailey, *Battleground Berlin: CIA vs. KGB in the Cold War* (New Haven, CT: Yale University Press, 1997), 232–33.

19 On the Teufelsberg station see Wayne D. Cocroft and John Schofield, *The Archaeology of the Teufelsberg* (London: Routledge, 2019).

20 Charles Maier, *Dissolution: The Crisis of Communism and the End of East Germany* (Princeton: Princeton University Press, 1997), 312.

21 Corey Ross, *The East German Dictatorship: Problems and Perspectives in the Interpretation of the GDR* (London: Arnold, 2002), 183–84.

22 The name is an ironic reference to *Antifaschistische Aktion*, a communist slogan from the Weimar Republic, later adopted by physical force anti-fascist groups in Germany and internationally.

23 See Thomas Lindenberger, "Stasiploitation—Why Not? The Scriptwriter's Historical Creativity in *The Lives of Others*," *German Studies Review* 31, no. 3 (2008): 558–59.

24 The headquarters complex was not used as a prison nor for interrogation. Elsewhere in Lichtenberg is the Stasi's notorious Hohenschönhausen prison. See Wayne D. Cocroft and John Schofield, "Hohenschönhausen," *Landscapes* 1 (2010): 67–83.

25 Besson continued her career as a professional musician in Germany after 1990. No evidence or details of her collaboration are given in the text.

26 Andreas Glaeser, *Political Epistemics: The Secret Police, the Opposition and the End of East German Socialism* (Chicago: University of Chicago Press, 2011), 262–63. See also Katja Hoyer, *Beyond the Wall: East Germany, 1949–1990* (London: Allen Lane, 2023), 147, 156–58.

27 Jens Gieseke, *The History of the Stasi: East Germany's Secret Police, 1945–1990*, trans. David Burnett (New York: Berghahn, 2014), 216.

28 Mary Fulbrook, *The People's State: East German Society from Hitler to Honecker* (New Haven, CT: Yale University Press, 2005), 247.

29 See Katja Hoyer, *Beyond the Wall: East Germany, 1949–1990* (London: Allen Lane, 2023), 222–23.

30 On the "museumification" of everyday life in the GDR see Daphne Berdahl, "(N)Ostalgie for the Present," *Ethnos* 64, no. 2 (1999), 201; Daphne Berdahl, "Re-presenting the Socialist Modern," in *Socialist Modern: East German Everyday Culture and Politics*, eds. Katherine Pence and Paul Betts (Ann Arbor: University of Michigan Press, 2008).

31 Paul Betts, *Within Walls: Private Life in the GDR* (Oxford: Oxford University Press, 2010), 23.

32 Ina Merkel, "The GDR – A Normal Country in the Centre of Europe," in *Power and Society in the GDR, 1961–1979: The Normalisation of Rule?* ed. Mary Fulbrook (New York: Berghahn Books, 2009), 195. On the inadequacy of binary readings of socialism see also Alexei Yurchak, *Everything Was Forever, Until It Was No More* (Princeton: Princeton University Press, 2005), 4–8.

33 Jens Gieseke, *The History of the Stasi: East Germany's Secret Police, 1945–1990*, trans. David Burnett (New York: Berghahn, 2014), 216–17.

34 Patrick Major, *Behind the Berlin Wall: East Germany and the Frontiers of Power* (Oxford: Oxford University Press, 2009), 259; see also Maier, *Dissolution*, 322. For a balanced view of the East German economy after 1990 see Rainer Land, "East Germany 1989–2010: A Fragmented Development," in *United Germany: Debating Processes and Prospects*, ed. Konrad H. Jarausch (New York: Berghahn, 2013), 104–18.

35 Author's interview with Florian Schimokowski, 6 September 2022.

36 Named after the Prussian general Gerhard von Scharnhorst (1755–1813), the medal was the highest military decoration awarded in the GDR. The original design for the medal is now on display at the Bundeswehr Military History Museum in Dresden.

37 In addition to lending objects for display, Germany's intelligence services have assisted the Museum in contemporary collecting. For example, the Bundeswehr's Military Counterintelligence Service donated a Volkswagen observation van in operational use until 2019 (Schimokowski, interview).

38 On Reinhard Gehlen's dubious career see Wolfgang Krieger, "German-American Intelligence Relations, 1945–1956," *Diplomacy and Statecraft* 22, no. 1 (2011): 28–43*;* Hugh Trevor-Roper, *The Secret World: Behind the Curtain of British Intelligence in World War II and the Cold War*, ed. Edward Harrison (London: I. B. Tauris, 2014), 199–204.

39 Christopher Andrew and Vasili Mitrokhin, *The Sword and the Shield* (New York: Basic Books, 1999), 438–39.

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7 Bunkers Revisited

Co-producing Memory, Meaning and Materiality in Danish Cold War Museums

Rosanna Farbøl

Introduction

In the medieval city centre of Aarhus, Denmark, just opposite the city's most fashionable coffee shop, is a small mound. In nice weather, the mound is crowded by people chatting, drinking coffee and enjoying life, blissfully ignorant that the mound – nicknamed *the hipster hill* – has a gloomy history. It is actually a public shelter constructed during the Korean War to protect locals in case the conflict sparked a third world war. The shelter is, on the one hand, a material manifestation of Cold War nuclear anxiety and, on the other hand, of the welfare state's attempts to protect the population against the ultimate threat. The Cold War is often characterised as an "imaginary war"; yet, it had very real and concrete effects on peoples, societies and the environment.[1] About 300 public shelters still dot the cityscape of Aarhus today. They are forgotten and unknown to most Aarhusians, even though many of them, like the hipster hill, are located in plain sight.

Cold War heritage as such is not neglected, however. In fact, the Cold War has officially been recognised as Danish national heritage, and the country demonstrates an impressive number of Cold War museums for such a small country: about a dozen Cold War facilities are open to the public as museums or on special occasions, and a large number of national and local museums include the Cold War as a part of their exhibitions. Most of the Danish Cold War museums are located in former bunkers and use the bunker as a starting point for telling the history of the Cold War and its impact on Denmark and the local area.[2] From this perspective, previous research has analysed how exhibitions and narratives are constructed, re-appropriated and presented at these museums,[3] but this chapter takes a different approach by seeking to explore how matter matters: what does it mean for Cold War museums and memory-making more broadly that the Danish Cold War museums are all *bunker* museums?

In answering this question, I draw inspiration from recent insights from the field of memory studies that seek to overcome the classic binary between memory and materiality.[4] Instead of seeing them as opposite (memory as fluid, variable and changing, and the material world as "consisting of an unchanging substance vulnerable only to perception") or the material as a mere repository or storage of memories, I focus on the intertwinement and entanglements of the mnemonic and

the material.[5] The bunker museum, I argue, is as much a product as a producer of memories, because materiality, memories and meaning-making are co-produced at these sites. I borrow the term co-production from Sheila Jasanoff's works. She defines co-production as "a way of seeing 'knowledge' [or in this case memories and meaning-making] and its material embodiments" as "at once products of social work and constitutive of forms of social work."[6] I am, further, interested in what Frieman, Nienass and Daniel call the "politics of the things of memory"[7] how the appropriation of objects by museums produce an understanding of historical events. Museums and heritage sites are powerful agents of cultural memory. When endorsed by museums and heritage institutions, historical interpretations are sanctioned by a site that signifies knowledge, authority and power, and this provides them with an aura of legitimacy and authenticity. As cultural studies scholar Katrina Schlunke reminds us in her essay on memory and materiality, "when something is re-presented something is (partially) lost."[8] It is critical to examine and question the histories presented at such sites as these institutions are potentially very influential in the processes of memory-making at a societal and personal level.

This chapter proceeds in five steps. First, I briefly introduce "the bunker" as materiality and myth. I do not pretend to exhaust the topic of bunkerology but merely highlight a few aspects that are relevant for a discussion of bunker museums. The second part offers a historicisation of the Cold War bunker from its origin as vital part of the total defence through obsolete and dormant object in the early post-Cold War period to a new afterlife as re-appropriated and cherished heritage relic. In the third and main part of this chapter, I present an analysis of contemporary Danish Cold War bunker museums. I am primarily interested in the bunker's materiality, though I also pay attention to issues of temporality and visuality. In the following section, I make three arguments: that musealisation and heritagisation has brought "the bunker" back into view; that the bunker form and materiality determines museum content; and that Cold War museums are preoccupied with a *war* narrative. Next, I discuss the implications of Cold War museums being *bunker* museums for memory, meaning-making and identification. The fifth and final section of this chapter explores future avenues for bunker musealisation and heritagisation. Here, I return to the shelter remains in the Danish cityscapes that were introduced in the beginning of this chapter, and I suggest that they can be seen as un-curated open-air museums with potential to expand the narratives promoted by the existing official Cold War heritage.

The Bunker: Materiality, Myth and Meaning

The bunker as spatial archetype and concrete object has long fascinated scholars.[9] It is (in)famous for its crude physical appearance as a brutal concrete structure as well as for its dark resonance in discourse and imagery.[10] It physically embodies fears of an anticipated future while also evoking notions of safety and shelter from the anticipated threat. The bunker has been studied by historians, geographers and architects as a three-dimensional object where geopolitics materialised. By making high politics concrete in local environments, it also contributed to a militarisation

of society.[11] Recent years has seen a growing academic interest from anthropologists and heritage scholars who study re-appropriations of bunkers, including artistic engagements, re-enactments or "bunker hunting."[12] Within heritage and memory studies, bunkers are often labelled "difficult" or "negative" heritage due to their grim symbolism or lack of appreciation by contemporary groups.[13] Yet, Danish Cold War bunkers do not fit easily in the category of "undesirable heritage" defined by Sharon Macdonald as a heritage the majority of the population would prefer not to have.[14] The bunker is at the same time scary but also strangely attractive. Indeed, the bunker embodies a fascinating duality in several ways: it is at the same time visible and invisible, embodies strength and weakness, nuclear anxiety and the hope of survival. The inherent ambiguity makes the bunker an interesting object of study for challenging key assumptions about memory and heritage, as for instance, laid out in the UNESCO categorisation of heritage: the bunkers are not "unique" but mass-produced; hardly "beautiful" or charming but brutal and functional; not "owned" or cherished by a "source community" but often unwanted.[15]

The *doyen* of bunker studies, the French architect and cultural theorist Paul Virilio, notes a paradox in his *Bunker Archaeology*: the bunker, a brute concrete structure "is able to go unnoticed in a natural environment."[16] The Cold War took this development to extremes: nuclear weapons and ballistic missiles necessitated the nuclear-proof super bunker to be deep underground or far inside mountains. If the bunker – more engineering than architecture – has an aesthetics, it is an "aesthetics of disappearance."[17] To Virilio, the bunker is a defensive structure whose *raison d'être* is protection against modern weaponry. In recent years, geographers Bradley Garett and Ian Klinke have made a powerful opposition to this and several other of Virilio's claims.[18] They argue than the bunker is as often a means of extinction as protection; a space from where to launch an attack. As architectural historian David Monteyne observed, even the strictly defensive version of the bunker, the shelter, has two sides: protection as well as coercion.[19] The bunker, and Cold War preparedness in general, contributed to social control through the promise of protection, it militarised social space and disciplined people emotionally and attuned them to live with the threat of war.[20] My point here is that the bunker is not a one-dimensional object, neither in itself or as a vector of memories, but a complex thing that allows multifaceted and multidirectional narratives to be told of war and peace, aggression and defence, preparedness and anxiety, disaster and survival, defeat and control, community and state-citizens relations. Whether this multivalent potential is exploited is a different matter, as this chapter will demonstrate.

Cold War Bunkers in the Past

During the Cold War, Denmark was a frontline state controlling access to the Baltic Sea, and hence a potential battlefield in almost any thinkable scenario of a war in Europe. Joining NATO in 1949 led to a significant military build-up, including numerous bunkers.[21] Bunker building took, in general, two forms: military and civilian bunkers. The first category includes two large coastal fortifications built in the early 1950s on the island of Langeland and on Stevns to control and

potentially block the Danish Straits with mines to prevent the passage of Warsaw Pact vessels. They were also a signal to NATO and the Danish public that, unlike in 1940, Denmark would not surrender if attacked. In addition to coastal fortifications, the Cold War shaped the Danish countryside with numerous other military bunkers: NATO built a regional headquarter in Northern Jutland, and there were multiple depots for ammunition and vehicles all over the country in addition to radar stations and bunkered HQs for the Navy, the Army and the Airforce. This type of bunker, the military bunker, had an aggressive purpose: to attack, destroy and kill enemy forces, in addition to their defensive function: protection of those inside. The military bunkers were all secret, and in line with the bunker's classical "aesthetic of disappearance," they were hidden in the landscape.

The same invisibility characterised two types of civilian bunkers: the control centre and the government emergency bunker. Every town with more than 10,000 inhabitants had a control centre, where the mayor, the police chief constable, civil defence officers and the directors of the energy and water distribution networks would attempt to keep society functioning as routinely as possible during war.[22] In case the government had to flee the capital, two secret emergency government bunkers were prepared, one in the eastern part of Denmark and one in the western part. As "the last bastion of democracy"[23] these bunkers could house the monarch, ministers and civil servants. This would ensure there was a legitimate government to claim sovereignty over the country. The population was supposed to wait out the attack in shelters. Shelters were constructed in urban areas and integrated into the ordinary cityscape.[24] The official goal was to have shelters for 125%–200% of the population. This ambitious goal was not met, but by the end of the Cold War, there were shelters for approximately 4 million people in a population of around 5 million.[25] The shelter programme can be seen as an extensive (and expensive) attempt to ensure the welfare of (and control over) citizens and a functioning social contract between state and citizens even in the most extreme situation imaginable.[26] An effort that arguably contributed to blurring the boundaries between everyday life in peace and the extraordinary threat of nuclear war in an age where war went from event to underlying condition.[27]

Cold War Bunkers in the Present

After the Cold War ended, Danish bunkers seemed to lose their purpose and function. Without a territorial threat, war became something "we," the triumphalist West, conducted when "we" chose to, far away in the former Yugoslavia, or even further away in Afghanistan and Iraq. The Danish military was gradually changed from territorial defence to expeditionary forces, and civil defence (rebranded as emergency management) focused on natural disasters, fires, chemical leaks, transportation accidents and, later, terrorist attacks. The bunkers' temporality appeared tied to twentieth-century warfare, and they became redundant. Nevertheless, as they were built to endure or outlast direct attack they were made of reinforced concrete and steel; hence they were not easily (or cheaply) removed. Instead, they were locked off, left to decay and receded into the past.

There were, however, people working actively to reinvigorate some of the Danish bunkers and bring them into public view. At Langeland, then then mayor, Knud Gether, sought to transform the decommissioned fortification into a museum already in the mid-1990s. He had a personal history at the place, having served there himself, but he also recognised the economic value of a tourist attraction in a peripheral region.[28] There was no inventory left in the fortification, and a tiresome job of retrieving original or similar objects began. In contrast, Stevnsfort was left intact and opened as a museum in 2008, largely thanks to an interest group in the local area and their skilful playing of political interests in promoting Cold War history.[29]

As historic sites, the two military bunkers symbolise the geostrategic position of Denmark as a NATO member and frontline state and, as *lieux de mémoire* and museums, this is also the history they promote. Early exhibitions mainly revolved around the military and foreign policy history of Denmark during the Cold War often along Orthodox lines. They centred on threat scenarios and plans, the forts' role in the overall defence of Denmark and NATO, exercises and everyday life of the marines who worked and lived at the forts. The objects materialising these narratives were bunkers, cannons, missiles, jet fighters, radars, uniforms etc. Like many international bunkers and Cold War museums of the 1990s and 2000s, they were "destinations where middle-aged male military enthusiasts took their sons and their political conservatism for a day out."[30] In the 2010s, this began to change. The cultural and social history of the Cold War found its way into museum exhibitions, echoing a cultural turn in Cold War studies, where a new generation of scholars demonstrated how the conflict crept into all spheres of everyday life, such as gender roles, religion and popular culture.[31] The Cold War museums at Stevnsfort and Langelandsfort began to develop their exhibitions to include diverging narratives of the Cold War, to include the history of the marines' families and the local environment and to highlight political conflicts of the past, for instance the contestation of deterrence and nuclear weapons policies.[32]

Around the same time, the Danish Heritage Agency (henceforth DHA) embarked on a major project of preservation and dissemination of Danish Cold War heritage, inspired by similar projects in the United Kingdom and the Netherlands. The project's aim was to map all Danish Cold War installations and areas and identify 33 of "national significance" in Denmark, Greenland and the Faroe Islands. The motivation behind the project was, on the one hand, a concern that these sites would disappear if not managed and, on the other hand, a normative understanding of the Cold War as important for contemporary identity construction and meaning-making as "one of the grand narratives about the emergence of the Denmark we know today."[33] The Cold War is, in a sense, difficult to frame because of its long duration, unclear beginnings and endings and its character as imaginary war. Physical sites offered a way to anchor this history materially and spatially.

Except one of the sites listed by the DHA, they were all related to the so-called total defence (the military and civil defence), and the vast majority of the sites belonged to the military. The official Cold War heritage is, therefore, a war-centred and largely a military heritage. With a few exceptions most of the sites chosen as heritage were

(or contained) bunkers, for instance the previously mentioned NATO HQ, military HQs, civil defence control centres in Copenhagen, Odense, Skanderborg and Hadsund, one emergency government headquarter and Copenhagen's air defence from the Ejbybunker.[34] Hence it seems safe to conclude that even though the bunker defies the previously mentioned UNESCO criteria for heritage such as beauty and uniqueness, the Cold War version has, indeed, become cultural heritage.

Some of the sites on the DHA's Cold War heritage list opened their doors to the public in the following years. An example is the former Odense control centre. In 2012, a group of volunteers acquired the bunker in a dismal condition but almost intact, and after careful restoration, they were able to open it as Odense Bunker Museum in 2013. In the following years, several other control centres have allowed visitors, either on special occasions or they have been turned into museums, often run by passionate locals and people who used to work there. These museums focus on civil defence and civil emergency planning; how the authorities, from the safety of being underground and protected by armed concrete, would attempt to minimise the impact of war on civilians. Unlike Stevnsfort and Langelandsfort, then, the former civil defence facilities emphasise the bunker's protective function. The museum boom reached its pinnacle – at least for now – in 2023 when the former government emergency headquarters in Northern Jutland, the so-called REGAN Vest facility, opened as a museum.

The Cold War Bunker Museum – or Why Matter Matters

Like their international counterparts, Danish bunker museums treat the bunker as a valuable relic of the Cold War. Cherished, but also, as Garett and Klinke note, as an outmoded testimony to a different time: "a contradistinctive connection to a past that has forever disappeared into the dark fold of the 20th century."[35] It is re-appropriated as museum exactly because it is seen as a relic, valuable as heritage but redundant as security measure, since the war that it symbolises belongs to a different time with different threats. All but one of the Danish Cold War museums are located in former bunkers, which is not a coincidence. There are, I contend, several factors that make the bunker an obvious site for a Cold War museum: First, Denmark lacks a Berlin Wall, a Fulda Gap or a Nevada Test site, however, the bunkers constitute a tangible, concrete link to the Cold War. The bunkers are the key sites where the imaginary Cold War materialised in Denmark, and many places elsewhere, and hence give a solid presence and basis for the Cold War narratives. Second, they were available (and unwanted by their owners) after the end of the Cold War. Third, for national and international tourists alike, the bunker is instantly recognisable through the "globalised repetition of its physical characteristics and form."[36] Last but not least, we must look to the bunker characteristics I traced at the first section of this essay: the duality of repulsion and attraction, fear and fascination, visibility and invisibility.

A museum needs to be visible and accessible – in stark contrast to a bunker, whose function calls for the aesthetics of disappearance. Moreover, as the historical

overview above has demonstrated the bunkers and their location were often secret. As museums, however, the Cold War bunkers have become public property. In fact, we have witnessed a reversal of Virilio's "disappearance": musealisation and heritagisation has brought the bunker back into view, most iconically in Denmark with the opening of the REGAN Vest facility and museum.[37] This facility had been top secret as part of Danish emergency preparedness planning until decommissioned in 2012. It was listed as protected national monument two years later, but it took almost a decade before it opened as a museum. Access to top secret sites may explain part of the visitor's attraction. The bunker was a part of and hidden in the landscape, but upon entering the bunker (museum), the visitors come to share the secret they were previously excluded from.

As Per Strömberg has noted, the spatial context is critical for the credibility of content.[38] Going on a tour of Stevnsfort museum, visitors descend down a seemingly endless flight of stairs, till they reach the underground fort 18 metres below ground. The atmosphere is tense, the walls are an eerie shade of green, and a constant temperature of 10 degrees Celsius means it is cold and damp. The experience creeps under your skin. The spatial setting gives atmosphere and authenticity, but, moreover, in contrast to, for instance, abandoned bunkers that are locked off and emptied of inventory, the bunker museums are accessible and filled with the objects that used to belong there, either at that particular place or similar structures.[39] Consequently context and objects, materiality and meaning interact. Objects are displayed and seen *in place*. When visitors submerge into, for instance, the Stevnsfort or REGAN Vest, the control centre in Odense or other bunker museums, they enter a time capsule of forgotten fears and hopes. The "mnemonic resonances and tactile qualities" of the place is part and parcel of the experience and this cannot be recreated or imitated in a newly built museum or by 3D photogrammetry or Virtual Reality.[40] Going below ground in the bunker, the visitor becomes enrolled in an embodied experience of the crammed conditions and the distinct damp smells. While recognising of course that there are limits to the access provided to the past, the officers are dummies, the sounds are recorded and there's no cigarette smoke, the bunker still allows the visitor to feel the heritage and the past through sensory and aesthetic experiences of materiality and authenticity.[41]

Materiality and memories of the past are co-produced, and the place, the particular bunker, shapes the content of the museum. Stevnsfort and Langelandsfort focus on the military threat to Denmark, the national defence and the forts' role in this and everyday life at the forts. Even though they promote a nuanced and different perspective of the Cold War as everybody's war, this dissemination point has difficulties escaping the strong military-material setting and framing of the forts.[42] REGAN Vest and the civil defence museums focus on civil defence and emergency preparedness in general (aims and practices), the local civil defence and the particular control centre. With a creative rewriting of the architectural dictum, we can say that (museum) function follows (bunker) form.

Whether the focus is on the military or civil defence, war remains the raison *d'etre* of the bunker and hence of the museum. Consequently, the bunker form

and the warfare narrative are hard to separate, and the Danish Cold War museum experience is, therefore, largely one of bunkered warfare. It is also, to a certain extent, the history of particular groups engaged in the total defence (politicians, military personnel, civil defenders), but less so the ordinary Dane. The "top down" war narrative comes at the expense of other ways of remembering and telling Cold War history.

The larger contexts that the Danish Cold War museums select for their exhibitions is focused on the superpowers and Europe, and only rarely or cursory touch upon global perspectives of the Cold War. The Global South – where the actual hot wars took place – are mostly totally absent. The main focus at all museums is the local and to some extent national story of a war that was about to happen and the preparations made. It is a perspective that at the same time prioritises the extraordinary and dramatic – the war – but that is never really dangerous or deadly. Particularly if we compare with other war museums, such as museums about the Second World War in Denmark and abroad, it appears as a rather harmless war story. Though military bunkers like Stevnsfort and Langelandsfort had an aggressive purpose, there is very little about death and destruction there. Of course, the massive fire power of cannons or the yield of missiles are proudly noted, but this information is detached from the damage the weapons might have done. Indeed, the museums lack a key characteristic of ordinary war commemoration of hot wars: victims, loss and sacrifice. We might say that the Danish museums manage to celebrate a war memory without having to deal with the unpleasant sides of warfare such as casualties and trauma.

At some of the smaller museums in particular, the guides' narratives and the souvenir shops betray a hint of nostalgia. Nostalgia is connected to a sense, however right or wrong this perception might be, that the past was a better and simpler time.[43] In its Cold War version, it feeds on "the myth of Cold War stability," a myth that the entire period was straightforward and simple: there were good guys and bad guys, and nuclear balance and deterrence made the international system stable and predictable.[44] Whereas the larger museums, REGAN Vest, Langelandsfort and Stevnsfort attempt an open, complex and self-reflexive war narrative with multiple actors and themes, the smaller bunker museums such as the ones in Kerteminde and Silkeborg are prone to present the Cold War as a mythic, simple, linear black-and-white tale.

The temporality of the bunker museum is ambiguous. The borders between history and imagined future, between that which actually happened and that which *could* have happened are often dissolved.[45] In their analysis of Swedish Cold War heritage, Frihammer et al. coined the term *phantasm time* to describe this phenomenon where something seems real and consequently has real repercussions though it is, in reality, a fantasy.[46] The story becomes told as if the Cold War was a hot war like the Second World War. Even more than that, a highly dramatic, even apocalyptic, but counterfactual, nuclear world war is staged. At Langelandsfort, for instance, it is possible to launch a counterfactual nuclear attack on the island, and at a number of the smaller museums, including Odense and Silkeborg, the narratives of the guides present plans and fictious events as if they had happened. This might seem to contradict the claim

made above of the victimless war, however even when unleashing a nuclear attack, there are no people, no victims to take into consideration. This phantasm time is, of course, only possible exactly because the Cold War was not a hot war in Denmark and Sweden. This leaves ample room for counterfactual engagement with the what if-scenario that can be played out from the comfortable position of the present knowledge that it did not happen, which is distinct from but at the same time colonises the very real past nuclear fears that it could happen.

The phantasm prioritises the dramatic and extraordinary at the cost of mundane experiences that were the everyday reality for people at the fort and control centres. Furthermore, the phantasms tend to be presented not as one of many possibilities but the one that would have happened. It is rarely complex, open ended or critical. At the guided tours that this author and her students received at Silkeborg and Odense bunker museums, for instance, there was little critical engagement with or questioning of for instance Cold War bipolarity, nuclear deterrence, the policies and strategies of Danish authorities, or whether civil defence could have worked. Frihammer et al. remark that the phantasm has a political function because it fills the gap between our desires and needs, the desire for a certain reality and the actual world. The encouragement of visitors to pretend that the nuclear World War Three was real, has a political potential to in raising important societal questions of crises, preparedness, military spending and enemy stereotypes, however every time this author has visited these museums, the phantasm drama blocked critical engagement with these topics. At the time of writing, in 2023, the webpage of Silkeborg Bunkermuseum argues that "the bunker reminds us of the necessity of preparedness planning and collaboration in a time characterised by uncertainty and fear."[47] It is left open whether this refers to the past or the present.

Danish Cold War heritage as promoted by DHA and the museums is largely set in concrete and steel, offering a tale of nuclear anxiety, geopolitical coordinates of bipolar enmity, existential threats and hopes of survival. This is not to say that the bunker per se necessarily and always will trap any later engagements with it in war-related meanings; the path dependency is not, of course, teleological. As argued in the beginning of this chapter, the bunker is a multivalent and multifaceted structure, and many narratives are, in theory possibly, at a bunker museum. Moreover, as Luke Bennett has demonstrated, over time using the bunker as setting for cultural productions such as art installations or concert venues, can enable a loosening of the bunker's war-related meanings, "a subtle, slow-burn form of cultural demilitarization."[48] However, that is not the case, yet, in Denmark, where bunkers are mainly turned into war museums.

The reappropriation of Cold War *bunkers* into Cold War *museums* that prioritise the war narrative means that memories, identities and meaning-making constructed at these sites become inextricably linked to war (in its cost free version) pushing aside other, equally legitimate memories of the Cold War, for instance of the Cold War as more than a military conflict, as an ideological contest between different ways of life and different paths to modernity. And who are included in and excluded by these memories? Denmark witnessed a heated political and public debate about the Cold War for decades after it ended. Allegations of ideological blindness, moral

treachery and gambling with national and global security have been abundant as right-wing and left-wing politicians have fought over who were right or wrong in the past. These debates were not merely mudslinging but had direct political consequences. For one thing, the Danish Parliament has seen fit to commission "the historical truth" about contentious Cold War issues, spending more than DKK100 million. Likewise, the former right-wing government led by Anders Fogh Rasmussen, later Secretary General of NATO, used references to the Cold War as legitimation for Denmark's participation in the War on Terror in the 2000s.[49] When history is contested and politicised like this, it is vital that museums and heritage sites as trusted, authoritative institutions of collective memory qualify and nuance a debate that tend to be reduced to mythical simplicity. This mission is no less important in the current context where the war in Ukraine that began in 2022 has sparked debates about the possibility that the Cold War has re-emerged or, even, that a hot war, possibly a nuclear confrontation, might happen. The connection between contemporary security policy concerns and the Cold War was highlighted in the speech held by a well-known Danish author Leif Davidsen when REGAN Vest opened as a museum.[50] It is also considered the main reason tickets to the museum were all but sold out before it even opened and six months into the future.[51]

The bunkers have the potential to shape our Cold War memories and experiences of the past as well as our perceptions of ourselves and "the other" in the present. Moreover, they can impact the lessons we draw to guide us through contemporary and future geopolitical challenges. As we face different ideological or geopolitical trials, the bunker museums play a vital role in the construction of memories and communities and in decision-making.

Conclusions

Along with the mushroom cloud, the bunker is today a potent symbol of the Cold War. Unlike the mushroom cloud, however, the bunker is an object we can encounter, explore and experience, which goes some way to explain why these sites have become favourite locations of Cold War museums. The bunker invites us to feel the presence of the conflict and to remember and commemorate the immense power of modern warfare on people, societies and nature.[52] Inspired by bunkerology, this chapter has highlighted the duality of the bunker as aggressor and defender and as the incarnation of nuclear fear as well as of attempts to provide security, protection and defence. This chapter has also briefly traced its history from vital part of the total defence of the past to its present as national, cultural heritage. During the Cold War, the bunker "disappeared" from view as a concrete materiality but remained present in image and discourse. The immediate post-Cold War-decade saw the bunker forgotten as well as invisible, but urban exploration, tourism and political attention have brought it back into view. Denmark has witnessed an impressive wave of Cold War bunker musealisation and heritagisation in the last decade. Here, materiality, memories and meaning are co-produced resulting in a war-obsessed, often phantasmic, victimless and elite-focused Cold War story with potential to act as compass for the future.

The notable exception to this heritagisation process is the civil defence shelter that has not, yet, become officially recognised as heritage. They might be too small or too mundane as they are everywhere. Indeed, a stroll through a Danish city is, I contend, an unguided tour of an un-curated (and free) open-air museum. Of course, a stroll in itself triggers little reflection or commemoration; some form of pro-active facilitation is necessary to get the attention of the latte-drinkers on the hipster hill. "To turn something into heritage is an active choice" Gilly Carr writes in her study of bunkers in the Channel Islands.[53] A choice that requires intervention. Instead, most shelters were locked off, a few rented out as storage or studios for music bands. Covered in grass or shrubs, passers-by barely notice the shelters or pause to consider them; they have become part of the landscape and the everyday environment. Yet, as a tangible result of the way the Cold War impacted on everyday urban life, the shelters are able to tell an important story, a story at least as important as the ones told at Stevnsfort, Langelandsfort and REGAN Vest. They are a key part of the history of how societies prepared for World War Three and how that nuclear anxiety transformed everyday lives and cityscapes.

What heritagisation of public shelters can offer the commemorative processes and meaning-making is the chance to supplement the focus on military and civilian authorities promoted by the Danish Heritage Agency's Cold War heritage list with attention to the plans and preparations for ordinary people. Shelters could facilitate the telling of multifaceted narratives of protection and coercion, preparedness and anxiety, disaster and survival, community and state-citizens relations. As much as other Cold War bunkers, it can invite us to remember the horrors of modern war, but instead of prioritising the dramatic phantasm, it might provoke reflection on how state-led preparedness planning might militarise social space, discipline citizens and blur boundaries between war and peace. In essence, the bunker reminds us about what it means for societies and people to live with nuclear anxiety as an everyday, banal but existential reality. And that matters because even though the Cold War is over, we still live in the nuclear age.

Notes

1 Margot Henriksen, *Dr. Strangelove's America: Society and Culture in the Atomic Age* (Berkeley: University of California Press, 1997); Jennifer S. Light, *From Warfare to Welfare: Defense intellectuals and Urban Problems in Cold War America* (Baltimore: John Hopkins University Press, 2005); Matthew Grant and Benjamin Ziemann, eds, *Understanding the Imaginary War: Culture, Thought and Nuclear Conflict 1945–90* (Manchester: Manchester University Press, 2016); Guy Oakes, *The Imaginary War* (Oxford: Oxford University Press 1994); Marie Cronqvist, "Evacuation as Welfare Ritual: Cold War Media and the Swedish Culture of Civil Defense," in *Nordic Cold War Cultures: Ideological Promotion, Public Reception, and East-West Interactions*, eds. Valur Ingimundarson and Rosa Magnusdottir (Helsinki: Aleksanteri Cold War Series 2015), 75–95.
2 There are four (partly) exceptions to this rule: Panzer Museum East, Beredskabsstyrelsens museums depot (housed in a civil defence depot), Beredskabsforbundets museum (in the former world war II camp Frøslev) and Museums skibene which is a floating Cold War museum "housed" in various marine vessels.

3 Rosanna Farbøl, "Commemoration of a *Cold* War: The Politics of History and Heritage at Cold War Memory Sites in Denmark," *Cold War History* 15, no. 4 (2015): 471–90; Rosanna Farbøl, "Commemorating a War That Never Came: The Cold War as Counter-Factual War Memory," in *The Twentieth Century in European Memory: Transcultural Mediation and Reception*, eds. Barbara Törnquist-Plewa and Tea Sindbæk Andersen (Leiden and Boston: Brill, 2017), 149–69; Peer Henrik Hansen and Martin Jespersen, "Den kolde krig på museum," in *Kold Krig på museum*, eds. Peer Henrik Hansen and Martin Jespersen (Rudkøbing: Langelands Museum, 2019), 4–10.

4 See Lindsey A. Freeman, Benjamin Nienass and Rachel Daniell, "Memory | Materiality | Sensuality," *Memory Studies* 9, no. 1 (2016): 3–12; Katrina Schlunke, "Memory and Materiality," *Memory Studies* 6, no. 3 (2013): 253–61; Emanuele Prezioso and Nicolás Alessandroni, "Enacting Memories Through and with Things: Remembering as Material Engagement," *Memory Studies* 16, no. 4 (2023): 962–83; Sarah De Nardi, "The Materiality of Conflict Memory: Reflections from Contemporary Italy," *Journal of Material Culture* 25, no. 4 (2020): 447–61; Christopher Morton, "Remembering the House: Memory and Materiality in Northern Botswana," *Journal of Material Culture* 12, no. 2 (2007): 157–79.

5 Katrina Schlunke, "Memory and Materiality," *Memory Studies* 6, no. 3 (2013): 253.

6 Sheila Jasanoff, "The Idiom of Co-production", in *States of Knowledge: The Co-production of Science and Social Order*, ed. Sheila Jasanoff (London: Routledge, 2004), 1–13.

7 Lindsey A. Freeman, Benjamin Nienass and Rachel Daniell, "Memory | Materiality | Sensuality," *Memory Studies* 9, no. 1 (2016): 8.

8 Katrina Schlunke, "Memory and Materiality," *Memory Studies* 6, no. 3 (2013): 255.

9 See for instance Paul Virilio, *Bunker Archeology* (Princeton: Princeton Architectural Press, 1994); John Beck, "Concrete Ambivalence: Inside the Bunker Complex," *Cultural Politics* 7, no. 1 (2011): 79–102; Per Strömberg, "Funky Bunkers: The Post-Military Landscape as a Readymade Space and a Cultural Playground," in *Ordnance: War + Architecture & Space*, eds. Gary A. Boyd and Denis Linehan (London: Routledge, 2013), 67–81; Luke Bennett, ed., *In the Ruins of the Cold War Bunker: Affect, Materiality and Meaning Making* (London: Rowman & Littlefield International, 2017); Ian Klinke, *Cryptic Concrete: A Subterranean Journey into Cold War Germany* (Oxford: Wiley Blackwell, 2018); Tom Vanderbilt, *Survival City: Adventures Among the Ruins of Atomic America* (New York: Princeton Architectural Press, 2002); Bradley Garett and Ian Klinke, "Opening the Bunker: Function, Materiality, Temporality," *Environment and Planning C: Politics and Space* 37, no. 6 (2019): 1063–81; Mark Duffield, "Total War as Environmental Terror: Linking Liberalism, Resilience and the Bunker," *South Atlantic Quarterly* 110 (2011): 757–69.

10 Luke Bennett, "Approaching the Bunker: Exploring the Cold War through Its Ruins," in *In the Ruins of the Cold War Bunker: Affect, Materiality and Meaning Making*, ed. Luke Bennett (London: Rowman & Littlefield, 2017), 7.

11 Bradley Garett and Ian Klinke, "Opening the Bunker: Function, Materiality, Temporality," *Environment and Planning C: Politics and Space* 37, no. 6 (2019): 1064–65; David Monteyne, *Fallout Shelter: Designing for Civil Defence in the Cold War* (Minneapolis: University of Minnesota Press, 2011); Joe Deville, Michael Guggenheim and Zuzana Hrdličková, "Concrete Governmentality: Shelters and the Transformations of Preparedness," *The Sociological Review* 62, no. S1 (2014): 183–210; Silvia Berger Ziauddin, "(De)territorializing the Home: The Nuclear Bomb Shelter as a Malleable Site of Passage," *Environment and Planning D: Society and Space* 35, no. 4 (2017): 674–93; Joseph Masco, "Life Underground. Building the Bunker Society," *Anthropology Now* 1 (2009): 13–29.

12 Mads Daugbjerg, "Vold og Volde i et stormfuldt landskab: Om krigens spor af beton langs den jyske vestkyst," *Kulturstudier* 13, no. 1 (2022): 35–61; Louise K. Wilson,

"Processual Engagements: Sebaldian Pilgrimages to Orford Ness," in *In the Ruins of the Cold War Bunker: Affect, Materiality and Meaning Making*, ed. Luke Bennett (London: Rowman & Littlefield, 2017), 75–93; J. J. Zhang, "Recuperative Materialities: The Kinmen Tunnel Music Festival," in *In the Ruins of the Cold War Bunker: Affect, Materiality and Meaning Making*, ed. Luke Bennett (London: Rowman & Littlefield International, 2017), 113–30; Gunnar Maus, "Popular Historical Geographies of the Cold War: Hunting, Recording and Playing with Small Munitions Bunkers in Germany," in *In the Ruins of the Cold War Bunker: Affect, Materiality and Meaning Making*, ed. Luke Bennett (London: Rowman & Littlefield International, 2017), 167–84.

13 Mads Daugbjerg, "Vold og Volde i et stormfuldt landskab: Om krigens spor af beton langs den jyske vestkyst," *Kulturstudier* 13, no. 1 (2022): 38; Sharon Macdonald, *Difficult Heritage: Negotiating the Nazi Past in Nuremberg and Beyond* (London: Routledge, 2009); William Logan and Keir Reeves, eds, *Places of Pain and Shame: Dealing with 'Difficult Heritage'* (London: Routledge, 2009); Lynn Meskell, "Negative Heritage and Past Mastering in Archaeology," *Anthropological Quarterly* 75, no. 3 (2002): 557–74.

14 Sharon MacDonald, "Undesirable Heritage: Fascist Material Culture and Historical Consciousness in Nuremberg," *International Journal of Heritage Studies* 12, no. 1 (2006): 9–27.

15 I thank Mads Daugbjerg for this observation.

16 Paul Virilio, *Bunker Archeology* (Princeton: Princeton Architectural Press, 1994), 44. It is possible to make the same claim about urban bunkers as I have done in Rosanna Farbøl, "Atomkrigens arkitektur. Velfærd og civilforsvar under den Kolde Krig," *temp – tidsskrift for historie* 11, no. 21 (2021): 118–19.

17 Paul Virilio, *The Aesthetics of Disapperance* (New York: Semiotexte, 1991).

18 Bradley Garett and Ian Klinke, "Opening the Bunker: Function, Materiality, Temporality," *Environment and Planning C: Politics and Space* 37, no. 6 (2019): 1068.

19 David Monteyne, *Fallout Shelter: Designing for Civil Defence in the Cold War* (Minneapolis: University of Minnesota Press, 2011), xix.

20 Joseph Masco, "Life Underground. Building the Bunker Society," *Anthropology Now* 1 (2009): 13–28; David Monteyne, *Fallout Shelter: Designing for Civil Defence in the Cold War* (Minneapolis: University of Minnesota Press, 2011); Rosanna Farbøl, "Urban Civil Defence: Imagining, Constructing and Performing Nuclear War in Aarhus," *Urban History* 48 no. 4 (2021): 10–11, 22; Casper Sylvest, "Atomfrygten og civilforsvaret," *temp — tidsskrift for historie* 16 (2018): 16–39.

21 Iben Bjørnsson, "Negotiating Armageddon: Civil Defence in NATO and Denmark 1949–59," *Cold War History* 23, no. 2 (2022): 217.

22 Rosanna Farbøl, "Warfare or Welfare? Civil Defence and Emergency Planning in Danish Urban Welfare Architecture," in *Cold War Cities. Politics, Culture and Atomic Urbanism*, eds. Jonathan Hogg, Martin Dodge and Richard Brooks (London: Routledge, 2021), 203; Poul Holt Pedersen, "Kommunale kommandocentraler i Skanderborg, Odense og Hadsund," in *Kold krig. 33 fortællinger om Den Kolde Krigs bygninger og anlæg i Danmark, Færøerne og Grønland*, eds. Morten Stenak, Thomas Tram Pedersen, Peer Henrik Hansen and Martin Jespersen (København: Kulturministeriet, 2013), 108.

23 Ulla V. S. Egeskov and Helle Nørgaard, *REGAN Vest–Demokratiets sidste bastion* (København: Gad, 2020).

24 Rosanna Farbøl, "Warfare or Welfare? Civil Defence and Emergency Planning in Danish Urban Welfare Architecture," in *Cold War Cities. Politics, Culture and Atomic Urbanism*, eds. Jonathan Hogg, Martin Dodge and Richard Brooks (London: Routledge, 2021), 202–5; Rosanna Farbøl, "Atomkrigens arkitektur. Velfærd og civilforsvar under den Kolde Krig," *temp – tidsskrift for historie* 11, no. 21 (2021): 118–19.

25 Depending on how the calculations are made. The 4m number includes the so-called "supplementary shelters" which were only planned but not realised in peacetime.

26 Rosanna Farbøl, "Atomkrigens arkitektur. Velfærd og civilforsvar under den Kolde Krig," *temp – tidsskrift for historie* 11, no. 21 (2021): 107–8.

27 Tom Vanderbilt, *Survival City: Adventures Among the Ruins of Atomic America* (New York: Princeton Architectural Press, 2002), 39.

28 Ole Mortensøn, *Fortet og den kolde krig. Das Fort und der Kalte Krieg* (Rudkøbing: LangelandsMuseum, 2006), 6–8.

29 Rosanna Farbøl, "Commemoration of a *Cold* War: The Politics of History and Heritage at Cold War Memory Sites in Denmark," *Cold War History* 15, no. 4 (2015): 482–83.

30 Bradley Garett and Ian Klinke, "Opening the Bunker: Function, Materiality, Temporality," *Environment and Planning C: Politics and Space* 37, no. 6 (2019): 1065.

31 See Elaine Tylor May, *Homeward Bound. American Families in the Cold War* (New York: Basic Books, 1988); Miriam Dobson, "Protestants, Peace and the Apocalypse: The USSR's Religious Cold War, 1947–62," *Journal of Contemporary History* 53, no. 2 (2017): 361–90; Susan E. Reid, "Cold War in the Kitchen: Gender and the De-Stalinization of Consumer Taste in the Soviet Union under Khrushchev," *Slavic Review,* 61, no. 2 (2002): 211–52; Margot Henriksen, *Dr. Strangelove's America: Society and Culture in the Atomic Age* (Berkeley: University of California Press, 1997).

32 Rosanna Farbøl, "Commemoration of a *Cold* War: The Politics of History and Heritage at Cold War Memory Sites in Denmark," *Cold War History* 15, no. 4 (2015): 485.

33 Anne Mette Rahbæk, "Forord," in *Kold krig. 33 fortællinger om Den Kolde Krigs bygninger og anlæg i Danmark, Færøerne og Grønland*, eds. Morten Stenak, Thomas Tram Pedersen, Peer Henrik Hansen and Martin Jespersen (København: Kulturministeriet, 2013), n.p.

34 The two fortifications are also on the list, which can be seen in full at the webpage https://slks.dk/omraader/kulturarv/bevaringsvaerdige-bygninger-og-miljoeer/bevaring stemaer/kold-krig, accessed 24 May 2024; the book downloaded here: https://slks.dk/fileadmin/publikationer/Kulturarv/Kold_Krig_2014.pdf.

35 Bradley Garett and Ian Klinke, "Opening the Bunker: Function, Materiality, Temporality," *Environment and Planning C: Politics and Space* 37, no. 6 (2019): 1074.

36 Gary A. Boyd and Denis Linehan, "Becoming Atomic: The Bunker, Modernity and the City," *Architectural Research Quarterly* 22, no. 3 (2018): 243.

37 On creating REGAN Vest as a museum, see Frandsen and Egeskov in this volume.

38 Per Strömberg, "Funky Bunkers: The Post-Military Landscape as a Readymade Space and a Cultural Playground," in *Ordnance: War + Architecture & Space*, eds. Gary A. Boyd and Denis Linehan (London: Routledge, 2013), 75.

39 There are some exceptions here. At Dueodde for instance, there are few of the surveillance installations left.

40 Sean L. Kinnear, "Reopening the Bunker: An Architectural Investigation of the Post-war Fate of Four Scottish Nuclear Bunkers," *Journal of War & Culture Studies* 13, no. 1 (2020): 90.

41 Jacob C. Miller and Vincent J. Del Casino Jr, "Negative Simulation, Spectacle and the Embodied Geopolitics of Tourism," *Transactions of the Institute of British Geographers* 43, no. 4 (2018): 661–73; Tracy Ireland and Jane Lydon, "Rethinking Materiality, Memory and Identity," *Public History Review* 23 (2016): 6.

42 Similarly, previous research has shown how modern, cosmopolitan perspectives struggled at the museum at Dybbøl, the site of a history Danish defeat in 1864, because the place was steeped in a historical and ultra-national fabric, see Mads Daugbjerg, "Kulturarvens grundspænding mellem nationale og globale strømme", *Kulturstudier* 2, no. 1 (2011): 6–35.

43 David Lowenthal, "Nostalgia Tells It like It Wasn't," In *The Imagined Past: History and Nostalgia*, eds. Christopher Shaw and Malcolm Chase (Manchester: Manchester University Press, 1989), 18–32.

44 Jussi Hanhimäki, "The (Really) Good War? Cold War Nostalgia and American Foreign Policy," *Cold War History* 14, no. 4 (2014): 674.

45 Mattias Frihammar, Fredrik Krohn Andersson, Maria Wendt and Cecilia Åse, *I kalla krigets spar. Hot, våld och beskydd som kulturarv* (Göteborg: Macadam, 2023), 100.
46 Mattias Frihammar, Fredrik Krohn Andersson, Maria Wendt and Cecilia Åse, *I Kalla Krigets Spår. Hot, Våld och Beskydd som Kulturarv* (Göteborg: Macadam, 2023), 100–6; see also Åse *et al.* in this volume.
47 www.danskkoldkrigsforening.dk/kommandocentralen/, accessed 24 May 2024.
48 Luke Bennett, "The Bunker's After-Life. Cultural Production in the Ruins of the Cold War," *Journal of War & Culture Studies* 13, no. 1 (2019): 9.
49 Rosanna Farbøl, "Commemoration of a *Cold* War: The Politics of History and Heritage at Cold War Memory Sites in Denmark," *Cold War History* 15, no. 4 (2015): 471–90; Rosanna Farbøl, *Koldkrigere, medløbere og røde lejesvende. Kampen om historien* (Kbh: Gads forlag, 2017).
50 Leif Davidsens tale ved indvielsen af koldkrigsmuseet REGAN Vest, 10 February 2023 www.dansketaler.dk/tale/leif-davidsens-tale-ved-indvielsen-af-koldkrigsmuseet-regan-vest.
51 *Herning Folkeblad* 13 February 2022 "Hemmelig regeringsbunker har næstne udsolgt frem til sommer".
52 Luke Bennett, "Presencing the Bunker: Past, Present and Future," in *In the Ruins of the Cold War Bunker: Affect, Materiality and Meaning Making*, ed. Luke Bennett (London: Rowman & Littlefield International, 2017), 234.
53 Gilly Carr, *Legacies of Occupation. Heritage, Memory and Archeology in the Channel Islands* (Cham: Springer, 2014), 12.

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8 Creating a New Cold War Museum

Curatorial Reflections

Ulla Varnke Sand Egeskov and Bodil Frandsen

In February 2023, North Jutland Museums (NJM) opened the doors to the Cold War Museum REGAN Vest to the general public. The opening of the museum marked the culmination of ten years of intensive work to turn the previously top-secret government facility West Denmark – referred to as REGAN Vest (short for the Danish Regeringsanlæg Vestdanmark) – into a visitor attraction of international standards.

Located in the Rold Skov forest in northern Jutland, Denmark, REGAN Vest was built over the period from 1963 to 1968 as a nuclear-safe facility for the Danish monarch, the Danish government and the central administration. In case of a war, Danish civil society would be governed from REGAN Vest, which constituted the upper echelon of authority as regards civil emergency management planning. The main task of such planning was, on the basis of the Danish act on civil emergency management from 1959, to ensure democracy and the maintenance of civil society during a crisis or war.[1]

From its completion in 1968 and throughout the rest of the Cold War period, REGAN Vest was kept ready for commissioning at very short notice. With the collapse of the Berlin Wall in 1989, the world situation and the threat scenario changed, so that the facility gradually lost its importance, and with the government agreement on emergency management of 2012, the bunker was decommissioned as part of the Danish emergency management system for good.[2] This decision made it possible to transform the highly authentic bunker into a visitor attraction for the general public, and it was only natural that the local state-authorised museum NJM was chosen to carry out this task. With this article, we wish to explain and discuss the considerations and choices that underlie the design and communication of the newly opened museum. Our discussions will be based on our understanding of the concepts of authenticity and agonism and how this has influenced further choices regarding the overall visitor experience, flow, target groups and communication methods (see following sections).

Preliminary Activities

Government facilities are not a special Danish phenomenon.[3] In line with government facilities in a large number of other NATO member states, REGAN Vest was

built at the request of the defence alliance, which in the light of the advancements in weapon technology, wanted the civil emergency preparedness planning to be prioritised.[4] What makes REGAN West unique is the facility's distinctive ring-shaped architecture, the numerous detailed and well-thought-out technical installations designed to make the bunker nuclear-proof, and the complete and untouched interior design, which turns the bunker into a time capsule.[5] There was therefore from the outset both politically and locally as within the Danish museum world consensus that the bunker held a unique presentation potential[6]

At the same time, a number of professional works were initiated by the museum. The work included a variety of material and immaterial collection and documentation activities, and in 2014, REGAN Vest was listed as a protected heritage building. The listing was recommended by the Historical Buildings Survey to be as extensive as possible – a fact that strongly influenced the interpretive choices related to the future museum.[7] Finally, a series of research and collection activities were initiated, as the area the museum wished to present was rather sparsely studied in both Danish research and within the museum world.[8] Most importantly in this context was the implementation of the grant-funded research and communication project "If War Comes."[9] The project and its results were crucial for the final museum's communication. Not only did it generate new and important knowledge that formed the basis for the concurrent collection campaigns, but it also nuanced our understanding of Danish civil Cold War history and shifted focus towards topics we had not originally intended to feature prominently in the communication.

Vision and Objectives

In the museum prospectus prepared in 2018, the vision for the Cold War Museum REGAN Vest was "to create the ultimate Cold War Museum which in both a national and an international context will appear as a unique museum attraction that will appeal to and fascinate more or less all target and age groups."[10] This vision reflected an extremely high ambition level for the strategy of the museum from the very beginning.

The prospectus stated that the objective of the museum was

> to offer information through guided tours, physical, visual and digital presentation about the period 1950–1991 from local, national, and international perspectives. The museum presents and studies the way in which international security policy has a direct impact on the lives of us all, and the extent to which a society will react in its efforts to safeguard the health and safety of its citizens if the war turns hot.[11]

The focus was therefore on the civilian perspective. This choice was based on several factors. First, Denmark already had two state-recognised Cold War museums that present the Cold War from a military point of view.[12] Second, there were no museums at a national level that conveyed the history of the civilian society's

response to the Cold War threat. We emphasised the latter perspective as it touches on the ways in which we, as a democratic nation and a member of a western alliance, would act in order to secure our country's sovereignty, democracy and population during a war or crisis.

The Authentic Experience

When REGAN Vest was decommissioned in 2012, the bunker remained complete with all furniture, installations, equipment, documents preserved. The pristine environment was among the aspects highlighted in the preservation act in 2014, stating that "furniture and other loose items are sought to be preserved in the facility to the greatest extent possible as part of the overall narrative."[13] The museum's staff and management shared the same view, so it was clear from the outset that authenticity was a key factor in the future communication of the site. This, in turn, requires a consideration of the concept of authenticity, and here, we have drawn upon the work Siân Jones, who has been studying the subject for several years.[14]

    According to Jones, the understanding of authenticity can be divided into two fundamentally different approaches. She writes:

> On the one hand there is the materialist approach, [...] which treats authenticity as a dimension of 'nature' with real and immutable characteristics that can be identified and measured. On the other hand, there is the constructivist position, [...] who see authenticity as a product of [...] the many different cultures through which it is constructed.[15]

Jones highlights the advantages of constructivist approaches but criticises that constructivism often excludes the material dimension of authenticity. Instead, she argues for an approach that incorporates a social aspect, thereby allowing for an understanding of how individual visitors are fascinated by the authenticity in their encounter with specific objects or buildings, and the networks and relationships that this encounter creates.

    In the development of the Cold War Museum REGAN Vest, it has been our goal, in line with the preservation, to maintain the authentic time capsule that the bunker represents, while also bringing the social and personal experiential aspect into play in the communication of the site. Behind this decision lies an acknowledgement that we are dealing with the recent past, which our visitors often have memories of. The experience of authenticity will therefore be almost inevitably influenced by the specific viewer and their memories and networks.

Target Groups, Experiences and Flow

A project that has been planned over a period of ten years has, not surprisingly, undergone a number of changes along the way. But three overall principles have guided our work from the beginning. First, it soon became clear that building the new museum would involve more than "just" opening the bunker to the general

public. To respect its listing and rare authenticity, we decided to keep the bunker "clean", in the sense that we have left out any type of staging, like texts or sound effects. However, this left us with a need to supplement the visit to the bunker with other components that could at the same time support the narrative and place the role of the government bunker in upholding Danish democracy and civil society into a broader context, linking the history of the location to Danish and NATO history more broadly. Furthermore, we anticipated that the concept of guided tours implied a specific flow, which made it necessary to create a comprehensive experience with multiple elements based on different styles, atmospheres and communication methods.

Second, using agonism as a theoretical tool, we decided to apply a cognitive and emotional presentation approach in which the citizen-centred objects and stories creating memories were used as communicative mean to frame a broader narrative (see below). This was primarily caused by the fact that we based our presentation largely on *imaginations* of a possible war, and even such imaginations that had resulted in extensive but partly secret planning, which was unknown to most people.

Third, we decided to target specific user groups in our design of themes and presentation instruments. We have been inspired by John Falk, who in his book *Identity and the Museum Visitor Experience* uses identities as an opening to understanding and satisfying the motivation, experience and learning of different visitors to a museum.[16]

NJM's philosophy is that a visit to a museum is a social experience linked to the place, the visit and the physical framework. For this reason, we decided to use the spoken word, texts, hands-on elements and sound and light effects experienced as a group as communication method. These particular elements were chosen, based on experiences from the other activities and exhibitions of NJM, where tests and user surveys have shown that guided tours with oral interpretation and activities where groups can interact have a great impact.[17] Additionally, the choices were based on the inspiration and experiences we gathered from other museums both domestically and internationally.[18]

When the Cold War Museum REGAN Vest found its final shape, the museum experience for the general visitor was based on three sub-elements: a guided tour in the government bunker; a museum experience in a newly built museum building; and a visit to the chief engineer's house at REGAN Vest.[19]

Our aim was to create a connection between the visit in the government bunker and the two other elements. We understood fairly early on in our planning that a visit to the government bunker would be subject to certain restrictions. For safety reasons, the Danish fire-fighting authorities required that visitors could only enter the bunker in groups of ten at a time, and only accompanied by a guide. This flow meant there was a need to design a visitor experience that supplemented the strictly planned story told by the guide inside the bunker with free choices. At the same time it would ensure a meaningful time for visitors before and after their visit to the bunker. Our goal was to create content for 3.5–4 hours.

Target Groups, the Museum Experience and John Falk's Visitor Model

The complex flow and the establishment of the many sub-elements which, in combination, constitute the new museum made it important at a very early stage to consider which target groups we wanted to address, and how we could meet their needs in our presentations. In the competition programme sent out in 2019 with a call for tenders for establishing the visitors centre and the included exhibition, the vision for the museum experience was formulated as follows:

> The museum experience at REGAN Vest […] should be a social experience that supports and challenges the visitor's personal identity. Visiting a museum is a leisure activity that should be at the same time meaningful, challenging and entertaining. [...] Visitors have different premises and motivations for a visit to a museum. This requires that the museum offers different communication methods reflecting different learning styles.[20]

In our efforts to comply with the objectives of the vision, we decided to make use of John Falk's approach to understanding the users of the museum and their visit experience.[21] In particular, we have been inspired by Falk's visitor model, which uses the visitor's identity and need as an opening to understanding the motivation behind a museum visit. In his model, he lists five overall categories: The Explorers are motivated by their interest in the content offered by the museum. They expect to find things that will attract their attention and inspire them; the Facilitators are socially motivated and focused on giving others a good experience that can be shared by their group; the Experience Seekers are mainly motivated by curiosity and an appetite for experience. They find motivation in seeing a new place they can tick off on their bucket list; the Professionals/Hobbyists feel a close tie to the museum content. They are typically motivated by a desire to satisfy a specific content-related objective; the Rechargers are primarily seeking reflection space and contemplation. For this group, recreative spaces where they can spend time and absorb impressions are the most important.[22] The five categories are not mutually exclusive but can be combined in many ways, and often the social framework of a museum visit will decide which type a certain guest will identify with.[23]

However, as Mads Daugbjerg has pinpointed in his analysis of the complexities and tensions surrounding the embrace of "experimental" and "playful" learning at war heritage sites, museums often struggle to balance a playful and romantic engagements with the more solemn and contemplative aspects of war.[24] Daugbjerg underlines the difficulty of presenting war scenarios in a meaningful way for visitors without creating experiences solely based on visitors' motivations and expectations.[25] In working with Falk's visitor model, we have been firmly aware about this dilemma, and have tried to navigate between the serious matter we present and the wish to create an experience, that would be perceived as valuable for the visitor.

Presenting (Secret) War Scenarios

As mentioned above, it was decided from the beginning that the Cold War Museum REGAN Vest would take a civil-society approach to the history of the Cold War. As this is a very comprehensive field, potentially including such different topics as high politics, espionage, diplomacy history, national history or propaganda, this meant that we very soon had to make some decisions on what to include and what not to include. Based on the concurrent research and collection activities, we decided to take a Western European and (in particular) Danish perspective focusing on the survival of civil society and the citizens in the event of war, and on the everyday life of the Danes and their reactions to the divided world of the Cold War.

One tool in this work was the use of "agonistic memory", inspired by Anna Cento Bull and Hans Lauge Hansen.[26] Agonistic memory is a concept that can contribute to a better understanding of how people remember and interpret historical events and conflicts. Agonistic memory refers to the process in which historical events and conflicts are interpreted and remembered in a way that highlights one's own group's righteousness and viewpoint, while demonising or dehumanising the opposing group.

By understanding agonistic memory, we can better understand how narratives about the Cold War have been constructed and maintained, which can contribute to more nuanced stories in museums today, even as we acknowledge that we are presenting from a Western European perspective. By being aware of agonistic memory, we can avoid using stereotypical ideas and create a more open and inclusive dialogue about the past.

As a tool to select and view the individual sub-elements and narratives, we decided to use the three overall themes "Fear, Hope and Identity." The themes were selected because the Cold War, in our view was basically a story about fear, hope and identity. At the same time, they enabled us to place the different topics in a framework that was intuitively understandable and tangible for the individual visitor. Moreover, the theme of "identity" also included the concept of "democracy." And as the research and collection activities progressed, the democracy concept became increasingly essential in the narratives, and today, it constitutes a pivotal element in our information material.

In the museum, there was a focus on creating an interactive and engaging experience for visitors by offering activities, exhibitions and events that go beyond just having static displays. We did this to give visitors increased opportunities to actively interact with the museum's subject and thereby gain an understanding. We did this in line with the concept of agonistic museums.[27]

With the overall vision, objectives, framing and target group strategy in place, we were ready to embark on the nitty-gritty activity of selecting and communicating individual topics and stories. At the top of our to-do list, was telling the story of the emergency management system. But the decision came with certain problems, because in Denmark, a large part of the emergency management planning during the Cold War remained either untold in order not to scare the population, or downright secret. In other words, we had to find a way in which to communicate,

in a relatable and nuanced manner, the story of the scenarios the authorities had imagined about a war that never happened, but which had resulted in extensive but untold planning activities.

The secret planning activities coincided with a debate among the general public.[28] We also wanted to expand this story and reflect its nuances. And finally, it was important for us to describe how many Danes lived their completely normal everyday lives, trying as best they could to navigate through all the different opinions and international threats.[29]

Consequently, we asked ourselves some hard questions during the process about whom we address in our communication, why we choose the specific topics and how to communicate the narratives. We analysed that our main audience would be broad group of young and older adults, but not children under the age of 12. The narratives and experiences at the museum are communicated in a way that may either scare children or be difficult for them to understand. The exhibition speaks about fear and hope for the future, and in some places, effects are being used that underscore the severity of the time. The Cold War is a conflict that relates to our most recent past, and the extensive planning activities of the time have been discontinued following the end of the Cold War. Communicating the story of the Cold War can therefore place the international and national environment of the time in a setting that underscores how seriously the threat of a third world war was taken. At the same time, the non-military part of the story had never been told to the population since most of it was kept secret.[30] The challenge in communicating this was to find the methods and instruments that enabled us to talk about these things, while at the same time creating an understanding of the extent and essence of the secret planning taking place in society over a long period of time. We chose different communication approaches for the four visitor experiences at the museum. Generally, our aim has been to communicate to our visitors in different ways in the different parts of the museum. To achieve this, we were inspired by Nina Simon's essential elements in her publication *The Art of Relevance*. Here Nina Simon discusses issues such as relevance/how to create user inclusion and the feeling of belonging.[31]

The method we decided to use to a certain extent in all the museum experiences was to let "the small story" act as an opening to the big stories. This means that in terms of communication, we start by telling a citizen-centred or person-centred story, which we then expand into the big story. One example might be: The museum exhibition has a small screen with five different people telling us why and how they took a political standpoint during the Cold War. The people we chose are an artist, a member of the Women's Voluntary Services, a person who was then a youth politician, a NATO general and a theatre manager. They tell us about their thoughts at the time about the future, and what they thought should be the solution to the Cold War conflict. The small screen is easily accessible, and real people are telling us about their lives. But the screen feeds into a story about the Cold War period's internal disagreements in Denmark, the big story about system conflict and Denmark's relationship to the United States, NATO and the Eastern bloc. In this way, the small citizen-centred story acts as a tin-opener to the bigger and more complex story.

The Individual Elements in the Museum Experience

The Bunker

The underground REGAN Vest bunker itself is the main attraction of the new museum. The bunker, 5,500 square metre large, was the very reason to establish the new museum, and the stories told at all the sub-elements are to various extents defined by the stories linked to the establishment and operation of the bunker. As mentioned above, it soon became clear that all visits to the bunker were to take place as guided tours for small groups – a controlled flow experience.

As also mentioned, REGAN Vest stands fully equipped with all its original furniture, fixtures and equipment, from designer chairs and bunk beds across green melamine plates in the cafeteria to "NATO confidential" stamps in the encryption room and vast quantities of paper clips and office gear.[32] The bunker is a completely exceptional time capsule from the Cold War. This sensation is further intensified by the architecture of the facility and the many, almost uncanny, solution details that were installed to make it nuclear-proof. The bunker stands as a unique physical indication of how seriously Denmark viewed the threat of a nuclear war, and it has a strong effect on people – even generations who are too young to have experienced the period.

To respect the authenticity of the facility and in line with our aims to maintain the feeling of a time capsule, we decided from an early stage to leave out any added sound and light elements as well as digital effects and scenography/tableaus that might create an illusion of life lived in it. Instead, we focused exclusively on communicating directly using the spoken word. Personal oral communication is experienced as eye-level contact by the individual visitor. Direct oral communication reflects shared attentiveness and enables a type of story-telling that promotes an atmosphere which may bring different emotions, memories, networks and moods into play. In the case of the bunker, it also serves as a mean to establish the constructivist conception of authenticity within the visitor group (Figure 8.1).

The preparation of the final tour script has been a year-long process, and during the period, we have continuously developed, tested and adjusted the final text. During the process, we have been assisted by a professional storyteller and communicator, who has "proof-tested" the script as well as the appearance of the guide.[33] The final communication concept was designed for guided tours of a duration of 1.5 hours and a maximum of ten participants per guide and is primarily aimed at the Explorer, the Experience Seeker, the Professional/Hobbyist and, to a lesser intent, the Facilitator. The large number of rooms and stories are linked together by the following three overall essential elements: The determination to secure democracy, sovereignty and society; fear of modern warfare and determination to secure the facility and its operations; and civil support functions and psychological effects. These particular themes are chosen because they encapsulate the bunker's role in civil emergency planning, its technical and structural capabilities in the event of a nuclear war and the considerations made to maintain the morale and well-being of the personnel. At the same time, these are key points that can be found to a greater or lesser extent in the presentation of other sub-elements of the museum – particularly in the exhibition and on the terrain above REGAN Vest.

Figure 8.1 Scene from a guided tour in the bunker. Photo: Lars Horn/North Jutland Museums

The Museum Exhibition

The museum exhibition at the Cold War Museum REGAN Vest is built around seven themes, each of which treats different aspects of the Cold War.

1 "What was the Cold War?" An AV installation which uses three projections to show short film clips from the era. An experience of the "hot-spots" of the Cold War period is projected, e.g. the iron curtain, the Berlin Wall, the space race and arms reduction agreements.
2 "Into the nuclear age", which describes the discovery of nuclear power, how this was viewed over time and how it was used to develop new types of weapons.
3 "Disagreements", which describes how block politics and international disagreements were reflected even in civil society.
4 "If the war comes", which shows how the fear of a nuclear war seeped into Danish homes and how the authorities recommended that people built their own fallout shelters.
5 "Secret planning", which demonstrates the extension of Danish civil emergency planning activities from the government and down to the individual citizen and also how society built emergency stocks to be used in a war situation.
6 "The Cold War cinema", which shows emergency management and information films from the Cold War.
7 "REGAN Vest", which focuses on some of the many technologies used inside the bunker."

The selection of these seven themes reflects pragmatic and conceptual thinking: we wanted to present the complexity and the extent of the planning activities that we mentioned above, while at the same time communicating imagined scenarios of a potential third world war.[34] The concept of agonism played a role in the use of interactive elements where visitors can discuss complex topics related to the cold war. Similarly, there are objects and narratives in the exhibition that represent different viewpoints or stories and invite visitors to critically and reflectively engage with them.

To present the themes, we chose communication methods with relatively different styles of expression. However, throughout the exhibition, short texts have been chosen. The longest texts in the exhibition are 600 characters long, and all text and speak in the exhibition appear in both a Danish and an English version. In this respect, we have leaned on the work and experience of colleagues regarding text lengths[35] as well as internal user tests showing that long texts can be stressful for visitors from the very beginning of their visits.[36] The Swedish ethnologist Sofie Bergkvist has recently compiled a list of important elements to consider when working with texts for museum exhibitions:

> In an exhibition, text is one of a number of media. Many other media exist, which take up space and try to attract the attention of visitors, such as objects, sound, installations, smells, interactions, videos and environments. Some things are best communicated in a video, others by displaying the authentic objects, and others again are best explained through installations which give visitors an experience of immersion. However, some stories are best told using text, and the text supplements other media.[37]

The exhibition is aimed at the professionals/hobbyists and explorers. To further fulfil their needs, we have included hands-on elements in all themes, which means that visitors may sense something for themselves or interact with the theme in question through their own actions (Figure 8.2).

To give a concrete example of our choices and the design of the exhibition, we will describe one of its themes in the following.

Case

The theme we selected for the exhibition is "If the war comes", named after a leaflet distributed in 1962 by the Danish government to all Danish households to prepare the population for a possible new war. The theme deals with the fear of nuclear war, and how international events, through the media, influenced the minds of the Danes and created fear. Following many discussions, we arrived at a tableau solution built like a traditional living room and a children's bedroom. Above this scene, an AV 24-hour-loop installation was made.

In the morning, the sun is shining and the living room is empty, but as the day progresses, the radio is turned on, the light changes and the living room lamps are switched on. In the evening, the TV is turned on, and programmes are

Figure 8.2 The living room in the theme "If the war comes." Photo: Lars Horn/North Jut-
        land Museums

shown where the authorities inform the population of how they should act in a
war situation, and news items alternate with international events and clips from
popular entertainment shows. As the evening progresses, the content becomes
increasingly severe and intense, until it finally spreads across the entire screen
in a frightening scenario showing war and nuclear explosions turning the entire
living room into an inferno. The inferno runs for quite a short time and ends
with the TV being turned off, the living room is lit up, and another 24-hour loop
can begin.

   So what was the "solution" to this fear? According to the Danish authorities, it
was to tell people that they could do something themselves. From the living room of
the tableau, a small corridor leads into the family's fallout shelter – a low-ceilinged
and sparingly furnished room of a completely different character compared to the
installation outside – a room of necessity. The fallout shelter behind the living room
was built according to the instructions given in 1962 to the Danish population in
the leaflet "If the war comes." The room is fitted with beds, food for three people
for eight days and sandbags to close the doors and make them stronger. In the cor-
ner of the room, there is a small table with a desk pad and two stools. Here, visitors
may sit down and fill out a form with the question "what would you take with you
into a fallout shelter?" The forms may be placed on some hooks outside the fallout
shelter and inspire other visitors to reflect.

   With the contrasts between the living room setup, the confined space conditions
in the fallout shelter and the discussion on how to feel safe that visitors experience,
combined with their own reflections on what would be necessary in a worst-case

scenario, we attempt to show aspects of the fear people experienced during the Cold War. From a museological perspective, this approach is about providing an immersive and inclusive experience that prompts reflection and encourages visitors to contemplate the fear of war and its impact on us. The use of digital cinematic techniques serves to illustrate how fear ultimately takes hold in the comfort of the living room.

The Chief Engineer's House

The chief engineer's house was inhabited by the chief engineer at REGAN Vest as part of their service. The house formed part of the REGAN Vest complex and was closely linked to the secret bunker. The chief engineer oversaw the technical operations inside the bunker and was commissioned to make sure that the bunker was always ready for use in terms of technical functionality. The family in the service tenancy lived a quite ordinary middle-class family life, but they also lived with a large secret in their backyard which they were not allowed to speak about.

In our communication of the story about the house, we decided to include the family's everyday life, the nuclear threat of the time and the secret facility. We implemented this by furnishing and fitting the house exactly like a home from 1980, and the visitor will initially step into a family home where many Danes will remember and recognise furniture and equipment. It is possible to experience the chief engineer's house at this level, which allows for the visitor's own memories to play a main role. The house is fitted with requisites, which means visitors may have the extended experience of sitting in the furniture and generally exploring and using the house.

We also added a digital layer to the exhibition. On four screens, the visitors will meet the four members of the chief engineer's family, who tell their stories about living in the house, having the secret bunker in their backyard and thinking about the threats and trends of the time. There is also a TV set, a radio, tape recorders and magazines that offer an insight into some of the big issues of the time. This work means that the visitors experience the engineer's house as a "real" or "authentic" home, but it is a home that is highly curated and where the rooms have clear but understated references to the Cold War era.

The presentation method in the chief engineer's house has been designed to speak primarily to explorers, who get the chance to find the stories themselves and to go exploring the rooms. At the same time, it also speaks to facilitators, who wish to tell about their own lives and enable others to understand everyday life during the Cold War.

Conclusion

The Cold War Museum REGAN Vest opened on 13 February 2023. Expectations in advance were enormous, so we were extremely excited to finally being able to welcome the public into the museum, but also slightly nervous about whether we were able to live up to the expectations.[38]

If we were asked to highlight one thing which has been very important for the final result, it is our decision to present the story using different methods at the three different museum locations experienced by our visitors: the spoken word inside the bunker; the more traditional exhibition experience using objects, texts and digital effects and the free spatial experience in the chief engineer's house with the digital input.

In John Falk's terminology, museum experiences speak to different experience types, and our aim has been to offer experiences that will create value for as many of our visitors as possible, while at the same time being true to both the complex and serious war story and the authenticity of the site. The responses we receive from our visitors indicate that we have succeeded in our aim.[39]

At the same time, we have taken on the task of telling the story of a secret planning process. This has also been a task full of choices. Our point of departure in this respect was to create an array of interlocking stories rather than focus on one big message. The citizen-centred story, or the small story in the big story, is used as a point of departure for understanding the extensive system of which the secret planning process in Denmark formed part.

By combining authenticity and agonism in Cold War Museums REGAN Vest, we aimed at creating a dynamic and engaging experience that encourages visitors to think critically about the past while also fostering a sense of historical accuracy and understanding. This approach is aimed at providing knowledge, challenging stereotypes and giving a comprehensive and balanced portrayal of the Cold War era.

The last element which should be considered particularly valuable is the research on which the museum bases its presentation and communication activities. Because this is a new museum whose aim was to present a topic that had been studied very little by researchers, it has been crucial that the staff and partners of the museum were given the possibility to conduct research in the topic. This means that the museum can now communicate valid research-based knowledge and that we stand on firm ground when making conclusions and presenting stories from certain perspectives.

Notes

1 Lov nr. 342 af 23. december 1959 om det civile beredskab." ["Act no. 342 of 23 December 1959 on Civil Emergency Management."] *Folketingstidende, [The Office of the Folketing Hansard]*. Collection 1959–60, supplement C, Columns 73–76, accessed 11 April 2024. https://www.folketingstidende.dk/samling/19591/lovforslag/L2/19591_ L2_som_vedtaget.pdf

2 Ministry of Defence, "Government agreement on the emergency management in 2013– 2014, 12 November 2012," accessed 11 April 2024, https://www.fmn.dk/globalassets/ fmn/dokumenter/forlig/-aftale-om-redningsberedskabet-2013–2014-.pdf.

3 See eg. Bodil Frandsen, "Hvis krigen kommer. En undersøgelse af det centrale civile beredskab og REGAN Vest under den kolde krig (1950–1968)." ["If the War Comes. A Study of the Central Civil Emergency Management System and REGAN Vest During the Cold War (1950–1968)."] (PhD diss. Aalborg University 2021), 204–10 and Bodil Frandsen, "Det centrale civile beredskab og REGAN Vest," ["Central Civil Emergency

Management System and REGAN Vest," in *Atomangst og Civilt Beredskab [Nuclear Anxiety and Civil Emergency Management]*, eds. Marianne Rostgaard and Morten Pedersen (Aalborg: Aalborg University Press, 2020), 50–53. Also see the chapter by Rosanna Farbøl in this volume.

 4 "The Application of the New Assumptions to the Work of the Emergency Planning Committees," 27 May 1955. C-M(55)48(Final), NA 01, C Series, 1955, Memoranda, NATO Archives Online, accessed 11 April 2024, https://archives.nato.int/application-of-new-assumptions-to-work-of-emergency-planning-committees-3.

 5 See Ulla Varnke Sand Egeskov and Helle Noergaard, *REGAN Vest, The Last Bastion of Democracy* (Copenhagen: GAD Publishers, 2019).

 6 The support manifested itself, among other things, in the establishment of an inter-ministerial working group, led by the Danish Emergency Management Agency. The task was to prepare a report containing a number of specific requirements and recommendations for the future use of the facility as a museum. *Redegørelse vedrørende over-dragelse og åbning for offentligheden af Regeringsanlæg Vest [Statement Regarding the Handover and Opening to the Public of Government Facility West.]* (The Danish Emergency Management Agency, 2015).

 7 "FBB-Sag: Regeringsanlæg Vest (Regan Vest)," ["Case: Government Facility West (Regan Vest),"] The Agency for Culture and Palaces, 2014, accessed 11 April 2024, https://www.kulturarv.dk/fbb/sagvis.pub?sag=120247857.

 8 Only very little research on the topic was made, when we started our work. The three main publications were Klaus Petersen and Nils Arne Sørensen, *Den Kolde Krig på hjemmefronten (Cold War on the Home Front)* (Odense: University Press of Southern Denmark, 2004); Morten Stenak, *Kold Krig: 33 Fortællinger Om Den Kolde Krigs Byg-ninger Og Anlæg i Danmark, Færøerne Og Grønland. [Cold War: 33 Tales of Cold War Buildings and Facilities in Denmark, the Faroe Islands and Greenland]* (Copenhagen: The Agency for Culture and Palaces, 2014) and Peer Henrik Hansen, Thomas Tram Ped-ersen and Morten Stenak, *Den Kolde Krigs Anlæg [Cold War Facilities]* (Copenhagen: The Agency for Culture and Palaces, 2013).

 9 The authors of this article participated in the research project, as well as Associate Pro-fessor Marianne Rostgaard and Associate Professor Ivan Lind Christensen from Aal-borg University, curator Iben Bjoernsson from the Cold War Museum Stevnsfort and curator Peer Henrik Hansen from the Cold War Museum Langelandsfort. The project manager was curator Morten Pedersen, NJM. The publication Rostgaard and Pedersen, *Atomangst og civilt beredskab* was published in connection with the research project "If the War Comes". The project also resulted in the PhD thesis Bodil Frandsen, "Hvis krigen kommer. En undersøgelse af det centrale civile beredskab og REGAN Vest under den kolde krig (1950–1968)." ["If the War Comes. A Study of the Central Civil Emer-gency Management System and REGAN Vest During the Cold War (1950–1968)."] (PhD diss. Aalborg University 2021).

10 *REGAN Vest – The Cold War Museum of the Danes.* Prospectus prepared by NJM, Aalborg, in collaboration with Kvorning Design & Communication ApS, Copenha-gen, and Art+Com Studios AG, Berlin. 2018. The museum later changed its name to Koldkrigsmuseet REGAN Vest [Cold War Museum REGAN Vest].

11 *REGAN Vest* Prospectus.

12 The two museums are Cold War Museum Stevnsfort and Cold War Museum Langelandsfort.

13 "FBB-Sag: Regeringsanlæg Vest (Regan Vest)," ["Case: Government Facility West (Regan Vest),"] The Agency for Culture and Palaces, 2014, accessed 11 April 2024, https://www.kulturarv.dk/fbb/sagvis.pub?sag=120247857.

14 Sian Jones, "Negotiating Authentic Objects and Authentic Selves: Beyond the Decon-struction of Authenticity," *Journal of Material Culture* 15, no. 2 (2010): 181–203 and Sian Jones, "Unlocking Essences and Exploring Networks: Experiencing Authenticity

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15 Sian Jones, "Negotiating Authentic Objects and Authentic Selves: Beyond the Deconstruction of Authenticity," *Journal of Material Culture* 15, no. 2 (2010): 182.

16 John H. Falk, *Identity and the Museum Visitor Experience* (London: Routledge, 2016).

17 *Evaluering af byvandringer 2020* [*Evaluation of City Walks 2020*], internal document, NJM (Aalborg; 2020).

18 Including DDR-museum, Berlin; Berliner Unterwelten; Dokumentationsstätte Regierungsbunker, Ahrweiler; Imperial War Museum, London and Tirpitz, Denmark.

19 Furthermore, there is a fourth element consisting of a network of walking paths above the facility, but it is owned by the Danish Nature Agency, and not as such part of the museum. As a fifth element, a learning centre for secondary school students has been opened. However, as this is not included in the general visitor experience, it will not be described in more detail in this article.

20 *Competition Programme Cold War Museum REGAN Vest, Visitors Centre. Call for Tenders for Full Consultancy Services*, NJM. (Aalborg: 2019)

21 John H. Falk, *Identity and the Museum Visitor Experience* (London: Routledge, 2016), 31.

22 John H. Falk, *Identity and the Museum Visitor Experience* (London: Routledge, 2016)*, 157–80. See also John Falk, "Understanding Museum Visitors' Motivation and Learning," in *Museums – Social Learning Spaces and Knowledge Producing Processes*, eds. Jacob Thorek Jensen and Ida Brændholt Lundgaard (Copenhagen: The Agency for Culture and Palaces, 2013), 117.

23 John Falk, "Understanding Museum Visitors' Motivation and Learning," in *Museums – Social Learning Spaces and Knowledge Producing Processes*, eds. Jacob Thorek Jensen and Ida Brændholt Lundgaard (Copenhagen: The Agency for Culture and Palaces, 2013), 118.

24 Mads Daugbjerg, "Playing with Fire: Struggling with 'Experience' and 'Play' in War Tourism," *Museum and Society* 9, no. 1 (2011): 17–33.

25 Mads Daugbjerg, "Playing with Fire: Struggling with 'Experience' and 'Play' in War Tourism," *Museum and Society* 9, no. 1 (2011): 17–33.

26 Anna Cento Bull and Hans Lauge Hansen, "On Agonistic Memory," *Memory Studies* 9, no. 4 (2015): 390–404.

27 Sabine Dahl Nielsen, "Aktion! Kuratering som organisering af participatoriske konfliktzoner," ["Action. Curation as Organization of Participatory Conflict Zones,"] *Nordisk kulturpolitisk tidsskrift [The Nordic Journal of Cultural Policy]* 19, no 2 (2016): 36–58. See also Anna Cento Bull and Hans Lauge Hansen, "On Agonistic Memory," *Memory Studies* 9, no. 4 (2015): 390–404.https://doi.org/10.18261/ISSN2000-8325-2016-01-03

28 Casper Sylvest, *Atomfrygt [Nuclear Anxiety]* (Aarhus: Aarhus University Press, 2022).

29 Ulla Varnke Sand Egeskov, "Erindringer om den kolde krig. Danskerne og atombomben" ["Memories of the Cold War. The Danes and the Atomic Bomb."], in *Atomangst og Civilt Beredskab [Nuclear Anxiety and Civil Emergency Management],* eds. Marianne Rostgaard and Morten Pedersen (Aalborg: Aalborg University Press, 2020), 169–95.

30 Bodil Frandsen, "Hvis krigen kommer. En undersøgelse af det centrale civile beredskab og REGAN Vest under den kolde krig (1950–1968)." ["If the War Comes. A Study of the Central Civil Emergency Management System and REGAN Vest During the Cold War (1950–1968)."] (PhD diss. Aalborg University 2021), 9.

31 Nina Simon, *The Art of Relevance* (Santa Cruz, CA: Museum 2.0, 2016).

32 See the section "The authentic experience".

33 "Når din kommunikation skal blive forstået," ["When your communication needs to be understood,"] Kunigo, accessed 11 April 2024, https://www.kunigo.dk.

34 For a broader context see also Matthew Grant and Benjamin Ziemann, eds., *Understanding the Imaginary War: Culture, Thought and Nuclear Conflict, 1945–90* (Manchester: Manchester University Press, 2016).

35 The Swedish ethnologist and exhibition producer Sofie Bergkvist runs the firm Ordochtext.se and has specialised in writing exhibition texts. She shares her experience in her network, which has inspired us. Also, exhibition staff at the two Danish Museums Den Gamle By [Old Town Museum] and M/S Museet for Søfart [Denmark Maritime Museum] have helped us with our text work. Den Gamle By have described their considerations in Gustav Wollentz. Martin Brandt Djupdræt, Anna Hansen and Lasse Sonn, eds. *Museet som et socialt rum och en plats för Lärende [The Museum as a Social Space and a Place for Learning]* (Sweden: Jämtli Editors, 2021).

36 From tests conducted in the chief engineer's house, for instance, we received the following responses, "I felt great about not having to read anything," and "I felt comfortable about not seeing texts there".

37 "Fem skäl för museer att satsa på bra utställningstexter." ["Five Reasons for Museums to Invest in Good Exhibition Texts"] Bergkvist Ord & Text, last modified October 2022, accessed 11 April 2024, https://www.ordochtext.se/nyheter/2022/10/20/fyra-skl-fr-museer-att-satsa-p-bra-utstllningstexter.

38 See e.g. Susie Skov, "Nu er datoen for åbningen af Regan Vest klar," ["Now the Date for the Opening of Regan Vest is Ready,"] *Nordjyske,* 26 October 2022; Emil K. Jørgensen, "Vi har besøgt REGAN Vest: Atombunkeren bliver et kæmpe trækplaster i Nordjylland" ["We have Visited REGAN Vest: The Nuclear Bunker Will Be a Huge Draw in North Jutland,"] *MigogAalborg,* 30 January 2023; or Amanda R. Madsen, "Efter 10 år: Regan Vest endelig klar med åbningsdato," ["After 10 Years: Regan Vest Finally Ready with an Opening Date,"] *TV2,* 26 October 2022.

39 In 2023, North Jutland Museums, in collaboration with The Ministry of Culture and the analysis firm Ramboll, conducted a user survey of Cold War Museum REGAN Vest. Danish Ministry of Culture, *Den nationale brugerundersøgelse 2023, REGAN Vest [The National User Survey 2023, REGAN Vest]* (Ramboll, Copenhagen, March 2024). The survey revealed that visitors overall rated their visits as 9.4 out of 10.

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9   A War That Never Was

Locating, Collecting and Exhibiting the Experiences of British Forces in Cold War West Germany

Peter Johnston

Conquerors, Occupiers, Allies

The British military's relationship with Germany throughout the Cold War was complex. In the immediate aftermath of the Second World War, the British established garrisons and airfields in their Zone of Occupation to, in the words of Field Marshal Bernard Montgomery, "win the peace."[1] Yet the reasons for the British being – and staying – in Germany changed rapidly. Initially British forces were occupying a defeated and destroyed country to guarantee future peace in Europe. But rapidly they found themselves on the front line in the developing Cold War. West Germany increasingly became the focus of British military effort in the Cold War, the place where it was expected that the final confrontation would take place and the war would be fought and decisively won.[2]

Ultimately, the British embarked on a long patrol in Germany that would outlast the Cold War, with the last combat units only returning to the United Kingdom in 2019. But for a military deployed and maintained in expectation of a devastating conflict, it withdrew without a shot being fired in combat. More than one million British personnel served in West Germany during the Cold War as part of British Forces Germany (BFG), the vast majority in the British Army and the Royal Air Force in the British Army of the Rhine (BAOR) and RAF Germany (RAFG), respectively. Yet until recently, their stories have mostly been neglected in major UK military museums.

War has long been exhibited to the public. Through the triumphant display of captured material and prisoners to specific museums, exhibitions and galleries created to document and memorialise conflicts, war has an active and enduring place in museums. Similarly, there is a long-established scholarship on the representation of war and conflict in museums. Jay Winter, for example, wrote that,

> Museums are the cathedrals of the twenty-first century, in that they have filled the void left by the conventional churches as a site in which mixed populations of different faiths or no faith at all, of different origins and beliefs, confront and meditate on sacred themes – sacrifice, death, mourning, evil, brotherhood, dignity, transcendence. War not only belongs in museums; war dominates museum space in much of the public representation of history and will continue to do so.[3]

However, much of the discourse surrounding war in museums centres on either those museums that serve as national memorials o particular conflicts, such as the United Kingdom's Imperial War Museum, or those that exist on battlefields themselves – Winter's sites of memory and mourning.[4] Furthermore, much of this discourse relates to the presentation of "hot" wars. How then can a "cold" war be effectively presented, and how has it suffered historically? Jan-Werner Müller has commented on the undoubted discrepancy in the way museums present hot wars and the Cold War:

> One reason might simply be that unlike "hot wars", the Cold War does not lend itself to memorialisation and, at least in the West, to the tales of suffering and mourning which are familiar from the world wars. Moreover, since the Cold War often blurred the line between war and peace, it became very difficult to define the beginnings and endings of conflicts which are central to the emergence of topographical and temporal sites of memory.[5]

The British Cold War experience in West Germany is one of a space between peace and war. It is also an experience very much rooted in the skies, fields and cities of West Germany; it is tied to Hohne, Soltau, Rheindahlen, Hemlstedt, Brüggen or Gütersloh. It is a British experience that did not take place in Britain, as well as one that was unique to a time in the increasingly distant past. How therefore can objects, stories and memories relating to it be brought into discussions about the Cold War in museum spaces? What stories – and whose – fill museum spaces dedicated to the Cold War, and whose are missing? This chapter outlines and addresses these questions. It will identify the salient experiences of the BFG community and compare those with the presentation of the Cold War as a historical narrative in the sites of the Imperial War Museums, the National Army Museum and the Royal Air Force Museum as the main repositories of this heritage and memory. This comparative approach in how BFG experiences are presented, through analysing physical and digital displays and interpretation, and the types of objects and artefacts used to carry narrative, will highlight key aspects of the BFG experience and the frequent disconnect between these and current museological practice and convention. Making use of existing and new oral histories, it will demonstrate the validity of these experiences to Cold War narratives and identify ways in which new voices can be added, and silences addressed, in existing Cold War displays and collections.[6]

Identifying the Experience

If museum displays are to feature the experiences of those from BFG, it is important to fully understand what those are and try to identify salient points or commonalities that can be represented. BFG and its main parts, British Army of the Rhine (BAOR) and Royal Air Force (RAF) Germany, constituted the largest concentration of British armed forces permanently stationed outside the United Kingdom, a monumental effort in terms of resources, logistics and doctrinal thinking. But the experience of this period is not generic or monolith, it is characterised by numerous

factors. The time at which people served, the locations they served in, the roles they held, their ranks, their relationship status, their ethnicity, their gender, their social class – all these colour people's perceptions and memories of service in Germany.

However, it has been possible to identify dominant themes of the experience of the British Forces in Germany, and subsequently the objects and stories that best illustrate them. Unlike hot wars, where conflict and the experience of battle is the central feature around which military museum displays often coalesce, the central, unifying activity of the Cold War for British service personnel in Germany was one of watching, waiting and training. BAOR and RAF Germany (RAFG) were responsible for West Europe's defence alongside NATO allies. For four decades, they stared down the Soviet and Warsaw Pact forces the other side of the Inner German Border and across the Wall into East Berlin and acted as the deterrent against any potential Soviet aggression (Figure 9.1).

Despite a significant military presence that was maintained at 50,000 throughout the Cold War period, the British were significantly outnumbered and outgunned by the Group of Soviet Forces in Germany (GSFG). BFG were a fundamental part of NATO's conventional and nuclear defence of Western Europe as part of the Northern Army Group (NORTHAG) and Second Allied Tactical Air Force (2ATAF). They had a key role in maintaining deterrence through the demonstration of military commitment and capability, perfecting their art and using their professionalism to exert any

Figure 9.1 A training patrol of the 16th/5th The Queen's Royal Lancers visits the Inner German Border, 1979 © National Army Museum

possible advantage. This required a vigorous training regime. For BAOR, this went from small-unit training right up to Field Training Exercises involving anything up to the entire 1 British Corps tearing across North-West Germany simulating war. For RAFG, operational flying was a daily occurrence, but low-level exercises, or MINEVALs, would be used to prepare for the station-sponsored major exercise, a MAXEVAL, which in turn was used to prepare for the NATO-wide Tactical Evaluation Exercises (TACEVALs). These phrases, along with others such as "Active Edge," codewords that prompted rapid crash outs of military forces in West Germany, entered the unique and particular lexicon of BFG. They were more than just part of the language of BFG, they were part of the social fabric – and therefore far harder to render tangible in museum displays.

After the Soviet blockade of the Western Sectors of Berlin in 1948, military exercises became a major part of life in BFG, complete with increasing realism and scale – including simulating tactical nuclear weapons. Exercise LIONHEART, which took place between 3 September and 5 October 1984, was the biggest exercise held since the Second World War. After four years of planning and costing around £31 million – more than £100 million in today's money – 131,000 UK troops descended on the 1 (BR) Corps area to battle their way across it. It was an exercise that defined an entire era.

The careers of senior officers were made on the success or failures of these exercises, with their success having a major role in promotion prospects, which in a professional officer corps was a significant issue. Failure to deliver, or poor performance, could result in the dreaded "interview *without* coffee" with a senior officer, something appreciated by all concerned.[7]

Yet, such performance was not only confined to choreographed and configured exercises. It was expected daily. A famous sign outside the main gate of RAF Brüggen, placed there under the initiative of a station commander and kept on by their successors, told all who entered, "The task of this station in peace is to train for war. Don't you forget it." This was an important part of the setting the war mentality of Brüggen, A film was also shown to all new arrivals about the strike function of the base and the squadrons stationed there. The message was clear; they existed to deliver the nuclear capability should it be required.[8] One 1979 film, shown to all new arrivals, even referred to Brüggen, and all who served there, as the "Watchdogs."[9] This mindset and posture, created by training and exercises, were part of what General Sir Rupert Smith described as part of "the ritual dances of deterrence and garrison life."[10] Training was a constant aspect of service life in order to build self-confidence in people's abilities and equipment.

Intelligence on the enemy was also key. *Threat* recognition guides were produced and regularly updated to tell British soldiers what to expect from the Soviets, and what weaknesses their equipment had. The very name conveyed the severity and the purpose of the task. At the same time, handbooks were produced to help British soldiers recognise friendly and allied equipment when on training exercises, so that when the time came in the heat of battle they could distinguish between friend and foe.[11] That they were being prepared for active conflict was never in doubt.

Hanging over all of this was the nuclear element. But this was not the nuclear issue represented in the RAF Museum and IWM through the display of missiles and bombs such as Blue Steel, the WE.177 or the Honest John. It was more personal. For Jim Toms, the nuclear threat was a dominant memory of his service in BAOR:

> You were aware of the threat, you knew what they could do to you. The assessment was that we had about 30 minutes and we'd be dead. So you were hot as you could be on your NBC drills, you put your NBC kit on before you even got out of barracks. And it was very ill-advised that you took it off before the end of the exercise. You lived in the damned stuff, it was awful. Especially in summer.[12]

Personnel were issued with *Survive to Fight*, an 84-page guidebook that explained to them how to protect themselves from nuclear, biological or chemical (NBC) attack and continue to fight, from decontaminating their clothes to defaecating while still wearing their NBC protective suits. This featured a soldier in full NBC kit on the cover.[13] But there are far fewer displays of this personal equipment – the Mark IV charcoal-lined smock, trousers, over boots and gloves or the respirators – in comparison to nuclear bombs in displays of Britain's nuclear Cold War.

Even for those for whom the expectation of nuclear war was low, the reality of what it would mean was clear and undisputed. Lieutenant General John Kiszely recalled his feelings on the topic:

> I think there was also a feeling, knowing the strength of the Soviet Army, that one's chances of coming out of it unscathed were rather low. At that stage the nuclear deterrence theory was of a tripwire; at some stage the battle would go nuclear, but there wasn't a great deal of thought about how you in your NBC suit and gas mask and respirator would be surviving the event of nuclear weapons being thrown about the battlefield, and I think a feeling that, if this does happen, our job is to die gloriously… because if you dwelt too much on the realities of what might face you, you might not have the cohesion to stand and fight. And I think there was a huge determination certainly in our battalion, and I'm sure there was in others as well, that you were damn well going to stand and fight, and if that was the end of you and the battalion then so be it.[14]

War museums and conflict narratives have historically been told through a lens of triumph and tragedy, with museums leveraging their unique positions to share histories through objects as authentic witnesses to the past. Their collections are their unique points of difference to narratives shared through any other media. However, in the European context, the Cold War was not marked by direct confrontation. Instead, it was a confrontation of heightened emotions and tensions, and a conflict remembered and conveyed mostly through feelings and perceptions. Capturing these and translating them in an engaging way for audiences is a major

challenge in museum displays, particularly in a time and place of greater safety. This can be why it can be hard to find the experience of BFG personnel in military museums. There was no medal for serving in BAOR or RAFG. None of the usual paraphernalia of war or material culture that is used to illustrate military memory, heritage and experience of hot wars is available. While quotes such as Kiszely's above resonate with those with lived experience of BFG, for anyone else it is hard to conceive, which is a weakness of using oral history alone.

Given the absence of direct fighting in Western Europe, some scholars have posited that the Cold War was an "imaginary" conflict, an empty battlefield.[15] However, references to the Cold War as imaginary understate the significance of the time for those who were deployed in expectation of fighting it, and those who lived through it. Even if the training and testing of scenarios were imagined and were highly choreographed and coordinated, it was also still very real, logical preparation for when the real event occurred. Fighting the Cold War dominated the life of British personnel in West Germany. For the professional soldiers and aircrew, it was a question of *if*, not *when*, the balloon went up and the Cold War turned hot. It was the central tenet of their existence, the reason they served there. People died in training accidents; for example, three were killed and seven seriously injured on LIONHEART. There were multiple casualties in flying accidents in RAF Germany throughout the Cold War.[16] While the mortality rate was nothing like a war, people were still dying during military service in preparation for a greater conflict. This more than anything else meant that for the forces of BFG, the Cold War was very real indeed.

However, alongside the training for war, there were elements of the BFG experience that correspond with periods of peace. Unlike hot wars, a particularly relevant aspect of service in Germany was the recreational aspect of life. The ability to travel extensively through Europe was one benefit many personnel took advantage of, facilitated by tax free petrol from fuel stations within West Germany that was a direct legacy of the occupation period.[17] This particular, indeed unique aspect of life in Cold War Germany has been preserved in material culture. The fuel coupons used to pay for such petrol, and the accompanying BFG-issued fuel map denoting which stations accepted them, became standard kit for any vehicle. And these places became as important as the military installations, most famously the small town of Wankum on the border of northwest West Germany. Not only was this the last place to use fuel coupons in West Germany for those driving back to the United Kingdom, and therefore on every map, but its name was also greatly amusing to many military personnel (Figure 9.2).

In terms of the domesticity of the military camps, leaving camp became a matter of personal choice and confidence. The authorities tried to provide as much entertainment as possible. By 1958, for example, there were nearly 50 Globe cinemas operated by the Army Kinema Corporation across the garrisons. But those lacking the confidence, ability or opportunity to venture into the local towns – even just to visit the shops – were confined to the facilities that were provided for them. While the NAAFI provided a taste of home and rapidly expanded its range to include fashion and consumer items, it could still be limited as the only source of shopping.

Figure 9.2 A June 1979 fuel map demonstrating the location of petrol stations where BFG personnel could use fuel coupons. Author's collection

For some, the camp fence almost served to keep them in, rather than keep the Germans out. For those trapped on the garrisons, life could be repetitive, enclosed and isolating. No objects currently on display in UK museum environments, and few in reserve collections, can carry this physical or emotional narrative. This is where oral history becomes significant.

Boredom was a significant factor within BFG, both professionally and domestically.[18] The former was a strategic challenge that BFG attempted to overcome, which is why sport was a mandated part of professional life. There were extensive sporting facilities available to personnel in BFG, everything from football to polo, boxing to yachting at Kiel. Adventure training and skiing were also common and popular. Every year units would participate in Exercise SNOW QUEEN, a two week skiing course in Bavaria or Austria that took advantage of BFG's location in central Europe. While sport has always had an established military role, there was a dual purpose to this activity. Smith recalled that:

> There was a tendency to live in a bubble, to only shop in the NAAFI… There were people who found it difficult to break out of the bubble, to break in to German society as it was. The sports clubs were very important as a result, things like skiing, sailing, things that took people off under the adventure training rubric were very important.[19]

Sporting opportunities became crucial "antidotes to garrison life."[20] Sport remains an easier theme to translate into museum displays, though it requires oral-history interviews such as Smith's to point to the relevance of this in the BFG context.

A study of BFG also opens up narratives about the Cold War British military community that are too often neglected from military museums in the United Kingdom, namely military spouses and families. How did they respond to the tensions and terrors of the uncertainty of the Cold War? What about the children of service personnel? In 1946, the British Zone was designated as a home posting, meaning that a soldier could serve accompanied by their family. They are intrinsically part of the story of BFG. Incorporating these experiences as part of the narrative is revealing. They also served and endured the same benefits, challenges and dangers.

As early as 1949, BFG had put plans in place to evacuate the children and spouses from the battle zone should hostilities break out.[21] For decades, the threat of a Soviet invasion, and particularly the nuclear threat, hung over those families who accompanied service personnel to West Germany. But intriguingly, despite the Cold War confrontation dominating the working lives of British service personnel, there was another threat that most considered more pressing to them and their families. From the 1970s the Provisional Irish Republican Army (PIRA) also began targeting the British in Germany, through shootings, bombings and other attacks. Julia Payne, who lived in Rheindahlen from 1982 to 1984 and again from 1988 to 1990 as an Army wife, recalled how this very real threat overtook that of the Cold War, relegating it to the background: We were far more worried in Germany about the IRA threat. That was much more imminent and likely… Nuclear war is highly unlikely but very serious; an IRA bomb is less serous but much more likely."[22]

The way the British community responded to this threat in the wider Cold War context is significant. A lifestyle of constant vigilance was created. The attitude was also adopted as a necessity by those who did not wear uniform. David Ackroyd, for example, was a civilian and a teacher at Queen's School in Rheindahlen between 1979 and 1982. In an oral-history interview specifically collected to add these

experiences to the discourse, he recalled some of the threats that affected him as a civilian and his pupils, as well as the military community:

> You checked your cars underneath for bits of wire. You never left your windows open. If you even left a little crack open, the Royal Military Police would put a note in saying, "This is a bomb, please report for education"… The IRA were definitely a threat.[23]

The British community were issued with handheld mirrors to sweep under their cars to check for bombs. To better protect them, the distinctive British number plates on their cars were removed and replaced with German ones. This vigilance was well-founded; the IRA threat remained constant. In 1983, they bombed Joint Headquarters Rheindahlen, the epicentre of the British military in Cold War Germany. The violence was also indiscriminate. In October 1989, Nivruti Manesh Islania, a six-month-old baby, was murdered alongside her father, RAF Corporal Maheshkumar Islania, as they left a petrol station at Wildenrath in 1989.

This subject matter is intrinsically linked to the history of the military stationed in Germany but absent from traditional Cold War stories – instead compartmentalised into the history of the Troubles. Bringing these events together through the lens of the BFG experience creates, as Odd Arne Westad argues, "a much bigger canvas for studying the Cold War than we have hitherto had."[24] It is only by engaging in participatory practices that these narratives can be identified or linked. Taking these voices into proactive collecting allows museum collections to become broader and more reflective.[25]

(Cold) War and Peace: Finding and Exhibiting British Forces Germany in UK Museum Spaces

Where then can the experiences of British Forces in Germany during the Cold War be found in museum collections and displays? How are they presented?

While there has been extensive discourse about how the Cold War manifests itself in museum spaces,[26] the experiences of BFG have been mostly neglected. This is almost exclusively down to the nature of the Cold War in British memory. Rosanna Farbøl has drawn attention to how in many European countries the Cold War has existed somewhat in the shade of the global conflicts of the twentieth century in the academic sphere as it never became a "war" in the classical sense of armed conflict – at least in the European context.[27] This certainly extends to the Cold War in museum spaces and dictates how the narratives are conveyed to audiences for those institutions that are not dedicated exclusively to the period or occupy a physical space connected to it. Not everywhere can be "a prime locus of memory of the Cold War," as Berlin has been described for example.[28] While objects can be moved, and exhibitions built anywhere, such physical connections cannot be replicated.

Samuel Alberti and Holger Nehring have proposed that,

the nature of the Cold War in Europe and the North Atlantic seems to have made it difficult to tell stories of national victimhood, heroism and military valour, three key reference points that have structured war exhibitions in the UK.[29]

The translation of this different kind of conflict into museum collections is relevant; museum collections and exhibitions are built around objects and stories. Where there are no compelling stories to mark objects out from those "of the type," it is hard to build compelling narratives – particularly in competition with other objects from other conflicts. As such, museums have tended to focus on iconic objects to carry a singular Cold War narrative such as nuclear confrontation – the Vulcan bomber, for example, shoulders this burden at both RAF Museum sites in London and the Midlands and at IWM Duxford – and significantly is a major feature of associated commercial activity and merchandising. Indeed, at the RAF Museum's London site there is a fee-paying tour titled, "*The Vulcan and Cold War Experience*."[30] The Vulcan and other V Bombers were never stationed in West Germany, and as such the RAF Germany experience is excluded.

Another important point of contrast within existing discourse regarding war in museums can be found between conflicts that are "known" and "unknown" to audiences, through a proliferation into national consciousness via formal education. This creates a major challenge for museums when it comes to which conflicts they present and in what detail. Museum audiences are diverse, composed of different people with different levels of knowledge, different expectations, motivations and hoped-for outcomes of engaging with a museum exhibition. They do not all come with a complete knowledge of every conflict that a museum might be presenting. Some do not know anything, nor do they particularly want to know. There are knowledge gaps relating even to the major, global conflicts that are common on the school curriculum, such as the First and Second World Wars.

For example, in 2012, ahead of the centenary of the First World War, the organisation *British Future* found that one in three of the public could not name the year that the war started.[31] The British Council's report of 2014, *Remember The World As Well As The War*, showed that what knowledge there was of the conflict was largely limited to the fighting on the Western Front. In the United Kingdom, less than half of the 1,081 people questioned, for example, were aware that North America (38%) and the Middle East (34%) were involved in the war, and less than a quarter are aware that Africa (21%) and Asia (22%) had participated.[32] By the end of the centenary, the number of people that realised Indians had played a role in the First World War had risen to 7 in 10 – but this was as a result of millions of pounds of investment, at a pace that many thought might be counter-productive and lead to war centenary weariness amongst the British population.[33] That cannot be replicated across every conflict that military museums choose to mark – nor can they wait 100 years for public interest to peak.

This limits and restricts the freedom of manoeuvre for museum professionals when it comes to presenting and interpreting the Cold War in the United Kingdom, with needing to respond to public demand and build around public knowledge – or lack thereof. The only historic event that is compulsory on the UK school curriculum is the Holocaust. While the Cold War is taught on the national curriculum in the United Kingdom, it is inconsistent and not everyone is introduced to it. Even then, the majority of the focus tends to fall on the traditional narrative of two opposing ideologies locked in a struggle characterised by a nuclear arms race. Museum displays have been crafted to reflect that. That is the dominant framework of the National Cold War Exhibition, located in a dedicated hangar at the RAF Museum Midlands at Cosford, for example. In a display involving aircraft and other military hardware, relying on "the aura of fighter bombers and rockets as both technological wonders and awesome death machines,"[34] individuals are named only if they were world leaders, and therefore grand actors in the Cold War. In the physical display space, a grand – if problematic – narrative of the Cold War is presented, focussing predominately on Europe and (rather bizarrely, given the role of nuclear weapons elsewhere in displays) excluding Cuba, the Middle East and the Global South in its supporting digital content.[35]

The exhibition at RAFM Midlands is neither truly about the Cold War from a global perspective or the role of the RAF in the Cold War. Instead it attempts to blend both, to the satisfaction of neither. For example, RAF Germany, a major effort and focus of the RAF in the Cold War, is not mentioned as a separate command but for a brief entry on a digital AV that is easily missed by visitors. The stories of the individuals who served within the RAF in Germany, the United Kingdom and elsewhere, and their thoughts and perspectives, are completely absent. The contrast with recent RAFM exhibitions at both the London and Midlands sites, particularly the work approaching the 2018 centenary of the RAF, where the RAF's people were foregrounded, as well as in future plans for upcoming exhibitions, is striking.[36]

There are some displays to represent BFG in some of the regimental and corps museums across the United Kingdom, but historically the primary audience of such institutions were the serving personnel of the regiment or corps; the museums existed to communicate the values and standards and play a role in the establishment of *esprit de corps*.[37] Veterans and families were a secondary audience, and most were housed in regimental or corps depots or barracks – military facilities inside the wire that were inaccessible to the general public. However, while many regimental and corps museums have opened themselves to the public in recent decades, some with huge success, the presentation of BFG within them has, as expected, a parochial focus on their particular cap badge or corps identity.

IWM Duxford has some displays that resonate with BAOR in its Land Warfare Hall, but these are simply large weapons platforms such as armoured vehicles, divorced entirely of personal stories or even wider context. This is a common theme when it comes to BFG heritage in UK museum spaces. Objects can and frequently do transcend time periods or operations, particularly in the context of large objects connected to the Cold War. Aircraft and armoured vehicles were frequently

updated and enjoyed prolonged service lives beyond anything their counterparts in the First or Second World War had. In such cases, curators working with these objects must make a choice about which element of its history becomes the focus of the interpretative text for the audience. With demands on word counts and space, this active editorial choice made by curators will always result in certain elements of an objects story being obscured and excluded. Predominately, practitioners will choose those elements that it is thought will resonate most with audiences – often this means objects are interpreted for the public through the lens of "active" service as this translates a greater urgency or relevance.

Currently on display at the RAF Museum's London site, for example, is a Sepecat Jaguar GR.1, Accession Number L001–0009. The airframe served at RAF Brüggen throughout the Cold War in the key strike role – a detail that can be discovered online but is curiously absent from the onsite text.[38] Instead, the interpretative text alongside the object, written in 2018, refers to the aircraft's service on Operation GRANBY in 1991. The same occurs for the Panavia Tornado GR.1B[39] and the Hawker Siddeley Buccaneer S2B, both of whom have their Cold War service in West Germany omitted in favour of more "active" operations.[40]

This is understandable; curators must make a choice about which element of its history becomes the focus of the interpretative text for the audience. With demands on word counts and space, this active editorial choice made by curators will always result in certain elements of an objects story being obscured and excluded. It is a very literal example of picking one's battles. Yet it does raise questions about what is left out of museum spaces. There are certainly silences in what museums have chosen to collect, and voices that have been excluded by omission, where "material evidence is simply not present in the historical collection."[41] But the BFG representation, or lack thereof, in UK museums also demonstrates how technical equipment has often been used as a substitute for the deeper exploration of the personal experience. This is particularly true at IWM Duxford, where the entire BAOR experience has been delivered purely through vehicles in static displays.

But beyond the hardware, one major constituency of people that have been mostly excluded from the presentation of Britain's military effort in the Cold War are the West Germans. As neighbours, employees, friends, love interests and spouses – and sometimes adversaries – of the British garrisons, they had an important perspective on this peculiar aspect of the Cold War. Indeed, a Bundeswehr General used the phrase "foe to friend" to describe the relationship between the German people and the British military throughout the Cold War,[42] which became the subject of a 2020 National Army Museum exhibition. This incorporated German civilian testimony alongside that of the British.[43] It was a transformative relationship, the type that has not been otherwise explored in Cold War museum spaces in the United Kingdom. Historically, the representation and inclusion of the "enemy" has always been a challenge. Frederick Todd noted in 1948 that, "Most military museums showed simply the relics and equipments of the forces of their own people and let it go at that."[44] Where enemy equipment was included, it was divorced of experiential context and often presented in a triumphalist way. Cold War museum spaces have often sought to display the equipment of the Soviets

as "the other side," but where civilians have been included it has often been as a point of contest and protest against nuclear weapons or anti-war protests during the Vietnam War.[45] The more complicated relationship with a former occupied enemy now acting as neighbours, suppliers and allies – who became active targets for potential Soviet strikes due to the presence of military installations in their towns and villages – is a unique experience to the British in Germany.

A considerable amount of material relating to the BFG experience remains mostly hidden from the visiting public within museums stores, unexplored and underappreciated. Uncovering collections and stories that relate to BFG, of locating and collecting them, requires an extensive collections development programme, built around reviews of existing collections and creative use of collections management software, but also of active community engagement and co-creation, deliberately cultivating relationships and using the lived experience of those who lived in Germany at this time.

Through oral history, workshops, social media and direct consultation with veterans and the military itself, it is possible for museum curators to marry academic research with lived experience to identify the themes of any exhibition, and what the key objects are. Collaboration with outside groups is essential. Not only do they hold the knowledge, but they are also the custodians of some of these objects. For example, as part of the NAM's *Foe to Friend* exhibition, many objects were sourced directly from veterans after their importance was identified through co-creation. These included a personal under car search mirror, fuel coupons and a box of Herforder Pils, the famous "yellow handbag."[46] This process transforms objects within a museum collection into a resonant collection. They can act as a draw for visitors, both those with a direct connection who lived the experience and those without, looking for a different perspective on the Cold War.[47]

However, most objects will remain absent from public display. The sign from RAF Brüggen, for example, has been lost.[48] Paper ephemera that were not seen as being significant at the time – because they were not validated by a "real" war – have not survived. These present real frustrations and problems for museum professionals.

A huge amount of veteran and participant testimony has conveyed how the Cold War *felt* – the various emotions associated with service and life in Germany throughout the period. This is something that cannot be physically documented in museums, but by giving platform to the participant voice and utilising other interpretative techniques, it is possible to convey a sense and build empathy with audiences – which is the whole point of exhibitions.

Conclusion

Martin Medhurst described the Cold War as "a rhetorical war, a war fought with words, speeches, pamphlets, public information (or disinformation) campaigns, slogans, gestures, symbolic actions, and the like."[49] The experiences of those who served in BFG fit within this context and in the tradition of representation in UK military museums, though they have often been absent and excluded in favour of

hot wars. There have been logical reasons for this, but it continues to influence the lack of understanding or exhibiting of Britain's military commitment to the Cold War in Europe.

Since the First World War, war and military museums in the United Kingdom have "functioned as a means of bringing the faraway near"[50] – the faraway meaning geographical, chronological and emotional distance. Therefore, while the experiences of British Forces in Germany sits on the periphery – thematically if not geographically – of British military history, it fits perfectly within this tradition of representation within UK military and war museums. There is a value in locating, collecting and exhibiting these experiences in UK museums. British Forces in Germany were the steel behind Britain's Cold War rhetoric. They were prepared and willing to use the training and military hardware that would enable the war to be fought should it be required. Ultimately, these objects and stories that carry this narrative resonate with experience and that are capable of evoking a unique time and place for those who encounter them. They may be drawn from a grey area between war and peace, but they are no less significant for that. Indeed, these objects are not so different to those already presented in war and military museums. Even the weapons, while never fired in anger, are still valuable in providing a springboard into the wider discussion about soldiering in Germany, the history of the Cold War and the military community's lived experience. But rather than rely on these to inspire an unfamiliar and potentially uninterested audience, they simply need to be woven into the wider ephemera of the British forces' story and interpreted through a new lens. They need to be brought to life through the stories and words of those who were there – given a greater relevance not only because they are in a museum, but also because there is greater evidence why they have been collected.

The physical spaces occupied by BFG are steadily being repurposed across Germany. They are either being occupied by the German armed forces, the Bundeswehr or repurposed into industrial parks, schools, university centres, new residential developments or civic buildings. Some have been used to house refugees. Others have been demolished or remain abandoned and are being reclaimed by nature. They will not last and not be used to convey the story of what occurred there during the Cold War, as in other bunkers or military facilities in other European countries. What will remain are the associated objects and stories, if museums are able to collect and exhibit them.

Notes

1 National Army Museum catalogue record (hereafter NAM) 1993-11-06, "Message from Field Marshal Montgomery to 21st Army Group," 1945.
2 See for example David French, *Army, Empire, and the Cold War: The British Army and Military Policy, 1945–1971* (Oxford: Oxford University Press, 2012); Simon J. Moody, *Imagining Nuclear War in the British Army, 1945–1989* (Oxford: Oxford University Press, 2020).
3 Jay Winter, "Museums and the Representations of War," *Museum and Society* 10, no. 3 (2012): 150.

4 Jay Winter, *Sites of Memory, Sites of Mourning: The Great War in European Cultural History* (Cambridge: Cambridge University Press, 1995).

5 Jan-Werner Müller, "Introduction," in *Memory and Power in Post-War Europe: Studies in the Presence of the Past*, ed. Jan-Werner Müller (Cambridge: Cambridge University Press, 2002), 11.

6 For a different perspective on Cold War museology pertaining to the British Forces in Germany see Grace Huxford's chapter in this volume.

7 NAM 2018-04-5, oral history interview with Colonel Richard Spencer.

8 Nick Kurth, interview with author, 15 July 2022.

9 Imperial War Museums catalogue entry IWM MIL 445, *Watchdogs* (1979).

10 NAM 2018-11-3, oral history interview with General Sir Rupert Smith.

11 NAM 1994-09-116-4-4, *Threat Recognition Guide* (Bielefeld: BAOR, 1988).

12 NAM 2017-06-20, oral history interview with Jim Toms.

13 NAM 2005-04-25-5, *Survive to Fight* (London: HMSO, June 1983).

14 NAM 2018-11-5, oral history interview with Lieutenant General Sir John Kiszely.

15 See for example Matthew Grant and Benjamin Ziemann, eds., *Understanding the Imaginary War: Culture, Thought and Nuclear Conflict, 1945–90* (Manchester: Manchester University Press, 2016), 5–6; and on the museological implications see Samuel J. M. M. Alberti and Holger Nehring, "The Cold War in European Museums – Filling the 'Empty Battlefield'," *International Journal of Heritage Studies* 28, no. 2 (2022): 182.

16 For a full list of air accidents involving the RAF in West Germany, see James Halley, *Broken Wings – Post-War Royal Air Force Accidents* (Tunbridge Wells: Air Britain Historians, 1999), 98–241.

17 Peter Johnston, *British Forces Germany: The Lived Experience* (London: Profile, 2019), 94.

18 Grace Huxford, "'Deterrence Can Be Boring": Boredom, Gender, and Absence in Britain's Cold War Military'," *Critical Military Studies* (2022): 6. https://doi.org/10.1080/23337486.2022.2110697.

19 NAM 2018-11-3, oral history interview with General Sir Rupert Smith.

20 NAM 2018-11-3, oral history interview with General Sir Rupert Smith.

21 The National Archives A DEFE 5/18/447 "Evacuation of families from British zone of occupation," 19 December 1949.

22 NAM 2018-03-2, oral history interview with Julia Payne.

23 NAM 2019-01-9-1, oral history interview with David Ackroyd.

24 Odd Arne Westad, "Exploring Histories of the Cold War: A Pluralist Approach," in *Uncertain Empire: American History and the Idea of the Cold War*, eds. Joel Isaac and Duncan Bell (New York: Oxford University Press, 2012), 56.

25 See for example NAM 2018-12-16-1-1, personal under car search mirror, 1985.

26 Samuel J. M. M. Alberti and Holger Nehring, "The Cold War in European Museums – Filling the 'Empty Battlefield'," *International Journal of Heritage Studies* 28, no. 2 (2022): 182.

27 Rosanna Farbøl, "Commemorating a War That Never Came: The Cold War as Counterfactual Memory," in *The Twentieth Century in European Memory: Transcultural Mediation and Reception*, eds. Tea Sindbæk Andersen and Barbara Törnquist-Plewa (Leiden: Brill, 2017), 149.

28 Bernd von Kostka and Arno Helwig, eds., *100 Objects: Berlin During the Cold War* (Berlin: Berlin Story Verlag, 2016), 19.

29 Samuel J. M. M. Alberti and Holger Nehring, "The Cold War in European Museums – Filling the 'Empty Battlefield'," *International Journal of Heritage Studies* 28, no. 2 (2022): 193–94.

30 "Vulcan and Cold War Tour," Royal Air Force Museum, accessed 20 November 2022 https://www.rafmuseum.org.uk/london/whats-going-on/events/the-vulcan-and-cold-war-experience/ (author's emphasis).

31 Jo Tanner, ed., *Do Mention the War: Will 1914 Matter in 2014?* (British Future: London, 2013), 5.

32 Anne Bostanc and John Dubber, *Remember the World as Well as the War: Why the Global Reach of and Enduring Legacy of the First World War Still Matter Today* (British Council: London 2014), 16.

33 Lucy Buckerfield and Steve Ballinger, *The People's Centenary: Tracking Attitudes to the First World War Centenary* (British Future: London, 2019).

34 Samuel J. M. M. Alberti and Holger Nehring, "The Cold War in European Museums – Filling the 'Empty Battlefield'," *International Journal of Heritage Studies* 28, no. 2 (2022): 194.

35 "The National Cold War Exhibition: Which Countries Were Involved," Royal Air Force Museum, accessed 4 November 2022, https://www.nationalcoldwarexhibition.org/the-cold-war/countries/.

36 See: "RAF Stories: The First 100 Years 1918–2018," Royal Air Force Museum, accessed 28 November 2022, https://www.rafmuseum.org.uk/midlands/things-to-see-and-do/hangars/raf-stories-the-first-100-years; "RAF Centenary Programme – The First 100 Years of the RAF," Royal Air Force Museum, accessed 28 November 2022. https://www.rafmuseum.org.uk/about-us/media-vault/galleries/1–2/; and "We Secure Investment from the National Lottery Heritage Fund," Royal Air Force Museum, accessed 15 December 2022 https://www.rafmuseum.org.uk/midlands/whats-going-on/news/rafm-nlhf-for-midlands-development/.

37 John Malcolm Bulloch, "The Necessity for Regimental Museums," *Journal of the Society for Army Historical Research* 16, no. 62 (Summer 1937): 114.

38 "Jaguar: The Accidental Cold War Warrior," Royal Air Force Museum, accessed 4 November 2022 https://www.rafmuseum.org.uk/blog/jaguar-the-accidental-cold-war-warrior/.

39 "Panavia Tornado GR1B," Royal Air Force Museum, accessed 4 November 2022 https://collections.rafmuseum.org.uk/collection/object/object-165351/?return=%2Fcollection%2F%3Fq1%3Dsearch%26q2%3Dtornado.

40 "Hawker Siddeley Buccaneer S2B," Royal Air Force Museum, accessed 4 November 2022 https://collections.rafmuseum.org.uk/collection/object/object-18934/.

41 Rhiannon Mason and Joanne Sawyer, "Bringing Museal Silence into Focus: Eight Ways of Thinking About Silence in Museums," *International Journal of Heritage Studies* 25, no. 1 (2019): 6.

42 NAM 2020-03-5-1, oral history interview with General Carsten Jacobsen.

43 "Foe to Friend: The British Army in Germany since 1945," National Army Museum, accessed 18 December 2022, https://www.nam.ac.uk/whats-on/foe-friend-british-army-germany-1945.

44 Frederick P. Todd, "The Military Museum in Europe," *Military Affairs* 12, no. 1 (1948): 43.

45 The National Cold War Exhibition at the RAF Museum Midlands, for example, includes information online for schools on "Social Issues," including Greenham Common, Vietnam protests, Olympic boycotts and the Solidarity movement, but nothing on the people who lived around the airfields the RAF operated from, either in the UK or West Germany. "The National Cold War Exhibition: Social and Economic Issues," Royal Air Force Museum, accessed 10 December 2023, https://www.nationalcoldwarexhibition.org/schools-colleges/national-curriculum/social-economic-issues/.

46 NAM 2018-04-3-1, Herforder Pils box, 1995.

47 NAM Visitor Views – December 21, and NAM Visitor Views – June 2022.

48 The possibility exists of course that it can be found within a museum store in future either uncatalogued or miscatalogued, but extensive efforts by the author to find it have so far been unsuccessful.

49 Martin J. Medhurst, "Introduction," in *Cold War Rhetoric: Strategy, Metaphor and Ideology*, eds. Martin J. Medhurst, Robert L. Ivie, Philip Wander and Robert L. Scott (East Lansing, MI: Michigan State University Press, 1997), xiv.

50 Susanne Brandt, "The Memory Makers: Museums and Exhibitions of the First World War," *History and Memory* 6, no. 1 (1994): 99.

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10 There Can't Be Any Berlin Wall Left

Oral History, "Domestic Museums" and the Search for a British Cold War

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Much like its demise in November 1989, the Berlin Wall's post-Cold War history has captivated many.[1] Remnants of this iconic structure are displayed in museums across the world, pieces of one of the Cold War's most recognisable frontiers. But what about the curation of fragments of Berlin Wall – or assumed fragments – that are kept in people's homes? What stories do people tell about these objects and themselves in such "domestic museums"?[2] One such display was created by Tania, a Women's Royal Air Force (WRAF) telephonist, stationed in the Federal Republic of Germany, who recalled in an interview the day she visited Berlin in early 1990:

> We were walking past the Wall and people were knocking pieces out of the Wall. And there was this … I just remember him being a very hairy man …. and I took a photo and he came up "You want, you want some Wall?" And I went "Yeah I want some Wall!" And he gave me a big chunk which I broke into three. And I gave him a big kiss, I remember that![3]

The small piece of concrete being discussed had been carefully stored for the intervening 30 years in a wooden, glass-fronted box, which had itself been lined with postcard images of Checkpoint Charlie and the Brandenburg Gate. Like thousands of other British military personnel stationed in Germany during the Cold War, Tania had visited West Berlin regularly during the 1980s with her service friends, attracted by the city's recreational activities but also drawn to it as a flashpoint of the conflict. She remarked on the changes she saw by 1990, describing how "we went through to East Berlin, we just *walked through* Checkpoint Charlie. It was so weird." Her piece of Berlin Wall was a small but important manifestation of geopolitical change, but one part of an autobiographical narrative of youthful exploration and encounter too. Her story also pointed to the unique way of life of the British military in Germany had enjoyed since 1945. With the fall of the Wall, something widely celebrated by British observers, many in military communities nonetheless sensed that something apparently permanent was coming to an end.

By meaningfully engaging with such collections as part of Cold War heritage, this chapter suggests, we can reveal in far greater detail the complex, interwoven concerns – both national and international – that shaped Cold War experience and

continue to influence how it is remembered today. Moreover, reflecting on Tania's account in depth and other British recollections, this chapter uses the experiences of these former base residents to explore the significance of objects in narrating the Cold War, especially within oral history interviews. Against the background of an emerging "Cold War museology," I discuss not only how objects can shape the course of interviews, but also how they influenced the meanings ascribed to the Cold War itself.[4] Drawing parallels and connections with the end of empire, this chapter argues that Cold War histories have been routinely reconstructed in *domestic* settings after 1989, not simply in formal museums and academic scholarship. These "domestic museums" – a term explored extensively by Sarah Longair and Chris Jeppesen to understand postcolonial memories – and their curators have grappled just as much with the complexity, danger, boredom, bureaucracies and uncertainties of the Cold War as historians have done, often making it into something far safer, less violent and more comprehensible. In Britain's case, they have done so too against an often muted collective memory of Cold War: its most deadly conflicts are widely "forgotten" in Britain, eclipsed by the public remembrance of the World Wars or other concerns.[5] As a result, the case studies presented here suggest the tremendous difficulties British people have faced in finding a meaningful narrative of their nation's role in the Cold War.

In analysing these objects as well as the personal and collective discourses narrators have drawn upon to describe and curate them, I take a deliberately "pluralist" approach to the Cold War as a global, lived conflict. I argue too that interviews are a vital way of understanding not just Cold War heritage, but the period's subjectivities too.[6] This chapter is split between a conceptual and methodological discussion of objects, oral history and the Cold War, and a short series of examples demonstrating the potential of "domestic museums." It starts by explaining further the difficulty of establishing a meaningful British Cold War narrative, for historians, individuals and wider audiences. It then explores the specific – and considerable – significance of objects to oral history interviews. This chapter then begins to test these ideas through exploring the curation of Cold War objects in homes, including remnants of the Berlin Wall. It reveals not only how the Cold War was understood and explained by some of its participants, but also the meanings British audiences ascribed to the eventual Cold War's end in Germany. But I also highlight how, much like recent historiography on divided Germany, some narrators used objects to tell a different history of the Cold War, one that was not centred on Berlin or its famous wall. These "other Cold Wars" reflected Britain's more significant military presence elsewhere in Germany, as well as other related strands of British post-war history.

Finding Britain's Cold War

Britain's Cold War history has often eluded a clear narrative.[7] Whilst the conflict has long been a key element of post-1945 intelligence and military history, its relevance to British social history and collective memory have been understated, especially during the Cold War itself and in its the initial aftermath. More recently,

however, historians have highlighted British attitudes to nuclear technology, civil defence and culture, as well as offering in-depth analyses of how the Cold War was experienced and remembered in Britain.[8] Much like the wider discipline of Cold War history, definitional questions remain, particularly as Britain's Cold War era overlapped with significant domestic and international changes for the country; from industry, economics and changing social structures, to the end of empire and realigned relationships with the United States and Europe. Holger Nehring noted in 2012, "the meaning of the 'Cold War' as a concept lurks everywhere and can be applied to almost everything, from high politics to the history of everyday life," potentially causing historians to lose sight of its essentially "war-like character."[9] Anders Stephanson also pointed out the dangers of too readily applying a Cold War label to all post-1945 history, rather than centring on the fundamental political and military rivalry between the United States and the Soviet Union at its core.[10] The Cold War's geography proved to be as contentious as its temporality: Federico Romero argued that, for all the global ramifications of the conflict, it was "spawned in and about Europe, pivoted on the continent's destiny, and eventually solved where it had its deepest and most relevant roots."[11]

However, Romero conceded that even a Europe-centred approach must still engage with global perspectives on the conflict. Substantial research into the intertwined histories of empire, decolonisation and Cold War demonstrates this powerfully, underlining the manifold ways that the Cold War influenced (and was influenced by) global, national and local politics, social and political networks, and personal life stories.[12] As Odd Arne Westad highlights, these approaches, untethered by a focus on superpower politics, conceptualise the Cold War as "a complex and rapidly globalizing ideological confrontation, with lots of unintended consequences, misunderstandings and rapid role-changes."[13] Such research shows the limitations of seeing the Cold War purely as a binary conflict, but also the value of "subalternising" the conflict and seeing it through the eyes of its participants across the world.[14] This chapter, which forms part of a wider project on the British military in Germany, follows this "pluralist" line to the Cold War (albeit still focusing on military actors in the global north), and seeks to connect the history of these service communities to global historical trends far beyond the wire fences of the bases.[15]

Given these fierce definitional debates within Cold War history, it is not surprising that collective memories of Britain's Cold War have been similarly hard to pin down, shaping in turn how museums and their audiences engage with the conflict. The World Wars continue to dominate a range of British museums at local and national level, as well as collective remembrance practice. Since at least the 1980s, the "social history" (loosely defined) of war has become an important part of narrating those conflicts. But Samuel Alberti and Holger Nehring point out the limitations that representing the Cold War in Europe has faced in that regard, as it was "a war of matériel and the imagination of its use," especially nuclear weaponry, leading to a focus military or technological hardware.[16] Despite the small but steady interest in Cold War aesthetics in Britain in the last decade, Alberti and Nehring argue that we still lack a "critical analysis and conceptual framework" around which to display the Cold War, especially its lived dimensions.[17] Without a

widely recognisable cultural framework for remembering the Cold War, veterans from Britain's deployments after 1945 routinely describe themselves as "forgotten." There is therefore a dual need to develop a Cold War museology: practically, to make best use of existing collections still dominated by the conflict's military or technological traces; and from a public history perspective, to grasp the opportunities to engage various publics with this conflict.

One case study that has the potential to straddle both the military and social dimensions of Britain's Cold War contribution can be found beyond its shores. If fighting were to break out on the European continent, British forces in Germany – especially the British Army of the Rhine (BAOR) – would be Britain's frontline.[18] Although their numbers fluctuated slightly over time, there were seldom fewer than 50,000 BAOR service personnel in Germany throughout the Cold War era, plus thousands of their immediate family members and associated civilians living in British bases across the north-west region.[19] Germany became an accepted – even "boring" – part of Britain's Cold War experience, a presence that many in Britain were vaguely aware of, even if they could not pinpoint exactly why they were there.[20] It was here that the complexity of Britain's Cold War were particularly apparent too: the dynamics of Anglo-German and Anglo-European relations, military capability and preparedness, domestic and international tensions, and even changing ideas about gender, youth, nationality and class all shaped the unique social history of base communities.

Understanding Germany within these overlapping contexts was a central research question of two oral history projects, based at the University of Bristol, which aimed to listen to and record the narratives of a deliberately broad range of former base residents.[21] The projects included military personnel, but also their partners, children, civilians in a variety of support roles, as well as members of voluntary services, religious organisations and civilian companies who spent time in Germany. Aided by various gatekeeper organisations, the project interviewed women and men from across the period of the British military presence in Germany. Ours was certainly not the first project to include the voices and experiences of ordinary base residents in the history of the British military in Germany: rich museum exhibitions in both Britain and Germany have made particular use of oral history testimony to give personal perspectives on the British occupation years and beyond.[22] But the project was among the first to place this history within both a global and domestic historical framework and to highlight how the social experience of base life was shaped by far broader developments in British and international history.

Homes and domestic settings featured prominently in these interviews, not least because it was where most interviews took place. As Sarah Longair and Chris Jeppesen's research into former colonial officers' "domestic museums" shows, homes can reveal very powerfully the acts of memory-making that take place throughout an individual's life and how they narrate their personal lives and professional careers (as well as wider structures, such as colonialism).[23] Just as former colonial officials often retired to British seaside towns, bringing with them their memorabilia from overseas, so many former military personnel interviewed settled in the environs of

"military" towns or clustered in counties such as Wiltshire or Lincolnshire. Homes have a further significance for military families too, because during their military service homes were routinely changed and even observed – something epitomised by the dreaded "march out" inspections at the end of a tenancy which were recalled by many narrators. For this reason, despite the richness of the domestic setting itself, former residents' homes were not the subject of research, nor were they analysed without the knowledge of participants; all the objects discussed here were ones that were directly referenced in interviews themselves. Nor should the analysis of these objects imply a condescension towards objects curated in domestic spaces: such division falsely places "formal" museums at the top of an epistemological hierarchy. Many of these objects will never make their way into museums and this chapter therefore makes the case for analysing these collections *in situ* as part of a wider Cold War heritage, including all the complex emotional, personal and social functions such objects play in a home settings, especially for highly mobile communities such as military families.

Narrating Objects

Objects used or preserved in domestic spaces have important histories to tell: as Longair and Jeppesen note, the stories crafted around artefacts brought "home" reveal the complex "processes of remembering" that surround Britain's past. Although views and stories differed, many of their narrators used objects to situate their personal history within the wider colonial world: quotidian objects, Longair and Jeppesen argue, support Ann Laura Stoler's argument that "colonialism produced both its colonizers and its colonized in the banal and humble intimacies of the everyday."[24] Some objects were carefully displayed and curated, others hidden in drawers, but many were also still in constant daily use.

Such a domestic focus is an important departure from existing literatures on museum collections and colonialism, which so often focus on the dynamics of extraction by institutions or else the imposition of colonial epistemologies and curatorial practices. But collection and curation on a domestic and personal level offer not only a glimpse of how individual lives are shaped by complex global, geopolitical forces (such as colonialism, or the Cold War), but also such practices are so widespread that they merit serious analysis when considering the material heritage of an era or the politics of object collection. Such domestic curation can be highly varied too: items might range from furniture or an entire dinner service obtained overseas to a collection of documents, photographs, postcards or a clock on the wall. Homes can be sites of intense collecting activity or even become "micromuseums" in a more formal sense: these spaces allow for both family memory and object storage in a way that larger institutions sometimes have little choice but to de-prioritise.[25]

Reorientating our focus onto the domestic and the individual is not without problems. The logistical issues of identifying and accessing privately-held material are significant: with object interviews, access is largely contingent on and secondary to the interview itself.[26] There are conceptual difficulties too: analysing

micro- or everyday histories through objects certainly allows historians and curators to shine a light on the experiences of those involved – even seemingly indirectly – in much wider power structures, from colonialism to military occupation. But such a focus on the individual raises issues of complicity too. Just as Longair and Jeppesen's study potentially highlights the discomfort individuals might feel about their part in the wider colonial system (or expectation that they *should* feel discomfort), so too scholars of "militarisation" argue that military communities – however removed from the actual mechanisms of fighting – are still part of a wider system of violence.[27] In Cold War history too, the recent move to focus on the "everyday" creation of borders and how ordinary people sustained these boundaries can be highly controversial, implying potentially that they – rather than those in power – were culpable of the violence, heartache and disruption of political division.[28] Objects can therefore raise difficult questions.

Neither is oral history necessarily a balm: capturing the memories of "ordinary" people – once part of oral history's radical origins and now sometimes used perfunctorily to provide a quick "social history" dimension – does not smooth over difficult histories. Far from it, oral histories can give voice to experiences that public narratives have excluded or long since forgotten: they can provide space for ambiguous, contradictory, unfashionable, prejudicial or deeply personal reflections. As this chapter argues, they also show the complexity of finding meaningful narratives, especially for a conflict like the Cold War and also the influence of contemporary political and social affairs on memory-making.[29]

Objects can have a special significance within such oral history interviews. They can evoke highly sensory memories, or even have a sensory history of their own: Paula Hamilton highlights how touch can be vital in remembering particular people ("the smoothness of a father's pipe or the texture of a mother's taffeta dress") but that senses can also be a helpful component in narratives themselves or even acted out in interviews.[30] Object biographies can also be narrated in interviews and, as Linda Sandino argues, oral history interviews can be used to understand the wider social and economic world in which objects are created, or the embodied histories of creating particular objects.[31] They can tell much longer histories too: for service personnel, the practice of souvenir-gathering or sending material "back home" are longstanding, but the way objects are curated and described afterwards is equally significant.[32] Oral histories, Paul R. Mullins argues, help to reveal the long, liminal histories of objects – they are not always front and centre in people's lives, but caught up in stories about how they were acquired, used, ignored: these "things" are persistently and "distinctively ambiguous."[33] Janis Wilton summarises the different ways that oral historians have used objects to understand broader histories:

> Objects are used as the touchstone of interviews about the values passed across generations; the emotive and memorial power of specific objects is uncovered and dissected; the impact of sharing memories about loved objects is explored; the symbolic potency of specific objects in marking significant moments in individual migration experiences is documented; the meaning of abandoned or lost objects is considered; and the value of an object as

the reflection of the actions that people have performed with that object is explored.[34]

Yet whilst Wilton acknowledges that interviews might well exhibit an interviewee's sense of self, socioeconomic status or other historically significant detail, they can also limit oral history interviews too. Object-focused interviews can lead oral history narrators (and historians) off-course, or "create blinkers and barriers that stop the listening and hearing of other signs and stories."[35] Wilton suggests an open approach, where historians create space for objects to feature in oral history interviews, but not to make them the sole focus, and this was the method adopted by our projects. Objects were discussed at length on recordings and they provided welcome prompts, but interviews were principally framed around the narrator's life-course, not the objects (however meaningful) they gathered along the way. A balance therefore continually had to be struck between including objects in oral history interviews and allowing for more longer-term narratives. But one object became of particular significance to many British residents in Germany: the Berlin Wall.

British Berlin Walls

The Berlin Wall is frequently seen as the quintessential Cold War border, both in historical research and in wider popular culture. By the early 1960s, West Berlin, supported by the three democratic allied powers, had become "an island of capitalism and democracy" in the communist German Democratic Republic (GDR) and many thousands of East Germans headed there, either temporarily or permanently.[36] From August 1961, the GDR sought to stop this "exodus" by constructing a barrier between East and West Berlin, first with barbed wire and later with concrete, eventually reinforcing the boundary still further and developing it into a highly militarised border with layers of fortification and security apparatus. The British press watched the Wall's construction and the heightened tensions that followed with dismay and Berlin became the epitome of the Cold War struggle, certainly to the outside world.[37]

The Wall also became one of many tourist hotspots for foreign visitors, including the western militaries stationed in Europe. A well-developed infrastructure of border tourism had already developed along parts of the "iron curtain" as early as the 1950s, the inner border becoming a popular destination for military personnel (on and off-duty), foreign visitors and young people.[38] Tania described military tourism when visiting West Berlin in the 1980s with other WRAF colleagues, juxtaposing the "very strange" atmosphere around the Wall and the fun that service personnel often had elsewhere in the city:

> As part of our military trip we were allowed to go right up the actual Wall on Brandenburg Gate, whereas as a civilian you weren't. … There was Checkpoint Charlie Museum – we looked all round those places, we went to lots of places like that. But then we also went to the Bierkellers and had lots of beer;

we had lots of food; we met a couple of guys and we went out with them for a couple of nights. And it was a really good. And then obviously we came back on the military train. It was an experience! [39]

The military train was a definitive Cold War experience for British visitors, taking passengers daily from West Germany to West Berlin throughout the period – an experience made memorable for many by the fine dining enjoyed along the way, the menu card a commonly preserved item in domestic collections.[40] But Tania also referenced an important Cold War museological site: the Checkpoint Charlie Museum. This opened not long after the construction of the Wall itself, offering a distinctive history of divided Berlin: as Anna Saunders notes, the Checkpoint Charlie area became "one of the busiest tourist locations in Berlin" providing visitors with "an easily digestible piece of history," though not without controversy.[41] Its meaning, topographical significance and financial and leadership structure changed over time, especially after the Cold War, as did its relation to broader *Mauer* tourism.[42]

The eventual "fall" of the Berlin Wall provided another clear, comprehensible moment in British interpretations of the Cold War. With the opening of the border from East to West Berlin late on the night of 9 November 1989, many remarked how the world had changed overnight.[43] For British residents looking to explain the significance and meaning of the Cold War, the fall of the Berlin Wall and the days that followed provided a clear justification for their presence in Germany, citing the freedom that the East Germans were now enjoying. It was in this context that pieces of the Berlin Wall became souvenir items. The British press referred to "wallpeckers" chipping away at the iconic structure, something Viv, a British teacher in Berlin, also described in detail:

And then the other thing was the noise of Berlin, which was metal on stone, as everyone was tapping stone to get a bit of the Wall. And, if you'd stopped, folk would say, "Have you got a hammer?" and so they could take a bit more off. And I mean it was obviously all going to come down eventually, but this noise and the smell and the excitement and the folk coming through and going "Oh!" – and then how it just gradually developed from there.[44]

The fall of the Berlin Wall – and the structure itself – was a symbol of hope and "excitement" for many British observers, even as they contemplated the likely end of their own military community.

Authenticity rapidly became important for the curation (personal and professional) of the Berlin Wall. In describing her remnant, Tania alluded to this process:

GH: And it's [the remnant] got the paint on it, hasn't it?
T: Yeah, absolutely genuine. Because if you go into Berlin – even now they're selling stuff, there's no way … there can't be any Wall *left*. It's genuine – that's my absolute piece, genuine piece of Berlin Wall.[45]

The authenticity of various fragments of the Berlin Wall became a source of debate, with the quality of concrete and the location of graffiti analysed and discussed by journalists, sellers and buyers.[46] Various certificates of authentication still often accompany pieces for sale across Berlin and globally; Berlin tourists sites sell pieces to tourists and around the world the public can even sponsor remnants in museum collections.[47] In discussing her piece in this way, Tania reflected on how the Berlin Wall's remains had been debated since its fall.

However, as with the history of other objects such as religious relics, discussions *about* authenticity, rather than authenticity itself, are perhaps just as significant for understanding wider sentiments at a particular historical moment. As Patrick Major argued, the wall "became a metaphor for the end of an era"; for Tania, and for museums and collectors in Britain and across the world, it signified a positive turning point in world affairs, and the wall's pieces were signs that one had lived through those momentous years.[48] In an Imperial War Museum interview in 2003, David Nicholas (later ITN Chief Executive) described how he was a sub-editor in 1989 and what his own piece of wall symbolised to him now:

> I've got a chunk of Everest and I've got a chunk of the Berlin Wall mounted in my study at home. That of course was in a sense the symbolic end of the Cold War. And I class that as one of the big epoch-making stories, it was the visible end of a century of a political system called Marxism….Of course the whole world changed after that, in some form or another. [49]

Much like the piece of Everest, the Berlin Wall signified a triumph of some kind. In these British recollections, such remnants present a curiously bloodless history of the Cold War too, one largely about the victory of ideas rather than the violence of political division.[50]

But narrators were aware that this emphasis on the Berlin Wall and a particular definition of the Cold War were not necessarily the only way they could remember their involvement in the conflict. Tania noted the recent rise in popular interest in the Cold War and how this might have affected her own story:

> There was always that threat of the nuclear side of it. I don't know whether I really took as much of that into account as perhaps I would now. Because I watched that *Deutschland '83*, and I have to confess I watched it and I thought "God, was it as bad as that?" … I just remember getting drunk in the NAAFI![51]

Boredom and waiting, often in vain, for something to happen were equally as part of the Cold War experience in western Europe as the Berlin Wall, certainly for the militaries and communities stationed there.[52] Yet these dimensions of the Cold War defy representation, certainly in museum collections where weaponry, intelligence and diplomacy leave more lasting traces. By looking at domestic collections – and crucially the stories told about them – we can begin to see the more everyday elements of Cold War experience and, in Britain's case, the myriad other histories that shaped the Cold War for its participants.

Other Cold Wars

Recent histories of divided Germany point out that, for all its dramatic appeal, Berlin is not necessarily the most representative location through which to understand the Cold War.[53] Several narrators noted how they "never made it to Berlin" or else argued that it was a touristic location, where people went to observe the Cold War at its riskiest frontier.[54] In these interpretations, Berlin was not synonymous with the far more everyday elements of Cold War soldiering and military life. Narrators used their oral history interviews and objects to tell other stories of their time in Germany. Indeed, these objects painted a very different picture of the Cold War itself, and one far more entangled with British domestic and international histories.

The first and perhaps most commonly articulated alternate framework was that of post-war occupation. In such narratives, the Cold War was as much about "keeping an eye" on the German population as it was preparing for war with the Soviet Union. Bob, conscripted into the army in the final days of the Second World War and posted to Goslar in north-west Germany in the immediate post-war period, used a portrait to illustrate the wider situation:

> You weren't quite sure how to behave as the conquering heroes, or whatever we thought we might have been at that time. The war was over, we had won the war, for what it's worth …. My feelings were quite clear: I was a member of the occupation forces, and showing the flag as I did, and also of course behaving correctly– in the way that I thought, well, how occupying people behave. I mean they, they were terribly badly off the Germans to worry too much. They had a problem of course even with currency. I mean, you know you could get things done, [for] a few cigarettes and things like that. It was a rather strange experience for a young man. I've got a portrait upstairs of myself painted, as I was, for a few cigarettes.[55]

The large, modern-style portrait of a serious-looking young soldier in uniform had remained a "souvenir" from those immediate post-war days of "flying the flag" for Bob, a contrast to his later experiences as a frontline soldier in the Korean War (1950–1953).[56] In contrast to Korea, his role in Germany seemed to him to be much more about watching over the local population lest it return to its totalitarian past.

Another Korean War veteran, Peter, had also lived in Germany immediately after the Second World War, but as a child of non-commissioned officer. He too stressed the privations of the local population and his father's work overseeing a former Wehrmacht regiment stationed in a barracks near Nienburg. Throughout the early part of the interview (and to the mild concern of the interviewer, thinking of the recording's sound quality), Peter repeatedly ran a chain through his fingers and passed something from hand to hand. When asked about the house he lived in and its proximity to the barracks, Peter recalled one Christmas when his father introduced him to the Germans he was overseeing: "And the commanding officer, a former colonel, of course—come here [*beckons to the interviewer*]—gave me

a Christmas present."[57] That present was a silver pocket-watch, still working and engraved with the Wehrmacht insignia. The object had been carefully looked after and used throughout his adult life and Peter again used it in his interview to discuss the tensions – and surprises – of the early occupation. On the one hand, "the reason we were there was to make sure there was no resurgence of Nazism," but on the other hand, Peter also said how he "had not expected the Germans to be *people*," still less people who would give him gifts. Like others in the immediate post-war period, Peter became interested in the idea of "reconciliation" and this object, with all its complicated history and imagery, represented that rapprochement.[58]

This emphasis on post-war occupation owed much to the age and experiences of the narrators, but the Second World War – rather than the Cold War – was still repeatedly used by British narrators to explore aspects of their experience in Germany much later in the period too. Senior army officer Ken recalled looking for a Meissenware ceramic factory in Dresden in 1990, and a local woman telling him, "It's gone, you bombed it!" Ken then amusedly pointed to a nearby cabinet saying: "She lied, because there was one up the road, and we were able to buy a tiny [piece]—it's all we could afford, a tiny little piece."[59] Historians have shown the myriad ways in which the Second World War continued to shape British cultural life and identity throughout the second half of the twentieth century, affecting British communities in Germany too. Although potentially to a lesser extent than in the United Kingdom itself, the depiction of Germans as a former enemy still to be treated with caution persisted, merging with longstanding British assumptions about Germany and offering a different framework through which to understand British Cold War history.

Another alternative to the Berlin-centred narratives was one that extended the "frontline" or danger zone beyond that city. After all, Berlin would not be the only area under extreme threat from a potential Soviet attack: in 1966, one BAOR report suggested that in two days of intense warfare, about 90 nuclear weapons (with yields of up to 8MT) would explode in the Rear Combat Zone, an area between the Teutoberg Forest and the Dutch and Belgian borders.[60] Airfields would be particularly targeted, something that some air personnel felt keenly. One material example of this concern was the graffitied wedding invitation of Lynn and Paul, two RAF officers. Their invitation pictured a bride and groom (and accompanying cupid) wearing full gas masks, sketched with a black biro pen.[61] They explained the image by recalling how a major "Taceval" exercise could have been called around the time of their wedding in the 1970s:

> And when we decided to get married in the mess there was the joke that they would call it on the day of the wedding. Because you never knew when it was going to come, so it was a gamble. So I have got pieces of wedding paper where people drew the ga[s masks]… because it was a slight sort of concern that we might have to don the stuff and run for it in wedding outfits.[62]

Lynn and Paul were referring to the NBC (nuclear, biological, chemical) suits worn for many hours during training by personnel and which would be worn in

the case of nuclear attack, an object itself now held in many military museums.[63] The history of the Cold War told using this wedding invitation was not that of jubilant celebration or vindication represented by the fall of the Berlin Wall; this was a sinister, violent and incomprehensible conflict with an unknown ending. It was about waiting, watching and living with danger. Of course, not all interviewees felt that they lived with such a prospect and others felt other dangers more keenly, such as the IRA activity targeting military bases from the late-1970s. But objects and their narration can tell us something more about the lived elements of Britain's Cold War and help to uncover alternate histories of conflict and its social impact.

Conclusion

Britain's Cold War history can be told in a variety of ways through objects and voices: from the former military child, handling a Nazi-era pocket-watch, describing Britain as a post-war occupying force whose job was to suppress totalitarianism at all costs; the National Serviceman and Korean War veteran whose uniformed portrait, painted by a local German artist, adorned his living room wall for 70 years; the wedding invitation graffitied with drawings of apocalyptic "hazmat" suits; and, of course, the ubiquitous pieces of Berlin Wall, all described as "genuine." British observers in Germany offered different conceptualisations of the Cold War, showing how historians are far from alone in grappling with the definition and meaning of the conflict. The Cold War's participants have used objects and material culture to try to ground their own memories and involvement in the conflict. As this case study has shown, that memory-work quickly bursts the boundaries of British military bases in Germany and reveals a far broader, more interconnected history: of European integration and Anglo-German relations; of the Second World War and the place of conflict in national culture and memory. It also shows how observers of one nation constructed a particular narrative about another and the meanings foreign observers invested in images and objects representing a united Germany. This globalised appeal of the Berlin Wall suggests too the importance of objects in marking significant moments of Cold War history and the need to develop a Cold War museology that takes them seriously, developing an interpretative framework for audiences, museums and historians alike. This chapter has made the case for people's own objects, curated in their own homes, to be included in such a museology.

Acknowledgements

Notes

1 Hope Harrison, *After the Berlin Wall: Memory and the Making of the New Germany, 1989 to the Present* (Cambridge and New York: Cambridge University Press, 2019); Jonathan Bach, "The Berlin Wall after the Berlin Wall: Site into Sight," *Memory Studies* 9, no. 1 (2016): 48–62; Anna Kaminsky, *Where in the World Is the Berlin Wall?* (Berlin: Berlin Story Verlag, 2014); Patrick Major, *Behind the Berlin Wall: East Germany and the Frontiers of Power* (Oxford: Oxford University Press, 2010); Katharina Gerstenberger and Jana Evans Braziel, eds., *After the Berlin Wall: Germany and Beyond* (New York: Palgrave Macmillan, 2011).

2 The phrase "domestic museums" was developed by Sarah Longair and Chris Jeppesen, "Domestic Museums of Decolonisation? Objects, Colonial Officials and the Afterlives of Empire in Britain," in *Decolonising Europe?: Popular Responses to the End of Empire*, eds. Berny Sèbe and Matthew G. Stanard (Abingdon: Routledge, 2021), 220–37.

3 Interview with Tania B. with Grace Huxford, 31 May 2019, BAOR/GH/39, University of Bristol Research Data Storage Facility (UoB RDSF). This dataset is closed to public access due to identifiable personal information but available on formal research request.

4 Samuel J. M. M. Alberti and Holger Nehring, "The Cold War in European Museums – Filling the Empty Battlefield," *International Journal of Heritage Studies* 28, no. 2 (2022): 180–99.

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11 Looking Out from Point Alpha

Entangled Histories in a Cold War Borderland

Adam R. Seipp

A hiker trekking south along the *Grünes Band*, the 1,400 kilometre network of trails that follow what was once the boundary between the Federal Republic of Germany (FRG) and the German Democratic Republic (GDR), will see the white observation tower first. The rolling landscape of the Rhön is deceptive and the slope is steep. Maybe the hiker needs to pause at a rough-cut timber bench. He takes in a scene of summertime Central European rural splendour, now able to see the remains of a low wall, behind which sits another guard tower. Once, there were armed men in these towers, keeping watch on each other across the most dangerous place along a dangerous border. This is Point Alpha.

Point Alpha sits right in the middle of Germany. For 40 years, this was an international border. The states of Hessen and Thuringia meet here, with the border of Bavaria a few miles to the south. The two closest towns are Rasdorf in Hessen and Geisa in Thuringia. There are few larger towns here, notably Fulda and Bad Hersfeld in Hessen, but Point Alpha is far from any population centres. The hills define the terrain, between the uplands of the Knüllgebirge to the north and the Rhön and Spessart to the south, with the Vogelsberg and the Kinzig River between them. In the 1980s, this spot was the subject of global interest as the "Fulda Gap." Today, it is the middle of nowhere.

In recent years, there have been efforts to revitalise tourism and preserve the memory of those increasingly remote events. The result has been a museum facility called the *Gedenkstätte Point Alpha* (Point Alpha Memorial). In 2009, the memorial estimated that they received about 100,000 visitors each year, about twice the number that visit the Border Museum (*Grenzmuseum*) in nearby Schifflersgrund.[1] The museum and education centre attempt to commemorate several distinct but related components of Cold War history: the vast American military presence in the Federal Republic of Germany, the experience of German division after 1945, and the lived reality of locals who experienced life in the shadow of physical division and the threat of nuclear catastrophe.

This chapter uses the example of Point Alpha to argue that museums dedicated to the experience of the Cold War in Europe should embrace a sense of *entangledness*.[2] The Cold War on the continent cannot productively be understood simply as the agglomeration of discrete national experiences, but rather as a field of relationships, transfers and engagements across the post-war decades. As much of

the literature on the subject already stresses, participants experienced the Cold War on a variety of levels simultaneously: the international, regional, national, local and even the most private spaces. A history of entanglement (*Verflechtungsgeschichte* or *histoire croisée*) seeks to understand the contingent nature of the wider Cold War and the critical, but sometimes indirect, process of negotiation, cooperation and conflict between the Cold War superpowers, their allies in the German capitals and a network of towns and cities across divided Central Europe.[3]

The Point Alpha facility attempts to tell a *doubly entangled* story. First is the presentation of the American military presence in the region, which admirably and comprehensively details the multi-layered interactions between soldiers and civilians, Germans and Americans over nearly a half-century. At the same time, the museum wants to tell the story of the two Germanys after 1949 as something other than a simple narrative of division and estrangement.[4] This is a massive conceptual challenge, one that Point Alpha does not fully meet.

Entanglement provides an opportunity to positively embrace the complexities of the Cold War in a public-facing way. An entangled museological presentation of Cold War history could offer what Anna Cento Bull and her colleagues describe as a "agonistic space," one that embraces the ambivalences and divisiveness of the post-war period while providing educational opportunities and local economic regeneration.[5] Second, an entangled presentation could meaningfully highlight the multiple layers of encounter that took place in border spaces: here the meeting of West German, East German and American societies along a wide continuum of encounter and engagement.[6] Finally, this could be space in which to ask questions about the responsibilities of German, European, American and transatlantic citizenship in ways that do not privilege one narrative over others.[7]

At the heart of the Point Alpha facility is a tension that reflects the ambiguous nature of the Cold War itself. At least in the centre of Europe, it was a war that did not happen. Visitors to Point Alpha will see all of the accoutrements of a "war museum": tanks, infantry weapons, wire and a reinforced watch tower. Scholars who have written about war museums acknowledge their centrality in process through which the public learns about war, while lamenting that the focus on technology sanitises and perhaps even glorifies human conflict.[8] The collection of military artefacts reminds visitors of a disaster that did not actually befall Central Europe, while also stressing that contemporaries did not know this at the time. As I will discuss below, one particular object in the museum, a game that caused its own controversy in Germany during the 1980s, reminds us of the multi-layered imaginary space of Cold War memory.

At the same time, Point Alpha also commemorates the real violence and dislocation of Germany's Cold War division. Andrew Whitmarsh has written about the shifting and blurred boundaries between museums and memorial sites.[9] Point Alpha intends to be both; telling the stories of the military confrontation and the civilian experience. However, the museum's designers intended to tell those stories as two physically and thematically connected but distinct narratives.

Remarkably, the American presence is often overlooked in conventional surveys of German history.[10] Their absence is all the more glaring at the most important

national museums of German history, particularly the German History Museum in Berlin and the *Haus der Geschichte der Bundesrepublik Deutschland* (House of History) in Bonn. While attention is paid to the politics of the NATO alliance and to the impact of American troops on popular, consumer and youth culture, there is little engagement with importance of American or other NATO forces on daily life. Labour, for example, is almost completely absent despite the fact that, at any given time, almost 100,000 Germans worked for the US Army.[11] Smaller local and regional history museums have done a better job with this, particularly communities with large garrisons like Hanau and Bremen.[12] This is perhaps unsurprising, since these garrison communities were the sites of the most intensive and intimate engagement across the Cold War decades. Such communities often experienced significant economic dislocation after the drawdown of the 1990s and lived alongside buildings vacated by departing troops. Many of these exhibitions and their accompanying publications exhibited a strong element of nostalgia for days recently gone by.

As others have noted, the Cold War poses a challenge for museums. In Europe, Cold War museums are war museums commemorating a war that did not happen – at least not in the way that many feared.[13] The fact that we know the outcome has led scholars and members of the public to marginalise the military aspects of the conflict. The result has been a sanitising of the Cold War, such that it now stands for a prolonged period of global tension that framed politics, culture and economic life in the shadow of superpower rivalry. This ignores the violent nature of the conflict in places like Southeast Asia, South America, or sub-Saharan Africa, while relegating the extraordinary militarisation of large swaths of western and central Europe to an afterthought.[14]

Likewise, the division of Germany poses substantial difficulties for museums. One of the major problems is both banal and serious. Much of the line that divided the two Germanys runs through rural, remote parts of the country. There are good historical reasons for this, having much to do with the political geography of nineteenth- and early twentieth-century Central Europe. The old border has a few post-1989 museums, some of which were built atop attractions that tried to draw visitors to these communities during the Cold War.[15] The Border Museum in Schifflersgrund, north of Point Alpha and also along with the Hessen-Thuringen border, is a good example.[16]

The division of Berlin is the easiest place to manifest the experience of division for visitors.[17] In an urban setting, the markers of division are clear and many are in easy walking proximity to each other. However, the specific history of Berlin was actually quite different from the rest of the intra-German border since the famous wall did not come into existence until 1961. By that time, the border was already a well-established fact in places like Rasdorf.

The Point Alpha facility offers a very particular view of the history of the Federal Republic, distinctly centre-right in orientation and one that valorises the "West." This is a triumphal narrative, embedded in which are the horrors and lessons of Nazism, the failed promise of the GDR and redemption through a reunited Federal Republic.[18] The "success story" of the Federal Republic requires that we

overlook many of the less salubrious elements of that country's post-1945 history, including economic inequality, xenophobia and the persistence of racism, and the question of security.

At Point Alpha, the last of these is particularly important. How does a museum like this tell a story about the unquestionable accomplishments of the Federal Republic while also emphasising the central role of the massive foreign military presence that underpinned the security of the country during the Cold War? How can we tell the story of German division, reunification and transformation without falling into a teleological trap that privileges western voices while silencing or marginalising the experiences of those on the eastern side of the inner German border?[19] Or, for that matter, how do we capture the worldviews of those who dissented from the Cold War consensus and pushed back against the militarisation of German space during the years of division? Can they be taken seriously at a site that clearly presents the military as a defender of freedom and a contributor to the triumph of western liberal democracy?

The remainder of this chapter will provide an overview of the history of Point Alpha and the Fulda Gap during the Cold War. I will then describe the existing museum facility, with a particular focus on a single item that appears in the permanent collection. Finally, I will assess the lessons that historians and museum professionals can take from the ways that that Point Alpha represents Cold War history (Figure 11.1).

Figure 11.1 Point Alpha, looking East, 2021. Haus auf der Grenze at right. Author photo

The Fulda Gap

The museological context of the Fulda Gap is inseparable from its history as an imagined battlefield. Scholars of "battlefield tourism" have wrestled with the problem of how to responsibly represent the horrors of war without sanitising armed conflict or promoting "dark" tourist experiences.[20] The Fulda Gap was, for several decades, one of the most militarised places on the planet. The fearsome military hardware perhaps contributed to deterrence, but fortunately never saw action in combat. At the same time, the region experienced terrible social dislocation and the decades-long partition of what had been a coherent and economically integrated rural landscape. In order to understand why there is a museum complex at Point Alpha, we have to first reckon with the region's Cold War history and context.

The Fulda Gap is a feature of political rather than physical geography. The relatively flat land between the mountain ranges provides ideal conditions for launching an armoured assault into the pre-1990 boundaries of the Federal Republic. It was one of several "gaps" identified by NATO planners in the 1950s, with others at Weiden, Coburg and Hof.[21] Most Germans were unaware of the term until the late 1970s, when it entered public consciousness because of the events of the Cold War. Germans even disagreed about how best to render the word "gap," and alternated between *Bresche*, *Senke*, or *Lücke*. In the end, most simply used the English term "Fulda Gap."

For almost the entirety of the Cold War, the region around the Fulda Gap fell under the responsibility of the US 5th Army Corps. Across the border stood the Soviet 8th Guards Army. Beginning with a simple border observation camp and a wooden tower, successive American units patrolled the area regularly. There were never many soldiers at Point Alpha. Larger formations, intended to blunt a Warsaw Pact offensive, were based farther to the West.

Shortly thereafter, the Fulda Gap transformed from a widely ignored backwater of the Cold War to a place of international prominence. Beginning in the late 1970s, NATO planners began to fear a Soviet armoured offensive in the region, resulting in a massive growth in military hardware and installations throughout.[22] The Fulda Gap became a metonym for this new vision of armoured warfare, over which loomed the terrible threat of short and intermediate range nuclear weapons.

At the same time, the West German Peace Movement (*Friedensbewegung*) focused considerable attention on Osthessen. A coalition of local groups distributed literature across the country, including detailed maps and guidebooks (see above) encouraging concerned citizens to visit and see the militarisation of the region for themselves. These "alternative border tours" (*alternative Grenzlandfahrten*) mirrored the decades-old practice of Germans coming to visit the border to look across into the GDR.[23] This attention highlighted several important facets of the region: its remoteness. Even dedicated activists had trouble organising transportation to and from the area.

The climax of organising efforts came in Fall 1984, when local and national groups attempted to organise a mass protest against NATO manoeuvres in the Fulda Gap. The *Aktionsherbst* was an effort to revitalise the movement after the

failure to stop the deployment of new Pershing II and Cruise missiles the previous year. By any measure, the protests were a depressing failure for the Peace Movement. They had less than a third of the planned crowds, who faced disorganisation, large distances between sites, an unclear mission, internal dissention and a population that alternated between hostile and indifferent.[24] Legendary activist and Green Party leader Petra Kelly spoke briefly in Rasdorf, the closest village to Point Alpha. Locals greeted her by flying a banner in the town square that read "Ami Go Not Home."[25]

Point Alpha became irrelevant very suddenly in 1989. The road between Geisa and Rasdorf re-opened shortly after the dramatic events of early November. On 31 March 1990, American troops concluded the final patrol along the international border. Within a few years, the American bases of the Fulda Gap closed. Without a border, there was no longer a gap. Osthessen reverted to what it had once been – a quiet, hilly, rural region at the centre of Germany.

Like all bases in the Federal Republic that housed NATO forces under international agreement, Point Alpha reverted to the Federal Asset Office (*Bundesvermögensamt*). For several years, it sat abandoned as the federal government tried to find uses for thousands of hectares of property through a process of *Konversion* or *Umwandlung*.[26] There was a good deal of local interest in preserving the property, which temporarily housed asylum seekers in the early 1990s. In 1997, the state government of Hessen recognised Point Alpha as a historic site (*Denkmal*). Two years later, the government of Hessen turned rightward with the election of Roland Koch (CDU) as Minister-President. Koch supported the Point Alpha project.[27] With support from the governments of Thuringia and Hessen, the memorial opened in 2000.

Today, the site is managed under the oversight of the Point Alpha Stiftung, a foundation endowed since 2008 by the two state governments along with several regional and town bodies. The Foundation's current and past leadership represents the politics of the surrounding region and includes members of both the Protestant and Catholic religious communities.[28] The politics of leadership clearly informs the museum site itself, which, as we will see, reflects a conservative understanding of the history of the Cold War and the experiences of German division.

The Site

The memorial sits a few kilometres from the Hessian village of Rasdorf down a narrow country road. The Point Alpha facility is divided into three primary areas, connected by a trail.[29] The specific geography is important because it establishes the themes of the site. The interaction, or lack of which, between the three sets the specific parameters of the memorial.

The largest component of the site is the "US Camp". This is the heart of the Point Alpha complex and the footprint of the American base over more than 30 years. When a visitor enters the camp from the parking lot, it appears to be a traditional military museum. On display, outside are a variety of military vehicles associated with successive stages of the American presence at the site. This array

of hardware, ranging from jeeps to main battle tanks, is a familiar site at military museums anywhere.[30] Here, they are displayed approximately in their context, although the heavier equipment was probably not deployed this close to the border at what had been a simple patrol site.

The most prominent structure in the camp is the observation tower, which affords a good view out across the valley towards Geisa in Thuringia, and past the GDR guard tower directly on the other side of the border. There are two low-slung buildings on the site, buildings A and B, that serve as the central museum in the camp. Building A focuses on life at Point Alpha, while Building B explores the context of the Cold War, the American military presence in the Federal Republic, and German-American relations at the local level.

Much of the US Camp is familiar for those who visit military museums. There are the usual reconstructed offices and duty stations, complete with uniforms and bric-a-brac typical of an American installation. There are helpful maps that highlight the military situation in the Fulda Gap and which show the war plans of the rival alliance blocs. As the museum takes pains to point out, the defenders of Point Alpha would have had very little warning in the event of a Warsaw Pact offensive. The post would have been overrun swiftly and the small garrison either killed or taken prisoner.

The second building, with its focus on everyday life, is far from traditional. It offers an exceptionally nuanced picture of the daily life of highly militarised border communities during the decades after the end of the Second World War, and may be the most thorough and even-handed depiction of Cold War-era frontline life I have ever encountered. In contrast to other museum displays in the country that focus on life in proximity to the Americans, these displays offer a range of artefacts, eyewitness perspectives and experiences.

There are, of course, displays dedicated to effect of American personnel on consumer culture, sports, food (particularly chocolate and chewing gum) and participation in holidays like Christmas and Carnival. At the same time, there are frank discussions of the problems of crime, violence, the deterioration of American facilities during the late 1960s and early 1970s, and the daily annoyances of living in proximity to military units. Depictions of the anti-militarisation movement in the 1980s are balanced and even sympathetic. The discussion of racial discrimination, by both Americans and Germans, could be more prominent but is laudable for its thoroughness.

The US Camp is certainly not an unqualified celebration of the American presence. However, it offers a depiction of the US military that is predominantly positive in orientation. The halls are lined with photos of contemporary American soldiers in uniform and there are American flags prominently displayed throughout the facility. Visitors would not be faulted for believing that they were in an American museum.

The facility has even incorporated and domesticated the name of the unit that patrolled this piece of territory. The dining facility at the museum is the Black Horse Inn. When I visited, the restaurant was closed because of the COVID-19 pandemic. According to the website, it has still not fully re-opened. This perspective changes

dramatically when visitors leave the US Camp to explore the rest of Point Alpha. Visitors walk south along the *Weg der Hoffnung* (Way of Hope), which measures 1,400 metres to mirror the 1,400 kilometres of the old intra-German border. The message here is not subtle. The path marks the "death strip" along the border. It is quite clear which side of the boundary was the morally superior one. "This border did not just divide Germany, but also split Europe and the world – it was the border between freedom and servitude."[31]

To drive the point home, there are 14 iron and steel statues along the path that symbolise moments of "resistance to Communist tyranny." The installations were created by the Fulda-based sculptor Ulrich Barnickel, born in East German Weimar in 1955. Barnickel came to the West in 1985 and clearly identifies as a product of divided Germany.[32] The statues themselves are unambiguously Christian in orientation, with figures crucified, adoring the cross, or bearing a cross while enduring beatings. The museum's interpretive language emphasises this.

> With its 14 stations, the Way of Hope connects with the Christian Way of the Cross. It encourages the viewer to remember their own destiny in difficult times and to relate it to the sculptures. Only these individual observations complete the total work of art, the Way of Hope.[33]

The final major component of the museum is the *Haus auf der Grenze* – House on the Border (awkwardly called by both names). This facility is the only part of the complex that was purpose-built for commemoration. The striking blue-roofed building was completed in 2003, with support from the two state governments. The museum describes it bluntly as "in and of itself a piece of the German-German success story."[34] This is a bold claim, one that gets to the multi-valent nature of the whole museum enterprise. Just a few hundred yards from a detailed description of the militarised border and the division of Germany, the Haus auf der Grenze is a monument to a decidedly west-oriented version of the post-1989 period. The effect on visitors – or on this visitor at least – is disorienting.

The Haus auf der Grenze presents the story of the Cold War division of Germany from a distinctly local perspective. It focuses on the experiences of families living on both sides of the border in the Rhön, both in eastern Hessen and western Thuringia. Using artefacts and family papers, the museum movingly depicts the experience of dispossession, with a particular focus on the GDR side of the border. There are excellent exhibits on the daily life of GDR border forces from the Florian Geyer Regiment who manned the border posts opposite the Americans of the Black Horse. The section called *Freiheiten* (Freedoms) moves away from the Rhön to tell the broader story of East Germans took to the streets in 1989 for "very personal, individual, and social freedoms."[35] This is an inner German history, but one told from a western orientation. It the story of a transition from dictatorship to democracy.

The end point of the Haus auf der Grenze, and the intended terminus of the visitor experience, is a large exhibit dedicated to the natural world of the Rhön. The exhibit places particular emphasis on the commonly understood narrative that the

Cold War division of Germany created a "Green Band" where nature could flourish for four decades. The museum describes a transition "from death strip to life line."[36] The exhibit emphasises the region's designation as a UNESCO Biosphere Reserve, which it achieved in 1991.[37] The visitor thus exits the museum complex with a positive impression of the region, ironically based on the very experience of division and militarisation.

The Game

In a glass case in the middle of one of the rooms in the US Camp exhibit sits an item that offers a window into the possibilities and limits of an entangled approach to the Cold War history. The item is a board game, titled *Fulda Gap: The First Battle of the Next War*. It was produced by the American game manufacturer Simulations Publishing, Inc. in 1977, and its subsequent history tells us much about transatlantic attitudes towards the Cold War in that conflict's last decade.[38] The fact that the exhibit designers at Point Alpha included the game is interesting, but just as compelling is what they chose to exclude.

The game, published in English for an American audience, initially made little to no impression in Germany. However, as public attention in the Federal Republic increasingly focused on the Fulda Gap, the game began to play a prominent role in the rhetoric of the Peace Movement. Activists were particularly keen to emphasise that the designers of the game assumed that the warring sides would use nuclear and chemical weapons, bringing terribly destruction to the very real towns and cities on the game board.[39]

Visitors on "alternative border tours" and consumers of documentary films, radio programs and newspapers came to see the game as evidence of the callous, thoughtless way that Americans treated German space and German lives. The journalist Paul Kohl wrote a book about the Fulda Gap in 1984. He travelled to the region with a copy of the game and encouraged locals to play it and imagine what

Figure 11.2 Fulda Gap board game exhibit. US Camp, Point Alpha. Summer 2021. Author photo

would happen to their communities if war broke out. "What happens to the population of this country (*Land*) – not a word about it in the rules. One of the many points where the game and reality are identical. You can forget about the population. They have been forgotten."[40]

The game was widely known in the Peace Movement, a recognisable symbol of the growing transatlantic divide on defence issues. A copy of the game is in the permanent collection of the *Haus der Geschichte* in Bonn, where the item description mentions that it treats the Federal Republic as a "playing field" for competing powers.[41] At Point Alpha, however, much of this contested history is missing. The label does not mention the role of the game in the Peace Movement, or any of the controversy of its design. Instead, the label makes an anodyne reference to the "possible reaction to a Soviet armoured offensive in the Fulda Area. The players may use conventional as well as nuclear and chemical weapons."

The Fulda Gap board game offers a fascinating glimpse into the nature of Cold War memory and the challenges of representing it in a museum context. This small but deeply contested object represents a transatlantic act of multi-layered imagination. Its players engaged in an imaginary version of a war that we know today did not come. German contemporaries viewed that act of imaginative play as a monstrous lack of sensitivity on the part of Americans who engaged in such play. If the purpose of board war games is, as one scholar has recently argued, to put players "into the minds of people from the past," then the Fulda Gap game at Point Alpha provides an opportunity for narrating multiple pasts.[42] Contemporary visitors, if properly guided by the exhibition, can imaginatively reconstruct the experience of past players imaginatively reconstructing the experience of Cold War armoured warfare.

The Future

The future of Point Alpha remains uncertain. There has been considerable upheaval in the Foundation's leadership over the past few years and real questions about its direction. Part of the problem appears to be political, particularly since the two states that support the site have very different orientations. In 2018, the Culture Minister of Thuringia, Babette Winter from the centre-left SPD, criticised the museum for putting ideology before content and for the outsized influence of Christian Democrats on the foundation's boards. Winter suggested that it needed to be re-conceptualised according to "professional standards."[43] The result was a re-shuffle of directors, several resignations and an intemperate exchange between local politicians.

In addition, museum leaders face the challenge that the Cold War is receding from public memory, even in the region. The area is now three decades removed from its time as a dangerous flashpoint. A generation has grown up in a profoundly different geopolitical environment. Parents and teachers now have to remind students of this connection. In 2015, a group of students at an academic high school (*Gymnasium*) in Bad Neustadt staged an exhibition they organised called "70 Years After Hiroshima – the World in the Shadow of the Bomb," which helped

the students connect their lives and their hometown with the increasingly distant past. A school administrator called the project "a powerful argument against the forgetting of history."[44]

This chapter has attempted to use Point Alpha as a means of examining important tensions in the depiction of Europe's Cold War in museums. The relative inaccessibility of the site contrasts with the centrality of Germany's Cold War dividing line during the decades after 1945. Likewise, the displays of military hardware juxtapose with the fact that these lethal tools never actually had to carry out their intended purpose. The German and American stories are presented both together (in displays about local relations between soldiers and civilians) and apart (separate buildings dedicated to militarisation and division). Finally, the prominent display of a controversial board game emphasises the critical role played by imagination and anxiety in shaping European and transatlantic responses to the Cold War.

Point Alpha wants to tell the story of a region that was for several decades a Cold War borderland. While it is one quite specific memorial site, it also points to the interpretive challenges that face anyone attempting to tell such a vast and complex story in a comprehensive way. The shortcomings, and successes, of Point Alpha point to the possibilities of a Cold War story that embraces both the fissures and the entanglements of that period as it recedes into the past.

Notes

1 Sumi Somakanda, "Cold War Tourism at Fulda Gap," *Agence France Press*, 13 June 2009, https://theworld.org/stories/2009-06-13/cold-war-tourism-fulda-gap; "Fast 49.000 Besucher im Grenzmuseum Schifflersgrund," *Thüringer Allgemeine*, 11 January 2015.
2 Tim Winter, "Heritage Diplomacy: Entangled Materialities of International Relations," *Future Anterior: Journal of Historic Preservation, History, Theory, and Criticism* 13, no. 1 (2016): 17–34.
3 Heinz-Gerhard Haupt and Jürgen Kocka, "Comparative History: Methods, Aims, Problems," in *Comparison and History: Europe in Cross-National Perspective*, eds. Deborah Cohen and Maureen O'Conner (New York: Routledge, 2004), 33.
4 For an excellent summary of this literature, including Christoph Klessmann's call for a history of *Verflechtung und Abgrenzung*, see Thomas Lindenberger, "Everyday History: New Approaches to the History of the Post-War Germanies," in *The Divided Past: Rewriting Post-War German History*, ed. Christoph Klessmann (Oxford: Berg, 2001).
5 Anna Cento Bull, Hans Lauge Hansen, Wulf Kansteiner and Nina Parish, "War Museums as Agonistic Spaces: Possibilities, Opportunities and Constraints," *International Journal of Heritage Studies* 25, no. 6 (2019): 611–25.
6 David Neufeld, "Commemorating the Cold War in Canada: Considering the Dew Line," *The Public Historian* 20, no. 1 (1998): 9–19.
7 Anna Muller and Daniel Logemann, "War, Dialogue, and Overcoming the Past: The Second World War Museum in Gdańsk, Poland," *The Public Historian* 39, no. 3 (2017): 85–95.
8 James Scott, "Objects and the Representation of War in Military Museums," *Museum and Society* 14, no. 3 (2015): 489–93.
9 Andrew Whitmarsh, "'We Will Remember Them': Memory and Commemoration in War Museums," *Journal of Conservation and Museum Studies* 7 (2001): 11–15.
10 Three excellent examples of this are Eckart Conze, *Die Suche nach Sicherheit* (Munich: Siedler, 2009); Ulrich Herbert, *Geschichte Deutschlands im 20. Jahrhundert*

(Munich: C.H. Beck, 2014); Edgar Wolfrum, *Die geglückte Demokratie: Geschichte der Bundesrepublik Deutschland von ihren Anfängen bis zur Gegenwart* (Stuttgart: Klett-Cotta, 2006).

11 Adam R. Seipp, "'We Have to Pay the Price': German Workers and the Us Army, 1945–1989," *War in History* 26, no. 4 (2019): 563–84.

12 See, for example, the exhibit "Amerikaner in Hessen - eine Besondere Beziehung im Wandel der Zeit," which ran from 2008 to 2009 at the Historisches Museum Hanau. https://www.deutsche-digitale-bibliothek.de/item/WKXAECA7AIFY5M6OSGR2D6 OLZQFVFO5U.

13 Samuel J. M. M. Alberti and Holger Nehring, "The Cold War in European Museums – Filling the 'Empty Battlefield'," *International Journal of Heritage Studies* 28, no. 2 (2022): 182.

14 Paul Thomas Chamberlin, *The Cold War's Killing Fields: Rethinking the Long Peace* (New York: Harper Collins, 2018).

15 For an excellent discussion of one such effort, see Jason Johnson's work on Mödlareuth. Jason Johnson, *Divided Village: The Cold War in the German Borderlands* (New York: Routledge, 2017), 206–7.

16 https://hlz.hessen.de/angebote/erinnerungskultur/fahrten-zu-gedenkstaetten/gren-zgedenkstaetten-1/schifflersgrund. accessed 17 January 2023.

17 Jennifer Cohoon McStotts, "The Second Fall of the Berlin Wall: Examining the Hilde-brandt Memorial at Checkpoint Charlie," *Future Anterior: Journal of Historic Preser-vation, History, Theory, and Criticism* 3, no. 1 (2006): 36–47. On Berlin, see also the chapter by Jim Gledhill.

18 Konrad Jarausch, "Beyond the National Narrative: Implications of Reunification for Recent German History," *Historical Social Research* supplement no. 24 (2012): 339.

19 Frank Biess and Astrid M. Eckert, "Why Do We Need New Narratives for the History of the Federal Republic?," *Central European History* 52 (2019): 18.

20 Miguel-Ángel García-Madurga and Ana-Julia Grilló-Méndez. "Battlefield Tourism: Exploring the Successful Marriage of History and Unforgettable Experiences: A Sys-tematic Review," *Tourism and Hospitality* 4, no. 2 (2023): 307–20.

21 One of the earliest references to the concept that I have found is Drew Middleton, "The Seventh Army," *Combat Forces Journal* 3 (1952): 12–17.

22 A much fuller discussion of these developments can be found in Robert Citino, *Blitz-krieg to Desert Storm: The Evolution of Operational Warfare* (Lawrence: University Press of Kansas, 2004); Benjamin M. Jensen, *Forging the Sword: Doctrinal Change in the Us Army* (Stanford: Stanford University Press, 2016).

23 Astrid M. Eckert, *West Germany and the Iron Curtain: Environment, Economy, and Cul-ture in the Borderlands* (New York: Oxford University Press, 2019); Susanne Schregel, *Der Atomkrieg vor der Wohnungstür. Eine Politikgeschichte der neuen Friedensbewe-gung in der Bundesrepublik 1970–1985* (Frankfurt: Campus Verlag, 2010). See also the documentary film Rene Giefer, Thomas Giefer and Peter Krahulec, "Zielgelände - Notizen aus dem Fuldatal," (CON VOI Film, 1984), esp. 16:00.

24 Adam R. Seipp, "Running over Trees in Germany: Social Movements and the US Army, 1975–85," in *Rethinking Social Movements after '68: Selves and Solidarities in West Germany and Beyond*, eds. Belinda Davis, Friederike Brühöfener and Stephen Milder (New York: Berghahn, 2022), 133–52.

25 Hans-Helmut Kohl, "Beim Point Alpha begegnen sich die Blöcke," *Frankfurter Rund-schau*, October 1 1984.

26 Keith B. Cunningham and Andreas Klemmer, *Restructuring the US Military Bases in Germany: Scope, Impacts, and Opportunities* (Bonn: Bonn International Center for Conversion, 1995).

27 Account taken from Mira Keune and Volker Bausch, *Point Alpha – Vom heißen Ort im Kalten Krieg zum Lernort der Geschichte* (Geisa: Point Alpha Stiftung, 2013), 57–62.

28 There is also a Scientific Committee (*Wissenschaftlicher Beirat*), which includes a number of eminent and non-political German and American historians.

29 The descriptions below are mine, taken from a visit in July 2021. I have referred to the museum's website for some of the text below. See https://www.pointalpha.com/gedenkstaette, accessed 14 January 2023.

30 James Scott, "Objects and the Representation of War in Military Museums," *Museum and Society* 14, no. 3 (2015): 489–93.

31 *Diese Grenze trennte nicht nur Deutschland, sondern teilte auch Europa und die Welt – es war die Grenze zwischen Freiheit und Unfreiheit.*

32 More about Barnickel, and images from this project, can be found at https://www.ulrich-barnickel.de/europaprojekt.html, accessed 24 January 2023.

33 *Der Weg der Hoffnung knüpft mit seinen 14 Stationen an den christlichen Kreuzweg an. Er regt den Betrachter an, sich des eigenen Schicksalsweges in schwieriger Zeit zu erinnern und diesen in Bezug zu den Skulpturen zu setzen. Erst diese individuellen Betrachtungen vervollständigen das Gesamtkunstwerk Weg der Hoffnung.*

34 *Das Haus auf der Grenze ist in sich bereits ein Stück deutsch-deutsche Erfolgsgeschichte.*

35 *Für "Freiheiten" – für ganz persönliche, individuelle und gesellschaftliche – sind die Menschen in der DDR 1989 auf die Straße gegangen.*

36 "*vom Todesstreifen zur Lebenslinie*"

37 https://www.biosphaerenreservat-rhoen.de, accessed 1 January 2023.

38 Most recently, Adam R. Seipp, "Fulda Gap: A Board Game, West German Society, and a Battle That Never Happened," *War and Society* 41, no. 3 (2022): 201–19; Florian Greiner and Maren Röger, "Den Kalten Krieg spielen: Brett- und Computerspiele in der Systemkonfrontation," *Zeithistorische Forschung* 16, no. 1 (2019): 46–73; Peter Hughes Jachimiak, "'Tanks, Terrain and Black Horses': The Intra-German Border, Mitteldeutschland and Third World War Cultural Texts," *European Journal of Cultural Studies* 14, no. 3 (2011): 339–54; Helmut R. Hammerich, "The Fulda Gap: A Flashpoint of the Cold War Between Myth and Reality," in *Fulda Gap: Battlefield of the Cold War Alliances*, eds. Dieter Krüger and Volker Bausch (Lanham: Rowman and Littlefield, 2017), 1–38.

39 Adam R. Seipp, "Fulda Gap: A Board Game, West German Society, and a Battle That Never Happened," *War and Society* 41, no. 3 (2022): 212.

40 Paul Kohl, *Fulda Gap: eine Reportage über die Militarisierung in Deutschland* (Göttingen: Edition Herodot, 1984), 50.

41 Adam R. Seipp, "Fulda Gap: A Board Game, West German Society, and a Battle That Never Happened," *War and Society* 41, no. 3 (2022): 217.

42 Solomon K. Smith, "Pounding Dice into Musket Balls: Using Wargames to Teach the American Revolution," *The History Teacher* 46, no. 4 (2013): 564; Judkin Browning, "Of Water Balloons and History: Using Wargames as Active Learning Tools to Teach the Historical Process," *The History Teacher* 42, no. 3 (2009): 297–313.

43 Pitt von Bebenberg, "Zoff um Point Alpha," *Frankfurter Rundschau*, 16 July 2018.

44 Sarah Zubel, "Die Welt im Schatten der Bombe," *Main Post*, 29 June 2015.

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Part 3

Values and Representations

12 Cold War Time

Contemporary Military Heritage in Sweden

Cecilia Åse, Mattias Frihammar, Fredrik Krohn Andersson and Maria Wendt

As a nonaligned country committed to armed neutrality, Sweden was heavily militarised during the Cold War. Mandatory male conscription was enacted, and military expenditure was higher per capita than in most NATO countries.[1] Following the collapse of the Soviet Union and the end of the Cold War, Sweden dismantled its defence capability, making large quantities of military equipment and buildings redundant. Various actors soon made efforts to preserve the material traces of the Cold War. Military vehicles, weapons and other paraphernalia found their way into state-sponsored museum collections. Special-interest groups drew attention to Cold War sites, such as bunkers, as significant cultural heritage sites.[2] Additionally, former military landscapes were turned into commercialised adventure parks, recreation areas or exclusive holiday residences. In other words, a new national heritage sector saw the light of day. Even if the heritagisations appear diverse and disperse, the Swedish state had strong agency, articulated primarily through the official report *Defence in Detention* (*Försvar i förvar*), which became a structuring matrix in the organisation of Cold War memory.[3]

In Sweden, the Cold War period is commonly associated with national pride. Recurring narratives describe the period in terms of the successful preparation for a 'war that never came'. Conscription signalled fulfilled political obligations, and the extensive armed forces were (at least hypothetically) capable of protecting the country. Descriptions highlight impressive engineering and technical skills developed alongside welfare state institutions. The welfare state promised citizens social and economic security throughout the life course, while the military forces and a domestic weapons industry guaranteed security in a threatening world order.[4] These positive values make Cold War heritage a potent identity resource, in clear contrast with the country's complicated World War II legacy tainted by insufficient aid to neighbours and lack of opposition against Nazi Germany.

This chapter discusses the ways in which time is experienced, understood and represented in the context of the recent heritagisation of Sweden's Cold War military history. The formation of a cultural heritage involves a delineation of time. At what point in time does the preserved historical period begin, and when does it end? The structuring of temporal elements – such as periodisations, starting points and end points and the interlinking or decoupling of events – condition both what stories of the past can be told and how communities and power relations

are formed.[5] We conceive of such structuring of time in terms of temporality. The analysis focuses on how the use of different temporalities in Cold War heritagisation constructs social identities and the implications for national security. How do temporal elements condition what stories can be told about who "we" are and what keeps "us" safe? Our aim is to show how different ways of temporalising lead to the privileging of certain versions of the (national) past and the formation of specific social and gender identities as well as understandings of national security.

In Sweden's national historiography, the division between the First World War, the interwar period, the Second World War and the Cold War appears more blurred than in countries that actively participated in these wars. The lack of a straightforward chronology of "obvious" key events and turning points – in terms of, for example, specific battles – also makes the period particularly open to *different* types of temporalities, or, in the words of Hayden White, modes of emplotment, and therefore interesting to analyse in terms of manufacturing temporalities within military heritagisation.[6] How can the collective memories of a period characterised by planning for military action (rather than action), waiting and even passivity be articulated within a national historical narrative worthy of preservation?

There is a significant amount of international research on Cold War heritage and its representation in museums.[7] Research relating to the Swedish context is, on the one hand, rarer, and on the other hand, the research that does exist focuses on accounting for historical events alternatively investigates the potential of using Cold War heritage as a resource for destination development.[8] Our analysis, based on collective fieldwork at Cold War military heritage sites in Sweden, unites two research fields: critical heritage studies and feminist international relations. In contrast with previous research on Cold War heritagisation in Sweden, this combination allows us to investigate the relations between memory/heritage and security and to analyse the political implications of various constructions of the past.

The act of delineating time is never a neutral endeavour. As Ludmilla Jordanova writes, the time units that we use to structure events and processes shape our interpretations of history and involve both emotional and political commitments.[9] Periodisation always constitutes a privileging of a perspective, for example, in terms of making certain groups or conflicts visible while others fall out of sight.[10] Jörn Rüsen argues that different temporalities tend to sanction different identities.[11] Traditional division into epochs highlights specific narratives and social dynamics while excluding others. For example, historical periodisation tends to render women's experiences invisible and bypass issues of change and stability in gender relations.[12]

Moreover, as Elisabeth Grosz points out, the way the past is framed and how continuities and change are established are tightly connected to what social and political structures are conceivable.[13] For example, the conception of time as a constant movement forwards, distinctive for modernity, nurtures a "genetic narrative" in which a more or less incomplete past leads to an ideal present.[14] Furthermore, and of importance to our gender perspective, within Western historiography, war and military conflicts are usually presented as moving history forwards, leaving peace to be associated with silence or stagnation. This "ontology of militarism,"

that is, the notion that war is a condition of human existence, makes men the main actors of history, while women's actions, such as peace work more generally, are removed from historical narratives.[15]

The centrality of violence and militarism is also reflected in national identities, which are generally constructed in relation to genealogies of national wars of past times: "our" history is perceived as inseparable from "our" history of war.[16] However, given the Swedish national self-narrative of being a historically peaceful, nonaggressive nation, in conjunction with the actual highly militarised society discussed below, the construction of a Swedish national identity in relation to historic military endeavours is to some extent ambivalent.

Translated to the context of the heritagisation of the Cold War, this means that we acknowledge that temporalisation not only affects how national and gender identities are produced but also has implications for what (security) politics appear possible. After a presentation of our theoretical perspectives, this chapter's analytical sections identify four different temporalities at work in Cold War heritagisations: permanence-time, development-time, parenthesis-time and phantasm-time. Because the two first are more commonly acknowledged in relation to collective memory and history writing, we mainly analyse how parenthetical and phantasmatical temporalities unfold in Cold War heritagisation. The conclusion explores how differing temporalities affect ideas of threat and safety, rendering some security politics obvious while obscuring alternative courses of action and restricting the scope of democratic discussions about vital matters such as what constitutes a threat and the way to achieve security.

Gendered Heritage

Taking a critical heritage studies perspective involves an understanding of heritage as active enactments and mobilisations of the past. Critical heritage studies broadens heritage beyond specific objects or places such as museums and monuments to encompass various engagements with the past. The key concept of heritagisation emphasises that heritage is not merely a possession of a national community, but rather an active process or action undertaken by that community. It suggests that heritage is constructed, maintained and interpreted through ongoing social and cultural practices rather than being static or fixed. The emphasis is on heritage as a contemporary and continuing selection process, where the past is turned into "the Past."[17] Heritagisation can be described as social and political negotiations in which objects, places or phenomena are linked to certain meanings and identities.[18] Boundaries between different types of heritage are loose and frequently transcended by various actors. Instead of investigating Cold War history as such – what "really" happened – our questions concern how the past is constituted *as* heritage and used in the construction of various collective identities and imagined communities.[19] In sum, we see heritage as both a construction in and a resource for the present.

The second theoretical perspective is feminist international relations. This intellectual tradition analyses how conflicts, war and national security are embedded

in gender norms. Notions of masculinity and femininity inform conceptualisations of national security, what constitutes a threat and how safety can be guaranteed.[20] Feminists have underlined how the legitimacy of militarisation and war rests upon a gendered and racialised myth of protection in which native "honourable" men keep "their" women and children safe.[21] While this myth links masculinity to agency, courage and the capacity for violence, femininity is constituted in terms of passivity and vulnerability.[22] Examinations of the gendered aspects of military memory and heritage show that women's experiences tend to be omitted from war histories, privileging the male soldier's perspective as well as military rationality.[23] Gender norms and heterosexuality underpin such memory-making in ways that strengthen certain notions of security.[24] When memory narratives use the heterosexual couple to signal security, the supposed "naturalness" of gender and sexuality contributes to establishing militarisation and military solutions as benign and self-evident.[25] Feminist thinkers insist on the denaturalisation and politicisation of allegedly natural phenomena and circumstances as productive analytical strategies.[26]

The Swedish Context

Despite the self-understanding of Sweden as a nonaggressive country with a long history of peacefulness and international disarmament struggle, the Cold War was – as noted in the introduction – a period of "deep militarisation."[27] A massive domestic military build-up and a highly developed civil defence characterised the period.[28] Neutrality built upon the idea that military manpower and a national weapon industry would deter a potential enemy from aggression. Thus, the doctrine of neutrality contributed to gendered citizenship, with men's citizenship responsibilities including military training and women's citizenship responsibilities including caring for the domestic sphere and the "national home" (*folkhemmet*). The association between masculinity and military competence and violence supported neutrality. The doctrine permitted military violence only as a response to other countries' military actions. This strategic renunciation of offensive uses of violence associated neutrality with waiting and responses to others' actions, leaving an opening for connotations of a certain gender ambivalence and even feminisation.[29]

The idea of neutrality remained central to Swedish identity after the Cold War, despite its formal abandonment upon entering the EU in 1994. The late 1990s and 2000s saw disarmament and a shift from territorial defence to smaller, flexible units and global military missions. However, the Russian invasion of Ukraine (2014 and 2022) sparked a rearmament era, marked by higher military spending, reopened regiments and the Swedish government applying for NATO membership in May 2022.

This chapter relies on material gathered during a three-year research project in which we documented more than 20 Swedish Cold War heritage sites using ethnographic methods, including *in situ* observations and interviews.[30] In line with the critical heritage studies perspective, the methodology encompassed different expressions of Cold War heritage, resulting in multifaceted and varied material. In this chapter, we include state sponsored as well as commercial and informal

enactments of the Cold War, official museums, commercial tourist sites, residential areas, television productions and informal groups of Cold War enthusiasts who gather online. To direct attention to the various uses of time and temporal features in Cold War heritagisation, our examples highlight locations with different characteristics.

Development-Time and Permanence-Time

As mentioned initially, we identified different ways of temporalisation, focusing on permanence-time, development-time, parenthesis-time and phantasm-time. Development-time denotes the idea of time as a continuous progression, constructing a past that is irretrievably gone and a future to strive for. It implies constant change, often as positive progress, akin to Rüsen's "genetic time."[31] Permanence-time, on the other hand, underpins an eternal dimension of time, constructing narratives around constant historical elements, with the implication that time is forever the same, regardless of whether epochal signs change. Where development-time points to change and transience, permanence-time is constructed around ideas of essence and origin.

The two temporalising principles play out in different ways. Exhibits such as those of the Swedish tank museum Arsenalen in Strängnäs arrange armoured vehicles chronologically, making visitors stroll along a timeline along which the capabilities for violence constantly increase. Progress is epitomised by ever-growing war machines, while permanence represents an unending threat against which weapons offer protection. The intermingling of development-time with permanence-time constructs a time that conveys an eternal military threat that produces an urge to continuously create even more powerful weapons. In this example, the political context is largely absent, further strengthening the idea of the evolution of military capacity as the response to an everlasting threat. Military technological innovations are frequently framed as a *national* competence, with specific models of technologically advanced military vehicles displayed as a proxy for the national self.[32] National identity underlines masculine potency and confirms a specific form of masculinity that fuses technological skills with a militarised discourse.[33] As noted by Emma Rosengren, the Cold War construction of a specific Swedish *engineering* superiority enabled the country to emerge as masculine, strong and active while simultaneously obscuring violent and aggressive aspects that threatened national self-perceptions of peacefulness.[34]

The Arsenalen exhibition features a bunker presenting a Cold War exhibition that embodies the concept of permanence-time. Visitors can enter this bunker, which is designed to resemble a concrete set in granite bedrock. An information sign recounts Sweden's historical connection to the mountain:

> In Sweden, we have lived off the mountain since time immemorial. During the Cold War, the mountain would also protect us […]. In the mountain, we sought safety and protection, the protection that would make us survive a coming third world war.

Continuity is underlined by the bunker itself, evoking a permanent existence detached from the outside world, where the eternal is tied to the rock, the granite. Throughout the research project, we observed how both actual mountains and rocks and the metaphorical primordial mountain had a special significance in the heritage of the Cold War and were linked to a kind of permanent, time-independent, national primeval history and identity.

Parenthesis-Time

During our fieldwork, we encountered the idea that the Cold War never truly ended, even if times might seem to have changed. What we term parenthesis-time brackets specific periods to emphasise continuity. Putting certain developments within parentheses conveys temporal stability: the occurrences within parentheses deviate from what is constructed as "normal" time. At the heritage sites, parentheses were inserted at different instances on a timeline.

At Norrtälje Luftvärnsmuseum, an enthusiast-driven museum focusing on air-defence systems, the purpose of the collections was framed not only as to preserve the equipment but also to maintain the technical knowledge and competences needed to manage these defence systems. During our walk through the museum, the manager emphasised that "It is important to describe something that disappeared too soon" and told us that some of the items in the collection are in working order and that similar weapons will now defend Gotland.[35] This narrative indicates that the competences, weapons and technical equipment exhibited will be needed again once the parenthesis-time is over.

A similar temporalisation was evident at the Gotland Military Museum in Tingstäde. Gotland, an island in the Baltic Sea, was heavily militarised during the Cold War with massive fortifications, manned cannons and signal intelligence equipment scattered across the landscape. After more than a decade of gradual downsizing, the Gotland regiment was disbanded in 2005. In 2015, the government decided to place troops on the island again, and in 2018, the regiment was reinstalled. The narrative we encountered in Tingstäde defined the period during which the island lacked the presence of the Swedish Armed Forces (SAF) in terms of a misguided parenthesis.[36] This was illustrated with a photograph of a strikingly empty storehouse with the headline "Supplies were emptied" and a well-known quotation from Fredrik Reinfeldt (conservative/liberal prime minister, 2006–2014) describing the armed forces as an "interest group" among other interest groups. The end of the parenthesis is represented through depictions of the inauguration of the Gotland Regiment 2018, overseen by the king, government representatives and the commander-in-chief. In this ceremony, the regimental flag, preserved by the island's home guard since the 2005 disbandment, was returned to the regiment. The flag, now back where it "should be," signals the return of a more authentic permanence-time.

The museum's telling of the parenthetic period of demilitarisation presents this decision as ideologically motivated and as lacking genuine interest in the safety of the people. The political change that characterises the parenthesis-time

is associated with risky and misdirected actions, while the "natural" and permanent time – before and after the parenthesis – is associated with security. This temporality implies that the geopolitical situation is the same today as during the Cold War and that the military threats are also equivalent. It also signals an unchanging and absolute need for strong Swedish military capabilities. If the geopolitical situation is essentially unchanged, then the political decisions to reduce the armed forces come across as misdirected and as contributing to increased insecurity. The uses of parenthesis-time consequently contribute to delegitimising the political decisions of the 1990s and early 2000s to demilitarise Swedish society and cut the military budget from its Cold War levels.

In addition, we want to underline this narrative's close association with nostalgia, a yearning for a time when things were as they should be, and the national collective was at its best. A characterisation of this longed-for situation is that the state/politicians respected militarisation as an indisputable value that stands beyond politics and unites the people in the need to militarily protect the country.

Such retrospective discourses habitually activate gender norms: longing for the past tends to involve longing for a stable and idealised gender order with distinct and separate roles for women and men. Megan MacKenzie and Alana Foster describe a "masculinity nostalgia" in which the yearning is directed towards a time when traditional masculinities were obtainable and men could live up to their traditional roles as fathers and breadwinners.[37]

This gendered nostalgia is also present in our material. A bunkerologist whom we interviewed described a deeply felt connection to the Cold War period and his pride in Swedish Cold War technology.[38] He expressed a longing to return to a time when conscripted soldiers were instructed to shoot to kill in high-risk situations, contrasting this with the present-day gender-equal armed forces, in which there are "shower curtains and closed doors to the toilets." In this narrative, the appeal of the Cold War period depends on how it manifests the "natural" separation of the sexes and conveys men's protector privilege as a requirement for national security. Constructing a parenthesis-time of the period of disarmament can therefore be seen as a way to restore specific gender and security configurations that are linked to the "authentic" permanence-time.

Phantasm-Time

If parenthesis-time constructs the period between the end of the Cold War and today in terms of a misguided deviation from the normality of permanence- and development-time, what we call phantasm-time works in quite a different way. We suggest that this is a temporality in which the factual and the fictional collapse. This temporality surfaces time and time again in Cold War heritagisations and plays an operative role in how to impart meaning to and rationalise the military past.

A hands-on example comes from the bunker installation at Arsenalen. Upon entry, the visitor meets installations that thematically and sensorially aim to address certain Cold War experiences. The light is dim. A ticking of a clock is heard, and an old phone is ominously ringing without being answered. There is a faint sound of

sobbing. One of the installations is a short exhibition film called "The rock cavern," beginning with a dark passage leading into an underground bunker. Images of rows of dormitories follow and command centres with radar screens and thick armoured doors. A voiceover comes in:

> Everything you need is in here. Food, water, heat. All those things that will make it possible for you to survive. I know you are scared, but now you have to do your job. That is why you are here. You have been selected to do your duty for the country.[39]

Thus far, the images and words convey the experience of being a military conscript in training in Sweden during the Cold War. Given the gendered conscription, it is a male protector subject who is called upon to do his duty. As the narrative progressively transforms, it moves away from training and starts to mediate a rather different experience:

> Do not think about the others. Forget your family. They are not important now. They are gone. It is war out there. That's how it is now. You are in here. I know you are scared. So am I. I am afraid of what is out there. We will not recognise anything. Once we get out, nothing will be as it was. Nothing will be left. Nothing.[40]

Here, the voiceover, accompanied by images of empty underground rooms, conveys a narrative of how the war, not only preparations for it, actually came and how gruesome and terrifying it was, ending in disaster and annihilation (Figures 12.1 and 12.2).

Despite the alarming context, the articulations as well as the images reverberate with what we have elsewhere described as "bunker cosiness."[41] In social media communities of bunkerologists, pictures of damp rooms, raw concrete surfaces and desolate bunkers are habitually described as depicting cosy, attractive and captivating environments. Bunker cosiness constructs a masculine zone in which a supposedly uncomplicated male existence can be portrayed, explicitly invalidating feminine-coded features such as caring or soft comfort as the origin of well-being and, most importantly, of security. In the narration, "the others," "family" – yes, practically everything – are "gone." What remains is only the masculine subject embedded in the concrete room and bedrock. Within the frames of phantasm-time, the masculine essence produced in and by permanence-time is allowed to re-emerge and materialise in the form of concrete and rock, thereby outdoing the ruptures in time associated with parenthesis-time. The intertwining of masculinity, concrete and stone, protection and permanence, recurred in various configurations throughout our material, while there was a conspicuous absence of feminised expressions. A pronounced "monomasculinity" seems to be self-sufficient in representing and legitimising national security in the Cold War context.

In the temporal formation of phantasm-time, the boundaries between what happened and what could have happened, or should have happened, are blurred and dissolved. Consequently, the same is true for the boundaries between reality and
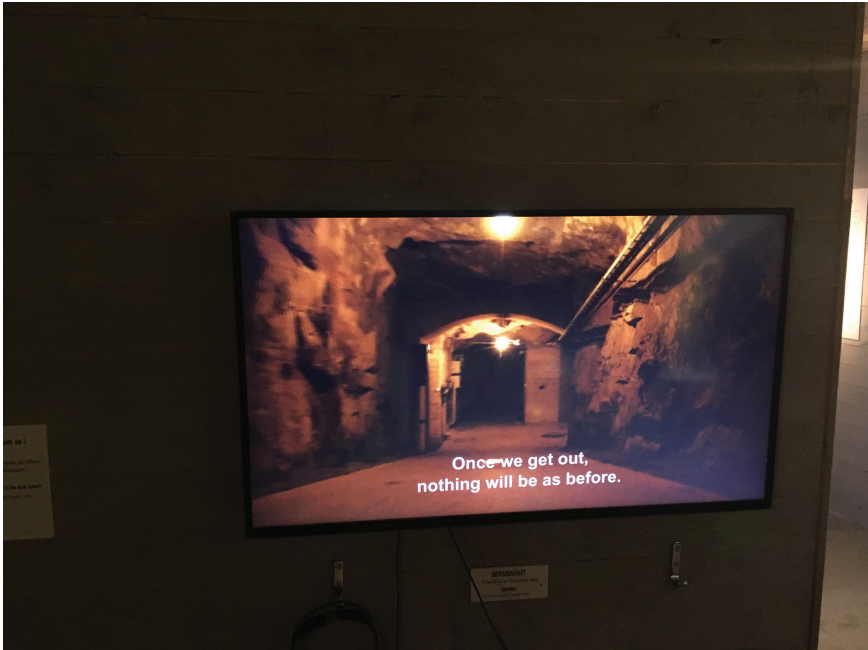
Figure 12.1 and Figure 12.2 Film stills from the exhibition film *The Rock Cavern* in the bunker installation at the Swedish tank museum Arsenalen in Strängnäs. Photographs: The authors

fantasy. Drawing upon Slavoj Žižek, we use "phantasm" to describe a phenomenon that appears to be real and therefore has real consequences, but that is only an imaginary representation.[42] The phantasm, appearing as the experienced reality, has a political function in bridging a gap between what is desired and the way the world is actually ordered. Similarly, phantasm-time makes it possible to tell the history of what could or even should have happened, even if it did not. This is a sort of as-if-time, where external events do not limit narratives. What did not happen appears as, or even more, significant and credible as what actually happened because it was so likely that it could happen and because, in Žižek's sense, it's happening was wanted and needed.

This collapse between the real and the desired is also what meets the visitor at the former coastal artillery Arholma in Stockholm's northern archipelago, listed as built heritage by the state but also as a commercial tourist destination. The guided tour of the rock cavern bunker begins with a short film that narrates the never realised but expected and phantasmatically needed Cold War attack on Sweden. The film mixes documentary footage of Cold War leaders and security incidents with pictures showing the fictional attack and includes references to the exact times of day of its different phases.

The uses of phantasm-time in heritagisation make possible pronounced action narratives and emphasise Swedish military agency. In relation to the passivity and feminisation associated with Sweden's neutrality doctrine, phantasm-time wards off doubt regarding the merit and military competence of the military. The portrayal of what *did not* happen as something that *could* or *should have happened*, or that even *did happen,* enables the Swedish protector to come forth as unambiguously strong, militarily capable and, by implication, masculine. This analysis suggests that in the context of Cold War heritagisation, the use of different forms of temporality has consequences in terms of conveying gender norms.

Phantasm-time is conspicuously articulated in a recent and multilayered historiographical attempt of the SAF. The result is "Our History," which includes a series of eight informational films with the overarching title *If the war came: A film narration of the Swedish defence during the Cold War* published on the SAF website and screened on Swedish public service television. The entire series has a decisively documentary framing, uses much old footage in combination with a voiceover narration and is explicitly presented as a "documentary series" in the title sequences of the films. The first episode in the series is called "If the war came: The foreboding."[43] It begins with the narrator introducing the content of the series: "This is the story of what *really* happened during the Cold War, and how close it was to us at times." However, after a short while this statement is more or less seamlessly transformed into a speculation about not what happened but what *could* have happened during the Cold War: "What would have actually happened if the war came?"

A key feature here is how the seemingly open formulation in the form of a question nonetheless signals an element of factuality through the phrase "actually." It is a case not only of speculation about what could have happened but also of speculation about what *actually* would have happened (which then has the effect of

transforming the speculative notion into a phantasm). Adding even more to the first episode's phantasmatical impulse is the direct, but never explicitly articulated, allusion to an information film produced by the SAF in 1987, which also had the title *The foreboding*.[44] The 1987 film was itself a phantasmatical narration. The film's purpose was to raise awareness and inform about infiltration by a foreign state and an imagined enemy's preparations for sabotage. Framed as a documentary, it also contains a strange twist at the end in which the production team becomes suspected of espionage and the narrator disappears. In the recently produced episode, "If the war came: The foreboding" from 2019, the quasidocumentary material from *The foreboding* from 1987 appears alongside and is seamlessly blended with other, older military informational and documentary footage from the Cold War era. The narrative content, warning about sabotage and infiltration, is practically the same. The result in the "documentary series" episode from 2019 is that this articulation now lends an unmistakeably documentary aura by being used as historical, and therefore true, material. The implication is that the events presented not only could have happened but also, in the phantasmatic realm, and now as a phantasm of a second order, which is truer than the real, actually did happen. It is by this operation that the oxymoronic statement "What would have actually happened" becomes legible and rational.

In this series, phantasm-time contributes to representing the massive Swedish militarisation as appropriate given that a war "would have actually happened." The way in which phantasm blends imaginations, apprehensions and falsifications with historical reality serves to guarantee that the conviction that military capabilities create national security remains uncontested. In Žižek's phrasing, the takeaway is that the subject needs and desires to believe that military violence is what will keep us safe.

Conclusion

What do the different ways of temporalising and connecting narratives of the past with the present suggest about what ways of achieving security that is desirable or even possible? As noted in the introduction, Sweden's Cold War history is regarded as one in which the war never came, a period of prolonged waiting and preparation that, with a few exceptions, lacks high-risk situations and military action. Because there exists no set timeline in which events follow in sequence one after another, temporalities can more easily be used in various ways. While this is partly a result of the historical features of the Cold War – the lack of traditional and clearly distinguishable narratives and episodes of military action – it nonetheless demonstrates the political power of heritagisation and collective memories.

Parenthesis-time is an example of how temporalities are innovatively constructed and used in heritagisation. Parenthesis-time signals a suspension of an accepted timeline, a manoeuvre that constructs the deviation and simultaneously strengthens what is regarded as "normal" time. Obviously, the consequences of inserting parentheses depend on where they are placed and how they are underpinned. In our Gotland example, the first parenthesis is inserted after the end of

the Cold War and the second in the 2010s, when military spending increased and the regiment was reinstalled. In our interpretation, this parenthesis enables a narrative in which the threat against the national community, as well as "our" ways of responding to these threats, comes forth as eternal – in a discursive move restoring permanence-time as natural time. This recuperative endeavour reproduces a conservative gender order with clear separation of the genders and in which the association between masculinity, violence and protection appears as both naturally given and necessary for the survival of the nation. Parenthesis-time powerfully delegitimates political decisions to demilitarise Swedish society, thereby making evident how temporalities are not politically innocent but rather contribute to making certain security choices appear natural and self-explanatory while discrediting others.

The absence of evident key historical events, together with the Cold War's abundance of speculative "what-if" narratives, leaves an opening for the specific form of temporality that dissolves boundaries between what happened and what did not. In phantasm-time, what might have happened is seamlessly transformed into what truly happened. The phantasm allows the war that never came to actually play out and the threat to be realised in a real war. Phantasmatic temporalities thus allow for the formation of national imaginaries in terms of a unified, strong and masculinised collective identity, courageously facing the enemy – constructions, perhaps, of particular urgency in the Swedish context, where norms of neutrality and nonaggressiveness threaten to feminise the national subject.

While parenthesis-time primarily elaborates distinctions between "false" and "true" time, phantasm-time dissolves such distinctions entirely. What might have been is as real, or even more real, as what is or was. This opens an opportunity for endless hyperdramatic and emotional fantasies to be projected onto Cold War history. Like parenthesis-time, phantasm-time performs a particular form of political work precisely in the negation of the political. In light of near annihilation, military preparedness and armament appear unconditional, and issues of violence and security are positioned in an existential, eternal and fundamentally nonpolitical sphere. Both representations of a perpetual threat from a violent enemy and phantasmatic stories about apocalyptic warfare construct a reality where the political implication is that safety can be guaranteed only through military and masculinised violence. One of the more notable consequences is that Swedish museums' governmental mission to contribute to democratic discussion is failing. Instead of adding context and thus showing how the rearmament is historically situated, the exhibitions naturalise the idea of military violence as a guarantor of safety and security. As an effect, political discussions are made redundant, if not outright threatening, to undermine national security. This analysis points to the deeply political significance of military heritagisation.

Notes

1 Wilhelm Agrell, *Fredens illusioner. Det svenska nationella försvarets nedgång och fall* (Stockholm: Atlantis, 2010), 45.
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13 How the U-2 Became a Museum Object – Local Identities and Museum Collections at the Norwegian Aviation Museum in Bodø

Karl L. Kleve

The very first paragraph in the Norwegian Government's most recent Museum White Paper states that

> Our museums are an expression of the development of society, the self-esteem of a nation, the standard for freedom of expression and democracy in a community. … Just like the museums played an important role in the nation-building process of the young nation of Norway, they play an equally important role in our own time's understanding of ourselves.[1]

This chapter discusses the role of the 1960 U-2 incident – when a spyplane headed for Bodø was shot down over the USSR – in shaping a local Cold War identity. It addresses the challenge of presenting an actual U-2 aircraft at the Norwegian Aviation Museum both as itself and as a representative of the international incident which had played an important part in shaping Bodø's modern identity as a town centred on defence and aviation.

The acquisition of a U-2 aircraft as one of the first and most prominent of the artefacts to be displayed at the museum at its opening in 1994 was primarily influenced by the role in Bodø's local identity and memory the U-2 incident had acquired. I will in this chapter address how the memory of the U-2 incident evolved to become an important identity marker for Bodø, how the interest in greater regional autonomy in the immediate post-Cold War years influenced both the struggle to establish the new national aviation museum in the North and influenced the acquisition of a U-2 aircraft to symbolise the military and aviation-related identity of the local area. I will also discuss how the display of the U-2 aircraft at the museum contributes to maintaining this identity.

The Role of the Museum

Torgeir Rinke Bangstad argues that museums of cultural history and identity are two sides of the same coin; museums are mirrors of society.[2] Museums view artefacts, which are their core, almost exclusively as materialised ideas. As Bill Brown argues, we all look through things in order to uncover what they say about history,

society, nature and first and foremost ourselves; but we hardly see the artefacts themselves.[3]

It is well acknowledged that the larger museums are important participants in identity processes, both national and local. Also, according to Pille Runnel, Krista Lepik and Linda Lotina, it seems museums rarely challenge dominant discourses on identity and visitors equally rarely challenge the information and representations found in museums.[4]

At the same time, many, perhaps most, visitors have expectations towards how history should be conveyed. Although a museum visit is generally understood to be a learning experience, nevertheless a certain distortion arises if these expectations are not met at all, according to Susan Crane and Maja Leonardsen Musum.[5] The U-2 aircraft exhibited at the Norwegian Aviation Museum in Bodø is not the one downed by the Soviets in 1960, but it is a substitute for it. The museum must take into consideration the reason for it being in the museum in the first place. Even though it has its own story, this is not the narrative addressed. If the museum had stressed the artefact's own history instead of the so-called U-2 incident, this could well have surfaced Susan Crane's "distortion."

In deciding which artefacts to preserve, how to preserve them and how to present them, museums influence how history is perceived. Ola Svein Stugu uses the terms "Memory-policy and Forgetting-policy" to understand how we actively and passively choose to remember something and forget something.[6] He shows how museums, by highlighting some objects and neglecting others, are actively influencing what we see as history and contribute to the building of national memories.

I will argue here that at the Norwegian Aviation Museum (of which I am a part), the way the U-2 aircraft is staged, renders it a national – or at least a local – myth. In the museum, new history is created, and the artefact acquires an additional identity.

By way of comparison, in 2020, the Aviation Museum acquired a police helicopter. It was the first one in Norway, entering service in 2008 without any particular public or professional attention. But when exhibited on museum, feedback from our visitors signifies that it has become quite popular, especially among service personnel – visiting police are for example very fond of taking selfies by the old police helicopter.[7] In the museum, as an artefact, a previously mundane vehicle has become part of Norwegian police pride and identity.

The U-2 incident of 1 May 1960 resulted in an international crisis between the Soviet Union and the United States and its allies. When Soviet Premier Nikita Khrushchev threatened Bodø with nuclear annihilation, it also brought to the Norwegian public's attention that the last decade of military rearmament in Bodø and Northern Norway had put the region in the spotlight as a target in the event of nuclear war. These events cemented the U-2's connection with the town. It underlined Bodø's new military role and as a primary Soviet target in the event of war.

When the Norwegian parliament decided in 1992 to locate a National Aviation Museum in Bodø, local aviation enthusiasts immediately looked around for a way to secure a genuine U-2 aircraft for the new museum. Having failed to convince Russian authorities to donate the wreck of the 1960s aircraft, another U-2, no. 66953/Article 393 was found in California, which the US Air Force agreed to

give to the museum on a permanent loan. At the opening of the museum in 1994, the U-2 was hailed in the media and amongst the visitors as the new museum's best exhibit.[8] Interest in the U-2 incident and the museum's U-2 as a representative of this event has been sustained in the years since.

This chapter explores how the U-2 incident of 1960 became a part of Bodø's Cold War era identity. How could one incident and one object contribute to shape the identity of a town and a region? By acquiring and displaying a U-2 aircraft, although not the one downed in 1960, the museum contributes to maintaining this identity. The chapter explores why the aircraft came to the museum, how it is exhibited and in what way the museum has an impact in perpetuating the role of the U-2 as an important part of Bodø's modern identity.

Local journalist Knut Hoff called the U-2 incident an *identity marker* for Bodø, in an important 1990 meeting I will return to later in this chapter. This is an apt expression, as it encompasses both the immaterial incident and the physical artefact. I define the term in this connection to mean an expression or example, physical or immaterial, of what the identity of the town is all about. But it is also something that can be expanded, for example in the way Per Rudling explores how the regime in Belarus developed the memory of the war against Nazi Germany as an identity marker for the nation under the Lukashenko dictatorship.[9] I would also claim that the expression "Defence- and Aviation Town" is an identity marker for Bodø, of which the U-2 incident is the most prominent example. (The expression works in Norwegian but lacks a proper English translation.)

To evaluate the connections between the U-2 and the U-2 incident with Bodø, this chapter mainly draws on press and media: newspapers, TV/radio and modern digital media including websites and podcasts. Bodø is the capital of Nordland County, the largest of Northern Norway's three counties, which is geographically varied with several distinct regions, each with several daily newspapers. The number of sources even from the pre-internet age is therefore large. Local media have been tremendously important in establishing the U-2 incident and the U-2 spyplane as integral parts of Bodø's contemporary identity.[10] First, however, I will set the scene by briefly exploring the relationship between geography and identity.

Creating a Local Identity

Geographic identity involves the distinctive features of a particular place. These features make a place recognisable and differentiate it from other places. According to one definition of local identity by Shao, Lange and Thwaites, they stimulate strong feelings, including both positive and negative emotions.[11] Local identity is a combination of historical, social, economic and political processes.[12] It contains continuity and uniqueness. Cultural identity is part of this local identity and is related to historical events. It makes people proud of their local heritage and identifies themselves with their town.[13]

Gerhard van Keken argues that geographic identity is also about branding. Every place needs an identity, needs to look for distinctiveness. Recognised landmarks, buildings and monuments are good, but not crucial. The important thing is

to have a distinct narrative about what makes a place meaningful, extraordinary and distinctive.[14] Spatial identity has grown in importance in modern branding, for use in tourism or to strengthen a region or town's recognition and making it more attractive for people and industry. The importance of events in influencing people's perception of place is also recognised by commercial businesses that offer to help in creating events with lasting impact on people's perceptions of place.[15]

Spatial identities, according to Kees Terlow, are social constructs created and reproduced through discourses among stakeholders, which materialise in newspaper articles, websites and elsewhere.[16] Examples include the Norwegian aviation authority's homepage on Bodø, which states that "Bodø is the aviation town before anyone else"[17]; the local Bodø newspaper *Avisa Nordland* writing of the U-2 that it was "the airplane which put Bodø on the map" and that the U-2 is a centrepiece of the exhibitions at the National Norwegian Aviation Museum since it is located in the town which the plane made world famous.[18] Likewise the popular Norwegian magazine *Vi Menn* has written repeatedly about the U-2, arguing that it is the plane which put Bodø on the map. Other articles compare the U-2 incident with other dramatic Cold War episodes: for instance a piece from July 2020 about an emergency landing of the intelligence plane SR-71 in Bodø in 1981, where the then Bodø Main Air Station Commander General Olav Aamoth stated that he had to do his utmost to prevent a "new U-2 incident."[19]

At the same time, the case in point involves not only an abstract event but also an actual object. The U-2 incident is made flesh through the prism of the U-2 spyplane. In his chapter on the Vulcan bomber (q.v.), Sam Alberti makes use of object biography as a way of studying the impact of the object on the visitor. He shows how the Vulcan has a range of different meanings for different people. In the case of the U-2, there is the added complexity of the specific event. Is it the event or the object which is significant? In Bodø, it is clearly the event.

Operation Grand Slam: The U-2 Incident of 1 May 1960

The U-2 was a striking aircraft which triggered people's imagination due to its role as a purpose-built spyplane able to ascend to previously unheard-of heights.[20] Several pilots claimed it was the closest flying experience to being an astronaut.[21] It entered service in 1956 with the CIA instead of US Air Force due to its precarious mission: overflying Soviet and other enemy airspace to gather intelligence on military developments, in particular the Soviet nuclear and missile programmes. Seeing the speed with which the Soviet Union reduced the US lead in nuclear weaponry and missile technology, Western politicians and military leaders feared the enemy might outproduce the NATO states and create a "Bomber Gap" and a "Missile Gap" between the Soviet Union and the Western Powers.[22]

Due to the sensitive nature of the flights into Soviet airspace, U-2 flights required Presidential authorisation. The first flight into Soviet airspace was in the summer of 1956, when the U-2 was based in West Germany. In 1958, the main base moved to Turkey, with temporary, Forward Operational Bases in other US allied countries. From September to November 1958, two top secret U-2 planes were stationed at

Bodø Main Air Station. Although there are no contemporary recorded accounts, many locals claimed afterwards to have seen the aircrafts take off and land.[23]

The 1 May 1960 flight was to be the first attempt to cross the entirety of the Soviet Union from Peshawar in Pakistan to Bodø. When the plane was subsequently shot down and pilot Francis Gary Powers captured, just two weeks before a planned summit between the two superpowers, this was a major propaganda coup for the Soviet Union. The USSR had attempted to shoot down U-2 flights before, without success. Now, it had both the pilot, a wreck in surprisingly good condition and an intact roll of 500 photographs taken by Powers before he was shot down.

That the aircraft was going to Bodø was made much of in the trial against Powers in August 1960. In public announcements, newspaper articles and speeches, the Soviet Union put enormous pressure to bear on Norwegian authorities to break relations with the United States.[24] For the Norwegian government, however, severing relations with the United States was of course out of the question, and the Soviets never pressed the matter. Although relations with the Soviet Union were tense, the situation did not escalate, and four years later, Soviet Premier Nikita Khrushchev made a visit to Norway including several public displays of good relations.[25]

After the 1960 debacle, the CIA sharply reduced its U-2 activity, closing it down for good in 1974. Even so, despite the crash landing in 1960, the programme overall was heralded by the United States as a success, and the Air Force had started its own programme in 1959: Project HASP – High Altitude Sampling Programme. There were however no further incursions into Soviet airspace. Coverage of the USSR was provided by satellites, including the Corona, the first military satellite programme which had launched in July 1960.

Except for a brief visit by a NASA U-2 in Stavanger in 1988 for ozone-layer observations, no U-2 visited Norway again.[26] Given that the 1960 attempt did not arrive, then, U-2 intelligence aircraft were only physically present in Bodø for two months in 1958.

The Role of the U-2 in Developing Bodø's Identity

In the history of the press in Bodø, Stian Bones states that

> If Bodø had not been a Defence Town before – in the sense that one identified the Armed Forces with the Town – it definitely became so by the entrance to the 1960s. Maybe we may see the foreign policy crisis related to the U-2 incident as a symbolic expression of this.[27]

In another history of Bodø, Wilhelm Karlsen likewise writes: "The U-2 incident marked Bodø's prominence in the Cold War. If it hadn't done so earlier, the town now appeared in Norwegian public opinion as the most central Defence Town in the country."[28] But the U-2's role was not so clear at the time, and I would argue that Bodø's martial identity was not connected to the aircraft until much later. A more nuanced understanding can be gained by addressing the broader history of the town.

Bodø's strategic location as a link between the south and north of the country was recognised early in the Cold War, and a large airbase plus a number of other military installations including the National Northern Armed Forces Command was established from the early 1950s onward, almost wholly financed through the primarily United States-funded NATO Infrastructural Aid Programme.[29]

The Bodø airbase grew to become one of the largest in Northern Europe and played host to huge military exercises every year, during which troops from NATO nations impacted upon the town. NATO Armed Forces activities during this period contributed to Bodø's military identity: troops participated in the National Day marches on 17 May each year, there were military parades on NATO anniversaries, new fighter planes were towed through the downtown streets in 1963, the same year there was a very prominent visit of US Vice President Lyndon B. Johnson.[30] Bodø's reputation was well entrenched by then.

In 1965, civil aviation in Bodø also greatly expanded when a secondary network of domestic air routes was established in Norway, as Bodø became one end of the first short-haul route and later also a hub for a large network of these routes and transition point to the primary network. More and more, Bodø also became an aviation town, with its constant hum of fighter jets and passenger aircraft.[31]

If the U-2 incident "put Bodø on the map," then, it did so gradually over the following decades. (And it was reinforced by the struggle for the establishment of the Aviation Museum in the early 1990s, as I will argue below.) I could find no direct mention of the U-2 as an identity marker for Bodø during the 1960s. There was significant media attention on the 1960 incident itself, not least because the Soviets themselves kept the topic alive throughout with the Powers trial and a U-2 exhibition in Moscow later on. Throughout the rest of the decade, between five and 20 regional newspaper articles were published yearly, evidencing a sustained interest in the U-2, but connections to Bodø were absent. Rather, focus through the 1960s was on other downed U-2s, in Cuba in 1962 and China later in the decade.

The U-2 incident also owed much of its subsequent coverage to the spy Selmer Nilsen. Nilsen was a Norwegian national who had spied for the Soviet Union on the military build-up in North Norway since 1947 and was arrested in 1967. The trial was secret, but there was a rumour that he had spied on U-2 operations in Bodø.[32] In the spring of 1972, Nilsen and the U-2 incident were again the subject of nationwide coverage due to two Swedish TV programmes. Norwegian freelance TV journalist Ivar Enoksen had recorded a documentary in 1970 on Nilsen for Norwegian Public TV NRK, but after much internal debate the NRK Board declined to broadcast on the grounds that it would "give the traitor a platform."[33] Enoksen then partnered with Swedish Public TV SR journalist Staffan Lamm instead, and together, they made two films, both on Nilsen, one of which specifically detailed the U-2 incident.[34] Selmer Nilsen was originally sentenced to over seven years in prison but released in the summer of 1970 due to his mental health. In an interview with Enoksen and later with author Paul Vatne who wrote a book about him, he claimed to have played a significant role in Soviet espionage against the U-2 programme.[35]

Nilsen greatly exaggerated his own role, but his claims made for a renewed interest in the U-2 incident.[36] In the Swedish programme on the U-2, local Bodonians were interviewed about their observations of U-2 at Bodø Air Station. It seemed a great many people had observed the aircraft not only in 1958 but also in other years, when the U-2 was not stationed in Bodø. Memory is a flimsy thing. One of the people interviewed stated what later became the common view on U-2: "Suddenly Bodø was the center for the whole world's attention!"[37] Bodø newspaper *Nordlands Framtid* ended its article on the TV programme with "The whole international atmosphere was suddenly transformed due to an aircraft and Bodø."

NRK in the end felt compelled to broadcast and aired the episode on the U-2 incident in 1973, followed by a panel in the studio containing the Prime Minister and Defence Minister from 1960, Einar Gerhardsen and Nils Handal, as well as the Commander of the North Norwegian Air Force Einar Tufte-Johnsen. Tufte-Johnsen had cooperated closely with Military Intelligence and led the Norwegian part of the 1958 U-2 operations in Bodø. All three publicly denied any knowledge that the May 1960 U-2 was supposed to land in Bodø. They upheld the story Gerhardsen told the Soviets in 1960, that the United States had withheld knowledge from the Norwegians. Subsequently released records later cast doubt on this account, and some newspapers speculated that there had been more U-2 flights out of Bodø.[38] The net effect was that when the U-2 incident was mentioned in the Norwegian media in the 1970s and 80s, the Bodø connection was usually mentioned.

Later episodes that pushed the U-2 to the front pages included the death of pilot Francis Gary Powers in a helicopter accident in 1977; a movie based on his autobiography *The true story of the U-2 incident* was shown on NRK 4 November 1978. During the 1980s, the spyplane SR-71 made emergency landings at Norwegian airbases eight times, six of them in Bodø.[39] The SR-71 was considered the heir to the U-2, and the connection mentioned every time it was discussed.[40] But otherwise during the 1970s and 80s there were relatively few newspaper articles discussing the U-2 connection to Bodø.

A Gear-Shift in 1990

A significant shift in the perception of the relationship between the U-2 and Bodø occurred in 1990. In January, a public brainstorming session was organised by the municipality on how to mark the town's upcoming 175th anniversary in 1991. Mayor Per Pettersen asked whether it would be possible to find an identity for Bodø; influential journalist Knut Hoff responded that "Bodø was a culture town, a communications town and an aviation town" and he suggested that the anniversary and identity should focus on two historic "marking points": a diplomatic incident between Norway and the United Kingdom called the "Bodø Case" from 1814 and the U-2 incident of 1960.[41] Hoff's suggestion of these two events as marking points or identity markers, is a good example of retrospective regionalism – reaching back in history in a search of building blocks to create a modern geographic identity.

Later the same year, the newspaper *Nordlands Framtid* published a special 40-page supplement about "Aviation Town Bodø."[42] Two pages was dedicated to

the U-2 under the title "U-2: The Black Lady who never reached Bodø." It stated that the U-2 incident was one of the most dramatic single episodes of the Cold War. In another article in the attachment, SAS Regional Director said that the term "Aviation Town Bodø" was a recent term, from the last two years. It would seem that the local community had started a conscious and collective attempt at place branding, the upcoming anniversary having stimulated a need for establishing a common story of Bodø, an identity. It seems that the process starting at the January meeting represents the most important shift towards connecting the U-2 with Bodø.

The Cold War was drawing to a close in this period, as communist governments fell in previously Soviet-controlled Eastern Europe. The dissolution of the Soviet Union coincided with debates in Norway, Sweden and Finland about possible membership in the EU which ended in a referendum in 1994, when Norway elected not to apply for entry. This also stimulated significant debate about national and regional identities. Certainly, there were several signs of this in Bodø at the time. As well as the upcoming anniversary, there was also the attempt by Nordland County to establish closer cultural and economic links directly with Northwestern Russia. A cooperation agreement between Nordland and Leningrad/St. Petersburg had been signed already in 1987. The dissolution of the Soviet Union then afforded greater autonomy for the Russian regions and talks of regional cross-border cooperation accelerated.[43]

The third process going on at this time was the struggle to develop an aviation museum in Bodø. Despite aviation's significance for Norway during the twentieth century, Norway did not have a dedicated museum. There had been talks among enthusiasts for several decades, and there was a nationwide network of aircraft hobbyists who collected historic aircrafts and restored them. Around 1990, these aircrafts were stored and worked on at Gardermoen Air Station outside Oslo.

Many of the enthusiasts were from Bodø. When talks about establishing an aviation museum gained purchase, the debate splintered into regions. Local politicians and influencers allied with the enthusiasts in launching Bodø as a good location for a National Aviation Museum. The discussion became a North–South struggle between Nordland and the capital area. And to strengthen the town's claim as the town with the strongest links to aviation in Norway, Bodø needed a U-2, preferably the one shot down by the Soviets in 1960. In February 1992, a group of Nordland- and Bodø-politicians and aviation enthusiasts went to Siberia, ostensibly to deliver aid, but with a secret mission to ask the Russian authorities to donate the U-2 wreck.[44] Before the trip, they had also approached US authorities about getting an American U-2 but were turned down.

The delegation succeeded in securing a MiG-15 which was ultimately delivered to Nordland County by the Russian Foreign minister Andrei Kozyrev in January 1993.[45] However, their request for the Soviet-owned U-2 wreck was declined.[46] Even so, later in 1992, Parliament decided to establish the National Aviation Museum in Bodø. Political scientist Thor-Martin Antonsen argues that the town had three advantages compared to the southern alternatives: local enthusiasm; support from the military in the north; and the capacity to focus on both military and
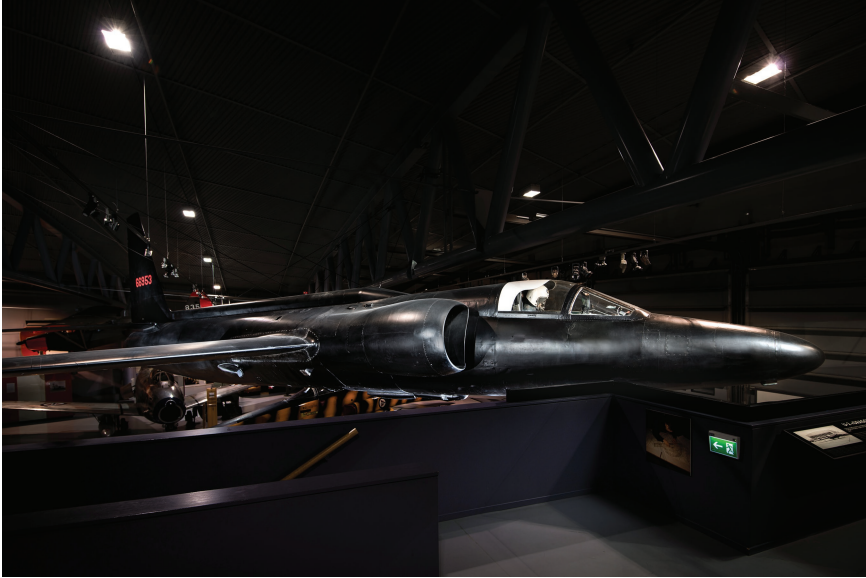
Figure 13.1 Article 393 exhibited at Norwegian Aviation Museum. Photo: Göran Kristensen

civil aviation.[47] I would argue that the attempt at highlighting Bodø's connection to the U-2 was also important.

Interest in the U-2 continued to be high. Local movie director Knut Einar Jensen started filming a motion picture about spy Selmer Nilsen and the U-2.[48] And after several decades of close alliance, there were many personal connections between Norwegian and US military personnel. Early in 1994, only a few months before the museum was due to open, the U-2 frame dubbed "Article 393" was located at Beale Air Force Base in California. It had been grounded in 1987 after 28 years of service in the US Air Force, the last 15 years as a trainer.[49] With help from the Norwegian Foreign Minister, the US Air Force agreed to transfer Article 393 on permanent loan to the new museum, despite attempts at sabotaging the deal by disgruntled enthusiasts from the south of Norway.[50] It could no longer fly but was carried to Bodø on a US military transport in March 1994. U-2 enthusiast and aircraft mechanic Captain Oddmund Bjørnaali spent the next month restoring the aircraft to its operational aspect as a 1960s/70s US Air Force U-2. It was on display in the museum in time for the grand opening on 15 May 1994. NRK called it the most central artefact of the museum and Helgelands Blad considered it "the pride of Norwegian Aviation Center"[51] (Figure 13.1).

Article 393 – the U-2 at the Aviation Museum

Once in the museum, the focus of the interpretation around Article 393 became exclusively about the U-2 incident of 1960, and how it put Bodø on the map. Oddmund Bjørnaali knew little about Article 393 before commencing restauration, but he was familiar with the US Air Force U-2 programme in general and so he knew

how it would have looked when operational and this was the look he aimed for.[52] To convert it into a CIA-version from 1960 would have taken too long; the older versions of the U-2 were structurally distinct and he only had one month.[53] Importantly, however, the differences between the CIA U-2s and those from the Air Force period were not well known. As of 1994, CIA had released precious few documents about its U-2 programme which was called "Project Chalice."

The restoration process was unfortunately not documented, but we can glean something of the museum's approach to the U-2 history from a museum extension project which was launched the year after opening. In 1995, a group of influential locals came together to form a planning group with the aim of extending the museum with a new wing dedicated to the Cold War in the Northern Norway. The group consisted of leaders from the Norwegian Air Force, Bodø Municipality, all three North-Norwegian counties and the local university. And for the launch of the museum extension plans, the planning group organised a Cold War conference in 1995 where the sons of Premier Khrushchev and Francis Gary Powers attended, alongside high-profile Cold Warriors like former Head of CIA Stansfield Turner and renowned historian Geir Lundestad.[54]

In 1996, the planned Cold War exhibition extension was presented in a brochure titled *The Cold War Experience*.[55] The introduction offered "an up-close and Personal Encounter with the Cold War":

> Who was involved in the Cold War? What was the Cold War really about? How close did the world come to the brink of disaster? How could this happen? How was a great war avoided, despite the extremely tense situation? Why build a museum about the Cold War in Bodø?[56]

The U-2 incident was going to be the centrepiece of the exhibition. Soundscapes, images and exhibits like the previously mentioned Russian MiG-15 fighter aircraft, a British Canberra electronic warfare aircraft and others would work together to present an immersive experience with a re-enactment of the flight and downing of Francis Gary Powers and his U-2 on 1 May 1960 as the main event of the exhibition and thus the Cold War in the North.

This particular plan for a new museum wing never materialised. The Norwegian Aviation Museum still has plans for an extension focusing on the Cold War, but the intense focus on the U-2 in these exhibition plans is no longer apparent to the same degree. The American U-2 aircraft has been on continuous display at the museum since the opening in 1994, as one of several important and interesting artefacts. But just as the display and the interpretation is focused on the 1960 incident and not the actual aircraft on display, so too the media attention. The museum is therefore arguably contributing to over-playing the connections between the U-2 incident and the recent history of Bodø. This is evidenced in examples of audiences eliding the U-2 at the museum and the aircraft shot down in 1960. In the 10th anniversary book on the Barents Cooperation from 2003, for example, author and leader of the Barents secretariat Oddrunn Pettersen claimed that the museum actually had Power's U-2 on display.[57]

The U-2 Manifested in the Present

Regional interest in the U-2 incident has been continuously high since the museum opened its doors in 1994.[58] A three-part podcast on the U-2 launched in 2020 quickly became the most popular among the podcasts on the national portal "Museumspodden."[59] Nationally too, the U-2 and the U-2 incident is today always mentioned as an important part of Bodø's identity. The Swedish television pro-gramme from 1972 detailed early in this chapter contained several interviews with local Bodonians who claimed to have witnessed U-2 flights from the airbase. And although the close connection in the minds of the public between the U-2 and Bodø is primarily a more recent affair, the interviews gave a clear indication that several Bodonians were already starting to make that connection.

This connection has become much more common and accepted the last 30 years. It is observable in the media, both in the recurrent interest in creating news items and programmes specifically about the incident, and how the link very often surfaces and is mentioned in various other contexts.[60] Local and national media often contact the Aviation Museum for interviews and state-ments when current world events or historic anniversaries can use an aviation angle. If it relates to the Cold War, Bodø and the U-2 are often mentioned. In 2014, for example, when Steven Spielberg and Tom Hanks revealed plans for a movie about the Francis Gary Powers/Rudolf Abel prisoner exchange in 1961, Norwegian news media immediately focused on Bodø and the "Norwegian spyflight-drama."[61]

When the municipality of Bodø in 2017 decided to start a process towards applying to be a European Capital of Culture, the Aviation Museum was asked to participate, with an expectation that the Cold War history and the U-2 inci-dent would be key parts of the contribution. The final application actually stated that the incident would be marked in May every year![62] The national tourist bureau Visit Norway's latest web marketing brochure on Bodø says this about the Aviation Museum: "Another highlight in Bodø is Norwegian Aviation Museum, which can offer a collection of civil and military airplanes – including the iconic U-2 which put Bodø on the map during the Cold War."[63] Comments and reviews of the museum on tourism sites like Tripadvisor also highlight the U-2.[64]

It is perhaps telling of the focus being on an event more than the actual aircraft that visitors never express that deep personal connection to the actual U-2 at the museum, in the way Sam Alberti shows that many do with the Vulcan bomber at the National Museum of Flight in Scotland.[65] In any case, due to the secrecy sur-rounding it, very few of our visitors have any personal experience with the U-2. But people continue to speculate. What did Norwegian military personnel really know about the U-2? Did it ever land in Bodø after 1960? As late as 2022, I received messages from both a Swedish journalist and a Danish museum-curator, asking about rumours regarding a possible U-2 crash in the Salten Fiord outside Bodø or a rumour that there should have been both Norwegian and Danish U-2 pilots in the CIA or US Air Force programmes.[66]

Conclusion

The U-2 incident of 1 May 1960 may be said to have been a latent identity marker for Bodø's image as a town centred on military and aviation, which then became a factual identity marker through a conscious place branding attempt in the early 1990s, by a coalition of local aviation enthusiasts and patriots. When the opportunity to establish a national aviation museum also arose, acquiring an actual U-2 aircraft to put on display at the new museum, would make the identity marker even more powerful.

Although attempts were made to acquire the actual U-2 wreck from the famous 1960 downing, the U-2 aircraft at the Norwegian Aviation Museum is not that one. As Torgeir Bangstad argues of museum objects in general, the aircraft on display is perhaps more a materialised idea than an actual object. Even so, I do not think one can go so far as to claim that the Aviation Museum consciously misrepresents history. The U-2 incident is presented to the best of the museum's knowledge. Nevertheless, by continuing to focus on the May 1960 incident, downplaying the history of the actual artefact on display and at the same time giving it a very prominent place, the museum is no doubt sustaining this local myth.

The U-2 – as an object and an idea – has been helpful in the context of this book on Cold War museology. The U-2's role in local identity is significant, as I have shown. The U-2 incident of 1960 continues to be visible; undeniably because it is manifested in the actual, physical U-2 at the Norwegian Aviation Museum, which even though it is not the U-2 of May 1960, still functions to uphold the bond between the incident and the town.

Notes

1 Ministry of Culture, Norway, *White Paper 23: Museums in Society: Thrust, Things and Time* (2020–2021), 7.
2 Torgeir R. Bangstad, "Mirror of the World and Graveyard of Things: Metaphors and the 'Doing' of Museology," *Norsk Museumstidsskrift* 3, no. 2 (2017): 61.
3 Bill Brown, "Thing Theory," *Critical Inquiry* 28, no. 1 (2001): 3–4.
4 Pille Runnel, Krista Lepik and Linda Lotina, "Constructing National Identity," *International Journal of the Inclusive Museum* 6, no. 4 (2014): 68–69.
5 Susan A. Crane, "Memory, Distortion and History in the Museum," *History and Theory* 36, no. 4 (1997): 57; See also Maja L. Musum, "The Open-Air Museum and the Contested Present: A Study of "All for Norway" at Hadeland Folkemuseum," *Norsk Museumstidsskrift* 6, no. 1 (2020): 28.
6 Ola S. Stugu, "Anniversaries as Memory Policy," in *The Art of Celebration: Constitution-Celebrations and Memory Policy,* eds. Olav Aagedahl, Ånund Brottveit and Pål K. Botvar (Oslo: Pax, 2017), 6.
7 Conversation with Curator Nina Bergum, Norwegian Aviation Museum, 18 October 2022.
8 "U-2 is the pride of the Norwegian Aviation Center," in T. E. Hansen, "The Aviation Museum Has Landed for Good," *Helgelands Blad*, 23 August 1994; "But What Really put People in a Good Mood Today Was the US spyplane U-2," *NRK TV*, "Opening of the Aviation Museum," 15 May 1994.
9 Per Rudling, "'For a Heroic Belarus!': The Great Patriotic War as Identity Marker in the Lukashenka and Soviet Belarusian Discourses," *Sprawy Narodowosciowe* 32 (2008): 52–56.

10 "Suddenly Bodø was the centre of the attention of the whole world," the newspaper quoted local Bodonian Johan Sedolf Nordgård who was interviewed in the Swedish Television programme "The Spy Who Never Came" in May the same year. The newspaper article ended with "The Whole International Atmosphere at once Became Changed Due To an Airplane and Bodø," in Kåre Antonsen, "Selmer Nilsen the First in the West Who Knew About the U-2 Downing," *Nordlands Framtid*, 24 May 1972.

11 Yuhan Shao, Eckart Lange and Kevin Thwaites, "Defining Local Identity," *Landscape Architecture Frontiers* 5, no. 2 (2017): 6.

12 Annette Pritchard and Nigel J. Morgan, "Culture, Identity and Tourism Representation: Marketing Cymru or Wales?," *Tourism Management* 22, no. 2 (2001): 12.

13 Yuhan Shao, Eckart Lange and Kevin Thwaites, "Defining Local Identity," *Landscape Architecture Frontiers* 5, no. 2 (2017): 31.

14 Gerhard Van Keken, "Place Making: The Construction of Regional Identity," www.place-brandobserver.com/place-making-construction-of-regional-identity, 19 May 2015. See also Van Keken, "The Construction of Regional Identity: Zeeland. Strategies of Place Branding and Place Making" (PhD Dissertation, Erasmus University Rotterdam, 2011).

15 See for example the company eventIMPACT, who offer a toolkit to make sure your event is properly impactful: www.eventimpacts.com/impact-types/social/content/identity-and-image, accessed 20 March 2024.

16 Kees Terlouw, "Territorial Changes and Changing Identities: How Spatial Identities are Used in the Up-Scaling of Local Government in the Netherlands," *Local Government Studies* 42, no. 6 (2016): 941.

17 www.avinor.no/avinors-flyplasser/bodo, accessed 23 March 2024.

18 Stein Sneve, "The Airplane Which Put Bodø on the Map," *Avisa Nordland*, 24 April 2010.

19 Knut Støvne, "The Worlds Most Advanced Spyplane Had to Make an Emergency Landing in Bodø," *Vi Menn*, 23 July 2020.

20 This short overview of the U-2's history is mainly based on my own research, published through several non-scholarly articles and a three-part podcast-series in 2020. See Karl L. Kleve, "U-2: The Spyplane Which Put Norway on the Map," *Flyhistorie* 56 (2020): 12–19; Karl L. Kleve, "The Spyplane," *Levende Historie* 5 (2008): 38–41; U-2-three-part podcast: www.museumspodden.no/?s=U-2, 21–29 April 2020.

21 The author's interview with Carmine Vito, 3 June 1999. See also James May, "James May at the Edge of Space," *BBC 4*, 21 June 2009.

22 National Security Archive, *The Final Overflights of the Soviet Union 1959–1960*, Approved for release 2013, p. 159, www.nsarchive2.gwu.edu/NSAEBB/NSAEBB434/docs/U2%20-%20Chapter%204.pdf, accessed 25 March 2024.

23 In addition to the author, several Norwegian historians have written on the U-2 in Norway in 1958 and 1960. A good, short account is Rolf Tamnes, "Days in May: The U-2-Case in 1960," in *In the Vicissitudes of Politics: Festival Script to Knut Einar Eriksen*, eds. Solveig Halvorsen, Terje Halvorsen, Einar Niemi and Helge Pharo (Oslo: LO Media, 2009), 268–88.

24 See Tom Christensen, "How the Soviet Union Attempted to Influence Norwegian Security Policy 1955–1964," (Masters Dissertation, Oslo University, 2007), 88–92. The Soviet propaganda agency's department for Norway, Sovinformbyrå, even published a 119-page booklet with selected texts from the trial, which made much out of the fact that Powers had been in Bodø before, namely during the 1958-operations. Sovinformbyrå, The *U-2 Powers-Case* (Oslo: Bryde, 1960).

25 At a visit to the Norwegian Folk Museum, he danced together with Norwegian Prime Minister Einar Gerhardsen and two museum employees in national costumes. And during his visit to the large Herøya Industrial Complex in Porsgrunn, he received an almost rock star welcome by the workers. See for example this personal tale of how one of the local workers experienced the visit: Linda Faane and Mathias Soleng, "When Khruchew came to Herøya," *Digitalt Museum*, 15 October 2014.

26 M. Hovland, "4 Extreme-Planes at Sola 1958–1989," *Sola Historielag*, 1 December 2020.

27 Stian Bones, "Party-Newspapers, Reconstruction and Cold War (1945–1970)," in *Start the Press! The Newspapers in Bodø through 150 years,* eds. Wilhelm Karlsen and Svein Lundestad (Trondheim: Akademia Forlag, 2012), 121.

28 Wilhelm Karlsen, *With Air Under the Wings, Bodø's History vol 4, 1950–2016* (Bergen: Fagbokforlaget, 2016), 90.

29 Karl L. Kleve, "The Air Force as an Infrastructure-Developer in Northern Norway During the Cold War – Case-Study Andøya," *Norwegian Aviation Museum Series* 6 (2003): 2–22.

30 See examples in the Norwegian Aviation Museum photo archives at Digitalt Museum: from the celebration of NATO's 10th anniversary in 1959: www.digitaltmuseum. no/021015550239/feiring-av-nato-som-fyller-10-ar, accessed 24 March 2024.

31 Karl L. Kleve, "How the Cold War Shaped North Norwegian Aviation and Society," in *The Cold War in the Arctic*, ed. Michael Soupron (Arkhangelsk: Pomor University, 2009), 188–200.

32 Both *Lofotposten* 15 September 1967, and *Rana Blad* 16 September 1967, claimed that "a Soviet superspy" in North Norway gave the Soviet Union information which led to the U-2 being shot down.

33 *Nordlands Framtid*, "Selmer Nilsens Life and the U-2 Incident in Swedish TV," 20 May 1972.

34 Ståle Hansen, "The Spy Programme NRK Refused to Send,*" NRK*, 25 October 2013.

35 Pål Vatne, *I Was a Russian Spy: The History of Selmer Nilsen* (Oslo: Aschehoug, 1981), 83–97.

36 Stian Bones, "The Boy Who Became a Spy," *Avisa Nordland*, 1 October 2016.

37 Kåre Antonsen, "Selmer Nilsen the First in the West Who Knew About the U-2 Downing," *Nordlands Framtid*, 24 May 1972.

38 Alf. R. Jacobsen, *The U-2 incident* (Oslo: Aschehoug, 2009); and Asbjørn Jaklin, *Ice Frontier: The Cold War in the North* (Oslo: Gyldendal, 2009), 139–55. See also Kleve, note 3 in this chapter, and *Nordlandsposten*, "U-2 Planes in Bodø as Late as 1964?" 10 November 1977.

39 The same plane and pilot landed two of the times in Bodø. After the second landing, the plane was given the name "Bodonian Express," painted on its side. It is exhibited at the US Air Force Museum in Dayton, Ohio today.

40 S. Larsen, "Technical Reasons Behind American Emergency Landing in Bodø Yesterday," *Nordland Framtid*, 14 August 1981, where the Norwegian Foreign Ministry spokesman Geir Grung says he doubt the SR-71 will cause a new U-2 incident.

41 Gerhard Van Keken, "Place Making: The Construction of Regional Identity," www. placebrandobserver.com/place-making-construction-of-regional-identity, 19 May 2015" Van Keken, "The Construction of Regional Identity: Zeeland. Strategies of Place Branding and Place Making" (PhD Dissertation, Erasmus University Rotterdam, 2011).

42 *Nordlands Framtid*, "Aviation Town Bodø," 40-page attachment, 2 June 1990.

43 Bjørn Rydmark, "The Black Lady Finally to Bodø," *Nordlandsposten*, 22 February 1992. A reportage about a trip to Russia of prominent Nordland-representatives, with the aims being a secret for the Ministries down in Oslo. See also Oddrunn Pettersen, *The Vision that Became Reality – The Regional Barents Cooperation 1993–2003* (Kirkenes: The Barents Secretariat, 2002).

44 Bjørn Rydmark, "The Black Lady Finally to Bodø," *Nordlandsposten*, 22 February 1992.

45 Jan O. Bodøgaard, "Competition, War and Merger (1990–2002)," in *Start the Press! The Newspapers in Bodø Through 150 years*, eds. Wilhelm Karlsen and Svein Lundestad (Trondheim: Akademia Forlag, 2012), 200.

46 But according to the NRK TV programme about the museum-opening in 1994, they still held up hope for some parts of the wreck. "Opening of the Aviation Museum," *NRK TV*, 15 May 1994.

47 Tore M. Antonsen, "High Up and Far to the North – A Study of the Decision-Making Process Connected to the Establishment of the Air Force Museum" (Masters Dissertation, Oslo University, 1995).

48 Bjørn T. Pedersen, "Want to Make a Movie About Selmer Nilsen," *Nordlands Framtid*, 31 August 1993. The movie premiered in 1995.

49 F. Gander, "35 Fine Years with the Black Lady," *Nordlands Framtid*, 7 April 1994. As a trainer it was painted whole white. According to this interview with U-2 mechanic Jim Wood, they called it "Old Whitetrash" towards the end. It was quite worn out.

50 Finn Breivik, "I Did Not Want to Stop the U-2 Plane," *Nordlands Framtid*, 29 March 1993.

51 *NRK TV*, "Opening of the Aviation Museum," 15 May 1994; T. E. Hansen, "The Aviation Museum Landed for Good," *Helgelands Blad*, 23 August 1994.

52 Email conversations between the author and retired Captain Oddmund Bjørnaali, 24–29 November 2022.

53 The largest difference was the colour. Operational Air Force U-2s had been black since the mid-1960s. But the CIA U-2s were initially an unpainted aluminium silver. And by 1960 they were dark blue, as can be seen on the U-2 on display in Moscow. See also the Soviet presentation of Power's trial: Sovinformbyrå, The *U-2 Powers-Case*, 59. This difference was not publicly known, though – to this day.

54 Svein Lundestad, ed*., "*U-2 Flights and the Cold War in the High North: Report from Cold War Forum Conference on the Cold War in Bodø, October 7–8, 1995," *HBO-rapport* 1, 1996 (Bodø: Bodø University College, 1996).

55 Norwegian Aviation Museum, *The Cold War Experience* (Mysen: TE Kommunikasjon, 1996). The brochure is available digitally through the Norwegian Aviation Museum library at https://asp.bibliotekservice.no/nlm/title.aspx?tkey=16147.

56 Norwegian Aviation Museum, *The Cold War Experience* (Mysen: TE Kommunikasjon, 1996), 3.

57 Oddrunn Pettersen, *The Vision that Became Reality – The Regional Barents Cooperation 1993–2003* (Kirkenes: The Barents Secretariat, 2002), 23.

58 The latest examples are Ola Hellnes, "When Norway Was in Cold War," *NRK*, 6–20 October 2022, a three-part podcast series with one episode dedicated to the U-2 incident. According to Helness, it became one of the most popular NRK podcasts that year. See (hear) www.radio.nrk.no/podkast/hele_historien/sesong/da-norge-var-i-kald-krig, accessed 25 March 2024; and Lars Risberg and Dang Trinh, "When Soviet Threatened Norway with Nukes*," National Library podcast*, 16 November 2022, www.nb.no/historier-fra-samlingen/da-sovjet-truet-norge-med-atomvapen.

59 Karl L. Kleve, U-2-three-part podcast: www.museumspodden.no/?s=U-*2*, 21–29 April 2020. According to Museumspodden-editor Kjartan Abel Nilsen, the series quickly became one of the most downloaded of all Museumspodden-podcasts (email to author 16 June 2020).

60 In 2017 NRK made a 4-part documentary about former Prime Minister Einar Gerhardsen, where the U-2 drama of 1960 and its Bodø-connection was an important part of episode 3: "Einar – The Whole Story," *NRK*, 2017, https://tv.nrk.no/serie/einar-hele-historien. When the US Air Force in the spring of 2023 announced the planned retirement of the U-2 planes in 2026, the Bodø connection was mentioned in Norwegian newsmedia. See for example M. Hem, "USA Will Retire the "Dragon Lady," *Forsvarets Forum*, 10 May 2023.

61 The two largest Norwegian broadcasters made similar news items: Kjell Persen, "Spielberg and Hanks are Going to Make a Movie About Norwegian Spyflight-Drama," *TV2*, 22 April 2014; and Susanne S. Lysvold, "Spielberg and Hanks Want to Make Movie About Norwegian Spyflight-Drama," *NRK*, April 22, 2014.

62 Bodø Municipality. *Bodø 2024 European Capital of Culture Candidate City Application* (Bodø, 2018), 33, https://bodo.kommune.no/les/ECC.

63 Visit Norway, *Bodø – Saltens Small Big City*, www.visitnorway.no/reisemal/nord-norge/
    bodo, accessed 25 March 2024. The local branch also focuses on the U-2. In their half
    page on the history of Bodø in the Bodø Guide for tourists, the U-2 incident is discussed
    under the heading "International Attention". Visit Bodø, *Bodø Guide 2013* (Bodø,
    2013), 37.
64 Some examples: Frøydis Refsvik G said "Love the military side. Check out the U2 and
    its Bodoe related history!" July 2023. Bernhard R thought the contextual material was
    excellent. He had even recognised that it is not Powers' U-2 on display, April 2019.
    Midtkandal though the most impressive must be the museums U-2 spy plane, January
    2015. See www.tripadvisor.com/Attraction_Review-g190470-d535029-Reviews-or10
    -Norwegian_Aviation_Museum-Bodo_Nordland_Northern_Norway.html, accessed 25
    March 2024.
65 Alberti in this volume.
66 Email to the author from Swedish SVT journalist Anders Öhlund, 16 October 2022; and
    Messenger-message to the author from Danish Curator Peer Henrik Hansen, 11 October
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14 Competing for Authenticity, Nostalgia and Visitor Revenue in Cold War Museums

Peter Robinson and Milka Ivanova[1]

This chapter explores the challenges for materialising, remembering and exhibiting the Cold War, comparing approaches to preserving, valuing and opening such sites and museums to the public in Eastern and Western Europe. The Cold War is still within living memory and is also moving into history – thus, Cold War sites can be conceptualised as potent "sites of memory."[2] At the same time, the Cold War is often described as an "imaginary war" that presents unique challenges for materialising it.[3] This chapter frames the research in a way that reflects the role of museums and heritage sites as active agents in the construction of political, public and academic knowledge.[4] They hold the power to shape cultural memory by legitimising interpretations through their authority and influencing societal and individuals coming to terms with the past.[5]

At the same time, museum practice still centres on objects and their authenticity and significance via either being typical or unique and avoiding complexities where explicit narratives might be missing or address controversial topics.[6] Often, such exhibits depend on the cultural capital and, in the case of the Cold War, the "lived experiences" of visitors to perceive the significance and meanings of the exhibited objects.[7] From the research, it is clear that visitor numbers to Cold War sites are growing, yet many of those visitors lack the knowledge or personal experience to engage with object-oriented exhibits critically and depend on the displays, materials, guided tours, as well as other media and collective memories to understand the larger context. Curating such exhibits around more contemporary heritage is fraught with difficulties, from ownership and management of sites and collections, identifying appropriate objects, to establishing narratives that are in flux, to capturing the width and breadth of the historical moments and communicating them to diverse audiences, investigating such processes offer unique perspectives on the production, materialisation and communication of heritage and its meanings.

The comparative approach deployed in this chapter helps expose the differences, challenges and gaps in exhibited collections faced by visitor attraction managers and site owners, given that the narratives of the Cold War are those of opposing sides and, more recently, those of victors, losers and victims.[8] This approach responds to the call for a more transnational approach to studying this historical period; the tourism studies lens in this chapter provides a valuable perspective around the interplay of memory, materialisation, and commercialisation of Cold

War heritage from a visitor experience perspective. Thus, our chapter demonstrates the parallel processes shaping these sites – as sites of historical and heritage value and study, on the one hand, and as sites imbued with meanings by individual and group memory and commercial interests, on the other hand.[9]

In the United Kingdom, by the 1990s, the Ministry of Defence's "Options for Change" policy had identified more than 100 military and emergency infrastructure sites that were surplus to requirements, including naval dockyards, nineteenth-century barracks, former munitions factories, airfields and a network of bunkers, food and equipment stores. It is estimated that there were some 10,000 grid-referenced remains of Cold War structures in the United Kingdom alone, with many being repurposed, abandoned, or relocated.[10] Historic England (then English Heritage) reported on the condition and cultural and architectural significance of most Cold War sites in England. Cocroft noted that two of each type of site were selected when listing these sites to ensure long-term preservation and mitigate the potential loss of a single example.[11] Since their declassification, several sites, regardless of listing decisions, have become known for their historical, archaeological and commercial interests. A number have become visitor attractions.

Although listing confers a particular historical significance, ownership responsibility and eligibility for financial support, very few structures have received any funding to support their conservation. The Gorse Industrial Estate (formerly RAF Barnham) in Norfolk has received significant financial assistance to protect and conserve its decaying concrete structures. The focus has been on the restoration of the cabinets that stored the fissile cores for air-dropped nuclear bombs, which has allowed conservators to test out ways to retain the appearance of the rusting iron doors by using vinyl adhesive images of the doors in their original condition. Without funding, such new curatorial methods cannot be tested. Cold War sites provide a unique opportunity to consider new strategies to capture and conserve challenging structures that require different treatment than other historic structures (Figures 14.1 and 14.2).[12]

Despite the recording of sites being undertaken in the early 2000s, research in 2005 noted that no clear case had been made to demonstrate that this heritage was worthy of preservation.[13] It had already been mooted during the late 1990s that these sites should be dismantled before the millennium as a marked public effort to look to the future.[14] A deliberate decision was taken at Orford Ness (opened to the public in 1995) not to try to retain many of the historic structures (the site was used to test atomic weapons components) in the face of climate-related erosion and to focus visitor experiences on the natural history of the site. Palmblad further noted that engaging key stakeholders in preservation was challenging because Cold War heritage is a recent genre. It wasn't easy to persuade stakeholders (and arguably the wider public) that such locations needed to be preserved.[15] While one or two sites – mainly bunkers – opened to the public around the turn of the century, a broader appreciation of these sites has only emerged in the last few years.

While there has been a concerted effort in the United Kingdom to identify and conserve Cold War heritage sites, at least in the 1990s, this has not been the case in Eastern Europe. After the fall of the communist regime in 1989, many of

Figure 14.1 Replica vinyl printed door from restoration work at Gorse Industrial Estate
          (formerly RAF Barnham)

the sites and symbols associated with the communist regime were destroyed or
abandoned and left to ruin. It was not until later that some effort was undertaken
to collect, preserve and reconstruct some monuments, sites and artefacts at local
and national government levels. One of the earliest examples is the birthplace
and home of the leader of the communist party, Todor Zhivkov (1954–1989),
which opened as part of the Local History Museum in 2002 in Pravets. In 2011,
following trends in other Eastern European countries, the Ministry of Culture
opened the Museum of Socialist Art in Sofia to present works from the period of
Socialist rule in Bulgaria (1944–1989). Many of the later initiatives to collect and

Figure 14.2 Original iron doors inside the hutch at Gorse Industrial Estate (formerly RAF Barnham)

preserve communist heritage sites and artefacts have been led by private organisations. Examples include the privately owned and operated Retro Museum in Varna, which opened in 2015, and The Red Flat in Sofia, which opened in 2019 and is co-organised by a non-profit NGO.

It is essential to note that these remnants of the communist regime in Bulgaria are embedded within the country's urban landscape.[16] Many of these monuments of the regime, the public buildings and architecture, the tourism resorts, heavy and light industry sites, and forced labour camps are abandoned and deteriorating, with patchy attempts at preservation, such as the Buzludzha monument. Some sites are

still functioning, such as The Palace of Justice in Sofia or the Former Bulgarian Communist Party Headquarters, which maintains its governmental purpose.

Tourism offerings based on these communist heritage sites have been developed as walking tours that heavily draw from the urban remnants of the communist landscape. Many of the sites and monuments included in the offer focus on the social, political and everyday experiences and life during the communist regime. The tours focus on the totalitarian nature of the regime, often through the lens of lived experiences.

Despite the growth in these Cold War visitor experiences, little scholarly attention has been paid to the presentation and curatorship of Cold War heritage in Eastern or Western Europe.[17] More recently, nuclear cultural heritage has emerged as a field of study in northern European countries, driven partly by the complexities of nuclear decommissioning after the end of the Cold War.[18] The NuSPACES project, for example, centres on how different social groups, including local communities, nuclear industries and national cultural organisations, create museum exhibitions and heritage sites to selectively preserve their nuclear past and contextualise Cold War heritage into the broader military, industrial, cultural and historical contexts.[19]

An Emerging Visitor Economy in the United Kingdom and Bulgaria

Most UK sites remain in private ownership. Kelvedon Hatch, for example, was repurchased from the government by the Parrish family, who owned the land when it was compulsorily purchased to build a ROTOR station in the early 1950s. It was one of the first bunkers to open to the public. Those sites are not in private ownership but are open to the public and are generally cared for by charitable trusts. These organisations typically preserve their sites to promote and encourage public access. It is important to note that only four sites are in the guardianship of nationally recognised heritage organisations, and only one of these – The York Cold War Bunker – focuses on nuclear heritage.

The National Trust owns Orford Ness and The Needles Old Battery – but at these sites, the Cold War heritage, though attractive to visitors, has only recently been recognised as being of specific rather than incidental interest. Importantly, it should be noted that other sites in the care of these organisations have some Cold War heritage – but this is often limited and not publicly accessible. Landguard Fort in Felixstowe (English Heritage) has two Cold War operations rooms that were built but never operationalised in a part of the site where there is no public access. They are mentioned on an interpretation panel at the site.

Table 14.1 presents all those sites that are open to the public in the United Kingdom and offer a specific "Cold War" orientation. A more comprehensive audit of all remaining and accessible Cold War sites and all museums with Cold War collections suggests 115 locations in the United Kingdom where visitors can engage with Cold War heritage as part of a more comprehensive offer. Most air museums are excluded from this list despite some having a significant collection because the core offer is not about the Cold War but engineering and wider aerospace heritage. It should also be noted that several other organisations – such as The Nuclear Test

Table 14.1 Major UK Cold War sites open to the public

Site	Ownership	Type of Site
Hack Green Nuclear Bunker	Privately owned and operated by a charitable trust	Cold War Bunker[a]
Kelvedon Hatch Secret Nuclear Bunker	Privately owned	Cold War Bunker[a]
The York Cold War Bunker	English Heritage	ROC Control Bunker
RAF Neatishead	Charitable trust	RAF Control Room
Dover Castle Tunnels	English Heritage	Cold War Bunker[a]
Orford Ness	National Trust	Nuclear Missile Fissile Core Test Site
Needles Battery	National Trust	Missile Test Site
The National Cold War Exhibition, RAF Cosford	RAF	Aircraft Museum
Scotland"s Secret Bunker	Privately owned	Cold War Bunker[a]
Bentwaters Cold War Museum	Privately owned	Cold War Control Room (USAF)
Gravesend Cold War Bunker	Gravesend Borough Council	ROC Control Bunker
Broadway Tower ROC Post	Privately owned	ROC Observation Bunker
Barnton Quarry	Privately owned	Cold War Bunker[a]
Alconbury Weald (RAF Alconbury)	Owned by Urban & Civic	USAF Chemical Warfare Bunker and Covert Plane Ops Centre
The Gorse Industrial Estate	Privately owned	Nuclear Missile Storage Facility
The Radar Museum	Charitable trust	Former Radar Site (part of Home Chain)
Drakelow Tunnels	Privately owned – voluntary group offers tours of the tunnels	Cold War Bunker[a]
Craigieburn Bunker, Dundee	Charitable trust	ROC Sector Bunker

[a]These sites have often been used for different purposes – mainly as RAF Rotor Stations before becoming Regional Government Control Rooms.

Veterans Association and the Military Vehicles Trust – manage collections and may hold exhibitions and events but do not operate as visitor attractions.

Table 14.2 focuses on the sites and museums and the architectural legacy accessible to the public, typically via walking tourism or museum visits, in Bulgaria, the key eastern European site of the study. While there is commonality in site ownership, the types of sites are quite different. While the UK sites are primarily military, the Bulgarian sites, as is often the case for Eastern European countries, are associated with the socio-political and economic characteristics of the communist regimes.

Exploring Curatorial Challenges

Research into curatorial challenges of the Cold War suggests most site managers regard their attractions as places that awaken values and meanings to help visitors

Table 14.2 Major Bulgarian communist heritage sites are open to the public

Site/Activity	Ownership	Type of Site/Activity
Red Flat, Sofia	Privately owned 365 Association Sofia Tours	Visitor attraction/museum
Retro Museum, Varna	Privately owned	Museum
The Museum of Socialist Heritage, Sofia	Offshoot of the National History Museum	Museum
The Palace of Justice in Sofia	Local council	Government Building
Former Bulgarian Communist Party Headquarters	Local council	Government Building
Buzludza monument, Central Balkan Mountains	Complex ownerships	Monument
The Alley of Cosmonauts	Local council ownership	Monument
Red Army Monument, Sofia	Local council ownership	Monument
Monument to Bulgarian-Soviet Friendship, Varna	Local council ownership	Monument Battlefield site

critically evaluate, reflect on and engage with a period in history.[20] The heritage for which these various owners and organisations are responsible is challenging – it is "often unknown, still invisible and often unreachable."[21]

While most sites explain aspects of the technological Cold War, it is much harder to materialise socio-cultural factors such as the Campaign for Nuclear Disarmament, women's peace camps, or the stories from communities close to many primarily military sites.[22] When combined with the focus on "hard" military and technological history that pervades many UK attractions, the intangible elements that cover social, personal and multivocal perspectives of the Cold War end up overlooked within the interpretation of the period. Such focus can easily lead to simplistic and deterministic interpretations that fail to make the voices of the period heard.[23]

Managers must provide sufficient information to place the location in its political, military and technological context.[24] Within the Bulgarian context, the focus on the lived experiences, art and totalitarian nature of the regime provides a partial understanding of the period that overlooks the military-technological developments and the country's international position in the Cold War period. The period is often understood from the post-communist perspective, and such narratives help shape the position of Eastern European countries not as the "other" side in the conflict but as unwilling pawns of the Soviet Union.[25] Such an approach is consistent with the ways the narratives of the Cold War are being shaped in Western European contexts, specifically in the United Kingdom.

These unchallenged narratives ignore the Cold War's political, socio-economic and cultural aspects and unproblematically present the nature of the military conflict. Very few sites in the United Kingdom fully explain the complex history of the period. More than a non-active military conflict, the Cold War was also a political, ideological, economic and cultural conflict, a conflict between systems and of global reach. In many cases, organisations lack the expertise, collections, or records

to explain this. It means that sites tend to offer a broad and shallow interpretation or choose to focus on a single, often aggressive, narrative. By contrast, most sites and experiences in Bulgaria are led by tour guides who offer a more human and softer perspective – the military hardware of the period is seen as the hardware of the soviet occupation and, as such, is typically removed and even destroyed. The relationship between these hard and soft elements is very different, and often, it is the negotiated relationships between personal memories, places and objects that create compelling visitor experiences more than the more materialist approach to authenticity.[26] Different sites included in this research adopt a number of both materialistic and more constructivist approaches to the authentic preservation of Cold War heritage.

In the context of Cold War structures – such as bunkers – built with a clear military purpose that shaped their architecture, there are difficulties associated with installing museum apparatus and equipment.[27] They are not easily converted for adaptation as museums.[28] The nature of such sites constrains the use of the internet, power availability and other services. It is challenging to bring meaning to such places without explaining the theory of what might have happened had the war heated up. Thus, it has often proven difficult to create meaningful engagement.[29] This is further complicated by the changing use of many of the buildings. Kelvedon Hatch, for example, began life as an RAF ROTOR Station (early warning air defence radar system) and served briefly as a civil defence centre before its final use as a Regional Government Headquarters. This happened in secret. Limited records are available to aid interpretation. Similarly, in Eastern Europe, while the majority of the existing structures are civil in nature, they are left in poor condition. Restoration and conservation efforts are too costly, and there is no political will for their preservation.

For national security reasons, archives and documents about military equipment often remain classified, and during decommissioning, the historical significance of documentation related to these individual sites was not recognised and has often been destroyed. Many who have information also signed the Official Secrets Act and are, to this day, not confident talking about any of their work. This was a particular issue for several of the sites included in the study. In the case of Bulgaria, many of the secret documents were never made public in a reconciliation project and were lost in fires, relocations, or remain classified. This creates significant gaps in understanding and presenting the apparatus of totalitarian oppression and the secret state, and many of the available accounts are from oral histories.

As sites were decommissioned, the physical contents were often destroyed or bought by private collectors – some were acquired for preservation – though the latter was not common practice, and many collections remain unsorted. English Heritage has a collection of some 3,000 items stored at Dover Castle, which have been collected from both the bunker at Dover and other locations. Work is still needed to understand the individual importance of many of these artefacts. The RAF Radar Museum at Neatishead is a rare survivor that passed from the RAF to the museum trust, complete with equipment. It is operated by volunteers, some of

Figure 14.3 Original equipment in the RAF Neatishead Control Room (now The RAF
Radar Museum)

whom worked at the site, enabling much of the knowledge to be passed on as part
of a working RAF base (Figure 14.3).

While finding equipment that has authentic links to each location is challenging,
the volunteers at Bentwaters Cold War Museum navigate such difficulties by adopt-
ing diverse strategies to enhance authenticity that preserves the historical integrity
of the displays and resonates deeply with the narrative of each place. Their focus is
on reuniting artefacts with their original locations when they are approached with
donations for the museum.

Kelvedon presents a different approach to historical authenticity, showcasing
how adaptation can co-exist with historic preservation. It was not one of the sites
chosen by Historic England for listing, thus lacking certain conservation protec-
tion, and as such, has been adapted to meet modern needs while still serving as
a historical exhibit. The owners have been able to adapt the bunker to be a visi-
tor attraction – most notably by boring a hole through the side of the bunker to

provide an exit route for visitors. Without this, the site would not meet fire safety requirements to operate as an attraction.

Orford Ness in Suffolk (UK), a site with a military history dating back to the First World War, provides yet another perspective through which to consider the curatorship of Cold War heritage. Owned by The National Trust and accessible only by boat, since first opening to the public in 1995, it has predominantly been managed as a site for wildlife and conservation. The site has presented challenges for an organisation that is more familiar with conserving historic houses and gardens. It creates the need for new knowledge, new curatorial approaches, and new ways of presenting information to visitors. While there is interpretation to explain the site, and a few buildings are identified for preservation, the large concrete pagodas that can be seen from the mainland and which covered laboratories for testing for components of atomic weapons are being allowed, together with other historical monuments on the site, to return to nature. This presents an evolving strategy towards authenticity in preservation – where not everything is preserved in its original state, but significant elements are highlighted and explained to visitors. Caitlin DeSilvey has discussed this approach to "curated decay," thus providing a unique and authentic historical insight that embraces both the past and the natural reclaiming process.[30]

The concept of "curated decay" explains a deliberate approach to conserving a historic site, which differs from the wilful forgetting of the past on display in central and eastern Europe. While both approaches are underpinned by cultural forgetting, curated decay is a managed process that keeps the site accessible, meaningful and safe. The process of decay reflects the impossibility of long-term preservation. It is part of the site's history that emphasises the transience of material things, understanding that change, deterioration and eventual disappearance are integral parts of any site or artefact's lifecycle. Such a presentation focuses on ecological narratives rather than the established narrative of the Cold War.[31] Some structures are now so unsafe that they have become inaccessible. One strategy to help preserve the history of these buildings is using robots to perform LIDAR scanning to record their details.

Despite the variance in approach, reverence and authenticity, the sites discussed here offer surprisingly similar visitor experiences – perhaps a reflection that the actual breadth of potential content is limited. Most UK sites visited for this research show the British Government's Protect and Survive films. What may seem a coincidence is a consequence of the very secret nature of the Cold War period. There is very little media to draw on. Nothing was recorded. Nothing was filmed. The only material on offer is those media resources originally produced for the public. For those who lived through the period, this media creates authentic and evocative experiences, but further explanation is required for younger audiences.

Many of the available materials offer a particular perspective. As Fairclough points out, the Cold War was also a secret war, with many documents, especially those in the media, being part of deliberate propaganda and thus requiring a critical appraisal and interpretation. In Eastern Europe, the intentional destruction of the sites and symbols of the regime immediately after and changes in 1989 meant

that many of the artefacts that are now included in museums are often replicas or removed from the context of their use and part of reconstructions often reimagined through memory and art as is the case of the red flat.

The Problem of Hyperreality

Some scholarly research, in which historians and social scientists have studied the Cold War from a traditional political history perspective, has been widely debated in historiographical terms. At the same time, it has been argued that little attention has been paid to socio-cultural meanings or impacts.[32] It has been suggested that this heritage may resist reinterpretation because it is impossible to fully explore the enormity of nuclear war, which is primarily considered beyond representation. However, there are connotations of hyperreality that need unpacking.

Jean Baudrillard's notion of hyperreality refers to a condition where the boundary between actual and simulated becomes blurred or indistinguishable. During the Cold War era, especially in the latter half of the twentieth century, media, particularly television and film, played a significant role in shaping public perceptions of the global political landscape, particularly the tensions between the United States and the Soviet Union.[33] Some notable examples that illustrate how media influenced and reflected Cold War sentiments include several films, *Dr. Strangelove or How I Learned to Stop Worrying and Love the Bomb* (1964), *Red Dawn* (1984), *Fail-Safe* (1964) and *The Manchurian Candidate* (1962) and television programmes including "The Day After" (1983), "I Led Three Lives" (1953–1956), "Tinker Tailor Soldier Spy" (1979) and "Yes, Minister" and "Yes, Prime Minister" (1980s). In addition, CNN's "Cold War" documentary series, narrated by Kenneth Branagh,

The Cold War era witnessed significant media spectacles, such as televised debates, military parades and propaganda campaigns. These spectacles aimed not only to inform but also to shape public opinion and reinforce ideological narratives. However, in the post-Cold War era, the legacy of these spectacles has persisted in the form of nostalgic or sensationalised representations in TV and film in both Western and Eastern Europe. As the Cold War ended and its consequences unfolded, media representations have often contributed to the creation of a hyperreal environment.

Television and film have often presented events, narratives and characters that are not, and never have been, directly experienced by the audience but are instead mediated through screens. Much of this has focused on post-apocalyptic lives, which sometimes, but not always, suggest the situation is the consequence of nuclear war. For many growing up in the 1980s, the BBC production "Threads" provided some sense of post-apocalyptic Britain and haunted a generation of young people (it was banned for a period). It has long been considered the most impactful illustration of the impact of nuclear war.

In contemporary society, the idea of post-apocalyptic life (a reason for the apocalypse is rarely offered) has given rise to films including *I Am Legend* (2007), *The Walking Dead* (2010) and *Cloverfield Lane* (2016). These point to

a public fascination with dystopian futures. Many of the more contemporary post-apocalyptic stories become disconnected from the actual events they seek to portray, creating a simulacrum – a copy without an original. This is also true of visitor experiences – the opportunity to press the button to launch a Thor Missile at the Titan Missile Museum is one such example. In the case of Cold War heritage, specific events, such as espionage, political manoeuvring and proxy conflicts, have often been dramatised and fictionalised in media representations, leading to a distorted perception of reality. Many television shows, movies and video games have depicted Cold War scenarios in exaggerated or speculative ways, creating hyperreal environments where the distinction between fact and fiction became increasingly ambiguous. Cold War nostalgia has become a prominent theme in TV and film as creators and audiences reflect on the anxieties and certainties of the past. This has often involved selective interpretations of history and romanticised portrayals of Cold War conflicts, overlooking the complexities and consequences of geopolitical tensions. As a result, the media perpetuated a hyperreal version of the Cold War era, characterised by idealised narratives and simplified dichotomies between good and evil, where triumphalist accounts suggest that capitalism and the military might have won the Cold War.[34] This portrayal often distorts the complexities of the past and disfigures the present, where narratives of a "new cold war" are deployed in the analysis of the Russian-Ukrainian conflict in contemporary commentary.

This leads to a disconnect between the "what-ifs" of nuclear war and the wider public perception of life after nuclear conflict. Curators inevitably look to these ideas to develop events and activities to attract repeat visitors. Inge Hermann suggests that the private ownership of the Kelveden Hatch bunker has enabled the owner to create a largely ambiguous collection of original and imported items which offers a particularly nuanced explanation and celebration of the site, suggesting it represented a "profane tangible tribute to emphasise the imminence and inevitability of World War III" with little social context or memorialisation.[35]

Within the Bulgarian context, nuclear and defensive bunkers have always been sites of speculation and myth because of their secretive and classified nature. Combined with the often-sensationalised narratives of the totalitarian nature of the regime with a reputation for less than ethical technological and scientific approaches, it is so no surprise that some sites are currently developed as "escape rooms" themed around secret biological and nuclear experiments in preparation for a fictionalised World War III.

Memorialisation

Cultural heritage is usually a result of crises and structural changes in society; the Cold War era, despite its secrecy, was a time of rapid modernisation and structural shift – such periods often evoke feelings of loss and create a need to freeze the state of things.[36] Memory is an important part of this mental conversion process – a cultural process of remembering and forgetting, which is fundamental to our ability to conceive of the world.[37] In this context, the Cold War has received relatively

little scholarly attention. There are difficulties for curators because concepts of nuclear fear and paranoia are profoundly intangible yet critical to interpretation.[38] The identification of national monuments, the conservation of heritage sites, the establishment of memorials and museums, and the organisation of commemorative events are potent reflections of how national identity is meant to be imagined.[39] As such, it is important to remember that heritage is political and reflects particular viewpoints. The Cold War was highly controversial in the past, and this continues in the present; the presentation and interpretation of Cold War heritage must avoid sanitising the past to offer simple narratives.[40]

Heritage and memory are similar in that they are produced in synergy through myriad forms of communication. People simultaneously share and produce memories with others through various narrative and activity modes – heritage is also shared and produced through these narratives and through engagement with landscapes, performances and other activities.[41] This idea of memory, as shared and collective nostalgia materialised through sites of memory, is central to many encounters with Cold War experiences at historical sites in both Western and Eastern Europe.[42] This is a strange phenomenon for those who have no personal connection with anything more than a media-generated notion of the Cold War.

As time passes, these personal connections with the Cold War will diminish, and with greater historical understanding, new values will emerge around surviving sites. As the remains of earlier conflicts become more distant with the passing of those generations whose direct associations created a greater interest in the surviving physical remains, the challenge of giving meaning to sites becomes more difficult. It also means that focusing on a museum's material culture and built environment is often easier.

Sites associated with symbolism tend to leave very little physical presence – protests and campaigns can only be commemorated through photographic records, oral history and occasional artefacts. Thus, the peace movement, although often focused on military sites, is more challenging to portray.[43] Studies on the material culture of the Cold War struggle to make sense of such inconsistencies in both Eastern and Western European contexts.[44] Many of Bulgaria's sites, monuments and museum artefacts, such as the Monument "Assembly: Banners of Peace," represent the desire for peace and international cooperation. Taken holistically, such narratives create the impression that the Cold War could not become an actual war, but such interpretations are certainly post-Cold War.

In Eastern Europe, artefacts are often interpreted through the lens of the collapse of the communist regime, with their original meanings and use subsumed into later representations. In the United Kingdom, military sites and artefacts from the Cold War era are frequently presented from perspectives that emphasise their roles as deterrents to war in search of peace or focus narrowly on their technical, mechanical and technological functions. This approach often glosses over their roles as instruments of death and destruction. Rarely do such museums and exhibits critically examine these technologies of war from the perspectives of opposition to them, including existing peace movements. Only Scotland's Secret Bunker and IWM North can really explore this.[45] As a result, there is a missed opportunity to offer

alternative interpretations that could provide a fuller, more nuanced understanding of these artefacts' historical significance. This oversight not only limits the depth of public engagement with these exhibits but also diminishes the potential for these sites to serve as educational platforms for discussing broader themes of conflict, peace and reconciliation.[46]

The research in Bulgaria observed the extent to which communities would prefer to remove all physical remains of the Cold War because it is seen as the period of Soviet Occupation. In this instance, the collective memory is not celebrated by the community but one that is often seen as best forgotten.[47] Consequently, official museums tend to focus on the social history of the time and people's ways of life, while military-related sites are often only talked about on guided walking tours. However, refusing to face the recent past's complexity and contradiction leaves space for naive, even innocent, interpretation of the period.

Memories represent a standard vehicle for sharing nostalgia. Halbwachs proposes that all individual memories are, in some way, "collective" in that they depend upon others for their existence because the experience is recalled from a social perspective and often for social purposes.[48] As such, they can be dynamic and subject to change as they are collaboratively recollected and reconstructed. They can also be contested as details are disputed and re-negotiated.[49] In Eastern Europe, "remembering" can be more productive than "memory," and the nostalgia towards the "lived" experience view of the period is not a call to its re-establishment but part of the healing process from the traumatic experience of totalitarian regimes.[50]

The Future of Visitor-Focused Cold War Curating

Cold War heritage, still within living memory, continues to influence contemporary perspectives. Recent global events, like the war in Ukraine, have reignited fears of nuclear threats and highlighted the existence of nuclear bunkers across Europe, renewing public and media interest in the Cold War era.

Despite its ongoing relevance, Cold War narratives in Western Europe remain depoliticised, portraying a war against a "clearly defined enemy" without actual combat.[51] This portrayal, rarely challenged, emphasises it as a defensive conflict marked by fear rather than physical battles, as reflected in preserved sites and their narratives.

The prevailing, uncontested Cold War narrative complicates attempts to present alternative views at military and technoscientific sites. Efforts like "curated decay," which integrate ecological perspectives, pose distinct management challenges that clash with traditional conservation methods used by heritage organisations.

Renewed interest from numerologists, academics and tourism professionals in the Cold War has led to a re-evaluation of its significance. These sites, rich in social memory, focus on preserving artefacts that narrate a victorious war. For those who experienced it, the Cold War's blend of secrecy and public visibility, alongside the rise of nuclear technologies and events like the Chornobyl disaster, reinforced the sense of an imminent threat. Today's visitors navigate a multifaceted engagement with this history, influenced by emotional, social, cultural, legal and economic

factors.[52] To effectively convey this complex heritage, current curation efforts at Cold War sites utilise a range of media, often shaped by both censorship and contemporary interpretations.

Our chapter highlights the importance of engaging visitors with personal or professional connections to these sites, including those with military or civil defence backgrounds. This approach enriches the visitor experience and is vital for additional historical insights. Such an approach enables museums and heritage sites to approach Cold War artefacts under continuous construction via collaborative meaning-making that can bring together dispersed, contradictory, or complementary accounts from different social and professional groups that can work together without consensus or top-down narratives.[53] Such an approach bridges the gaps where narratives of the peace movement otherwise have minimal inclusion.

Notes

1 In 2021, Leeds Beckett University secured a British Academy Grant (SRG2021\211287) to explore visitor experiences, curatorship, emotion, and memory at Cold War related tourist sites, comparing the perspectives of eastern and western European sites through research carried out in the United Kingdom and Bulgaria. The research explores the themes of curatorship, experience, and memory.
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31 Caitlin DeSilvey, *Curated Decay: Heritage Beyond Saving* (Minneapolis: University of Minnesota Press, 2017), 67.

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45 For example, there is a small mention of the peace movement in the Kelvedon Hatch Secret Nuclear Bunker.

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15 What Colour Was the Cold War?

Jessica Douthwaite

In museums of twentieth-century history, the Cold War is mercurial. At once everywhere and nowhere, recognisable, or hidden, complex yet all-too-easily simplified, this era of global conflict poses unique problems for collecting and display.[1] What constitutes museum experts' foundational knowledge and presumption about the Cold War? I asked myself this question as I began an ethnography of four institutions' Cold War collections at National Museums Scotland (NMS), Imperial War Museums (IWM), RAF Museums (RAFM) and the Norsk Luftfartsmuseum, Norway (NLM). In this chapter, I use an interview question about the colour of the Cold War to approach this topic. Colours are a useful lens onto personal and institutional perceptions, as well as preconceptions and imaginings, of this historical era. The act of being asked to call a colour to mind that represents the past is an important indicator of how the Cold War is envisaged in museums by professionals – infused with cultural references, nostalgia, highly specialised knowledge and sometimes personal memories. I argue that given that the public space of a museum is always coloured, one way or another, and given that we all recognise the symbolic attributes of colour, a consideration of how it informs collections, displays and institutional narratives of the Cold War can enhance museum practice.

First, I discuss the methodological implications of this research, exploring how and why the Cold War might be better accessed by association rather than direct interpretation. I review recent work on heritage ethnography, auto-ethnography and other critical studies of museology and heritage. A feminist perspective contributes to my argument that metaphor, symbolism and abstraction is often more present in museum professionals' working practices than previously acknowledged by them and their workplaces. Following the methodological review, I consider how an ambition to be experiential has encouraged museums to re-think the use of colour after the so-called "affective turn" focused museums on emotions and senses. Finally, I evaluate the responses on Cold War colour that were revealed in my interviews and discuss how existing collections, museum environments, the cultural sphere and individual impressions inform the colourway produced in these interviews. I conclude that colour can be an enlightening tool in re-imagining how the Cold War is conceived in museums, from collections stores to exhibition displays.

Museum Ethnography

Popular Cold War narratives lend themselves to simplicity. Such interpretations suggest that a binary confrontation between superpowers was fuelled by a monolithic nuclear threat. Indeed, in popular culture the Cold War can be too simply explained and thus left bereft of further interrogation or tropes are over-emphasised at the expense of nuance.[2] While I was sure that museum professionals would approach this topic from various angles and positions of expertise, when I set out on my ethnography I was not certain that an interview of around 60 minutes, usually a first-time meeting, would create a setting in which we could discuss the granularity and variety of Cold War history. Thus, a question on colour – visual, sensual and metaphorical – arose as a foil to the question "what was the Cold War?" It allowed me to delve into the instinctual responses that museum professionals have when they think about the Cold War; instincts that, I argue, inform their working lives, from collecting, conservation and cataloguing to displaying and retail.

The inherent contestability of both the hue, and the symbolic value, of colour allowed interviewees to deliberate and vacillate on historical "truth." Researching how Cold War history is taught, Barbara Christophe suggests that despite the monolithic narrative in Cold War textbooks, teachers find ambivalence in the text to corroborate (rather than balance) their own preconceptions.[3] She finds that "although all of the teachers appear to hold different positions in discussing a textbook quotation, each seems to believe that there exists only one appropriate position from which to speak the truth."[4] This relates to her broader theory that:

> much of what we know about history may be implicit and more or less taken for granted and therefore difficult to scrutinize critically… In this sense, history could be perceived as entangled between serious academic study, personal memories, and broader cultural and ideological aspects of the past.[5]

A discussion of colours often provided a moment in which respondents illuminated what was taken for granted in their perceptions of the Cold War. The museum narrative, like a textbook, may be singular, but practitioners' understandings and expectations of those narratives vary.

There is an element of "*stealth*" contained in my research – a word used by Charlotte Andrews to describe how she defined the perimeters of improvised interviews on maritime heritage. Her ethnographic practice became organic and managed to "penetrate surface level understandings" and direct informants to "express everyday heritage use that often goes unarticulated."[6] Interviewees were recruited on the basis of their experience and expertise working with materials, themes and memories of the Cold War. As such, it would not have been surprising if our conversations had been limited to the detail of their jobs as opposed to the more ambiguous, contested aspects of Cold War history. Thus, my intention to use colour as a tool to uncover preconceptions about the Cold War was somewhat stealthy. Of course, just because *I* believed in the value of colour, it does not mean that my interviewees were always convinced of it. I habitually couched my question in

a statement of justification, apologised and entreated interviewees to "humour" me.[7] Equally, I noticed that I was delighted when interviewees called the question "interesting" or "good" and on occasion congratulated their answers.[8]

My approach is an informal challenge to the codes and expectations of both the interview environment, the museum setting and Cold War history, mimicking and incorporating strategies used by feminist researchers across disciplines.[9] Gaby Porter influenced my analysis of interviews with museum employees whose "professional codes and day-to-day practice are built on the premise of objectivity and neutrality, eschewing bias or influence."[10] Though the museums sector has changed since Porter published her work in 1995, her depiction of a workforce who are "strongly anti-theoretical or empirical, in their practice and approach" remained highly relevant.[11] Many of my interviewees combatted uncertainty with reference to the "material facts" of the Cold War.[12] Based on Porter's observations, my ethnographical study did not simply amass data, but had a chance to "deconstruct" the ways in which historical "notions are both given and giving meaning, and to build new ways which are more productive, diverse and open to re-reading."[13]

Cecilia Åse and Maria Wendt analyse the silenced and naturalised masculine narrative that dictates the display principles and audience experience at two Cold War exhibitions in Sweden.[14] In order to "un-silence and make strange" those archetypes, Åse and Wendt engage in methods that position themselves within the embodied, known, traversed landscape of their research.[15] In doing so, they allow a subjective spontaneity and intuition to contribute to research and highlight how gendered Cold War narratives are perpetuated in Sweden's national discourse of geopolitics. My relationship with the interviewee and my interaction with their answers created "relational" knowledge, to use Audrey Reeves' term. The proposition of "a perspective that is innovative but believable, relevant, convincing and helpful… in making sense of the world" is its most valuable outcome.[16]

On Colour and Museum Display

For centuries, museums have grappled with interpreting their contents for various audiences.[17] Both the interior and exterior designs of a museum make a statement about its authentic, value-led heritage policies.[18] Experiencing the atmosphere, environment and material of each museum was an essential task in siting and evaluating the Cold War heritage therein. Crucially, I needed to witness the types of museum conditions that framed professional handling of Cold War collections and displays. Colour informed my movement across and between these museum research settings, an experiment that nods to Goethe's theory of colour, in which it is understood not as an objective truth or material fact, but as an intrinsic and changeable subject of human–material relations.[19] In historical scholarship, colour is the subject of science, art and design.[20] Its relationship with nostalgia has also played a role in how it is treated – the black, white and sepia past versus the colour of the present.[21]

In recent years, museums have increasingly prioritised visitor experience. The affective turn of the late twentieth-century encouraged museums to engage

visitors emotionally.[22] As Marzia Varutti writes: "in museums and museum studies, reverberations of the affective turn have produced a move away from text-centred exhibitions, and a stronger engagement with non-verbal channels of communication such as emotions, imagination and sensory experiences."[23] Colour, as a component of display, in tandem with light, sound, architecture and other sense perceptions, has become a tool to affect and immerse visitors in their museum surrounds.[24] RAFM Art Curator Julia Beaumont-Jones explained,

> Whether it's the wall colour, whether it's the kind of display hang, whether it's films that might be used, it's always about atmosphere. And if you don't have that, then it isn't really an exhibition… Audiences these days want immersion…[25]

Peter Johnston, RAFM Head of Collections and Research at the time of the interview, noted that there is a "wider museological trend… about… how you invoke emotion and feeling in space… you might make something dark, for example, to make it foreboding."[26] However, in the public sphere and in museums scholarship, the production of displays to incite emotional reactions has been criticised for glamorising inherently complicated histories and in the process "construct[ing] meaning about warfare and security."[27] Darkness, Johnston suggested, had been over-used to add gravity to exhibitions, a technique, he noted, that museums were "moving away from."

The Holocaust is a topic that conflict museums have addressed through a variety of these affective and immersive visitor experience techniques. But, as with Cold War galleries, affective techniques to stimulate visitor experience have often led to poorly devised narrative and an awkward treatment of the subject.[28] The recently re-opened and refurbished Holocaust galleries at IWM London break with tradition.[29] Appreciating its new and "interesting perspective" Johnston said,

> It's specifically designed to show this is something that happened in the daytime. This is not a secret thing. It's a shameful thing that happened… in the light and people need to confront that rather than have it hide away in darkness…

James Bulgin, Head of Content for the IWM's new Holocaust Galleries, stated that "every colour and texture has a reason for being as it is."[30] Shades of blue "ebb and flow" throughout the galleries; chosen for the walls because not only was it "quite a neutral colour," but it also referenced the sky – "the world" – crucial in debunking notions that Auschwitz epitomised the Holocaust and avoiding a "situation where [the exhibition] got darker and darker and darker as things got worse and worse and worse." As we will see below, the colour of collections and existing exhibition displays influenced interview answers. While display is not the subject of this chapter, the affective, experiential purposes attributed to colour bore out in interviewees' notions of Cold War history. Very few academic studies have considered how historians might make use of colours to better understand a period in time, yet the lived-in space of museums, where history is materialised, provide the perfect location in which to explore this potential.

Colours of the Cold War

When asked about colours, interviewees often also referred to light, dark and temperature. Instinctively the question prompted a convergence of visual perceptions and sensations. The associative nature of the word "colour" incited responses that participants themselves found unexpected and surprising. For example, Peter Elliott, Curator Emeritus at RAFM replied, "the one that comes to mind was white, simply cold, snow. I don't quite understand how I've reached that."[31] Former National Museums Scotland Curator Alison Taubman elaborated on the link between the colour white and cold weather, musing "I think it would be something at the cold end. It makes me think of *Ice Station Zebra*… then somewhere I think the hot needs to be in there, white with a hint of red underneath."[32] The icy nature of relations, a pop-cultural reference point for Cold War tensions, was evoked by the colour white; red stands for the reality of hot and unpredictable aggression. Taubman's reference to the film and novel *Ice Station Zebra* also illustrates how artistic representations set and released during the Cold War have contributed to perceptions of atmosphere and symbolic colour. Other examples of this cultural influence in our interviews were the film *Wings of Desire* (1987) and the television productions *When the Wind Blows* (1986) and *Threads* (1984).[33] Cultural references are an important reminder that memory and personal tastes colour professional visions of Cold War history.

The colour cited most easily in interviews was red, often preceded by interviewees with the word "obviously."[34] The suggestion was that the connection between the colour red, the Soviet Union and the Communist flag was self-evident.[35] As one curator at the RAFM said: "any Soviet bit of kit has got either a dirty great big red star on it or a dirty great big red flag and the same with the Chinese as well."[36] Red also signified the colour of the nuclear threat because, the same curator stated, "it's a word that is used quite a lot in connection with air raid warning reds." Others evoked the red button that would initiate the final phase of a nuclear war and the "four-minute warning."[37] Red was also the colour of nuclear blasts and the heat of a detonated weapon.[38] Thus, red symbolised a multitude of Cold War phenomena: a political and cultural stance, the emotions and atmosphere associated with ideology, the hardware designed to manage war, and the results of a worst case conflict scenario.[39]

The range of meanings embodied by the colour red mirrored the material setting of each museum. None was dominated by the colour red, each was built in extension to, or as a renovation of, ex-military sites. The archaeology of these spaces is industrial and mechanical reflecting the changing needs of modern warfare. IWM Curator, Carl Warner, described the importance attributed to colour as historical context at the IWM's Duxford airfield:

> The backdrop of… the chronological display changes… so all of the set works and carcassing for the cases in the First World War is hessian, sand-baggy with sort of muted, woody tones.
> The inter-war period, it's white… all of the buildings were painted white. But it's white that sort of shows the wood underneath sometimes because

they sort of let it go. Second World War, it's the camouflage colours that they painted the place, so it's very much the green…

  And then The Cold War they came up with mixing a particular type of material that sets and looks like concrete and it's a combination of that plus the white again. So white painted concrete rather than white painted wood.[40]

The predominance of the colour red in interviews highlights the importance of ideology and political change as a *background* to the material collected within these museums. Red historically contextualises the anticipated military stand-off and communist menace that brought these military locations to life during the Cold War; red also evokes the violent reality of nuclear warfare – an image engendered and inspired by the objects located within collections. Whether ideologically or militarily, red was the Cold War colour for something "serious" to use Norwegian MP and amateur historian Erlend Larsen's word (Figure 15.1).[41]

  Only in one instance in our 46 interviews is red attributed to the corporeal cost of Cold War violence: Karl Kleve, curator at NLM, observed: "red is a very good bloody colour."[42] He also noted that, although the "redness of the Soviet Union" might best describe the threat of communist ideology felt throughout the West, "seen from an ordinary Russian it was the other way around."[43] The equivalence of experiences on either side of the Cold War divide was precipitated by the exploration of red as the colour of Western fears. Kleve's comments highlight how my interview question on the colour of the Cold War provoked ambivalence. For example, Paris Agar, a curator at IWM stated that the "explosive" colour orange shows that the "Cold War wasn't cold… It is hot, it is tense."[44] Karl and Paris diverged from answering red for communism and nuclear violence, but their answers were important indicators that brightness and saturation levels also alter the symbolic meaning of colours. The deeper, thicker red of blood, and the scorching orange of explosives evoked a more violent Cold War than the cliché of the Soviet red menace.

  In our responses, blue is mentioned as another "obvious" colour because it represents the United States and the West in NATO combat exercises. Usually, our respondents cite red and blue together to describe the head-to-head ideological contest of the Cold War era.[45] Harald Høiback, Deputy Commander at the Norwegian Armed Forces Museum, evoked the symbolic attributes of blue: "for me, growing up in the '80s with Ronald Reagan and this kind of American romanticism… America is blue."[46] Aside from his history qualifications and museum experience Høiback is a serving lieutenant colonel in the Royal Norwegian Airforce. With his personal memories of serving in the Cold War he recalled a "red sign and there were the blue arrows." He did not clarify whether this was a map graphic, military signage, or training material, but his memory corroborated his impression that the Cold War was "very much blue and red."

  Blue also evoked cold for our respondents. "Frozen blue" and "black ice" as IWM Curator Richard McDonough described it.[47] Høiback's colleague, Erling Kjaernes, Director of the Norwegian Armed Forces Museum, answered: "it's more or less cold and hot… So I would definitely think of it still as a blue with some hint of red it in sometimes."[48] An archivist at NLM responded, "well, it's obviously

Figure 15.1 A red background: Hiroshima bomb blast display, Norsk Luftfartsmuseum. Image author's own

blue and red… red because of the communistic… colours, and blue because, you know, cold."[49] Michelle Kirby, Film Curator at IWM also said that she visualised "a strobe light display flashing between blue and red" because:

> there are these… two competing sides to it, aren't there, there's the… icy blue… because… at the heart all of this was a real rupture in terms of two

opposing ideologies who just couldn't see eye to eye and there was real tension… and they were worlds apart. And there was paranoia… I know that thawed at different points but ultimately, it's about… being… diametrically opposed… which I just associate with ice.[50]

Drawing on her expertise in Cold War film, she explained that blue also reminded her of the skies made so threatening by nuclear testing films which convey the "ultimate fear" of nuclear threat. "Of course," red, she continued, "would be the flashpoints" of nuclear danger and the blue epitomised tense relations. In a similar answer, the Head of Collections Care and Management at NLM contended that blue conveyed the "icy relations" of the Cold War.[51] He clarified "I don't mean cold as in not a hot war, but cold as in people rejecting people, giving people the cold shoulder so to speak." To his mind, blue was linked to a "human condition" intrinsic to this conflict, "where you turn someone down, you turn away from someone." An idea he explained with the Norwegian word "avvise" – to reject. Again, referring to colour allowed interviewees to explain and nuance their impressions of what the Cold War was – in this case, a refusal to cooperate, avoidance of tolerance, a rejection of difference.

Our interviewees also examined colours as descriptors of Cold War nature. Green symbolised the German forests and fields where British forces would fight if the iron curtain was breached, but it also described the environments where hot wars most frequently erupted – the jungles of Asian and south American landscapes.[52] These interview responses are unique in the sense that the museum environments in which the recording took place held little, if any, reference to the greenery recalled in the interview. Others, like Carl Warner, referred to the colours of Cold War architecture. The grey of concrete – defence installations, hangars, shelters, walls, aircraft, offices, missile housings – became a trope of Cold War materiality.[53] Warner described how grey defined the Cold War era at Duxford where the pre-1945 "green grass and wooden buildings" were overlaid by "thousands and thousands of tons of concrete."[54] The Cold War, he continued, "created a runway… peritracks… an enormous apron… hardstanding… the baffles that go with that hardstanding… an armoury." He concluded, it was "about pouring large amounts of cement and letting it set into shapes."

Grey also describes the Eastern bloc and life under communism.[55] One curator evoked "the colour of concrete, the Berlin Wall, in drizzle or possibly slight snowfall [and] bunkers" to conclude "they're all grey things."[56] For some of our respondents, the colour grey provoked associational answers and led to the most developed conversations about colour in interviews. While the colour itself can be connected to material things and places reminiscent of the Cold War, it also describes an emotional and political climate that respondents felt dominated the historical mood. In effect, colour epitomised by period objects also becomes a descriptor of contemporary feelings. This was evident in my interview with Bodil Nyaas, Head of the Dissemination and Research department at NLM, in which I referred to a catalogue from 1999 exhibition *The Many Faces of the Cold War*.[57] I asked her about a sub-title, "Grey but frightening at the same time – our view of them?"[58] This, she said, referred to Eastern Europe during the Cold War – a place

that was almost "colourless" because it was so unknown, "It was a kind of grey mass behind the Iron Curtain." The exhibition booklet might also have been referring to a lack of colour television, she suggested, but largely, the sense of,

> … same-same, if you know what I mean… all these different countries Poland, Czechoslovakia, Hungary, Russia and all the Baltic States kind of… no impression. They were just part of the big USSR. I don't think we had any notion… that they were different cultures.

Ruth Tove Trang-Liljar, a Heritage Officer in Nordland County, echoed Nyaas' thoughts. Grey signified, she explained, "something that was depressive or something that is in the back of the minds, maybe of the people who lived in the worst periods of the Cold War."[59] An Exhibitions Officer at NMS stated that, apart from her family's experience of exile as Polish post-war refugees, she had little knowledge of Cold War history but grey and khaki colours reminded her of "people wearing old uniform because they couldn't afford new clothes."[60] She elaborated:

> I have this strong association of depravation and, sort of, loss of quality of life and a lot of soldiers obviously continued wearing various uniforms […] it's economic deprivation and… because it's so obviously linked into the Second World War, I think it's this idea of people… continuing to have to live that way.

In effect, for some of our respondents, grey signifies Cold War stasis and the continuation of wartime conditions, particularly the drabness of the communist east – drawing together inter-generational memories and professional understandings of twentieth-century European history.

Cultural and social history curators' answers are often informed by their collections. Carys Wilkins, Assistant Curator, Modern and Contemporary Design at NMS, associated the Cold War with post-war modernisation and the product design of western consumerism – "bright pop colours" and "plastic in any colour you wanted."[61] These products symbolise Cold War competition and ideologies – with "advertising… and… the pop art movement spilling over into design" and "that space race aesthetic, space odyssey, Stanley Kubrick kind of thing where you have these mad organic forms and big inflatable chairs." Dorothy Kidd, former Social History Curator at NMS, reflected on the design of the CND logo as an emblem of the Cold War, the colours of black on white. She also mentioned yellow because "zillions of people" had an anti-nuclear t-shirt "with the smiley face on it."[62] Jane Pavitt, former Curator at the Victoria & Albert Museum, reflected on colour as a structural element in the *Cold War Modern* exhibition she was responsible for (2018). In that exhibition, at the "midpoint" in the floorplan a colour palette from the 1950s emerged. That colour palette

> … is often referred to as kind of Expo colours or… Brussels style [after the World Exhibition 1958]… you get lots of bright, they're not primary colours, they're kind of like really strong pastels […] the colouring of '50s design.[63]

Though fewer in number, interviews from social and cultural practitioners were an important comparator to responses from professionals working in military departments. The colours evoked by Carys, Dorothy and Jane were reminders that the Cold War intersected with developments in post-war art, design, fashion and late twentieth-century aesthetics.

These interview responses illustrated how significant the colours of collections and museum surroundings are to the perceptions of the staff responsible for their interpretation. Much literature focuses on the impact of museum design on visitors but it is also important to staff learning. Two interviewees at RAFM reflected on the impact of the galleries on their understandings of the Cold War as non-experts. Angela Vinci, Head of Exhibitions and Interpretation, interpreted her own answer, red and black: "it's the way that the main colours of the exhibition in Cosford are, and I wonder whether… ten years ago, when I hadn't seen the exhibition, if the answer would" have been the same.[64] Frances Galvan, Head of Retail and Admissions, answered the colour question: "because our hangar has a lot of red and white in it… [and] all of the signage is… yellow and black."[65] These responses highlight that the application of colour implicitly informs museum staff as well as museum visitors.

When Hilary Roberts, IWM's Senior Curator of Photography, answered me firmly with "no" and hypothesised that her Cold War colour(s) would be a "rainbow" or a "Joseph's coat of many colours," I wondered whether this research led to a dead end.[66] Hilary contended, and I agreed, that the Cold War was "lots and lots of different elements, which combined to make a whole." Trying to identify and claim the colours of the Cold War could become an endless and consequently vague project. However, the way in which museum professionals remember, imagine and perceive the Cold War is not a rainbow – it is a group of associated, lived and materialised colours which also denote light, atmosphere and texture – some more dominant than others. Museologists and museum professionals should reflect on these colours more often. Why are they significant and what is missing? This, Pavitt implies, was what her and co-curator, David Crowley, had intended to do when she remembered the yellow, grey and black colour scheme of *Cold War Modern*,

> [W]e did have lots of discussions about colour and imagery… those are the colours of a kind of hazard, a modern-day hazard branding, so that was quite useful, they're the colours of contamination… so you get lots of symbolism there, the colours of that Henrion poster I was telling you about, certainly. So lots of greys. But we wanted to avoid clichéd imagery of… Soviet red… the colours of anything that sort of smacks of patriotism or so on.[67]

Analysing the predominant colours of museum collections, the gunmetal hues and hazard graphics of late twentieth-century military technology, helps us consider the narratives underpinning that colourway. If colours do not fit standardised expectations, what happens? For example, the "psychedelic" purple and green "swirly patterns" of 1960s–1980s sofas in the married quarters and crew rooms of RAF bases

In this spacious room the wall units are from the DoE rationalised furniture range. The carpet is 'Opal'. The curtains 'Lagoon' blue plain weave, both from the DoE Bernat Klein range. The settee is upholstered in 'Delphinium' printed stretch fabric;

the 'Beagle' low-back easy chair is upholstered in 'Lagoon' and the 'Apple' plain weave cushions are all from the DoE Bernat Klein range. 'Alpha' occasional tables. Record player, Sony TV and fire irons from Harrods Ltd. Lamps and all other

accessories from Heal & Sons Ltd. The pair of tile pictures from the Whibley Gallerie, Cork Street, W.1. Hanging wall rug from Casa Pupo; floor rug and large picture from Bernat Klein.

A Living Room

Figure 15.2 Purple and green interiors intended for the armed forces: Bernat Klein Design Consultants Ltd and the Department of the Environment, 1971. © Crown copyright. Licenced under the terms of the Open Government Licence v 3.0

were disposed rather acquired for the RAFM collection.[68] But could purple and green RAF furnishings add to a Cold War collection? Unexpected colours might make a visitor think twice about the social life of an aircraft or missile but they also remind museum professionals of the Cold War experience and create a contrast to the violence and ideological competition of its narrative (Figure 15.2).[69]

Conclusion

Among museum practitioners dealing with the history of war and technology colours create a loose frame of reference that governs heritage understandings of the Cold War. In these circles, the Cold War colourway is red, blue, grey, white, yellow and black. An investigation of museum practitioners' impressions of these colours in the context of object collections, galleries and their understanding of history reveals that despite the coherence of this palette, individual colours often signify a diverse range of symbolic and historical meanings. Indeed, a conversation about "obvious" colours red and blue soon uncovered less literal impressions of why each represented the Cold War. Intuitive answers comprised personal and inter-generational memory, cultural signposting, artistic representations, academic knowledge and were informed by existing museum settings.

This research tells us two things: that a popular and figurative narrative of the Cold War governs museum practitioners' approaches to this era; and that this is a narrative which goes largely unrecognised and under-reflected in Cold War display. By adding colour to the impressionistic way in which individuals approach this topic, it is possible to identify moments of alternative within the museum space and

this is important because it disaggregates the standard museological approach. This is what Marie Louise Stig Sorensen means by identifying "cracks" in research on attitudes to heritage and identity. She argues that insights gained by avoiding a dedication to data collection and conventional wisdom offer a comparative benchmark of far greater value to scholarship. Questioning the colours of the Cold War became my route "between the lines and in the margins" of this museological research.[70]

Another finding arising from this research suggests that colour is as important to museum staff as it is to visitors. Altering colourways destabilises norms embedded in staff attitudes and supports non-experts to learn more about Cold War history. In interviews, despite a largely unchallenged Cold War narrative existing in each museum, a question on colour simultaneously invited ambivalence and implicit knowledge. This research complements scholarship that focuses on mono-causal presentations of war in European museums of conflict that have a neutralising and desensitising effect on visitors.[71] A general absence of agonism in European museums of war, write Anna Cento Bull and colleagues, results from the competing responsibilities and activities required of each.[72] However, though "war and conflict lend themselves to being represented in ways that emphasise patriotic consensus" they can "also highlight dissent, contestation, antagonisms, multiple perspectives and alternative visions of society."[73] In our interviews, colours mediated the potent question of consensus and contention in Cold War history, allowing me to listen without challenging comfort levels in conversation.

Coherent colours disadvantage the narrative ambiguity of this period. I argue that the complexity of Cold War history deserves more colour, and less coherence – a collections-based reflection of the technicolour dream coat. This does not mean re-colouring objects, but it means highlighting how colour might influence collecting strategies. It does not mean jettisoning the standard Cold War colours for eye-catching alternatives but recognising that milieu makes a difference to meaning. Rather, my argument is to use colour to enable museum professionals to think carefully about what an exhibition says to its audience, and to break down any immediate impulses to impose affect for purely dramatic purposes. The Cold War cannot be handled without an understanding of the value judgements we bring to this history – explicitly, the relationship between museum professionals and the physical setting of the narrative, the material remains of this period and the images in their minds' eyes. In the interview, a conversation about colour helped consider those value judgements. Not one interviewee refused to answer the question. There is little doubt, therefore, that although it is unusual to ask respondents to reflect on the colour of the Cold War, it is valid. The Cold War is unquestionably coloured.

Acknowledgements

Notes

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3 Barbara Christophe, "Ambivalence and the Illusion of Hegemony: Remembering the Cold War in Germany and Switzerland," in *The Cold War in the Classroom: International Perspectives on Textbooks and Memory Practices*, eds. Barbara Christophe, Peter Gautschi and Robert Thorp (Cham: Palgrave McMillan, 2019), 259–87.

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6 Charlotte Andrews, "Heritage Ethnography as a Specialised Craft: Grasping Maritime Heritage in Bermuda," in *Heritage Studies: Methods and Approaches*, eds. Marie Louise Stig Sorensen and John Carman (London: Routledge, 2009), 156.

7 For example, Jessica Douthwaite (interviewer) [hereafter Douthwaite] and Ewan Burnet (interviewee), RAFM Hendon (4 March 2022). See also, Holger Nehring (interviewer) [hereafter Nehring], Erling Kjaernes (interviewee) and Harald Høiback (interviewee), Norwegian Military Museum (23 June 2022); Nehring and Erlend Larsen (interviewee), Museum Ship HNoMS Narvik, Horten, Norway (24 June 2022).

8 Douthwaite and Angela Vinci (interviewee), RAFM online interview (10 June 2022); Douthwaite and Julia Beaumont-Jones (interviewee), RAFM Hendon (5 April 2022); Douthwaite and Carys Wilkins (interviewee), NMS (21 April 2022); Douthwaite and Peter Elliott (interviewee), RAFM Hendon (4 March 2022); Douthwaite and Michelle Kirby (interviewee), IWM online interview (17 June 2022); Douthwaite and Jane Pavitt (interviewee), online interview (13 September 2022); Douthwaite and Craig Murray (interviewee), IWM online interview (9 August 2022).

9 Linda Åhäll, "Affect as Methodology: Feminism and the Politics of Emotion," *International Political Sociology* 12, no. 1 (2018), 36–52; Katy Deepwell, "Feminist Curatorial Strategies and Practices since the 1970s," in *New Museum Theory and Practice: An Introduction,* ed. Janet Marstine (Malden, MA: Blackwell, 2006), 64–84.

10 Gaby Porter, "Seeing through Solidity: A Feminist Perspective on Museums," *The Sociological Review* 43, no. 1 (1995), 108.

11 Porter, "Seeing through Solidity: A Feminist Perspective on Museums," *The Sociological Review* 43, no. 1 (1995), 107.

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