

This is a repository copy of Cold War:a Transnational Approach to a Global Heritage.

White Rose Research Online URL for this paper: <a href="https://eprints.whiterose.ac.uk/id/eprint/181648/">https://eprints.whiterose.ac.uk/id/eprint/181648/</a>

Version: Published Version

## Article:

Schofield, John orcid.org/0000-0001-6903-7395, Cocroft, Wayne and Dobronovskya, Marina (2021) Cold War:a Transnational Approach to a Global Heritage. Post-Medieval Archaeology. pp. 39-58. ISSN: 0079-4236

https://doi.org/10.1080/00794236.2021.1896211

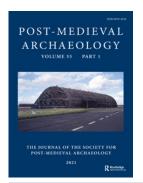
## Reuse

This article is distributed under the terms of the Creative Commons Attribution-NonCommercial-NoDerivs (CC BY-NC-ND) licence. This licence only allows you to download this work and share it with others as long as you credit the authors, but you can't change the article in any way or use it commercially. More information and the full terms of the licence here: https://creativecommons.org/licenses/

### Takedown

If you consider content in White Rose Research Online to be in breach of UK law, please notify us by emailing eprints@whiterose.ac.uk including the URL of the record and the reason for the withdrawal request.





# **Post-Medieval Archaeology**



ISSN: (Print) (Online) Journal homepage: <a href="https://www.tandfonline.com/loi/ypma20">https://www.tandfonline.com/loi/ypma20</a>

# Cold War: a Transnational Approach to a Global Heritage

John Schofield, Wayne Cocroft & Marina Dobronovskaya

**To cite this article:** John Schofield, Wayne Cocroft & Marina Dobronovskaya (2021) Cold War: a Transnational Approach to a Global Heritage, Post-Medieval Archaeology, 55:1, 39-58, DOI: 10.1080/00794236.2021.1896211

To link to this article: <a href="https://doi.org/10.1080/00794236.2021.1896211">https://doi.org/10.1080/00794236.2021.1896211</a>

orma



# Cold War: a Transnational Approach to a Global Heritage

By JOHN SCHOFIELD, WAYNE COCROFT and MARINA DOBRONOVSKAYA

SUMMARY: Although within living memory, many countries now consider their surviving Cold War architecture as part of their heritage. It can even be a priority for heritage managers given that significant buildings are often suitable for reuse while extensive 'brownfield' sites such as airfields can be used for large-scale redevelopment. In a number of countries whose work we refer to here (notably the United Kingdom and elsewhere in Europe), agencies responsible for managing their country's heritage have approached this priority by creating national inventories of sites and buildings with a view to taking informed decisions on their future. This paper presents the argument that the wider international context of the Cold War provides a more appropriate (or additional, higher-level) framework for such decision making. Such a 'transnational' approach would allow the comparison of similar (e.g. European) sites not merely within national borders but across the full extent of their western NATO<sup>1</sup> deployment in Europe and North America. Taking this approach would also allow comparison with related sites in countries that formed part of the eastern-bloc Warsaw Pact.<sup>2</sup> After outlining some examples of how national agencies have approached their Cold War heritage, this paper presents the four stages of this transnational approach making provision for an improved understanding and management of Cold War heritage sites wherever they occur. With a specific focus on the direct comparison between England and Russia, and also referring to sites surviving elsewhere within the former NATO and Warsaw Pact regions, as well as the United States, we argue that this four-stage approach: provides new understandings of a complex archaeological and architectural record; gives fresh perspectives on significance; and (importantly in a time of geopolitical instability) does so in a spirit of cooperation and friendship.

#### INTRODUCTION

The surviving heritage of the Cold War period<sup>3</sup> presents a challenging contradiction: on the one hand an historic era, increasingly presented in history books as though it is a 'distant' past; yet on the other hand a resilient, unforgotten and therefore enduring present that remains both physically within the land-scape and psychologically in the memories of most people over 40 years old. Cold War legacies continue to form, as people are reminded of the period through ever-popular fiction, film, television programmes, art

and music, or through the re-use or re-design of former military Cold War-era buildings.<sup>4</sup>

Building on work originally undertaken in England by English Heritage (and discussed below),<sup>5</sup> authors from England and Russia here combine for the first time to explore Cold War cultural heritage not from particular and distinct political and geographical standpoints, but from a broader 'transnational' perspective. Built around ideas promoted by Hannerz,<sup>6</sup> and not least his thinking on borders and frontiers and the benefits of enabling information and ideas to flow across them, our

© 2021 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group

DOI 10.1080/00794236.2021.1896211

This is an Open Access article distributed under the terms of the Creative Commons Attribution-NonCommercial-NoDerivatives License (http://creativecommons.org/licenses/by-nc-nd/4.0/), which permits non-commercial re-use, distribution, and reproduction in any medium, provided the original work is properly cited, and is not altered, transformed, or built upon in any way.

argument is that in a globalised world (one that arguably emerged during the Cold War period), national understandings of culture are limiting and that perspectives which effectively cross boundaries and enable a broader perspective provide a better way to achieve global perspective. What this approach should not imply, however, is a rigid top-down global management model reminiscent of the highly structured regime of the World Heritage Convention. Rather, one might suggest as a parallel the transition that Willems' has identified, from state-based frameworks that originate in a 'European way of thinking' (being the current approach to Cold War alongside all other forms of national heritage) towards a regime led by increasingly influential organisations to guide their own global operations. This approach is summarised in one such company's heritage guidelines, noting how it respects and protects cultural heritage because, 'it is the right thing to do and because there is a strong business case for doing so', while actively seeking the empowerment of local communities as stewards and caretakers, replacing the more traditional idea of heritage experts.9 Within this framework, and in ways reminiscent of Ingold's 10 notion of 'taskscape' (defined below), we therefore present the idea of a single transnational Cold War landscape (comprising East and West), rather than either many (one per state) or two (East vs. West). The reality is of a relict transnational militarised landscape comprising a diverse range of sites and monuments, either buried, lost to redevelopment or remaining as architectural forms, that in Ingold's terms fall within (but are not confined to) categories including controlled mobility, geopolitical habitat, a military-industrial economy, the ecology of militarised landscape, and public space, for display and commemoration. Such a transnational approach, we argue, offers a more holistic, symmetrical, humane, democratic and intellectually rewarding way to address a heritage of the recent and remembered past.

At its core, the paper proposes a transnational four-stage approach to managing these Cold War sites. Adopting a grounded approach (through which data is used to develop theory as opposed to having theory to test data), 11 the four stages are: (1) characterisation and inventory, (2) creating an overarching framework, (3) values-based assessment, and (4) decision-making. Having worked through this four-stage approach, we conclude that by adopting this approach and considering the significant cultural and ideological differences between East and West, the Cold War militarised landscape shows remarkably little variation in form.

For this paper, Cold War sites are defined as those structures, buildings and areas used for a military purpose during the Cold War period. Many such sites were built during this period while earlier military sites were either repurposed or enhanced by additional construction. Some of these sites constitute

the operational 'teeth' (in military parlance) of military activity during this period, such as missile launch sites; and others the 'tail', being support facilities or infrastructure. An obvious and significant example of the latter includes the many research and development sites that were so influential and important to Cold War military strategy and operations.

#### REMEMBERING THE COLD WAR

The Cold War was a political stand-off between the capitalist West and the communist East which, in the northern hemisphere at least, lasted from the end of the Second World War until the break-up of the Soviet Union. It was a global phenomenon which involved most countries to some degree, including those which were neutral. While the development of military technology during the Cold War was mostly confined to the northern hemisphere, many parts of the southern hemisphere were also implicated by political association or through trade agreements and the supply of raw materials. The Cold War was also highly localised in its impact on communities, most infamously at the border which divided East from West and which became (and remains) the symbol of the Cold War: the Berlin Wall<sup>12</sup> and the wider Iron Curtain of which it formed a part.<sup>13</sup> This border cemented political and ideological division in the landscape, while dividing communities and families. 14 In Berlin this was an impact that continues to shape social relations within the modern city, over thirty years later.

The Cold War period also witnessed significant technological and scientific progress which had a transformative impact on the militarised landscape. For example, new jet aircraft required longer, hardened runways and reinforced or 'hardened' structures for their protection, while a global defence landscape (notably using radar) emerged to counter the threat of increasingly effective and longer-range weapons systems. There was also an impact on domestic architecture. In the United States, for example, the Federal Civil Defense Administration advised householders to prepare for Armageddon. Yet in Las Vegas, close to the Nevada (atomic weapons) Test Site, in a move to 'neutralise fear', domestic design countered this advice, with large plate glass windows proving a popular design feature in spite of their obvious drawbacks in the event of missile attack.15

Heritage decision-making relies on a good understanding of what survives (often referred to as 'the resource'); the better we understand this resource, the more informed our decisions will be about it. Being so recent, we might assume a plentiful supply of detailed primary source materials to build such an understanding. But usually for reasons of national security, in the United Kingdom and in other countries, these primary sources are elusive: archives and

documents often remain classified, while oral testimonies are hard to source and labour intensive to collect. More prosaically, at the time of a military unit's withdrawal from a site or country, or a site's abandonment, the historical significance of site drawings and documentation related to these individual sites may not be recognized, with their retention representing an unwelcome and on-going cost. Much of this material is therefore destroyed. Personal testimonies are usually problematic as it is often difficult to track those who once occupied former military sites, although this is becoming easier through veterans' social media networks. One exception to this lack of primary research material are the transnational governmental studies undertaken to support, for example, the Intermediate Nuclear Forces Treaty signed in December 1987. These studies identified precise locations for all sites covered by the Treaty<sup>16</sup> thus providing an important source of information for some site types, and a blueprint of sorts for the transnational approach suggested here.

When heritage-based research on the Cold War was initiated in a number of countries in the early to mid-1990s, the locations, chronology, and types of military sites were therefore imperfectly understood for the reasons outlined above. This was also the time at which sites were under the greatest threat of demolition, so research was urgently needed if appropriate management strategies were to be implemented before the sites were sold and either lost without record or irrevocably damaged. The approach in most countries where research was undertaken aligns with Stage 1 of the Methodology (below): characterization and inventory. Here, however, we argue that Stage 1 is merely the first stage in a longer research process and that, learning from our experience in the United Kingdom, all stages are best undertaken within the transnational frame of reference.

Prior to discussing the methodology, questions remain on how the Cold War should be remembered. and on the value or cultural significance of its material legacies. Opinions and priorities vary between countries, not least in relation to the post-colonial concept of 'orphan heritage' that survives where forces were stationed on the territory of once allied nations.<sup>17</sup> A particular set of motivations and values might be argued where sites exist in the country they were originally intended to defend. But where the political landscape has changed, and the sites now exist beyond their original political boundary, a very different set of priorities will likely prevail. Virilio<sup>1</sup> describes this situation in post Second World War France, where even in the 1980s, German fortifications of its Atlantic Wall were being demolished by local communities, to help erase painful memories. Second World War airfields in Britain were at the same time given very different treatment, with statutory protection often afforded to sites representing a heroic heritage of defence and victory.

Within the former Soviet Union and previously allied countries, military museums were opened during the Cold War and included material from the 'current' conflict within their collections. 19 The museums generally focussed on collecting military vehicles, aircraft, missiles, munitions, documents and photographs. Yet in Russia at least, most Cold War sites are neglected, and quickly deteriorating.<sup>20</sup> Unlike the collections, sites are not considered cultural heritage and certainly not a heritage warranting protection. In Russia, there are no Cold War sites under state or local authority control or that are managed as monuments, although some, such as Bunker 42 (at Taganka, Moscow), are under private management. Beyond Russia, many former Cold War military sites are scattered across the former Soviet republics. While few of these former Soviet sites are afforded protection, there are some exceptions. At Plokštinė, within the Zemaitija National Park (Lithuania), for example, a partly dismantled Soviet SS-4 medium range missile base has been opened to tourists.<sup>21</sup>

In the United Kingdom and the United States, significant research has been undertaken on Cold War sites at national level and for specific cultural resource management purposes. In England, a comprehensive study of the Cold War has provided a framework for the statutory protection of key sites. This work, by English Heritage, included detailed survey for each of a variety of site types<sup>22</sup> alongside a broader study to specifically determine their national significance.<sup>23</sup> Denmark's national agency has similarly produced an inventory of its Cold War heritage and used it to inform decisions on the protection of sites.<sup>24</sup> Similarly, researchers in Italy and Albania, have begun to document the countries' Cold War heritage.<sup>25</sup> Elsewhere, sites are managed by authorities at a regional or state level. An inventory of Cold War military barriers and borders was created in Bavaria in 2003, for instance, with five locations protected as a result.<sup>26</sup> More recently the Rhineland Regional Council researched all of the 20th-century military sites in its area.<sup>27</sup> In Berlin, traces of the iconic Berlin Wall have been documented.<sup>28</sup> In the Czech Republic archaeologists are beginning to explore former border areas behind the Iron Curtain.<sup>29</sup> In the United States, the Historic American Engineering Record, the Desert Research Institute, Las Vegas, and others have been active in documenting individual sites.<sup>30</sup> In Canada, historians have researched aspects of the country's Cold War experience.31

As stated above, these studies shape an understanding of Cold War infrastructure in individual regions and countries and can provide a robust framework for heritage decision making in those countries. What they do not provide is any appreciation of the wider geopolitical landscape of which these sites formed a part. The following sections will present

TABLE 1	
Four-stage approach to managing Cold	War heritage sites

Stage of process	Result	Application
1. Characterisation and inventory	Definition of Categories, Groups, Classes, Types etc	Transnational
2. Building a Framework	Creating a framework of understanding, focused on chronology and technology	Transnational
3. Values-based assessment	Determining the value and significance of surviving sites	Transnational
4. Decision-making	Determining the 'heritage future' (the purpose/use) of surviving sites	National, regional or local

such an approach (summarised in Table 1) that builds on these foundations, emphasising the benefits of transnational cooperation in the earlier two stages of the four-stage process alongside the need for a feedback loop in which characterisation/inventory and the framework inform one another as research is undertaken and understanding develops. This transnational cooperation extends to the third stage with its need for some degree of consensus, while a more nuanced and inevitably locally-led approach to decision making will exist at Stage 4.

42

## MANAGING COLD WAR LEGACIES: A FOUR-STAGE 'TRANSNATIONAL' APPROACH

## STAGE 1 - CHARACTERISATION AND INVENTORY

Characterisation and inventory take account of the function, architecture and design of individual sites. This is achieved by research combining any available historical documentation with aerial photographs and satellite imagery, survey records and fieldwork to create a typology of sites. Once this typology exists, newly discovered sites can be placed within it, ensuring that it is flexible enough to accommodate new forms that had previously passed unrecognised and that it can be adjusted as understanding develops. As we discuss below, with a transnational approach similar site types can be compared between and across countries and alliances.

While one might expect significant regional variations in architecture across the Cold War's political divide, for example reflecting technological and economic diversity, work undertaken so far and presented here is suggestive of a more universal Cold War heritage. Building on the inventory and survey work undertaken to date (as stated above, focused on the work undertaken in the United States, United

Kingdom and Russia), Table 2 provides such a transnational typological framework. As noted previously, this framework is not fixed and will continue to evolve as new information informs new understandings.

A first impression from Table 2 is of compatibility. Terms vary, alongside technologies, yet the framework and main categories and groups are commonly held. In short, the broad 'high level' framework holds true for East and West. Perhaps this is unsurprising, as the situation (broadly speaking) was the same for everyone. In the geopolitical maelstrom of the Cold War, every country directly involved needed both defence measures and the means to attack. The key players were also vying with each other for technological and political advantage, each engaged in industrial espionage, and each wanted to be the first to conquer space. However, beyond the 'headline' Categories and Groups (and Classes to some degree), more detailed morphological and typological ordering reveals distinctive national styles as well as the alliances (e.g. across either NATO or Warsaw Pact countries) cemented by technological transfers. An example is nuclear deployment sites (Figure 2). Superficially the contemporary launch sites of Soviet SS-4 Sandal missiles and United States Thor missiles of the 1962 Cuban Missile Crisis bore many similarities. <sup>32</sup> Due to their relatively limited range and the need for rapid deployment, both were built on the soil of allied states using imported prefabricated components on unprotected pre-surveyed fixed launch sites with associated warhead stores, storage areas for liquid fuels, and control centres.

A generation later in the late 1970s and early 1980s Soviet missiles increasingly relied on mobile systems with protected shelters, launch vehicles, and warheads. In the United Kingdom, United States cruise missiles were stored in protected shelters at Greenham Common (Berkshire, Figure 2) and Molesworth (Cambridgeshire), with the intention that

TABLE 2
Characterisation and Inventory of Military and Associated Material Culture/Architecture (Ticks indicate presence, and crosses likely absence)

Category, Group, Class	United Kingdom	Soviet Union
Air Defence		
1 Early Warning Systems - Radar Class – separated by phase, recognised by distinctive layouts and buildings	Rotor 1950s Linesman 1960-80s Improved UK Air Defence Environment – late 1980s	Tall King P-14 Early Warning Radar 1950s
2 Aircraft and nuclear attack reporting	Visual Reporting Posts Nuclear Monitoring Posts Reporting Headquarters	Gamma detectors incorporated into some Warsaw Pact facilities
3 Anti-Aircraft Gun Sites Class – separate by phase, recognised by distinctive layouts and buildings	Permanent 3.7-inch and 5.25-inch sites -until 1955 Anti-Aircraft Operations Rooms <i>c</i> .1951-55	
Anti-Aircraft Command Centres 4 Surface to Air Missiles Class – separate by phase, recognised by distinctive layouts and buildings	Bloodhound Mark I – 1958-64 Bloodhound Mark II – 1963-91 Tactical Control Centres 1958-64	SA1 Guild – 1950s SA2 – Guideline – 1960s SA3 – Goa -1960s SA5 – Gammon – 1960s B200 Radar bunker, YO-YO,
Surface to Air Missile Command Centres 5 Fighter Interceptor Airfields 6 Anti-Ballistic Missile	Ballistic Missile Early Warning System - Fylindales	Moscow air defences 1950s  Dog House ABM Radar Cat House ABM Radar Hen House ABM Radar
		Galosh ABM Missile
Nuclear Deterrent		
7 Command Centres	$\checkmark$	For example, Bunker 42, Moscow
8 Bomber Airfields Strategic / tactical	RAF V-Bomber US Strategic Air Command USAF	
9 Nuclear Weapons Stores	Separate central RAF stores – c.1953-61 Royal Navy 1968	
10 Nuclear Missile Deployment Sites	Thor – 1958-63	Small Selection SS-4
Class - separate by missile type	Cruise – 1982-91	SS-5 Skean SS-7 Saddler SS-8 Sasin SS-9 Scarp SS-11 Sego SS-16 SS-17 SS-18 Missile train depots
11 Naval facilities	Ballistic missile submarine facilities	Ballistic missile submarine facilities

TABLE 2 (Continued).

	(Continued).	
Category, Group, Class	United Kingdom	Soviet Union
<b>Ground Forces</b>		
12 Barracks	$\checkmark$	$\sqrt{}$
13 Storage Depots – eg tanks and	√ √	V
vehicles		
14 Training areas		
<b>Defence Research Establishments</b>		
15 Aviation	$\checkmark$	$\sqrt{}$
16 Naval	√ √	V
17 Rockets, Guided Weapons	√ √	V
18 Nuclear	√	, V
19 Miscellaneous	√	√
<b>Defence Manufacturing Sites</b>	·	·
20 Defence Manufacturing Sites		
Class - separate by	$\sqrt{}$	$\sqrt{}$
factory type	•	,
<b>Emergency Civil Government</b>		
21 Central Government		
Class – separate by phase/	$\sqrt{}$	
distinctive buildings War	,	
Rooms	$\sqrt{}$	
22 Local Government Class –	•	
separate by phase/		
distinctive buildings		
23 Civil Defence Structures	$\checkmark$	Network of civil nuclear shelters
24 The Utilities	,	$\sqrt{}$
25 Public Nuclear Shelters	V	Network of civil nuclear shelters
	*	X
26 Private Nuclear Shelters	$\checkmark$	$\sqrt{}$
<b>Emergency Stores</b>	*	·
27 Grain Silos	$\checkmark$	$\sqrt{}$
28 Cold Stores	,	V
29 General Purpose Stores	V	V
30 Fuel Depots	,	V
Communications	•	·
31 Protected Communications	$\checkmark$	
Centres	V	$\sqrt{}$
32 Microwave Tower network	, ,	v /
33 Interception stations	v	v
National Border Defences		
34 Coastal defences	Guns until 1956	Guns and shore to ship missiles
35 Border surveillance	X	√ missines
Miscellaneous	••	V
36 The Peace Movement	Peace camps	X
	<u>*</u>	

they would be deployed on mobile launch vehicles.<sup>33</sup> Alongside these obvious similarities, a notable difference is that missile deployment within the Warsaw Pact included the provision of separate nuclear warhead stores controlled by elite KGB and airborne troops (Figure 2). Such provision did not exist within NATO. The Soviet infrastructure also included missile train depots, for which there is no obvious western comparison.

Related to missile deployment was radar. The Warsaw Pact placed greater emphasis on mobile radar systems than was the case in NATO, meaning that there are fewer archaeological traces in Russia than exist for the NATO's fixed systems.<sup>34</sup> As mentioned earlier, most sites of this type were mapped as part of the verification of the Intermediate Nuclear Forces Treaty providing an additional and important source of information.<sup>35</sup>

Another difference between East and West would appear to have been anti-nuclear protest, although it is possible that information about this in the Soviet Union was and remains restricted. But from what we know it would appear there were few significant spontaneous, citizen-led anti-nuclear protest movements in Warsaw Pact countries, whereas it was strongly evident in the West. Obvious and well-known examples of the physical manifestations of western anti-nuclear protests exist for example around the periphery of the former military base at Greenham Common, <sup>36</sup> and at the entrance to the Nevada Test Site in the American Midwest. <sup>37</sup>

In summary, and in the broadest sense, the 'characterisation and inventory' stage of the process shows sites displaying more similarity than difference, usually with technology at the core. These similarities most evident at the higher (Category > Group > Class, eg. Air Defence > Early Warning System > Radar); local variations tend to emerge more clearly beyond this, in Types, Sub-types etc. Overall, the Cold War involved two 'sides' that were ideologically and culturally distinct, yet both had comparable ambition and the resources with which to attain it. Considering the differences involved, the landscape of the Cold War appears to show remarkably little variation. Using a transnational approach, this observation could prove helpful in both the assessment of sites and in deciding on their future management.

#### STAGE 2 - BUILDING A FRAMEWORK

With the information available from Stage 1, a framework can be constructed around two central factors: chronology and technological development. These two factors are of course closely related. We begin with chronology.

#### Chronology

For a transnational approach to Cold War heritage, it is important to recognise and accommodate the possibility that architecture followed different trajectories in different countries, for example in relation to rapid changes in technology or threat level. It is also important to identify the possibility of similarities. As we have seen, within and between the two major alliances (NATO and the Warsaw Pact) there is both marked variation but also close similarity in architecture, and its development.

From the perspective of the United States, and based on the 'Stage 1' work undertaken to date, Hanson<sup>38</sup> has identified three principal building phases of the Cold War, which he has categorized as follows:

- Evolution Early Cold War 1945–1957
- Revolution Middle Cold War 1958–1975
- Resolution Late Cold War 1976–1989

In the first phase, Cold War sites evolved directly from wartime sites involved with research, development, and production; air force and army bases were also developed for continental defence and potential offensive operations. By the middle phase the military-industrial complex was in full production, leading to advances in continental defence (e.g. radar systems), production, command and control centres, and defence for the civilian population. It was also during this period that the United States sought to expand its international influence and military footprint. In the last phase Hanson identified a decrease defence construction in the continental United States.

In the United Kingdom a slightly different chronology has been proposed,<sup>39</sup> again framed around surviving infrastructure:

- First Cold War 1946–1962
- Sustained balance/deterrence 1963–1979
- Second Cold War 1980–1989

During the immediate post war years, there was very little new defence-related construction in the UK, but the outbreak of the Korean War in June 1950 provoked fear that it might be a prelude to a communist invasion of Western Europe. This led to a massive rearmament programme and the construction of associated infrastructure, including reconstructing airfields to support the strategy of Mutually Assured Destruction.<sup>40</sup> During the 1960s and early 1970s there was little new building work undertaken, as the country's nuclear deterrent passed to the Royal Navy. Meanwhile the deployment of intercontinental missiles in North America allowed many United States strategic bomber squadrons to be reassigned away from Europe. During the late 1960s NATO shifted its war-fighting doctrine to Flexible Response, whereby 'communism would be contained by a combination of economic, political and military means, and any attack would be met with a graduated response to allow time for negotiations'. 41 Finally, from the mid-1970s in response to enhanced Soviet military capabilities, there was a marked increase in western defence expenditure, evident in the construction of new emergency government headquarters and a NATO Europe-wide 'hardening programme' to reinforce key infrastructure.

Work to understand the chronology of Cold War construction across the Soviet Union is in its early stages and the following hypothesis is proposed based around an understanding of sites in Russia:

• Stasis with some dismantlement - 1946–1948

- Modernisation of homeland defence systems
   1948–1954
- Deployment of modern weapon systems -1954–mid 1970s
- Modernisation of the missile forces 1978–1985
- Reduction and freeze 1985–1991

Prior to the 1990s in Soviet and Russian historiography, the Cold War was interpreted solely as unilateral ideological and political aggression of the West against the USSR. <sup>42</sup> It may be no surprise then that expenditure on defence construction roughly mirrored that of the West. <sup>43</sup>

At the end of the Second World War the Soviet armed forces were rapidly reduced, while enormous resources were shifted toward nuclear weapons research. The development of new technology, especially long-range aircraft and missiles, potentially threatened the whole of the Soviet Union's land mass and to counter these challenges air defence systems were built around Moscow and other major cities along with facilities for air defence units, command posts and radio-location stations.44 The mid-1950s saw further reductions in the size of the army with priority transferred to the transition to nuclear weapons, missiles, and electronic control systems, and the construction of missile silos and command posts. 45 From the late 1970s advances in solid fuel technology for missiles and electronic systems led to further changes in infrastructure. The new missiles required less maintenance, and many were mobile, requiring fewer personnel based on smaller and less distinctive deployment sites. 46 On the accession of Mikhail Gorbachev in 1985 and the easing of tensions with the West there was initially a reduction and ultimately a freeze on new defence construction.

More work is required to refine Cold War construction chronologies in other countries, and especially across the former Soviet Union. Certainly, as the Soviet Union sought to meet the perceived threat from NATO and to strengthen its influence in eastern Europe represented by the founding of the Warsaw Treaty Organisation or Warsaw Pact in 1956, there was a marked drive to standardise equipment often reflected in new infrastructure. In addition, much wartime infrastructure was reused. In the German Democratic Republic (GDR), for example, Soviet forces occupied substantial wartime bunker complexes which were adapted to meet Cold War threats and serve new purposes. To the south of Berlin, former Wehrmacht Oberkommando des Heeres bunkers were taken over as the main headquarters for the Group of Soviet Forces Germany.<sup>47</sup> It was not until the mid-1960s that the East German government began to construct purpose-built protected accommodation and increasingly sophisticated facilities to

serve civil government and the armed forces over the following decades. 48

In summary, the chronology of architectural development varies between countries (in this case, the United States, England and Russia). There are also obvious similarities as the countries responded to one another's perceived capabilities and the changing political landscape. Another key variable was the rapid rate at which science and technology were changing, partly driven by the need for military superiority.

### Science and Technology

Investigating the global Cold War through its military installations and wider militarised landscape provides a documentation that both aligns with and differs from the grand political, historical narratives of the period. An example is the re-use of earlier facilities, which contradicts the myth of an entire Cold War period characterised by new technologies and progress. At the end of the Second World War the Soviet Union and the western allies controlled a vast inheritance of defence research and manufacturing facilities and military installations on their home territories and those of their erstwhile allies and defeated nations. Across this vast region, thousands of military installations had been abandoned and, in straitened post-war economies, existing sites were reused and adapted to meet post-war needs. Furthermore, in the early post-war years there were huge surplus stocks of military equipment, and within the western orbit American and British equipment was widely used to re-equip the armies of the recently liberated nations such as Belgium, the Netherlands, Greece and Denmark. Across eastern Europe it was more of a mixed picture. In Czechoslovakia, for example, the manufacture of German inspired armaments continued for some time, whereas in the early 1950s the Soviet Union began to supply East German forces with tanks and artillery. 49 Simply, and with the exception of jet aircraft, if war had broken out again in the early 1950s it would have been waged essentially with wartime weaponry supported by contemporary infrastructure.

The Second World War also brought to the fore technologies that would dominate the succeeding decades, including atomic weapons, guided missiles, jet engines and radar, requiring development of new facilities for their manufacture, storage, maintenance and deployment. For example, by 1950 the frontline units of the major air forces were equipped with jet aircraft, which in contrast to propeller driven aircraft, tended to be heavier and had nose wheels, while the fiery engine backwash soon burnt away grass airstrips. To accommodate these new machines, concrete runways and associated taxiways were required, along with maintenance facilities for their complex

internal technologies thus driving significant changes to aviation landscapes around the globe.

A notable characteristic of the Cold War was the provision of military technology by the superpowers to their allies, and the construction of semi-permanent and permanent bases in their countries. These included in the late 1950s the deployment by America of Jupiter medium-range missiles in Italy and Turkey, and Nike Hercules anti-aircraft missiles additionally in Denmark, West Germany, Greece and Norway. This supply and deployment of equipment represented a complex web of patronage, defence and commercial concerns. At the highest policy-levels, the superpowers needed to ensure their allies were effectively equipped and could operate alongside one another. They did not, however, enjoy a monopoly of arms sales, and countries such as the United Kingdom remained leading developers and manufacturers of defence technology. For example, in the late 1950s the United Kingdom sold aircraft and air defence missiles to western-leaning, although neutral, Sweden and Switzerland, including the British Bloodhound surface-to-air missile. The contemporary Russian S75 Dvina (SA-2 Guideline) was one of the most widely exported, and arguably successful, missiles of the Cold War. It was responsible for bringing down Gary Powers' CIA U-2 spy plane over the Soviet Union in May 1960 as well as many US aircraft over Vietnam and was extensively used in middle-eastern conflicts. It was usually deployed in a static air defence role and was launched from sites with a distinctive star-shaped ground plan.<sup>50</sup>

One of the most distinctive features of the Cold War was the deployment of nuclear weapons, collectively representing a highly specialised landscape (or 'taskscape' in Ingold's terms) with wide deployment and even wider social, economic and political impact. Nuclear research and production facilities were largely restricted to the home territories of the nuclear states: although the United States. United Kingdom and France all made use of test ranges in the South Pacific. The superpowers kept the operational deployment of nuclear weapons under tight control. For instance, to implement the strategy of Mutually Assured Destruction, which threatened massive nuclear retaliation in response to an attack on the United States or her allies, US Strategic Air Command required new home bases in North America and similar facilities in countries close to eastern Europe, including in North Africa, Spain and the United Kingdom. It was a comparable picture with Soviet nuclear weapons during the 1950s and early 1960s: by the late 1960s specialist stores had been built in Czechoslovakia. East Germany, and Poland.<sup>51</sup> An archaeological investigation in Cuba uncovered a related set of structures, being the sites prepared for Soviet missile deployment on the island in October 1962, during what came to be known as the Cuban Missile Crisis.<sup>52</sup>

This diversity of site types relating to military activity throughout the Cold War provides an illustration of what Ingold<sup>53</sup> describes as a taskscape, a socially constructed space of human activity with spatial boundaries and delimitations. Central is the idea that taskscape, like landscape, is perpetually in process rather than being in a static or otherwise immutable state, a point that has particular relevance in the fast-changing political and technological world of the Cold War, notwithstanding its comparatively short duration. Kuletz's<sup>54</sup> study of nuclear industries of the American Midwest highlights the character and wider impact of a complex and vast 'taskscape' in three specific but related contexts: the built infrastructure (the 'sites', the places); the social landscape of scientists and support staff that were essential to their successful operation; and the environmental pollution that resulted from the science undertaken, notably from atomic testing. While not as openly documented in the former Soviet Union, a comparable picture appears likely.<sup>55</sup> Typically, these atomic sites had complex histories of use and re-use after abandonment. We can also identify a strong political legacy (where armament and nuclear energy policies and investments have a lasting environmental impact), or political legacies to be, where these impacts can be projected forward as 'heritage futures', such as in the storage of nuclear waste.<sup>56</sup>

Finally, military strategy has always been shaped by historical or contemporary events. The 1967 Arab-Israeli War provided a graphic illustration of the vulnerability of aircraft parked on an open airfield. Across the globe the lesson was quickly learnt and from the early 1970s key NATO and Warsaw Pact airfields took on a superficially similar appearance with hardened aircraft shelters and other protected facilities (Figure 1). The western hardening of its critical facilities was also a reflection of NATO's 'Flexible Response' policy whereby it sought to protect enough of its strike forces to mount an immediate counter-attack against any would-be aggressor.

In summary, understanding the significance of surviving Cold War sites can be improved by placing them within a broader historical and geopolitical context which requires thinking about the influences exerted across political borders and the exchange of information, for example through trade deals or espionage. To date, heritage organisations have tended only to view Cold War legacies within their national context.

#### STAGE 3 - VALUES ASSESSMENT

Having completed Stages 1 and 2, the relative value of individual sites can be assessed, based on a range of indicative criteria. These criteria have been developed and previously published<sup>57</sup> for sites in England, influenced by a wider discussion of heritage values.<sup>58</sup>





FIG. 1
A hardened aircraft shelter from (left) Alconbury, Cambridgeshire (England), and (right) a Soviet example from Altenburg (Germany). © Wayne Cocroft.

The criteria by which the significance of Cold War sites was assessed appear as Table 3.

Most national heritage agencies and related organisations have some mechanism for attributing cultural values to archaeological sites, places and buildings. Definitional criteria will be generic, 59 while evaluative criteria are more specific, recognising value or significance as something associated with tightlydefined variables including associations with specific events, people or technological progress, or the quality of survival and rarity. This is broadly the mechanism that exists within the United Kingdom and in many other European countries: how one defines a monument, and how one then assesses its significance.

To take one of the criteria in Table 3 as an example and building on the previous section, rarity is generally known and easily quantifiable: that a site or building may be one of fifty surviving of its type, or one of ten, or the best surviving example, with 'best' often defined in terms of completeness or integrity (see Table 3 for a range of considerations). Further, this analysis may extend beyond the known surviving population of sites to the known original population. Thus, one of only five surviving examples may also be one of 500 originally built (the other 495 having been removed through a variety of cultural and natural processes over the intervening period). This work has been undertaken for numerous categories of English Second World War and Cold War sites, by Historic England<sup>60</sup> under its former Monuments Protection and Thematic Listing Programmes.<sup>61</sup> For this stage of the process, this 'tried and tested' methodology provides a comparatively straightforward and reliable basis for heritage decision making.62

However, there are limitations to this 'values assessment' process as it is currently applied. One is that assessment is generally time limited: a generic

national assessment of surviving sites undertaken once<sup>63</sup> is soon out-of-date. A solution would be to delay assessment until the point of need, although this carries the risk that sites may be lost in the intervening period. This 'point of need' assessment can be easily and quickly achieved given that, with earlier stages of the process complete, both context and site locations will generally be known. A more serious limitation is the national frameworks within which these assessments are made. As an example, Historic England recognises the Greenham Common airbase and cruise missile site as having 'national importance' but that hardly seems an adequate label for such a place, given its position in a global network of missile storage and launch sites, related Research and Development establishments and defence systems.<sup>64</sup> The site is one of six near identical ground-launched cruise missile (GLCM) sites across Europe, which themselves were part of a wider NATO response alongside contemporary mobile US Pershing II missiles with storage sites in former West Germany. All of these sites faced east. In the former Soviet Union and her allied states many opposing sites for equivalent SS 20 missiles existed, facing west. 65 These are all sites whose significance is mutually dependent (Figure 2). A transnational approach would argue that it is the 'group value' of all of these sites that contributes most to the cultural value of each of the individual sites. It would also provide important recognition of the role of individual sites as part of a wider network.

#### STAGE 4 - DECISION-MAKING

Heritage is always political, and draws its priorities from particular viewpoints and perspectives, to determine for example what is worth preserving, why and for whom. Politics also contributes to prioritisation and heritage funding. All of this will vary between countries influencing how heritage and specific

# TABLE 3 Assessment Criteria used to assess Cold War sites in England

#### Survival/condition

- Structural integrity and survival of internal configuration, plant and fittings.
- Structures that survive in their original form; however, reuse for another purpose may add historical
  value to a structure.
- Survival of contemporary setting, character, spatial relationships group value.

#### Period

- A site that represents a particular phase of the Cold War.
- Centrality to a country's or alliance's defence doctrine or policy.
- Technological significance.

#### Rarity

 In most cases individual site types are rare. Criteria for protection will probably also include technological reasons.

#### Diversity of form

 Where a site or structural type might exhibit a number of different structural forms, although designed to fulfil an identical or similar function.

#### Cultural and amenity value

• Sites or structures that promote public education, access, and tourism.





49

FIG. 2

(Left) A ground-launched cruise missile (GLCM) site at Greenham Common, West Berkshire (England, photograph licensed under the Creative Commons Attribution-Share Alike 2.0 Generic license), and (right) a former Soviet missile store at Altengrabow, Saxony-Anhalt, Germany (2001). © W D Cocroft

heritage sites are managed. Attitudes towards expertise also vary between countries, ranging from conservative approaches that advocate central control to more liberal approaches involving community leadership, even community ownership of heritage assets, such as Bunker 42 at Taganka (Moscow) which, as we saw earlier, is under private management. Where the subject of attention is itself highly politicized and recent, these issues may come into even sharper focus.

Within this context it is worth noting the potential benefits of policy guidelines and frameworks such as the Faro Convention, <sup>66</sup> which originated in the creation of new states (and thus the rebuilding of national identities and heritage) following the end of the Cold War. With the Faro Convention, the breadth of cultural heritage, its relevance to society and identity and the recognition of heritage communities are central, alongside the Convention's direct alignment with the Universal Declaration of Human Rights. Yet even with Faro (a Convention to which many of the countries mentioned in this paper are signatories), reaching consensus on the significance of sites which represent such marked political and philosophical

divisions will not always be easy to assess, meaning that decisions about their future will often be contested.

In Russia, the material legacy of the Cold War remains neglected. Several factors play into this. First is the common notion (understood by Russian citizens) that the Soviet Union 'lost' the Cold War, since its major result was the collapse of the Union. President Putin made a well-known statement to this effect, when he said that: 'the collapse of the Soviet Union was the largest geopolitical catastrophe of the century'. 67 Thus, officially, Russian attitudes towards the Cold War are restrained, in contrast to the official and national pride about the Great Victory in the Great Patriotic War. These are attitudes which frame the beliefs of the majority of Russian citizens. Unofficially however, attitudes are contested. Some consider the ending of the Cold War positive, since it opened a pathway to democracy and Western values; while others, presumably influenced by Putin, view the ending of the Cold War as resulting from the betrayal of socialist values by past presidents Gorbachev and Yeltsin. 68 Related to this is the concept of ostalgie, a nostalgia felt amongst citizens of the former East Germany for the communist era, played out in the 2003 tragicomedy, Good Bye Lenin!, one of many films which provide alternative on the ending of the Eastern perspectives Cold War.<sup>69</sup>

In spite of these differences of opinion and economic and political pressures, and as mentioned previously, some military sites are preserved across the former Soviet Union's allied states, in Poland at Podborsko, Kolobrzeg and Swinoujscie, the Baltic States, the Czech Republic, Ukraine, the former Yugoslavia, the former German Democratic Republic and Lithuania (see Figure 3).70 In the former GDR, artist Angus Boulton has documented former Soviet barracks sites in their abandoned state, recalling their complex military and social histories on film, often creating a unique record of the murals and graffiti that typically remain. At Forst Zinna, for example, a departing soldier wrote his last goodbye on his barrack room wall, as the Cold War created the site's final abandonment: 'Cood bay [Goodbye] Forst Zinna'. 71

Many sites survive in the west, across the full typological range. Early sight of post-Cold War disposal lists by the United Kingdom's Defence Estate organisation, for example, allowed English Heritage to conduct the research described earlier in this paper often in advance of disposals, and culminating in publications<sup>72</sup> which encouraged wider sectoral involvement in documentation and survey, as well as promoting public understanding. Early action and clear decisions on significance (occasionally but not necessarily resulting in designations) meant that heritage implications were already known to potential developers when sites were bought.

measures taken by the Russian Federation's Ministry of Defence show that it has an understanding of the importance of protecting military heritage and of its significant role in the public's patriotic upbringing. In July 2016 it opened the Military Patriotic Park of Culture and Recreation near Moscow, with exhibitions of Soviet and Russian aviation, rocket and aerospace devices and equipment, and armoured and special vehicles. The Park also includes diverse structures, such as the Central Museum of Armored Weapons and Equipment, the Guerrilla-warriors village (an imitation of a Second World War partisan-guerrillas' camp), the Center for Military-Tactical Games, and a field for historical reenactments. From its website, the official mission of 'Patriot Park' is to contribute to education, to create an attractive and friendly image of the Armed Forces, and to help develop a sense of pride and respect for the Motherland. The Park combines education with amusement. Shortly after opening, it became a popular place, receiving hundreds of daily visits. This extends beyond collecting objects to developing sites that place objects within their historical cultural landscape.

In summary, management options will depend on a complex range of locally-defined circumstances, only some of which are discussed in this paper. Sometimes sites will be demolished to make way for new development, while many abandoned Cold War installations form what planners often refer to as 'brownfield' sites, ripe for redevelopment.<sup>74</sup> In other situations sites and landscape are simply left alone, abandoned, to 'curated decay'. 75 Unlike the other three stages of the transnational approach, it seems both necessary if not appropriate that these decisions are taken locally based on locally-held perspectives. That said, consensus will be hard to establish. One example is the Nevada Test Site where the remote desert location makes any clear-up of a vast material record of nuclear testing costly, dangerous and (for some) unnecessary. Yet these are traditional lands of the Western Shoshone, to which they are currently denied access. The disadvantage of curated decay in this case is environmental pollution<sup>76</sup> while the benefit for researchers is arguably an unprecedented and virtually limitless research opportunity:77 a major and significant archaeological legacy survives across the Test Site, providing resources for a unique documentation that can either complement or contradict official and archival accounts, should they ever come to light. Another example is the Teufelsberg in Berlin, a Cold War listening station where signals emitted from the East were intercepted and interpreted in the West. This site is also now abandoned and in a state of decay (see Figure 4).<sup>78</sup> Again, this site has provided research opportunity,79 while its ruined and heavily graffitied state is a bone of contention amongst former veterans and the alternative



FIG. 3

DUGA Radar Array near Chernobyl (Ukraine). This file is licensed under the Creative Commons Attribution 3.0

Unported license. Image: https://commons.wikimedia.org/wiki/File:DUGA\_Radar\_Array\_near\_Chernobyl,\_

Ukraine\_2014.jpg

communities which now occupy and use the site as a gallery and performance space.

# CONCLUSION: THE TRANSNATIONAL COLD WAR LANDSCAPE

We conclude this paper with the suggestion that a transnational approach provides a helpfully fluid framework for managing Cold War heritage infrastructure across the globe. On one level Cold War landscapes are inevitably either 'East' or 'West' and in terms of the human experience this division is appropriate: people and politics were one or the other, with an 'iron curtain' in between. But in terms of intellectual enquiry, one can also helpfully investilandscape as 'East' and 'West', McWilliams<sup>80</sup> has done for the Soviet border, for example, and Klausmeier and Schmidt<sup>81</sup> have achieved for the Berlin Wall. This paper is an attempt to extend our view outwards from these discrete sites, places and things, to the entirety of the Cold War experience. We have presented a new perspective on the Cold War, and a new lens through which to view a surprisingly unfamiliar past. Part of what we see through that lens is the need for theoretical perspective, such as through ideas reminiscent of a task-scape, <sup>82</sup> and recognition of the Cold War as a largely technological conflict, with each 'side' trying to negate the other through science and technological progress. The 'space race' is the ultimate example of this, and one that helpfully extends conceptions of landscape to the earth's orbit, and indeed space. <sup>83</sup>

But to achieve the goals we have set out requires some reappraisal of the data, and of the way we view it. Previously, too much emphasis has been placed on creating national inventories, telling individual stories of the Cold War and examining significance in terms of the nations that participated in it. Where tourism initiatives have looked beyond national borders to develop transnational heritage 'trails', exemplified by work around the Baltic where a guidebook describes Cold War sites to visit across the region, 84 visitors are better informed of the wider landscape. The creation of such trails, and the research that informs them, provides an example of how one can achieve new popular and transnational public understandings. The same is true of heritage assessment and management, for which a common approach requires a



FIG 4

The Teufelsberg, Berlin. A Cold War listening station recently afforded heritage protection. The site is well known, much visited and used by a diversity of communities. Photograph: John Schofield.

common framework, or at least a suite of related approaches to the sites that remain.

Of the many types of heritage that exist, Cold War heritage is amongst the most challenging, being close in memory and ubiquitous (even if many of the sites have been re-used and pass barely recognisable as formerly having military purpose). It presents challenges as a heritage of division, competition and ideological difference. And because it remains etched into cultural memory, it continues to have relevance. Yet,

while the Cold War may feel important now, we should be wary of predicting its significance in the future and the tendency to always default to a strategy of protecting sites 'for the benefit of future generations'. Eric Hobsbawm, 85 for example, argued that the military aspects of the Cold War are secondary; that the, 'extraordinary, unprecedented, fundamental changes which the world economy, and consequently human societies, had undergone in the period since the Cold War began ... will, or should, have a far larger place in the history books of the third millennium than the Korean War, the Berlin and Cuba crises, and the cruise missiles.' Further, Cold War historian John Lewis Gaddis cautions that humility is needed when assessing the Cold War's significance; what might seem momentous to current generations, might in the distant future be regarded as trivial and insignificant.86

Whatever we think about this particular 'heritage future', we argue here that having a transnational approach to this contemporary heritage of the Cold War seems a sensible and attainable aspiration and will be helpful in providing a solid foundation for decision making. By working together across former political divisions, the transnational approach also provides the opportunity to pool knowledge and resources in a spirit of cooperation and friendship. This paper has provided a framework against which such an approach can be achieved.

### NOTES

<sup>1</sup> North Atlantic Treaty Organisation, an intergovernmental military alliance of 29 North American and European countries. The organization implements the North Atlantic Treaty that was signed on 4 April 1949.

<sup>2</sup> The Warsaw Pact was a collective defence treaty between the old Soviet Union and seven other Eastern Bloc socialist republics of Central and Eastern Europe in May 1955.

<sup>3</sup> Commonly considered to cover the years 1946 to 1989, after Cocroft & Thomas 2003; although in some areas of the world the dates can vary, arguably up to the present in some places.

<sup>4</sup>e.g. the use of former Cold War buildings in Berlin as nightclubs, discussed in Schofield & Rellensman 2015.

- <sup>5</sup> Cocroft & Thomas 2003.
- <sup>6</sup> Hannerz 1996, 1997.
- <sup>7</sup> Willems 2014.
- <sup>8</sup> Bradshaw, E. *et al.* 2011, and cited in Willems 2014.
  - <sup>9</sup> Willems 2014, 114.
  - <sup>10</sup> Ingold 1993.
  - <sup>11</sup> after Glaser & Strauss 1967.
  - <sup>12</sup> Baker 1993; Klausmeier & Schmidt 2004.
  - <sup>13</sup> McWilliams 2013.

```
<sup>14</sup> Borneman 1992.
```

- 15 Johnson 2002, 234.
- <sup>16</sup> Harahan 1993.
- <sup>17</sup> see also Price 2005 for the use of this phrase.
- <sup>18</sup> Virilio 1994.

<sup>19</sup> Examples include the Museum of Military Cargo Aviation (Ivanovo, opened in 1984), Museum of the Air Force of the Northern Fleet (Murmansk district, opened in 1976), and the Museum of the Air Defense Forces (Moscow district, opened in 1978).

- <sup>20</sup> Rasmussen 2010.
- <sup>21</sup> Rasmussen 2010, 134-5.
- <sup>22</sup> Cocroft & Thomas 2003.
- <sup>23</sup> Cocroft 2007.
- <sup>24</sup> Stenak et al. 2013.
- <sup>25</sup> for Italy see Bravaglieri 2019; for Albania, e.g. Glass 2018.
- <sup>26</sup> Ongyerth, 2007.
- <sup>27</sup> Hoppe *et al.* 2014.
- <sup>28</sup> Klausmeier & Schmidt 2004.
- <sup>29</sup> Bureš 2013; Rak et al. 2018.
- <sup>30</sup> for an overview, see Hanson 2016. Also the socalled 'science cities' in the American Midwest, after Kuletz 1998.
- <sup>31</sup> e.g. Granatstein 2011 and Mushynsky 2019.
- <sup>32</sup> Burstrom *et al.* 2011, 14; Cocroft & Thomas 2003, 38-46.
- <sup>33</sup> Cocroft & Thomas 2003, 76-81.
- <sup>34</sup> Pretty 1981, 478-484.
- 35 Harahan 1993, 120 and 122.
- <sup>36</sup> Schofield & Anderton 2000; Marshall et al. 2009.
- <sup>37</sup> Beck et al. 2009.
- <sup>38</sup> Hanson 2016, 28-67.
- <sup>39</sup> Cocroft 2007.
- <sup>40</sup> or 'MAD', the idea that as long as parity was maintained, neither side would risk a pre-emptive strike.
- <sup>41</sup> Cocroft & Thomas 2003, 9.
- <sup>42</sup> Egorova 2017, 17.
- <sup>43</sup> after Chernoff 1991.
- <sup>44</sup> e.g. Fowler 2008; Collective authors 1968.
- <sup>45</sup> Bystrov 2004.
- <sup>46</sup> Podvig 1998.
- <sup>47</sup> Best 2003 181-7.
- <sup>48</sup> Best 2003, 15.
- <sup>49</sup> Kopenhagen 1999, 13-19.
- <sup>50</sup> Isby 1981, 245-52.
- <sup>51</sup> Eckart 2013, 3.
- <sup>52</sup> Burstrom et al. 2009; Burstrom et al. 2011.
- <sup>53</sup> Ingold 1993.
- <sup>54</sup> Kuletz 1998.
- <sup>55</sup> an example is Robert Maxwell's research at Chernobyl https://news.nationalgeographic.com/2016/04/20160428-Chernobyl-Pripyat-archaeology-abandoned-ruins-nuclear-disaster-Pompeii-Ukraine/ accessed 8 January 2019.
- <sup>56</sup> Holtorf & Hogberg 2016.
- <sup>57</sup> e.g. Cocroft 2007.
- <sup>58</sup> Most notably Lipe 1984, de la Torre 2002, and most recently English Heritage 2008.

- <sup>59</sup> for example, how the term 'monument' is legally defined, or that everything beyond a certain age has value or protection by default, and that 'younger' sites (less than 100 years old, say) do not.
  - <sup>60</sup> previously English Heritage.
- <sup>61</sup> e.g. Schofield 2000; Schofield 2001.
- <sup>62</sup> see also Stenak et al. 2013, for a comparable example from Denmark.
- <sup>63</sup> like England's Monuments Protection Programme, 1988-circa 2005.
- <sup>64</sup> not to mention the history of protest at the site, and the significant traces of this which remain.
- 65 Harahan 1993, 120, 122.
- <sup>66</sup> Council of Europe 2009.
- <sup>67</sup> Message to the Federal Assembly of the Russian Federation 25.04.2005. http://kremlin.ru/events/president/transcripts/22931 [accessed 9 August 2018].
- <sup>68</sup> cf. "Who actually won the Cold War?" in the newspaper *Komsomolskaya Pravda*, 01.02.2012.
- <sup>69</sup> Steingrover 2007.
- <sup>70</sup> See for example Rasmussen 2010; Klupsz 2018; http://zimnawojna.info/ accessed 9 August 2018.
- <sup>71</sup> Boulton 2007.
- <sup>72</sup> e.g. Cocroft & Thomas 2003.
- <sup>73</sup> http://patriotp.ru/about/general-information/.
- <sup>74</sup> see Lange and McNeil 2004 for a wider discussion.
- <sup>75</sup> after DeSilvey 2017.
- 76 Kuletz 1998.
- <sup>77</sup> Beck 2002.
- <sup>78</sup> Cocroft & Schofield 2016; 2019
- <sup>79</sup> Cocroft & Schofield 2019.
- <sup>80</sup> McWilliams 2013.
- 81 Klausmeier & Schmidt 2004.
- 82 after Ingold 1993.
- 83 Gorman & O'Leary 2007.
- <sup>84</sup> Rasmussen 2010.
- 85 Hobsbawm 1994, 256.
- 86 Gaddis 2007, 260.

### **BIBLIOGRAPHY**

- Baker, F. 1993, 'The Berlin Wall: production, preservation and consumption of a 20th-century monument', *Antiquity* **67**, 709–33. doi:10.1017/S0003598X00063742
- Beck, C.M. 2002, 'The archaeology of scientific experiments at a nuclear testing ground' in Schofield, Johnson & Beck 2002, 65–79.
- Beck, C., Drollinger, H. & Schofield, J. 2009, 'Archaeologists, activists and a contemporary peace camp', in Holtorf & Piccini 2009, 95–112.
- Bennett, L. (ed), 2018, In the Ruins of the Cold War Bunker: Affect, Materiality and Meaning Making, London: Rowman & Littlefield.
- Best, S. 2003, Geheime Bunkeranlagen der DDR Motorbuch. Stuttgart: Verlag.
- Bewley, B. & Raczkowski, W. (eds), Aerial Archaeology – Developing Future Practice.

- Amsterdam: NATO Science Series Series 1. Life and Behavioural Sciences, Volume 337.
- Borneman, J. 1992, Belonging in the Two Berlins: Kin, State, Nation, Cambridge: Cambridge University Press.
- Boulton, A. 2007, 'Cood bay Forst Zinna', in Schoffeld & Cocroft 2007, 181–192.
- Bradshaw, E., Bryant, K. and Cohen, T. (eds), 2011, Why Cultural Heritage Matters. A Resource Guide for Integrating Cultural Heritage Management into Communities Work at Rio Tinto, Melbourne and London: Rio Tinto. Available at: https://www.riotinto.com/documents/ReportsPublications/Rio\_Tinto\_ Cultural\_Heritage\_Guide.pdf [accessed 19 August 2019].
- Bravaglieri, S. 2019, 'Una rassegna delle tipologie di siti e manufatti della Guerra Fredda in Italia', SMC Magazine Sustainable Mediterranean Construction Land Culture Research and Technology, Recognising and making known fortified land-scapes, International Congress, 6th-7th June 2019, University of Naples Federico II, special issue, no. 1, 131–136.
- Bureš, M. 2013, 'Iron Curtain archaeology in Novohradské hory in South Bohemia'. Unpublished conference presentation EAA Pilsen.
- Burström, M. *et al.* 2009, 'Memories of a world crisis: The archaeology of a former Soviet nuclear missile site in Cuba', *Journal of Social Archaeology* **9**, 295–318.
- Burström, M. Gustafsson, A. & Karlsson, H. 2011, World in Crisis: The Archaeology of the former Soviet Nuclear Missile Sites in Cuba, Sweden: Bricoleur Press.
- Bystrov, I. 2004, 'The military-industrial complex of the USSR in the 1920s-1980s: the economic aspects of development', *Economic History Yearbook 2003*, 234–248.
- Chernoff, F. 1991, 'Ending the Cold War: The Soviet Retreat and the US Military Buildup', *International Affairs* **67**:1, 111–126.
- Cleere, H (ed) 1984, Approaches to the Archaeological Heritage. A Comparative Study of World Cultural Resource Management Systems, Cambridge: Cambridge University Press (New Directions in Archaeology).
- Cocroft, W.D. 2007, 'Defining the national archaeological character of Cold War remains', in Schofield & Cocroft 2007, 107–128.
- Cocroft, W., Devlin, D., Schofield, J. & Thomas, R.J.C. 2006, War art: murals and graffiti – military life, power and subversion, York: Council for British Archaeology.
- Cocroft, W.D. & Schofield, J. 2016, Der Teufelsberg in Berlin. Eine archaeologische Bestandsaufnahme des westlicher Horchposten im Kalten Krieg, Berlin: Christoph Links Verlag.

- Cocroft, W.D. & Schofield, J. 2019, The Teufelsberg and Western Electronic Intelligence Gathering in Cold War Berlin, London: Routledge.
- Cocroft, W.D. & Thomas, R.J.C. 2003, Cold War building for nuclear confrontation 1946-1989, Swindon: English Heritage.
- Collective Authors 1968, *The air defence forces of the country's air defence. Historical essay.* Moscow: Military Publishing House [Voyska protivovozdushnoy oborony strany. Istoricheskiy ocherk. M.: Voyennoye izdatel'stvo]. Available at: http://militera.lib.ru/h/pvo/07.html [accessed 19 August 2019].
- Council of Europe 2009, *Heritage and Beyond*, Strasbourg: Council of Europe.
- Desilvey, C. 2017, *Curated Decay: Heritage Beyond Saving*, Minneapolis: University of Minnesota Press.
- Eckart, V. 2013, Kernwaffendepot Lychen II Geheime Verschluss-Sache, Martenshagen: Verlagshaus M&M.
- Egorova, N.I. 2017, 'A new history of the Cold War: theory and practice', in Egorova 2017, 17–29.
- Egorova, N. (ed) 2017, Ensuring International Security in the Cold War: Finding Harmonized Approaches. Collection of scientific articles/otv. Ed.
   N.I. Egorova; Institute of World History of the Russian Academy of Sciences. - Moscow: Entire World, 2017.
- English Heritage 2008. Conservation Principles, Policies and Guidance for the Sustainable Management of the Historic Environment, Swindon: English Heritage.
- Fowler, M.J.F. 2008, 'The application of declassified KH-7 GAMBIT satellite photographs to studies of Cold War material culture: a case study from the former Soviet Union', *Antiquity* **82**, 714–731. doi: 10.1017/S0003598X00097337
- Gaddis, J.L. 2007, The Cold War, London: Penguin.
- Glaser B.G. and Strauss A.L. 1967, *The discovery of grounded theory: strategies for qualitative research*, New York: Aldine de Gruyter.
- Glass, E. 2018, 'Once Upon a Time in Ksamil: Community and Post-communist Biographies of Mushroom-shaped Bunkers in Albania', in Bennett 2018, 145–164.
- Gorman, A.C. & O'Leary, B. 2007, 'An ideological vacuum: the Cold War in space', in Schofield and Cocroft 2007, 73–92.
- Granatstein, J.L. 2011, 'Gouzenko to Gorbachev: Canada's Cold War', *Canadian Military Journal* 12:1, 41–53.
- Hannerz, U. 1996, *Transnational Connections:* Culture, People, Places, London: Taylor and Francis.
- Hannerz, U. 1997, 'Fluxos, fronteiras, híbridos: palavras-chave da antropologia transnacional', *Mana* (Rio de Janeiro) 3:1, 7–39. Translated into English

- and available at: http://www.transcomm.ox.ac.uk/working%20papers/hannerz.pdf
- Hanson, T.A. 2016, The Archaeology of the Cold War: The American Experience in Archaeological Perspective, Gainesville: University Press of Florida.
- Harahan, J.P. 1993, On-Site Inspections under the INF
   Treaty A history of the On-Site Inspection Agency
   and INF Implementation, 1988–1991, Washington
   DC: US Dept of Defense.
- Hobsbawm, E. 1994, Age of Extremes: The Short Twentieth Century, 1914-1991, London: Abacus.
- Holtorf, C., & Högberg, A. 2016, 'The Contemporary Archaeology of Nuclear Waste: Communicating with the Future', *Arkaeologisk Forum* **35**, 31–37. Retrieved from http://urn.kb.se/resolve?urn=urn:nbn:se:lnu:diva-6064
- Holtorf, C. & Piccini, A. (eds) 2009, Contemporary Archaeologies: Excavating Now, Bern: Peter Lang.
- Hoppe, W., Wegener, W., Keller, C., Schmidt, C. & Weber, C. 2014, Archäologische Kriegsrelikte im Rheinland Führer zu archäolgischen Denkmälern in Rheinland, Essen: Klartext.
- Ingold, T. 1993, 'The Temporality of the Landscape', World Archaeology 25:2, 152–174.
- Isby, D.C. 1981, Weapons and tactics of the Soviet Army, London: Jane's.
- Johnson W.G. 2002, 'Archaeological examination of Cold War architecture: a reactionary cultural response to the threat of nuclear war', in Schofield, Johnson & Beck 2002, 227–235.
- Klausmeier, A. & Schmidt, L. 2004, Wall Remnants Walls Traces The comprehensive guide to the Berlin Wall, Berlin: Westkreuz-Verlag.
- Klupsz, L. 2018, '20th-century fortifications on the National Heritage List for Poland', in Luciani 2018, 46–52.
- Kopenhagen, W. 1999, *Die Landstreitkräfte der NVA*, Stuttgart: Motorbuch.
- Kuletz, V.L. 1998, The tainted desert environmental ruin in the American west, New York: Routledge.
- Lange, D. & McNeil, S. 2004, 'Clean It and They Will Come? Defining Successful Brownfield Development', Journal of Urban Planning and Development 130:2, 101–108.
- Lipe, W.D. 1984, 'Value and Meaning in Cultural Resources.' In Cleere, H (ed), 1–11.
- Luciani, R. (ed) 2018, Military Heritage from 20th century Preservation, Reuse and Management, Norway: ICOFORT.
- Marshall, Y., Roseneil, S. & Armstrong, K. 2009, 'Situating the Greenham Archaeology: An Autoethnography of a Feminist Project', *Public Archaeology* 8:2-3, 225–245.
- McManamon, F. & Hatton, A. (eds), Cultural Heritage Management in Contemporary Society: Perspectives on Managing and Presenting the Past, London and New York: Routledge.

- McWilliams, A. 2013, An archaeology of the Iron Curtain: Material and Metaphor, Sweden: Södertörns högskola.
- Mushynsky, J. 2019, 'Don't Talk About Your Fallout Shelter: Civilian Perceptions of Threat and Structural Responses during the Cold War in Regina, Saskatchewan between 1958 and 1963', Canadian Military History 28:1, Article 1. Available at: https://scholars.wlu.ca/cmh/vol28/iss1/1 [accessed 25 March 2020].
- Ongyerth, G. 2007, 'Fortifikation des Kalten Krieges in der Denkmalliste Methodische Ansätze der flächenbezogenen Denkmalforschung in Bayern', in Denkmalpflege im Saarland 1- Denkmalpflege an Grenzen Patrimoine sans frontiërs?, 103–107 Denkmalpflege im Saarland, Arbeitsheft 1 Landesdenkmalamt: Saarland.
- Podvig, P. (ed) 1998, Strategic nuclear weapons of Russia. Moscow: Izdat. [Strategicheskoye yadernoye vooruzheniye Rossii. P. Podvig (ed.) - M.: IzdAT, 1998.] Available at http://militera.lib.ru/tw/ stratrus/index.html - accessed 19 August 2019.
- Pretty, R.T. 1981, Jane's Weapon Systems, London and New York: Jane's.
- Price, J. 2005, 'Orphan Heritage: Issues in Managing the Heritage of the Great War in Northern France and Belgium', *Journal of Conflict Archaeology* 1:1, 181–196.
- Rak, M., Funk, L., & Starková, L. 2018, 'A Cold War conflict landscape in the Borderlands of West Bohemia', in Stichelbaut et al. 2018, 235–52.
- Rasmussen, J.B. 2010, Travel guide Traces of the Cold War period The countries around the Baltic Sea, Copenhagen: Norden.
- Schofield, J. 2000, 'Now we know: the role of research in archaeological conservation practices in England', in McManamon & Hatton 2000, 76–92.
- Schofield, J. 2001, 'The role of aerial photographs in national strategic programmes: assessing recent military sites in England', in Bewley &

- Raczkowski 2001, 269-282. *Aerial Archaeology Developing Future Practice*, 269–282. Amsterdam: NATO Science Series Series 1. Life and Behavioural Sciences, Volume 337.
- Schofield, J. & Anderton, M. 2000, 'The queer archaeology of Green Gate: interpreting contested space at Greenham Common Airbase', World Archaeology 32:2, 236–251.
- Schofield, J. & Cocroft, W.D. (eds) 2007, A Fearsome Heritage: Diverse Legacies of the Cold War, California: Left Coast Press.
- Schofield, J., Johnson, W.G. & Beck, C.M. (eds) 2002, *Matériel Culture: The Archaeology of Twentieth Century Conflict*, London and New York: Routledge.
- Schofield, J. & Rellensmann, L. 2015, 'Underground Heritage: Berlin techno and the Changing City', *Heritage & Society* **8**:2, 111–138.
- Steingrover, R. 2007, 'Filming the end of the Cold War', in Schofield & Cocroft 2007, 253–272.
- Stenak, M., Pedersen, T.T., Hansen, P.H. & Jespersen, M. (eds) 2013, Kold Krig — 33 fortaellinger om den kolde krigs bygninger og anlaeg i Danmark, Faerøerne og Grønland, Copenhagen: Kulturstyrelsen.
- Stichelbaut, B. and Cowley, D. 2018, Conflict Landscapes and Archaeology from Above, London: Ashgate.
- de la Torre, M. (ed) 2002, Assessing the Values of Cultural Heritage, San Francisco: Getty Conservation Institute.
- Virilio, P. 1994, Bunker Archeology. Translated from the French by George Collins. Paris: Les Editions du Demi-Cercle.
- Willems, W. 2014, 'The Future of World Heritage and the Emergence of Transnational Heritage Regimes', Heritage & Society 7:2, 105–120.
- Woźniakoski, A. 2015, Mapa Fortyfikacji Półwyspu Helskiego, Poland: Casamata.

### SUMMARY IN FRENCH, GERMAN, ITALIAN AND SPANISH

#### RESUME

# Guerre Froide: une approche transnationale d'un patrimoine mondial contesté

Les divers et variés monuments et sites militaires de la Guerre Froide constituent une trace archéologique complexe que de nombreux pays considèrent désormais comme faisant partie de leur patrimoine. En développant des moyens pour mieux comprendre et gérer ce patrimoine de la Guerre Froide, l'accent a été mis sur : la création d'inventaires nationaux de sites et monuments qui racontent des histoires spécifiques de la Guerre Froide ; l'examen de l'importance du contexte sur les nations individuelles qui y ont participé ; et la

sélection de quelques sites particuliers pour leur conservation. Après avoir exposé quelques exemples de ces initiatives variées, cet article présente une nouvelle approche 'transnationale' pour l'amélioration de la compréhension et la gestion des sites patrimoniaux de la Guerre Froide où qu'ils se situent. La méthodologie encourage la coopération au-delà d'anciennes frontières et pour la première fois, entre l'Est et l'Ouest. Avec des focus sur la comparaison directe entre l'Angleterre et la Russie, en se référant à d'autres sites toujours en place au sein de l'ancien Pacte de Varsovie et des régions de l'OTAN, ainsi que les Etats-Unis, nous considérons que cette approche en 4 étapes

permet d'améliorer notre compréhension d'un inventaire archéologique complexe et d'apporter de nouvelles perspectives sur la signification, se faisant, (en dépit de la période d'instabilité géopolitique) dans un esprit de coopération et d'amitié.

#### ZUSAMMENFASSUNG

# Der Kalte Krieg: Ein transnationaler Ansatz für ein globales Erbe

Obwohl es einen Teil der lebendigen Erinnerungen darstellt, betrachten viele Länder ihre Architektur des Kalten Krieges heute als Teil ihres Kulturerbes. Für Kulturerbeverwalter können diese Gebäude sogar eine Priorität darstellen, da bedeutende Gebäude häufig zur Wiederverwendung geeignet sind, während ausgedehnte "Industriebrachen" wie Flugplätze für eine umfassende Sanierung genutzt werden können. In einer Reihe von Ländern, auf deren Arbeit wir uns hier beziehen (insbesondere im Vereinigten Königreich und anderswo in Europa), sind Institutionen, die für die Verwaltung des Kulturerbes ihres Landes verantwortlich sind, diese Aufgabe angegangen, indem sie nationale Inventare von Standorten und Gebäuden erstellt haben. Dies geschah, um wissenschaftlich fundierte Entscheidungen über die Nutzung treffen zu können. Der folgende Artikel stellt die These auf, dass die Breite und der internationale Kontext des Kalten Krieges einen angemesseneren (oder zusätzlichen, übergeordneten) Rahmen für eine solche Entscheidungsfindung bietet, in dem man ihn Transnational betrachtet. Ein solcher nationaler" Ansatz würde den Vergleich ähnlicher (z. B. europäischer) Strukturen nicht nur innerhalb der nationalen Grenzen, sondern über den gesamten Umfang ihres Auftretens innerhalb der westlichen NATO1 in Europa und Nordamerika ermöglichen. Durch diesen Ansatz könnte man auch einen Vergleich mit ähnlichen Standorten in Ländern ermöglichen, die Teil des Warschauer Pakts im Ostblock waren2. Nachdem einige Beispiele dafür skizziert wurden, wie nationale Institutionen mit ihrem jeweiligen Erbe des Kalten Krieges umgegangen sind, werden in diesem Artikel die vier Stufen eines transnationalen Ansatzes vorgestellt, die – landesunabhängig und länderübergreifend – ein besseres Verständnis und Management der Kulturerbestätten des Kalten Krieges ermöglichen. Mit einem besonderen Schwerpunkt auf dem direkten Vergleich zwischen England und Russland und inklusive der Strukturen, die an anderer Stelle in den Regionen der ehemaligen NATO und des Warschauer Pakts sowie in den Vereinigten Staaten vorhanden sind, argumentieren wir, dass dieser vierstufige Ansatz: a) ein neues Verständnis der komplexen archäologischen und architektonischen Hinterlassenschaften liefert; b) neue Perspektiven auf ihre Bedeutung ermöglicht; und c) (vor allem in der heutigen Zeit von geopolitischer Instabilität) die Zusammenarbeit und Freundschaft zwischen verschiedenen Ländern fördern kann.

#### RIASSUNTO

# La guerra fredda: un approccio sovrannazionale a un patrimonio globale conteso

La guerra fredda è un periodo storico al quale sono ascrivibili più siti militari di diversa tipologia, ed edifici che costituiscono una complessa testimonianza archeologica, considerata adesso da diversi paesi come parte del loro patrimonio. Nel portare avanti delle strategie per gestire e meglio comprendere tale patrimonio, allo stato dell'arte è stata posta particolare attenzione sui seguenti aspetti: creare degli inventari nazionali dei siti e degli edifici che attestano storie specifiche della guerra fredda; analizzare la loro rilevanza in seno alle singole nazioni che vi presero parte; selezione alcuni siti specifici da tutelare. Dopo aver messo in evidenza alcuni esempi fra queste variegate iniziative, questo contributo presenta un nuovo approccio sovrannazionale in quattro fasi, che si propone di migliorare la comprensione e la gestione dei luoghi legati alla guerra fredda, indipendentemente da dove siano situati. Questa metodologia incoraggia la collaborazione attraverso confini ora scomparsi, quelli l'Est e specificamente fra l'Ovest. sul confronto tra Focalizzandoci in parte l'Inghilterra e la Russia, e facendo riferimento ai siti preservati nelle aree di influenza legate sia al patto di Varsavia e alla NATO, sia agli Stati Uniti, sosteniamo che questo approccio in quattro fasi fornisce una rinnovata comprensione di dati archeologici complessi, dando nuove prospettive sul loro significato. Inoltre, cosa significativa in un momento di instabilità geopolitica, tutto ciò viene portato avanti in uno spirito di collaborazione e di amicizia.

#### RESUMEN

# Guerra Fría: un enfoque transnacional de un patrimonio mundial

La arquitectura de la Guerra Fría es considerada por muchos países como parte esencial de su herencia. A veces es incluso considerada como una prioridad en la gestión de patrimonio ya que los edificios importantes pueden ser reutilizados, mientras que los lugares vacíos extensos, como por ejemplo los aeródromos, se pueden urbanizar. En varios países a cuyo trabajo nos referimos aquí (en particular el Reino Unido y otras partes de Europa), las agencias responsables de la gestión del patrimonio han creado inventarios nacionales de vacimientos y edificios con el fin de tomar decisiones informadas sobre su futuro. Este artículo propone que el marco más apropiado para la toma dichas decisiones sería un contexto internacional más amplio. El enfoque "transnacional" permitiría

la comparación de yacimientos similares (por ejemplo europeos) en toda la extensión del despliegue occidental de la OTAN en Europa y en América del Norte. También permitiría la comparación de yacimientos en países que formaron parte del Pacto de Varsovia del bloque oriental. Después de esbozar algunos ejemplos de cómo las agencias nacionales han abordado su herencia de la Guerra Fría, presentamos las cuatro etapas de este enfoque transnacional que prevé una mejor comprensión y gestión del patrimonio de la Guerra Fría dondequiera que se encuentren. Con un enfoque

específico en la comparación directa entre Inglaterra y Rusia, y también refiriéndonos a los yacimientos que sobreviven en otros lugares dentro de las antiguas regiones de la OTAN y del Pacto de Varsovia, así como en los Estados Unidos, argumentamos que este enfoque de cuatro etapas: proporciona una nueva comprensión de un registro arqueológico y arquitectónico complejo; brinda nuevas perspectivas sobre la importancia de tales yacimientos; y (sobre todo en una época de inestabilidad geopolítica) lo hace con un espíritu de cooperación y amistad.

John Schofield, Department of Archaeology, University of York, YO1 7EP, UK [john.schofield@york.ac.uk]

Wayne Cocroft, Historic England, Brooklands, 24 Brooklands Avenue, Cambridge, CB2 8BU, UK [wayne.cocroft@HistoricEngland.org.uk]

Marina Dobronovskaya, Preservation Studies Program, University of Delaware, USA [marinado@udel.edu]