

World Heritage Inscription for naval heritage brownfields?

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Abstract

Inscription onto UNESCO's list of World Heritage sites is an important way of drawing international attention to the legacy left by centuries of military and naval activity – brownfields par excellence. Three dockyards (government shipyards) are already so designated – in Karlskrona in Sweden, Suomenlinna in Finland and Venice – as part of the broader inscription of the city. Rochefort in southwest France and Chatham in southeast England are candidates, and Portsmouth Harbour, the Isle of Wight and Spithead might be the first 'cultural seascape' to be so inscribed.

Each country maintains a tentative list of candidates for world heritage status, usually controlled by the ministry of culture. One entry per year is put forward by member countries for ICOMOS, UNESCO's advisory body to consider for inscription. To be accepted sites have to meet tests of authenticity, prepare a justification and supporting nomination dossier and ultimately have a management plan for safeguarding their future.

The process of application requires considerable local commitment: viable management plans over a ten year period must be drawn up by local authorities, site owners and other stakeholders. These requirements reflect increasing concern that inscription is not enough in itself to guarantee protection of these very specialised brownfields from decay or overdevelopment. World Heritage Sites may be placed on the list of sites in danger if there is damaging change. This paper examines the extent to which inscription safeguards these unusual brownfields.

Keywords: dockyards, ICOMOS, inscription, World Heritage sites, conservation, maintenance.



“A European colonial ensemble in the Caribbean of outstanding value and integrity, which illustrates the organic growth of a multicultural community over three centuries and preserves to a high degree significant elements of the many strands that came together to create it. The modern town consists of several distinct historic districts whose architecture reflects not only European urban-planning concepts but also styles from the Netherlands and from the Spanish and Portuguese colonial towns with which Willemstad engaged in trade”. [1]

1 Introduction - defence cuts

Inscription onto UNESCO’s list of World Heritage sites is an important way of drawing international attention to the legacy left by centuries of military and naval activity – including colonial survivals. As armed forces in different countries are reduced and regrouped, significant historic sites associated with national defence are on the closure list in many countries. In 2008 the United States federal government pledged to purge military bases of 50 million unused square feet in the next five years. The Department of Defense’s edict has put pressure on many of the country’s military bases—including the United States Naval Base at Pearl Harbor—to tear down rather than reuse their historic buildings [2]. Military and naval sites are brownfield sites par excellence. Historic defence sites may have significant architectural and engineering legacies, as well as problems such as contamination, decay from lack of maintenance, absence of documentation, isolation, difficult transport access, depressed local economies, unemployed workforces.... This rapidly moving and widespread process is still not much studied. There is little interchange between sites, or indeed between countries undergoing similar experiences, yet the importance of historic defence sites to their local communities is cultural and social as well as economic. More needs to be done to share good practice in this most symbolic of transitions.

2 Lack of research or exchange of experience

There is little research into this profoundly important and symbolic land use exchange. Literature on post-defence reconstruction, its economic, social, spatial and physical impacts, and the implications for the historic defence estate is rare, though more common in the United States. Although base conversion may be intermittently highly visible in land use and development policy debates, administrative and academic interest is not sustained because of the long timescales involved. Since 1994 the Bonn International Center for Conversion (BICC) does pioneering work on decontamination and the economic effects of closure upon defence dominated communities in many countries including Germany. It has been actively tracking all aspects of the conversion processes in central and eastern European countries; military expenditure, surplus weapons, demobilisation, conversion of military research and development, conversion of defence industry and base conversion. But, as in the BICC case, the effect of conversion on the defence industry has dominated conversion research, while



conversion of military properties and lands such as airfields, depots, barracks, dockyards, training centres has received far less attention. This absence in social scientific research has left significant gaps in our knowledge about the effects of base closures and the prospects for civilian reuse in many parts of the world.

3 Development opportunities

Brownfields par excellence, military and naval sites offer unprecedented development opportunities. Sites large and small – contaminated, built over with utilitarian or historic structures or protected for wildlife value – all offer a challenge to the achievement of creative, sustainable reuse. Job creation and technical innovation may or may not result, but land values and local tax bases are considerably affected as these sites emerge into the property market. Marine, maritime, commercial, leisure/shopping, educational, cultural, heritage tourism, residential and industrial uses are emerging in this enormous transition.

What happens when the navy leaves? As long-term industrial sites, significant industrial archaeology may survive: cranes and hoists; objects: anchors, chains, figureheads; railway and tram lines; below ground archaeology; water pumping systems; power stations; specialist buildings: roperies, drydocks, wet docks, workshops, storehouses, foundries, electrical shops, covered slips, airplane shelters; specialist machinery; bridges, mast towers; air raid shelters; preserved ships, submarines; textural details: paving, mooring rings, signage; ‘intangible heritage’- cultural tradition, folklore....One mechanism for protecting them is inscription on the World Heritage List maintained by UNESCO.

4 The World Heritage Inscription process

Each country maintains a tentative list of potential World Heritage sites, usually controlled by the ministry of culture. One entry per year is put forward by member countries for ICOMOS, UNESCO’s advisory body to consider for inscription. In 1999 Chatham dockyard was nominated onto the UK list, which is managed, by the Department of Culture, Media and Sport. To be accepted sites have to meet certain tests of authenticity, prepare a justification and supporting dossier and ultimately to have a management plan for safeguarding their future.

The case for inscription has to make a claim of the universal human value to mankind of the site. There are two broad categories: natural sites and sites of cultural value. There are ten selection criteria. Sites must fulfil one or more categories. They are:

- to represent a masterpiece of human creative genius;
- to exhibit an important interchange of human values, over a span of time or within a cultural area of the world, on developments in architecture or technology, monumental arts, town-planning or landscape design;
- to bear a unique or at least exceptional testimony to a cultural tradition or to a civilization which is living or which has disappeared;



- to be an outstanding example of a type of building, architectural or technological ensemble or landscape which illustrates (a) significant stage(s) in human history;
- to be an outstanding example of a traditional human settlement, land-use, or sea-use which is representative of a culture (or cultures), or human interaction with the environment especially when it has become vulnerable under the impact of irreversible change;
- to be directly or tangibly associated with events or living traditions, with ideas, or with beliefs, with artistic and literary works of outstanding universal significance. (The Committee considers that this criterion should preferably be used in conjunction with other criteria);
- to contain superlative natural phenomena or areas of exceptional natural beauty and aesthetic importance;
- to be outstanding examples representing major stages of earth's history, including the record of life, significant on-going geological processes in the development of landforms, or significant geomorphic or physiographic features;
- to be outstanding examples representing significant on-going ecological and biological processes in the evolution and development of terrestrial, fresh water, coastal and marine ecosystems and communities of plants and animals;
- to contain the most important and significant natural habitats for in-situ conservation of biological diversity, including those containing threatened species of outstanding universal value from the point of view of science or conservation.

The protection, management, authenticity and integrity of properties are also important considerations. Since 1992 significant interactions between people and the natural environment have been recognized as cultural landscapes.

5 Naval sites on the World Heritage list – and applicants

Three dockyards (government shipyards) – Karlskrona in Sweden, Suomenlinna in Finland and Venice – as part of the broader inscription of the city – are already so designated. Rochefort in southwest France and Chatham in southeast England are candidates, and in 2008 a group from around Portsmouth Harbour and the Isle of Wight was preparing the case to be the first 'cultural seascape' – the harbour and the sheltered anchorage of Spithead – to be inscribed in the list. The only other harbour already on it is the Dutch trading settlement founded in 1634 in Willemstad in the Netherlands Antilles on the Caribbean Island Territory of Curaçao.

Chatham dockyard's statement makes reference to other dockyards in Europe and to its unique contribution to world heritage. Its justification emphasises the dockyard's national role and include the associated military functions:

"Britain's naval power is exemplified at home by three great Royal dockyards – Chatham, Portsmouth and Devonport. Chatham is now the most complete



example of a home dockyard from the age of the sail powered navy, which reached its zenith in the 18th and early 19th centuries. It is this completeness that sets it apart from either Portsmouth or Devonport. [Its] importance is enhanced by its close association with contemporary military establishments, notably the Brompton Lines and Brompton Barracks. This combination of a substantially intact 18th century dockyard with its contemporary massive landward defences is unique. The importance of Chatham is further enhanced by earlier associated structures like Upnor Castle, which functioned as part of the 18th century military presence in the Medway. Internationally only the existing World Heritage Site of Karlskrona, Sweden, is comparable to Chatham for its surviving dockyard buildings and associated fortifications. Of the dockyards belonging to the other major 18th century naval powers very little has survived the subsequent centuries or the ravages of war. The best preserved French dockyard is Rochefort but here survival is partial. The dockyard of the Arsenal of Venice retains many structures but, as with Dutch historic naval installations, was on a comparatively small scale. The German navy was essentially a creation of the 20th century and hence there are no comparable dockyards to Chatham. Overseas the British created a string of dockyards and supply bases to keep the fleet operable anywhere within the expanding empire. These, however, were never intended to build ships in the same way as the home dockyards and are not comparable in terms of scale or complexity. Many suffered war time destruction. Alongside Karlskrona, Chatham is outstanding amongst the surviving historic dockyards”

“Chatham was instrumental in securing and maintaining Britain’s worldwide influence. The completeness and survival of the dockyard and its defences – Fort Amherst, Upnor Castle and the Great Lines – is unique. In addition, a series of historic barracks and military installations help make Chatham one of the greatest British garrison towns.” [3]

In June 2007 Chatham’s World Heritage site bid, supported by Chatham Historic Dockyard Trust, English Heritage, The South East England Development Agency (SEEDA) and Medway Council was launched, with the aim of being the UK’s nomination in 2010 or 2011.

Greenwich on the River Thames in London – celebrated for its cultural heritage: its naval and sea-faring history and its grandiloquent formal planning – is already a World Heritage site. The Royal Naval College was built as a hospital for veteran sailors; Admiral Lord Nelson lay in state in its Painted Hall prior to his funeral. The National Maritime Museum and the preserved ship the *Cutty Sark* are also within the boundaries. The splendid classical townscape set in and around the oldest Royal Park in London and bordered to the north by the River Thames were designed by Sir Christopher Wren, Inigo Jones, Sir John Vanbrugh, Nicholas Hawksmoor and Joseph Kay. Together the ensemble constitutes the World Heritage Site. Key scientific developments: Greenwich Mean Time, and Longitude 0° – making Greenwich the centre of time and space – are also a key to its value in world terms.



6 Scientific and technological innovation as justifications for inscription

Scientific advance and technological innovation are current themes for World Heritage sites. Following the failure of ICOMOS to recommend inscription of Charles Darwin's Down House in Kent in southeast England in 2007, the British Department of Culture, Media and Sport and the UK National Commission for UNESCO hosted an expert international workshop on behalf of the World Heritage Committee in January 2008 on 'World Heritage: Science and Technology'. It was designed to develop guidelines to identify future World Heritage Sites that represent advances in science and technology of global significance. Experts from 15 countries, representing the physical sciences and technology as well as those with detailed knowledge of the operation of the UNESCO World Heritage Convention discussed ways to create a scientific framework, to help identify and recognise sites that represent the heritage of science and technology that could potentially become World Heritage Sites. The conclusions of the expert meeting will be presented to the World Heritage Committee for consideration at their next meeting in July 2008 in Quebec, Canada [4].

In 2007 no less than fourteen of the citadels, fortresses, town walls and towns designed by the great French engineer, strategist, town planner, philosopher, political theorist and designer of more than 150 fortresses as well as extensive civil engineering works Sébastien Le Prestre maréchal de Vauban (1633-1707) were chosen by a network of major Vauban areas to be put onto the UNESCO list of World Heritage sites, with the support of the French government (Casemate 2007) and the European-funded project Septentrion which united 20 or so fortified cities in Northern Europe [5]. Interestingly, the areas chosen did not include Vauban's work in Cherbourg dockyard. Its case, by the Syndicat Mixte Du Pays Rochfortais: Charte Patrimoniale de l'Arsenal Maritime du Rochefort: Paysage Culturel Évolutif" dated September 2005 is available on the web. Rochefort's bid, bringing together fourteen local councils, may not succeed on its own, because western Europe is already so well represented on the list, compared with the rest of the world. It may be necessary to join with similar dockyard sites – as was the case with the fortresses designed by Vauban.

Making the case for unique universal value is a challenge. Technological innovation is an unsung characteristic of government establishments.

'The English royal dockyards, victualling yards and hospitals formed what are arguably the largest industrial centres in Britain before the Industrial Revolution, while their economic impact was out of all proportion to their size' [6]

'...Given the way the dockyards, drawing on public funds, were able to influence private sector enterprise is a somewhat under-researched area.' [7]



7 The Portsmouth Harbour, Isle of Wight and Spithead case for inscription

Examples of outstanding innovation in dockyards perhaps reached a peak in Portsmouth dockyard in the UK. Block Mills is the site of a world first: the first steam powered mass production factory using metal machine tools to make the hundreds of thousands of pulley blocks required by sailing ships. It was developed by a constellation of brilliant engineers led by Marc Isambard Brunel, a French émigré. Brunel had experimented with block making equipment in America. When he returned to Britain he took out a patent and had models made of his first design by the engineer Henry Maudslay when he got the contract. The brilliant team of engineers included Simon Goodrich who developed the factory. Block Mills was built over a small basin of 1791-8 used as a reservoir for the dockyard pumping system. In 1799 a 12 horsepower steam engine invented by Sadler was installed, which powered the woodworking machinery by day and pumped water from a borehole into the reservoir by night. The block-making machines were the earliest machine tools of substantial size (except clock-making tools) to be constructed entirely of metal a major advance in the history of mass production. Ten men could produce the same number of pulley blocks - 130,000 – as 100 men working by hand. By 1806 45 machines and 10 men were producing 140,000 blocks a year.

Other key innovations in the area include the first working caisson to close dry docks, the first circular saws, key developments in wrought iron in response to the demand for quality iron by dockyards the base metal of the industrial revolution, the first clinical trials for treatment of scurvy, the first steam powered dredger, early large scale ship testing tanks, ship-borne radar and the invention of freeze drying.... How are these brownfields sites of innovation to be preserved and celebrated?

These inventions, together with the successive layers of defences including the 1860s ring of forts commissioned to defend Portsmouth dockyard by Lord Palmerston, four of them in the sea, and the ‘submerged landscape’ showing human occupation over 5,000 years make the Portsmouth Harbour, the Isle of Wight and Spithead bid for World Heritage status a new concept: the world’s first ‘cultural seascape’. The public launch of the project in January 2008 was in an appropriate venue – the modern auditorium of the converted Boathouse 6 in the Historic Dockyard. It followed closely on the good news of the Heritage Lottery Fund’s massive grant for a new museum for the Mary Rose, Henry VIII’s sixteenth century flagship.

The first speaker at the launch in January 2008 was David Michelmore of ICOMOS – the international advisory body that advises UNESCO on the list. He has successfully inscribed 11 sites onto the World Heritage List, and is preparing several others. After a year of preparatory work, the Portsmouth Harbour bid was ready for its promoters to ask for public support. As he said, creative, forward looking cities regularly reinvent themselves, and the process



towards achieving this project would help the harbour and Island communities to establish new roles.

Another speaker, John Rodger, spoke eloquently about the difference World Heritage status has made to Blaenavon Industrial site in South Wales, a ruined and contaminated historic brownfield of worldwide significance. Local people's perception of the area's key history as a cradle of the Industrial Revolution had been totally changed by a continuous programme of events and activities. Physical repairs and new buildings had raised property values and encouraged considerable inward investment, and tourist figures to the Big Pit and other industrial sites have tripled.

ICOMOS recommends that World Heritage sites anticipate the effect of climate change – reminding us all of how vulnerable the area is to rising sea levels. This is particularly true of Portsmouth, where the whole low lying-city could be flooded. Unlike Chatham where the naval base closed in 1985, Portsmouth is one of three surviving dockyards for the British navy. The leader of Portsmouth City Council, Gerald Vernon-Jackson, said that nothing should jeopardise the navy's freedom of operation. The Ministry of Defence is already subject to civilian planning law on land and to the myriad of marine consents, and Defence Estates are to commission a study of the effect of World Heritage designation on the navy's operations, taking advice from the Swedish navy about Karlskrona – already on the list.

8 Another layer of bureaucracy? Maintenance – development versus conservation

An obvious question is whether World Heritage Status would frustrate economic progress and just become another layer of bureaucracy. All the research undertaken suggests that the reverse is true; it positively encourages inward investment, is good for tourism and unlocks grants and it may demand that new design is appropriate and of good quality.

Maintenance – or lack of it – affects potential for future brownfield use. Poorly maintained buildings cost more to repair and convert. Even pioneering buildings are not always valued. The Gunner's Mate School, also known as Building 521, located on Naval Station Great Lakes in Lake County Illinois, designed by the famed firm of Skidmore, Owings & Merrill in 1954, was the office's first "curtain wall" structure. With its massive volume, the building exemplifies Mies van der Rohe's concept of universal space, which promotes Cathedral-like interiors that are unobstructed and therefore flexible. "You could almost do anything in it. That's what it was designed for; it was designed to adapt," but it is under threat of demolition. The firm's July 2006 study says it would cost \$34 million to retrofit the building as a double-walled cafeteria and club facility: "in the same price range" as the Navy's estimate for a new building [1]. Things are not any better on the other side of the Atlantic. The UK MOD at best only keeps historic buildings for which it has no use wind-and weather-tight. The Stewardship Report on the Defence Estate 2005 acknowledged the need to take into account the wider interests of society – in particular sustainability and



the environment – in defence historic buildings at risk. In 2001 there were 43 defence buildings at risk: 6.1% of the total; this has now been reduced to 32. However, 33% of the 9000 Scheduled Ancient Monuments on MOD land were in fair condition, while 21% were in poor or unknown condition. The same problems occur with subsequent private owners who have no use for historic buildings on their sites.

The Gibraltar government was apparently willing in 2006 to forsake the opportunity of applying for World Heritage status by granting permission for the destruction of the six huge brick water tanks built in Rosia Bay between 1799 and 1804 to supply the Royal Navy with 5,000 tons of water. At that time the Royal Navy had no allies in the Mediterranean, and Tetuan and Ceuta could not be relied on. Rosia Bay is a tiny bay with a harbour only about 300 yards wide which has Parsons Battery (Moorish/Spanish/British), Dutch Battery, the Grand Magazine, Victualling Yard, Agent's houses, Cold Meat Store and Naval Hospital above – once a complete naval enclave. The tanks were supplied with water collected from the roof of the adjacent Victualling Storehouse, and were in continuous use by the Royal Navy until 2004 when they were transferred to the Gibraltar Government. An Irish development company OEM proposed to build a block of 200 flats of 'affordable housing' and car parking on the site of the water tanks, even though there were other brownfield MOD sites available [8]. The Bay is a key site for maritime heritage, and Gibraltar aims to build up its tourism. But despite protests from the Council of Europe, ICOMOS-UK, Europa Nostra and MEPs, the Prince's Foundation, SAVE Britain's Heritage, the Society for Nautical Research and the Naval Dockyards Society, protests signed by 10% of Gibraltar's population, considerable press coverage in British and Gibraltarian newspapers and following visits from historians from Britain, France and Spain gathered in Rosia Bay in 2005 to commemorate the Battle of Trafalgar, the tanks were demolished after court hearings in January 2006.

The Gibraltar Heritage Trust had to withdraw from the case because it could not risk the costs of judicial review – as mentioned above, often the greatest deterrent to small organisations or individuals who want to challenge government actions. The British government said it was a domestic matter and that they could only intervene if the Gibraltar government acted unconstitutionally or illegally. Gibraltar has listed very few historic sites in recent years and it is not complying with EU guidelines for historic areas. It is not clear whether the government has signed the Venice Charter, but as a member of the European Union it must comply with the Grenada Convention (1985), and should have protected the site. Historians and heritage experts in several countries were sympathetic to the campaign, but there seemed to be no mechanism to call in any outside agency to intervene and prevent demolition [9]. Clearly there are serious limitations on the extent of protection when a government is determined to allow redevelopment, and there are also temptations to put economic development before heritage protection in rapidly developing countries such as Estonia, where tall hotel and offices blocks close to the Old Town prompted a threat to remove World Heritage status.



9 Conclusion – is inscription as a World Heritage Site and tourism a panacea?

The process of application requires considerable local commitment: viable and renewable management plans over a ten year period must be drawn up by local authorities, site owners and other stakeholders in conjunction with the Nomination dossier, in accordance with the *Operational Guidelines for the Implementation of the World Heritage Convention* and the *Vienna Memorandum*. These requirements reflect increasing concern that inscription is not enough in itself to guarantee protection of sites from decay or overdevelopment. World Heritage sites may be placed on the list of sites in danger if there is damaging change, and ICOMOS works with those responsible for the site to ensure its long term future.

This paper has not examined the complex and sometimes damaging relationship between tourism and world heritage sites which is often the dominant new land use for naval sites such as Greenwich and Chatham. Arguably Venice with its shrinking population is being destroyed by tourists, although the magnificent buildings of the Arsenale are occasionally beneficially reused for cultural events such as the Biennales of Art and Architecture. In view of the importance of this relationship, a significant 18 month long project is to start in March 2008 organised by UNESCO World Heritage Centre and the UN World Tourism Organisation in conjunction with ICOMOS and IUCN. It will examine the whole relationship between world heritage sites and tourism. All World Heritage Sites will be involved, including Natural Sites and Natural Protected Areas, Cultural Landscapes of mixed values, Cultural Sites including archaeological and underwater, vernacular, industrial and military heritage, and Urban places including historic cities, towns and villages. Key questions to be discussed were: how can tourism benefit heritage places and enhance the livelihoods of the local communities who live and work near them? What actions are necessary to protect heritage sites in the context of tourism activity? What are the main issues which should be raised and examined? [10]

Other stakeholders in international cultural heritage, tourism and development will also be consulted, and tangible as well as intangible values and relations will be examined. This is the first time that all four agencies have combined to examine this relationship in a holistic manner, so it is an opportunity for all interested parties to contribute.

Inscription of historic naval and military brownfields onto the list of World Heritage sites is valuable in focusing world attention on these specialised but difficult to reuse brownfields. Their history of technological innovation as well as their architectural and engineering legacy make the case for their inclusion, but it is the physical remains that visitors come to see. There are gains from the process, whether or not the application for World Heritage Inscription succeeds. While not a panacea, this rare privilege, joining the 851 sites on the List, helps to preserve and sustain these unique brownfields – built, underwater, archaeological, cultural, natural – by committing their owners to longterm,



sustainable management as well as emphasising their importance to local people and to the local economy, holding them in trust for future generations.

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