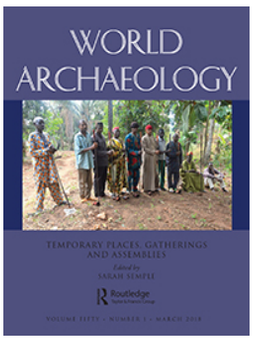

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Beneath the rubble, the Crystal Palace! The surprising persistence of a temporary mega event

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ABSTRACT

This paper considers the archaeological traces of some of the largest temporary gatherings imaginable: modern cultural mega events such as World's Fairs, Expositions and Olympic Games. Focusing specifically on what is widely accepted as the 'first' such event, The Great Exhibition of 1851, its aftermath and the rebuilding of its host structure, the Crystal Palace, the author investigates how mega events' archaeological traces can provide alternative accounts of the history of temporary spectacles. The author also highlights how an event sometimes becomes conflated with its structure, showing how the Crystal Palace's materials persisted long after the original gathering was over. Even after event sites take on radically different uses or their structures are moved, altered or totally destroyed, their scant traces can still inspire a desire for resurrection.

KEYWORDS

Mega events; contemporary archaeology; London; Crystal Palace; Great Exhibition

Investigating temporary gatherings presents an especially difficult problem for archaeologists: how can we identify the presence of an event in the past that, by its very nature, may leave few material traces? Even with monumental temporary gatherings such as those discussed in this paper (e.g. large structures, significant landscape changes), many smaller details may be missed. We also face issues of definition: what is understood to be a 'temporary gathering'? Should we limit ourselves to temporally circumscribed events and their period of operation (a fair, feast or conflict for example), or should we see them as merely the most recognizable point in a chain of associations (composed of many smaller micro-scale 'events') and long-term changes in a given environment?

This paper grapples with some of these issues by examining the traces of some of the most spectacular temporary gatherings imaginable: modern cultural 'mega events', focusing specifically on what is recognized as the first of these, The Great Exhibition of 1851.

Mega events, like Great Exhibitions or the modern Olympic Games have been defined as large-scale, 'one-off' spectacles that 'have dramatic character, mass popular appeal, and international significance' (Roche 2000, 1). Though temporary, they nonetheless have had a disproportionate impact not only on their host cities and nations, but are also seen as unique reflections of changes wrought by the industrial revolution (Briggs 1965). This, combined with their vast scale, provides a distinctive form of material culture for historical archaeologists to work with.

Paul Greenhalgh (1988, 1) dramatically sums up mega events' spectacular transience saying:

> [...] imagine an area the size of a small city centre, bristling with dozens of vast buildings with every conceivable type of commodity and activity known, in the largest possible quantities; surround them with miraculous pieces of engineering technology, with tribes of primitive peoples, reconstructions of

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> ancient and exotic streets, restaurants, theatres, sports stadiums and bandstands. Spare no expense. Invite all nations on earth to take part by sending objects for display and by erecting buildings of their own. After six months, raze this city to the ground and leave nothing behind, save one or two permanent landmarks.

This, despite its undoubted dramatic appeal, potentially undersells such temporary gatherings: is truly 'nothing' left behind? The presence of 'one or two' permanent buildings is indeed often a feature of later mega events, most famously that Parisian 'permanent landmark', the Eiffel Tower (built for the 1889 Exposition), but what about more ephemeral events? What can more subtle traces tell us about such gatherings, and their relationship to their hosts? I begin to answer these queries by firstly reviewing previous 'mega event' archaeology, before turning to how we define a 'temporary event'. I then consider the brevity of the Great Exhibition in contrast to its structure's surprisingly long-term persistence.

Excavating the mega event

Though mega events are often well-documented through archives, there is nonetheless a point when such records jar with the material traces of their operation. Based on this disjuncture, my research draws on the sub-field of contemporary archaeology (Buchli and Lucas 2001; Graves-Brown, Harrison, and Piccini 2013) as a productive means to consider temporary events of the recent past. For example, Carolyn White's examination of the Burning Man Festival, a week-long cultural gathering hosted in the Black Rock Desert (Nevada) shows how archaeology can provide an 'insight into the material culture, organization, and practices' of such temporary gatherings by exploring 'the sites that are created and destroyed by [their] participants' (2013, 596).

Such an archaeological approach has so far rarely been used to look at large-scale historical events, but those studies that have been carried out (see Nordin [2011]; Graff [2012]; Penrose [2012]; Piccini [2013]), along with my own research (e.g. Gardner [2017, 2016, 2013]) demonstrate its rich potential. This work shows that mega events are rarely the unified and universally welcomed festivals their organizers would have us believe (see MacAloon [1984]) and that they also act as sites of contestation, raising issues as diverse as national identity, inequality, security and censorship.

Temporalizing the temporary

Just how 'temporary' are temporary places or events? How do we define and recognize their ephemerality, whether Neolithic construction workers' camps (e.g. Craig et al. [2015]) or nineteenth-century revolutionary barricade (e.g. Coghlan [2012])?

The time-limited use of certain sites and hence, their identification to archaeologists as more, or less, temporary is clearly dependent on our particular focus. For example, if the gathering in a given place lasted only a few days or weeks, such activities clearly may not leave a direct archaeological trace, or may be 'overwritten' by later activities/taphonomic processes (Lucas 2008, 63). Not all temporary events are therefore equal in their relative (im)permanence; potentially, the larger the spatial scale and level of landscape change, the longer the traces of a gathering may linger.

However, even if no physical trace is left of a gathering, it may leave material and/or discursive *proxies*. For example, though no direct traces of Paris' mid-nineteenth-century revolutionary gatherings survive, we nonetheless see how the city was changed by such events: easily barricaded routes were razed in the 1850s and then replaced by the broad boulevards that we still stroll down today (Frisby 2004, 284).

Thus what is it we are actually investigating when talking about 'events'? Discussion of what archaeologists are actually recovering – do we excavate 'the past', or simply interpret its traces in the present? – goes back to debates over the nature of the archaeological 'record' from the 1960s onwards (see Murray [1999]), but also more recent considerations of the nature of the 'archaeological event' itself, particularly with regard to taphonomy.

Lucas points out that even the briefest interpretation of an archaeological context – describing a layer as a 'floor' for example – may be conflating multiple contexts, which represent many distinct 'events', giving an overly simplistic meaning to said context (2001, 152–62, 2010, 352). We are therefore not excavating the moment a singular floor was in use, but a palimpsest of uses and disuses (*many* floors), as well as post-abandonment/burial processes.

Perhaps of greater concern for a gathering like the Great Exhibition is our tendency to confuse the material trace of an event (or its representations) and the actual event itself. A building which hosted a temporary gathering has a much deeper and long-lived temporality than its event – such a gathering's contents and participants will be long-since dispersed, yet its building (or ruins) can linger, and be frequently reused for other purposes.

The Great Exhibition and the Crystal Palace

The 'Great Exhibition of the Works of Industry of All Nations' was held from 1 May to 15 October 1851 and was located in Hyde Park, London, in a vast glass-plated temporary structure, which became rapidly nicknamed 'the Crystal Palace' (Figure 1). Developed under the directorship of Henry Cole and championed by Prince Albert, husband of Queen Victoria, the Exhibition was intended to promote British manufactures to an international audience, and to improve the 'taste' of domestic consumers so that they might purchase more British goods and for the 'lower orders' to become 'better' citizens (Auerbach 1999, 12–13). The building was some 564 m in length, had

Figure 1. The Crystal Palace from the northeast during the Great Exhibition, set in something of an idealized rural landscape.

Source: By Dickinson Brothers – Dickinsons' comprehensive pictures of the Great Exhibition of 1851, public domain. Available at: https://commons.wikimedia.org/w/index.php?curid=543319

92,000 m^2 of floor space, and housed over 13,000 exhibits, including steam engines, gigantic lumps of coal, 'priceless' diamonds and trinkets such as a penknife with 80 blades. The Exhibition attracted some 5 million visitors and made a financial surplus which led to the formation of the museums and institutions of South Kensington that exist today.

The event has variously been seen as the apogee of the British industrial revolution, the signature gathering of the Victorian era (e.g. Benedict [1983]), or even a vast 'counter-revolutionary measure' (Greenhalgh 1988, 29). Indeed the Exhibition has been associated with so many paradigm shifts and 'defining moments' (Schofield 2009) that Auerbach suggests it has 'become one of the most misinterpreted events in modern British history' (2010, 97). Such associations have been considered exhaustively elsewhere (e.g. Beaver [1970]; Buzard, Childers, and Gillooly [2007]) so instead, here, I explore the event's site in Hyde Park, along with archival material, to get a sense of the structure itself within this gathering.

The palace of iron and glass (and concrete and timber)

The Palace built in Hyde Park was actually an unofficial, last-minute design, replacing a building originally designed by members of the Exhibition's building committee, following their rejection of all entries to their design competition. The originally proposed structure would have required around 15 million bricks, supposedly more than could have been produced in time for the event to go ahead on schedule, but, more importantly, was seen by the managers of Hyde Park and its well-heeled neighbours as *anything but* temporary, despite strict rules regarding the short-term use of the site (Cox 1911, 235–7).

Thus, Joseph Paxton's famous Crystal Palace design was born, following a fortuitous meeting with the event's organizers. Paxton's design was well suited to the event, in terms of useable space, low cost and natural lighting, and, moreover, understood as a temporary structure, almost *non*-architectural. Arguably this design's perceived temporariness actually help secured the event's hosting in the Park (see also Clayton [2007, 285]).[1]

Figure 2 shows the site of the Crystal Palace today, an unremarkable stretch of grass located in the south of Hyde Park and now used informally for a variety of sports. Walking over the site, the ground appears uneven and dry in places, and no trace is seen of the Palace, other than a set of commemorative markers designed by the artist Virginia Nimarkoh (2011). The only above-ground evidence of a structure ever having been here is actually an absence: unlike the rest of the area, there are no trees for the entire length of where the building stood. This is in contrast to the situation in 1851 where seven mature elm trees were felled to build the Palace and a further three (after public outcry) incorporated inside the structure itself. These trees lasted longer than the Palace itself, with the last said to have been felled in the late nineteenth century (Gibbs-Smith 1950).

No archaeological excavations have been conducted on the site and as the area is within a 'Royal Park', there is little chance of development. The only exception to this, though outside the footprint of the Palace, was a recent evaluation for a new water system which revealed the brick foundations of the original 'spend-a-penny' public convenience, which gained fame in 1851 as the 'world's first paid-for flushing toilet' (Royal Parks 2016). Beyond this we must rely upon analysis of archival material to suggest what is likely to remain below ground – I return to this shortly, but for now, turn to the construction of the building itself.

The Palace's construction relied, along with its famous cast iron and glass, on a large quantity of concrete and wood, with these latter materials commonly forgotten in most accounts, perhaps due the clearer association between the former two and the supposed 'modernity' of the event

Figure 2. The site of the 1851 Great Exhibition's Crystal Palace today looking west towards the Albert memorial. *Source*: Photograph by the author.

(e.g. Beaver [1970, 148]). Hence, in discussing concrete and timber in more detail, I want to explore this association with technological progress, while also examining the structure and its gathering's relative permanences.

Concrete

The Palace's construction saw the hand-excavation of 1074 footings dug up to 1.2 m deep into the natural Taplow gravel, with cast iron base plates set in concrete (Wyatt 1851, 52). Interestingly, the footings' Portland cement was hand-mixed with these self-same gravels, quarried from 'a pit' on the site (Berlyn and Fowler 1851, 63–5).

Adrian Forty (2012, 17) suggests concrete can be seen as simultaneously 'modern' and 'un-modern', due to its nineteenth-century 'rediscovery' and widespread adoption. It was, unlike the development of cast iron or steel, a material un-reliant on specialist processes – no teams of engineers were required to design or cast footings used by the Palace, merely 'human muscle' to mix its few ingredients. This 'vibrancy' of concrete, as Bartolini puts it (2015, 6), comes from an interaction with human agency and the action of crafting the material into a solid from a liquid, and thus is an almost 'anti-industrial' process, once again seeming at odds with the 'modern' nature of the mega event itself. Exhibitionary structures like the Palace were seen by the likes of Le Corbusier as 'heralds of a new age' (quoted in Piggott [2004, 11]), and by others as direct antecedents of modernism (see Murphy [2010]), yet this concrete, co-mixed using the gravel of the site itself, seems decidedly ancient.

These footings nonetheless actually appear to be the only surviving material of the structure potentially left on its original site, having been revealed once since 1852, albeit accidentally. During emergency works in the Second World War, the site was used as a quarry to fill sandbags and eerie images of these excavations in late 1939/early 1940 show the concrete footings upended (Figure 3). Stranger still, the Air Raid Precautions Commissioner for London, Sir Harold Scott (quoted in Hennessy [1992, 16]), recalled that:

> [...] the site of the 1851 Exhibition was excavated to a depth of some forty feet, uncovering the foundations of the original Crystal Palace, and leaving an enormous crater. This was later filled by rubble from London's bombed buildings, which rose to a mound forty feet high and this in turn vanished, for it was carried away to East Anglia to make the foundations for those runways from which the American Superfortresses [*sic*] carried even greater destruction to the cities of Germany.

Thus, this raises the curious likelihood that London's Blitz rubble wound up mixed with some of the original footings to build the runways in question, some of which may potentially still be present, given the large numbers of such runways constructed and extant in East Anglia (e.g. http://www.invisibleworks.co.uk/ww2-airfields-in-norfolk/).

Timber

The Palace used 17,000 m^3 of timber spread throughout its roof, its 320 km of sash bars (glass framing), in its 48 km of guttering, and in its pine flooring (Wyatt 1851, 49–81; Gibbs-Smith 1981, 23). Glass cannot exist as a useful building material without a framework – in this case, one which was entirely wooden. This framework was wooden because Paxton realized that a metal version would expand and contract in the sun, likely resulting in the glass breaking, not to mention being extremely heavy (Great Exhibition 1851a, 62).

Another example of the importance of wood to the Palace is found in its enormous transept (protecting the elm trees within) which included 16 eight-ton, semi-circular 'ribs' (hand-built using hundreds of less-favoured pine trees) – once again, a metal equivalent being impractical. The ribs' installation was shown in great detail in the *Illustrated London News* on 14 December 1850. This describes hundreds of 'long-shore men' (dockworkers) with crowbars moving them on rollers, whilst others worked hand-winches and clambered aloft, in a process reminiscent of the raising of a megalith or the lifting of the stones of a cathedral (ILN 1850, 454).

Thus, reconsidering the use of wood in the construction of the Palace, we also begin to reveal the human labour involved in producing this 'modern' marvel that has often been ignored. The Palace's appearance deceives us; the sense of time separating the supposed precursor to architectural modernism and newer mega events grows larger when we observe such 'primitive' processes of construction; iron and glass' silent partners are not only these 'old' materials, but even more so, multitudes of anonymous labourers. The advanced machinery on display at the Exhibition inside the Palace testified to the *event's* display of industrial innovation, yet the brute force involved in mixing the concrete and lifting the wood of its host *structure* generally remains absent from most narratives of the event.

Glass and iron

The Palace's glass was created in a distinctly artisanal fashion: each of its 293,655 panes were mouth-blown, then hand-rolled by workers at Messrs Chance & Co in Birmingham (Beaver 1970, 9). The Palace, so often seen as a product of mechanization, is complicated by this manufacturing

Figure 3. Top: The disturbed concrete foundations of the Palace in Hyde Park in late 1939 during excavation for sand (A7903). Bottom: The site looking west in January 1940 showing some of concrete footings in alignment in-situ (A7905).

Source: Reproduced with kind permission from London Metropolitan Archives, City of London: SC/PHL/02/BOX 1258.

process; again we are reminded it also relied on human blood, sweat, and indeed, breath. This laborious form of production would soon be replaced by modern, mass-produced, float-plate glass (a method actually on display within the Palace: Great Exhibition 1851b, 697–707), though *these* panes would linger long into the late-nineteenth and early twentieth century, remaining with the structure at Sydenham.

If we now turn to the cast iron, again a tension between permanency and impermanency is observed and the limitations of an apparently modern material appear. Of the surviving Palace remnants today, the iron fares better than the glass or timber, with socketed base-plates visible at Sydenham in-situ. However, one somewhat stranger vestige of the iron also persists at Holme Fen, Cambridgeshire.

Here, since 1852, a cast iron column (set upon a timber pile) said to be from the original Palace, has been used to mark the receding ground level following the draining of nearby Whittlesey Mere. The somewhat mythical status of this post located in a dried-out fen, attests once again to how the temporary structure becomes permanent, albeit in a radically decontextualized environment. Other than this, other fragments of the Palace's cast iron are hard to find,[2] despite the vast number (3300 columns alone) produced for its construction.

After 1851, cast iron became seen as outdated, if not dangerous, for structural elements. Though strong in compression (e.g. the Palace's vertical columns), cast iron is brittle in tension, resulting from its relatively high carbon content, and the occurrence of impurities and cracks during casting (Gagg and Lewis 2011, 1963–4). This is starkly illustrated by the deadly collapse of several cast iron railway bridges in the late nineteenth century; perhaps most notoriously, the 1879 Tay Bridge Disaster which took 75 lives (Duck and Dow 1994, 139).

The materials of the Palace came to the rescue of the mega event, their relative impermanence, cheapness and reproducibility (but importantly, mainly through human labour) meant its structure could be finished in time for the event. Such components remind us that this event did not simply 'appear' mirage-like as a signifier of modernity, but, like industrialization more generally, was uneven, peppered with dead ends, and driven by the work of thousands of ordinary people.

These materials also facilitated rapid deconstruction and movement of the Palace to Sydenham (below); whilst the contents of the temporary gathering itself dispersed, its host structure persisted, and, to some extent, remains present today.

A second Palace

If my examination of the traces of the Palace at Hyde Park showed that the event was not a straightforwardly modern marvel and that little of it actually survives there, the structure's re-building at Sydenham, and its operation from 1854 until its destruction in 1936, speaks to a different aspect of the archaeology of temporary gatherings. The new Palace, today in ruins, highlights how a temporary event like the Great Exhibition inspired new gatherings and new uses. These were stimulated and sustained, partly by the association of the structure with the popularity and success of the original event, though arguably, the Palace ultimately became more famous than the Exhibition itself.

After the Great Exhibition closed, the desire to make the structure in Hyde Park a permanent venue was loudly expressed by both organizers and the general public, with plans for the memorialization of the event suggested even before the building was dismantled ('Delta' 1851; Smith 2012, 6). The Palace also inspired all kinds of imitators around the world, both for exhibition venues (e.g. the short-lived New York Crystal Palace, 1853–1858), and more quotidian structures such as railway stations and arcades.

In 1852 however, the Palace was sold to a commercial operation ('The Crystal Palace Company') and removed to Sydenham Hill, south London, being rebuilt five times larger than the original as a permanent educational and leisure venue. Surrounding it were landscaped gardens, enormous fountains and cascades, displays of geological strata, and models of extinct animals (including dinosaurs), all of which were intended to support the 'rational recreation' mission of the Palace Company, and referring to the 'improvement' in taste, morals and knowledge the Great Exhibition was said to have produced amongst visitors (e.g. Doyle [2008]).

The galleries inside the new Palace included replicas of ancient art and architecture with large replica 'rooms' covering Ancient Greece, Pharaonic Egypt and other periods, as well as a 'Natural History Court' where wooden models of the peoples of the world were racially organized according to their perceived level of 'civilization'. This concluded with industrial exhibits of British workers, held unambiguously to be the most 'advanced' in the world (Moser 2012; Qureshi 2011).

This Palace, unlike the first, has left us a large-scale archaeological presence despite its destruction, with controversial plans for its rebuilding and resurrection continuing to be discussed, and, as we will see, being understood as 'heritage' in its own right (MOLAS 2007; Jacob 2013).

Reuse and ruination

The Palace and its Park throughout the late-nineteenth and early twentieth centuries saw many further temporary gatherings such as scientific congresses, concerts, political gatherings, consumer shows, fireworks displays, funfairs and cat-and-dog shows (Piggott 2004, ch. 7). Perhaps the most spectacular reuse of the Palace and its Park however was for the 1911 'Festival of Empire'.

This vast event, spread throughout the Park, coincided with the coronation year of George V and was described by organizers as a 'social gathering of the British Empire' showcasing its benefits to the home population (Stead 1911, 1–2). Alternatively, it can also been seen as a desperate, and ultimately failed, attempt to revive the Palace Company's fortunes, who by the 1910s were facing bankruptcy in the face of competition from rival, more modern, spectacles like the 1908 Anglo French Exhibition.

The Festival portrayed the Empire, its peoples and their products in microcosm, with the main attraction being a 2.4 km (1.5 mile) electric railway called the 'All-Red Route', surrounded by backdrops depicting life in the colonies/dominions using a combination of real and model people, animals and plants (FoE 1911, 20). Along this route were three-quarter-scale replicas of the parliament buildings of New Zealand, Australia, South Africa, Newfoundland, and, at two-thirds-scale, Canada (Figure 4) built in wood and plaster. Also associated with the event was a vast historical musical performance, 'The Pageant of London', with the city cast as the origin of Britain's great dominion through a series of *tableaux vivants*, where a cast of 15,000 volunteers and hundreds of animals performed scenes from imperial history.

Of both the Festival and the Pageant, only a few traces persist today; what seems to be two possible indentations of the 'All Red Route' visible as 'cropmarks' in the grass of the Park, and the curving terrain upon which the Pageant amphitheatre sat. The Festival presented perhaps the most spectacular temporary gathering the second Palace was to see, with its organizers conflating the positive associations of the building with the glories of the imperial Victorian past. For example, the Official Guidebook appears to use the Palace and its persistence as an example of the serendipitous nature and tenacity of the Empire itself:

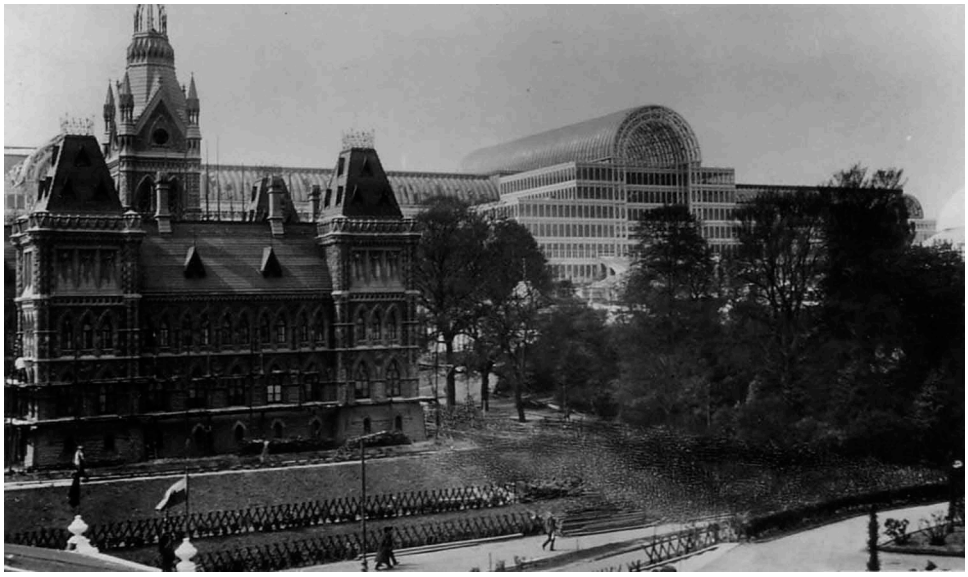

Figure 4. The replica Canadian Parliament building with all-red route track in the foreground during the 1911 Festival of Empire.

Source: Photographer Unknown, Public Domain. Available at: https://commons.wikimedia.org/w/index.php?curid=11419517.

> The Festival of Empire is a jubilant commemoration of a long series of victories built upon defeats, of triumphs wrested from disaster. [. . .] Verily our fathers builded [*sic*] better than they knew. (Stead [1911, 1–2]).

Unfortunately, I cannot do justice to this enormous gathering here (see Piggott [2011]), but nonetheless the Festival highlights how the temporary event of the Great Exhibition lived on through new uses and gatherings. In the Festival's case, this was to legitimize and promote the imperial system itself, which with the First War and its aftermath, and like the Palace itself, would soon ultimately face collapse.

A final gathering

During the Festival, the Palace Company filed for bankruptcy as a result of unsustainable debt. In the subsequent seven years, the Park and Palace were bought 'for the nation' by the Earl of Plymouth, served as a naval training base in the Great War, and hosted the first Imperial War Museum from 1918 onwards. The Palace's fortunes began to improve by the late 1920s and early 1930s after something of a nostalgia for the Victorian era had set in, especially focused around such decades-old 'pleasure grounds' (Pussard 2004). The Palace, despite being old fashioned, became seen as a familiar friend in the skyline of the city, becoming perhaps akin to today's heritage 'theme parks'.

The destruction of the Palace by fire on the night of 30 November 1936 was a suitably dramatic end for this most spectacular of structures, a final temporary gathering of hundreds of firemen and a crowd of 500,000 spectators (Piggott 2004, 206). This event was recorded for posterity, appearing in newsreel footage shown around the world. Against a vision of hellish flames in this newsreel we are told that:

> [. . . for] few people in a lifetime comes the chance of seeing such a gigantic blaze as the funeral pyre of the Crystal Palace. The proudest building of the last century, one of the few remaining links with Queen Victoria and Prince Albert. (British Pathé 1936 00:08)

The announcer ends, following spectacular imagery of melting glass, by saying: 'For 85 years the Crystal Palace has been a playground and a landmark of London. We mourn its loss'. (1936 01:54)

As this would suggest, the Palace's loss prompted a huge outpouring of national grief (e.g. ILN [1936]; Edwards and Wyncoll [1992]) and even belief that its passing was a 'portent' for the looming threat of European conflict (*News Chronicle* in Auerbach [2010, 93]). Again, such emotion appears partly linked to the structure itself, not necessarily memories or associations with the original temporary gathering of the Great Exhibition itself. What is surprising is how rapidly this 'loss' appears to be forgotten – the Palace's ruined afterlife being one of amnesia and contestation, to which I now turn.

Rubble and resurrection

The association of the Palace with destruction and conflict, which as we have seen was demonstrated by the inadvertent wartime reuse of the original concrete footings for runways, and the second's role as naval base and as the Imperial War Museum, appears to transcend its ultimate fiery demise. For example, some of the 15,000–20,000 tons of tangled cast iron left by the fire were said to have been sold to Krupp, a German industrial firm and heavy weapons manufacturer (Edwards and Wyncoll 1992, 42), being followed by the demolition and recycling of its water towers to produce British armaments in the Second World War (ILN 1940, 25).

Like the first Palace site, the cleared ruins of the Sydenham Palace also presented a vast, flat space unoccupied in an otherwise built-up area and, hence, were used as storage for south London's Blitz rubble, with some 385,000 tons dumped and remaining to this day. Ostensibly this dumping was intended to create a new foundation for a rebuilt Palace, which despite great efforts over the intervening decades, has yet to come to pass (see LMA CPT/011; Jacob [2013]).

The Park itself was hit multiple times by bombs and V2 rockets, and, before the war was out, it hosted an anti-aircraft rocket battery and a scrapyard for recycling metal from government vehicles and armoured cars. This wartime usage of it is visible in another newsreel, where we are told that 'the gentle sex' (female volunteers) cut up vehicles with blow torches amongst the still-standing statues of the Palace's terraces (see https://www.britishpathe.com/video/car-dump).

Many other temporary uses followed in the wake of the War including further exhibitions, motor racing, music festivals, sporting events and various failed efforts to resurrect the Palace (as well as a protest against one of these which tunnelled into the Palace foundations). Such uses reiterate the fact that the original gathering of 1851 sparked a long chain of events that led to the extreme longevity of the original structure and, indeed, that subsequent temporary gatherings sometimes complicated associations with the Exhibition.

Conclusion

In this exploration of the traces of what remains after a mega event, The Great Exhibition of 1851, several interrelated conclusions emerge. Firstly, with the examination of the original Palace's

structure we saw how a need for temporariness led to a distinct set of materials being used to facilitate the event, yet also how these components could contradict what can be seen as a fetishization of the 'modern' and progressive narrative the Exhibition was said to possess by some of its contemporaries and later historians (see also Fisher [2012]). Furthermore, such materials were relatively reusable, meaning that the structure itself would go on to have a long life of its own that far exceeded the spectacle of 1851 in duration.

Even in the absence of the complete structure at both sites, we also saw how the Palace inspired radically different temporary uses, in some cases, those strongly connected to warfare, rubble and recycling. The Palace therefore seems to become inextricable from its rubble, its remains providing a deposit utilized and modified by further temporary structures and events.

In 2013 another failed attempt was made to rebuild the Palace at Sydenham, funded by the Zhong Rong Corporation and championed by the then mayor of London, Boris Johnson. The new Palace would externally resemble the second Palace, but would have contained retail units, a '6-star' hotel and temporary exhibition space. Boris argued the scheme, was not 'an act of nostalgia [… but] about adorning our city with a world-class structure' (in Milmo [2013]). Architectural critic Sam Jacob (2013), contesting Johnson's support, argued that nostalgia was indeed at play but employed cynically as a cover for unsustainable and damaging private development of a public park and, significantly, opined that:

> We may mourn the past. We may feel intense sorrow at the gaping voids left in the present by things that have vanished, but we should resist the pull of these feelings of loss and nostalgia. The Crystal Palace functions perfectly well in its absence (perhaps even more so than if it were still here).

Jacob's last sentence seems to summarize the curious nature of the Palace's long life. Today its functional usage has long since passed, it is effectively absent – though as we have seen, some of its materials remain – yet, as a cultural artefact, it lingers in the present, confounding the brevity of the original temporary gathering, leaving a place some feel should be protected and valued for what it has become, not what it was, or what it is said to represent.

Notes

1. Compare the original brick design (http://greatexhibition1851.blogspot.co.uk/2011/09/crystal-palace.html) with the initial sketch: http://www.vam.ac.uk/content/articles/t/the-crystal-palace/.
2. A few fragments are also in the collection of the Crystal Palace Museum at Sydenham: http://www.crystalpalacemuseum.org.uk/.

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Archival material

London Metropolitan Archives
LMA CPT/011: Miscellaneous reports including those of the Special Committee appointed after the 1936 fire, the War-time Allotments Sub-Committee 17 April 1940, and the Assessors to the Joint Committee representing the promoters of the Crystal Palace Competition.

Notes on contributor

Jonathan Gardner is a Teaching Fellow in Heritage and Museum Studies at the UCL Institute of Archaeology where he teaches the MA in Cultural Heritage Studies. He recently completed doctoral research at UCL considering the archaeological traces of 'mega events' (such as the 1851 Great Exhibition, 1951 Festival of Britain and the 2012 Olympic/Paralympic Games). Prior to the PhD, he completed an MA in Cultural Heritage Studies, following an undergraduate degree in archaeology, also at UCL. He has also worked extensively as a commercial field archaeologist in London and southeast England, excavating deeply stratified urban sites on projects like Thameslink and the 2012 Olympic Park in Stratford. These experiences led to his interest in how the materials of the past and present intersect with mega projects, and how varied ideas about such interactions (consciously articulated as 'heritage' or otherwise), are used to legitimize or challenge change in societies.

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