Chapter 18

Landscapes of mental health: The archaeology of St Wulstan's Local Nature Reserve, Malvern, England

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Abstract

The St Wulstan's Local Nature Reserve was developed in 1997, on the site of a former military hospital built for US military casualties of the Second World War D-Day landings and subsequent actions. After the war, the hospital was absorbed by the NHS, closing in 1986, with subsequent site redevelopment including the nature reserve. The planting of the reserve partly aimed to preserve something of the hospital's heritage, through the use of trees and shrubs from the former hospital grounds. This paper presents part of a four year research project at the University of Worcester, investigating the archaeology of nature reserves and landscapes in Worcestershire and the elsewhere in the UK. The paper explores the ways in which the environment has been used to enhance and improve mental well-being. It then describes the history of both the original St Wulstan's Hospital and the more recent nature reserve, going on to describe the present research project and present interim results from its first year. The discussion explores the ways in which the St Wulstan's Local Nature Reserve may be considered a healing environment, and how such studies can assist with the understanding of post-war environmental changes.

Keywords: Contemporary archaeology; Hospital sites; Mental health; St Wulstan's; Trees

Introduction

This study forms part of a wider investigation into the archaeology of nature reserves and landscapes within Worcestershire and elsewhere in the UK (Hoaen in press a; b). The former hospital site at St Wulstan's was part of a series of five US military hospitals built during the Second World War (WWII) in Malvern Wells, Worcestershire to receive causalities from the D-Day landings in Normandy from June 1944. After the war it was taken over by the NHS and used first as a tuberculosis (TB) hospital and then as a psychiatric hospital before closing in 1986. The site was redeveloped for housing, and the hospital buildings were subsequently demolished in 1994–1996 with the eastern half of the site declared a Local Nature Reserve in 1997 (Figure 18.1). Part of the reasoning behind the declaration was to maintain the planting of specimen trees and shrubs from the grounds and thereby maintain the heritage of the hospital.

The research was developed and conducted following the *Archaeology of the West Midlands: A Framework for Research* (Watt 2011). Our focus has been on understanding and enhancing our archaeological knowledge of the following themes identified by Belford: Capitalism, Globalization, and Consumption (2011: 229), as well as sub-themes of Conflict, Death and Disease, and the Home (2011: 237–238). Hickman has noted a gap in our knowledge around the landscapes of mental health after the 1930s (2013). At the time of writing, the project has just completed its first year and it is intended to run for a further three years, forming part of the archaeological and heritage training provided for first year archaeology students at the University of Worcester.



Figure 18.1 St Wulstan's Local Nature Reserve in 2009 showing boundaries of the former hospital and new buildings. (Based on Digimap 2018a, used under license)

Environment, and what we might call the 'environmental sensorium', has long been considered an important part of medical practice, although the weight given to this factor has varied through time (Hickman 2013). The concept of gardening and other outdoor and physical work as a helpful practice for the traumatized, can be seen in Voltaire's satire Candide (Voltaire 1759) and was also pioneered in America by physicians such as Benjamin Rush in the late eighteenth century (Plankinton 1973). Since the 1990s it has been recognized that work such as gardening together with structured outdoor activities has a role to play in therapeutic practice, and contributes to the mental well-being of the general public (c.f. Bragg et al. 2015; Bragg and Atkins 2016; Sempik and Aldridge 2006). On a personal note, one of the authors (Hoaen) discovered in 2012 that he had been suffering from a long-standing complex post-traumatic stress disorder. One of the therapeutic outcomes of the recovery process was the suggestion to return to writing and delivering conference papers, but also to work out of doors in natural surroundings. Consequently, all of his subsequent research has been into the archaeology of contemporary environments, particularly nature reserves and ancient woodlands. He finds these environments much less stressful to work in than other archaeological contexts, and overall better for his mental well-being whilst conducting fieldwork.

Approaches for the environmental analysis of contemporary archaeological landscapes

The hospital grounds at St Wulstan's present a challenge to archaeological practice with regard to how and what to record in order to capture the environment both as it exists today and in the recent past. We are investigating a number of interlinked questions: how has the environment of the hospital changed through time; did the gardens play a therapeutic role in the life of the hospital, either overtly or subconsciously; to what extent can we consider the other organisms at the site to have possessed agency; what can we determine about the environmental *sensorium* of the location.

HISTORIC LANDSCAPES AND MENTAL WELL-BEING

Whilst environmental historians (e.g. Crumley 1994) are quite used to investigating recent landscape change, the analysis of recent and contemporary landscapes from the perspective of environmental archaeology is relatively new (Richer and Geary 2017). The concept that environment might have a determining role in human society and on the individual, is one that has been overlooked within archaeology in recent years. Environment, we will argue, has a critical role to play in understanding people's sensory world, both in the past and in the present. As Ingold (2000: 47) has said, environment is central in hunter gatherer societies to individuals' understanding of themselves: 'In their account there are not two worlds of nature and society but just one....'. We would agree with Ingold that if we are to understand the environment, we need to move away from these binary divisions between mind and body, and culture and nature.

To do this we will structure our investigation of the environment around the concepts of use and delight as outlined by Smout in *Nature contested* (Smout 2000: 7) and which ultimately derive from Horace and Georgian poetry (*sensu* Hardie 2001). The fields of ecocriticism (Garrard 2004) and the environmental humanities (Bate 1991) draw on literary and philosophical approaches to investigate concepts such as the 'pastoral' and the 'wild', both rather undertheorized in archaeology.

Archaeologies of the senses have been a developing area within archaeology for some time (Tilley 1994; MacGregor 1999), and a sensory approach appears suited to interpreting the archaeology of former hospitals and the subsequent nature reserve at St Wulstan's. In order to document the sense of 'delight' and the sensual world at specific sites, it is important to be able to understand the plantings and the buildings that constitute and constituted the environmental *sensorium*. Delight is both abstract and yet concrete; we know when we are delighted, but what constitutes delight is very much an individual experience. As a qualitative variable of experience it is a difficult concept to pursue archaeologically.

Two useful theoretical approaches to delight are the concepts of affordances as suggested by Gibson and subsequently developed by Ingold (2011), and that of charisma (Lorimer 2015). Here we might consider what role the gardens had in creating a pleasant experience for the staff, patients, and visitors to the site, and what this may have contributed to their well-being. The idea of charisma was first developed by the biologist Uexküll, who considered the qualities of organisms that either brought them to the attention of other organisms or led them to being ignored. Lorimer has used this to analyse the way in which certain animals (e.g. elephants) are charismatic for people and act as a focus around which a whole series of conservation measures may be built (2015). In a similar way, certain plants also have charisma and may be deliberately selected for their affordances as well as their charisma. Apple trees, for example, provide flowers in the spring and apples in the autumn so have a dual purpose when seen in this way. Some trees such as conifers are charismatic because of their sensory qualities at different seasons of the year. Lorimer points out that the vast majority of life forms are not ecologically charismatic and consequently are rarely considered when planning gardens. To be selected, a plant has to be both noted and notable. Lorimer also observes that organisms have an aesthetic charisma that will be culturally contingent. Insects, for example, provoke both loathing and likeability (Hillman 1988). By combining these concepts of affordances, charisma, and delight, we may also begin to detect where plants and animals have developed agency within human decision-making. The concept of the environment having agency is a relatively

new one (Bennett 2009), but an examination of the St Wulstan's Local Nature Reserve and hospital site suggests that some elements within that environment have their own agency and are capable of influencing human decisions.

The roles of the environment and the senses appear to have been recognized relatively early in recuperation. For example, Hickman quotes Florence Nightingale on the beneficial effects of a view from a window or a vase of flowers (2013: 206). The role of the environment in therapy, and in particular the use of gardens and horticultural work, appears to have declined after the 1930s (Sempik and Aldridge 2006) and was noted by Monty Don on *Gardener's World* on the BBC (SweetTree Farming for All 2015). This has been attributed to a lack of funds and labour after both the Great Depression and WWII, coupled with a new medical focus on interior spaces and drug-based therapies.

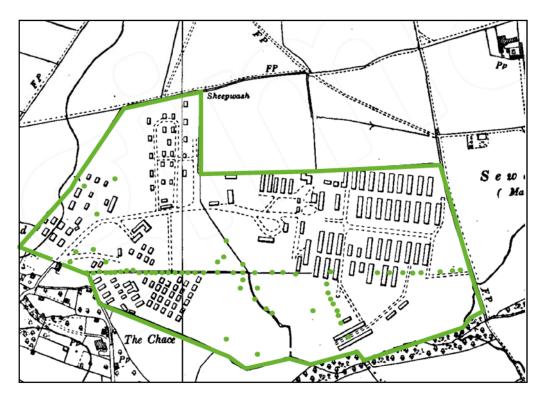
History of St Wulstan's Hospital and Local Nature Reserve

The site at St Wulstan's was originally known as the Long Meadow and was recorded by the Land Utilization Survey of Britain as poor-quality grazing land in the 1930s (Stamp 1937). Analysis of Ordnance Survey mapping, post 1945 aerial photographs, and building plans enables us to reconstruct developments at the site with a reasonable degree of accuracy. To these we can add information derived from oral history and documentary archives (Unaccessioned materials deposited in Worcester City Council Archives, 2009). Unfortunately, the documentary archive from the St Wulstan's history archive project has yet to be accessioned. Consequently, documents used from that archive will be referred to by name rather than document number.

Malvern has been regarded as a place of well-being since the middle of the eighteenth century. The long-term consequences of that specialization have included the marketing of the area for tourism, as people sought peace and quiet. With the start of WWII, Malvern and the county of Worcestershire became an important location for a variety of government and military institutions, both technological and respite in nature. When America joined the conflict in 1942, a series of five hospitals was established in the vicinity of Malvern. One of these, the site at Brickbarns (St. Wulstan's) was the home of US 96th General Hospital (Turley and Turley 2000). Originally planned as a surgical unit, the hospital subsequently became a psychiatric hospital for shell shock cases from D-Day June 1944 onwards.

The original layout of the main buildings was to a standard pattern on all the Malvern sites: parallel lines of long, single-storey ward buildings, grouped end to end in pairs of lines, with an access path between them. There were two such pairs of lines in the eastern half of the site, in the area that is now the Nature Reserve. The other buildings, including staff accommodation, were in the western half. The hospital incorporated the mature trees and most of the hedging from the pre-existing agricultural landscape (Figure 18.2), which meant in some cases that wards were sited between these trees.

The military hospital closed in 1945, and after a short period of use as a refugee camp for displaced persons, the site was given to the NHS and developed as a TB hospital that opened in 1950. It was during this phase that thought was given to refurbishing the buildings and developing the gardens. The *Malvern Gazette* notes that 'Outside the blank dreary wastes of land are blossoming into gardens, avenues of silver birches, poplars and flowering trees' (1950).



- Tree from pre hospital landscape
- Pre hospital hedge lines

Figure 18.2 St Wulstan's hospital site at 1955, with pre-hospital landscape trees and hedgerows shown.

(Based on Digimap 2018b, used under license)

With the discovery of a cure for TB, the hospital was closed in 1960. By this point however, the investment of the staff and health board, together with the charitable activities of the local community, had produced a valuable asset with its well laid out grounds. The health authority therefore looked for alternative uses for the site.

It was decided to reopen the site as a psychiatric hospital, specializing in the rehabilitation and return to the community of long stay patients from across the West Midlands, under the medical superintendent Dr Roger Morgan. Dr Morgan adapted the hospital to use a form of industrial therapy in order to help people move from long term hospital living to the community. Industrial therapy was a development of the post-war period, that aimed to train patients in a variety of tasks within their region (Long 2013; Morgan 1970). Records from this period include several accounts by the medical superintendents of the ways in which this therapy was used at the site (e.g. Morgan, Cushing and Manton 1965). As this type of therapy became popular and the site attracted both national and international interest, a visiting American psychiatrist, T. Query, provided a further useful account (1968).

Most work took place indoors in approximations of the type of industrial metal working workshops that could be found throughout the West Midlands at that time. The 'business'

proved successful; patients were paid, and through work, were found jobs and homes both in the Malvern area and further afield. Gardening and other outdoor work was seen as secondary, and used for male patients who were considered unsuitable for the workshops. Women were trained in secretarial, cooking and cleaning work.

The hospital remained open until 1986, during which time the western half was redeveloped extensively (Figure 18.3). Gardens and ornamental plantings were laid out along with allotments and orchards. Subdivisions using ornamental hedges were created along with tree lined avenues. An oblique photo taken in 1992, shows the hospital grounds a few years after abandonment (Figure 18.4). Woodland regeneration can be seen in various places, but the main tree and shrub plantings amongst the wards and around the administrative buildings can be clearly seen. It is noticeable that hedges have been used to screen the living accommodation of the staff from the site.

The site was used for various purposes after closure, but eventually, in the early 1990s, plans were brought forward by Bovis to redevelop the old staff quarters in the Crescent and to build new houses on the remainder of the site. A successful campaign by the council and local residents led to the site being split; the western half would be used for housing, whilst the eastern half would be cleared and landscaped to form a nature reserve (Figure 18.1).

University of Worcester research project methodology

The project was divided into two parts. The first part consisted of documentary research at the Worcestershire archives in 'The Hive', together with online sources such as Digimap and

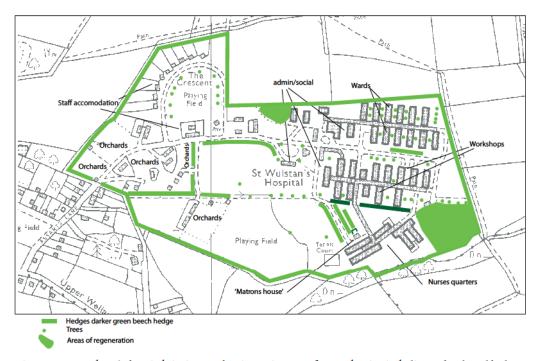


Figure 18.3 St Wulstan's hospital site in 1971 showing main areas of 1960s planting including orchards and hedges.
(Based on Digimap 2018c, used under license)



Figure 18.4 Aerial photograph showing the site after closure in 1992. (Courtesy of the Historic England Archive MNR SU 7481/7. Crown copyright reserved)

Google Earth. The second part comprised fieldwork conducted by first year students for the University of Worcester Archaeology and Heritage degree program, as part of their fieldwork requirement. We conducted geophysical survey of an earlier monument at the site, off set survey of parts of the hospital gardens, and a pick-up survey of pottery disturbed by pond digging. This section will focus on the documentary research, the tree survey (Handley and Rotherham 2013), the finds and a well-being survey.

The well-being survey consisted of an anonymized, self-administered questionnaire, sent out on 12 March 2018 (Denscombe 2017; Oppenheim 1992). The questions were based on established well-being and mental health self-assessments such as those on the Good Medicine website (Hawkins 2018). Participants were asked to provide basic personal information, including frequency of visits to the Nature Reserve. Participants were then asked to provide ranked responses to questions about their knowledge of the site, and their emotional engagement with their visits.

University of Worcester research project results

Maps plans and documents

The results of the St Wulstan's history archive project are held by Worcestershire County Council (Ward 2009). Whilst these are invaluable social records of the site, they are missing the official records of the hospital including the daybook, the location of which is not currently known. Few of the records in the archive deal directly with the hospital gardens and grounds. Where they do, they contain interesting insights into the work of the hospital but shed little light on the species that were planted. There are, however, documents that enable us to understand how the staff and residents felt about the hospital and its gardens, and to understand the role they played in softening the utilitarian aspects of the buildings.

The temporary nature of the original US army hospital suggests that the grounds were managed largely by mowing, with little thought as to how they might be improved as the setting for a hospital. An aerial photograph (US/31GR/LOC20 frame 9) from 1945 suggests that sport and recreation were important elements of the use of the ground; a baseball diamond can be clearly seen, along with an oval running track. Oral history recounts that local boys were not allowed to play baseball but had to make do with softball.

The first major attempts at improving the grounds are recorded in the *Malvern Gazette* (1950), during preparation for the conversion to a TB hospital. Evidence for the planting of cherries, birch and poplars can be seen in an aerial photograph dating to between 1945 and 1969 A series of young trees and shrubs can be seen, along with surviving mature trees and hedgerows of the pre-existing landscape. The plantings are concentrated away from the wards and instead are focussed around the entrance and administrative buildings.

An aerial photograph taken in 1969 (Williams pers. comm.) shows that an area of woodland has developed in the southeast corner of the site by that time. At the present day, this part of the site is considered to be dangerous due to the earlier dumping of hazardous waste, which may be why woodland was allowed to grow up here. Elsewhere, orchards have replaced housing in the west of the site and planting has continued around the site. It is noticeable that trees and shrubs were planted between the ward blocks, and that the ends of ward blocks have flower beds. Also, by 1969, formal flower beds are present, with formal hedges and lawns completing the gardens. It appears that hedges and blocks of woodland were used to screen the living accommodation of the staff from the patients (Figure 18.3).

The grounds were also used for fetes and festivals, not only by the staff and patients, but also by the local community. As the site was not enclosed, patients were able to leave and members of the public were welcome to use the facilities. As well as the gardens, the hospital also had a cricket pitch and tennis courts, and later, football pitches. After 1969, the main change to the grounds is the addition of conifers to the administrative areas around the 'flagpole', and along major walkways.

From the documentary records, we can see that the gardens and the general setting of the hospital played an important but possibly subconscious role in the life of the patients, staff and local residents. The superintendent Dr Morgan makes it clear in his writings that gardening was mostly carried out by professional staff, and that only suitable patients were employed in



Figure 18.5 Plan of the 2018 tree survey on the 2009 Digimap aerial photo.
(Based on Digimap 2018d, used under license)

this activity. Nonetheless, according to Query, the hospital took a holistic approach based on gestalt theory, wherein the patient's environment, both psycho-social and sensual, is crucial to their recovery. The pleasant environment created by the gardens is frequently commented on in the hospital's newsletter. For example, the editor often comments on the gardens with statements such as:

'I consider myself lucky to work in such a setting of peace and tranquillity' (St. Wulstan's Newsletter June 1981).

Similarly, patients write in poems and notes about how the environment is one of peace and beauty. For example, in *Our surroundings* by Anne Forrest, she praises the tranquillity that she finds whilst wandering around the grounds. However, the grounds and pleasant surroundings of the hospital could occasionally interfere with a patient's rehabilitation. Query relates that one woman was helped to retrain as a secretary so that she could return to work, and she was then found a position in a factory. She soon returned to the hospital, commenting:

'How can you expect us to give up the green tranquillity of the rehabilitation hospital for the hell of a factory' (Forrest 1967: 53).

Tree survey

The initial woodland survey in 2018 was carried out along the northern margins of the site (Figure 18.5; Table 18.A). An additional reconnaissance walk-over survey subsequently identified the remains of a garden enclosed by a beech hedge next to the 'Matrons House', a second beech hedge to shield the nurses' quarters from the workshops, and the remains of the pre-1945 hedges (Figure 18.3). The species identified by the survey are mainly conifers, but also include decorative trees such as maples and walnuts.

Table 18.A Tree species identified by survey undertaken in 2018.

Tree Species	ID Number
Leyland Cypress	SW1-5, SW10, SW12, SW16, SW20, SW22, SW23
Scots Pine	SW6
Unidentified	SW7, SW13, SW15, SW17,
Lebanon Cedar	SW8
Oak	SW9
Walnut	SW11
Western Red Cedar	SW18, SW19, SW21, SW22
Maple	SW14

Finds

An area of disturbed ground was field-walked, resulting in the collection of early to midtwentieth century pottery and glass. The marked glass includes a Badoit mineral water bottle base, a Pond's cold cream container, and several fragments of what may be medicine or poison bottles. A total of 67 pottery sherds were collected. As might be expected, these comprised a mixture of stoneware and earthenwares, with a few pieces of porcelain/bone china. The identifiable pieces of porcelain and/or bone china included a likely late nineteenth century Limoges fragment, as well as wares from a number of British manufacturers such as T.G. Booth of Tunstall. There was also a well-preserved Lovatt & Lovatt ink bottle, and a complete Virol bone-marrow paste pot. This sample may predate the main phase of the NHS hospital. It possibly dates to the period of the American hospital or earlier. Other finds include an NHS plastic tea mug and bowl and a surgical steel implement, all collected by the reserve warden, Martin Barnett.

Well-being survey

A total of 21 questionnaires were completed and submitted for analysis, and the following information summarizes the results. About 57 per cent of respondents were over 65 years of age, and 71 per cent were female. The age demographic is a reasonable reflection of the time and day of the week in which this survey was conducted. This was mid-day during the working week, and so would favour both retirees, approximately 51 per cent, and women of working age who maintain a household. There were three respondents between the ages of 18 and 24 who were students.

Overall, 50 per cent of participants reported that they visited the site more than once a week, with 19 per cent reporting that they visited the site daily. Some 86 per cent of participants reported they were here to walk a dog, but when asked what prompted visits more than once a week, 67 per cent responded for 'regular exercise', 29 per cent suggested an interest in plants and animals, 19 per cent bird watching, and 14 per cent 'to clear their head'.

Question Ten asked participants to rank their feelings regarding visits to St Wulstan's on a scale from 1 to 5, with 1 'Strongly disagree' and 5 'Strongly agree'. The highest score possible is 105. The question 'Do you think your visits help you relax?' received an agreement score of

90 per cent, with 'Do you think your visits help you to be cheerful?' receiving an agreement score of 74 per cent. The question 'Do you think your visits help you solve problems?' scored 51 per cent. Finally, Question 11 asked participants about their awareness of the history of the site as a WWII hospital for service men with shell shock, as a TB hospital and as a psychiatric hospital. Responses were incomplete, so the absence of an answer was taken as a 'No' response. Nonetheless, the bulk of respondents, 81 per cent, were aware of the site's history as a WWII hospital, 72 per cent also knew that it had been a psychiatric hospital, and 62 per cent knew of its time as a TB hospital.

Discussion

From its early beginnings as a temporary site for casualties from the D-Day landings of June 1944 to the present day, St Wulstan's has been subject to constant and rapid change. From fields to hospital buildings, back to fields, and then back to fields and houses. If nothing else, the site tells us about the frenetic state of human activity in the post-WWII medical landscape. It suggests that doing something new is almost as important an activity as the provision of care. Gardens and horticulture therapy were not considered significant elements of mental health rehabilitation services in the early post-war period. Despite this, the site at St Wulstan's suggests that the quality of one's surroundings — the environment in which patients and staff lived — was also considered significant; it was just no longer the role of patients to provide that service.

Within the hospital site, significant living elements of the historic environment have survived despite, or because of, the constantly changing landscape. The most obvious of these are the hedges and the trees incorporated in them. Along the central hedge line that runs directly through the site, many trees survived the hospital's construction, despite it being a time of war and the hedge apparently being very much in the way. Elsewhere on the site, parkland trees also survived this initial phase of construction and became incorporated into the life of the hospital. Whilst there may have been many different reasons for this, it could be that the aesthetic charisma of isolated trees in a park setting gave certain trees agency that favoured their survival. It may also be that as large mature trees, they were simply too much trouble to remove, again suggesting the agency of this element of the environment.

After the conversion to a TB hospital, both the NHS and the local community contributed to the creation of attractive landscaped grounds. The environmental setting within the Malverns, with the visible presence of the hills and the fresh air, helped create a suitable sensorium for a sanatorium treating TB. The wards were redesigned to allow the patients access to fresh air, with photographic records showing rows of patients in beds outside the hospital buildings, enjoying the view and the air. This idea of an open-air hospital for the treatment of TB can dated back to the mid nineteenth century (Hickman 2013). Interestingly the early plantings in the TB hospital grounds were based around seasonal deciduous plants. The planting was carried out by professional staff, with materials to improve the life of the patients donated by the local community (Ward 2009).

This collaboration between the NHS and the local community appears to have continued with its conversion to a psychiatric hospital. It is during this phase, after around 1960, that many

of the trees and plantings occurred that give the site its unique character. These gardens, as we have discussed above, were not considered a primary part of therapy at the site. They were the creation of the management of the hospital, working with mainly professional gardeners and a small number of patients. However, the gardens, trees and shrubs all connected with the inhabitants, and it is clear from the documents that the environment they created contributed to the overall well-being of the people at the site. By inviting the community into the site for fetes, sports and recreation, Dr Morgan created a facility that was not only for the benefit of his patients, but was also greatly admired and respected in the local area. Consequently, despite changing patterns in the health service and the costs associated with maintaining the buildings, the hospital was able to survive repeated plans to close it.

When closure did finally occur, the site held a great deal of importance for the local community. The trees and the 'natural' feel of the gardens encouraged a campaign to save all or most of the site as a nature reserve. This campaign was very successful; the developers constructed houses on one half of the site, but also paid for the demolition of the hospital buildings and landscaping of the other half.

Conclusion

As an environment for healing, St Wulstan's appears ideal. There was a long history of care and therapy in the Malvern community into which the hospital was inserted. The location is one in which there is an abundance of space, quiet, and fresh air, with excellent views towards the Malvern Hills. Whether these factors contributed to the initial selection of the site, or whether there were more prosaic factors such as the cost of the land, proximity to railway stations and distance from hostile forces, we cannot know. Once the site became established as a place of healing, these and other factors had a role to play as contingent elements in the choices made around the changes of use of the site.

St. Wulstan's is now a mature nature reserve, but the remains of the hospital plantings are still present; together with the earlier field systems, they still structure the layout of the site. Long Meadow is still a meadow. The Matron's Residence is now a buried concrete pad, but the beech hedge of her garden is still present in the landscape. Our small survey suggests that aside from the utilitarian need to 'walk the dog', users of the nature reserve find it a place helpful for peace and reflection. They also are very aware of its history as a hospital. We would argue that in part, this is due to its aesthetic charisma, firstly as a well-appointed hospital garden and secondly because of the way in which the design of the nature reserve has preserved elements of the former hospital. In this short paper it has not been possible to fully explore the history of this important post-war hospital. Instead, we have attempted to show that an understanding of the environmental settings of such places can contribute to our overall interpretation of change in the post-war period.

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