

Profitable Landscapes – Industry, Business and Agriculture

From inner city to remote rural countryside, a new post-war industrial revolution has transformed the landscapes of work.

The England of smog-ridden factory streets, grim mining towns and rustic agricultural landscape – the England of Dickens, Gaskell, Lawrence and Hardy – had gone by the end of the 20th century. Its remains had been transformed – city warehouses into bijou flats, mining towns into declining wastelands, the rustic south into the commuter belt. We farm in new ways – bigger fields, new crops. New ‘soft’ industry now slots into the crooks of land between major transport infrastructure and over former sites of heavy industry. City centres are no longer dominated by a skyline of choking chimneys and hydraulic lifts but by high-tech and high-finance office blocks. Industry has left the city, in many ways outgrown it, and inhabits out-of-town nests – hubs in a global network – delivering its eggs on to the anywhere-anytime motorway system. The advent of the computer changed the way that business, industry, agriculture and infrastructure were run. Human involvement became less and less necessary as mechanisation gave way to automation. Miniaturisation was furthered by the invention of the computer chip. The digital age had begun. ■

Landscapes of retail, storage and redistribution, near Wembley in north London.

© English Heritage



Prairies and sheds? The farming landscape since 1950

Jeremy Lake

Characterisation Team, English Heritage

Andy Wigley

Shropshire County Council

Since the 19th century, the farming landscape has been subject to the often conflicting and paradoxical demands of urban values and global markets. Today, 80 per cent of England is farmland, yet less than 2 per cent of the population is employed in agriculture. The development from 1986 of environmentally friendly farming (including agri-environment schemes) has reflected increasing concerns about the impact of production-based subsidies and the requirement for more integrated and sustainable approaches to land management. During the same period, the size of individual agricultural holdings has continued to increase from already high levels, while new lifestyle buyers have made further inroads into the land market, just as middle-sized family farms have come under particular pressure.

Landscape change

Much of the language used to describe the changes wrought on the farming landscape since 1950 has been in terms of loss – the uprooting of hedgerows to create ‘prairie fields’, the replacement of traditional barns with factory-style sheds and the impact of intensive farming techniques on fauna, flora and archaeological sites. Since the Scott report of 1942 and subsequent planning acts, planning policy has been based on a definition of the ‘intrinsic character and beauty’ of the countryside – a term which lends weight to the perception of the countryside as unchanging and as an anchor of tranquillity and beauty in a rapidly changing world, but which obscures the role of past creation and change in shaping this character.

Measuring the impact of this change – such as the loss of more than 400,000 km of hedgerows since 1950 – depends on a broader understanding of the inherited character of these landscapes and of the new drivers for change. Some landscapes have been shaped by a long history of arable cultivation and much of the loss of 112,000 km of field

MODERN TIMES

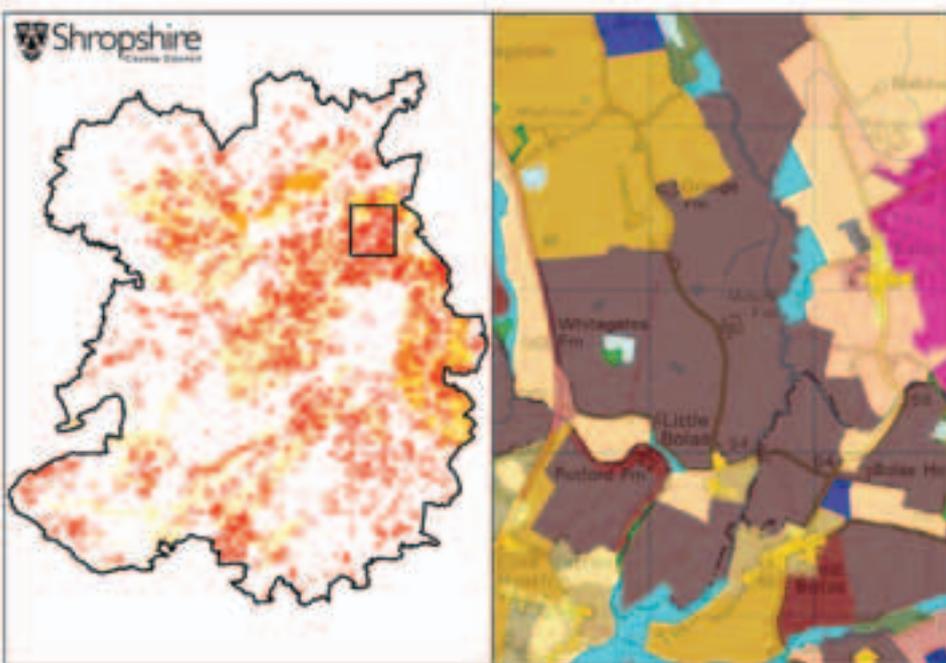
boundaries occurred during the capital-intensive 'High Farming' period between 1850 and 1880. Arable intensification in other areas, such as the claylands of Suffolk where dairying had been steadily eclipsed by arable farming since the



The northern edge of the Lambourn Downs, showing Grim's Ditch on East Ginge Down. In the chalk downlands of southern England, post-1950 landscape management and rural sports have reinforced the inherited pattern of very large farms and large-scale enclosure landscapes, and the pattern of copses and blocks of woodland. © English Heritage.NMR

Napoleonic Wars, has commonly involved the removal of hedgerows that have played a key role in supporting biodiversity within anciently enclosed landscapes. The response should not simply be to 'restore' such hedgerows to where they were in the late 19th century, but to accept that new boundaries, banks and buffer strips, aimed at restoring biodiversity and mitigating soil loss, will have to be functionally consistent with the requirements of modern agriculture. In places this has restored the pattern of pre-18th-century boundaries such as the large demesne farms of the medieval period.

It is now widely predicted that the future development of farming landscapes will reflect not only the move to align UK agriculture with world markets and to reduce carbon emissions through biomass and energy crops but also the desire to conserve and enhance those of the most highly valued landscapes that are more suited to smaller-scale, diverse and high-value production. New landscapes will be created on larger farms, while smaller family and hobby farms are more likely to retain and utilise their inherited landscapes to the full. Understanding the spatial patterning of these changes, and how they are consistent with or diverge from the patterns inherited after the Second World War, is of fundamental importance. This is why English Heritage's contribution to the project Countryside Quality Counts (CQC, www.cqc.org.uk), which has sought to establish where and what kinds of changes are occurring in the countryside, has focused on the provision of historical profiles that



The distribution of post-1950 large-scale fields, from the Shropshire Historic Landscape Characterisation (left), shows that they are concentrated on the estate and sandstone farmlands of the county, where larger farms had developed by the 18th century on the more easily worked soils. The inset (right) shows how very large post-1950 fields (shown in dark brown) smoothed over a mosaic of inherited character that stretched from the 18th- and 19th-century enclosures of heathland and piecemeal enclosure of medieval fields, to water meadows on the floodplain.

© Crown copyright. All rights reserved. Shropshire County Council 100019801. 2007

extend beyond a single ‘historic features’ topic heading. In so doing, we recognise that landscape features such as woodland, moorland, even settlements, have both historical and ecological interest.

Farmsteads and settlements

The future adaptation and management of the older building stock, in itself the result of change and in particular the need to house livestock in the 19th century, cannot be considered in isolation from post-1950 change. The integration of all the stages of food production and processing that have marked the post-1950 farming industry also found visible expression in the introduction of wide-span multi-purpose sheds in concrete, steel and asbestos. Based on American models and driven by the need to compete in a global market, these needed to provide for new machinery, environmental control, livestock welfare and labour efficiency.

Older buildings are often the focus of diversification schemes, but they also now command high property values, as they are in demand from lifestyle buyers for homes and for ‘hobby farms’. The sensitive conversion of this building stock provides opportunities to enhance and reinforce local distinctiveness, build sustainable rural communities and contribute to the economies of rural areas. Work by the University of Sheffield for CQC and Communities and Local Government is showing that isolated farmsteads and hamlets are now absorbing as much housing growth as city areas, in proportion to their size, but involve quite different values (the desire to live in an iconic rural building, not simply the countryside) and actors (local builders and owners, rather than large-volume housebuilders).

The impact of large sheds, particularly for loose-housing and managing cattle, is seen on this Cotswold farmstead.
© English Heritage.NMR



There is also increasing evidence that locally distinctive landscapes attract businesses, particularly home-based micro-businesses that are linked to broadband and are less reliant on car use, and which collaborate and contract work from within their own areas. However, although nearly 12 per cent of the economically active work from home in rural districts (census 2001) their contribution to the rural economy has remained hidden and largely unsupported.

Conclusion

Positive solutions for managing change do not lie in turning back the clock – for example, restoring boundaries whatever their age or historical context – but in understanding the vital role of rural communities in shaping landscapes and the interaction between patterns of settlement, fields, woodland and architecture. The role of the historic environment sector is fundamental to informing an open debate about the type of rural landscapes that we can envisage in the centuries to come. ■

Cars and chips: the diet that transformed Swindon’s industrial landscapes

Keith Falconer

Head of Industrial Archaeology, English Heritage

Swindon, the archetypal 19th-century railway town, has witnessed a phenomenal transformation in post-war years. Now home to English Heritage’s Swindon office in the largest heritage campus in Europe, and a commercial and industrial boomtown, it exemplifies the profound landscape changes that have occurred almost unheralded over the last half-century.

Steam

On 18 March 1960, *Evening Star*, the last steam locomotive to be built under the aegis of British Railways, was ‘out-shopped’ from the former GWR Railway Engineering Works and a remarkable era began drawing to a close. Over the previous century a succession of illustrious railway engineers had presided over the works’ expansion from a locomotive-maintenance facility employing some 400 workers into one of the largest engineering complexes in the country housing 14,000 railway staff. The Works, in terminal decline, were finally to close in 1986 and the *raison d’être* of the town and much of its landscape was apparently to disappear (Cattell and Falconer 2001). What happened since March 1960 confounded the prophets of doom and demonstrated the resilience of urban landscapes and their industrial components.



Swindon in the immediate post-war years was still dominated by the railway and its Engineering Works. In the Municipal Borough (1951 population 68,670) the majority of households had at least one member working 'inside' the Works while the railway itself, running east to west, was in effect a barrier to north-south circulation for much of its length in the urban area. The vast Works site, which comprised Central Stores and Traffic departments as well as locomotive, carriage and wagon workshops, straddled the railway and was the focus for a dense network of workers' housing. Almost no road entrances penetrated the site – this was a landscape of railway lines and sidings, pedestrian entrances and tunnels. Though the housing of New Swindon had spread up the hill to merge with Old Swindon and a civic and commercial centre had developed between the two, it was still essentially a landscape of terraced houses, corner pubs and corner shops. At its heart were the Railway Works and the Railway Village, terraces of cottages designed by Brunel that were clustered round the Mechanics Institution, Medical Dispensary and Swimming Baths. Despite some diversification in its industrial base in the inter-war years with firms such as Garrards opening factories, by the mid-1930s Swindon was at its lowest ebb. The railway works were stagnating, unemployment was at its highest-ever level, younger skilled workers commuted to Oxford to work in the car factories at Cowley and the population actually declined between 1931 and 1939.

Wartime production

The Second World War and the remainder of the 20th century were witness to a profound transformation in the demography, economic base, industrial focus and overall character of Swindon. The seeds of that transformation were sown in the run-up to the war in the national programme of shadow factories and wartime aircraft production that spearheaded the revival. Work started on the South Marston shadow factory in January 1940 and by the following spring aircraft were rolling off the production line, supplied by components made in the Railway Works and by smaller units in Blunsdon and Sevenhampton. Further wartime factories were established, such as Plessey (radio components) in Gorse Hill and Marine Mountings at Wroughton, and for the first time new industrial landscapes were created outside Swindon's core. Significantly the population in the Swindon area rose from 88,000 in 1939 to 104,000 in 1941 and the transformation had begun.

Cars

If wartime provided the opportunity for expansion, the major catalyst was in 1952 when, under the provisions of the Town Development Act, Swindon became a receiving authority for London's overspill. By persistent and astute political manoeuvring, Swindon was not only to attract 13,000 people from London but was also chosen as the new site for the Pressed Steel Company, a key supplier to the Oxford car industry. Production of car-body panels at the Stratton St Margaret site began in 1955: by 1958 the site had

RAF Vertical photograph of Swindon Works 1960. Swindon's industrial core is surrounded by terraced housing. Only two roads pass under the main London to Bristol line in this view. © Crown copyright. MOD

Pressed Steel Site – sited in Swindon's outskirts as part of the Town Development Act expansion. © Crown copyright. NMR



Renault Car Distribution Centre, Swindon. Sir Norman Foster's innovative building demonstrates the confidence shown in Swindon's future as a car town. © J O Davies, English Heritage



doubled in size and by 1965 it employed 6,595 people – 1,000 more than the Railway Works. Despite the vicissitudes that have beset the British car industry the company now called Swindon Pressings still employs more than 2,000 workers, and is a key part of the BMW Group and produces body panels for the new Mini. Crucially this successful entry into the car industry led to Honda being attracted to the former Vickers site at South Marston in 1985. Over the next 20 years Honda was to develop into the largest industrial employer in the town with 4,000 employees occupying a vast robotic factory three times larger than the Pressed Steel site. A third car-industry site, though much smaller, has attracted even more attention – that of the former Renault Distribution Centre designed by Sir Norman Foster and opened in 1983.

Chips

Meanwhile the incursions into the electrical and electronics industries pioneered first by Gerrards and then by Plessey and their expansion in new industrial estates such as Cheney Manor from 1957 onwards, laid the foundation of an electronics industry. Attracted by the high-speed rail link that opened in 1974 and by the completion of the M4 motorway past the town in 1971, further electronics firms such as Motorola (1998) have established in the town while the presence of the head-

quarters of financial giants such as Nationwide and Zurich maintains a healthy IT industrial environment.

Thus by the time the Railway Works finally closed in 1986 there had been a seismic shift in industrial emphasis and Swindon, very much part of the M4 corridor, had put behind itself its image as a one-industry town. The momentum established in the last few decades promises further growth and Swindon's population is predicted to reach 225,000 by the next census. This phenomenal trebling in population and physical area has come about through a variety of circumstances and its import has only recently been fully recognised. But, as Harloe argued as early as 1975, the transformation, despite all its industrial, residential and commercial manifestations, was essentially a political process (Harloe 1975). In the post-war climate of state direction of industry and employment, traditional factors such as location, transport links, market and labour supply are not enough – the new industrial landscapes are created by more complex and political combinations of factors. ■

REFERENCES

- Cattel, J and Falconer, K 2001. *Swindon: Legacy of a Railway Town*. English Heritage
 Harloe, M 1975. *Swindon: A Town in Transition*. London, Heinemann

The ‘Sunrise Strip’: the M4 corridor

Christine Finn

University of Bradford

Often marketed as Britain’s answer to Silicon Valley, California, the M4 corridor forms a conglomeration of high-tech start-ups and established industry names. It is part of what is popularly known as the ‘Sunrise Strip’, which includes the M11 to Cambridge, the M25, and the M3.

Like its American namesake, infrastructure is key. The M4 affords easy access to airports and urban centres, attracting a workforce from a wide area. Like Stanford in Silicon Valley, it has a symbiotic relationship with centres of research excellence including Oxford and Reading universities.

And from July 2007, it shares another commonality: geological fallibility – not earthquakes, but the over-developed flood plain of the River Thames which, coupled with unseasonal rainfall, led to unprecedented flooding.

This has opened up a new debate on the uneasy relationship between nature and the built environment. In today’s global-warming-aware climate, what would have been regarded as ‘freak’ floods are now read as a stark warning of worse to come. This has thrown the spotlight on the government’s newly announced plans for millions of new homes in already crowded areas, with building still likely on flood plains.

This is just one example of the mediation – landscape and heritage versus jobs and new industrial heritage – played out increasingly in places where the drive is ‘go faster’.

Like the mill houses built adjacent to the mills, which were next to the river that drove them, the proximity seems logical. But looking at the span of the Thames we see an entanglement of industrial buildings, service roads, airports, associ-

ated warehouses, storage yards, commercial spaces, traffic infrastructures, retail developments and brownfield sites. Within and without this cluster of modernity are premium waterfront conversions, post-war estates, historic cottages, ancient byways, village greens, minor roads, woodlands, market squares, and greenfield sites. And central to them all is the Thames, with its boats, barges, and poetic resonance as London’s backbone.

How will the interactions of heritage and modern play out in the arguments that will surely ensue about development in this technological centre of excellence?

In the early 1990s, thousands camped at Twyford Down, Hampshire, protesting against M3 motorway development that would destroy an ancient chalk meadow. This direct action campaign, which grew out of 20 years of petitions and letters, redefined the way in which people were prepared to speak out against change over heritage. In July 2007, inhabitants of West Oxford waded through the floodwater to deliver a vociferous message about their predicament as evidence of tipping points being reached, and warnings ignored.

The traditional issues of change, involving new road siting, motorway re-laning, airport expansion and the compulsory purchase of homes, will define the shape of Britain. But the continuing history of the M4 corridor is also the sum of new challenges – global rather than local or national, as well as responses to changing business models driven by those global concerns.

The ‘Sunrise Strip’, for all its high-tech buzz and bravado, is a fallible entity where the lights can still go out. Planners will need to reconsider this infrastructure of their own making, and listen to the public, for whom heritage-linked environments are – literally – forces of their own. ■



Meeting the infrastructure needs of a brave new world. At the end of July 2007 the emergency services battled to save this vital electricity station on the outskirts of Gloucester from flooding – just one example of the kinds of environmental challenge now facing the over-developed flood plains of southern England.

© English Heritage.NMR

Broadmead, Bristol: art and heritage in urban regeneration

James R Dixon
University of the West of England

Public art and archaeology are of a similar age as locally legislated developer considerations within urban regeneration. Both have been common components of large- and small-scale development projects since the early 1990s and remain important aspects of the majority of projects. A recent initiative at Bristol's Broadmead development has provided the opportunity to consider how art and heritage can usefully work together in the context of urban regeneration.

Developer-funded art and archaeology

Developer-funded archaeology generally takes the form of PPG15- and PPG16-led investigation and the 'preservation by record' of elements of the historic environment prior to their destruction. Developer-funded art takes a number of forms, notably the engagement of artists in architectural and landscape design and the commissioning of iconic/sculptural pieces for public places. Major urban developments in the UK incorporate these elements as a matter of course.

Potential problems arise as a result of the nature of developer-funding of art and archaeology. The archaeological consideration within a project is usually limited to a minimum of excavation and recording, with funds often lacking for more overtly *public* interpretation and involvement. The public-art aspect of development largely takes the forms mentioned above and is naturally 'developer-friendly'. Urban development and its constituent parts play a local role (the actual regeneration of areas where this is deemed necessary) but they also have to play an international role and situate any development project within a wider field of contemporary urban design.

Despite the archaeological publications, showpiece cultural events and public contact with commissioned artworks, what is often missed is the true potential of locally situated art and archaeology projects to be involved in the process of designing and building new places. Here, these two distinct areas can come together as *processes* and move on from simply digging holes and making sculptures to informing both each other and, crucially, developers about what places have been, are, will and can be.

Who are 'the public'?

It is impossible to avoid the contested nature of the term 'public'. It is a fuzzy, murky term used in



different ways by different people, never entirely satisfactorily. For a developer, the public are the projected users of the shops, restaurants, offices and apartments that they are constructing. Whether these people are 'new' users, attracted from elsewhere, or current shopper-residents engaging in different activities, this type of public are conceptual, future projections, numbers on paper. Local councils, heritage organisations and communities all mean subtly different things when they use the term.

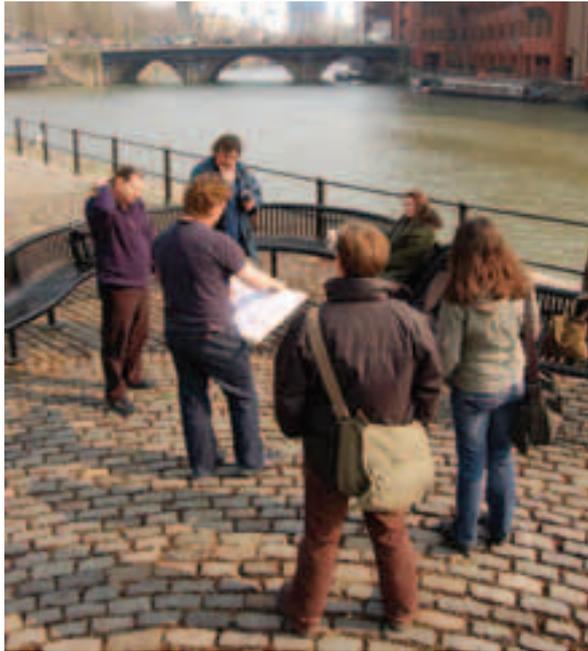
Through this difference, sites of urban regeneration become contested. One need only look to the London 2012 Olympics project to see how local concerns can be mobilised in opposition to development. And who is at fault? By simplifying the opposition to one of local communities 'against' national developers, both sides can be seen to take up unhelpful positions.

It is here that archaeological and artistic process can be brought together and used by developers and local communities in unison, not in the nostalgic selection of elements of the past to retain as monuments or celebrate through artworks in the future, but in the creation of contemporary local identities, with reference to the past but situated in the present.

Broadmead initiatives

Two projects based around the current Cabot Circus development centred on Broadmead in central Bristol are addressing this idea. The first, in March 2007, was a weekend of fieldwork organised as part of the Material City programme, a collaboration between Situations (UWE/Arnolfini, <http://www.situations.org.uk>) and the University of Bristol Department of Archaeology and Anthropology. Over this weekend, three artists (Pablo Bronstein, Richard Wentworth and Lottie Child), and three archaeologists (Dan Hicks, Sefryn Penrose and Sarah May), were invited to

A new landscape of retail and business, at Broadmead, Bristol.
© James Dixon



investigate the area surrounding the Cabot Circus development with reference to the past, the present or the future.

The aim of the fieldwork weekend was to investigate artistic and archaeological ways of thinking in the specific temporal and geographical circumstance of an urban renewal project. One result of the exercise was the deep investigation not just of existing places affected by the regeneration, but of new places and concepts created by it. Ideas of inside/outside, old/new, allowed/not allowed were among those investigated over the course of the weekend, the work going some way towards developing an understanding of the effects of urban regeneration on existing people and places as well as the different senses of place and identity created by the regeneration itself. The fieldwork weekend was followed by a symposium, and a short film was made about the entire project.

Related to this, developers of Broadmead, the Bristol Alliance, are acting as industry partners to a Great Western Research (GWR) PhD Studentship in Creative Arts based at UWE and supported by the University of Bristol's Department of Archaeology and Anthropology. The three-year study will address the relationships between public art and archaeology within developer-funded urban renewal projects and is based around the public-art programmes of both Bristol Alliance and Bristol City Council. By considering the issues discussed here, as well as wider debates about site-specific art and contemporary archaeology, it is hoped that the study will allow better incorporation of artistic and archaeological processes in development strategies and legislation.

Benefits

Such projects should prove useful to wider heritage concerns. We should look to public art and archaeology not simply as a means of understanding and interpreting the past, but also as tools with which to express contemporary community identities and concerns alongside the aims of developers. This will take some time to engender. There is no reason why developers should fund processes that overtly criticise their work, just as bad feeling is often the result of local communities being marginalised, ignored or actively removed from their homes. Art, archaeology and urban regeneration can come together in a productive way though this has to begin at the very start of the development process. Through collaborative engagements such as this we can both better understand contemporary landscapes and play a significant part in creating and sustaining them. ■

Bristol Broadmead: archaeological fieldwork of an emerging landscape.

© Claire Doherty

OPINION

The years after 1950 were the first in history in which British architecture was acknowledged as globally important. This view is hard to reconcile with the popular prejudice against the period, sometimes well founded on physical or social failure. Positive aspects of post-war buildings include generous spaces, inside and outside, dramatic engineering structures, imaginative use of artworks and sensitive responses to landscape. They are a record of public spending of a kind that we may not see again. Even the toughest buildings, such as Goldfinger's Trellick Tower, have advocates in thrall to the apparently unrepeatable sublime of public housing. Modernist disdain for traditionalists such as Goodhart-Rendel and Donald McMorran has also been overcome.

The campaign for listing the post-war period, active through the 1990s, was a remarkable achievement by English Heritage, with the involvement of the Twentieth-Century Society. Owing to the confidence with which this was carried out, many problematic buildings, such as the Brunswick Centre in Bloomsbury, have been 'turned round' by developers, who have used their history as a marketing tool and shown how investment can solve problems.

Listing paused around the dateline of 1970, but time moves on. Perhaps it is time to start survey research again.

Alan Powers

University of Greenwich