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# Cutting Edge 1997

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charting the difficult path from redundancy to heritage  
attraction**

Rick Ball, Staffordshire University

ISBN 0-85406-864-3



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# **INDUSTRIAL HERITAGE, TOURISM AND OLD INDUSTRIAL BUILDINGS: CHARTING THE DIFFICULT PATH FROM REDUNDANCY TO HERITAGE ATTRACTION**

**Dr. Rick Ball  
Division of Geography  
Staffordshire University  
Leek Road  
Stoke-on-Trent ST4 2DF  
UK**

## **Abstract**

This exploratory paper considers the processes, problems and constraints involved in the transition of old industrial buildings, often those prone to vacancy, into heritage and tourism-linked uses. It discusses the heritage-property nexus with regard to industrial buildings, and builds an empirical picture of such relationships in a specific local property arena. The discussion is partly based on research projects completed in a number of localities within the British West Midlands. In particular, it draws on work on the evaluation of European Commission Community Initiatives in the West Midlands that have targetted tourism development, as well as on EPSRC funded research focused on vacant industrial buildings in Stoke-on-Trent. As such, in scene-setting style, a structure is developed for the evaluation of heritage-property links with the emphasis on the small number of specific local projects that have at least partly sought to bring buildings back into use with some, perhaps extensive, degree of heritage activity in mind.

## **1. Heritage and the property domain - some introductory comments**

The background to this paper is the apparent reassertion of industrial heritage as a flavour of tourism in the late 1990s (Goodall, 1996), a process pursued with vigour in the quest for the renaissance of the urban industrial economy (see Ball and Stobart, 1996). This is partly linked to expectations of the value of industrial heritage as a tool for regeneration, and at least partly to available funding initiatives that have viewed tourism as such a potential force (Ball, 1997a). An excellent example is the case of RECHAR, the European Commission's coalfield community funding package. Coal heritage is seen as a lost opportunity in the past and untapped regeneration potential for the future. Beyond that, local authorities in old industrial areas are being drawn into heritage development via a number of pressures and mechanisms. Prominent amongst these influences is the drive for diversification in the face of a closing down of alternatives, a recognition of the importance of property issues in the old industrial area, and a wide recognition of the need for the local state to deal with its own economic problems.

In a general sense, it is clear that the idea of tapping industrial heritage is often closely linked to the problems and potentials of the built fabric and environment of places. Indeed, that is perhaps its most overt element. As such, there is real value in assessing the property dimension of industrial heritage - focusing questions on some of the central property issues connected to building transitions involving heritage uses or bases, the barriers to successful transition, and, in general, charting the experiences - successful or otherwise.

In this way, the paper reviews old industrial buildings and heritage issues, generating a view of the 'heritage-property nexus'. Much of the analysis seeks a prescriptive outcome, especially given the fact that overt heritage tourism use of former industrial buildings is a rare occurrence. It investigates factors in conversion/re-use potential, including issues such as the physical and organisational constraints involved, and micro-level factors in re-use potential for heritage purposes such as building location, nature, and historical significance. It also links to notions of 'institutional thickness', identifying and assessing the role of key decision-makers in the process. The analysis is particularly focused on and structured around detailed examples of heritage development involving redundant buildings, more precisely given the arguments in this paper, labelled as disused and underused industrial buildings, in the north Staffordshire coalfield area.

It is within this domain that major regeneration initiatives have been set up, and within which the relationships between heritage and old industrial buildings might be most usefully and effectively assessed. Any observations, implications and outcomes should have both resonance and applicability beyond that specific domain.

## **2. Heritage, urban regeneration and the property domain - some contextual basics**

Whether via a desire to shelter within strength of community (Ball and Stobart, 1996a) in the wake of globalisation forces (Harvey, 1989), or as a potential tourism path to a diversified local economy (Goodall, 1996), heritage is increasingly higher on the development agenda. Indeed, many urban localities are focusing their efforts to nurture and develop tourism business on the perceived strength of local attractions linked to some dimension of heritage (Ball and Stobart, 1996b). There is a downside - with a view that 'theme park' Europe is being nurtured, but for every critical comment there are numerous examples of heritage projects being implemented (see Ball and Walljes, 1997).

As tourism and recreation becomes more prominent as an activity, then the property element is bound to be implicated. Indeed, there is a variety of evidence to support this assertion. The inclusion of leisure property in local property marketing (Staffordshire Development Agency, 1996), or the recorded conversion of commercial and other buildings into hotel space (Newman and Salter, 1996), are just two of the more recent examples. Of course, these examples relate to the 'support' side of the tourism industry and do not necessarily implicate the heritage element of buildings as attractions. That said, heritage value is not simply applicable to tourist attractions. As Jansen-Verbeke suggests, old industrial buildings may suit re-use as 'hotels with character' or similar functions supporting the industry (Jansen-Verbeke, 1996, p.216). This, of course, requires a conceptual assessment of exactly what is meant by the term 'heritage' and this is an issue that we will return to in a later section of the paper.

Perhaps surprisingly to those who have not delved into the subject, the connections between industrial buildings and heritage have been articulated in a wide variety of ways.

To begin with, there is increasing recognition of industrial buildings as part of a notion of place product, an idea initially conceptualised in these terms by Ashworth and Voogd (Ashworth and Voogd, 1990). In this conceptualisation, they view industrial buildings as a central element of a place (city) marketing mix. To Ashworth and Voogd, some level of refurbishment is likely; ironically, in contrast, there is the rather stunning assertion that actually derelict buildings are the purest and most appropriate way to view heritage (Gilman and Gilman, 1995). In support of this view, and in rather more critical terms, Urry argues that if buildings are removed from places, then those places become almost placeless (Urry, 1989). As Tuan has argued, there is a distinct allegiance to buildings by local communities, what he refers to as 'topophilic sentiment' (Tuan, 1974).

The implication from many of these ideas is that on grounds that transcend purely economic considerations, industrial buildings should be used as far as possible (McKean, 1997). Now, that is easy to assert, but, given the condition and re-use potential of such property, much more difficult to enact. That said, heritage use of buildings would appear to be a solution - for some, but obviously not all vacant and/or redundant buildings. However, as we report later, research on vacant industrial buildings reveals that very few end up in overt heritage uses, although there is more to the heritage component than there might at first seem.

The argument that re-use is important, links in with a number of themes - first, notions of a 'refurbishment turn' and a shift towards re-use rather than redevelopment, especially if the arguments have, for some reason, become more pervasive and/or relevant in current (economic or social) conditions, or on sustainability bases (Ball and Walljes, 1997); second, in a practical sense, the problems and processes involved in bringing about a physical and often functional transition of buildings - in effect, from redundancy to new heritage-based or linked use.

### **3. Towards the heritage-property nexus - concepts, definitions, and conversion generalities**

At the core of any debate on heritage and property is the matter of the links and relationships between them.

#### **3.1 *The heritage-property nexus with regard to industrial buildings***

The heritage-property nexus is the range of links between property and its heritage value. This relates mainly to a wide array of aspects associated with the nature of building, and with the character and extent of local tourism potential. The key question from all this is what are the conditions under which buildings acquire heritage value?

From the moment they begin to take shape and form, industrial buildings start to accrue and acquire a heritage element. As many suggest, a building becomes an immediate icon in the local landscape (Tuan, 1974; Urry, 1989). However, whilst heritage is, arguably, immediate, convention suggests that it gathers strength over time via an acquisition process that 'builds' heritage value. As such, heritage links to time and continuity. A further condition concerns the nature of any building. The recognition of potential linked to heritage comes with reflection on style and design, not necessarily in the form of quality. A building earmarked for heritage linked re-use will often (but not always - see SPACE Organisation, 1997; Ball, 1997b) have some specific quality of design. Of course, in many cases, buildings with heritage potential acquire listed or scheduled status. This is normally associated with particular design features or process situations that are held to have some value as representative of historic development, and which are often amongst the few remaining examples of their kind.

At a variety of levels, location is significant in heritage potential. The local situation (micro-scale) is important in conditioning the feasibility of a specific site - there is evidence that developments have failed in the past simply because they were situated in non-central locations with few related attractions in the vicinity. The physical and economic character of the locality as a whole is also of great significance.

These are fundamental conditions within the context of which heritage related re-use/transition does and could occur. This has to be set against the different relationships that occur between buildings and heritage. We start with a subtle distinction.

Conventionally, tourism and leisure uses dominate thinking on the heritage use of buildings. However, there is more to it than that. In fact, in many cases re-use may be image-led. Work by Ohrstrom in the Gothenburg shipyards in Sweden has found that new business occupiers of refurbished, hitherto redundant buildings, positively react and respond to the heritage feel of converted structures (Ohrstrom, 1997). There are also examples in north Staffordshire of pottery firms occupying old buildings and realising, in retrospect, the value of older, sturdily-constructed, and interestingly designed buildings (Ball, 1997b).

Of course, tourism and leisure uses are potentially important for old industrial buildings. As the content and theme of a recent BURA conference implies, heritage tourism projects should be viewed as potential catalysts for urban regeneration (BURA, 1996)

#### **3.2 *Types of heritage development, re-use and industrial buildings***

Building a scenario around the influences discussed in section 3.1, there are a number of ways in which types of heritage development may be usefully classified, particularly in terms of their heritage implications. Particular amongst these are building type, mix of heritage features, and style of re-use.

##### **3.2.1 *Building type and the suitability for heritage tourism***

The opportunities and constraints attached to the re-use of redundant industrial buildings vary by building type, although for heritage tourism purposes the issues are less clear. In a useful

typology developed by Michael Stratton (Stratton, 1997), the pros and cons are neatly articulated and it is useful to briefly present a synthesised version at this point in the discussion. As Stratton notes, multi-storey mills and warehouses are enthusiastically lauded for their interesting architecture and innovative use of iron, and for their ability to accept a variety of internal treatments and to be easily sub-divided. There may well be too many of them, with problems of poor upper floor access and limited parking space, but they are attractive for their design, and there is much evidence to suggest that they have featured heavily in urban regeneration schemes (see Ball and Walljes, 1997). Great halls - railway sheds, works and erecting shops - contrast in their re-use potential. For example, large shed constructions are usually in central urban locations, and some of the huge erecting shops left in the wake of engineering closures are large and difficult to adapt (although see Ball, 1996).

Single-storey sheds - the archetype of the modern factory structure - are more readily adaptable to industrial use but the lack of conventional windows and partitions constrains their adaptability for other uses to a degree.

In these ways, it is possible to infer ease of re-use and transition at a very basic level. Of course, there is less clarity of opportunity and constraint with heritage tourism uses. This is simply because the nature of the use - the attractiveness of some aspect/s of a building per se, and for heritage business - may actually seek - and benefit from - a retention of layout etc. in its original form.

### **3.2.2 The mix of heritage features and building use**

Against the background of suitability, industrial buildings tend to be retained and re-used in some form through four considerations, three of which involve heritage-related purposes. These are, their status as monuments, the processes that can be presented, their use as museum locations, and their opportunities for commercial re-use (see Stratton, 1997). Turning to the heritage element, some buildings are conserved through selectivity, some more readily if they retain 'process' equipment. Others have been used to house museums and/or processes, or to combine a tourist attraction with more overtly commercial and/or industrial interests. The combination of 'heritage' functions or elements at specific property sites must serve to enhance their tourism potential.

### **3.2.3 Scales of heritage presentation**

Whilst the adaptability of single-storey sheds often leaves a facade fronting new build, it is clear that there are various forms of heritage use - ranging from the raw form of the building to its substantive refashioning. Thus, style of re-use is also an important consideration. Heritage re-use might thus involve a relatively raw form of development - which retains the full original structures as far as possible, a measure of refurbishment, or a complete refashioning. Each 'scale' of development has its limitations - maintaining an old building in its relatively original state is potentially expensive, but refashioning runs the risk of being criticised as a purveyor of 'constructed' experiences. Where cost constraints occur, it may be most suitable to deliver relatively raw forms of heritage development.

## **3.3 *Some thoughts on the organisation of the nexus: from tentative recognition to realisation***

The notion of a building as an icon of community is one thing. Recognising and realising its potential for transition into heritage attractions is another. Perhaps the key aspect in any emergent 'link' is the recognition of potential by interests that have some catalytic power. This must involve a strong partnership between the local state and others.

This suggests that institutional thickness - the existence of relevant interacting and developing agencies (see Amin and Thrift, 1995) - is important. For example, recognition often requires proactivity - perhaps on the part of local planning representatives - in identifying not only a problem but also a potential in the redundant industrial built environment. In addition, to move towards realisation via some kind of action, there needs to be guaranteed funding for both revenue and capital needs. It is also apparent that the successful transition of a building for

heritage tourism use always involves, as a necessary but not guaranteeing feature - effective organisation, an adequate management structure. In the domain of heritage tourism, the scale of works required, coupled with the uncertain returns, means that projects have often been initiated as part of some external public funding project.

What we might reasonably suggest is that it is institutional thickness as it relates to the heritage domain which is important. In other words, the key may well be the coincidence of private sector interest and/or willingness to enact heritage projects in partnership with others; local authorities with a commitment to industrial heritage tourism; other agencies with a particular remit and with enthusiasm. This notion of heritage relevant institutional thickness probably varies by locality, and certainly over time. The key catalyst for tourism development in Stoke-on-Trent was the 1986 National Garden Festival and the strong partnership approach - welding private sector, with central and local government agencies - which was required. This added an extra, and vital, dimension to the vibrancy of existing institutional structures.

### **3.4 From topophilic sentiments to practical needs**

Given the array of challenges confronting most projects, strong partnership is essential in the development of industrial heritage tourism initiatives. So, what are these problems?

There are a number of key problems confronting the specific heritage tourism re-use of hitherto redundant industrial buildings. These relate to 'unlocking' the premises in terms of ownership, realising design potentials, the level of refurbishment costs as linked to structural and fabric defects, and durability factors.

Many older industrial buildings are owned and/or managed by those with little interest in bringing them into effective use. As an indicator, in surveys of vacant industrial buildings in Stoke-on-Trent, it has been common to find 60% or more of empty buildings off the market. Buildings may be hoarded or forgotten, perhaps existing as (overvalued) items on a balance sheet produced by an absentee landlord with little or no knowledge of or remit for the development of the locality. Unlocking them - making them available or bringing them back into use - is a difficult matter.

Some older buildings have only limited re-use potential from a design perspective, especially for heritage tourism purposes. For example, despite the endeavours of developers such as the SPACE Organisation (1997), multi-storey factory buildings - extensive in number, and often lacking in intrinsic heritage value, have rarely been re-used within innovative design schemes, unless they have been integrated into a mixed-use heritage-relevant development.

Particularly important are refurbishment costs. The majority of re-used industrial buildings are reoccupied with little or no refurbishment - they are a cheap source of premises. In the 1997 Stoke-on-Trent survey, this was around 87%. However, for heritage tourism, and of course for others, refurbishment is essential. The need for attention - for some refurbishment - increases with the length of time that a building is vacant. For heritage purposes, the necessity for extensive refurbishment normally increases with the level of heritage presentation. There are basic needs - to rectify structural and fabric deficiencies, but beyond that, a high level of 'presentation' will require a greater financial commitment.

Beyond the level of attention required for these needs, there is, for heritage tourism re-uses, the additional need for durability in the physical quality of the re-used building. Without industrial or commercial users, there is less likely to be resources for building maintenance, and this might function as a constraint on re-use intent.

The central implication from this basic analysis is that there are substantial resource needs in the refurbishment/re-use process, and that the basic costs of re-use in building structure and fabric attention, are extended when heritage activity is at the core of the re-use. In general, we might say that, despite the strength of feeling amongst communities and planners, economics usually prevails in the use of older industrial buildings, and regardless of their heritage value or potential. As Hatfield has noted, in commenting on the before and after situation (in terms of the removal of the characteristic headgear and associated colliery buildings) at Florence colliery in Longton,

not only was the 'landscape irrevocably altered but (despite whatever economic arguments can be made for or against what many would consider a short-sighted decision) a community's sense of being and the heritage of many individuals is lost.' (Hatfield, 1997). The demolition of the equally iconoclastic "A" frame at Hem Heath colliery in Trentham, despite the endeavours of aspirant heritage museum interests to acquire it, is a more recent example (Sentinel, 21/8/97). It seems that such heritage artefacts in the built environment are only retained when the full weight of the institutional base, coupled with external funding potential, is levelled on the situation. With heritage tourism that is a rarity, but when it does occur it offers valuable insights into the opportunities and constraints involved. In the next section, we turn to some examples for a specific locality.

#### **4. Focusing on the heritage-property nexus - heritage and tourism in the Stoke-on-Trent locality**

Tourism development has been firmly on the city agenda in Stoke-on-Trent since the early 1980s, with part of the strategy built around the industrial heritage of the locality (see Ball and Stobart, 1996). The 'pits and pots' experience is a key attraction and that clearly has its counterpart in the built environment.

##### **4.1 *From the majority to the minority and back?***

The re-use of industrial buildings for heritage tourism is a minority occurrence, especially in old industrial areas. For example, in Stoke-on-Trent, early results from the EPSRC funded project reveal that between 1994 and 1997, there were very few re-uses involving heritage tourism, although aspects of heritage were obviously relevant in the reoccupation process.

Although overt heritage tourism or leisure re-use is a rarity, it is possible to move towards a more prescriptive outcome. This is the part of the sub-title that refers to 'back to the majority'. In general terms, we are able to cite heritage potential indicators. These might include the high level (around 450) and wide array (of types) of historic industrial buildings that are currently vacant in Stoke-on-Trent, and could include assessment of the large number of canal-side locations; buildings with high accessibility, sound condition, unusual style and design. The occurrence of relatively high scores on these criteria in Stoke-on-Trent vacant industrial buildings in mid-1997 indicates a theoretical potential for heritage-led re-use, providing that the heritage market is sufficient in scale. Clearly there is a necessity to think innovatively in this domain - perhaps considering an array of mixed uses around heritage attractions, and involving the retention of buildings in refurbished form. The idea of hotels with character, as well as buildings as attractions in their own right, should have mileage. Perhaps a level of development on the scale of Germany's Emscher landscape park (see Internationale Bauausstellung Emscher Park, 1996; Ball and Walljes, 1997) would be possible. It could certainly be seriously considered.

Regardless of such potential and its applicability to more than a minority of buildings, it is to the minority of heritage tourism-led developments that we must look for vital evidence on past experiences - opportunities and constraints - in nurturing the transition of buildings from redundancy to heritage tourism use.

##### **4.2 *The transition to heritage at derelict/redundant sites - assessing the array of problems and opportunities***

As a pivot in the local tourism development effort, heritage transition has been prominent in a number of Stoke-on-Trent development initiatives involving tourist components, and in this section we dwell on a small number of notable examples. In all cases, they involve a mixed-use development in the transition to heritage at specific working sites, although they are different in scale, context and implication. The brief analysis in this section sets out their context, discusses the property element in their development, and assesses the constraints and successes in their transition to heritage re-use. All are partly funded by European Commission sources.

###### **4.2.1 City centre mixed use development - the Dudson Centre**

In the central urban core of the north Staffordshire economy there are a number of disused industrial buildings, some of which have been recognised via listing as valued in heritage terms. The former Dudson's pottery manufactory had been vacant since around 1990, and the buildings involved were gradually deteriorating. There were clearly major design challenges to be met. The premises were in poor structural condition, with major fabric renovation also required. That said, the complex of buildings had great potential as a location for regeneration. The site has excellent accessibility, and, most important, the complex lent itself to refurbishment and proposed reoccupation. In 1996, as part of a bid for Objective 2 funding, a scheme was developed involving the substantial refurbishment and partial rebuild of factory buildings around a grade 2 listed former potbank. The scheme envisages a small pottery museum and associated catering facilities, with the surrounding buildings housing local voluntary groups and related training facilities - the Dudson Resource Centre - in which the offices of various local agencies will be located.

The new company formed to complete the development constituted an Action Group - comprising a local solicitor; a partner in the project's architectural firm; a director of the CVS, and a representative from KPMG, plus representation by the City Council - to progress the project on a day-to-day basis. The funding for the £2m scheme has been generated through a partnership between the City Council, central government (via the Single Regeneration Budget (SRB)), the European Regional Development Fund (ERDF), and National Lottery funds. A request for support from English Partnerships was rejected on additionality grounds.

There are, of course, potential problems. A high level of survey and related fees has been sanctioned given the difficulties attached to returning a derelict site to use; and there has been concern expressed over the high costs associated with the complex construction work. Indeed, there have been fears by GOWM that the project might go over budget.

On the tourism side, there are some interesting observations to be made. The development was not seen as a high priority by the Area Museums Service, but was seen as such by DoE in the West Midlands and was also supported by the Council for Voluntary Services, and by English Heritage. There is thus a suggestion that this is an example of heritage tourism being foisted on localities because non-specialists view it as high potential.

As the process is only currently underway, it is difficult to make judgements on the success or otherwise of the scheme. That said, the buildings - albeit with major refurbishment - have been brought back into use, it may assist the return to use of adjacent buildings thus reducing blight, and it is in a gateway location to Hanley. The occupation of the community office section of the scheme is guaranteed, but the potential success of the direct heritage element - the potbank/museum and the expected output of 10,000 visitors by 2000 - is rather less certain. However, in defence of this, the funding package put together for the scheme has heritage as its catalyst.

#### **4.2.2 The regeneration of an old industrial area - the Gladstone/St. James area**

Much more prominent in the local economy is the Gladstone/St. James area of Longton in Stoke-on-Trent. The Gladstone Heritage Museum (formerly the award-winning Gladstone Pottery Museum) - located at the heart of a classic old industrial area based around ceramics and engineering premises and as a working museum described as a unique heritage site - has been running in some form since 1974. The gradual decline of visitor numbers from the early 1980s, together with a deterioration in the built fabric of the structures involved, led to the formation of a bid for Urban Pilot Project status for the museum and its near vicinity, and more recently the injection of European Regional Development Fund (ERDF) support. Within this area, there were also a number of vacant factories, some poor housing, and an empty school - all reflecting the image of a run-down area of the city. The project involved the City Council in partnership with the European Commission, each contributing £1.4m for regeneration projects running over the 1992 to 1995 period. Prominent amongst these were various heritage-related elements.

Amongst a range of aims linked to heritage-led regeneration the project sought to promote innovative urban regeneration by developing the industrial heritage of the area through ceramic design development, small workshop activities, and heritage tourism. The overriding aim was to



improve the image of the place. The area was designated as a ceramic design quarter, with a formerly disused but later refurbished school refashioned as a Centre for Ceramic Design, various environmental improvements, and some rundown and derelict manufacturing buildings refurbished as studio workshops.

The Gladstone-St.James regeneration effort is viewed as quietly effective by local planners. Yet, there are major problems connected with the situation of the local built environment. The 'quarter' has a neglected corner with persistently under-used and vacant industrial buildings scarring the area - what some would describe as real heritage. In other words, development has not necessarily reached other parts of the immediate vicinity. This is partly a problem connected to absentee owners and inaction, a situation that lessens the appeal of the heritage tourism element. The durability factor is also a problem. Despite genuine intent, positive and regular maintenance has not been possible, although there are plans to rectify this situation by designating an additional area of strategic attention using European Commission funding.

The central tourism element - the Gladstone Heritage Museum, lacks quality of facilities and has sought funding for improvements in areas such as sound proofing and improvement to the limited security situation. It also suffers from some negative visual images. Above all, a major problem is that there is only a small visitor base using the museum.

The museum was purchased by the City Council in May 1994, and, following visitor surveys, most recently, externally funded projects to enhance facilities both within and outside the site have been set up. In general, it is strongly supported by the Area Museums Service and the need for environmental enhancement is clearly recognised, especially as the 'edge' of the area is of poor visual and, undoubtedly, physical quality.

The museum is seeking self-sufficiency by 1999, and projected growth of visitors from 35,000 pa to 60,000 pa plus by 1998/1999. However, as with similar schemes, the main issue is whether sufficient tourist interest is generated. That is partly a test of the strength of association between heritage property and tourism development, a matter that has rarely been explored in research.

#### **4.2.3 The attempted regeneration of a major coal heritage site - Chatterley Whitfield colliery complex**

Perhaps the most notable, and contentious, heritage site and development in north Staffordshire is the Chatterley Whitfield colliery complex, a rare example of a 19th century coal mine with surface buildings virtually intact and amounting to over 1m sq.ft. At the time of cessation of coal production in 1977, the site had been worked for some 120 years using some buildings that are still standing. In this sense, the site contains an array of buildings and machinery that demonstrate the wide range of deep mining processes used in British coal mining since the 1860s.

Chatterley Whitfield Mining Museum was established soon after the cessation of production and for some years aspired to major heritage status as probably the most intact colliery site, and latterly as the location of the British Coal Collection of mining artefacts, engines, and other heritage attractions. Lack of visitor numbers at this relatively inaccessible site, combined with an inability of the City Council to subsidise what was an immensely expensive complex to maintain, led to its demise in 1993.

Monument status was established in 1993 and a fresh impetus to make effective use of this valuable heritage facility was created. Following a strategic assessment in 1995, and in the wake of a realisation that European Commission and other urban and regional funding might be tapped, a comprehensive development plan for the whole site was prepared by the City Council in partnership with English Heritage. This envisages the site as an industrial heritage and leisure attraction and centre for live training in practical building conservation.

In these terms, the Chatterley Whitfield complex offers an excellent example of some of the most pronounced problems and opportunities confronting any attempt to enact a transition of derelict buildings into heritage use. As such, it is instructive to dwell on some of the finer detail, especially in terms of the buildings and their refurbishment/re-use costs and implications.

The complex itself contains a wide array of heritage buildings. These include winding houses and headgear dating from the early 1880s and from the 1914-15 period, a chimney stack from 1891, the main boiler plant constructed from the 1920s, a range of shafts and associated buildings dating to the early and mid 19th century period. In total, the complex of 25 structures contains 16 listed or scheduled buildings.

Not surprisingly, given their age and the conditions under which they have existed, the technical problems confronting the re-use of the buildings are wide-ranging and costly. Although there has been a recent claim that costs have been underestimated quite significantly, according to consultants, the total cost of bringing the complex back to use would be (at 1996 prices) capital/repair, maintenance and upgrade costs of ú7.95m for the listed/scheduled buildings and ú5.2m for the remaining buildings. These costs reflect the repair and refurbishment requirements of key structures on the site. For example:

Old Offices - two storey brick building of 800 sq.m with concrete floor and roof slabs. Windows are predominantly steel, with some timber. Asphalt finish to roof, cast iron rainwater goods. Plastered brickwork or blockwork internal partitions. There was minor tension cracking of brickwork, some movement, and some localised concrete spalling from rusting reinforcement. In terms of fabric, the roof membranes had failed, roof lights had broken panes, steel window frames were beginning to corrode, and there was evidence of water penetration causing paintwork deterioration, mould growth and the lifting of woodblock floors.

Boiler House and Chimney Stack (scheduled monument) - large single storey steel framed building with single skin brickwork infill panels. Contains ten Lancashire Boilers. Roof had been removed. Brick plenum chamber and chimney stack adjoin the building. Some 10% of the brick panels were found to be dangerous, window openings and doors were loose and affected the stability of adjacent brickwork, and the concrete floor had holes. There was also cracks in the brick walls of the plenum chamber and other parts of the building, and some severely corroded roof beams. The surviving fabric was saturated due to the removal of the roof.

Lamphouse - single storey grade II listed building of 488 sq.m with loadbearing brickwork external walls and internal steel columns supporting lightweight metal roof trusses, with a pitched asbestos sheet roof and glazed north lights. The building had minor structural defects, with some instances of rotting timber, and some lateral movement and cracking in brickwork. There was some leakage from the valley gutters and roof flashings had been distorted.

Ken Salt Building - this is one of the newer buildings. It is a single storey brick building of 1,050 sq.m with two internal spine walls, steel casement windows, lightweight lattice roof beams, and a pitched asbestos cement sheet roof. Whilst the building was thought to be in sound condition, there was severe cracking and lateral displacement of brickwork at each corner, and movement of brickwork at high level on the south gable. In terms of fabric defects, rainwater goods were damaged or missing, and there was dampness evidence in external walls. Recent, more detailed inspection, has revealed that the building is virtually beyond repair and refurbishment.

Hesketh Winding Engine and Power House (scheduled monument) - two storey building with solid loadbearing walls supporting lightweight roof trusses and a pitched asbestos cement sheet roof. Constructed in three phases, with a tall upper storey containing the Powerhouse, Central Hall and Winding Engine, and the ground floor containing mass brick and concrete supporting structures for machinery above, together with stables and storage areas. The building was generally sound with only minor structural defects. Some brickwork had fallen out, the north end parapet was cracked and spalling, and there were cracks in door arches. Widespread spalling of brickwork, vegetation growth, holes in roof sheeting and thus water penetration, corrosion of machinery and lifting of clay floor tiles. Evidence of failure of parapet gutters, rainwater downpipes damaged, many window panes broken and some masonry plinths open jointed and spalling were damaged.

In the case of these five examples, there was clearly a need to complete some major refurbishment work. This included repairing and rebuilding brickwork, replacing roofs in some cases, replacing window frames and re-glazing windows, and derusting, cleaning and repainting

frames, guttering etc., as well as redecorating and refitting the internal spaces. In a number of cases, there was a need to remove brickwork etc. to inspect for the causes of movement and other damage, and in this context, recent work has been constrained by the discovery of unseen subsidence and deterioration. In many cases however, the endeavours of the mining museum staff and volunteers, had kept the bulk of the buildings in reasonably good shape.

The heritage tourism development options depend on the style, level and organisation of presentation of key attractions (such as the Hesketh Power House). The strategic review suggested that the capital and operating costs would depend upon the level of presentation required in the heritage component. These were option A - low key interpretation (€4.5m), option B - working heritage attraction (€9.2m), and option C - incremental development with volunteer staff (€5.8). Clearly, the quality of the presentation, and the facilities involved, would condition the success (and revenue) from the project. As a consequence, and given the conclusion that some parts of the site would not have great attraction as heritage features, a mixed-use development was set out, drawing heavily on various aspects of the heritage value of the site.

The present plans are, in effect, for an extensive mixed-use development around the heritage attractions of the site. The Chatterley Whitfield Industrial Heritage Centre should refashion the site as a major heritage and leisure attraction, combining that with the conversion of former mineworking buildings into enterprise units, and including a unique Conservation Technology Centre. Although cost estimates have already been adjusted upwards, the first two phases of this development were originally expected to involve the €0.84m refurbishment of a number of non-scheduled buildings as the Conservation Technology Centre (the Old Offices and part of the Mine Laboratories), and around 10 enterprise starter units in a former mine building (the Ken Salt Building), and the conversion of the former Lamphouse into a Visitor Reception Centre handling up to 50,000 visitors pa. This €0.33m development, involving the provision of a reception foyer, changing facilities, information and booking desk, improved lighting and staff amenities, would be the first part of the Stage 2 development of Chatterley Whitfield as a regional tourist and educational resource.

Although widely supported by most agencies, especially as a mixed-use rather than solely tourism development, the regeneration of the Chatterley Whitfield complex illustrates many of the problems associated with refurbishing and re-using old industrial buildings for heritage tourism purposes, in this case buildings that have been out of use for several years.

Clearly, there are a huge array of costs, especially in capital support as it pertains to structural defects and fabric defects. More than this, the development has been held up by escalating costs of refurbishment and repair needs not picked up in the original (visually-based) strategic assessment by consultants. This, in turn, displaces funding packages, throwing out the delicate phasing of matched funding arrangements and thus functioning as a major set back to the project. In terms of the heritage tourism market, there is widespread support from interested agencies, but some private scepticism on potential outputs. In essence, the success of the scheme may well reside in the decision to use heritage but not to rely on it too much.

## **5. Reflecting on the transition from redundancy to heritage attraction**

In reflecting on the issues involved in the transition of buildings from redundancy, or more positively, disuse to heritage tourism use, there seems little doubt that this is a very difficult sector of the property arena, fraught with problems of unforeseen costs, the phasing of funding packages, let alone the conviction of planners and property actors. Yet, industrial heritage tourism, even the heritage element of building re-use outside of the tourism and leisure domain, is a major area of local development potential. There may well be too much of it, but it does create jobs, and generate uses for, perhaps excuses for, the retention and reuse of buildings that might otherwise fall into virtually constant disuse.

Of course, as we have argued, given the nature of the tourism business, re-using an old disused industrial building as a heritage tourism attraction is a rare occurrence. In the contemporary scene, it only seems to involve the occasional building, although, following the example of others - not least of all the Emscher Park in Germany's Ruhr, there are opportunities if the commitment is present. In the Emscher Park, colliery buildings, including winding gear of the 'A' frame type

discussed earlier in the paper, have been retained and developed with a rather more innovative level of design than seems to have been attempted in the UK (see Internationale Bauausstellung Emscher Park, 1996). Projects need initiators, arguably institutional thickness perhaps. The initiative via funding packages often rests with local authorities and thus depends on their tenacity. As such tenacity varies, perhaps in line with the varying groundswell of commitment to heritage per se, then the success in bringing older buildings into heritage use will also differ across localities. At other times, projects may be private sector led, although they are virtually always dependent on external funding to cover the huge costs, relative to revenues that are involved.

Clearly, there is a difficult, fraught path from redundancy through to heritage attraction. Not least of all, this occurs with funding arrangements. All of the heritage projects in Stoke-on-Trent depend on packages of external funding, and often these involve the matching of funds from different sources. A hold up with part of a project may well throw the phasing of requests for say, Heritage Lottery funding, out of sequence, delaying and even jeopardising the project. It is simply the case that with heritage buildings, often old, often in a condition that requires major and/or delicate refurbishment, it is sometimes very difficult to meet the requirements of funding agents. There are simply too many unknowns.

Perhaps a partial solution to this problem has simply emerged by default. As it is expensive to develop a site as a purely, dedicated heritage attraction, especially when set against commercial potential, there has been a tendency to create mixed use developments around heritage features.

There are, of course, policy implications from this analysis. Some might argue that, in cost and revenue terms, and given the finite nature of specialist heritage tourism markets, a heritage-led regeneration approach is ultimately futile. However, community and social considerations, allied to the economic, suggest that a strong innovative partnership and/or committed local intentions to use industrial heritage structures as attractions may be sufficient to overcome such limitations.

Undoubtedly, there is a need for more work on the types of heritage attraction use developed, and on the relevance of heritage-linked institutional thickness, including the private sector. Further research might also engage in a detailed investigation of innovations developed in bringing old buildings into direct heritage tourism use, and of the policy processes involved. Often, it seems, solutions to the wide array of problems confronting the re-use and reoccupation of a building are made without publicity at the local level, and in response to emerging situations. Publicising - and hence sharing - experiences could be very beneficial.

Older industrial buildings create difficulties in the re-use process, but without attention they are icons of despair, and many vacant industrial premises in old industrial areas will not be redeveloped. There may be no alternative to re-use of some type, but in any case, returning them to use eases blight.

There are thousands of buildings out of use in Europe's older industrial areas. Perhaps the word 'redundant' is almost applicable to them. That said, heritage tourism is a possible solution for some of them, but it has its own special constraints, problems and, in effect, challenges for the regeneration process. As we have argued, the constraints on the heritage development of old buildings are probably as much about variations in commitment and tenacity, and hence organisation and the policy process, as they are about the high costs involved. That is the challenge for future research.

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