A dungeon horrible, on all sides round
As one great furnace flam’d; yet from those flames
No light, but rather darkness visible…

Loss of cultural heritage linked to the multiple impacts of technological change, both now and in the future, has dominated the professional discourse in recent years. Loss has become the *leitmotif*, the enduring theme that has tended to obscure the importance of cultural heritage as a dynamic concept with shifting values, and the expansion of a global conservation movement, shaped and formed through the increasing capacity of technology to support a diversity of cultural heritage and a burgeoning heritage industry.

The environmental impact of climate change and global warming is confirmed as an apocalyptic scenario supported, not least, by evidence from last year’s ICOMOS International Scientific Committee’s interdisciplinary research programme. Without straying into the realm of social change, the topic of next year’s research programme, it is worth recognising that the capacity of technology to influence perceptions of cultural heritage significance and conservation priorities is related to decisions of government, business, institutions, communities and individuals at any given time.

This paper examines the impact of technological change on the concept of cultural heritage significance and the nature of the importance of cultural heritage sites and monuments in a global village. Consideration is given to the accelerated rate of changing values and evolving perceptions of cultural heritage associated with travel and migration giving credence to the growing appreciation that the fates of the tangible and intangible heritage are intertwined.

There is an examination of the inter-relationship between physical and virtual access to cultural heritage and the influence of modes of transport and infrastructure on visits to cultural heritage monuments and sites; and the impact of digital access on increasingly wide and diverse definitions of cultural heritage significance and conservation priorities.

Paradise Lost explores a culture of entropy brought about by the impact of 20th and 21st century technologies on cultural heritage sites and cultural landscapes through two iconic UNESCO World Heritage Sites: Machu Picchu and Stonehenge (transport & infrastructure). It examines the loss of a sense of place with destruction of the industrial heritage as part of regeneration through a case study of The Thames Gateway: Dagenham & Chatham Historic Dockyard; and the isolation of migrant communities from the places where they live because of the continuous contact with their homeland through digital technologies: TV and internet. But also their role in sustaining the diversity of the cultural expressions of minority and ethnic communities wherever they live creating a new a sense of place.

Paradise Regained looks at the impact of conservation technologies on perceptions of cultural heritage through a study of archaeological ruins at two UNESCO World Heritage Sites: Hadrian’s Wall (part of the trans-national Frontiers of the Roman Empire WHS) and Ironbridge Gorge. It examines the role of digital technologies in creating communities of interest for the preservation and conservation of redundant technologies.

Changing perceptions of cultural heritage values and the complexity of the relationship between old and new technologies in the global village is discussed in the context of the redevelopment of Kings Cross Station, London and adjacent area; and the technologies associated with global trade and climate change in Great Yarmouth, Norfolk, England.
**Section 1**
Paradise Lost - loss of a sense of place

Travel & Migration: cultural tourism & economic development

The possibilities of travel to far flung places by air and road transport, emanating from a legacy of 20th century technologies, has impacted on the global leisure and labour markets. Accessibility has fuelled the desire for mass cultural tourism, especially to those places with the brand identity of UNESCO World Heritage Sites, and encouraged migration to towns and cities around the globe, especially those experiencing economic prosperity. Economic gain for local communities has been the mantra for a combination of conservation and development at major cultural heritage sites over the past 25 years and, I would argue, the reason for an introduction of a culture of entropy. In parallel, heritage management, and more recently destination management, have emerged as disciplines dealing principally with issues of strategic planning and operations management².

The world-wide conservation movement has increasingly recognised the ambivalence of ease of access and the effects of transport and infrastructural developments on major monuments and sites. In 2005 UK Director the World Monument Fund (WMF) considered the dichotomy in respect of the exponential growth in tourism: ‘Tourism is a double-edged sword for places considered of “outstanding value to humanity”’. It offers many impoverished communities the chance to reap financial rewards, but also threatens the very resources, human and natural, upon which the industry is ultimately built.³ The current stated position of the WMF is more accommodating and avoids semantic debates: “Sustainable tourism minimises the negative impact of visitors on heritage sites and the surrounding environment, but also produces income and jobs for local communities. Responsible tourism is both culturally and environmentally sensitive.”⁴

The World Heritage Centre’s current Sustainable Tourism Programme (WHSTP) is a co-operative venture including representatives from IUCN, ICOMOS and ICCROM, other United Nations Agencies such as UNDP and UNWTO and UNEP. It takes a positive approach. The purpose of the WHSTP is ‘to aid the World Heritage Committee and site management using tourism as a positive force to retain World Heritage site values and to help mitigate site threats’. Tourism associated with World Heritage Properties is recognised as a tool to conserve and enhance conservation outcomes while contributing to sustainable development of a destination and its local communities. A Workshop in China, September 2009, on ‘Advancing Sustainable Tourism at Cultural and Natural Heritage Sites’ sponsored by the Getty Institute has the overall objective of developing recommendations for amendments to the World Heritage Operational Guidelines integrating best practice tourism management with the management processes of the World Heritage Convention to be presented to next year’s meeting of the World Heritage Committee. If predictions by the UNWTO prove to be correct, an enhanced approach to destination planning and site management will be required. The World Heritage Centre project is timely.

Despite environmental concerns relating to air travel, governments world-wide have responded to the severe impact of the global economic crisis and negative trend in international tourism, an overall drop of minus 8% in international tourist arrivals during the first four months 2009. In Europe where the drop was minus 10%, Italy France and Spain have formed a marketing partnership to encourage long haul inbound travel to their ‘destination’. UNWTO still stands by its Tourism 2020 Vision. This forecasts international arrivals are expected to reach nearly 1.6 billion by the year 2020. Of these worldwide arrivals in 2020, 1.2 billion will be intra-regional and 378 million will be long-haul travellers. The top three receiving regions will be Europe (717 million tourists), East Asia and the Pacific (397 million) and the Americas (282 million), followed by Africa, the Middle East and South Asia.

The historical perspective is important from the point of view of the impact of the substantial growth in tourism on cultural heritage sites, cultural heritage significance and a loss of a sense of place. Tourism is one of the most remarkable economic and social phenomena of the past century, made possible by modern technologies: cheap air travel, road transport and universality of concrete. The number of international arrivals shows an evolution from a mere 25 million in 1950 to an estimated 806 million in 2005, corresponding to an average annual growth rate of 6.5%. Europe and the Americas were the main tourist-receiving regions between 1950 and 2000. Both regions represented a joint market share of over 95% in 1950, 82% forty years later and 76% in 2000. (See Figure 1)

This rapidly changing situation and the resultant culture of entropy are exemplified by two iconic archaeological World Heritage Sites: Machu Picchu, Peru and Stonehenge, UK.

**World Heritage at Risk: Machu Picchu & Stonehenge**
Machu Picchu

Machu Picchu was Peru’s second World Heritage Site. UNESCO cited the city’s magnificent site, its architecture and its significance as an almost perfectly preserved example of Incan technology and social organisation when it was inscribed in 1983. Even before designation, Machu Picchu was a popular tourist destination. The 15th century Inca citadel became a cornerstone of Latin America tourism when the American historian, Hiram Bingham, first stubbed his toe on an overgrowth-covered stone slab in 1911. As visitor numbers and the infrastructure to support them have grown exponentially, so has the burden on the site and its surrounding ecosystem. An indigenous woman whose family lived for generations in a valley below Machu Picchu described the situation: "Since ancient times, this land has been preserved as sacred. The guardian spirits do not want roadways or industry, or people who pollute the land. These are sacred areas. It was there the deities built the ancient city of Machu Picchu."5

International concern about the site’s preservation and conservation is on-going. Ten years ago a joint World Heritage Centre-IUCN-ICOMOS report stated: "Having analysed the tourism and demographic pressure on the sanctuary and more particularly on the landscape surrounding the Ciudadela, the mission concluded that any new construction or infrastructure in this area would very seriously affect the World Heritage values, authenticity and integrity of the Ciudadela and its surrounding landscape". On many occasions UNESCO’s World Heritage Committee has considered placing the Inca citadel of Machu Picchu on its endangered list. Large numbers of visitors, approximately 800,000 a year, are harming the site’s archaeology, landscape and wildlife according to conservation experts. The ruins face many threats related to the unregulated expansion of tourism, including the uncontrolled growth of hotels and restaurants in Aguas Calientes, and pressure on the site’s erosion-prone banks.

A survey by Japanese geologists earlier in the decade suggested the earth beneath the 2,000 metre-high city was moving at a rate of up to one centimetre per month.6 Measures have already been taken to reduce visitor numbers. In 2006 ticket prices were raised by 50% and daily numbers reduced to 2500. The Inca Trail is regulated by law to a maximum of 500 people a day. An early sell out of the Trail for the peak season 2008 put increased pressure on other less well-protected routes such as Choquequirao. Last year the Peruvian government again narrowly avoided being placed on World Heritage endangered list by instituting a $132.5 million emergency plan with measures to preserve the ruins, limit the flow of tourists, and prevent forest fires and landslides. The World Heritage Committee has requested reinforced monitoring. ‘The ‘citadel in the clouds’ was placed on the 2008 World Monuments Watch List of 100 Most Endangered Sites with the observation: "In 1992, a total of 9,000 tourists visited the site. By 2006, however, that number had topped 4,000 on a single day. Although the site generates some $40 million in revenue annually for the Peruvian economy, little has been done to address the impacts of tourism on the site or the resulting environmental degradation of the area".  

Paradoxically, local action supporting the economic well-being of the indigenous people, and indirectly responsible tourism, was deemed illegal. The mayor of Convención province – now the ex-mayor - caused a furore by building a bridge connecting the village of Santa Teresa to the citadel and the markets of Cusco, thus improving access to the site and the commercial prospects for local people. Fears were expressed that, if the bridge across the Vilcanota River was constructed in defiance of a court order and government protests, tourist numbers would double, people would avoid the fees charged on the Inca Trail and the increased weight of visitation would further destroy, not just the ruins, but also the flora and fauna. Others took the view that vested interests were being protected especially those of Perurail. A more sanguine approach to Peru’s tourist boom is taken by an English journalist and Latin American correspondent: “After suffering upheaval and poverty for so long Peru cannot afford to wrap its Inca sites in a bubble. They are assets which need to be treasured and protected - and used."7

Replicating Pablo Neruda’s experience - “a trip to the serenity of the soul, to the eternal fusion with the cosmos; where we feel our fragility” - is likely to remain tantalisingly out of reach.8

Stonehenge

Ambitious plans for reinstating the Neolithic and Bronze Age monuments of Stonehenge in their landscape setting have stalled following years of studies, debates, a public enquiry and travels in hyper-reality, costing government transport and culture departments in the UK almost £38 million. Inscribed with Avebury on the World Heritage List in 1986, Stonehenge is among the most famous groups of megaliths in the world and, according to the British Pre-historic Society, the ‘most archaeologically sensitive land surface in Europe’.
In 2008 UNESCO accused the UK of damaging the globally significant site by its failure to relocate the A344 that runs beside Stonehenge despite promising action for 22 years. The road actually clips the Heel Stone, part of the ancient entrance to the sacred site. The stranglehold of roads and traffic with a car park and visitor facilities dating from the 1960s positioned adjacent to the monument was condemned as a ‘national disgrace’ in 1993 by the UK Parliament. Plans to sink a 2.1 km (1.3 miles) tunnel would have cost £540 million by 2007. Supported by English Heritage but opposed by other heritage organisations the tunnel was a compromise solution providing the opportunity to reinstate the landscape immediately around Stonehenge but leaving 7.7 miles, 80% of the World Heritage Site, exposed to the bulldozers creating a four lane highway on the A303 – a major route to the South West. In providing a solution to a renowned traffic bottle neck and accident black spot, there would have been substantial intrusion into the sacred landscape of the World Heritage Site.

The Stonehenge Project included a ‘signature’ building as a “world class” Visitor Centre costing £79m, designed by Denton Corker Marshall of Melbourne, and requiring a rapid transport system to the monuments 3 kilometres away. Umberto Eco noted that “Disneyland must be visited without anything to remind us of the future surrounding it. Marin has observed that to enter it, the essential condition is to abandon your car in the endless parking lot and reach the boundary of the dream city by special little trains.”9 For the heritage lobby the attraction of such schemes is the control of the balance of access and conservation. Such schemes do not, in general, engage the visitor in the central purpose of the preservationist cause which has concerns about the future, as much as the present cultural heritage significance. They are a response to visitor management and congestion management at iconic cultural heritage sites, framed by the consumerist culture, fuelled literally, and metaphorically, by the desire and possibility of global travel.

In common with Machu Picchu, visitor numbers at Stonehenge soared during the first decade of the 21st century reaching approximately 900,000 by 2008. Stonehenge received only around 100,000 visits in 1951; steadily rising to over 700,000 visitors by 1990, spurred on by the ready availability of air, car and coach travel. Today about 50% of visitors are from overseas, 30% arrive as part of a group and 5% are education visitors. More than 70% of the education visitors are from overseas. The Summer Solstice, the opportunity to experience the stones without the fences attracted 30,000 people in June 2008; according to eyewitnesses “a crowded somewhat dismal occasion in the grey dawn”. Somewhat ironically, a Druid protest is a corollary to the government’s scrappage of plans to remove fences around Stonehenge, build an underpass and grass over the A344. King Arthur Pendragon’s campaign, with consent from the Council of British Druid Orders, seeks to allow visitors to walk around and touch the stones rather than remain in a visitor centre and be confined to marked-out trails.

The recently revised short-term improvement programme for Stonehenge is a co-operative venture, with a 20 year life-span, seeking attainable incremental changes by the time of the London Olympics in 2012. Denton Corker Marshall has again been appointed to design the £25 million Visitor Centre, a scaled-down project at the edge of the World Heritage Site, with a brief to pay special regard to the sensitive landscape and other environmental issues. The government hailed the plans “sustainable and affordable”. Airman’s Corner, the chosen site for the visitor centre, is about 2.5 km (1.5 miles) west of the current visitor centre. As a 21st-century solution to the dual challenges of improving visitor access and conservation, the plan makes use of the existing road for an efficient, all-weather visitor transit system. The planned closure of the A344 close to the monument, if implemented, will re-unite Stonehenge with the ancient processional avenue and improve the setting of the monument. The closure of the A344/ A303 junction (Stonehenge Bottom) will also eliminate a traffic accident black spot. Finally, grand designs shelved, the government and heritage organisations hope to fulfil their long held commitment to improve the facilities and presentation at Stonehenge and take roads out of the landscape. The opportunity to revitalise Stonehenge with a sense of place and as an inspiration for the future is also a possibility.

What is Stonehenge? It is the roofless past;
Man’s ruinous myth; his uninterred adoring
Of the unknown in sunrise cold and red;
His quest of stars that arch his doomed exploring.
And what is Time but shadows that were cast
By these storm-sculptured stones while centuries fled?
The stones remain; their stillness can outlast
The skies of history hurrying overhead.10

Living memory: the impact of redundant & modern technologies
Loss of a sense of place and the spirit of a place is marked when technology becomes redundant in living memory. The Thames Gateway London is the UK’s largest growth area and a national regeneration priority. The automotive industry at Dagenham and Chatham Naval Dockyard offered large scale employment opportunities in the 20th century. The new vision for Dagenham Dock is as a Sustainable Industrial Park, developing environmental technologies.

Chatham Dockyard

Chatham Naval Dockyard closed in 1984 resulting in the loss of more than 7,000 jobs. With the loss of jobs came the loss of self-esteem. Aspirations disappeared. The large area occupied by the Dockyard was an empty shell. Other companies closed: Metal Box, Wingates (Dumper trucks) and a BP Refinery. Redefining and reclaiming a sense of place has been an on-going activity with cultural heritage playing a central role. Chatham Historic Dockyard Trust is celebrating its 25th anniversary. Part museum, part incubator for small businesses, the Trust was set up immediately the Dockyard closed, taking responsibility for the 18th century core of the old Royal Dockyard. Chatham Dockyard and its defences have been on the UK Government’s shortlist of potential World Heritage Sites for 10 years. Slow to capture the fashion for industrial and military heritage inscriptions the local authority was a late comer to commit to a bid for World Heritage status, a sign of the continuing loss of self-worth. Over the past five years a successful World Heritage Partnership has changed this situation.

Chatham is the world’s most complete example of a Historic Dockyard from the age of sail. When Dockyards were the industrial centres of Europe, Chatham was in the forefront of naval and military technological progress. Now it is a research and teaching centre for engineering and technology. The local authority has recognised that a ‘sense of place’ is essential in developing and maintaining a strong sense of identity, civic pride and belonging, which should be ‘based on the area’s cultural significance’. Medway Waterfront Renaissance Strategy confirms that there is a place for conservation-led regeneration which will contribute to the tourist and visitor business economies.

The significance of cultural heritage is not a static concept: the historic significance of a site is perceived through current values. Epitomising economic decline, it took 20 years before the heritage assets in Chatham were recognised as a benefit rather than a burden, a spring board for future prosperity and community well-being. Cultural tourism, business, education and leisure opportunities provide the justification to retain and develop a community’s cultural heritage. Brand Identity and pride of place in a globalized world are others.

The paradox of modern media

Dynamic, integrating, diversifying and separatist elements of cultural heritage significance are intensified by modern communication technologies. Digital communication technologies: television, telephone and internet, can have both positive and negative impacts. The capacity of television, telephone and the internet to isolate migrant communities from the places where they actually live because of the possibility of continuous contact with their cultural roots, backed up by regular visits ‘home’, is problematic in the 21st century. The sense of place remains a memory nurtured down the generations.

In contrast, television and the internet play a major role in sustaining the diversity of the cultural expressions of minority and ethnic communities wherever they live, creating a new sense of place. Culinary traditions, ritual and worship are played out in homes, on the streets, in cafes, restaurants, churches, mosques and temples. The shift from the intangible to the tangible cultural heritage began amongst faith communities in the UK in the late 19th century, with the process of converting houses and chapels. Number 8 Brougham Terrace, Liverpool, became the first mosque in England in 1889. Over £250,000 has been received in pledges for the restoration work, raised through a Bangladeshi-language TV channel. In an interview one of the campaigners commented: “It is a heritage site for us ... and extremely important especially for the younger generation who are searching for roots in this area. We can say your roots are here ... you have something concrete to look to ...”

The process has moved forward to creating new faith buildings. In north Kent, the recently completed £11m project to build a Sikh temple employed stonemasons from India to clad the building inside and out with granite and marble. It is a future heritage site for 21st century Britain; a community of communities; and a reversal of the shared heritage of empire.

**Section 2**

Paradise Regained - the impact of conservation technologies on perceptions of cultural heritage

Conservation: a hidden science
Hadrian’s Wall

Hadrian’s Wall has been the subject of continuous experiment in terms of heritage management and sustainable development since the first World Heritage Site Management Plan was written in 1996. The core principle in the third iteration 2008-2014, is management based on the values of the site, influenced by research supported by the Getty Institute. Part of the trans-national Frontiers of the Roman Empire World Heritage Site the Wall is an impressive sight. Stretching for 75 miles (120 kilometres) from east to west, mostly across the desolate, undulating moorland and the urban built up area of Tyneside, there are also the archaeological remains of forts, milecastles, temples and turrets.

Photograph 4: Hadrian’s Wall, Housesteads Fort

The Hadrian’s Wall brand is used to promote tourism in the North of England in order to combat both rural and urban poverty. Current conservation measures, however, are largely invisible to the general public, particularly the policy of leaving sites grassed over. Failure of tourism planning became a cause celebre in 2003 when the Hadrian’s Wall Path was opened as a National Trail. It immediately captured the public imagination. The press release was positive: ‘Hadrian’s Wall Path is part of a £6 million investment by the Countryside Agency that will open the area to tourists, play a key role in protecting the fragile monument for future generations and bring much-needed jobs and income to the rural economies in Northumberland and Cumbria.’

Two years later the same government agency published a damning report. ‘Walkers put Hadrian’s Wall on road to ruin’ was the headline in the Times newspaper. “The World Heritage Site survived invasions and battles but is being wrecked by a surge in tourism. Hadrian’s Wall is in such a dire state of deterioration that parts of it should be closed to the public... By immediate, I mean this week, today — now” commented the report’s author, an archaeologist and UNESCO consultant. “Very little is being done to stop the destruction of such an important World Heritage Site. The situation is desperate.” His remarks caused consternation amongst local businesses at the peak of the tourist season.

What were the reasons for this debacle? Fowler blamed the lack of management. ‘It’s not the walkers; it’s the lack of management of the walkers and the lack of management of the trail which is causing the erosion and the wearing of the path which in places is 10 to 15 cm deep.’ Tourism planning and visitor management had certainly failed. Some 400,000 people used the trail during the first two years, but no more than 20,000 people were expected when the trail was planned. There are more than 700 owners of the Wall: at that time only around 45 volunteers acted as ‘the eyes and ears’ of this long distance National Trail.

The majority of visitors were, and still are, unaware of the conservation issues identified by the experts. In 2003 walkers might have encountered temporary wooden signs, designed to blend into the landscape and asking them not to walk on the archaeology, in places where fragments of the Wall lie under the surface (if they, the walkers, could work out which grass-covered mound hid remnants of the Roman era). At one stile, located where the main path led over a stone boundary wall, the National Trust, a major land owner, had placed a discrete but durable metal sign: ‘In the interest of conserving the archaeology would visitors please keep off the Wall’. Oblivious to the significance for conservation of these brief entreaties walking on the Wall, as well as alongside the Wall, continues to be a feature of many souvenir photographs.

The distinction between conservation and maintenance; permanent damage and temporary unsightly wear and tear which can be repaired, are not clear to the general public. Hadrian’s Wall has been around for almost 2,000 years. This year a section of the wall near Haltwhistle, Northumberland, was removed from the English Heritage ‘At Risk’ register. Wandering farm animals and the harsh effects of the weather had left the fragile core of the Roman remains unprotected. Restoration work was urgently needed. The popularity of public access to the Trail along the Wall has taken conservation to the top of the management action list.

Crucially, one of the principal aspects of the world heritage mission is missing at Hadrian’s Wall, as at many other world heritage sites: public awareness-building activities relating to preservation and conservation. If the balance is not redressed, Hadrian’s Wall is in danger of being seen in the same light as the Victoria and Albert Museum in its 1980s advertising campaign: ‘V&A - An ace cafe with quite a nice museum attached’. The National Trail’s marketing slogan is implicit rather than explicit in its reference to the archaeological heritage: Hadrian’s Wall Path - ‘Alongside History from Coast-to-Coast’.
Industrial heritage ruins: the setting for ‘a great day out’

Ironbridge Gorge Museum has a continuing conservation dilemma at its Blists Hill site. Whereas Ironbridge Gorge World Heritage Site (1986) recognises the area’s unique contribution to the birth of the Industrial Revolution, from the museum’s inception (1973) at the Blists Hill site, rescued buildings gradually took precedence over the original industrial archaeology. The site contains \textit{in situ} the remains of previous industrial activity, a stretch of the Shropshire (later Shropshire Union) Canal, Blast Furnaces built in the middle of the nineteenth century, and substantial remnants of a Brick & Tile works which covered the whole of the top of the site by the end of the nineteenth century, as well as the Hay Inclined plane, joining the Blists Hill canal to Coalport and from there on to the River Severn. These Blast Furnaces replaced the riverside Bedlam furnaces - where Abraham Darby’s Iron Bridge was cast. Raw materials and the pig iron produced on site were transported by canal. On site this remains a largely untold story.

The ruins of Blists Hill Blast furnaces provide the dramatic backcloth for a Victorian town experience revamped for the 21st century with a new visitor centre, new shops in Canal Street and an Incline Lift to take visitors from the top of the recreated Victorian Town down the steep slope to the Green below. Seen as ‘a great day out’, and with paying visitors up by 20\% compared to last year, questions of conservation are sidelined in favour of a living history lesson at this popular visitor attraction. The open air museum is a themed experience with costumed demonstrators; an experience made possible by the growth in car ownership and technical ability to move historic buildings threatened by major new developments. The Victorian Town is a heritage visitor attraction in an authentic 19th century industrial archaeological setting. Questions about these difficult conservation decisions and subsequent actions are not on the agenda from the visitor perspective, thus reinforcing the Disneyesque quality of a visit at the expense of encouraging the development of visitors, as partners, in conservation.

On-line communities: cultural tourism, cultural exchange & creative solutions

Worldwide the informal promotion of cultural heritage, cultural tourism and sharing of expertise amongst heritage communities has benefitted from ready access to digital communication technologies.

Digital communication technologies support cultural exchange, cross-cultural understanding and global interaction, relating to the intangible heritage, backed by images of the tangible heritage of places on a scale unimaginable, even 10 years ago. Pakistani students in Karachi have created a collaborative, international on-line network of fables and folktales which celebrates and shares the cultural heritage of specific places. The idea is a digital re-creation of the way stories were passed along by caravans and travellers, taking goods to and from India and Central Asia along the old Silk Road. In Peshawar, a city on the Afghan border, there still is a place called Qisa Khawani Bazaar, a name that means "market of storytelling." Such projects reinforce the idea of a sense of place, both lost and found, linked to evolving living traditions, with stories which absorb outside influences shared amongst others around the world.

Small, mainly voluntary, groups form large special interest groups on-line on a global scale. Railway preservationists and steam enthusiasts underpin the efforts of those promoting historic railways as socio-technical systems. The Mountain Railways of India World Heritage Site includes three railways: Darjeeling, Nilgiri, and Kalka Shimla (1999, 2005 and 2008). Indian Railways and preservationist groups worked together to achieve World Heritage status for the third addition - Kalka Shimla and its ‘toy’ train. Darjeeling Himalayan Railway (DHR) runs steam trains every day. On the unofficial website, worldheritagesite.org, set up in the Netherlands and designed for travellers collecting and commenting on the World Heritage Sites they have visited, the community forum includes a discussion on the Mountain Railways of India. One USA contributor who had not himself visited the railway recorded how his group of hobbyists spent two and a half years recreating the DHR in computer simulation using the most up to date Digital Elevation Modelling data and photographic sources. “The simulation is in real time meaning the trip from Sukna to Darjeeling takes about 8 hours. We have a website at: darjeelingtrainz.com. Come and visit us!”

On-line marketing and promotion of cultural tourism is often economical with the truth taking little account of sustainable futures. Iconic cultural heritage sites are made more appealing and seductive by the quality of digital colour images now available. Idyllic photographs and video clips rarely show the crowds of people, coaches, new-build hotels and rubbish. Tour companies, governments and local authorities alike have little incentive to stop the crowds coming, although this situation is slowly changing in rhetoric if not reality. The reaction to the economic down turn in Europe by government-backed marketing promotions is a case in point.
Communities in formerly remote places are no longer isolated from one another. Protests from local people at some honey-pot sites are getting louder. A group of Easter Island residents are seeking the same controls as in the Galápagos archipelago in order to avoid ecological disaster caused, as they see it, by hordes of tourists; but they lack support from those on the island who survive on visitor dollars. Despite controls, the Galápagos Islands saw an increase in visitor numbers from 40,000 in 1990 to more than 170,000 last year, making tourism a major source of income for the islands and mainland Ecuador.

High-volume tourism changes places. Few tourists realise the irony that their trip is putting strain on the very unspoilt beauty they expect to see and are encouraged to find from the media images. Egypt's Supreme Council of Antiquities has taken a series of measures to protect the tombs, including restrictions on the number of visitors who increase humidity levels. The country has come a long way in tackling environmental damage since 1995, when it had to be dissuaded from building a motorway alongside the pyramid of Khufu at Giza. Venice is discussing plans for pre-book visits to the city to limited numbers on any one day. The plans have been described as "undemocratic" by the Italian State Tourist Board.

Elsewhere, I have argued that we need a sea-change from visitors as 'people who stare' to 'people who care'. This will require more inclusive visitor management and enhanced roles for on-line marketing, interpretation and heritage learning. To date access has been confined largely to tackling physical issues, with intellectual and emotional access given little attention. Visitors are one of the major stakeholders in cultural heritage. Backpacker fatigue may be solved by the exigencies of the recession; otherwise these migrants of the leisure world are ripe for conversion to become ambassadors for cultural heritage conservation, a topic for further discussion in detail elsewhere, and one that must surely include wide-scale use of internet technology to galvanise and mobilise support?

Constructive conservation versus laissez-faire

Changing perceptions of cultural heritage values and the complex relationship between old and new technologies in the global village, has been tackled in different ways in regeneration schemes. The redevelopment of Kings Cross Station, London and adjacent area; and the technologies associated with global trade and climate change in Great Yarmouth, Norfolk, England are contrasting case studies.

Kings Cross

Recognition of the distinctiveness, offered from rescuing and restoring historic buildings, has been a growing realisation and practice in western societies, although not in China. In Kashgar, a melting pot of civilizations, the old city is coming down, with only a zone to be rebuilt in Uighur style for the million tourists who visit in search of Silk Road romance. According to Chinese officials tourists will be shown ‘international heritage scenery’. By 2012 tourists arriving at St Pancras, London’s newly refurbished international rail terminal will exit to see the adjacent newly restored Kings Cross Station. The capacity of building technologies to combine old and new have had an impact. In parallel, heritage experts are taking a positive and collaborative approach to conservation: the focus is on actively managing change. This involves heritage and development professionals working together as a team from the outset. The process, now labelled Constructive Conservation by English Heritage, is being put into practice at King’s Cross, one of the most important regeneration projects in London, with over 20 historic buildings and structures.

Kings Cross is a flagship project in the centre of London providing a new university campus, residential flats, commercial and retail, in an area of London that was renowned for sleaze.

How are decisions arrived at in order to make the right interventions? A new methodology was needed. Constructive Conservation is a progressive values-based approach aiming to recognise and reinforce the historic significance of places, while accommodating the changes necessary to ensure their continued use and enjoyment. Guided by four core values: historic, aesthetic, communal & evidential; heritage significance is worked out objectively. At Kings Cross, decisions have been made as to which parts of a historic site must be kept and which less-important parts could be changed, giving the developer greater freedom to use creative solutions.

Great Yarmouth

Great Yarmouth, on the eastern fringes of the U, is a little-known tourist town and sea port. An economically deprived community by European standards, Great Yarmouth was a medieval port visited by Captain Cook and Admiral Lord Nelson. The faded seaside resort disguises a distinguished past and the more recent memory of a fishing industry which disappeared half a century ago.
Described by Charles Dickens as ‘the finest place in the universe’ for Bloaters (the local people) in his semi-autobiographical novel David Copperfield, this town and its setting is an urban and cultural landscape which exhibits the technological response to global trade and climate change: a new container port, preventive measures against flooding and wind farms.

In the unabashed desire to embrace new technologies and ameliorate the impact of climate change, aesthetic considerations concerning the historic fabric are assuaged. The 1960s were the last heyday for tourism. Great Yarmouth is the recipient of a confusion of coastal town regeneration strategies; small scale heritage-led regeneration projects; experiments in sustainable energy technologies with an early off-shore wind farm, and (too late) a new deep water harbour for global trade. It is already a support port for the offshore gas industry in the southern North Sea.

‘Regaining paradise’ in this community is about employment opportunities. Cultural heritage values are muted. In 2009 the Zhen Hua 6 arrived from China with two massive cranes for the new container terminal, completely destroying the harmony of the landscape: they were redundant immediately. The focus has already shifted to the renewable energy sector. Plans have been altered to expand the port to accommodate this trade, including the decommissioning of redundant gas platforms and the construction and maintenance of off-shore wind farms. Dockers have been dismissed in favour of casual labour. An economic downturn could be considered an advantage since, until a third river crossing is built, container traffic will thunder past the historic buildings on the South Quay, including the 16th century Elizabethan House Museum and the 18th century merchant’s house, now the Nelson Museum, on a road reinforced for the purpose.

Whereas other places around the world are moving port activities away from urban centres, the newly constructed deep water port in Great Yarmouth is located between two seaside resort areas. Visual impacts and noise pollution from a possible thriving harbour in the future, have not been the foremost considerations. Off-shore wind farm construction engendered little debate locally and was seen in some quarters as an additional tourist attraction. Are these the industrial heritage sites of the future?

Photograph 7: Great Yarmouth UK: seaside resort with historic theatre, ballroom and hotel (left) in a conservation area dwarfed by the cranes of the new 21st century port: off-shore wind farm in the distance (right)

The impact of climate change is an ever-present concern. Last yea, the River Yare breached flood defences and the town suffered from severe flooding in 1953. Located on a sand spit in the North Se, on a stretch of coast subject to rising sea levels and coastal erosion, the use of renewable energy is welcomed. The Shoreline Management Plan has the stated policy of ‘holding the line’ by maintaining and replacing existing defences. Principal heritage sites in Great Yarmouth are above the flood plain. Further north at Happisburgh, where the draft policy allows cliff erosion to continue; houses, a 12th century church and an Arts and Crafts manor house, are likely to be lost to the sea by 2050.

Conclusion

Notions of cultural heritage values change on a continuous basis, influencing conservation decisions by accident or design. The thesis of this paper suggests that from an examination of the evidence, a new dynamic for the significance of cultural heritage monuments and sites is needed, together with more flexible models for cultural heritage designation, monitoring and evaluation.

This paper illustrates the significance of cultural heritage as a dynamic concept as perceived through the lens of the 21st century. In attempting to analyse the loss of a sense of place, and loss of the spirit of a place, through the impacts of technological change, travel and migration; Paradise Lost, the iterative process of conservation dynamics becomes increasingly apparent. Amongst local communities suffering loss of employment and self-worth from the impact of technological change, gradually the loss of a sense of place is turned into pride in the past through a greater understanding of their inheritance and a new updated sense of place. Amongst migrant communities Paradise Lost, conserved through memory sustained by digital technologies, can become Paradise Regained in tangible form.

Cultural tourism is a fraught and contested area. Fuelled by cheap air travel, World Heritage Sites have become the icons of cultural heritage tourism worldwide, a trusted brand. However, access and conservation can only be partners in a sustainable future with an excellence in resource management which has so far eluded most of those cultural heritage sites with the special ‘wow’ factor which have also attracted large numbers of tourists. The capacity to limit visitor numbers, or to close cultural heritage sites for on-site visits, requires government action at the highest level and a long-term view of the importance of irreplaceable cultural heritage assets beyond the rhetoric of sustainability. Paradise Regained all too readily becomes Paradise Lost.
The expansion of a global conservation movement has been shaped and formed through the desire of travellers to experience cultural difference, fears of the homogenisation of cultures and the increasing capacity of technology to support a diversity of cultural heritage and a burgeoning heritage industry. Cultural heritage, I would argue, has a more central role in sustainable futures than has been acknowledged hitherto. Cultural heritage is at the core and not the periphery of creating sustainable environments. In the UK, where it could be said there is a surfeit of historic buildings, listed buildings are adapted and converted for re-use in ways unimaginable even ten years ago.

At the international level, questions about the impact of the listing process, the conscious development of conservation awareness amongst all stakeholder, and decisions about conservation priorities are raised, especially in relation to World Heritage Sites. Attitudes towards cultural heritage have changed since the inception of the World Heritage List over 30 years ago and continue to do so.

Tourism associated with World Heritage Properties, sensitively and successfully managed, is rightly recognised as a potent tool to conserve and enhance conservation outcomes while contributing to sustainable development of a destination and its local communities. The democratisation of cultural heritage and possibilities of digital technologies have only just begun to make their impact beyond rampant consumerism. Cultural shoppers are increasingly seeking out products with soul. Irreplaceable heritage resources do require protection, as well as responsible and enjoyable access to them. But the dynamics of cultural heritage creation needs greater recognition too. Whether this means a new approach to the listing process is open to debate.

Figure 1: World Tourism Organisation statistics

Figure 2: Machu Picchu
Figure 3 - Stonehenge

Figure 4 Chatham Dockyard
ICOMOS Scientific Symposium – Malta, 2009
Changing World, Changing Views of Heritage

Theme 2: Intangible
Sue Millar

Figure 5 Hadrian’s Wall, Housesteads Fort

Figure 6: Aerial View - St Pancras International Station (left) with Kings Cross Station (right): ‘King’s Cross has heritage embedded in its DNA’

1
Figure 7: Kings Cross Redevelopment London UK: Building Materials saved for ‘Creative Solutions’

Figure 8 Great Yarmouth UK: seaside resort with historic theatre, ballroom and hotel (left) in a conservation area dwarfed by the cranes of the new 21st century port: off-shore wind farm in the distance (right)
1 John Milton *Paradise Lost* 1.60, 1667
2 *Tourism Congestion Management at Natural and Cultural Sites*, Guidebook, World Tourism Organisation, January 2005
3 Oliver Bennett, *The Guardian*, April 30, 2005
5 [www.sacredland.org](http://www.sacredland.org) accessed March 2007
6 K. Sassa et al, *Landslide Risk Evaluation in the Machu Picchu World Heritage*, Disaster Prevention Research Institute, Kyoto University, 2002
8 Pablo Neruda, *The Heights of Machu Picchu*, 1944
12 Interview with Dr Akbar Ali by Karl Mansfield, *Independent Newspaper*, 2 January 2009
13 Marta de la Torre, Ed., *Hadrian’s Wall World Heritage Site: A Case Study* English Heritage, with Getty, Conservation Institute, Los Angeles, 2003
14 Countryside Agency (now part of Natural England) *Press Release*, 23rd May 2003
15 Dalya Alberge, *The Times*, 9th August 09, 2005
16 Ibid
17 Sue Millar, Managing world heritage archaeological sites: the significance and quality of the visitor experience and the need for new approaches to interpretation, UNESCO World Heritage Centre, Tourism Planning at Major World Heritage Archaeological Sites, Granada, Spain, February 2006
18 Quotation: Argent Property Developers, King’s Cross Central Limited Partnership [www.argentkingscross.com](http://www.argentkingscross.com) accessed June 2009
19 Constructive Conservation in Practice, English Heritage, 2008
20 The Shoreline Management Plan, Amended Report North Norfolk District Council, 2006