Broken Hill: a comparable case study of sustainable heritage management

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Abstract

Since the 1960s, Broken Hill, along with many industrial cities in the developed world, has experienced a period of steady de-industrialisation. In an effort to combat the socio-economic decline commonly associated with this process, governments have increasingly attempted to utilise the heritage value of sites such as Broken Hill. The demands and expectations associated with such heritage-led regeneration strategies is one of several challenges facing managers of industrial heritage. The recent affirmation by UNESCO that heritage is ‘an instrument for the sustainable development of all societies’ offers an additional but complimentary challenge, not only to managers of industrial heritage but to heritage management practice more generally. This paper reviews these challenges and, using a case study of six industrial World Heritage sites, provides research evidence that indicates the need for procedural and institutional innovation if industrial heritage sites are to respond to the challenge of sustainable development. The paper concludes with a model of sustainable heritage management that is relevant to complex heritage sites such as Broken Hill.

Introduction

Since the 1960s, Broken Hill in Australia’s arid interior, along with many industrial cities and regions in Europe and the Americas, has experienced a period of steady de-industrialisation. At Broken Hill, the silver, lead and zinc that supported mining activity for over 100 years, has been all but exhausted. At another significant Australian site, the BHP steelworks in Newcastle, obsolete technology and global competition ended in closure of the plant in 1999, after 84 years of production. Unlike Broken Hill, however, little of the original BHP infrastructure remains in Newcastle. Both these sites, and many like them, have significant cultural value for local communities. They also contribute, at a broader scale, to a collective understanding of national identity.

Industrial cities such as Broken Hill face several challenges made unique by their scale, complexity and perceived heritage value (Figures 1 and 2). The first of these is the recent affirmation by the United Nations Educational, Scientific and Cultural Organisation (UNESCO) that ‘the protection and conservation of the natural and cultural heritage are a significant contribution to sustainable development’ (UNESCO 2005:2). This implies an approach to site management that is long-term, holistic and participatory (Simpson 2001). The second challenge is the increasing utilisation of the link between heritage and identity in public policy (Colomb 2007; Robinson 2005; Smith 2006). This implies an approach to site management that values diversity and supports the continual evolution of tradition and local associative meaning (Sullivan 2004). These challenges are particularly significant in areas undergoing the socio-economic disruption associated with de-industrialisation and, as this paper will also show, they are closely tied to sustainable development.
So what are the issues facing the sustainable use of industrial heritage sites such as Broken Hill, and how can the conditions for their sustainable use be met? To date, several challenges have been identified. These include the inadequacy of existing definitional, procedural and institutional frameworks (Williams 2006), the difficulty of developing practical communication, participation and implementation strategies (Ruhnane 2004; Sharpley 2000; Simpson 2001) and the complexity of evaluating policy intervention outcomes (Dwyer 2014; Landorf 2011; Roberts 2006; Stubbs 2004). Furthermore, evidence linking urban and regional regeneration strategies with enhanced sustainability is lacking (Bramley & Power 2009; Colomb 2007), as is evidence supporting the effectiveness of heritage-led regeneration strategies in industrial regions (Cole 2004; Hospers 2000; Jones & Munday 2001). More recently, Harrison (2013) has questioned the long-term sustainability of current heritage listing practices, while Rautenberg (2012) and Reeves et al. (2011) have considered the tensions between local communities and external agents in the choice of what to memorialise.

Additional studies have shown limitations in the effectiveness of inter-organisational collaboration (Wilson & Boyle 2006), strategic planning (Rodwell 2002) and stakeholder participation at World Heritage sites (Aas, Ladkin & Fletcher 2005). Limitations have also been identified in the strategic management skills of heritage managers (Garrod & Fyall 2000; Watson & McCracken 2002). These are all considered desirable operational characteristics or strategic dimensions of sustainable development. While these studies contribute to a better understanding, they do not holistically evaluate the integration of sustainable development principles at heritage sites, nor do they specifically consider industrial heritage sites.

In the light of these findings, this paper sets out to establish a holistic framework for the evaluation and management of sustainable development at industrial heritage sites. The paper starts by identifying two strategic dimensions of sustainable development and highlighting the inter-related expectations of public policy. Using a content analysis of six industrial World Heritage site management plans, the paper then provides research evidence that indicates the need for procedural and institutional innovation if industrial heritage sites are to respond to the challenge of sustainable development. The paper concludes with a model of sustainable heritage management that is relevant to industrial heritage sites and other complex heritage sites such as historic urban landscapes and city centres.

**Definitions and theoretical foundations**

*The dimensions of sustainable development*

Despite widespread consensus about the general objective of sustainable development as being "development that meets the needs of the present without compromising the ability of
future generations to meet their own needs’ (WCED 1987), the definition of more pragmatic dimensions remains a complex issue. As a starting point, most sustainable development models require a holistic approach that balances the economic, environmental and social dimensions of sustainable development over time (Johnson 1993). While a foundational principle, the complexity of achieving a balance across the three sustainability dimensions is manifest (Basiago 1998; Hunter 1997, Mowforth & Munt 2003). Williams (2006), for example, points to the non-linear nature of relationships across the three dimensions as a major barrier. Bull and Jones (2006) raise questions about the capacity of existing governance models to distribute resources evenly while Littig and Griessler (2005) and Landorf (2011) emphasise the lack of established and comparable decision making indices across dimensions, and Rydin, Holman and Wolff (2003) highlight the impact of political influence on decision making.

Most models of sustainable development also include multiple stakeholder participation and, in particular, community empowerment as cornerstones of the development process. However, achieving authentic democratic participation is highly challenging (Bull & Jones 2006) while defining ‘the community’ is exceptionally problematic, particularly for heritage sites (Hall & Richards 2003). For some, the proposition of extensive and equitable community participation is an idealistic concept with little chance of effective implementation (Getz & Jamel 1994; Aas, Ladkin & Fletcher 2005). However, failure to adequately reconcile the full range of opinions present in any community is likely to exclude many from the benefits of a heritage resource and reduce the effectiveness of any sustainable development initiatives.

In considering the strategic dimensions of sustainable development, two provide a useful framework for further consideration—the use of a long-term and holistic (strategic) planning process, and the participation and empowerment of multiple stakeholders. There is strong support in the literature for the use of a formal planning process that recognises a circular model of cause and effect beyond the immediate activities of any organisation (Mintzberg 1994). Strategic planning is considered a foundation of conventional management theory (Johnson & Scholes 1999; Viljoen & Dann 2000) that ‘implies a long-term perspective, requires consideration of multiple situational influences, is…goal oriented, and can accommodate a wide variety of conflicting perspectives’ (Simpson 2001:12). This embodies many of the principles of sustainable development established in *Our Common Future* by the World Commission on Environment and Development (WCED 1987) and is suggested as an appropriate framework for sustainable heritage management.

As an idealistic concept, the meaningful engagement of multiple stakeholder groups throughout the decision making process is also widely accepted as pivotal in achieving a collective sense of responsibility for the sustainable development of a resource (Aas, Ladkin & Fletcher 2005, Jamal & Getz 1995, Selin 1999). A critical assumption of this approach is that local stakeholder groups have a more direct need to reduce the inter-generational impacts of any resource use. Milne and Ateljevic (2001) also suggest that local stakeholders have a greater understanding of the economic, environmental and social needs and resources of a community, and how these might be best integrated into regional and national systems.

Though sustainable development, stakeholder participation and strategic planning are all established concepts, they may be of more theoretical than practical value. Simpson (2001) notes, for example, that despite the general acceptance of collaboration theory, specific examples of community involvement in planning processes are rare. Where it does occur, input is generally restricted to consultation in relation to strategies developed by formal planning bodies, rather than broad based participation in strategy development. On other occasions where genuine community participation has been sought, the practical difficulties of achieving any form of equitable consensus have resulted in questionable outcomes (Ass, Ladkin & Fletcher 2005; Bull and Jones 2006). This is in addition to the problems noted earlier of establishing who the legitimate stakeholders are in the first instance.

If achieving effective and empowering community participation is difficult in practice, similar problems associated with the strategic planning process also need to consideration. Key amongst these is that the existence of a formal planning process does not guarantee a balance
across the three sustainable development domains. As long as environmental and economic objectives are more readily quantifiable than social objectives, there will be problems with the equitable treatment of the three sustainability dimensions (Littig & Griessler 2005). As long as there are political imbalances in the decision making process, the more powerful members of communities will continue to impose their views of what constitutes sustainable development over the less powerful (Agyeman & Evans 2003).

For many, if sustainable development is to become a reality, the fundamental premise of the global economy needs to change, as do current procedural and institutional models. Williams (2006:260) suggests that, rather than traditional hierarchical approaches, interdependent organisations are required with ‘shifting and opaque boundaries between public, private and voluntary sectors; frequent interactions between interests based on the need to share resources and negotiate common purposes; and an enhanced role for trust’. This implies new forms of collaborative inter-organisational relationships and structures, and new skills in entrepreneurship, negotiation, networking and relationship management.

**Sustainable development and the expectations of public policy**

Having established two strategic dimensions of sustainable development, this section will consider the link between sustainable development, public policy and heritage. Immediately following the publication of *Our Common Future*, the academic literature focussed on poverty eradication as the major strategy for socially sustainable development. More recently, inequity has been associated with concerns about social exclusion and poor social cohesion (Colomb 2007; Forrest & Kearns 2001). In much of the developed world, social policy now parallels international agreements such as the *Johannesburg Declaration* with poverty eradication and social inclusion seen as essential for sustainable development (Bramley & Power 2009). Social inclusion, and by association social cohesion, has become embedded in policy discourse (Kennett & Forrest 2006; Colomb 2007) while the neighbourhood has emerged as an important social setting (Kearns & Forrest 2006; Lowndes & Sullivan 2007).

As an extension of this, policy aimed at addressing inequity and social exclusion has been associated with urban and regional regeneration initiatives. Since 1998, impoverished urban areas have been targeted through neighbourhood regeneration strategies (Colomb 2007). The recently successful World Heritage nominations of several relatively depressed de-industrialised areas in the United Kingdom are also evidence of a heritage-led regeneration approach. In Europe, despite significant policy and attitudinal variation, a consistent assumption that the neighbourhood is an important arena for shaping identity and social cohesion is evident (Kennett & Forrest 2006) while in North America, urban renewal has been encouraged through policies that promote informal collaborative networks at a local level (Davies 2002).

While playing to the sustainable development agenda, the driving force behind much urban and regional regeneration policy is the link between marginalised social groups, deprived neighbourhoods and social unrest. However, Robinson (2005:1412) argues that, while appearing as ‘evidence-based policy-making in action’, there is little other than causal association supporting such an approach. Colomb (2007:2) also suggests the need for ‘more empirical research on the practical outcomes of urban regeneration strategies’. Much of this official rhetoric fails to recognise the contested assumptions surrounding the concept of community and social mix. The result is that the social cohesion debate has tended to focus public attention on ethnic differences and highlight the negative assumptions made about multiculturalism.

The evolving policy agenda surrounding social sustainability has also grown to emphasise active citizenship and enhanced political participation. A central strategy toward achieving this has been the adoption of more participatory modes of governance. Two assumptions underlie this changing approach to the way societies are governed. The first is that the local community is an important arena for shaping social cohesion (Kearns & Forrest 2000; Kennett & Forrest 2006). The second is that enhanced political engagement leads to a growth in social capital, which is, in turn, linked to greater economic prosperity and social inclusion (Bull & Jones 2006). Social capital is seen, therefore, as the foundation of social stability and empowerment, and its absence a factor in neighbourhood decline (Middleton, Murie & Groves 2005). Irrespective
of the underlying assumptions and political overtones, there is growing emphasis on political participation in social policy (Bull & Jones 2006; Davidson & Lockwood 2008). A particularly relevant example is the use of partnerships to manage World Heritage sites in the United Kingdom. The following sections discuss how a model for sustainable heritage management can address these challenges.

Methodology

Sample frame and rationale

World Heritage sites were the most appropriate sample for this study for two reasons. Firstly, World Heritage is the pinnacle of international heritage significance based on universally agreed criteria, and secondly, that significance is subject to independent evaluation by recognised bodies of international experts. World Heritage sites are also subject to regular reporting and scrutiny. For these reasons, World Heritage sites should be expected to provide a best practice model of heritage management.

Of the 754 sites on the World Heritage List in 2005 when the study commenced, the 33 industrial sites represented an identifiable sub-category and one that most strongly related to the research question. Limiting the sample to those sites whose significance related to the period starting with the Industrial Revolution further increased the relevance. As protection for heritage sites is dependent on national statutory controls, a further limitation was that sites should fall under a consistent legal framework. Finally, to enhance the research validity through cross-site comparison, multiple sites with similar characteristics were included (Yin 2003). Six sites conformed to this sample frame. The sites shared a relatively intact physical state, an extensive scale, utilitarian physical fabric, complex layers of technical innovation and industrial processes, a relatively remote location, and an established site management plan. The selected sites were the Blaenavon Industrial Landscape, the Cornwall and West Devon Mining Landscape, the Derwent Valley Mills, Ironbridge Gorge, New Lanark and Saltaire (Figures 3 and 4).

Research methodology

Evidence for the remainder of the paper comes from a content analysis of each World Heritage site’s management plan, in particular the planning process, objectives and action plans. As the primary instruments guiding the management of each World Heritage site (Rodwell 2002; Wilson & Boyle 2006), there was an expectation that the strategic dimensions of sustainable development would be present in each plan. As the data for the study were text based management plans, and theory in relation to the principles of sustainability could be identified, a qualitative and directed content analysis approach was used. Qualitative content analysis employs a systematic classification process of coding and identifying themes to interpret the content of text data. A directed approach validates and extends an existing theoretical framework (Hsieh & Shannon 2005). In this case, the goal was to test the extent that the site management plans incorporated the two strategic dimensions of sustainable development, namely a long-term and holistic (strategic) planning process, and the participation and empowerment of multiple stakeholders. Forty-four assessment items across the following six coding dimensions were extracted from these two strategic dimensions:

- The situation analysis dimension was used to assess the extent that influences on the management of each World Heritage site (demographic, economic, political-legal, socio-cultural, technological) were identified as a starting point in the planning process.
- The strategic orientation dimension was used to evaluate the extent that a holistic and long-term planning approach had been used.
- The organisational design dimension was used to evaluate the extent that organisational systems and structures at each site were designed to support collaborative linkages between organisations and across policy fields.
- The stakeholder identity dimension was used to establish the extent that stakeholder values, needs and expectations were integrated into a strategic vision for each site.
The participation scope dimension was used to determine the breadth of stakeholder engagement and degree of influence stakeholders had on the decision making process.

The participation continuity dimension was used to determine the extent that the breadth of stakeholder engagement and degree of influence, identified at the start of the strategic planning process, was maintained.

The final coding instrument was based on an instrument constructed by Simpson (2001) and later adapted by Ruhanen (2004) and Landorf (2009a and 2009b). Simpson’s instrument was used to assess the extent that the principles of sustainable development had been integrated into nineteen New Zealand tourism management plans. The instrument had been subject to considerable efforts to reduce bias in its construction, including the use of an expert panel of independent reviewers and statistical analysis to verify reliability and validity. Coding items were phrased to require systematic evaluations of fact and care was taken to define any subjective concepts prior to analysis. For this reason, a forced evident/not evident coding response was adopted in this study rather than the three point scale adopted by Ruhanen.

Figure 3. World Heritage sites included in the study. Left top to right bottom: Big Pit National Coal Mine, Blaenavon, Geevor Tin Mine, Cornwall, Derby Silk Mill, Derwent Valley, the Iron Bridge, Ironbridge Gorge, Workshops and Dyeworks, New Lanark, United Reform Church, Saltaire (Photographs: C. Landorf).
Results

This section examines the major themes stemming from the content analysis categorised under each of the coding dimensions described above.

Situation analysis

All six management plans provided extensive historical backgrounds, inventories and maps associated with their claim for heritage significance. Natural features were detailed where integral to a site’s significance. All plans identified site-specific factors as key issues influencing the management of the site. Not surprisingly, protection of unique heritage values was identified as a key issue in all plans. Reference was made in five plans to site-specific risk issues and to there being pressure on the integrity of the historic fabric resulting from changes in use and technology. All plans identified visitor access and transportation management as key issues, in addition to research and education. Other key issues included marketing and promotion in three plans, monitoring and information management in five plans, resources and funding in two plans and management structures in four plans.

Two plans also mentioned the economic benefits of heritage to the local community and one discussed the capacity of local infrastructure. All referred to the political and legal environment in the form of the national planning framework but only one reflected on how this might evolve as a future influence and no plans considered socio-economic trends. None of the plans provided detailed local demographic, economic or visitor data or appeared to integrate this into the decision making process. Nor did any of the plans consider the impact of broader national or international trends, or provide a mechanism for the ongoing evaluation of these dynamic external factors. This leads to the conclusion that the planning process at each site remained relatively isolated from the surrounding macro-environmental context and focused on site-specific conservation issues.
Strategic orientation

A linear planning process was evident in all six management plans though differences were apparent in the extent of long-term and expansive strategic thinking. Aims generally referred to the distinctiveness of the site and provided a broad commitment to stakeholders. Four plans referred to protecting and enhancing the ‘character’ or ‘values’ of the site, and a fifth plan used the phrase ‘safeguarding the outstanding universal value’. Social and community goals were primarily evident in the economic goals and aims related to enhancing public awareness. Reference was made to promoting a ‘sustainable’ or a ‘holistic and integrated approach’ and ‘enhancing public awareness’. How aims and objectives were established was never clearly described, however, giving the impression that each plan was trying to generate, rather than having been generated by, community commitment to a vision. Only one plan described the methodology used, which consisted of a description of the organisations that prepared the plan and the data sources. One plan included an opportunities and threats analysis but confined the discussion to the site rather than the broader strategic environment. There was no evidence in any of the plans that a range of strategic alternatives had been evaluated. Managing information and developing indicators to monitor progress were both mentioned as key management issues in five of the six plans. However, strategies to develop quantifiable measures for less tangible issues, such as social well-being and equity, were not evident.

Organisational design

It was evident that all six management plans sought to establish a framework for long-term interorganisational collaboration. A steering group or partnership facilitated collaboration at each site. Partnerships were primarily composed of local and national government representatives, non-government agency representatives with heritage expertise, or major landholders within each site. Partnership size varied, as did the organisations involved and their participation in the implementation of objectives. Ironbridge Gorge had the smallest partnership with twelve members while the Cornwall and West Devon Mining Landscape World Heritage Site Bid Partnership included seventy-five members. New Lanark and Saltaire included private sector organisations while the Derwent Valley Mills included an industry association. All sites had a site coordinator to provide administrative support to the partnership and ensure coordination between members. The site coordinators role in holding partners accountable was not clear. Five of the sites had specialist technical panels that fed into the main partnership. Three collaboration facilitation mechanisms, identified by Wilson and Boyle (2006), were not so evident. These were multi-organisational responsibility for the implementation of objectives, action plans linked to a collaborative funding framework and performance measures, and formal arrangements for consultation. With a high degree of ownership and statutory authority complexity within each site, collaboration appears as much a matter of necessity as a commitment to the ideals of participatory management.

Stakeholder identity

All six management plans referred to some form of stakeholder consultation. How consultation processes were conducted, what communication methods were used, what understanding came from it and how it was integrated into the planning process was unclear in four plans. The vagueness of statements such as ‘consultations with public and private bodies and with the general public have taken place’, or this management plan follows ‘consultation with the local community and relevant organisations and agencies’, indicated an assumed authority in relation to the process and suggested it did not require a more explicit explanation. There was limited evidence of a systematic assessment of contemporary community values and attitudes, lifestyle features or quality of life characteristics, and no evidence of their integration into the planning process. There was also minimal evidence that the vision for each World Heritage site aligned with community values leading to an assumption that, however vague the process of consultation was, it equated to having a common understanding regarding the heritage value of a site.
 Participation scope

All six management plans detailed a partnership structure between varying numbers of key stakeholders. Local government agencies dominated the membership and the implementation of objectives in all six plans. An organisation or individual was deemed to have participated in the planning process if they had an active role in the implementation of objectives. The generic ‘public consultation’ process noted in four management plans was not included as participation because of the lack of evident influence over the planning outcomes. Objective implementation responsibilities were spread across government and non-government agencies, businesses, residents and visitor groups in all plans. However, local governments in three of the six management plans assumed the overwhelming majority of the objective implementation responsibility. While all six plans referred to consultation having taken place, it was evident that the consultation process had been directed by the heritage concerns of the relevant government and non-government agencies and major land owner groups who made up the partnership membership, rather than an open process of negotiation. The suggestion in one plan that ‘public consultation is an opportunity to secure understanding of and support for… management principles’, appears to be closer to the true scope of participation at four of the six sites.

 Participation continuity

Stakeholder participation in the prioritisation of objectives was considered integral to the development of joint responsibility for the planning process outcomes. None of the plans showed evidence of broad stakeholder participation in the prioritisation of objectives. This was due to the difficulty in gauging whether broad stakeholder participation did in fact contribute to the final chosen strategic direction. All plans listed a series of action plans or projects derived from an analysis of the key management issues. However, many projects were assigned to only one implementer and all of the plans lacking a comprehensive set of collaborative performance indicators. Also difficult to gauge was the extent that stakeholder relationships were subject to review. Though one plan did include an action plan to ‘develop and strengthen new and existing partnerships’, none of the plans clearly addressed the issue of ongoing partnership membership and legitimacy.

 A model of sustainable heritage management

It was evident from the analysis of the World Heritage site management plans that there are some weaknesses in the current planning process in relation to sustainable development. Firstly, an extensive situation analysis is a foundation for holistic and long-term decision-making. Despite an awareness of site-specific situational factors, there was no direct evidence of an engagement with trends in the broader national and international environment in any plan. Secondly, assessing a range of strategic alternatives and developing an equitable balance of economic, environmental and social objectives contributes to longer-term sustainability. While all plans followed a logical process of setting objectives and developing action plans to meet those objectives, social objectives and quantifiable measures for the less tangible values associated with each site were notable omissions. Thirdly, a vision that incorporates local values and attitudes contributes to a collective sense of responsibility for a site and enhances the connection between a local community and their heritage. There was minimal evidence that any of the plans addressed this issue. Finally, the capacity for all stakeholders to contribute to the management of a heritage resource is fundamental to empowering local communities, enhancing the equitable distribution of the benefits of that resource and maintaining local associative connections with a site. There was a clear commitment to stakeholders at all the sites in the study but collaboration appeared to be limited to providing comment on solutions developed by a small number of key stakeholders.

This suggests a model of current best practice heritage management that remains inwardly focussed on situational issues of immediate concern for the heritage site. The model, shown graphically in Figure 5 indicates an inwardly focussed organisation with a dynamic central core of key stakeholders who act relatively independently of each other. The strategic
orientation is segmented and project specific, with key objectives determined by individual partnership organisational agendas rather than collective negotiation. The organisation is fragmented, decision-making is hierarchical, and power rests with several major stakeholders, thus making the management of inter-organisational relationships difficult. Stakeholder identity is driven by an insular vision. Beyond the key landowner and agency members of the partnership organisation, the scope of stakeholder influence is limited and there is limited review of the partnership membership over time.

By contrast, a model of sustainable heritage management should focus on situational issues within and beyond the heritage site boundary. The model shown in Figure 6 indicates an outward looking organisation moving toward sustainable development as a coordinated whole in response to internal and external situational issues. The heritage resource and, therefore, the conservation of heritage values are shown as the major environmental factor influencing organisational objectives. The organisation has a strategic orientation that seeks to balance economic, environmental and social objectives that support the conservation of heritage values. The organisational design is shown as a set of common collaborative management processes, organisational structures and funding frameworks founded on a common vision and mutual trust. Decision-making is centred on collective negotiation, contextual needs and broad stakeholder participation. Stakeholder identity is driven by community values, needs and expectations that include a strong commitment to and understanding of heritage values. There is multiple stakeholder participation in the process, and that participation is subject to regular evaluation and continuous review as part of a long-term and holistic planning process.

**Conclusions**

This paper set out to explore the issues facing the sustainable management of industrial heritage sites such as Broken Hill. In doing so, it revealed widespread consensus about the fundamental objective of sustainable development, but little agreement in relation to the practical strategies for its implementation, and even less agreement about its validity for heritage sites. Even so, the literature did indicate support for the use of a long-term and holistic planning process, and the participation and empowerment of multiple stakeholders in that process. The paper also considered the increasing utilisation of the link between sustainable development and heritage in public policy. A content analysis of six World Heritage sites management plans then indicated that, despite moves toward a more sustainable approach at the policy level, there were evident problems associated with the application of those principles in practice.

The paper identified four key weaknesses—a limited engagement with broader local, national and global trends, a narrow definition of objectives and weak development of performance
indicators, an inadequate integration of local values and attitudes into a strategic vision for the site, and stakeholder collaboration limited to major government and non-government agencies. A model of sustainable heritage management has been proposed to address these weaknesses. The model integrates a conventional strategic planning process with the process of joint decision-making amongst stakeholders found in stakeholder collaboration and inter-organisational theory.

The study can be criticised as one-dimensional, it is indeed one part of a larger multi-method case-study. However, the findings do provide some insight into the problems associated with the implementing of sustainable development at heritage sites. Perhaps the most important lesson from this is that the management process should be viewed as dynamic, evolving in response to internal and external forces and changing collaborative arrangements. The research also indicates that at present, the focus of the site management process overly emphasises the preservation of tangible heritage value. This needs to align more closely with developments in World Heritage policy in relation to sustainable development and the definition of limits of acceptable change that might better support a more active relationship between local communities and their heritage. A further issue raised by the study is that greater attention should be given to the decision making process. While establishing lines of communication is relatively simple, it does not guarantee equitable or broad participation in the decision-making process or authentic inter-organisational collaboration. Finally, it should be noted that the application of the model presented in this paper is reliant on heritage managers having complimentary conservation, strategic management and negotiation skills, as well as access to the data to support the decision making process.

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