



THE VALUE OF HERITAGE: LITERATURE REVIEW



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1. INTRODUCTION

1.1 Context

In recent decades, the urban and socio-political fabric of our societies has been shaped by a range of inexorable global forces. Climate change, urbanisation and population growth, mass migration, the restructuring of the global economy, and the advent of the smart city, all have significant repercussions for the way communities and governments approach the built environment.¹

Cities are increasingly viewed as living, dynamic and complex systems comprising rich layers of history and collective memory. As an intricate fabric, woven from threads of the past and present, embedded in cities are not only our histories, but our plans, projections and desires for the future.

UNESCO views urban areas as the 'most powerful engines of human development' and highlights the hope placed in urban areas to determine mankind's future. ² In this context, culture is a 'powerful strategic asset' capable of creating cities and urban futures that are more 'inclusive, creative and sustainable'.³

Culture, which encompasses cultural heritage, is increasingly viewed as integral to sustainable development and, as argued by Hawkes, is the 'fourth pillar' of sustainability. ⁴

1.2 What is heritage?

Heritage is all the things that make up Australia's identity—our spirit and ingenuity, our historic buildings, and our unique, living landscapes. Our heritage is a legacy from our past, a living, integral part of life today, and the stories and places we pass on to future generations⁵.

Definitions of heritage can be nuanced, however, heritage is generally understood to mean 'what we inherit, and what society retains of this inheritance'. For UNESCO built heritage is treated as a 'productive asset' transmitting knowledge from one generation to the next.

A popular understanding of built heritage is as an endowment from one generation to the next. While this understanding has been critiqued by some academic authors as 'patriarchal and socially constructed', it is generally accepted. ⁷

Understanding heritage as an endowment poses significant challenges for the sector in terms of ensuring intergenerational equity.

For Harvey, society's approach to heritage has been an evolutionary process, shaped by society's experience of time and space and 'societal changes associated with the colonial and post-colonial experience'.⁸

⁸ David Harvey, 'Heritage pasts and heritage presents: temporality, meaning and the scope of heritage studies.' *International Journal of Heritage Studies*, 7(4), (2010): 319-338.



¹ Christopher Tilley, 'Introduction: Identity, place, landscape and heritage.' *Journal of Material Culture,* 11, No. 1-2 (2006): 7-32.

² I Bokova, Forward to *Global Report on Culture for Sustainable Development' United Nations Educational, Scientific and Cultural Organisation* (UNESCO), (2015). ONLINE SOURCE

³ Ibid (2015):5

⁴ Jon Hawkes, 2001. The fourth pillar of sustainability: culture's essential role in public planning. Common Ground.

⁵ Australian Government Department of the Environment. *'Plan for a Cleaner environment'*, (DoE, Canberra, 2016)

⁶ The Allen Consulting Group, Valuing the Priceless: The Value of Historic Heritage in Australia (2005): p.1

⁷ Laurent Dalmas, Vincent Geronimi, Jean-Francois Noël, and Jessy Tsang King Sang. "Economic evaluation of urban heritage: An inclusive approach under a sustainability perspective." *Journal of Cultural Heritage*, 16, no. 5 (2015): 681-687.

⁸ David Harvey, 'Heritage pasts and heritage presents: temporality, meaning and the scope of heritage studies.'

Since the 1990s, the concept of heritage has shifted towards a more holistic understanding of built heritage as part of a 'cultural ecosystem'. The field of cultural economics explored the concept of 'cultural capital', drawing parallels between cultural and natural capital. In this way, cultural economics has drawn on environmental and ecological discourses to consider new ways of measuring intrinsic value and factoring in intergenerational equity.

Aligning built heritage with sustainability discourse has resulted in a greater emphasis and awareness in recent years on sustainable urban development, corporate ethics and social responsibility. ¹² This is reflected in the 'landscape based approach to architectural heritage management' employed and promoted by the United Nations and European Union. ¹³

A key issue in defining heritage, is defining what counts as heritage. Academics have tended to emphasise the negotiated nature of the construction of what counts as heritage, and are critical of how defining heritage assets is 'bound up with elite power, specifically the power of experts'¹⁴, which is referred to by Laura Jane Smith¹⁵ as the 'authorised heritage discourse' (2006).

1.3 Environmental sustainability and adaptive reuse

A new development in the valuation of heritage has been an increased awareness of the role in built heritage in sustainable development.

Armitage et al. argue that while Australia has a well-developed system of heritage management it has been 'slow to adapt to its responsibilities under international treaties in the area of sustainable practices in the property field'. 16

Bandarin et al. probing of the relevance of cultural heritage for contemporary society of in a postmodern context and suggests it is intrinsically tied to visions for a sustainable future and adaptive reuse. ¹⁷ Radoine support the emergence of a vision for sustainable development which 'combines heritage, contemporary design and environmental awareness'. ¹⁸ In this vein, the practice of urban conservation of built heritage in itself can offer the following benefits: ¹⁹

- New approaches and instruments to achieve urban and environmental sustainability
- Unlock local knowledge, creativity and wellbeing (support the knowledge economy)
- Bring together a range of public and private stakeholders

The environmental benefits of adaptive reuse featured prominently across the most recent literature on cultural built heritage. A number of academics have made compelling arguments for the adaptive reuse of heritage from a sustainability viewpoint and outlined the following benefits:

- Extending the lifecycle of buildings as opposed to demolition and new construction.
- Efficient use of resources (reduced carbon)²⁰

²⁰ Esther HK Yung, and Edwin HW Chan, 'Implementation challenges to the adaptive reuse of heritage buildings: Towards the goals of sustainable, low carbon cities.' *Habitat International*, 36, no. 3 (2012): 352-361.



⁹ Xavier Greffe, 'Is heritage an asset or a liability?' Journal of Cultural Heritage, 5, no. 3 (2004): 301-309.

¹⁰ Throsby, D., Why should economists be interested in cultural policy? *Economic Record*, 88(s1), (2012): 107

¹¹ Ibid

¹² UNESCO (2015):40

¹³ Loes Veldpaus, Ana R. Pereira Roders, and Bernard JF Colenbrander, 'Urban heritage: putting the past into the future.' *The Historic Environment: Policy & Practice*, 4, no. 1 (2013): 3-18.

¹⁴ H. Graham, R. Mason, A. and Newman, *Literature Review: Historic Environment, Sense of Place and Social Capital*, Commissioned for English Heritage. (2009)

¹⁵ Laura Jane Smith, *The Uses of Heritage*, (London 2006)

¹⁶ Lynne Armitage and Janine Irons, "The values of built heritage." *Property Management*, 31, no. 3 (2013): 246.

¹⁷ Francesco Bandarin, and Ron van Oers, 'The Historic Urban Landscape: Preserving Heritage in an Urban Century.' *The Historic Urban Landscape: Managing Heritage in an Urban Century* (2012): 175-193.

¹⁸ Hassan Radoine, 'Planning and Shaping the Urban Form through a Cultural Approach' *Global Report for Sustainable Urban Development* (UNESCO 2015) 5: 169

¹⁹ Global Report on Culture for Sustainable Development. (United Nations Educational, Scientific and Cultural Organisation (UNESCO), 2015). ONLINE SOURCE

• Reuse of a historic building is more sustainable than LEED certified new construction. 21

Armitage et al. argues as yet there is poor recognition of the measurement tools to measure the value of a heritage asset's social and cultural contribution to sustainability. 22

²¹ Sarah Laskow, 'Why historic buildings are greener than LEED certified new ones, *The Daily Grind*' (2012). Available online: https://www.good.is/articles/why-historic-buildings-are-greener-than-new-leed-certified-ones

²² Armitage et al, (2013): 255

2. THE CULTURAL VALUE OF HERITAGE

This chapter provides a broad overview on why heritage is important to individuals and society at large. It provides a background context to the categories of value identified in chapter 3.

2.1 Cultural value and significance

History and heritage are essential elements of all cultures, as reflected in the ideas, materials and habits passed through time. In this way, cultural values are 'a part of the very notion of heritage' and pertain to the shared meanings associated with built heritage.²³

The value of a heritage place, site, landscape or object is commonly referred to as its cultural significance.²⁴ Cultural value/significance is a broad term which encompasses the aesthetic, historic, scientific, symbolic and social or spiritual value of cultural heritage for past, present and future generations.²⁵

The socio-cultural values embodied by the term cultural significance have a number of associated benefits that are often intangible and not necessarily quantifiable. There have been a number of approaches taken to categorising sociocultural values over time. Current trends observed in the literature tend to agree on the typology of socioeconomic values outlined in **Error! Reference source not found.**. Several of these values and other values not explicitly identified in this list are explored in greater detail in the following sections.

TABLE 1: SOCIOCULTURAL VALUES OF URBAN HERITAGE

VALUE	DEFINITION
Historic	The building or site provides a connectedness with the past and reveals the origins of the present
Aesthetic	The building or site possess and displays beauty, this may include the relationship of the site to the landscape in which it is situated and environmental qualities relevant to the site and surrounds.
Scientific	The building or area is important as a source or object for scholarly study
Spiritual	The building or site contributes to the sense of identity, awe, delight, wonderment, religious recognition, or connection with the infinite
Symbolic	The building or site conveys meaning and information that helps the community to assert its cultural individuality
Social	The building or site contributes to social sustainability and cohesion in the community, helping to identify the group values that make the community a desirable place in which to live and work.

Source: Throsby David "Heritage Economics: A Conceptual Framework" Urban Development Series, The World Bank (2012).

Australia ICOMOS Charter for Places of Cultural Significance, The Burra Charter. ICOMOS (2013), David Throsby, 'Heritage Economics: A Conceptual Framework' *Urban Development Series*, The World Bank (2012).



²³ Randall Mason, 'Assessing values in conservation planning: methodological issues and choices.' Assessing the Values of Cultural Heritage, Ed. Marta de la Torre, (The Getty Conservation Institute, Los Angeles, 2002): 5-30.

²⁴ The Allen Consulting Group, (2005): 1

²⁵ Ibid

2.1 Aesthetic and Design Quality

Throsby²⁶ describes the aesthetic qualities of cultural heritage as the beauty displayed or possessed by the site. This may extend to the surrounding landscape in which an asset is located and associated environmental qualities.

Previous studies by SGS have also highlighted the architectural and design qualities of built heritage, and the contribution an asset makes towards the education of the community on the value of good design.

2.2 Political significance

The attribution of cultural significance to heritage sites and places is values based, and has not and does not necessarily occur in an equitable manner.²⁷

Heritage sites have a political value-in that they can be used to build or maintain the legitimacy for governments, protest movements and ideological causes. The political value of heritage sites can be purely symbolic, but can also result from understanding how the heritage site was created and evolved over time and from providing insight into who has shaped the environment.²⁸

The political value of heritage sites can be viewed as 'a key contributor to civil society' or more cynically 'a political tool used to enforce national culture, imperialism, post-colonialism, and so on'.²⁹

2.3 Educational

Built heritage has educational meaning and value for a society. Built heritage provides opportunities for people to gain knowledge about the past, provide primary research material for academics and an archaeological record that can be studied in context.³⁰

Bandarin³¹ suggests the active use of heritage assets can leverage the cultural value embedded in a heritage building to inform the intellectual development of a community.

Recent studies are starting to unpack the relationship between heritage and the knowledge-based city and maintain the heritage has an important role in 'creating representations of place within which the knowledge economy remains firmly rooted'.³²

2.4 Community identity

Cultural heritage is widely understood to constitute 'who we are' and underwrites a community's source of identity.³³ Tilley³⁴ argues that our relationship to heritage raises all of the 'classical questions of social identity' which, in a contemporary context of globalisation, the rapid development of multicultural urban communities are increasingly uncertain.

It is argued that 'tangible and intangible heritage are integral parts of a city's identity, sense of belonging and cohesion'.³⁵ Further to the contribution of built heritage to a city's identity, is



²⁶ Throsby, (2012)

²⁷ Chris Johnston, *What is social value*, (Australian Heritage Commission, Commonwealth of Australia,1992)

²⁸ Mason, (2002)

²⁹ Ibid: 11

³⁰ Ibid

³¹ Bokova, (2015): 5

³² Graham, (2002)

³³ Bokova, (2015): 5

³⁴ Tilley, (2006): 8

³⁵Bokova, (2015): 17

the unique contribution it makes to personal identity and a 'sense of self'.³⁶ For Tilley³⁷ the two are 'inextricably bound'.

UNESCO suggest that for communities 'disrupted by bewildering change and economic instability' built heritage is all the more important in 'constituting a source of identity and cohesion'.³⁸

2.1 Sense of Place

Heritage sites are also associated with a sense of place and positive place attachment. In a UK Study, historic environments were identified as contributing to a sense of place because of its role in 'place distinctiveness (what makes a place distinctive), place continuity (the way a place supports people's sense of continuity) and place dependency (how a place enables people to realise their goals)'.³⁹

Place attachment relates to the production of identity, both individual and community. It is associated with the social cohesion and community identity that members of a social group share, which arises from the shared symbolic meanings associated with the specific heritage and environmental characteristics of their "home "territory. 40 It is widely accepted that place attachment operates at a variety of scales- the place someone may be attached could be as local as the street or as global as the country.

2.2 Social Capital

Built heritage impacts on social capital in a range of ways.⁴¹ The Allen Consulting Group suggest heritage places 'engender community involvement and networking'.⁴² The social capital of heritage sites enable and foster social connections and networks and other kinds of social relations, which may not be related to the historical importance of the heritage asset.

In this way heritage assets contribute to and provides a place for the following:

- encounters and social gatherings such as celebrations, markets, picnics and games
- Contributes to a healthy local economy (Jobs and wealth)
- Civic Pride
- Sense of place
- Community hubs (and associated uses)
- Sites for social integration and inclusion
- Source of identity and local pride
- Activities of NGOs and volunteers

2.3 Community concerns and historical legacies

There is limited research available on community concerns regarding heritage and historical legacies. A literature review commissioned by the Heritage Council of Victoria in 2014 on existing research and studies on 'community perceptions of heritage' found no Victorian studies regarding public attitudes to heritage, with the exception of the Allen Consulting study of 2005. However, there is considerable research on the impact of loss of heritage on communities.

In recent years, deliberate attacks on cultural heritage in Afghanistan, Iraq, Libya, Mali and Syria has brought the concept of 'access to cultural heritage as a human right' to the fore of

⁴² The Allen Consulting Group, (2005): 8



³⁶ Tilley, (2006):8

³⁷ Ibio

³⁸ Protecting our heritage and fostering creativity. UNESCO (2017) http://en.unesco.org/themes/protecting-our-heritage-and-fostering-creativity

³⁹ Graham et al. (2009)

⁴⁰ Mason, (2002); Scannell and Gifford (2010)

⁴¹ The Allen Consulting Group, (2005); Murzyn-Kupis (2013)

discussion⁴³.To the UN the destruction of cultural heritage in conflict and non-conflict situations undermines a number of additional human rights.

The devastating and long term impacts on a community's psyche resulting from the destruction of cultural heritage, demonstrate the strong correlation between heritage and civic pride, identity and wellbeing.

Hejazi⁴⁴ identifies the four types of risk to cultural heritage, natural causes, economic causes, social causes and institutional weaknesses. The risks posed by climate change to built heritage and heritage landscapes are increasingly recognised by the community.⁴⁵

Worldwide, there are numerous case study examples of communities galvanising to protect against the loss of built heritage.

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⁴⁵ Armitage et al., (2013): 255



⁴³'Destruction of cultural heritage is an attack on people and their fundamental rights – UN Expert', *UN News Centre*, (United Nations 2016). Available online: http://www.un.org/apps/news/story.asp?NewsID=55412#.WUdZi2iGMdU

⁴⁴ Mehrdad Hejazi, "The risks to cultural heritage in western and central Asia." Journal of Asian Architecture and Building Engineering 7, no. 2 (2008): 239-245.

3. ECONOMIC VALUES OF HERITAGE

This chapter summarises the different economic values for heritage that can be used to inform a CBA.

3.1 The meaning of 'value' in a heritage context

Mason observes that 'economic valuing is one of the most powerful ways which society identifies, assesses, and decides on the relative value of things'. ⁴⁶ There are a number of well-established economic values with regards to historic heritage which are described in Figure 1. Economic values significantly overlap with the cultural values discussed in the previous chapter, but differ in that they can be measured through economic analysis.

It is suggested that each of the use and non-use benefits identified are capable of 'increasing welfare' and ought to be considered in any analysis.⁴⁷ In addition, there may be examples of evaluations in which the 'benefits conflict' and trade-offs are required between the degree of place conservation and the intensity of use.⁴⁸

Serageldin argues that there is a spectrum of decreasing tangibility' of value to individuals, with direct use having the highest tangibility and bequest value having the lowest tangibility.

FIGURE 1: ECONOMIC VALUES OF URBAN HERITAGE (AFTER THROSBY)

		•
VALUE		DEFINITION
accommodate residential, commercial, services or other uses demand in the property markets and for consumers. Direct w buildings as a private good. Their potential to accommodate commercial, services or other uses with demand in the prope		Direct worth of buildings as a private good. Their potential to accommodate residential, commercial, services or other uses with demand in the property markets and for consumers. Direct worth of buildings as a private good. Their potential to accommodate residential, commercial, services or other uses with demand in the property markets and for which consumers will be willing to pay a premium rent due to the heritage value of the asset.
	Indirect	Value accruing to others (passive use)
NON-USE	Existence	Communities value the existence of the heritage, even though they may not directly consume its services, and are willing to invest resources for its safeguarding
	Option	Communities wish to ensure that their members or others will have access to the heritage in future, and are prepared to commit resources for its safeguarding
	Bequest	Communities with to bestow the heritage for future generations, so devote resources to its conservation

Source: Eduardo Rojas "Governance in Historic City Core Regeneration Projects" Urban Development Series. The World Bank (2012).

⁴⁹ Ismail Serageldin, 'Cultural heritage as public good.' *Global Public Goods*(1999): 240.



⁴⁶ Mason, (2002): 12

⁴⁷ The Allen Consulting Group, (2005): 5

⁴⁸ Ibid: 5

The following section defines and discusses uses and non-use economic values in greater detail.

3.2 Use Value

Use values are also defined as market values, and can typically be assigned a price. For heritage assets, the use values 'refer to the goods and services that flow from it that are tradable and priceable in existing markets'.⁵⁰

Direct user value

Built heritage has direct use value as a physical asset capable of accommodating and earning revenue from a range of residential, commercial and other uses.

The heritage element of physical assets often adds value to the primary use value as people may 'derive additional value from viewing, visiting and or living and working in a heritage place.'51

The direct use value of heritage assets has a number of quantifiable direct benefits including the stimulation of economic activity and increased labour force productivity, increased tourism, and opportunities for recreation, leisure and entertainment.⁵²

The argument that heritage assets can extract premium rents for residential and commercial uses should be tempered with an understanding of the capital expenditure and ongoing operational costs associated with maintaining the asset. Whether a heritage listing elevates property values or 'creates a negative impact' by restricting property rights is contested across the literature.⁵³

In some development contexts, heritage is viewed a liability by public and private property owners. 54 In recent years, UNESCO have endeavoured to promote urban heritage's contribution to sustainable development and shift perceptions to a view of built heritage as a development asset for the city. 55

However, as suggested by the Allen Consulting Group, there are sometimes trade-offs to be made between the degree of place conservation and the intensity of use proposed for an asset.

Indirect user value

The indirect use value of built heritage is best defined as external or 'passive use' or the value accruing to others.⁵⁶ A non-use value can occur 'without any direct consumption' whereby 'individuals can derive benefit from a heritage place despite never physically entering or viewing the place but merely from reflection or association'.⁵⁷

"Indirect value relates to the more subtle and less quantifiable values that are relevant to the users who do not specifically live or work in the heritage structure but for whose property forms a familiar and defining element of the community and is associated with regular community life. The property may define the community image that is projected to visitors and, in turn, may increase the overall appeal of the community. The presence of an appealing heritage building can increase the visual amenity of a street or the wider neighbourhood. Indirect benefits of a heritage site can include the social benefits derived from having a

⁵⁷ Armitage et al., (2013): 249



⁵⁰ Mason, (2002)

⁵¹ Serageldin,(1999): 4

⁵² Allen Consulting Group, (2005)

⁵³ Armitage et al., (2013): 252

⁵⁴ Eduardo Rojas "Governance in Historic City Core Regeneration Projects" Urban Development Series. The World Bank (2012): 199.

⁵⁵ Ibid

⁵⁶ Rojas, (2012):199

recognisable and iconic local building that can act as a landmark and meeting place that encourages social interaction.

Throsby suggests the most promising approaches to measuring cultural value is to break the category down into components of value 'for which measurement scales might be devised'. These are captured in the cultural values described by Throsby in **Error! Reference source not found.**:

- Aesthetic value
- Spiritual value
- Social value
- Historic value
- Symbolic value
- Authenticity value

More specific indirect benefits accruing from indirect user value may include:58

- Community image
- Environmental quality
- Aesthetic quality
- Valorisation of existing assets
- Social interaction
- Educational benefits
- Impact of heritage designation on property values
- Spill-over benefits from tourism⁵⁹

3.3 Non-Use Value

Non use values are also referred to as nonmarket values, as they are not traded in markets and are not readily assigned a price. Many of the sociocultural values discussed in the previous chapter can be categorised as non-use values. However, these values can be expressed as economic values due to individuals willingness to pay to acquire them and/or protect them.

Option value

The option value of heritage can be defined as 'someone's wish to preserve the possibility (the option) that he or she might consume the heritage's services at some future time'.⁶⁰

Bequest value

The bequest value refers to the historic legacy of built heritage and is encapsulated by the resources communities are prepared to allocate to its ongoing preservation. It stems from the desire felt to bequeath a heritage asset to future generations. This cultural and historical legacy stems from the feeling of obligation and responsibility shared by individuals in communities that it is right to protect and pass down our historical places for those that have not had the chance to experience them.

Existence/intrinsic value

"Intrinsic value" is a much less tangible value of heritage. It is typically involves the perceptions of individuals as to how a heritage property contributes to the basic and essential elements of a local community. The presence of these values helps form the identity of an area and the people that live within it. The existence value or inherent value of heritage is firmly embedded in a building and or site's identity, uniqueness and significance.

⁶⁰ Mason, (2002)



⁵⁸ Serageldin, (1999): 48

⁵⁹ Armitage et al., (2013)

Serageldin argues that the 'estimation of existence values is not a senseless academic exercise' and without due rigour can lead to the significant understating of the value of heritage. 61

It is proposed that cultural built heritage requires a similar approach to that taken in environmental economics to estimate the existence value of biodiversity. ⁶²

⁶² Ibid: 48



⁶¹Serageldin (1999): 47

4. INDICATORS FOR THE ECONOMIC VALUE OF HERITAGE

This chapter summarises measurable indicators that can be used to assess community values for built form heritage that can be used as direct inputs in a CBA.

4.1 Overview

Choi et al consider the field of cultural economics a burgeoning area which is receiving an increasing amount of attention and scholarship.⁶³As discussed in the previous chapters, the use and non-use qualities of built heritage assets make valuing heritage a complex and challenging exercise.

The literature review highlighted that there are longer term indicators of a society's recognition and valuing of heritage which are often taken for granted, including:

- Establishment and maintenance of legislation and regulation⁶⁴
- Well established community bodies with nationwide membership
- Advocacy groups

A 'typical valuation study' looks to arrive at a total economic value through use and intangible non-use values.⁶⁵

To determine use values, revealed preference methods are used to look at 'surrogate markets' by analysing preferences for non-market goods indicated by willingness to pay (WTP) data for similar markets. ⁶⁶ Such techniques include:

- Hedonic price method
- Travel cost method
- Maintenance cost method

To determine non-use values, stated preferences methods are employed which use 'hypothetical markets' (captured by a social survey methodology and supporting qualitative analysis) to understand preferences for which there may be 'no surrogate market a cultural good or service'.⁶⁷ Typical methods include:

- Contingent valuation method
- Choice Modelling

Figure 2 outlines the framework of a typical valuation study for a cultural heritage asset.

⁶⁷ Ibid: 51

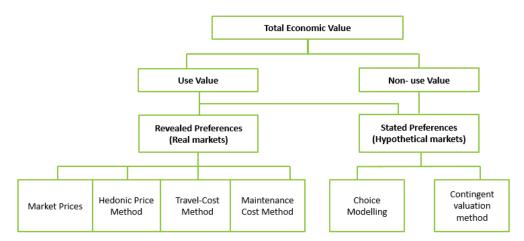


⁶³ A.S Choi., B.W. Ritchie, F. Papandrea, and J.Bennett, 'Economic valuation of cultural heritage sites: A choice modeling approach.' *Tourism Management*,31(2),. (2010): 213-220

 ⁶⁴ "Community Perceptions of Heritage". Heritage Council of Victoria. (2014):254. Available online: http://heritagecouncil.vic.gov.au/research-projects/community-perceptions-of-heritage/
 ⁶⁵ Ibid: 214

⁶⁶ Susana Mourato, and Massimiliano Mazzanti. 'Economic valuation of cultural heritage: evidence and prospects' in Assessing the Values of Cultural Heritage, Ed. Marta de la Torre, (The Getty Conservation Institute, Los Angeles, 2002):51-76

FIGURE 2: FRAMEWORK FOR ECONOMIC VALUATION TECHNIQUES



Source: Economic valuation techniques, modified by Choi et al. from Fig.1.4 of Bateman et al. (2002: p.30)

4.2 Use Value Indicators (Revealed preferences)

Hedonic Pricing Method

A hedonic pricing method is based on the concept that house prices are impacted by a range of attributes, which may include 'non-market cultural factors' such as a heritage overlay. 68 This method captures the 'extra price commanded by a house in a historic area' if all other factors are the same. 69

Limitations

This method has the following limitations:

- Only applies to cultural heritage attributes that are incorporated in property prices
- Reliant on assumptions that the property market is efficient and self-regulating.
- Assumes the value of the cultural good accrues only to those who live close to it: visitor
 use values and non use values are excluded.⁷¹

Travel Cost Method

A travel cost method captures how much individuals value the benefits of a cultural heritage site by quantifying how much they are willing to pay to make a journey to visit it. This includes both the amount of time spent and the financial costs associated with the trip, including any entry fees. .

As individuals experience different costs to visit different places, this method uses these 'implicit prices' instead of 'conventional market prices' to determine a site's value and or changes to the quality or offer available. ⁷²

This data is used to establish a demand curve for the benefits of a site.

A 2015 study used the travel cost method to value an American Revolutionary Ware heritage site in South Carolina USA, which was visited by cultural and recreational tourists. The found while the site had substantial economic value, but the results were particularly sensitive to the variables that described the different types of visitor.

⁷⁰ Ibid;

⁷² Mourato, and Mazzanti, (2002): 54



⁶⁸ Mourato and Mazzanti, (2002): 54

⁶⁹ Ibid;

⁷¹ S. Navrud, S., and R. C. Ready, *Valuing Cultural Heritage: Applying Environmental Valuation Techniques to Historic Buildings, Monuments and Artifacts.* Edward Elgar (2002): 14

Limitations

While this is a well-established and regarded method for economists, this approach is limited in that it cannot determine option, non-use values or negligible changes in cultural assets. Other limitations include:

- Less effective for accessible and or centrally located sites not requiring much travel
- Difficult to apply to cultural sites with multiple attributes and confused by the 'presence of substitute locations'⁷³
- Sample selection bias due to questionnaire non-response and item non response where surveys are applied⁷⁴
- Misspecification of the demand curve

Maintenance cost method

The maintenance cost method uses an avoided maintenance-cost approach to understand 'damages to cultural materials' common examples include air pollution.⁷⁵ This method calculates the cost savings 'implied from a reduction in maintenance cycles due to reduced maintenance rates'.⁷⁶

Limitations

It is important that this method is tempered by an understanding that cost data is often more accessible than data on benefits. A heavy reliance on this method may lead to a significant underestimate of the true economic value of an asset.

4.3 Non-use value indicators (Stated preferences)

Contingent Valuation

Contingent valuation has been a prevalent valuation method in the past, however in recent years the use of choice modelling has become a popular alternative. Contingent valuation primarily involves surveying people with regards to their willingness to pay for received benefits from cultural heritage assets or alternately, willingness to accept compensation for their loss.⁷⁷

Survey's aim to illicit from respondents the maximum financial contribution they would be willing to make towards supporting a cultural asset. Table 2 includes a list developed by Doug Noonan of Contingent Valuation Studies in the Arts and Culture, that were conducted internationally between 1983 and 2003.⁷⁸

A particularly relevant study conducted in 2012 looked at tourist's as well as local residents' willingness to pay for cultural heritage in the city of Valdivia in Chile, as a way to understand the economic vale associated with the city's historic fabric⁷⁹. They found that "Contingent valuation may thus be an invaluable tool for public authorities charged with the care of cultural heritage, as the findings may offer a coherent guideline for allocation of funding or assessing cultural projects, in sum for designing specific cultural policies linked to heritage".⁸⁰

⁷⁹ A Báez, and L.C. Herrero, 'Using contingent valuation and cost-benefit analysis to design a policy for restoring cultural heritage.' *Journal of Cultural Heritage*, 13(3) (2012): 244 ⁸⁰ Ibid;



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⁷³ Mourato, and Mazzanti., (2002): 55

⁷⁴ R. T. Melstrom, 'Valuing a historic site with multiple visitor types and missing survey data'. *Journal of Cultural Heritage*, 16(1): (2015): 102-105.

⁷⁵ Mourato, and Mazzanti., (2002): 55

⁷⁶ Ibid;

⁷⁷ Throsby, (2002): 111

⁷⁸ Doug Noonan, *Contingent Valuation Studies in the arts and Culture: An Annotated Bibliography*, (The Cultural Policy Centre, University of Chicago, 2003): 10

TABLE 2: WILLINGNESS TO PAY: SUMMARY OF SELECTED CULTURAL CONTINGENT VALUATION STUDIES

Column heading	Year	Topic	Specific Good	Currency	WTP	Survey Number
Thompson, et. al.	1983		Support Australian arts through taxes	Australian \$	18	827
Morrison, West	1986		Support for performing arts in Ontario through taxes	Canadian \$	6	463
Thompson, et. al.	2002		Preventing losing 25% of arts in Kentucky	US\$	16	503
Glass, et. al.	1999		Increase in local area arts in Kansas	US\$	19	515
Pollicino et. al.	2001		Cleaning Lincoln Cathedral more often	UK Pound	15	328
Willis	1994		Access to Durham Cathedral, England	UK Pound	1	92
Grosclaude, et. al.	1994		Maintain buildings in Neuchatel	Swiss Franc	5	200
Garrod, et. al.	1996		Renovate buildings in Newcastlel	UK Pound	10	202
Santagata, et. al.	2000		Support for Napoli Musei Aperti	Italian Lira	17000	468
Maddison, et. al.	1999		Road options for Stonehenge	UK Pound	0*	357
World Bank	1998		Prevent deterioration of Fés Medina, Morocco	Us \$	30*	600
Navrud	1992		Preservation of Nidaros Cathedral, Norway	US\$	51	163
Chambers, et. al.	1998		Historic building in St. Genevieve, MO	US\$	6*	305
Morey, et. al.	1997		Reducing damage rate to DC monuments by 50%	US\$	4	272
Kling, et. al.	2001		Hotel in Ft. Collins, CO	US\$	121*	212
Scarpa, et. al.	1998		Rivoli Castle, Italy	US\$	28	1323
Powe, Willis	1996		Preservation of Warkworth Castle, England	UK Pound	2*	201
Bille Hansen	1997		Support for the Royal Theatre in Copenhagen	US\$	11	1843
Martin	1994		Support for all Quebec museums	Canadian \$	8	908
Maddison, Foster	2001		Congestion costs in the British Museum, per marginal visitor	UK Pound	6*	400
Mazzanti	2001		Admission to the Galleria Borghese in Rome	Italian Lira	6000*	185

Lockwood, et. al.	1996	Preserve cultural heritage of grazing Australian alps	Australian \$	81	702
Boxall, et. al.	2002	Aboriginal rock paintings in Canada	?	?	?
Riganti, Scarpa	1998	Conserving all of Campi Flegrei in Italy	US\$	216	448
Beltrán, Rojas	1996	Preservation of Mexican archeological sites	New pesos	36	6503
Papandrea	1999	Increase domestic TV programming by 10%	Australian \$	12	2193
Schwer, et. al.	1995	PBS TV in Las Vegas	US\$	25	229
Harless, Allen	1999	18 extra reference desk hours at university library for faculty	US\$	5	382
Johnson, et. al.	2000	Building a new UK basketball arena	US\$	5	230
Johnson, et. al.	2001	Keeping the Pittsburgh Penguins hockey team	US 6	293	

Source: Doug Noon, 2003. * indicates the WTP payment is a one time payment.

Limitations

Throsby outlines a number of biases which may impact the results of contingent valuation studies and argues that careful experimental design is required to mitigate these.

- Incentives may exist for individuals not to reveal their true willingness to pay
- Responses may not be informed by sufficient or correct information (must provide expected effects of the choice being proposed)⁸¹
- Budget constraint gap between monetary value suggested and an individual's financial resources
- Difficulty validating the responses to questions
- General public are not familiar with valuation techniques
- Thoroughness recommended that they are carried out in person⁸²

Choice modelling

Qualitative research is often required to gauge the existence value of a built heritage asset by assessing the willingness of members of a community to pay (WTP). Already widely applied in environmental economics, the use of choice modelling in the evaluation of cultural heritage assets is still relatively new.⁸³ Choice modelling has been described as a 'powerful and detailed capacity of evaluation' for cultural heritage assets.⁸⁴

Choice modelling uses a number of survey based methodologies for the measurement of preferences for non-market goods and respondents to surveys are typically asked to do one of the following:⁸⁵

- Rank the various alternatives in order of preference
- Rate each alternative according to a preference scale
- Choose their most preferred alternative out of a set

A price is attached to one of the attributes of a good and therefore willingness to pay can be deduced from respondents' ranks, ratings and choices. ⁸⁶ In this way choice modelling allows for 'multidimensional changes' and overcomes the limitations traditionally associated with contingent valuation. ⁸⁷

Table 3 summaries the stages of a choice modelling exercise.

TABLE 3: STAGES OF A CHOICE MODELLING EXERCISE

STAGE	DESCRIPTION
Selection of attributes	Literature reviews and focus groups are used to select the attributes of the good to be valued that are relevant to people, while expert consultations help to identify the attributes that will be impacted by the policy. A monetary cost is typically one of the attributes to allow the estimation of Willingness to Pay.
Assignment of levels	The attribute levels should be feasible, be realistic, and span the range of respondents' willingness to pay values. A baseline, status quo level is usually included (e.g., a no-payment level in the case of willingness to pay).
Choice of experimental design	Statistical design theory is used to combine the levels of the attributes into a number of alternative scenario descriptions.

⁸¹ Peter Abelson 'Valuing the public benefits of heritage listing of commercial buildings.' In *Proceedings Conference*, (2000): 147..

⁸⁷ Ibid;



⁸² Ibid:153

⁸³ Choi et al., (2010): 215

⁸⁴ Mourato et al., (2002): 64

⁸⁵ Ibid;

⁸⁶ Ibid;

Construction of choice sets	The scenarios identified by the experimental design are then grouped into choice sets to be presented to respondents. Choice sets can have two or more alternative scenarios.
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Measurement of preferences Respondents are typically asked to choose their most-preferred alternative out of each choice set, or to rank the alternatives in order of preference

Source: Susana Mourato and Massimiliano Mazzanti "Economic Valuation of Cultural Heritage: Evidence and Prospects" (2002): 64

Limitations of choice modelling

According to Susana Mourato and Massimiliano Mazzanti choice modelling is also prone to the difficulties associated with survey techniques encountered by contingent modelling. In addition, respondents may experience 'cognitive difficulty' with making 'complex choices between bundles with many attributes and levels'.⁸⁸

Other issues can include:

- Respondent fatigue/ overburdening respondents with information
- Choosing options with reference to one attribute only (ignoring others)

CHOICE MODELLING - ALLEN CONSULTING GROUP 2005

Choice modelling undertaken in 2005 by the Allen Consulting Group with the assistance of ACNielsen to evaluate the importance of heritage to community. According to a literature review undertaken by the Heritage Council of Victoria, this is one of the few studies to date on the Victoria community's perceptions of heritage.

The following approach was taken:

- **Survey**: In simple attitudinal questions respondents were asked if they 'Strongly agree and agree', 'Strongly disagree and Disagree', or 'Neither agree or disagree' with statements representative of community views and perceptions of heritage related values.
- Choice modelling: was undertaken to further analyse general statements to see the degree to which the population is willing to financially support historic heritage conservation. Attributes were developed following focus group meetings, and related to Protection, Condition, Accessibility, Age Mix, Development Control, and Cost. The Choice modelling involved eliciting a respondent's stated preference in a hypothetical setting; respondents are presented with several sets of options, and asked to indicate which option they prefer. The choice modelling allows implicit prices to be assigned to each of the changes associated with the attributes, e.g. \$5.53 per person for the Places Protected attribute, per 1000 additional heritage places protected.

Armitage et al. argue that since the Allen Consulting Group survey in 2005 there has been greater public awareness on sustainability and the need to 'effectively use the planet's resources'. This may feed into a future survey approach.

4.4 Additional indicators

Revenue from entry fees

Price paid for entry into heritage venues and associated programs and activities, calculated by attendance numbers.

⁸⁸ Mourato et al., (2002): 64



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Limitations

• Often instances where there is a failure to charge optimal entry fees and charges i.e. 'fees that would maximise visitor revenue without compromising targets for number of visits and fees that could subsequently revert to conservation'⁸⁹

Volunteer hours

Another important indicator of heritage places' contribution to social capital is reciprocity.⁹⁰ Reciprocity is seen in actions including contributing time or money to the community, making charitable donations, and sharing support among friends and family.

This can be measured through the percentage of adult population volunteering for heritage activities, and the percentage which donated to charity causes in the last 12 months.

Limitations

While the survey results are useful in pointing to the degree of social interaction regarding historic heritage matters, their value as standalone indicators is limited. Their value may emerge if monitored over time. ⁹¹ Additionally, the indicators of reciprocity are vague; the percentage of adult population volunteering for heritage activities does not specify how much time is spent, and how much time constitutes as 'volunteering' (i.e. frequent and continuous volunteering, once off volunteering, or whether the activity was compulsory community service, etc.). This also applies to the indicator of 'donations to heritage causes in the last 12 months', with the indicator failing to address exactly how much is donated, or in which percentiles in proportion of income the donations were made.

4.5 Foregone commercial value

The foregone commercial value of a heritage site refers to the the difference between the economic value of a heritage site and the economic value of redeveloping that site for commercial purposes. The difference between these indicates a willingness to pay for the heritage values, due to the foregone commercial value of not developing it

4.6 Environmental benefits

The literature review highlighted a number of environmental benefits linked to the restoration and upkeep of heritage assets have been identified, including:

- Extended lifecycle
- Recycling versus demolition and construction
- Reduction in carbon emissions
- Long term investment

The environmental benefits identified share a link with the maintenance cost method, in that it identifies the cost savings of environmental benefits associated with restoration and upkeep of heritage assets. .

⁹¹ Ibid;



⁸⁹ Mourato et al., (2000):51

 $^{^{\}rm 90}$ The Allen Consulting Group, (2005):37

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