

## Capturing Heritage Value Through Innovative Mechanisms

### Gambaran Nilai Warisan Melalui Mekanisme Inovatif

AHMAD SHUIB & NITHANAN KOSHY MATHEW

#### ABSTRACT

*Cultural heritage (CH) is a public good which is not traded in the market, thus market fails to indicate the true value of the CH, giving the impression that CH has zero or minimal economic value. Furthermore, the public good nature of CH has made the consumption of most CH to be FOC or at the minimum price; thus the revenues generated from consumption of CH is insufficient to maintain, what more to finance conservation of the CH. Without strong supports from government and public subsidy, the conservation of many important cultural assets are neglected or at best given lip service. People obtain significant benefits from CH in many forms, yet CH is threatened with degradation and destruction. Although several techniques to capture the economic value of the changes in CH, which are external to the market, have been developed but the validity and reliability of the values are often questioned. The present paper will discuss the use of the stated preference approach (CVM) to assess the economic value of CH and to deliberate on the issues and limitation of the approach. New innovative techniques are being further developed that take into account preferences for cultural assets that have wider ranging multifaceted concepts and different motivational concerns.*

*Keywords: Cultural heritage; innovative mechanisms; motivational concerns*

#### ABSTRAK

*Warisan budaya atau Cultural heritage (CH) merupakan harta awam yang tidak diniagakan dalam pasaran, dengan itu pasaran gagal untuk menunjukkan nilai sebenar CH, memberi gambaran bahawa CH mempunyai nilai ekonomi sifar atau minimum. Tambahan pula, sifat barangan awam CH telah menjadikan penggunaan CH secara percuma atau dengan harga yang minimum; dengan itu pendapatan yang dijana daripada penggunaan CH tidak mencukupi untuk melestarikannya, apatah lagi untuk membiayai pemuliharaan CH. Tanpa sokongan kuat daripada kerajaan dan subsidi awam, pemuliharaan banyak aset kebudayaan yang penting diabaikan atau paling kurang pun diberi janji kosong untuk pemeliharannya. Orang mendapatkan manfaat yang besar dari CH dalam pelbagai bentuk, namun CH diancam dengan kemusnahan dan kehancuran. Walaupun beberapa teknik untuk mendapatkan nilai ekonomi untuk CH, yang berada di luar daripada pasaran, telah dibangunkan tetapi kesahihan dan kebolehpercayaan nilai sering dipersoalkan. Kertas ini akan membincangkan penggunaan pendekatan keutamaan yang dinyatakan (CVM) untuk menilai nilai ekonomi CH dan membincangkan isu-isu dan kelemahan pendekatan yang digunakan. Teknik inovatif baru sedang dibangunkan lagi yang mengambil kira keutamaan bagi aset budaya yang mempunyai konsep yang lebih luas antara pelbagai rupa dan keprihatinan motivasi yang berbeza.*

*Kata kunci: Warisan budaya; mekanisme inovatif; kebimbangan motivasi*

#### INTRODUCTION

Although cultural heritage – and more generally culture - has a value, but measuring the value is difficult because most cultural goods are not traded in the market context based on monetary transactions, thus values of culture measured using financial indicator is seen as not satisfactory. Nevertheless, recognizing that cultural heritage goods have impacts on the well-being of people by satisfying the needs of (members of) society, estimation of the extent to which cultural goods

fulfil man's satisfaction using monetary values have been developed.

#### HERITAGE, CULTURE, VALUES

Cultural heritage (CH) refers to a set of recognized assets that reflect the historical, socio economic, political, scientific, artistic or educational importance of a good that has been created as a visible landmark by our ancestors (Azhar 2010). CH is a social capital good that was not purposely created to signify

of history of previous generation, but becomes valuable goods because it survives the tides of history and be recognized as CH by the subsequent generation. Several features of the cultural heritage make it different from normal economic goods. A historical asset, CH cannot be replaced in case of loss or major damage, since CH are often unique in nature and cannot be reproduced, market simply cannot substitute such goods.

Being different from normal economic goods, CH has no production system. CH is created and thus supplied to the market due to two relevant elements: 1. the act of recognition (e.g., a listing procedure for monuments), and, 2. the task of maintaining the cultural heritage. Thus, as Throsby (1997) mentions, since the supply side of cultural heritage is not driven by any apparent market orientation, CH may be owned, managed, and governed by a different form of private and public ownership and by different authoritative structure.

As the supply of CH is not associated with the market mechanism, i.e., not the normal price-quantity relationship, there is distortion in the demand for CH since there is no well-defined equilibrium price. As a result, the value of a cultural good – as a social asset – cannot unambiguously be determined in the market. In other words, the market fails to determine the allocations of resources for CH. The consumption of the cultural goods is free or, at best, minimally charged (e.g., visits to churches, or museum visits on public holidays). Consequently, a traditional economic supply-demand analysis where prices act as equilibrating parameters does not hold for the CH market.

Methods to estimate the value of public goods have attracted a lot of attention among economists; however, economic elicitation of CH values is quite a recent practice. Not many case studies have applied non-market valuation techniques, such as contingent valuation methods or travel cost methods, to derive monetary estimates of cultural goods' attributes and even fewer applications have been policy oriented (Schutster 2003). Major controversies in the estimation of values of CH had arisen around the issue of the validity and reliability of cultural values estimates, which have often shown to be not only site specific, but also quite sensitive to the used valuation method.

Methodologies used to estimate benefits or values of goods are basically motivated by welfare economics and were originally normative and prescriptive in nature, and thus subjected to various restrictive value judgments, such as the emphasis on efficiency and the repression of equity (Throsby 2001). Besides, the use of 'fictitious' shadow prices to indicate the opportunity costs of benefits foregone was a major source of uncertainty in such project evaluations. Using the 'measuring rod of money' to measure all relevant impacts in one common denominator has become a source of major criticism (Snowball 2008).

Evaluation of public or collective goods – and especially public capital goods such as churches, palaces, parks, landscapes, 'cityscapes', etc. – is not an easy task and cannot be undertaken by the exclusive consideration of the tourist and recreation sector. Especially when expenditures made in visiting recreational destinations are often used as a proxy value for assessing the financial or economic meaning of natural parks, palaces, museums, etc. However, it ought to be recognized that the indigenous socio-historic-cultural value of monuments – or CH in a broad sense – is often invariant with respect to the geographical coordinates (apart from the scale economies emanating from 'socio-cultural complex'), so that we are still left with the problem of a compound evaluation (Snowball 2008).

## VALUES OF CH

Values and valuation in the care and conservation of CH are concerned with critical investigation of both intellectual and practical approaches to key issues in the field of conservation. CH as a whole and each monument has their own, individual array of values. Two general categories of values may be key factors in conservation, as listed below – with a few 'mutual' active fields for interactions including many sub-criteria. The proposed structure of valuation below is based on two main categories – cultural-historical values and socio-economic values (Schaeffer and Millerick 1991) – here modified to current needs (Table 1).

TABLE 1. Cultural-historical values and contemporary socio-economic values based on current state of knowledge and introducing new terms

CULTURAL-HISTORICAL VALUES	CONTEMPORARY SOCIO-ECONOMIC VALUES
relative artistic value	educational value
aesthetic (visual appeal) and age value	economic value (heritage as source of social well)
historical value, including memorial value (memory of place important for the image of place; human memory)	functional value, use value (in the “Rieglian” “sense as document of past human activity – idea and performance; witness of historic events)
identity value (role of cultural heritage in the identity of society, both global and regional)	social value (cognisance, knowingness)
scientific value (heuristics in creative thought, discoveries and new theories)	social access value (as a platform for reflective society)
rarity value, uniqueness	political value, regional value
authenticity value (identity and veracity of the work )	operational value (usefulness of record to its creator or receiver in current operations – also called administrative value)
emotional value (provocation of empathy)	newness value (satisfies the natural human pleasure and curiosity about the new)
integrating value (fostering the reflective capacity of society, innovative participatory approaches)	situational value (influences on evaluations of tourism)
associative/symbolic value (cultural and political, sacral, spiritual value)	financial value “value of value”
creative value (the work of human creative genius – artistic or technical)	potential value for future exploitation and generation of value

Source: Adapted from Schaeffer and Millerick (1991)

Why is this long list of values important? Value and valuation have rich intellectual and historical basis, particular as key factors in conservation projects, of recognition, diagnose and the goals of preservation of cultural heritage.

Many cultural goods have a *public* or *quasi-public* good nature, and the change in their provision brings positive and negative externalities that have to be accounted in CBA for an optimal management of these resources. As it has been pointed out (Thorsby 1997), in economics we now distinguish four different forms of capitals. The *physical capital* (Hicks 1974) as the primary stock of goods, such as plants, buildings etc, was discussed and acknowledged since the beginning. On its implicit definition, economics was initially based. Then, the notion of *human capital* was introduced, (Becker 1964), indicating how people’s skills, knowledge and experience were as important as the physical capital itself to produce economic outputs. In more recent years (Jansson et al. 1994), the concept of *natural capital* was brought forward, meaning the stock of renewable and non-renewable resources that nature provides us. Debate has arisen around this concept, and careful attention has been

## HERITAGE CYCLE

The Heritage Cycle diagram (Figure 1) gives us an idea how we can make the past part of our future (Thurley 2005). In a clockwise direction the wedges and arrows read:

1. By understanding (cultural heritage)
  - people value it
2. By valuing it
  - people want to care for it
3. By caring for it
  - it will help people enjoy it
4. From enjoying it
  - comes a thirst to understand
5. By understanding it.....etc

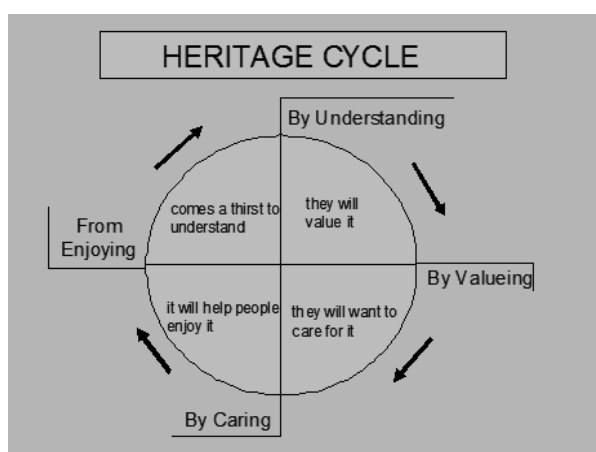


FIGURE 1. Heritage Cycle  
Source: (Thurley 2005)

### REASONS FOR VALUATION OF CH

Potential policy uses of the value estimates generated from studies:

- 1<sup>st</sup>: valuation estimates are useful for evaluating whether to undertake projects to protect or restore cultural heritage goods.
- 2<sup>nd</sup>: valuation estimates are also useful for determining the level of investment in ongoing activities to

provide or protect cultural heritage goods. So that we could determine how much effort and resources should be devoted to protection of the heritage

- 3<sup>rd</sup>: valuation results can inform decisions when choices have to be made among competing objectives within cultural heritage.
- 4<sup>th</sup>: valuation results can be very useful in informing decisions about the funding of cultural heritage goods. Since we acknowledge the diversity in values of heritage held by the population, the estimates can also be used to predict what will happen if increased reliance is placed on entrance fees

### TECHNIQUES FOR EVALUATION OF CH

Revealed preferences (RP) and stated preferences (SP) are two types of non-market goods valuation techniques. Revealed preference utilizes the individual’s actual behaviour to arrive at a value for environmental goods or services. While in stated preference, the value of resources to users is determined by identifying the willingness to pay for the resources available at the site.

TABLE 1. Types of Environmental Valuation Techniques

Revealed Preferences (RP)	Stated Preferences (SP)
Travel Cost Method (TCM)	Contingent Valuation Method (CVM)
Hedonic Pricing Method (HPM)	Choice Modelling (CM)
Market prices	
Advertising Behaviour	
Random utility model	

Source: Adapted from Nijkamp, Vindigni and Nunes (2008)

The main objective of the stated preference valuation techniques is to try to discover what individuals are willing to pay or are willing to accept, by using survey questionnaires. Contingent Valuation Methods (CVM) form an important class of preference elicitation methods and focus directly on willingness to pay by using open ended questions (for an overview see Mitchell and Carson 1989). CVM have been applied to the evaluation of cultural heritage in numerous evaluation studies. Noonan (2003) offers a meta analysis of this rich literature.

It is pointed out that CVM have intrinsic limitations and caveats, designs of the choice

context, the survey question, the specific cultural good concerned, the set of relevant alternatives and the survey unit (e.g., individual or family) have to be carefully chosen and described. Nevertheless, the use of these techniques has significantly increased in the past decades and, consequently, these methods have become a standard element in the toolbox of cultural economists. Noonan (2003) has given a broad review of the applications CVM in many fields of culture, such as arts, historical sites, theatres, museums, heritage, archaeological sites, broadcast, libraries and so forth.

TABLE 2. Studies using Stated Preference Technique

Researchers	Year	Objective of the study	Method
Bille	1997	To identify the willingness to pay for the Royal Theatre in Copenhagen, Denmark as a public good	CVM
Santagata and Signorello	2000	To determine the value to the Naples population of maintaining "Napoli Musei Aperti" a cultural public good provided by the city of Naples in Italy	CVM
Maddison and Foster	2003	To value the congestion costs in the British Museum	CM
Mazzanti	2003	To value cultural heritage in a multi-attribute framework microeconomic perspectives and policy implications	CM
Rolfe and Windle	2003	To estimate non use value for protecting aboriginal cultural heritage sites in the context of further water resource allocation and irrigation development in Central Queensland	CM
Salazar and Montagud	2005	To value the social benefits of restoring an old Arab tower in Spain	CVM
Kim, Wong and Cho	2007	To assess the economic value of Changdeok Palace, Korea and willingness to pay determinants	CVM
Tuan and Navrud	2008	To capture the benefits of preserving My Son, a heritage site of Vietnam	CVM
Kinghorn and Willis	2008	To investigating and estimating the value of Hadrian's Wall in Vindolanda, United Kingdom	CM
Lillian Chan	2009	To determine the conservation value of living heritage site on Penang, Island, Malaysia	CVM
VerbicandSlabe-Erker	2009	To analyze the willingness-to-pay in VolcjiPotok landscape area	CVM
Chiam, Alias, Khalid and Rusli	2011	To discuss contingent valuation method in valuing cultural heritage and to contribute the knowledge on CVM for nonmarket goods	CVM

Studies have applied nonmarket valuation techniques, such as contingent valuation methods or travel cost methods (TCM) to derive monetary estimates of cultural goods attribute and even fewer applications have been policy oriented. These

studies, particularly contingent valuation ones, have very high implementation costs. Hence, to obtain primary estimates of cultural values, local agencies need to spend a great deal of money and time.

TABLE 3. Studies That Employed Revealed Preference Technique

Researchers	Year	Objective of the study	Method
Martin	1994	To estimate the visitor value component of the consumer surplus, for an urban museum in Canada	TCM
Ai, Gao, and Qui	1996	To determine the recreational benefits of Wuyishan national scenic spot in China	TCM
Li and Wenjun	2003	To evaluate the recreational benefits of Jiuzhaigou nature reserve in China	TCM
Bedate, Herrero and Sanz	2004	To calculate the consumer surplus value of four different cultural heritages in Spain	TCM
Guo and Wang	2004	To evaluate the non-use values of tourist resources of Dunhuang located in China	TCM
Ruijgrok	2006	To determine the economic value of cultural heritages in Netherlands	HPM

Contrary to the interview-based valuation of cultural heritage by CVM, the hedonic price models measure the value of cultural heritage by using revealed preferences. Griliches (1971) develops the idea of implicit prices for characteristics, which can be estimated by regressing prices on these characteristics. Like ordinary prices, these implicit

prices reveal the marginal willingness to pay of consumers. An important problem for hedonic price analyses is that, in principle, there can be many variables that influence the value of real estate.

## VALUE TRANSFER METHOD

Value transfer studies in cultural heritage economics are rather rare, and the idea itself is quite controversial. In this paper, we offer a concise – and certainly not exhausting – review of some recent value transfer studies in this area, with a particular view to spatial variability and transferability. We discuss limits and potentialities of benefit transfer approach for cultural values, aiming to raise debate on the topic. We acknowledge the local nature of cultural values and the strict relationship with the population to which the specific heritage belongs, but we focus on the more universally shared values that are embedded in cultural heritage and on possible ways of expressing them in terms of priorities and clusters. More research is needed in this direction before dismissing the possibility to apply benefit transfer in the case of cultural values estimates.

The major criteria for a sound values transfer can be summarised as follows:

1. Studies considered for inclusion must be based on adequate data, sound economic methods and correct empirical techniques
2. Studies should describe willingness to pay (WTP) as a function of relevant explanatory factors
3. Sites must have similar populations
4. The environmental good and the change in provision levels at the different sites should be similar
5. Sites should have similar characteristics
6. The constructed markets, including distribution of property rights, should be the same

Many economists are reluctant to transfer values measured at one site to another site, since the two goods object of the valuation exercise are never exactly the same at the two locations. As Pearce pointed out: “Benefit transfer is often unreliable. Environmental values and cultural heritage values are naturally highly site-and good-specific. We do not anticipate that there will ever be a catalogue of values from which decision makers can select an appropriate number for the new policy issue they face.” (Pearce et al. 2002).

## CONCLUSIONS

In estimating the values of CH through the use of common relevant descriptors (behavioural, methodological, contextual) it is possible to draw

inferences when estimations are carried out from a large sample of cases. Knowledge acquisition in the social sciences, and hence also in economics, is usually based on a reductionist approach, which eliminates many person-specific, object-specific site-specific characteristics of a phenomenon, but the major advantage is that it allows for generalization through a common standardized approach that is applicable to a larger population. It is also important to realize that one of the purposes of undertaking the evaluation is for planning, development, and management of the heritage capital goods, thus when analyzing costs and benefits of additional historic heritage conservation it is not only the direct costs of the conservation that should be considered but also the opportunity costs. A decision to conserve a historic heritage building for instance would forego the opportunity to use the site for other purposes. The socially optimal level of historic heritage conservation is said to occur when the social marginal costs are equal to the social marginal benefits. Society would only move to increase conservation where the additional benefits from that conservation are greater than the additional costs associated with the conservation.”

## REFERENCES

- Ai Yunsheng, GaoLan, QiuJunqi. 1996. Study on the recreational benefits of Wuyishan national scenic spot. *Journal of Beijing Forestry University* 18(3): 89-97.
- Azhar Abdul Latiff. 2010. *Cultural Arts and Heritage Education: Current Framework in Malaysia*. Pusat Pengajian Bahasa, Budaya dan Kebudayaan Melayu Fakulti Sains Sosial dan Kemanusiaan Universiti Kebangsaan Malaysia. Retrieved on: 20 Oct 2013. <http://www.scribd.com>
- Becker, G.S. 1994. *Human Capital*. New York: Columbia University Press.
- Bedate A., Herrero, L. C., & Sanz, J. 2004. Economic valuation of the cultural heritage: Application to four case studies in Spain. *Journal of Cultural Heritage* 5: 101-111. Retrieved on: 23 March 2013. 10.1016/j.culher.2003.04.002.
- Bille, H. T. 1997. The willingness to pay for the Royal Theatre in Copenhagen as a public good. *Journal of Cultural Economics* 21: 1-28.
- Chiam, Chooi Chiam and A. R. Khalid, and Y. Rusli, and R. Alias. 2011. Contingent Valuation Method: Valuing Cultural Heritage. Singapore Economic Review Conference (SERC) 2011, 4-6 August 2011, Singapore.
- Griliches, Z. 1971. Introduction: Hedonic price indexes revisited. In *Price Indexes and Quality Change*, edited by Z. Griliches, 3-15. Cambridge MA: Harvard University Press.
- Guo Jianying & Wang Naiang. 2004. Assessing the tourism value of tourism resources: A case study of Dunhuang. *Journal of Natural Resources* 19(6): 811-817.

- Hicks, J. 1974. Capital controversies: Ancient and modern. *American Economic Review* 64: 302-316.
- Jansson, A. and Jansson, B. 1994. Ecosystem Properties as a Basis for Sustainability. In *Investing in Natural Capital*, edited by Ann Mari Jansson et al. Washington: Island Press.
- Kinghorn N. Willis, K. 2008. Valuing the components of an archaeological site: An application of choice experiment to Vin-dolanda, Hadrian's Wall. *Journal of Cultural Heritage* 9: 117-124. Retrieved on: 6 April 2013. 10.1016/j.culher.2007.05.006.
- Kim, S. S., Wong, K. K. F., & Cho, M. 2007. Assessing the economic value of a world heritage site and willingness to pay determinants. A case of Changdeok Palace. *Tourism Management* 28: 317-322. Retrieved on: 23 March 2013. <http://www.j.tourman>.
- Li Wei, Li. 2003. Using a modified travel cost method to evaluate the recreational benefits of Jiuzhaigou nature reserve. *Acta Scientiarum Naturalium Universitatis Pekinesis* 39(4): 548-555.
- Lilian Chan M.L. 2009. The conservation of a living heritage in inner George Town, Penang Island, PhD thesis submitted to School graduate Studies, Universiti Putra Malaysia.
- Maddison, D. & Foster, T. 2003. Valuing congestion costs in the British Museum. *Oxford Economic Papers* 55(1): 173-190.
- Martin, F. 1994. Determining the size of museum subsidies. *Journal of Cultural Economics* 18: 22.
- Mazzanti, M. 2002. Cultural heritage as multi-dimensional, multi value and multi-attribute economic good: toward a new framework for economic analysis and valuation. *Journal of Socio-Economics* 31: 529-558.
- Mitchell, R.C. and Carson, R.T. 1989. *Using Surveys To Value Public Goods The Contingent Valuation Method*. Washington DC: Resources for the future.
- Nijkamp, P., Vindigni, G., & Nunes, P. 2008. Economic valuation of biodiversity: A comparative study. *Ecological Economics* 67: 217-231.
- Noonan, D.S. 2003. Contingent Valuation and Cultural Resources: A Meta-Analytic Review of the Literature, *Journal of Cultural Economics* 27: 159-176.
- Pearce D. and O'zdemiroglu E. et al. March 2002 Economic Valuation with Stated Preference Techniques Summary Guide Department for Transport, Local Government and the Regions: London. Retrieved on: 23 April 2013. <https://www.gov.uk/government/uploads/system/uploads>
- Rolfe, J., & Windle, J. 2003. Valuing the protection of aboriginal cultural heritage sites. *Economic Record* 79: S85-S95.
- Ruijgrok, E. C. M. 2006. The three economic values of cultural heritage: A case study in the Netherlands. *Journal of Cultural Heritage* 7: 206-213. Retrieved on: 16 May 2013. 10.1016/j.culher.2006.07.002.
- Santagata, W., and Signorello, G. 2000. Contingent valuation of a cultural public good and policy design. *Journal of Cultural Economics* 24: 181-204.
- Schaeffer, P., and C. Millerick. 1991. The impact of historic district designation on property values: An empirical study. *Economic Development Quarterly* 5(4): 301-12.
- Schuster, M. 2003. Introduction. *Journal of Cultural Economics* 27: 155-158.
- Snowball, J. D. 2008. *Measuring the Value of Culture: Methods and Examples in Cultural Economics*. Berlin, Springer.
- Thurley, S. 2005. Sustainable tourism and cultural heritage. Retrieved on: 15 March 2013. <http://www.nwhf.no>.
- Throsby, D. 1997. Seven questions in the economic of cultural heritage. In *Economic Perspectives on Cultural Heritage*, edited by Michael Hutter and Ilde Rizzo, 13-30. St. Martins Press Inc., New York.
- Throsby, D. 2001. *Economics and Culture*. U.K: Cambridge University Press.
- Tuan, T. H, & Navrud, S. 2008. Capturing the benefits of preserving cultural heritage. *Journal of Cultural Heritage* 9: 326-337. Retrieved on: 23 March 2013. 10.1016/j.culher.2008.05.001.
- Verbic, M., Slabe-Erker, R. 2009. An econometric analysis of willingness to pay for sustainable development: A case study of the VolcjiPotok landscape area. *Ecological Economics* 68: 1316-1328. Retrieved on: 23 May 2013. 10.1016/j.ecolecon.

Ahmad Shuib  
 Institute of Agricultural and Food Policy Studies,  
 Universiti Putra Malaysia.  
 E-mail: [ahmadshu@upm.edu.my](mailto:ahmadshu@upm.edu.my)

Nithanan Koshy Mathew  
 Institute of Agricultural and Food Policy Studies,  
 Universiti Putra Malaysia.

Received: 05 June 2015  
 Accepted: 12 November 2015

