# The Costs and Benefits of Conserving Vushtrri Castle

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### **ABSTRACT**

The question of whether and, if so, how to value heritage sites is a vexed one. In the UK, various organisations including H M Treasury, English Heritage and the Royal Institute of Chartered Surveyors (RICS) are preoccupied with it. The nature of this interest can be seen for example in the 2006 discussion paper published by the Accounting Standards Board under the title 'Heritage Assets: Can Accounting do Better? (Accounting Standards Board, 2006) Also, in March 2009, a team led by Sarah Sayce, Professor of Surveying and Planning at Kingston University, produced a report examining the case for the valuation of heritage assets for RICS and H M Treasury (Kingston University, 2009). Both reports sought to explore issues relating to the valuation of heritage assets in the balance sheets of private and public sector organisations and both concluded that the system of accounting for heritage assets in the UK was inconsistent and unhelpful to those who rely on such accounts. Our purpose here is rather different. We are concerned with the valuation problems that arise in trying to determine whether to conserve a heritage asset and how much should be devoted to this purpose. For illustrative purposes, we use the case of Vushtrri Castle in Kosovo, largely because one of us - Kaltrina Thaci - has recently been involved in a condition survey of it (Cultural Heritage without Borders, 2012). However, we believe that the analysis that follows below is relevant to many heritage conservation problems. As our title indicates, we are concerned here with how best to assess the costs and benefits of conserving a heritage asset in order that judgements can be made about the extent of the resources that can sensibly be devoted to such purposes. That such an analysis is essentially economic in character should be obvious since economics is the study of the allocation of scarce resources between competing ends. Thus, resources devoted to the conservation of Vushtrri Castle cannot also be used for other heritage conservation projects and nor will those resources be available for any other purposes however desirable those purposes

**KEYWORDS:** valuing; heritage sites; Vushtrri castle; costs and benefits; conservation

<sup>&</sup>lt;sup>1</sup> For a brief discussion of the definition of economics, see Bannock, Baxter and Rees, 1972.

## 1 INTRODUCTION: VALUING HERITAGE SITES

It is precisely to address problems of this kind that the techniques of cost-benefit analysis (CBA) have evolved and it is important to be clear about the nature of CBA. The function of the cost-benefit analyst has been well summarised as follows: 'The economist engaged in CBA is not, in essence, asking a different sort of question than the accountant of a private enterprise. Rather, the same sort of question is asked about a wider group, society as a whole, and is asked more searchingly. Instead of asking whether the owners of the enterprise will be made better off by the firm's engaging in one activity rather than another, the economist asks whether society as a whole will be made better off by undertaking a project rather than not undertaking it, or by undertaking, instead, any of a number of other projects. Broadly speaking, for the concept of the revenue of the private concern, the economist substitutes the less precise, yet meaningful, concept of social benefit. For the costs of the private concern, the economist will substitute the concept of opportunity cost – or the value forgone elsewhere by using the factors of production for the project chosen. For the profit of the private concern, the economist will substitute the concept of excess social benefit over social cost (B – C) or the ratio of social benefit to social cost (B/C).' (Mishan, 1971)

One question immediately arises from this definition: why is the conservation of Vushtrri Castle and other heritage assets seen as a matter for the public purse rather than for private enterprise? For the answer to this question we refer the interested reader to the introductory chapter of Navrud and Ready's book on valuing cultural heritage (Navrud and Ready, 2002). Briefly, the reason has to do with the 'public good' characteristics of many cultural assets. Pure public goods exhibit two characteristics. First, it is difficult to prevent users from enjoying heritage assets (such as the view of the castle and cathedral from Durham railway station) because there is no charging mechanism available for doing so. Second, several people can enjoy a heritage asset (such as the view of Durham described) simultaneously without detriment to each other's enjoyment. These two characteristics, known as 'non-excludability' and 'non-rivalry' in consumption, make it impossible and undesirable respectively to charge for use of the heritage asset in question. In such circumstances, the provision of conservation funding by private for-profit providers might well not prove to be forthcoming in sufficient amounts and government and not-for-profit organisations are likely to have to step in.

Of course, many heritage assets do not fall into the category of pure public goods although they might exhibit some public good characteristics. For example, although it might be impossible and/or undesirable to try to charge people wishing to enjoy the views of King's College Chapel from 'The Backs' in Cambridge, the College authorities do nevertheless charge for admission to the interior of the chapel. To this extent, therefore, the chapel has private as well as public good characteristics. However, our principal concern here is with Vushtrri Castle, and it is to it that we now turn.

## 2 HISTORY OF VUSHTRRI CASTLE

The 'Old Castle' of Vushtrri (see Figs. 1 and 2 below) is a statutorily protected archaeological site covering an area of 1190 square metres. It is located in the centre of the city of Vushtrri in the Republic of Kosovo and currently has around 105,000 inhabitants. Vushtrri is an ancient settlement dating back to pre-Roman times and is thus one of the oldest cities in the Balkans. By the end of the 1<sup>st</sup> century BC, it had been conquered by the Romans. It has a rich cultural heritage and is well known for its archaeological and historic sites. Apart from the Old Castle, notable historic buildings are the Old Bridge over the Sitnica River that was built towards the end of the 14<sup>th</sup> century and the Hammam of Ali Beu, a small public bath dating probably from the 15<sup>th</sup> century. (Cultural Heritage without Borders, 2012)

The Old Castle itself is of uncertain date although its old foundations support the view that it might well have been built in the 7<sup>th</sup> century by the Byzantine emperor Justinian 1<sup>st.</sup> Before the Ottoman conquest of 1439 the castle was in Serb hands. During the Ottoman period the castle is thought to have been used both as a prison and as a Turkish court. After that it was used as an arms depot and, for a while, the castle's tower served as a granary. In recent times, the castle has been used for a variety of purposes

ranging from a store for sheep foodstuffs, to a prison, to a depository for war remains, to a volleyball training centre, and even, from 1955-58, as a cinema, restaurant and ballroom. The castle is now owned by the Institute for the Protection of the Monuments of Kosovo (*ibid.*).

Unfortunately, what is known of the castle's historical background is not as detailed as one might wish and this is also true of the town of Vushtrri more generally. Since 1962 Vushtrri castle has been closed to the public. Today the physical condition of the castle is poor, and it has been allowed to fall into a state of neglect. Even though located in the centre of the town it no longer benefits the community as it once did and, because of the castle's poor condition and work being done on it, public access is currently denied. (*ibid*.)



Figure 1: The tower of the castle - corrected photograph by K Thaci, 2012



Figure 2: The entrance of the castle from the inside - corrected photograph by K Thaci, 2012

## 3 THE VUSHTRRI CASTLE CONDITION SURVEY

Since 2009, the Kosova Institute of Archaeology has been in charge of excavations at the castle site although, at the time of writing, no report with conclusions and treatment proposals had been produced by them. Against this background, from 2010, the US Embassy Fund made available to Cultural Heritage without Borders (CHwB) grants totalling US\$538,000, principally to produce proposals for the conservation and adaptation and re-use of the castle. CHwB's condition survey of Vushtrri Castle was published in June 2012. (*ibid.*)

CHwB's investigation work was hampered, *inter alia*, by the lack of any proper documentation of the archaeological and historic context or of the site's development at different stages of its history, and the intention is that the condition report should provide the basis for such documentation. Visual analysis conducted on the site noted the poor condition of the castle and how it had been damaged 'as a result of

atmospheric conditions, construction problems, wrong treatments, fire exposure, vandalism, biological colonisation.' However, the main problem for the site's degradation was found to be its neglect and poor maintenance. Following completion of the condition report, and starting in August 2012, field works consisting of the cleaning of biological colonization and pollution, lime mortar re-pointing, stone conservation and consolidation of the castle walls have been underway. (*ibid.*)

The castle's material and architecture contribute to a strong sense of place by locating it within regional craft and material traditions that span the centuries. The historically important pyramidal stones, which are characteristic of the castle, and the thickness of the fortifications walls, are forced into a disharmonious contrast with the adjacent modern PTK building. This is further exacerbated by the lack of visual or physical access to the castle walls, either by the public or for maintenance purposes, from the west and north sides. The castle appears 'squeezed' by its neighbourhood, and is not given the volumetric 'breathing space' or material accord that could highlight, celebrate and enhance the castle's natural architectural qualities. Views from the castle further reinforce this sense of its compression by its neighbours. The biggest risks for the Vushtrri Castle are neglect and new urban development. The historic fabric of the city is being damaged, destroyed, and demolished especially by new urban development that is degrading the main attributes of the castle. (*ibid*.)

The purpose of the conservation of Vushtrri Castle, as developed by CHwB, is not simply to preserve and protect the site, but also to make it once again a living part of the city. Thus the vision is not just to protect the multi-dimensional values of the site, but also to ascribe new ones. This vision of ascribing the castle a multifunctional role in the community is to be seen as just another step in its long history. Throughout the years the castle's function has changed in accordance with the needs and values of the time. The aim today is to let it do the same. By conserving the castle, deterioration will be hindered, safety measures can be taken and new uses can then be ascribed. By combining the will of all stakeholders, the aim is to make the castle a mirror of the will of today's community, whilst at the same time stimulating entertainment, culture, education and economy activity. (*ibid.*)

The conservation and adaptation of Vushtrri Castle must, however, take proper account of its legal status. Vushtrri Castle is a protected archaeological site. Thus no reconstruction works are to be carried out in the structure. The castle will be consolidated to last longer without being dangerous for the people in the vicinity. The first phase of conservation is cleaning the biological colonization and pollution in the structure. The walls will be conserved by use of compatible local stones. Where the mortar is loose or missing, it will be re-pointed with compatible lime mortar. In parts where cement mortar has been used in earlier phases of restoration, it will wherever possible be removed. (*ibid.*)

The conservation philosophy being developed by CHwB is that cultural heritage cannot be preserved, appreciated and understood if not used and interpreted by people. Thus the castle of Vushtrri will be conserved and adapted for current needs and local conditions. The use of the site will be to serve the needs of the community and take due account of local memory for its past functions. It is believed that, by incorporating multiple uses, all of them serving the community, the castle can best be appreciated, interpreted and preserved for the future. (*ibid*.)

The above is presented as an abbreviated summary of CHwB's conservation philosophy for Vushtrri castle which we will return to below. However, it is now time to return to our main purpose, namely how to assess, in economic terms, the costs and benefits of CHwB's conservation proposals for the castle.

## 4 THE COST-BENEFIT EQUATION

Although there is plenty of guidance on how to do cost-benefit analysis, the approach adopted below, given that one of us – John Corkindale – has experience as a practitioner in using it, draws on the 'Green Book' guidance promulgated by H M Treasury in the UK (H M Treasury, 2003) The Green Book advocated use of the so-called ROAMEF cycle consisting of the following elements – Rationale, Options, (ex ante) Appraisal, Monitoring, (ex post) Evaluation, Feedback. The last three of these elements are to carried out once a decision to implement the project in question has been implemented and as a means of

checking how far the assumptions embodied in the (ex ante) Appraisal are justified in the light of experience. Given that, to all intents and purposes, the Vushtrri Castle conservation project is yet to be implemented, we shall have nothing further to say about these three elements here. Also, enough has been said above about the rationale for the conservation of Vushtrri Castle, so we have nothing further to say about the 'Rationale' component of the ROAMEF cycle

An important step in many project appraisals (and the second element of the ROAMEF cycle) is to specify a range of project options. In principle, each option can then be appraised by comparison with a base case (*ibid.*). For example, in the economic appraisal of flood risk management (FRM) schemes in England and Wales, it is normal to specify a 'Do Nothing' option and a 'Do Minimum' and a range of 'Do Something' options. Often, the 'Do Something' options will be characterised by different degrees of flood risk reduction targeted as 1 in 100 years, 1 in 250 years, and so on (Department for Environment, Food and Rural Affairs, 1999). The equivalent for the conservation of Vushtri Castle would be a 'Do Nothing', a 'Do Minimum', and 'Do Somethings' consisting of varying degrees of conservation expenditure.

Thus, in the case of Vushtrri Castle, it is possible to envisage a range of project options. These might include 'Do Nothing' where literally nothing is done on the ground at all, 'Do Minimum' where a minimal amount of work is done consistent with making the building safe for people going into it or walking past it, and various 'Do Something' conservation options. As is apparent from the condition survey, much work has already been done to specify project options and, in fact, a good deal of work has already been carried out on the castle itself.

In principle, it might also be possible to specify a 'Demolish and Site Clear for New Development' option for Vushtrri Castle although such a project option would be rejected out-of-hand by many people in Kosovo, not least on the grounds that it would be grossly unfair to the interests of future generations because Vushtrri Castle is a vital part of their inheritance<sup>2</sup>. If this is so, it might reasonably be asked why even refer to the possibility of a 'Demolish and Site Clear for Development' option? There are plenty of cases around the world of heritage being lost for highly dubious reasons; the destruction by the Taleban in Afghanistan of historic artefacts associated with religions other than Islam, and the demolition at the behest of the planning authorities in the UK of Victorian buildings of high architectural merit (as documented by Stamp, 2010) are among a depressingly large catalogue. Why therefore raise the possibility of more such disasters?

We raise the matter here partly because looking after the interests of future generations has become a matter of heightened public concern since the publication of the Brundtland report and its promotion of the concept of sustainable development (World Commission on Environment and Development, 1987). This, of course, advocated a form of development that enabled the present generation to provide for its own needs whilst not depriving future generations of the wherewithal to do the same. That sustainable development might be something to do with conserving cultural heritage as well as the natural environment can be seen, *inter alia*, in the title of the UK's first environment white paper, 'This Common Inheritance', that was largely prompted by the Brundtland report (H M Government, 1990).

The public concern with equity between generations prompted by Brundtland has given rise to difficulties for cost-benefit analysts. Cost-benefit analysis is an application of the theory of welfare economics that has its origins in Adam Smith's concept of the market operating as 'an invisible hand' for human material progress (Smith, 1776) and was developed by his successors in the nineteenth and early twentieth centuries. An important feature of the invisible hand idea is that it works by conveying signals about individual preferences from consumers to producers. The idea has proved very powerful but has at least one important limitation: as future generations are as yet unborn, their preferences cannot be taken adequately account of by the market mechanism. That this problem might give rise to problems in the

<sup>&</sup>lt;sup>2</sup> The CHwB's condition survey of Vushtrri Castle devotes a good deal of attention to the question of why the castle should NOT be lost to future generations. Apart from its legally protected status, the site including the Hamam, stone bridge and the castle itself is in an unusual urban location and has a good deal of historical significance.

economic appraisal of long-term conservation projects has been recognised by economists for a long time. For example, as long ago as 1952 in his book on agricultural production and resource use, the American agricultural economist, Earl Heady (1952), commented as follows:

'What..is the optimum level of conservation for an intergeneration society? Existing scientific logic can only state this: The optimum level of conservation is what each succeeding generation thinks it to be...The values of discrete generations cannot be linked together *ex ante* into a single index for all time to give one optimum level of conservation into eternity...(T)he level of conservation which is ideal or optimum changes with the values of each succeeding generation.'

The problem Heady identified is likely to give rise to problems whenever CBA is being conducted in relation to projects likely to have an intergenerational dimension to them. An obvious example is nuclear power generation where, because of conventional discounting procedures, decommissioning costs stretching far into the future do not impact very much onto the cost-benefit equation. Another example is climate change mitigation where the costs are short-term and the benefits are long-term. In this example, Nick Stern in his review of the economics of climate change attempted to justify artificially low discount rates for use in the appraisal of climate change mitigation projects on ethical grounds (Stern, 2006) despite the well-known objections to such a procedure (see, for example, Winpenny, 1995).

For what it is worth, our own view is, where intergenerational equity considerations are important, as in climate change mitigation they clearly are, it should be recognised squarely that CBA runs into methodological problems. CBA itself is an application of the theory of welfare economics and a concept of economic optimality that can be traced back ultimately on Adam Smith's concept of the market as 'an invisible hand' making for material progress. This is behind Heady's comment about the difficulties of determining the economically optimal level of conservation and it is not a problem that can be resolved by tinkering with discount rates. Our view is that, where intergenerational problems of this nature arise, economists should confine their attention to the more limited but nevertheless important role of cost-effectiveness analysis (CEA). In the case of climate change mitigation, this would mean economists accepting overall targets based on scientific research and political negotiation and focussing on how most cost-effectively such targets might be achieved.

As far as the economic appraisal of the conservation options for Vushtrri Castle is concerned, our view is the intergenerational issue is not really a problem except where there is the possibility of the castle being completely lost to future generations. In other words, there is a problem in applying CBA to the 'Demolish and Site Clear for New Development' option with the implication that future generations would be deprived of the cultural heritage of Vushtrri Castle. For 'Do Something' conservation options where most of the costs and benefits will fall to the present generation, there is no overwhelming conceptual problem in the application of CBA although, as we shall see, there are some quite difficult practical difficulties to be overcome.

### 5 DEFINING CONSERVATION OPTIONS FOR VUSHTRRI CASTLE

It appears from the condition survey that the (mainly conservation) project options for Vushtrri Castle are as follows:

## 1) Demolish, Clear Site for Redevelopment

Not discussed further here for the reasons described above.

### 2) Do Nothing

No incremental costs or benefits (except incremental damage costs associated with further deterioration of the building and structures through neglect).

#### 3) Do Minimum

Incremental costs associated with minimal maintenance and repair work. No incremental benefits (except avoidance of incremental damage costs associated with the Do Nothing option).

### 4) Do Something 1 - Health and Safety

Fundamental to the future use of the building will be the installation of adequate health and safety measures. According to the condition survey, this will include the provision of the following:

- ramps and steps that are slip resistant and of a different colour to each other at all entrances;
- separate toilets for men and women, a wheelchair accessible unisex toilet, and separate WC cubicles for ambulant people;
- adequate fire protection, including facilities to use the existing doors as fire exit doors; exit, disabled and fire exit signs; fire detectors and fire alarms; fire alarms in disabled toilets; provision of a sprinkler system; provision of a first aid kit; and education for staff in first aid and safety procedures.

## 5) Do Something 2 -Conservation

According to the condition survey, the conservation option will entail the adoption of measures to achieve the following:

- to provide a focal point for the local community;
- to remove and replace the existing damaged door to the castle;
- to use materials wood, steel, tensile, lime mortar, etc. to conserve what is left of the castle's structure;
- to convert the space currently used for car parking into a public space to enhance the appearance of the castle:
- to remove the kiosks and billboard currently located in the car parking area;
- to treat the facades of the neighbouring houses.

## 6) Do Something 3 – Multifunctional Use

Following consultation with local stakeholders etc., it has been proposed that the castle should be adapted into a multifunctional space to include an archaeological museum, a cinema, a theatre, a ballroom, and so on. The intention is that the site will become economically viable by introducing new businesses and other economic activity.

The above 'Do Something' options are summaries of more detailed proposals contained in the condition survey (although the survey itself did not define them in this format). It should be clear that the 'Do Something' options are not mutually exclusive. Indeed, unless all three are implemented, it is hard to see how the expenditure involved can be justified in terms of the likely benefits. One of the messages of the condition survey is that multifunctional use of the castle will make it possible for it to be economically viable by introducing new businesses and economic activities, to be socially inclusive by being accessible to all, and to be environmentally sustainable by making use of sustainable materials, etc., although it will not be possible to make definitive proposals for the adaptation of the site until the report from the Kosova Institute of Archaeology becomes available. This report is expected to define the time-table and detailed locations for future archaeological excavations, the findings to be made publicly available, and so on.

### 6 CALCULATION PROJECT COSTS AND BENEFITS

To date a budget of US\$ 476,278 has been committed to the project of which US\$ 115,090 is designated for 'consolidation' (or conservation) works, US\$ 230,000 for adaptation works, and the remainder for overheads including wages and salaries, study visits, workshops, etc. The obvious question arises as to how cost-beneficial this expenditure might ultimately prove to be. The condition survey includes much by way of statement of aspirations but little in terms of hard calculation of benefits. How then might the latter be done?

The method most frequently used as a way of putting a value on the use of a recreational or heritage site is the travel cost method (TCM), otherwise known as the Clawson-Knetsch method (1966). The method deploys the costs to people of visiting the site as a proxy for its value (Hanley and Spash, 1993). These costs will include travel costs, entry fees, on-site expenditure, and the value of people's time. The Vushtrri Castle condition survey has little to say about these (except to suggest that access should be for everybody and that some parts of the castle should not require any fee for admission).

Fundamental requirements for the TCM to work are estimates of the following:

- the build up of visitor numbers over time;
- information about how far these visitors will travel;
- the costs the visitors will incur in reaching the site;
- how much they will pay for admission;
- the opportunity cost of their time.

Conceptually, it is only the last of these that presents difficult problems. Much depends on what the people involved would otherwise be doing. If they might otherwise be working, the opportunity cost of their time is the wages they will forgo. If, on the other hand, the opportunity cost is some other recreational possibility foregone, the answer will be different. For practical purposes, some kind of uniform proxy value is generally used. (*ibid*.) Thus the H M Treasury 'Green Book' refers to a value of £1 per visit (at 1992 prices) for visits to forest recreational sites in the UK.

On the basis of the information presented in the condition survey, it is simply not possible to say whether the expenditure currently being undertaken on Vushtrri Castle can be justified in cost-benefit terms because there is no way that a benefit-cost ratio (B/C) or a net present value (B - C) can be calculated. The most that can reasonably be said is that, for the expenditure to pass the cost-benefit test, the present value of the benefits as measured by the travel cost method would have at the very least to exceed US\$ 470,000 committed to the project.

Given the dearth of quantitative information, the best that can probably be done in current circumstances is to produce an illustrative calculation. In the time honoured fashion of economists the world over, let us assume that:

- the Vushtrri Castle project has a project life span of 30 years;
- all US\$ 476, 278 project costs are expended in Year 1;
- there are no other capital or recurrent expenditures;
- costs and benefits arising after Year 1 are discounted at a rate of 3.5 per cent (in line with H M Treasury 'Green Book' recommendations);
- project benefits as measured by the travel cost method run at the same level for each of the 30 years of the assumed project life; and
- each visit to the site (as measured by the TCM) is equivalent to US\$ 1 in benefit.

These are admittedly rather unrealistic assumptions. Nevertheless, they can help to provide an indication of the circumstances under which the conservation project might be regarded as economically viable. Thus the present value of US\$ 1 per year for 30 years, discounted at 3.5 per cent, is equal to US\$19.04. If each visit to the castle were equivalent to US\$ 1 of benefit, the implication would be that the minimum number of visitors required to justify the expenditure of US\$ 476, 278 would be 476, 278/19.04 = approximately 25,000 visits per annum.

Inevitably, a degree of uncertainty attaches to some of these assumptions. For example, if each visit were calculated to be worth US\$ 2 of benefit rather than US\$ 1, then the minimum number of visits required per annum would be about 12, 500 rather than about 25,000. Equally, if the project costs amounted to more than US\$ 476, 278, then the number of visitors required to ensure project viability would be commensurately greater. Also important is the implicit assumption contained in these calculations that the project is economically viable provided that its benefit: cost ratio is at least equal to

unity (BCR = 1) and/or its net present value is equal to or greater than zero (NPV = 0). However, better outcomes than these are normally required in project appraisal. Typically, for example, BCRs of 6 + are required to justify flood risk management projects in the UK. Such a requirement would inevitably and very substantially increase the number of visitors needed to make the Vushtrri Castle conservation project viable.

### 7 CONCLUSIONS

It is important to be clear as to what the above calculations do NOT tell us. First, they have nothing to say about the likely profitability or otherwise of enterprises that might be encouraged to set up within Vushtrii Castle as a consequence of the implementation of the conservation project. Each such enterprise would no doubt have to make its own assessment of its financial prospects.

Secondly, and perhaps more importantly, the calculations do not provide an economic justification for the conservation project going ahead or not. Apart from the point, discussed earlier in the paper, that no account is taken of the benefits to future generations of conserving Vushtrri Castle, the cost-benefit calculations are crude and purely indicative in character. The assumptions made are not intended to be realistic but rather as a basis for a more detailed cost-benefit assessment to be undertaken at some later date. For the moment, their purpose will have been served if they can assist in clarity of thought about the issue of economic viability of a conservation project such as is being embarked upon at Vushtrri.

The Vushtrri Castle condition survey is, as is normal with such surveys, very detailed in its architectural prescriptions. It also had much to say about the justification of expenditure on the site in terms of the desirability of conserving the heritage embodied within it, not least for the benefit of future generations. What it does not purport to do is to present an assessment of the costs and benefits of the various project options it discusses. Our paper has offered some ideas as to how this latter purpose might be carried out.

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