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VALUING THE LEGACY OF OUR CULTURAL HERITAGE

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The world has witnessed ethnic and religious genocide, by which one party has tried to destroy or displace another by the most extreme measures.¹ In such instances, the attackers have turned on the cultural heritage of the victims as a way of erasing their associations with both location and building, and of erasing their legacies as a people. In so doing they recognize that there is an additional dimension to cultural heritage that makes it much more than just the physical reality of a space, building, or object, and that endows it with a value beyond the commercial attributes of its component parts.

That intangible quality that makes cultural heritage a contributor to a society's sense of identity and a people's sense of belonging has, understandably, been elusive to quantify. In this chapter, I review a number of techniques and methodologies that have been used not just to recognize these intangible values that are attached to cultural heritage, but to quantify them. While some may think that these estimates are subjective and inconclusive, they are now based on powerful and rigorous analytical techniques.

These efforts to bring more rigor to the estimation of the financial and broader economic, tangible and intangible values of cultural heritage are not only important in guiding governments on the importance of its protection and maintenance. They also remind us of its significance in strengthening a local and national sense of identity and pride. Indeed, those with strong and living links to their past are more empowered to deal with current challenges and to design their own path toward a better future.

Consequently, the purposeful actions of nonstate armed groups, militias, despotic governments, or invading armies in attacking tangible cultural heritage inflict losses that far exceed the mere physical destruction of monuments or the disappearance of

objects. These destructive actions are akin to cultural and social genocide. And in many, if not most, places, among the legacies of the past, cemeteries and places of religious worship are considered especially sensitive and important, and their desecration is considered abhorrent. Thus, far from being an academic exercise of little real-life benefit, the better estimation of the total values of cultural heritage are significant in helping national and international society focus on an additional dimension of the full cost of mass atrocities and the need to counter them.

Most people can easily visualize that art, objects, and monuments are aspects of cultural heritage and that they have values which can be estimated. Some objects can also be traded and auctioned off, thus establishing a market price, such as the Fabergé Easter eggs designed for the Romanovs, one of which was valued at over \$30 million. This chapter, however, focuses on immovable heritage rather than traded objects.

Other items of cultural heritage, including buildings, can acquire value by virtue of their association with important historic people, such as the house where Mozart was born and the one he lived in, or events such as the house where US president Abraham Lincoln wrote the Emancipation Proclamation. But we also talk of cultural heritage in the context of landscapes and places. Whether natural or human-made, landscapes have value. Natural landscapes can become part of the cultural heritage of the nation or of the world by virtue of their unmatched natural beauty, as in the case of the Grand Canyon, or their environmental and biodiversity value like the Great Barrier Reef in Australia. However, more commonly, it is human activity that transforms certain landscapes into cultural heritage by virtue of the monuments placed on it, as in well-known cases from Stonehenge to the Giza Pyramids plateau, or even by the association of the site with an important historical event, such as the plain of Runnymede in England in relation to the Magna Carta, and other sites of major battles.

Historic Cities

Another set of landscapes acquires a subtle form of value: the urban texture and character of historic cities or the historical part, the “old town,” of larger cities with long histories. Here it is the sense of place and its overall character rather than any individual building that matter most, although historic cities also tend to have more than their share of monuments. Unfortunately, such cities have become major battlegrounds between nonstate armed groups and governments in recent decades, especially in the Middle East and North Africa.

This situation becomes more complicated as people live in such cities, which are also visited by tourists. The violence and fighting are doubly problematic due to the humanitarian problems that they create in addition to the threats (and actual destruction) of cultural heritage. This chapter does not address these humanitarian aspects, nor the role of local populations and the international community in

resolving such conflicts. Rather, it focuses on built and tangible cultural heritage and the cultural genocide that often accompanies conflicts today.

Historic cities that have been subjected to damage on a massive scale include Aleppo in Syria and Mosul in Iraq,² as well as urban environments in other countries from Mali to Yemen. In such places, the imperiled cultural heritage includes more than just specific monuments and buildings, although protecting these is also very important. Rather, the rich heritage of these cities extends to include the “character” and “sense of place” of their irreplaceable historical districts.

In dealing with the aftermath of the damage and destruction wreaked on historic cities, the repair and reconstruction of individual buildings are often treated as discrete, individual projects undertaken by various groups and charitable foundations, such as the Agha Khan Development Network and the Aliph Foundation. But there is a sense where the whole is more than the sum of the parts, and so we have to ensure that the repair and reconstruction of individual buildings is done in a way that does not damage or compromise the unique sense of place and urban character of each district and subdistrict. That is, in addition to dealing with the particular building or monument, we must protect and recapture the unique urban character and sense of place that emanates from a combination of the voids and solids, the mix of buildings—many of which are quite mundane in their architectural design characteristics—that together create a part of our legacy that is worth protecting in its overall character. In terms of urban morphology, the characteristics of historical districts include the variety in ages of buildings, the mixed land use—with commercial services and residential spaces cheek by jowl—and a wide array of activities taking place on the street. In such districts, the streets tend to be narrow and frequently have curved alignments with small plazas, and a certain volumetric pattern with an interplay of voids and solids. On the whole, dealing with historic cities raises institutional, governance, investment, and taxing issues that deserve separate and longer treatments elsewhere. We can only indicate a few of these aspects here.

Historic cities from old Amsterdam to Venice in the wealthy West, to Samarkand, Lahore, Cairo, and Fès—to name but a few—in less developed countries are very special places whose names evoke magic and the stuff of dreams. Yet the realities in the case of developing states are of cities teeming with poor individuals struggling with inadequate infrastructure and deteriorating buildings. But the magic is certainly there, and so is the pride of the inhabitants in their city and the monuments that make it such a precious part of world heritage. The increasing pace of urbanization and population growth adds to the challenge. Thus, intervening in these very special places requires a combination of sound policy, effective participation, innovative institutional arrangements, and public–private partnerships. Above all, it requires the mobilization of considerable investments, targeted specifically to the rejuvenation (or postattack repair and reconstruction) of these very special places. It requires new and

fresh thinking about the issues of managing urban growth and creating livable cities.

Mobilizing resources must involve the public sector (both national and local) and the private (both local and international). To mobilize public money, we must be able to convince the public at large (not just the local inhabitants) of the merits of each case. To mobilize private funds, the profit they will make (the financial return on investment) must be encouraging to investors. Here we must also beware of gentrification that would lead to involuntary displacement of the currently resident poor population.

Philosophical Foundations for the Institutional Framework

Finance and economics are dependent on processes that bring together the different actors; private and public, international and national, formal and informal. We need to make sure that the investments and efforts of the various actors become mutually reinforcing, pulling in the same directions, supporting the same objectives, so that the whole is more than the sum of the parts. Such processes require not only sound finance and economics, but also effective political processes that bring all these actors together to work collaboratively on effective approaches to conservation and socioeconomic rejuvenation in historic cities.

Most approaches involve some combination of restrictions on activities in historical areas, the most obvious of which are not to destroy and replace culturally significant structures, to damage them by misuse, ugly partial additions, and other inappropriate uses, or even by permitting pollution nearby. Buildings that destroy the overall urban character of a historical district are usually forbidden, even if they could be commercially and financially remunerative. Restrictions may go further, however, by requiring particular standards of upkeep or specifying how that upkeep should be carried out, or constraining both the public and private sector activities that can be undertaken in certain locations.

Also important are measures to encourage conservation by other actors. In an urban context, direct intervention to conserve all structures is impractical. Conservation efforts, therefore, are dependent on an incentive framework that will encourage the kind of actions that support the thrust of the conservation programs, directly and indirectly. Every type of actor has a different way of looking at the problem of rejuvenating the historic cores of living cities in the rapidly evolving context of developing countries. They will have their own calculus by which they will decide whether to invest their effort and funds in the renewal of the historic core and the preservation of its unique character. But the set of incentives that are necessary for each to act in a particular way are codependent. Thus, social life in historic cities must be designed to give each the necessary set of incentives. This is done in order that the whole acts in concert to reverse the negative downward spiral that could result from the unlimited commercial exploitation of the "old city," and the continued

pollution and lack of infrastructure that surrounds poor districts in historic cities, all of which would degrade the unique urban character of the historic city. It is difficult but not impossible, akin to finding a solution to the Rubik's cube puzzle.

Trying to shore up the finances of municipalities through more rigorous taxation may discourage necessary private investment, while excessive incentives to private investors could bankrupt a municipality. Similarly, attracting higher income residents to a historic city may raise revenues and create economic opportunities, but it could also lead to the displacement of the local population. Thus, striking a balance in the investment framework of historic cities and promoting real public-private partnerships are necessary to protect their unique heritage and maintain their social cohesion.

While adaptive reuse is the only way to keep a historical district living and functioning, it requires very careful attention to the physical restoration and reuse of its buildings. The type of use can be a source of controversy if it is not sensitive to the feelings of the community.

The need to preserve has to be matched by the need to provide flexibility of reuse. Experience shows that excessively rigid adherence to restoration standards can lead to less-than-optimal use of buildings. This requires a review of prevalent practices in conservation to ensure that purity of purpose does not constrain the ability to reuse buildings and thus strangle the economic and social revitalization of historic cities.

We must also be able to mobilize the necessary amount and the right kind of investment to revitalize the economic base of an old city, restore its glorious monuments, protect its unique character, and meet the sociocultural needs of the inhabitants and the aspirations of the young. This invariably raises a host of technical problems that require expertise, including imaginative reuse of old buildings and mobilization of financing. An interesting new initiative to develop a viable approach to financing cultural heritage and link it to expertise is the Cultural Heritage Financial Alliance (CHiFA), launched in 2019. The mobilization of resources requires the application of rigorous methods of economic and financial analysis that justify the flow of public investments and create adequate incentives for private action. Such methods are not yet systematically applied in the case of historic cities, whether to develop a program of maintenance and upkeep, or to rebuild and restore cultural heritage after destructive attacks.

Putting a Dollar Value on Cultural Assets

Beyond historic cities, cultural heritage more generally requires our attention and protection. Monuments need to be maintained and protected against dilapidation and vulnerability to everything from water intrusion to rising damp, from sliding earth to fissures in foundations, all of which require investment. This needs to be justified against competing claims for government funding.

How much is it worth for a society to protect cultural heritage “assets”? Many poor countries need to spend far more than they can currently afford on education, health, infrastructure, and other sectors. How much should such countries spend on the protection of cultural heritage? What is the relative responsibility of different social actors, both public and private, national and international, toward investment in the protection and enhancement of heritage?

Here we need to discuss the techniques for estimating the value of tangible and immovable cultural heritage, including its intangible worth. This relies on cost-effectiveness and cost-benefit techniques for judging the appropriateness of making investments in cultural heritage assets, whether for routine maintenance or for repair and reconstruction. Note that leaving an aspect of cultural heritage partially destroyed itself entails a major cost: to the credibility of the authorities and the self-esteem of the population.

Proper calculation of costs and benefits—all benefits—will lead to a very clear indication to undertake investment in cultural heritage. This is because the total economic value of a tangible and immovable cultural asset goes far beyond simple direct or indirect use values, with considerable additional intangible nonuse values that must also be taken into account in calculating the benefits society derives from maintaining and protecting the cultural asset. We have a number of methodologies to estimate such intangible values using both revealed and stated preference techniques that were initially developed to establish the value of intangible benefits in relation to the environment, but can be used to estimate the value of cultural heritage.

The basic idea is to ensure that any investment being considered will have total benefits that exceed the total costs of the investment. Thus, except for rare cases of truly priceless and invaluable heritage where we would use cost-effectiveness techniques, most investments compare a cost stream and a benefit stream over time. We say that both costs and benefits should be summed and discounted. We “discount” future costs and benefits because a dollar in the hand today is not equal to a dollar years in the future. The estimation and comparison of these expected streams of costs and benefits, and the discount rate, which determines how much we reduce the value of future costs and benefits, are at the heart of the benefit-cost methodology.

For conservation efforts to succeed, especially in the complex reality of historic cities, a variety of actors need to undertake many disparate actions, some of which can be deliberately chosen and directed by government decision makers. Many other actions will be outside their direct control and will depend on independent decisions made by various private local or international actors. Private sector actors (except for philanthropists) will use financial rather than economic analysis, which the government should be using except for special cases where the use of cost-effectiveness is justified.

In a few cases, such as unique monuments that are central to national identity, conservation investments will be justified a priori, for which the only further analysis will be a cost-effectiveness one, i.e., what the most effective means of achieving the desired result is, not whether the investment has sufficient benefits to justify the conservation effort. Examples of using cost-effectiveness (because the benefits are so great that they do not need to enter our calculations) would be restoring the Sphinx in Egypt or moving the Abu Simbel Temple in Nubia when it was threatened by the rising waters of the Aswan High Dam. These are things that are absolutely essential to do, no matter what the cost. But such cases are rare, as the competing priorities for limited funding even between cultural heritage projects in the same country will require the application of cost-benefit analysis. Here we ask if the totality of the cost (over a prescribed time horizon) is justified by the totality of the benefits that will accrue from the investment (over the same time horizon). These future streams of costs and benefits must be discounted.

Analyses of such efforts must include, therefore, both what we might call an economic and a financial analysis. The economic (or social) analysis asks whether the proposed investments are worth undertaking: Do their benefits to society as a whole exceed their costs? The financial (or private) analysis, on the other hand, examines the specific costs and benefits that an investor, or group of investors, will experience as a result of these investments: Do they individually gain or benefit from them? For example, if the government is providing subsidized electricity or water, that subsidized price is the price that the private investor uses in his or her financial analysis. The government, however, should use the full (“economic”) price of what it costs to provide this water or electricity (frequently referred to as “shadow pricing”) in its economic analysis. That is the essence of applying cost-benefit analyses.³

Cost-benefit analyses are key for both public and private decision-making. They compare discounted streams of costs with discounted streams of benefits, using financial values for the private investor and economic (social) values for the public agencies. We can subtract the total costs from the total benefits and obtain the net present value (NPV) for the project. We can divide the total benefits by the total costs to get the benefit-cost ratio (B/C ratios); the result should be greater than one. Because the results of both NPV and B/C ratios are highly sensitive to the discount rate selected for the analysis, many analysts prefer to work with a rate of discount which is defined by the parameters of the project under consideration. This is the internal rate of return (IRR), defined as that rate that would set $NPV=0$, meaning that it would equate the project’s discounted cost and benefit streams. Then that rate is compared to, and should be greater than, the prevailing opportunity cost of capital (the interest rate you would get if you put that money in a certificate of deposit, CD, at a bank, or invested it in treasury notes). It also allows the analyst to test for the robustness of the analysis, by recalculating the IRR for, say, a 20 percent cost overrun, or a delay of two years in

the start of the benefit stream, etc. These analytical tools and the quantification they bring allow comparisons between different projects and may help decision makers in setting their priorities in an investment program, or help justify aid donors to invest in the maintenance, or the repair and reconstruction, of cultural heritage in developing countries.

In the past century, a number of economists have argued that the economic benefit stream for such projects should be limited to the tourist benefits they will generate. Tourism revenues are undoubtedly important, but limiting the economic benefit stream to that would lead to three false conclusions. The first error would be to conclude that those aspects of cultural heritage that do not attract visitors willing to spend money are not worth preserving. This of course denies the intrinsic worth of cultural heritage, both for local people and the world at large, who are enriched by its very existence even if they never visit the site. After all, many of us may never have an opportunity to visit any World Heritage Sites, but we would feel impoverished at the loss of such places, and look with trepidation to conflicts that threaten them.

The second error that a purely tourism-centered outlook brings is for authorities to seek the maximization of tourist numbers since their expenditures at a site increase the benefit stream. In fact, such a development would often destroy the charm of the place and denature the activities that are endogenous to the cultural setting, and lead to such problems as the endless queuing to get to the peak of Mount Everest which resulted in the death of two climbers in May 2021. The third error is the inherent implication of a tourist-centered valuation: if another and mutually exclusive investment—say a casino on the beach—resulted in increased tourist dollars for the country, we should leave the old city without restoration and build the casino.

Clearly, these conclusions are neither justified nor defensible. We must look for the intrinsic value of the cultural heritage *above and beyond* what it is likely to generate in terms of tourist dollars. We need to think through all that enters into estimating the full economic value of cultural assets.

Estimating the Total Economic Value of Cultural Assets

Cultural heritage sites differ from other sites and from each other because of their aesthetic, historical, cultural, and social significance. In similar circumstances, environmental economists generally take a comprehensive look at value, using the concept of total economic value (fig. 6.1).

Total economic value is usually broken down into a number of categories of value. The breakdown and terminology vary slightly from analyst to analyst, but generally include use value (both direct and indirect), option value, and nonuse value. Use values include direct (or extractive) and indirect (or nonextractive) uses. Each is often further divided into additional subcategories. By disaggregating the value of a cultural

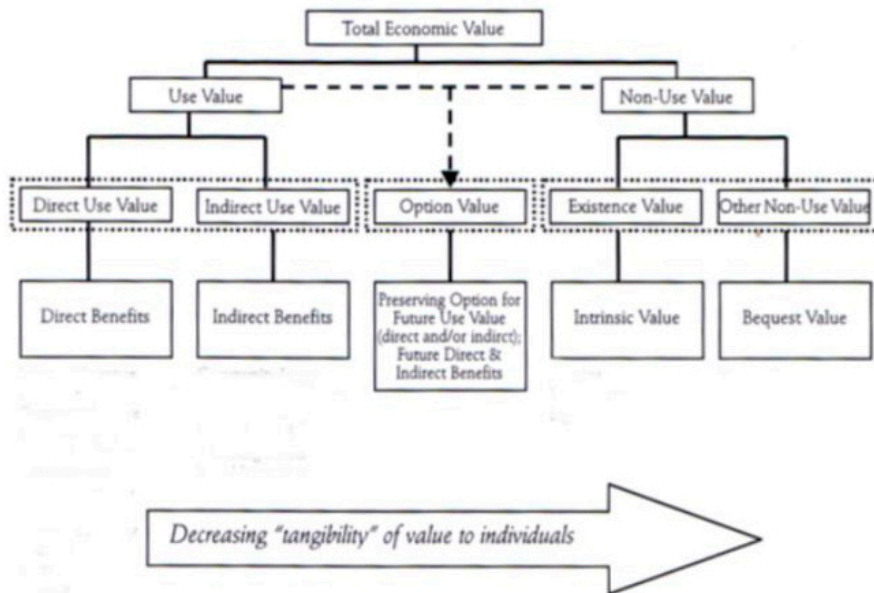


Figure 6.1 Total economic value of an asset (Serageldin et al. 1999)

heritage site into various components, the problem generally becomes far more intelligible and tractable.

Direct use value derives from goods which can be extracted from the site, or the building, such as direct uses being made of the buildings for living, trading, and renting or selling spaces. Many of these categories of use are captured by markets and transactions in markets. Unlike a forest, the use of a historic city does not deplete it unless the use is inappropriate or excessive, denaturing the beauty of the site or the character of the place. At some level, a parallel exists to extractive use of a forest being kept at sustainable levels. Indirect (or nonextractive) use value derives from the services the site provides. For example, some people just pass through a city and enjoy the scenery without spending money, so their use of the place is not captured by an economic or financial transaction. Note that to the extent that a site involves natural or human-made beauty, it may have enormous value independent of its historical or cultural value. Thus, one can enjoy the charms of an old medieval town center without reference to the history of the individual monuments, although for many the city would evoke both memory and identity through its heritage connotations.

Measuring indirect use value is considerably more difficult than measuring direct use value. Among the indirect use values likely to have clear relevance to the valuation of cultural heritage are aesthetic and recreational values. Aesthetic value consists of the aesthetic benefits obtained from that part of the pleasant sensory experience that is separate from material effects on the body or possessions. Such effects differ from nonuse value because they require a sensory experience, but

aesthetic benefits are often closely linked to physical ones. It is the difference between actually walking in that historic city and simply seeing a picture of it. And we can quantify that difference.

In terms of recreational value, although the recreational benefits provided by a site are generally considered together as a single source of value, they are a result of different services which a site might provide. The extent of recreational benefits depends on the nature, quantity, and quality of these services. A historical area could have rest stops, vistas, and attractive meditation spots, in addition to shopping bazaars and, of course, monuments. The enjoyment derived by visitors from each of these will depend on such factors as the cleanliness of the surroundings. Frequently, disaggregating the benefits into components eases the task of valuation. But indirect use values of cultural heritage sites must also include the sense of place and its contribution to local and national identity. That sense of place, its impact on behavior, and the ensuing interactions are also intangible benefits of cultural heritage that cannot be easily measured but are nevertheless real.

Between use and nonuse value there is also option value and quasi-option value. The former is the value obtained from maintaining the option of taking advantage of a site's use value at a later date, akin to an insurance policy. Quasi-option value is derived from the possibility that even though a site appears unimportant now, information received later might lead us to reevaluate it.

Nonuse value tries to capture the enrichment derived from the continued existence of major parts of a particular cultural heritage site. Even if not likely to visit these locations, one would feel impoverished if they were destroyed. In many cases, this benefit is referred to as existence value—the value that people derive from the knowledge that the site exists, even if they never plan to visit it. People place a value on the existence of tigers and whales even if they have never seen one and probably never will; if tigers or whales became extinct, many people would feel a definite sense of loss. Existence values can also be expressed by bequest values: i.e., I want my children to benefit from the continued existence of these sites after I am gone, and many people make formal bequests of their collections or their historical family residences to be maintained after their death. Nonuse values are the most difficult types of value to estimate. Yet, this category of value has obvious relevance for the assessment of cultural heritage sites.

In addition to helping evaluate the benefits provided by the site itself, adapted environmental economics techniques can also be useful for evaluating the impact of changes in environmental or aesthetic problems at the site. For example, the enjoyment derived by visitors, and which is felt by the residents for whom the urban environment contributes to their own sense of identity, will be adversely affected by air pollution as well as by inappropriate construction, such as an ugly fourteen-story building in the heart of a medieval townscape.

There are many different actors who are likely to benefit from an investment to protect the cultural heritage in historic cities, and each may have a different appreciation of the benefits that accrue. So their distinct perspectives should be taken into account. Such actors include residents, investors, visitors, and nonvisitors. Residents, making the distinction between renters and owner-residents, and absentee landlords, qualify as a special category of investors, housing usually being regulated differently from businesses. Investors in businesses in the historical area may or may not be residents, including small traders. Visitors to the historic city can be both nationals and international. And there are also nonvisitors, also distinguishing between national and international, the latter of which could be called “the world at large.” Further refinements are necessary for meaningful analysis: poor and rich, formal and informal, and so on.

Measuring the Benefits: Appropriate and Inappropriate Methods and Techniques

There are several methods used in measuring benefits. Each has certain advantages and limitations. Note that market price methods, discussed first, are applicable only in traded goods and most of the inherent value of cultural assets are really nontraded. Although many benefits of cultural heritage sites do not enter markets, some do. The most obvious example is when visitors pay a fee to enter a site. The revenue from fees provides a measure of the value people place on being able to visit the site. Some uses of cultural heritage sites have close substitutes which can be used to estimate the value of those uses. Thus, the value of using a historic building as a school might be estimated using the cost of the next best way to obtain the necessary space: for example, the cost of building and equipping a suitable structure. Cultural heritage sites might also induce a variety of economic activities, again most obviously in the tourism industry (e.g., hotels, restaurants, shops). Standard techniques can be used to value these benefits. The difficulty generally arises from predicting the impact that changes in the cultural heritage site will have on the quantity and quality of such services, not in estimating their value.

To capture nontraded benefits, three broad categories of techniques exist, each discussed in turn below: price-based revealed preference, survey-based stated preference, and adaptive techniques (that seek to adapt the value of one thing to another). First, economists generally prefer price-based revealed preference techniques since they involve actual money paid by people rather than just responses to surveys. Two of these techniques stand out and are discussed below: the travel cost method and hedonic pricing methods. The former uses information on visitors' total expenditure to visit a site to derive their demand curve for the site's services. This method assumes that changes in total travel costs are equivalent to changes in admission fees. From this demand curve, the total benefit obtained by visitors can be calculated. It is important to note that the value of the site is not given by the total

travel cost; this information is only used to derive the demand curve to calculate the value the visitors' place on that curve for the various kinds of services that are and could be provided at the site. The travel-cost method was designed for, and has been used extensively to, value the benefits of recreation. But it depends on numerous assumptions, many of which are problematic in the context of international tourism. It is best used to measure the value placed by visitors of the site as a whole, rather than on specific aspects of the site, and can be better applied to local visitors rather than international tourists who have had to come by air.

It is known that many observed prices of goods are actually prices for bundles of attributes. For example, if somebody buys a historic house, the price paid depends on physical attributes of the dwelling (such as number and size of rooms, amenities such as plumbing, and general condition); on the convenience of access to employment, shopping and education; and on a number of less tangible factors such as environmental quality and the value that the purchaser puts on living in a historical district or on the knowledge that he or she lives in a historic house. Because each house differs slightly from others, the influence of the various factors on its price can be broken down using statistical techniques known as hedonic methods, provided sufficient observations are available. This approach is of interest because many dimensions of cultural heritage are likely to be embodied in property values.⁴ A historic structure, for example, may sell for more than an equivalent modern one. Hedonic methods allow this effect to be measured, holding other factors such as size and amenities constant. In essence, the technique estimates the implicit prices for various attributes that together make up the sale price. Although these techniques have obvious applicability to the study of benefits of cultural heritage in urban settings, their use has often been limited by their considerable data requirements.⁵

The second broad category of techniques for capturing nontraded benefits are survey-based stated preferences. Contingent valuation, for example, is carried out by asking consumers directly about their "Willingness To Pay" (WTP) to obtain an environmental good or a cultural benefit derived from the protection and maintenance of cultural heritage.⁶ A detailed description of the good (environmental or cultural) accompanies details on how it will be provided or accessed by the respondent. In principle, contingent valuation can be used to value any environmental or cultural benefit. Moreover, because it is not limited to deducing preferences from available data, contingent valuation can be targeted quite accurately to ask about the specific changes in benefits that the proposed project would bring. Contingent valuation methods have long been used to examine aesthetic benefits, and they are especially important in the estimation of existence value because it is the only way to measure it, since by definition existence value will not be reflected in behavior.

Contingent valuation was used effectively in the case of the Exxon Valdez oil spill off Alaska in 1989 and was supported by the courts in an almost \$1 billion settlement. As can be imagined, it was subjected to severe criticism, but best practice guidelines have now been developed for its use,⁷ and it is now generally accepted that contingent valuation can provide useful and reliable information as long as these guidelines are followed.

The third type of broad category of techniques for capturing nontraded benefits, adaptive techniques, employs the valuation of something else, like the actual cost of repairing an asset as equal to the value of that asset (replacement cost method), or that the benefits measured for one asset will be equal to those for another asset (benefit transfer method). In general, these methods should be avoided as they have many conceptual errors, as explained below.

The cost of replacing a good is often used as a proxy for its value: this is replacement cost.⁸ The approach has two problems. First, it simply may not be possible to replace many cultural heritage sites, and when the site is only damaged, restoration cost might be used. Second, when the goal is to decide whether a site is worth restoring, using restoration cost as a measure of value is clearly of little use. It would argue that the more degraded the site, the costlier the restoration and the greater the value. This is clearly faulty reasoning, though this measure may be appropriate for some critical aspects of the site where the value might reasonably be thought to be extremely high. In such cases the appropriate approach is one of cost effectiveness rather than cost benefit.

Second, benefits transfer refers to the use of estimates obtained (by whatever method) in one context to estimate values in a different context. For example, an estimate of the benefit obtained by tourists viewing wildlife in one park might be used to estimate the benefit obtained from viewing wildlife in another park. Because cultural heritage sites are unique, benefits transfer methods have little applicability. Yet there may be some relevance in considering benefits associated with international tourism. Since tourists at a historical site are likely to be drawn from the same pool of potential tourists as those at another site, it seems reasonable to assume they would place similar values on similar services. Thus, while this approach is probably of limited use in valuing unique aspects of a site, it could be used for more generalized aspects. Of course, the original estimates being transferred must be reliable for any attempt at transfer to be meaningful.

Ultimately, the choice of the most appropriate technique depends on the problem under study. Except in simple situations, a variety of techniques will likely be necessary to estimate the full range of benefits for complex projects. Moreover, where substantial investments are contemplated, it might be desirable to cross-check estimates by deriving them from multiple methods.

When bringing together the results of multiple techniques, two important points should be kept in mind: to avoid the twin dangers of underestimation, or not measuring intangible benefits, and of double counting, or using techniques that each capture part of the same benefit and adding them. Another important pitfall comes from limiting the benefit stream to a fairly measurable, solid, and understandable set, such as tourism revenues, as discussed earlier.

Another potential pitfall is the use of the likely impact of investment in (or expenditure on) restoring the heritage on the gross domestic product (GDP). This approach equates the spending with the benefit of that spending. Thus, letting a monument decay and then spending more on its restoration and conservation would appear to promote more benefits than avoiding the decay of the building in the first place. These anomalies are common to GDP calculations, and have been much debated in the economic literature. Although some aspects of the issues can be addressed by such calculations—for example, that spending on cultural heritage restoration projects has a higher multiplier effect than spending on other construction projects—they are likely to be misleading. They should be avoided despite their obvious attractiveness to decision makers who have been conditioned to think in terms of contributions to GDP growth as equivalent to increases in welfare and well-being.

Concluding Remarks

Much is being done to add rigor to the financial and economic analysis of cultural heritage conservation projects, including tools that can be used to study repair and reconstruction projects after damage from hostile forces, or even to build protections for the site against possible damage by nonstate armed groups. There are two important elements to this new work. First, it provides rigorous techniques that have stood the test of major litigation in the United States. Second, it contextualizes the project intervention, its costs and benefits, within the wider realities of multiple interests and actors who deal with cultural heritage, and especially those who make up the living city. Above all, this work tries to give due recognition to the intrinsic existence value of cultural heritage beyond its existence as an object for tourists.

It is important to remind ourselves just how valuable these elements of our cultural heritage are, and how ruthless its intentional destruction is. Reflecting on that provides powerful arguments for how important it is to protect our cultural heritage, with its invaluable contribution to the local and national sense of identity and pride, because those with strong and living links to their past are in the best position to design their own future. The legacies of our cultural heritage are the touchstones of our memory and the wellsprings of our imagination.

BIOGRAPHY

Ismail Serageldin is the Emeritus Librarian of Alexandria, and was the Founding Director of the Bibliotheca Alexandrina, the New Library of Alexandria in Egypt (2001–17). Before that he was the Vice President of the World Bank (1993–2000). He has received many awards including the Order of the Rising Sun of Japan. He is a knight of the French Legion d’Honneur and a Commander of Arts and Letters of the French Republic. He has lectured widely, published more than a hundred books and five hundred articles, and has received over thirty-five honorary doctorates from all over the world.

SUGGESTED READINGS

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NOTES

1. Earlier versions of the material in this chapter can be found in Ismail Serageldin, *Very Special Places: The Architecture and Economics of Intervening in Historic Cities* (Washington, DC: World Bank, 1999), and “On the Economic Value of Cultural Assets: Reflections with Special Reference to the Case of Historic Cities in the Less Developed Countries,” conference paper presented at “Florence 1966–2016: Resilience of Art Cities to Natural Catastrophes—The Role of Academies,” Accademia Nazionale dei Lincei, Rome, 11–13 October 2016.
2. For Mosul, there is an upcoming study that examines the destruction of the architectural heritage perpetrated by the Islamic State of Iraq and Syria between 2014 and 2017. See Karel Nováček et al., *Mosul after Islamic State: The Quest for Lost Architectural Heritage* (London: Palgrave Macmillan, 2021).
3. Matthew D. Adler and Eric A. Posner, eds., *Cost-Benefit Analysis: Economic, Philosophical, and Legal Perspectives* (Chicago: University of Chicago Press, 2001).

4. The quality of surroundings impacts the prices of residential property, and thus by extension the quality of a historical district can be a factor. For an example of calculating the impact on residential prices of proximity to a forest using a hedonic price method, see Ken Willis et al., “Assessing Methodologies to Value the Benefits of Environmentally Sensitive Areas,” Countryside Change Initiative Working Paper no. 39, 1993, 15–28.
5. Harold Kalmann, *The Evaluation of Historic Buildings* (Ottawa: Canadian Ministry of the Environment, 1980); and Rob Pickard, “Setting the Scene: A Review of Current Thinking,” in *The Economics of Architectural Conservation*, ed. Peter Burman, Rob Pickard, and Sue Taylor (York: University of York, 1995), 14–17.
6. For a detailed discussion, see David J. Bjornstad and James R. Kahn, eds., *The Contingent Valuation of Environmental Resources: Methodological Issues and Research Needs* (Cheltenham, UK: Edward Elgar, 1996); and Steven K. Rose, “Non-Market Valuation Techniques for Application to the Preservation of Cultural Heritage: State of the Art,” Department of Agricultural, Resource, and Managerial Economics, Cornell University, Ithaca, New York, 1998.
7. Kenneth Arrow et al., “Report of the National Oceanic and Atmospheric Administration Panel on Contingent Valuation,” *Federal Register* 58, no. 10 (1993): 4602–14.
8. David W. Pearce and Jeremy Warford, *World without End: Economics, Environment and Sustainable Development* (New York: Oxford University Press, 1993), 105–11.