World Heritage List: Does it Make Sense?

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World Heritage List: Does it Make Sense?

Abstract

The UNESCO World Heritage List contains the 900 most treasured Sites of humanity's culture and landscapes. The World Heritage List is beneficial where heritage sites are undetected, disregarded by national decision-makers, not commercially exploitable, and where national financial resources, political control and technical knowledge for conservation are inadequate. Alternatives such as the market and reliance on national conservation list are more beneficial where the cultural and natural sites are already popular, markets work well, and where inclusion in the List does not raise the destruction potential by excessive tourism, and in times of war or by terrorists.

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I. The World Heritage List

The UNESCO Convention

The World Heritage List compiled by UNESCO has become highly popular. Many World Heritage Sites are major attractions for cultural tourism, and are icons of national identity (Shackley, 2006:85).

In the 1920s the League of Nations became aware of the growing threat to the cultural and natural heritage on our planet. Nothing concrete emerged despite many years of intensive discussions and drafting of reports. In 1959, UNESCO launched a spectacular and successful international campaign to save the Abu Simbel temples in the Nile Valley. In 1966, UNESCO spearheaded an international campaign to save Venice after disastrous floods threatening the survival of the city. In November 1972 the General Conference of UNESCO adopted the *Convention concerning the protection of the world cultural and natural heritage* at its 17th session in Paris. The Convention "seeks to encourage the identification, protection and preservation of cultural and natural heritage around the world considered to be of outstanding value to humanity". It came into force in 1977 and was ratified by 20 nations; the Convention now includes 186 countries¹, and the World Heritage List comprises 919 Sites,² 706 (or 77 percent) of which relate to culture, 187 to nature, and 26 are mixed, i.e. combine cultural and natural heritage.

The sites to be included in the List initially were evaluated in a somewhat *ad hoc* fashion by the Advisory Bodies to the World Heritage Committee. The Convention's criterion of "outstanding value to humanity" is noble but proved to be almost impossible to clearly define. An important development has been to establish ten criteria for inclusion in the World Heritage List, which are put down in detail in the *Operational Guidelines for the Implementation of the World Heritage Convention* (Unesco, 2005) and accessible online³. Nominated sites must meet at least one of the ten criteria and are applied in connection with three comprehensive aspects: uniqueness, historical authenticity and integrity or intactness.

¹ States of the World Heritage Convention as of 16.4.2009 according to http://whc.unesco.org/en/statesparties/, accessed on 6.9.2009.

² After the 33rd ordinary session of the World Heritage Committee, held in Sevilla on 22nd-30th June 2009, the World Heritage List contains a total number of 890 Sites. For our purposes, we count Sites extending over more than one country as many times as the number of countries involved, therefore obtaining a higher number of Sites. We also disregard the two de-listed Sites.

³ http://whc.unesco.org/en/criteria/, accessed on 13.11.2009

The first six criteria refer to Cultural Sites:

- 1. to represent a masterpiece of human creative genius;
- 2. to exhibit an important interchange of human values, over a span of time or within a cultural area of the world, on developments in architecture or technology, monumental arts, town-planning or landscape design;
- 3. to bear a unique or at least exceptional testimony to a cultural tradition or to a civilization which is living or which has disappeared;
- 4. to be an outstanding example of a type of building, architectural or technological ensemble or landscape which illustrates (a) significant stage(s) in human history;
- 5. to be an outstanding example of a traditional human settlement, land-use, or sea-use which is representative of a culture (or cultures), or human interaction with the environment especially when it has become vulnerable under the impact of irreversible change;
- 6. to be directly or tangibly associated with events or living traditions, with ideas, or with beliefs, with artistic and literary works of outstanding universal significance. (The Committee considers that this criterion should preferably be used in conjunction with other criteria);

The last four criteria concern Natural Sites:

- 7. to contain superlative natural phenomena or areas of exceptional natural beauty and aesthetic importance;
- 8. to be outstanding examples representing major stages of earth's history, including the record of life, significant on-going geological processes in the development of landforms, or significant geomorphic or physiographic features;
- 9. to be outstanding examples representing significant on-going ecological and biological processes in the evolution and development of terrestrial, fresh water, coastal and marine ecosystems and communities of plants and animals;
- 10. to contain the most important and significant natural habitats for in-situ conservation of biological diversity, including those containing threatened species of outstanding universal value from the point of view of science or conservation.

The *World Heritage Committee* meets once a year, and consists of representatives from 21 of the member countries. It is elected by the General Assembly of the members of the Convention for terms up to six years. The sites to be included in the List must be proposed by

member governments. The *Heritage Committee* is advised by the *International Council on Museums and Sites* (ICOMOS) for Cultural sites, by the *International Union for Conservation of Nature* (IUCN) for Natural sites and by the *International Centre for the Study of the Preservation and Restoration of Cultural Property* (ICCROM). It has been claimed that "The scrutiny of these systems by the two Advisory Boards is now rigorous..." (Cleere, 2006:xxii).

Literature

There is an extensive literature on World Heritage and on the UNESCO program (recent contributions are e.g. Leask and Fyall (2006), Harrison and Hitchcock (2005), van der Aa (2005), Leask and Yeoman (2004), Howard (2003). The following aspects have received special attention: the process of designation with respect to its formal nature, the stakeholder groups participating, as well as its politics (e.g. Millar, 2006, Cleere, 2006); the consequences of inclusion in the World Heritage List, especially with respect tourism (e.g. Tunney, 2005, Cochrane and Tapper, 2006); visitor management (e.g. Shackley, 2006, McKercher and Cros, 2001); as well as case studies of individual Sites (for Stonehenge Mason and Kuo, 2006, or for Machu Picchu Regalado-Pezúa and Arias-Valencia, 2006, e.g. for the Yellow Mountain in China Li Fung and Sofield, 2006). In economics, only few works deal with UNESCO World Heritage, the doctoral dissertation by van der Aa (2005), the book by Santagata, de Caro and Marrelli (2008) and the papers by Frey and Pamini (2010, 2009) being exceptions. An excellent analysis of general heritage issues is provided in Peacock and Rizzo (2008). Other economic analyses mainly evaluate the utility of preserving the past as well as financial consequences (see, for instance Benhamou, 2003, Benhamou, 1996, Frey, 1997, Greffe, 1999, Klamer and Throsby, 2000, Mossetto, 1994, Mossetto and Vecco, 2001, Netzer, 1998, Peacock, 1978, Peacock, 1995, Rizzo, Streeten, 2006, Throsby, 2003, Throsby, 1997b, Throsby, 1997a). The collection of articles in Hutter and Rizzo (1997), Peacock (1998), Rizzo and Towse (2002) also contain references to heritage, as do the more general monographs and collections by Frey (2003), Ginsburgh (2004), Ginsburgh and Throsby (2006), Towse (2003, 1997) and Throsby (2001). The consequences of being listed, in particular on the number of visitors frequenting these Sites, are studied e.g. in Bonet (2003) or Tisdell and Wilson (2002).

Intended contribution

The World Heritage List is generally considered an excellent contribution to saving the globe's common history in the form of cultural monuments and landscapes worth preserving. This paper takes a more critical stance. It fully appreciates the undisputed and well-known

positive effects of having such a list based on a careful selection process (Section II). But it also points out possible negative consequence of which there is quite a number (Section III). An evaluation depends on whether there are superior alternatives such as the market or national lists (Section IV). It is necessary to identify conditions under which the World Heritage List is beneficial, and under which it is detrimental (Section V). It is concluded (Section VI) that in many cases the selection of the World Heritage List constitutes a great step forward, but that alternative approaches should be considered in those cases in which the World Heritage List typically produces detrimental results.

II. Positive Aspects of the World Heritage List

The beneficial consequences of the UNESCO List refer to two general aspects: the direction of attention, and the specific protection provided.

Attention

The World Heritage List can be considered a collective international effort to safeguard our planet from destruction, similar to the efforts with respect to the global environment. It can be considered to be a kind of applied global ethics.

The List attracts the attention of various actors:

- The general public is informed by experts on particularly important cultural and natural sites to be protected. Being put on the List is accompanied by considerable media resonance. This is important because it propagates the information to a larger number of persons. Indeed, inclusion in the List is considered to be a great honor for the respective nation, and gets accordingly much attention by the press, radio and TV. A higher number of visitors increases the revenue from tourism of the concerning site or city. E.g. the old town of Stralsund and the monasteries on the island Reichenau experienced a significant increase in the numbers of visitors. While in Dresden it was argued that the title of World Heritage has no influence on tourism or the economy.
- *Public decision-makers* are made aware of the great importance of particular cultural and natural sites within their country. They have an incentive to respond by securing the Sites selected by UNESCO not only because they have proposed them to the

⁴ http://www.morgenweb.de/service/archiv/artikel/657022762.html accessed on 12.03.2010

- World Heritage Commission but also because they can gain prominence and votes by engaging themselves on behalf of the national Sites on the List.
- The attention of *potential donors* is attracted. People who usually give money for cultural, artistic or religious purposes might be willing to give more to objects on the UNESCO-List. Also new donors might be attracted by the increased popularity. One example is the "Verein zur Erhaltung des Hohen Doms zu Aachen e.V" (Club to preserve the Aachen Cathedral) who offers the possibility to give donations or to become a sponsor or club member in order to protect the cathedral.
- For-profit firms may find ways and means to exploit the prominence of World
 Heritage Sites either by catering for tourists visiting the Sites, or by sponsoring a
 particular World Heritage Site. In both cases the administrators of the Sites have more
 money available to keep them up (provided they can keep the additional receipts,
 which is uncertain, since additional revenue often results in cutting regular funds).

Protection

The involvement in the process of getting on the World Heritage List, strengthens a country's relationship with the international heritage movement. The *World Heritage Commission* will offer technical help to preserve the Sites on the List. Both tend to be beneficial also for sites not on the List, or not yet on the List.

It should be noted that inclusion in the List is not accompanied by financial support from UNESCO. The corresponding fund is only \$ 4 million per year (World Heritage Information Kit 2008), which is minimal in view of the over 900 Sites listed.⁵

III. Negative Aspects of the World Heritage List

To be on the UNESCO List may be subject to four undesired aspects: Questionable selection of the Sites on the List; overextension with respect to the number and types of Sites; substitution effects burdening non-listed cultural and natural sites; and destruction by an excessive number of visits to the Sites, in war or by terrorists seeking a well-publicized target.

⁵ The typical funds for emergency, preparatory or management assistance vary between \$5.000 and \$75.000 and are authorized by the director of the World Heritage Centre or the Chairperson of the Committee. Higher amounts have to be approved by the whole Committee.

Questionable selection

The selection of what cultural and natural sites should be included in the List is strongly influenced by experts represented in the three advisory groups, ICOMOS, IUCN and ICCROM. They rely on their knowledge as art historians and conservators. In principle, every Site included in the List is of equal value, i.e. the experts do not try to establish a ranking. No willingness-to-pay studies are undertaken to determine the value, at least not in a way satisfying cultural economists (see e.g. Benhamou, 1996, Hansen, 1997, more generally Frey, 1997). Such studies seek to capture the utility gained by a representative sample in the population rather than the opinion of experts. It can well be argued that the general population often knows little or nothing about the sites in question and that therefore the stated willingness-to-pay is of little relevance.⁶

Some scholars even question the legitimacy of the List. Meskell (2002) argues that the concept of World Heritage is flawed by the fact that it privileges an idea originating in the West, which requires an attitude toward material culture that is distinctly European in origin. However, the UNESCO also runs a List of the World's Documentary Heritage ("Memory of the World"), comprising archives, libraries, books and writings, musical scores, audio- and video-documents. To complete the World Heritage Program in 2001 the UNESCO started a List of *Intangible Cultural Heritage*, including languages, oral narrations or epics, music, dances, games, customs and other forms of art.

Being on the UNESCO List is highly desired by many actors as it brings prominence and monetary revenue, one may even speak of a "heritage industry" (Johnson and Thomas, 1995). As a consequence, the process of getting on the List is subject to rent seeking (Buchanan, 1980, Tollison, 1982). It has been highly politicized as many political and bureaucratic representatives of countries consider it a worthwhile goal from which they personally profit. As a consequence, the selection is subject to political pressures, and is not solely determined by the ten criteria listed above deemed to be "objective". While the goal of the whole project is to protect Sites of central importance for humanity, not unexpectedly national interests dominate global interest. "The rhetoric is global: the practice is national" (Ashworth and van der Aa, 2006:148). Some countries are more active than others to secure Sites to be included in the List. The 21 nations participating in the Convention have a seat in the World Heritage

⁶ Additional reasons to question willingness-to-pay studies have been adduced e.g. by Kahneman (1993) or Green (1998).

⁷ An unorthodox proposal to deal with the public good aspect of global heritage is advanced in Frey and Pamini (2009).

Committee. But these members nominated more than 30 percent of listed Sites between 1978 and 2004 (Van der Aa, 2005:81).

Econometric research suggests indeed that politically more powerful countries have a better chance of putting national sites on the List (Frey et al., 2010). The distribution of Sites on the List among countries is highly unequal⁸. 47 percent of the Sites are in Europe⁹. The European predominance is larger for Cultural Sites (54 percent) than for Natural Sites (22 percent). In contrast, (sub-Saharan) Africa has less than 9 percent of all Sites, and the Arabian countries 7 percent. The Americas and Asia-Pacific are better represented with 17 percent and 20 percent, respectively (derived from Frey and Pamini, 2010: Table 1). If the distribution according to the population is taken as a reference, Europe is still on top with 52 Sites per 100 million persons, followed by the Arabian countries, the Americas and sub-Saharan Africa with 23, 18, and 11 Sites per 100 million population. Asia-Pacific has much less, 5 per 100 million population. The distribution of sites per square kilometer is also clearly headed by Europe with 19 sites per million square kilometer, while all other continents posses between 4 and 5 (see Table 6 in Frey and Pamini, 2010).

The questionable selection may be illustrated by some pertinent examples. In Switzerland the old town of Berne is listed, but not the old towns of, say, Lucerne or Basel. The Benedictine Convent of St. John at Mustair and the monastery of St. Gallen are listed, but not the similarly important and ancient Benedictine monasteries of Engelberg and Einsiedeln. In all cases, it is difficult to argue why the latter are excluded. To provide an example from a totally different culture: The Djongs of Bhutan, which are of great art historic importance, are not listed though Bhutan has been a member of the Convention since 2001. Many more examples could easily be adduced.

Overextension

The number of Sit on the UNESCO List has continuously grown over time. The World Heritage List now contains over 700 Cultural Sites, almost 200 Natural Sites, and close to 30 Mixed Sites simultaneously belonging to both types. On the one hand, this is a small number if one takes into account the richness of culture and nature on the planet. On the other hand, it is an already large number considering that each Site is a very special selection according to

⁸ Inequality does, of course, not necessarily mean that the selection is incorrect. However, a strongly unequal selection (as documented below) suggests that inappropriate aspects play a role. The UNESCO accepts this point. Therefore, in 1994 the *World Heritage Committee* started the *Global Strategy for a Balanced, Representative and Credible World Heritage List* but, as documented in the text below, with little effect.

⁹ Continents follow the UN definition.

the ten criteria mentioned above. It is difficult to see how this process can be slowed down or even stopped (see Benhamou, 1996). Provided the selection is well taken, the newest additions are necessarily somewhat less well suited than the first ones (the law of decreasing marginal utility), there are more and more sites which could well be argued to fulfill the criteria. The problem is intensified because de-accessions are extremely rare¹⁰. The overextension takes a second form, namely an increasingly broad definition of what is our planet's "heritage". At the beginning, "heritage" was understood to be a specific historical monument such as Aachen Cathedral or the Chateau and Park of Versailles or ensembles such as Venice and its Lagoon or Stonehenge, Avebury and Associated Sites. In addition there is a "List of World Heritage in Danger" comprising 31 properties. Later Natural Sites such as the Jungfrau-Aletsch region in the Swiss Alps or Lake Turkana National Parks in Kenya were added. Then "Immaterial Cultural Heritage" such as the Carnival of Binche in Belgium and Nooruz holiday in Kyrgyzstan was added. This led to increasing demands by politicians to be put on one of those Lists. In 2008, French president Sarkozy declared French cuisine to be the best in the world and promised to propose its inclusion in the List of Immaterial Cultural Heritage (Neue Zürcher Zeitung 23 February 2008). Similarly, some Austrians want to have "Austrian charme" on the World Heritage List and even such controversial events as

Undesired substitution effects

When an object is included in the World Heritage List several reactions detrimental to global heritage taken as a whole may occur. The two most important ones refer to attention and financial resources.

bullfighting are proposed. These proposals seem to be somewhat odd.

A site not on the UNESCO List is, by definition, not quite first, but rather second rate. Attention is directed to the Sites on the List. That a site not on the List is "second rate" would be violently denied by the World Heritage Commission and other persons involved in the selection process. But it is clearly the case for the general public, politicians, government bureaucracy and potential donors. The tourist industry understands well that not being on the List is a considerable disadvantage for its advertising. It is indeed an argument brought forth to induce the Commission to include a site on its List¹¹.

¹⁰ The case of countryside around Dresden is one of only two cases. The other one being Oman's Arabian Oryx Sanctuary, which was deleted after the government reduced the sanctuary by 90% following the discovery of oil at the site.

¹¹ To provide just one example: in a report on Heidelberg in the Frankfurter Allgemeine Zeitung (5 July 2007:R1) it is stated that "once more, Heidelberg was not given the title

A second undesired substitution effect takes place when due to the attention generated with politicians, bureaucrats and firms, funds from other sites are reallocated to a Site on the List. An important prerequisite by the World Heritage Commission to be put on the List is that additional funds go into the preservation of the chosen Sites. The loss of funds of the non-UNESCO sites may well damage the heritage overall more than the increase in funds of the Listed Sites which find it much more easy to attract money also from private sponsors¹². This effects takes place as long as the total government budget, and the funds from private firms, for heritage projects is not raised to the same extent as additional money flowing into the Listed Sites. Only a series of careful case studies can establish whether such undesired substitution effects are avoided.

Attracting destruction

Being on the World Heritage Site makes an object interesting for three sets of actors. In the case of not yet fully explored, excavated and secured Heritage Sites, tomb robbers may get a hint of how important the Site is. As a rule, the damage done is much higher than the objects robbed because the Sites are destroyed, and other objects mutilated (Gamboni, 2001). More important is the fact that Listed Sites become a prominent target in war. Already in 1954, the Hague Convention for the Protection of Cultural Property in the Event of Armed Conflicts was drafted in response to the huge losses in cultural heritage suffered during World War II. The Blue Shield symbol was created to indicate cultural sites of special importance. While this may sometimes have preserved the object so designated, in many cases exactly the opposite happened (Wegener and Otter, 2008, Gamboni, 2001). Examples are the destruction of the ancient bridge in Mostar, the bombing of Sarajewo, the city of Dubrovnik and the obliteration of the great Buddhas at Bamiyan. For a conflictual site that becomes the repository of negative memory in the collective imaginary, Meskell (2002) has coined the term of "Negative Heritage". Terrorists who strongly depend on media attention, seek highly visible and cherished targets, or "icons" (Frey and Rohner, 2007, Frey, 2004). The attribution of World Heritage status to a monument may well induce them to attack and destroy it. Another negative consequence of the increased popularity is the deterioration caused by the high numbers of visitors. This is especially the case if free entry is granted into World

[&]quot;World Cultural Heritage" (translation by the author), implying that this makes Heidelberg a second rate place.

¹² In the Swiss canton Ticino the Three Castles located in Bellinzona were well restaured when they came on the List. In contrast many of the wonderful Carolingian churches in the same canton desperately need funds for repairs.

Heritage cities such as Florence, Bern, Bruges or Venice. The latter could quite easily impose an entry fee but in fact it does not, even though on an average day no less than 39,000 people visit and overcrowd this island and its severely restricted space (Frey and Steiner, 2010).

IV. Alternatives to the World Heritage List

The World Heritage List is often discussed as if there was no alternative to that procedure. The UNESCO initiative tends to be presented as the only means with which the globe's cultural and natural heritage can be saved (see e.g. Ashworth and van der Aa, 2006, Van der Aa, 2005, Johnson and Thomas 1995). But as the World Heritage List has several important disadvantages as set out above, it matters to consider alternatives. From an economic point of view there are at least three relevant alternatives.

No intervention

The idea that cultural and natural sites would be destroyed or seriously hampered if they were not protected by the World Heritage List is untenable. Indeed, if the negative effects outlined in the last section dominate the positive effects, it would even be preferable to not have such a List. It can hardly be doubted that most of the well-known Sites in the List would still exist if they were not on it. Aachen Cathedral or Versailles would not disappear. But it can be presumed that their state of preservation would not be better if they were not on the List. That would only be the case if the national conservation efforts were more intensive without the List.

Use of the market

In the absence of external effects, the market could be trusted to preserve the globe's cultural and natural heritage. Few economists, not to speak of other people, would be prepared to argue that this is the case. Indeed, heritage is a case with strong positive external effects markets do not, or insufficiently care for. Well known external effects in the cultural sector comprise the education, option, existence and prestige value (Frey, 2003). In addition to static externalities, there is the vexing problem of discounting over several generations (bequest value). Psychological (or behavioral) economics has well established that with respect to evaluating the benefits and costs of future items individuals are subject to systematic biases or anomalies (Thaler, 1992). While the market is imperfect, it must be compared to the equally

imperfect system of the World Heritage List, following the comparative institutional analysis (Demsetz, 1964).

One possibility to use the market in order to efficiently preserve the public good of World Heritage is to introduce *World Culture Certificates*. The community of nations, as embodied by the United Nations, has to agree on the Global Heritage List and has to establish how many World Heritage Units each nation is prepared to save. Each World Heritage site conserved is acknowledged through the issuance of a tradable Certificate. The cost of a certificate is the lower the less expensive it is to accomplish saving a World Heritage Site. It is, therefore, advantageous to countries not to only concentrate on saving their national heritage (which may be very expensive due to decreasing returns) but also to seek sites where funds can be expended most productively and therewith the World Heritage Certificates can be acquired most inexpensively. Countries and private firms are induced to seek sites where financial resources can be spent most productively. This leads to an efficient allocation of resources to preserve World Heritage from a global point of view (Frey and Pamini, 2009).

Competing evaluations

The World Heritage Commission is not the only organization providing lists of cultural and natural heritage. Probably one of the very first list of major sites contains the "Seven Wonders of the Ancient World". The historian Herodotus made early lists of seven wonders, which served as guidebooks popular among the ancient Hellenic tourists. Nowadays, for-profit firms have long since established guides to the major heritage sites. Examples are tourist books attributing stars and similar attributes to the sites they find worth visiting, or scholarly and popular books devoted to informing people on what properties and landscapes they deem to be important, such as *1000 Places to See Before You Die* (Schultze, 2003). To a significant extent, the corresponding lists overlap with the World Heritage List. Many countries have extensive national lists of cultural and natural heritage sites to be preserved, such as the Burra Charter in Australia (Benhamou, 1996, Peacock, 1998). However, these lists often carry little weight when there are competing claims, and the respective objects are often badly funded. But some poor countries do not have such national lists, and have not the resources to protect, secure and preserve their heritage. In that case, the international effort by UNESCO is helpful. While the World Heritage Commission provides

¹³ The influence presumably goes both ways: the World Heritage Commission certainly consults such books, and these books include what is listed by the Commission.

practically no funds to help in the preservation effort, it may be that inclusion in the List induces foreign nations, NGOs or sponsoring firms to provide help.

V. The Role of the World Heritage List and of the Alternatives

The discussion reveals that the effort by the World Heritage Commission has good and bad consequences, but that the same applies to alternatives. It follows that it is impossible to provide a general verdict not least because an evaluation depends on preferences, or on the weights attributed to the various possible consequences. In a democratic political system, these weights have to be determined in the political process.

What is possible, however, is to indicate the conditions under which the UNESCO List is particularly beneficial, and where and when it is important to actively involve the market and the national lists of heritage sites.

Beneficial World Heritage List

Inclusion into the World Heritage List is advantageous when one of the following six conditions obtain.

1. *Undetected heritage sites*

The experts of UNESCO on culture and nature may be aware of particular heritage sites which are little or not known to the national decision-makers or market participants. This may be due because the sites are difficult to access or are not yet excavated or developed at all. Suggesting to the respective governments to propose them for inclusion in the World Heritage List draws attention to the sites and helps to preserve them.

2. Commercially unexploited sites

If access for tourists is very costly and burdensome, and no facilities are available to host the visitors, or if the heritage sites are unfamiliar, inclusion in the World Heritage Commission List may attract funds by foreign governments and NGO's, and may start a commercial development of the Site. The financial resources gained help to preserve the corresponding Sites.

3. Disregarding the need to preserve heritage important to mankind.

Nations, and regions may not fully, or sufficiently, appreciate the value of cultural and natural sites as an global public good but the international experts and the World Heritage

Commission do. This disregard may be due to insufficient knowledge, but presumably more

often to ideologically biased views of what belongs to the planet's heritage. An example is the destruction of the Buddha statutes in Afghanistan by the then reigning Taliban. This act was undertaken for what the Taliban considers religious reasons. Also, the importance of particular sites for the global public good of heritage may be overlooked or discounted. It is, of course, open whether inclusion in the World Heritage List is able to prevent the destruction of heritage sites by national governments and/or populations. But it is known that even authoritarian governments respond to international pressure as they depend to some extent on good political and economic relationships to foreign countries.

4. Inadequate public resources

The national and sub-national governments may want to preserve a particular heritage site but may lack the resources to do so because of extreme poverty in the country. Another reason may be that the funds granted by the government for preserving heritage sites are wasted by incompetent or corrupt bureaucrats. Putting a site on the World Heritage List does, of course, not change these fundamental conditions, but it may attract foreign funds less subject to waste

5. Inadequate political control

Civil wars, and political unrest may make access and work on a heritage site dangerous or even impossible (Meskell, 2002, Gamboni, 2001). An object put on the World Heritage List gains visibility may at least partly overcome these problems.

6. Inadequate technical knowledge

A country may be willing to preserve its cultural and natural heritage but may lack the technical expertise to undertake this task in a good way. Once a Site is on the List, the exchange of technical knowledge is facilitated. The intensified contacts with the World Heritage Commission helps to educate a staff able to preserve and manage the Sites.

Beneficial alternatives

There are four important circumstances in which the use of market forces and/or reliance on national heritage lists are commendable.

1. Popular sites

To put globally known and cherished properties like the Colloseum, the Taj Mahal, or Stonehenge on the World Heritage List is unnecessary as the market may be used to secure the funds necessary to preserve them. Using the price system with cultural and natural heritage requires adequate regulations to deal with external effects. However, the price system must be used in an intelligent way. Often a resistance by heritage experts against the market

must be overcome, and sometimes the persons responsible for the respective heritage community are insufficiently educated and inexperienced to beneficially use pricing mechanisms. But today there are many examples where it has been demonstrated that the price system may be helpful for conservation. A case in point is the many churches in Venice which were closed most of the time or even always because there was no money to employ guards. Nowadays, the tourists must buy a ticket to visit these churches which provides sufficient funds to reduce or fully prevent robbings and destruction (Delaive et al., 2002). Another example is Bhutan, which restricts the number of tourists into the country by asking an entry fee, and requires them to hire an official guide and driver. ¹⁴

2. Weak externalities

There are sites of cultural and natural heritage where externalities are weak and where therefore the price system can be expected to work quite well. The market can work directly via tourism or indirectly through sponsoring.

When the externalities produced by the market are stronger, they must be combined with regulations reducing them. Examples are restrictions on the total number of visitors to a site, or on the noise and traffic pollution created.

3. Marked substitution effects induced by the inclusion in the World Heritage List
Heritage sites whose positioning on the World Heritage List would lead to a neglect of other
sites with respect to the attention received by the general public, the media, bureaucrats and
politicians and as a consequence to a worse preservation efforts should not be proposed for
the List. In that case national and regional lists are preferable as they are broader and include
otherwise neglected sites (see Peacock and Rizzo, 2008:147).

4. Destruction potential

In cases in which being on the World Heritage List can be expected to lead to a higher instance of destruction in armed conflicts and by terrorists it is reasonable to choose a lower profile. Decentralized protection on the basis of national and regional lists is better suited, since it attracts less attention.

VI. Conclusions

The effort of UNESCO through the World Heritage Commission to establish a World Heritage List containing the most treasured Sites of humanity's culture and landscapes constitutes a great step forward towards preserving one of the most important global public

 $^{^{14}}$ $\underline{\text{http://www.auswaertiges-amt.de/diplo/de/Laenderinformationen/Bhutan/.html}}$ accessed on 24.04.2010

goods on our planet. The List now contains more than 900 Sites, and its number has been steadily increasing since its establishment almost 40 years ago.

It is now time to take critical stock of this effort. Our analysis reveals that there are strong positive effects induced by the World Heritage List, in particular by drawing attention to prominent examples of our heritage, and by providing protection and conservation to specific objects. There are also questionable aspects such as the selection of Sites not based on willingness-to-pay studies, and being subject to rent-seeking, in particular by the national interests pursued by politicians and bureaucrats, but also by the commercial heritage industry. Among the negative consequences are the induced substitution leading to less protection of sites not part of the World Heritage List; the potential deterioration of the Sites by excessive tourism, and the creation of an attractive goal for destruction in wars and by terrorists. The paper argues that an overall verdict of whether the UNESCO initiative has been beneficial to conserving the globe's heritage is ill taken. Rather, the paper seeks to identify areas in which the World Heritage List is more likely to reach its goal, and where this is less the case. The List tends to be beneficial where heritage sites are undetected, disregarded by national decision-makers, not commercially exploitable, and where there are inadequate national financial resources, political control and technical knowledge for conservation. On the other hand, alternatives are likely to be beneficial where the cultural and natural sites are already popular, markets work well, sites not on the World Heritage List are negatively affected, and where inclusion in the List does not raise the destruction potential by excessive tourism, and in wars and by terrorists.

References

- Ashworth, Gregory John and van der Aa, Bart J.M. (2006). Strategy and policy for the world heritage convention: goals, practices and future solutions. in: Anna Leask and Alan Fyall (eds.) *Managing World Heritage Sites*. London: Elsevier.
- Benhamou, Françoise (1996). Is Increased Public Spending for the Preservation of Historic Monuments Inevitable? The French Case. *Journal of Cultural Economics*, 20: 115-131.
- Benhamou, Françoise (2003). Heritage. in: Ruth Towse (ed.) *A Handbook of Cultural Economics*. Cheltenham, UK, and Northampton, MA, USA: Edward Elgar.
- Bonet, Lluis (2003). Cultural tourism. in: Ruth Towse (ed.) *A Handbook of Cultural Economics*. Cheltenham, UK, and Northampton, MA, USA: Edward Elgar.
- Buchanan, James M. (1980). Rent Seeking and Profit Seeking. in: James M. Buchanan, Robert M. Tollison and Gordon Tullock (eds.) *Toward a Theory of the Rent-Seeking Society*. Texas: Texas A & M University Press.

- Cleere, Henry (2006). Foreword. in: Alan Fyall Anna Leask (ed.) *Managing World Heritage Sites*. London: Elsevier.
- Cochrane, Janet and Tapper, Richard (2006). Tourism's contribution to World Heritage Site management. in: Anna Leask and Alan Fyall (eds.) *Managing World Heritage Sites*. London: Elsevier.
- Delaive, Amanda, Kristant, Elaine, Petrowski, Craig and Santos, Luiz (2002). The Church Floors in Venice, Italy: An Archeological Study and Analysis. *Venice Project Center*.
- Demsetz, Harold (1964). The Exchange and Enforcement of Property Rights. *Journal of Law and Economics* 7: 11-26.
- Frey, Bruno S. (1997). The Evaluation of Cultural Heritage. Some Critical Issues. in: Michael Hutter and Ilde Rizzo (eds.) *Economic Perspectives on Cultural Heritage*. London: Macmillan.
- Frey, Bruno S. (2003). *Arts and Economics. Analysis and Cultural Policy*, Berlin, Heidelberg and New York: Springer, 2nd ed.
- Frey, Bruno S. (2004). *Dealing with Terrorism Stick or Carrot?*, Cheltenham, UK, and Northampton, MA: Edward Elgar.
- Frey, Bruno S. and Pamini, Paolo (2010). World Heritage: Where Are We? An Empirical Analysis. *CESifo Working Paper Series*. Munich: IFO.
- Frey, Bruno S., Pamini, Paolo and Steiner, Lasse (2010). What Determines the World Heritage List? An Econometric Analysis. Zurich: Institute for Empirical Research in Economics.
- Frey, Bruno S. and Pamini, Paolo (2009). Making World Heritage Truly Global: The Culture Certificate Scheme. *Oxonomics*, 4: 1-9.
- Frey, Bruno S. and Rohner, Dominic (2007). Protecting Cultural Monuments against Terrorism. *Defence and Peace Economics*, 18: 245-252.
- Frey, Bruno S. and Steiner, Lasse (2010). Pay As You Go: A New Proposal For Musuem Pricing. Zurich: Institute for Empirical Research
- Gamboni, Dario (2001). World heritage: shield or target? Conservation 16: 5-11.
- Ginsburgh, Victor A. (2004). Economics of Art and Culture, Amsterdam: Elsevier.
- Ginsburgh, Victor A. and Throsby, David (2006). Handbook of the Economics of Art and Culture. Amsterdam: Elsevier.
- Green, Donald, Jacowitz, Karen E., Kahneman, Daniel and McFadden, Daniel (1998). Referendum contingent valuation, anchoring, and willingness to pay for public goods. *Resources and Energy Economics*, 20: 85-116.
- Greffe, Xavier (1999). La gestion du patrimoine culturel, Paris: Anthropos.
- Hansen, Trine Bille (1997). The Willingness-to-Pay for the Royal Theatre in Copenhagen as a Public Good. *Journal of Cultural Economics*, 21: 1-28.
- Harrison, David and Hitchcock, Michael (2005). *The Politics of Heritage. Negotiating Tourism and Conservation. Channel View*, Clevedon: Publications.
- Howard, Peter (2003). Heritage: Management, Interpretation, Identity, London: Continuum.
- Hutter, Michael and Rizzo, Ilde (1997). Economic Perspectives on Cultural Heritage. London: Macmillan.
- Johnson, Peter and Thomas, Barry (1995). Heritage as Business. in: David T. Herbert (ed.) *Heritage, Tourism and Society*. New York Mansell Publishing.
- Kahneman, Daniel, Ritov, Ilana, Jacowitz, Karen E. and Grant, Paul (1993). Stated Willingness to Pay for Public Goods: A Psychological Perspective. *Psychological Science*, 4: 310-315.
- Klamer, Arjo and Throsby, David (2000). Paying for the Past: the Economics of Cultural Heritage. *World Culture Report*. New York: UNESCO, pp. 130-145.
- Leask, Anna and Fyall, Alan (2006). Managing World Heritage Sites, Amsterdam: Elsevier

- Leask, Anna and Yeoman, Ian. (2004). *Heritage Visitor Attractions*, London: Thompson Learning.
- Li Fung, Mei Sarah and Sofield, Trevor H. B. (2006). World Heritage Listing: the case of Huangshan (Yellow Mountain), China. in: Anna Leask and Alan Fyall (eds.) *Managing World Heritage Sites*. London: Elsevier.
- Mason, Peter and Kuo, I-Ling (2006). Visitor management at Stonehenge, UK. in: Anna Leask and Alan Fyall (eds.) *Managing World Heritage Sites*. London: Elsevier.
- McKercher, Bob and Cros, Hilary du (2001). *Cultural Tourism: The Partnership between Tourism and Cultural Heritage Management*, Binghampton, New York: Haworth Press.
- Meskell, Lynn (2002). Negative Heritage and Past Mastering in Archeology. *Anthropological Quarterly* 75: 557-574.
- Millar, Sue (2006). Stakeholders and community participation. in: Anna Leask and Alan Fyall (eds.) *Managing World Heritage Sites*. London: Elsevier.
- Mossetto, Gianfranco (1994). The Economic Dilemma of Heritage Preservation. in: Alan Peacock and Ilde Rizzo (eds.) *Cultural Economics and Cultural Policies*. Dordrecht: Kluwer.
- Mossetto, Gianfranco and Vecco, Marilena (2001). *Economia del patrimonio monumentale*, Venice: F. Angeli.
- Netzer, Dick (1998). International Aspects of Heritage Policies. in: Alan Peacock (ed.) *Does the Past Have a Future? The Political Economy of Heritage*. London: Institute of Economic Affairs.
- Peacock, Alan (1978). Preserving the past: an international economic dilemma. *Journal of Cultural Economics*, 2: 1-11.
- Peacock, Alan (1995). A Future for the Past: The Political Economy of Heritage. Keynes Lecture in Economics. *Proceedings of the British Academy*, 87: 189-243. Reprinted in Ruth Towse (ed.) (1997). Cultural Economics: the Arts, Heritage and the Media Industries. Aldershot: Edward Elgar. 1387-1424.
- Peacock, Alan (1998). *Does the Past Have a Future? The Political Economy of Heritage*, London: Institute of Economic Affairs.
- Peacock, Alan and Rizzo, Ilde (2008). *The Heritage Game. Economics, Politics, and Practice,* Oxford: Oxford University Press.
- Regalado-Pezúa, Otto and Arias-Valencia, Jesús (2006). Sustainable development in tourism: a proposition for Machupicchu, Peru. . in: Anna Leask and Alan Fyall (eds.) *Managing World Heritage Sites*. London: Elsevier.
- Rizzo, Ilde (2006). Cultural Heritage: Economic Analysis and Public Policy. in: Victor A. Ginsburgh and David Throsby (eds.) *Handbook of the Economics of Art and Culture*. Amsterdam: Elsevier.
- Rizzo, Ilde and Towse, Ruth (2002). *The Economics of Heritage*, Cheltenham, UK, and Northampton, MA, USA: Edward Elgar.
- Santagata, Walter, De Caro, Stefano and Marrelli, Massimo (2008). *Patrimoni intangibili dell' umanità*. *Il distretto culturale del presepe Napolitano*, Napoli: Guida Editore.
- Schultze, Patricia (2003). 1000 Places to see before you die, New York: Workman Publishing.
- Shackley, Myra (2006). *Visitor Management: Case Studies from World Heritage Sites*, Oxford: Butterworth-Heinemann.
- Streeten, Paul (2006). Culture and Economic Development. in: Victor A. Ginsburgh and David Throsby (eds.) *Handbook of the Economics of Art and Culture*. Amsterdam: Elsevier.
- Thaler, Richard H. (1992). *The winner's curse. paradoxes and anomalies of economic life*, New York, NY: Free Press.

- Throsby, David (1997a). Seven Questions in the Economics of Cultural Heritage. in: Michael Hutter and Ilde Rizzo (ed.) *Economic Perspectives on Cultural Heritage*. London: Macmillan.
- Throsby, David (1997b). Sustainability and culture: some theoretical issues. *International Journal of Cultural Policy*, 4: 7-20.
- Throsby, David (2001). *Economics and Culture*, Cambridge: Cambridge University Press.
- Throsby, David (2003). Cultural sustainability. in: Ruth Towse (ed.) *A Handbook of Cultural Economics*. Cheltenham, UK, and Northampton, MA, USA: Edward Elgar.
- Tisdell, Clement and Wilson, Clevo (2002). World Heritage Listing of Australian Natural Sites: Tourism Stimulus and its Economic Value. *Economic Analysis and Policy*, 32: 27-49.
- Tollison, Robert D. (1982). Rent Seeking: A Survey. Kyklos, 35: 575-602.
- Towse, Ruth (1997). *Cultural economics: The arts, the heritage and the media industries.*, Cheltenham, UK, and Lyme, USA: Edward Elgar.
- Towse, Ruth (2003). *A handbook of cultural economics*, Cheltenham, UK, and Northhampton, MA, USA: Edward Elgar.
- Tunney, James (2005). World Trade Law, Culture, Heritage and Tourism. Towards a Holistic Conceptual Approach. in: David Harrison and Michael Hitchcock (eds.) *The Politics of Heritage. Negotiating Tourism and Conservation*. Clevedon: Channel View Publications.
- Unesco (2005). Operational Guidelines for the Implementation of the World Heritage Convention: http://whc.unesco.org/archive/opguide05-en.pdf:
- Van der Aa, Bart J.M. (2005). Preserving the Heritage of Humanity? Obtaining World Heritage Status and the Impacts of Listing, Amsterdam: Netherlands Organization for Scientific Research.
- Wegener, Corine and Otter, Marjan (2008). Cultural Porperty at War. Protecting Cultural Heritage During Armed Conflicts. . *Conservation. The Getty Institute Newsletter* 23: 4-9.

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