

2.0 COST BENEFIT ANALYSIS FOR THE CULTURAL BUILT HERITAGE: THE CONCEPTUAL FOUNDATION

2.1 What is the Cultural Built Heritage?

Each generation finds itself with a huge amount of capital resources, to which each individual has access simply through being born into the human race. The capital is broadly made up of three kinds:

- (a) natural resources (God or Nature given);

man-made resources, through investment of capital, applied to natural resources, comprising broadly the immoveables (the built environment) and moveables (the furniture, cars, etc) which facilitate use of the built environment;

- (c) human resources, being the people inhabiting and multiplying on the planet.

Within this category we are here concerned with a quantitatively minor part of the built environment: that part which the contemporary generation resolves has "cultural values", and accordingly merits special protection from the chances of erosion, in order that it can be better enjoyed by the current generation, and passed on to the future. In attempting the protection they often find that no significant recognition is given to the importance of such assets for cultural development, environmental protection or historical awareness. As a result, urbanisation and industrialisation processes, pollution, modern architecture and low budget allocations have led to a situation where cultural buildings, historic landscapes and archaeological sites are in permanent danger of erosion. It is the aim of conservation planning to avoid such erosion and indeed to achieve enhancement.

Those seeking to protect and enhance the cultural built heritage must face a number of interrelated realities:

- (a) the cultural element in the heritage is made up of various streams which are of value to society, namely, art, history, religion, aesthetics, education, to name a few;

the degree of appreciation of such elements, which vary between particular instances of the cultural built heritage, is linked with the human values of the particular generation which takes action in protection and enhancement of the heritage. Any particular generation can choose or not to take into account what they know of the values of past generations and what they assume will be those of future generations;

- (c) in any particular generation the cultural values spread across international borders simply because the cultural elements of particular buildings, monuments, towns, etc. are valued by people outside that country, as well as those within. This reality is recognised by the International Agreement on World Monuments and Sites, and has been accentuated by the phenomenon of cultural tourism which is growing from modest proportions in earlier generations to the explosion associated with air travel;
- (d) unlike other forms of cultural heritage (moveable property, graphic arts, etc) the cultural element is indissolubly embedded in works and buildings which are no different in essence from other works and buildings which do not have a cultural value. Accordingly the protection of the cultural heritage carries with it the need to protect the works and buildings themselves;
- (e) as with other works and buildings, the cultural built heritage is subject to the laws of real property. In this sense it is owned and occupied by particular public or private agencies, and cannot be said to be "inherited" by the contemporary generation in general;
- (f) because the CBH is property, there needs to be formulated some special legal and institutional machinery for the purpose of controlling what owners and occupiers might do with their property, to the detriment of the heritage. This may or may not carry with it financial transfers (compensation) between the government and the property owners in respect of the former's infringement of property rights of the latter;
- (g) because of the globalisation of concern for the cultural built heritage, the countries containing that part of the heritage which is valued internationally must seek international co-operation between government and non-government organisations (UNESCO, ICOMOS, etc), for international accord on protection. Such accord must reflect the reality that the legal and institutional machinery in each country is not uniform but varied.

2.2 What is Cost Benefit Analysis?

In the development of cost-benefit analysis, economists working in different fields (recreation, education, transport, etc) have developed methodologies that permit the assessment of public or private investment decisions, and out of that complex of transactions, to assess all the significant costs and benefits that arise.^{1} These assessments are aimed to aid in public decision making, since markets are by no means socially acceptable perfect allocators of resources, so that some very important benefits or costs may not be reflected in the market prices. External effects may occur; costs

may be shifted on to others; monopoly may exist; distortions of various sorts in the markets may cause distorted or inefficient market results. It is for these reasons that the cost-benefit economist is working to develop a surrogate market value estimate (or shadow price). In short, cost-benefit analysis tries to assess all of the major economic impacts having to do with an investment decision, public or private, including those which the market does not.

While the approach is common in all these fields, the application of the method for highways, hospitals, ports, etc. must vary, so that the analysis itself is inevitably coloured by the particular field of application because of the technological differences between them. And so it is with the cultural built heritage, because of its distinguishing features, which were sketched out in Section 2.1 above.

2.3 Conservation and Renewal of the Cultural Built Heritage

Since the cultural built heritage is fused with the real property in which it is found, its conservation must be necessarily applied to the real property itself, within the constraints which have regard to the cultural values. This means that the conservation must be tackled with an understanding of the inevitable life cycle of real property.

In brief, once newly constructed the bricks and mortar start a race against obsolescence. {2} This can take at least five forms:

structural/(stability of the buildings themselves);

functional (the original use of the building becomes outmoded);

locational (where the originally suitable location is now found to be lacking because of changes in the urban scene);

environmental (where the use of the building is undermined through traffic noise, environmental pollution, etc).

sudden disturbance (e.g. due to a flood, fire, storm or an earthquake).

But while the first of these categories (structural) necessarily advances with the age of the building (although it can be checked with prudent maintenance and repair) the others do not. Indeed they may decline. On the second, new uses could appear; on the third, location could be improved; on the fourth, the environment may become more suitable.

Whatever the kind of obsolescence for particular elements of the built environment, there comes a time in its life cycle where the owner/occupier

decides that there should be some "renewal" of the built fabric. He might wish to carry out major structural alterations; or adapt the building for a new function; or, with greater difficulty, attempt to ameliorate disadvantage of location or environment. In such situations, the owner/occupier will be exercising the normal role of asset management of the property in question, and will take decisions based on analysis of financial costs and returns (6.0 below).

In this management exercise the owner/occupier of the cultural built heritage will be constrained by the legal/institutional protection that has been created for the cultural element. He will typically be debarred from demolishing for redevelopment; and his investment in alteration, repair, modernisation, etc. will need to be conditioned by the constraint imposed by government in order that the cultural value be protected. Thus conservation becomes a "special case of urban renewal".

Within this special case there can be envisaged different levels of conservation/renewal. These can be categorised in many ways (e.g. conservation, preservation, restoration, etc). Since the terminology is not standardised, following is one authoritative suggestion.{3}

- (1) prevention of deterioration (indirect conservation): by for example a sound maintenance programme and controlling environmental pollution;
- (2) preservation: keeping the object in its existing state of repair to prevent further decay;
- (3) consolidation (direct conservation): adding or applying supportive materials into the actual fabric in order to ensure its continued durability and structural integrity;
- (4) restoration: reviving the original concept, either or both in relation to the fabric or use (also called restitution);
- (5) rehabilitation: adapting the building to a contemporary use which will be capable of sustaining it (also called reconditioning, renovation, remodelling, adaptive use);
- (6) reproduction: copying an existing artifact in order to replace some missing or decaying parts; or in extreme circumstances moving the object to a more suitable environment;
- (7) reconstruction: rebuilding anew in imitation of the old, as necessitated by disasters such as fire, earthquake or war, on the same site or, in the extreme case, another.