

Contingent Valuation and Cultural Policies: Some Challenges and a Case Study

Franco Papandrea

**Paper Prepared for Presentation to
Contingent Valuation of Culture Conference
February 1-2, 2002, Chicago**

Organised by:

The Cultural Policy Centre at the University of Chicago

**Contingent Valuation and Cultural Policies:
Some Challenges and a Case Study**

Franco Papandrea*

Abstract

Because of its capacity to measure the value of intangible benefits, contingent valuation promises to become a useful tool in the evaluation of cultural policies, programs and facilities. Although CVM has been widely used for valuing non-market goods its application to the measurement of cultural goods has been limited. Several challenges arise, particularly when the methodology is used to estimate costs and benefits for the evaluation of cultural policies and programs. The paper highlights some of these challenges and illustrates how they may be addressed with reference to a recent Australian application of CVM to value benefits derived from mandatory broadcast of domestic television programs. The case study offers an insight on the potential for a wider application of the methodology to evaluate cultural policy instruments.

Introduction

Public policies for the promotion of culture presuppose the existence of some form of market failure that inhibits efficient market outcomes. Notwithstanding their perceived public benefits, cultural policies often attract considerable debate about the role and nature of government support. While contrasting views are often passionately presented, they are seldom supported by empirical information. Questions of fact, however, are crucial to rational discussion of government cultural policy intervention and evaluation of related policy instruments.

Culture is an elusive concept that is difficult to define and even more difficult to quantify. What constitutes culture is steeped in values that differ from individual to individual, from group to group and from society to society. Culture is thought to derive from activities we undertake as a society and from our historical, artistic and traditional heritage. While cultural goods and activities generate direct benefits to those who consume them, much of their value is thought to accrue indirectly to society as a whole and is thus difficult to measure. Despite the difficulties, measurement of the indirect value to society is crucial to the evaluation of policies. We cannot determine whether a policy is justified without knowing how much people are prepared to pay for its perceived benefits to society.

Several methodologies have been developed for the empirical measurement of non-market benefits with attributes similar to those of cultural benefits. Methodologies for the measurement of environmental costs and benefits are of particular interest in this regard. Cultural and environmental benefits possess many similar attributes. In an economic sense, for example, the intangible benefits derived from the preservation of historic buildings and other cultural landmarks have much in common with the benefits derived from preservation of natural landmarks and rare flora and fauna. These similarities have encouraged some researchers to explore the possibility of estimating cultural benefits using methodologies developed for the measurement of environmental costs and benefits. Of these the contingent valuation methodology (CVM) has been the most prominent.

This paper focuses on the potential for the use of CVM to evaluate cultural policy instruments. The application of CVM in some cultural policy situations raises somewhat peculiar issues in that the desired benefits arise indirectly from the consumption of some cultural activity that is the subject of the policy instrument. For example, special assistance to the domestic production of television programs is motivated by the cultural value of the output and not by employment or other more direct economic benefits generated by the assistance.

The paper begins with a brief survey of the application of CVM to the evaluation of cultural policy instruments. This is followed by a discussion of some of the challenges of using CVM in the evaluation of cultural policies. Finally, the paper uses a case study to illustrate how some of these challenges were addressed in a practical application of CVM to assess the efficiency of domestic content regulation of television programs in Australia.

Contingent Valuation of Cultural Values

Contingent valuation has not been widely used to evaluate cultural policies, cultural goods, facilities or institutions. A bibliography of contingent valuation studies and papers compiled by Carson, et al (1995) refers to less than one dozen cultural applications in a list that extends to more than 2000 entries. The entries on cultural issues include an unpublished paper (Navrad, Pederson and Strand, 1992) and two conference/workshop papers (Bergland, 1993; Chambers and Chambers, 1994) that were not readily available for review. Although there has been some interest in cultural applications of CVM since the bibliography was compiled, the methodology's potential to estimate cultural values remains underutilised.

Possibly the earliest application of a contingent valuation methodology to a cultural good was Bohm (1972). However, his interest was more in the capacity of willingness to pay measures to produce reliable demand estimates rather than in the cultural benefits generated by the public good (television programs) used in his experiments. His subsequent work (Bohm, 1979; 1984) on an 'interval method' for the control of strategic bias in responses by asking willingness to pay questions with and without liability for payment to two separate samples was influential in the design of some of the early applications to cultural issues.

A study by Thompson, Throsby and Withers (1983) to measure community benefits from the performing arts appears to be the earliest specific application of CVM to evaluate a cultural policy. That study collected information with a 'personal interview' survey of 827 adult individuals in Sydney (Australia) on a range of issues related to community support for the arts. Its primary focus was on the collection of reliable information on willingness to pay for publicly funded subsidies to the arts (i.e., assessment of total demand for the subsidies). The Bohm interval method was adopted with open-ended willingness to pay questions posed in a liability/non-liability format to test and control for strategic bias as well as in an informed/uninformed format to control for information bias. The results, consistent with the questionnaire's format, were in the form of a range of values all of which were found to be substantially higher than the level of the then public subsidies. The study also elicited information on the respondents' preferred direction of change in arts subsidies under conditions that increases would be funded by higher taxation or reduced expenditure on other government programs and found that almost three-quarters of respondents favoured an increase, almost a quarter favoured the status quo and only 3.5 per cent favoured a decrease. Other papers by Throsby (e.g., 1984) and Throsby and Withers (e.g., 1985; 1986) deal with specific aspects of the same study.

Morrison and West (1986) adopted a similar methodology to Thompson, Throsby and Withers with their telephone survey of 463 adults in Ontario. They too used the Bohm interval method to control for strategic bias. All respondents were informed of the average per adult cost of subsidies to drama, dance, classical music and opera and were asked whether the amount was 'too little, too much or just right'. Those responding that the amount was 'too little' or 'too much' were asked to state what they thought an appropriate increase or decrease would be. They also used a similar procedure to elicit willingness to pay information for support of cultural activities generally (defined to include a wide range of facilities and activities). The study found public support for the performing arts to exceed subsidies and a broad endorsement for the level of support provided for culturally activities generally.

Much of the concern of both studies, particularly that by Thompson, Throsby and Withers, was to establish the usefulness of CVM surveys in assessing cultural policies and both reached a positive conclusion in that regard. Both studies preceded the controversies on the reliability of using CVM to assess environmental damages that culminated in the report of a panel of eminent experts appointed by the US National Oceanic and Atmospheric Administration (NOAA) to examine the issue. The panel was co-chaired by Nobel Laureates Kenneth Arrow and Robert Solow and concluded that the methodology 'can produce estimates reliable enough to be the starting point of a judicial process of damage assessment, including passive-use values' (NOAA, 1993).

Whereas both previous studies were concerned primarily with assessing the level of support for public subsidies to the arts, Papandrea (1996; 1997; 1999) focused on a benefit-cost type evaluation of an actual cultural policy instrument (domestic content regulation of television programs in Australia). Contingent valuation was used to assess the value of the benefits produced by the regulation. A relatively large face-to-face national survey involving personal interviews with adult members of 2193 households was used to collect the information. In addition to assessing the level of public support for the prescribed level of domestic content, the study sought to determine community preferences for the distribution of expenditure on **categories of** domestic programming, demand for a marginal increase in expenditure for the programming, and preferences for the distribution of any such demand. The study thus differentiated between total and marginal demand for domestic programming and sought to assess the efficiency of the regulation. The results indicated that while the regulation enjoyed public support, its efficiency could be improved by the reallocation of assistance to better reflect community preferences for different types of programs.

Support for cultural institutions was the subject of a study by Ehrenberg and Mills (1990) who used contingent valuation to estimate the total value of the BBC to the British public and thus assess the scope for charging a higher viewer licence fee. Bille Hansen (1997) used a CVM telephone survey of 1,843 Danes to assess support for public subsidies to enable the Danish Royal Theatre 'to continue its activities at the present level'. A more recent survey of 468 individuals to estimate the level of public support for a program to maintain and promote public access to several significant cultural facilities in Naples (the Naples 'Musei Aperti') was conducted by Santagata and Signorello (2000).

Valuation of access to cultural facilities and the value of preserving them have received relatively more attention, perhaps because of their similarity to environmental applications for which CVM was originally developed. Studies of the value of access to cultural facilities include: estimation of visitors' willingness to pay for preservation and 'own use' of the old Nidaros Cathedral in Norway by Navrud, Pederson and Strand (1992); estimates of use and non-use values of historic monuments in Northern Italy by Maggi (1994) (cited in Santagata and Signorello, 2000); estimate of use value of the Durham Cathedral in England by Willis (1994); and the estimate of non-use value of the 'Musée de la civilisation' in Quebec, Canada by Martin (1994) — he used the 'Travel Cost' method to estimate use value. Studies of the value of preserving cultural facilities include: valuation of damage from road traffic to historic buildings in Switzerland by Grosclaude and Soguel (1994); a study of the option value of preserving a historic building in Missouri by Chambers and Chambers (1994) (also Chambers, Chambers and Whitehead, 1998); a study of funding for Mexican archeology by Beltrán and Rojas (1996); estimation of the value of rehabilitating the Fes Medina in Morocco Carson *et al* (1997); a study of the value of restoring the 'Teatro Colon' in Argentina by Roche (1998); and a study of the value of restoring a historic landmark in a medium-sized US city Kling, Revier and Sable (2000).

Another interesting stream of studies used surveys to determine preferences for public expenditure. Some ten years after the Thompson, Throsby and Withers (1984) study of public subsidies for the arts that also examined the distribution of public expenditure across a full range of activities, Throsby and Withers (1994) conducted another survey focusing on the second of those objectives. The latter study sought to estimate willingness to pay for broad categories of public expenditure, but also included a series of questions eliciting respondents' views of

potential community benefits from public expenditure in education, health, the environment and the arts. Withers and Edwards (2001) conducted a more limited study of voter preferences for government expenditure in a broad range of activities including the arts and public broadcasters.

Policy Evaluation

Assistance to cultural activities is based on the notion that those activities generate general community benefits in addition to the private benefits derived by those involved in the production and consumption of the activities. A belief that such indirect community benefits exist is widespread. However, the value of such benefits (how much people are prepared to pay for them) is what matters in the evaluation of policy instruments. Without a reliable measure of willingness to pay, it is likely that support for a particular activity may be under or over provided thus leading to a loss of welfare to society.

Cultural decisions are made regularly by governments and there are two principal motivations for the evaluation of policy instruments. The first is to assist in the review of a policy. In such a case, the interest is primarily to assess the effectiveness and efficiency of a policy instrument to achieve the intended objectives and may be linked to considerations of whether the policy should be continued or amended in some way. The second is usually associated with evaluations of new policy proposals or of proposed changes to existing policies.

When evaluating a government intervention in a market in support of an activity we are interested in assessing whether the policy satisfies four important criteria, namely:

- Is there market failure that potentially justifies the intervention?
- Will the intervention produce benefits in excess of its costs?
- Is the proposed policy instrument efficient?
- Is the proposed level of intervention optimal?

The existence of market failure is a necessary pre-condition for intervention. Typically, assessment of whether this pre-condition exists is determined by the attributes of the market and of the activity that is subject to the policy instrument. In most cases encountered in the cultural field there is a widely held presumption that public goods or externalities are involved that create benefits that are not normally taken into account by market transactions. Public acceptance of the existence of these wider benefits has been demonstrated regularly in surveys and other studies and generally provides *prima facie* justification for some form of policy intervention.

Existence of non-market benefits, however, is not a sufficient justification for policy intervention. We need to

measure or estimate the value of the perceived benefits and set them against the costs of the intervention to assess whether the policy will produce a net benefit to society. Unless a net benefit can be demonstrated with some confidence, a policy intervention may not be justified. The intense debate that regularly accompanies proposals for cultural policy changes is often a reflection that widely accepted empirical measures of the associated costs and benefits are not readily available. As we are dealing with intangible, non-market benefits, there may be considerable scope to use CVM or some other methodology to estimate these benefits.

Market intervention may take several forms and governments will usually have a range of options from which to choose a policy instrument. The efficiency of the options in delivering the desired outcome will differ. Which of the available options is likely to be the most efficient will depend on the circumstances of each particular case. As circumstances usually change over time, it should not be assumed that an instrument that is likely to be the most efficient at a particular point in time will remain so for ever. This is particularly important in the evaluation of existing policies that may have been implemented in conditions significantly different to those prevailing at the time of the evaluation.

Evaluation also needs to assess whether a policy instrument is providing or assisting the provision of an optimal level of the desired outcome. Both over and under provision mean a loss of welfare to society. Here, too, contingent valuation can play a significant role in assessing the level of demand for the cultural benefits being promoted by the policy instrument.

As demonstrated by the applications reviewed above, contingent valuation can be a useful mechanism in the evaluation of cultural policy instruments. The application of CVM, however is not a simple or routine affair. While the judgment of the NOAA (1993) expert panel legitimised the use of CVM for the assessment of public policy, some of the related problems and controversies remain unresolved. Intending users, therefore, would be well advised to familiarise themselves with the controversies surrounding CVM and take care to adopt recommended guidelines for the derivation of reliable estimates. A concise summary of the controversies and guidelines is provided in Carson (2000). A particular focus on cultural CVM studies (albeit somewhat dated) is provided in Throsby and Withers (1985), which addresses some of the bias problems that can arise in CVM studies and how they may be averted or minimised. More recently Frey (1997) provided a concise and useful discussion of the specific problems and beneficial aspects of using CVM in the cultural field with reference to some of the previously conducted studies. Frey considers that a 'major problem of social welfare-based willingness-to-pay studies is that they are *divorced from practical decisions*' (emphasis in original). He proposes the use of popular referenda as a way of combining evaluation of competing alternatives with democratic decisions. But, as he acknowledges, referenda are not problem free either and may be difficult and costly to implement in countries without the referendum tradition of Switzerland.

The standard, dichotomous choice (yes/no) CVM referendum question often provides insufficient information on the optimality of an existing policy instrument. A supply 'quantity' has to be specified in the valuation question. Typically this is done by specifying either the existing supply quantity or a change to that quantity. But in many

cases, both the existing supply and a change to that supply need to be valued. Public support for an existing level of assistance to a cultural activity, for example, provides little indication about the optimal level of that assistance. While the usual contingent valuation procedure (i.e., testing different willingness to pay amounts on sub-samples of respondents to derive an estimate of demand for a *new policy proposal*) works reasonably well, it does not always do so for an established policy. In the case of an established policy, respondents usually want to be informed of the existing level of public support as a point of reference for the framing of their responses. Once that information is provided, however, there is considerable risk of ‘starting point’ bias or ‘anchoring’ becoming a serious problem. A partial solution to this may be to split considerations of support for existing arrangements from support of a marginal change (increase or decrease) to those arrangements and evaluate them separately.

These types of problems and issues need to be considered in the planning and development of contingent valuation surveys to assess the efficiency of cultural policy instruments. There are no off the shelf solutions and often compromises will need to be made for practical reasons. By exercising care, however, sensible and useful results can be obtained. The following application of contingent valuation to assess the efficiency of domestic content regulation of television programs in Australia illustrates some possibilities.

An Application of CVM

Australian free to air, commercial, television services must comply with minimum quotas for transmission of domestic programming. The quotas specify the proportion of overall transmission time (currently 55 per cent) to be devoted to domestic programming and sub-quotas for the transmission of minimum quantities of domestic programming in certain genres such as drama, documentaries and children’s programs. The sub-quotas are for first release, prime-time adult drama and documentaries, and for ‘first release’ (including children’s drama) and ‘repeat’ of children’s programming during designated children viewing times. The national, publicly funded, television service is expected, but not required, to adhere to the domestic content quotas. The quotas are deemed to be necessary to promote and enhance ‘a sense of national identity, character and culture’ (*Broadcasting Services Act, 1992*). Although the regulation has been reviewed and amended on several occasions over the past 40 years, there has been very little serious effort devoted to empirical measurement of the claimed benefits.

The regulation was the subject of a recent major study, including a valuation of its cultural benefits with a CVM survey (Papandrea 1996, 1997). The study followed standard welfare economics criteria to assess whether government intervention was justified and whether the adopted policy instruments were efficient and produced optimal results.

The Survey

The Australian Bureau of Statistics (the national statistics agency) was commissioned to collect the survey data as part of its Population Survey Monitor (PSM) quarterly survey conducted in November 1994. The PSM collects data from households in private dwellings in rural and urban areas across all States and Territories of Australia. The contingent valuation questionnaire was a self-contained section of the overall questionnaire administered by experienced interviewers to adult respondents in face-to-face interviews. An initial nationally representative sample of 3,156 private dwellings was chosen for the PSM survey. After allowing for sample loss arising from a

variety of factors, such as vacant dwellings, refusals and non-contacts, the effective sample size reduced to 2,193. The Bureau of Statistics also assisted in the development and extensive pilot testing of the survey questionnaire. Full details of the survey questionnaire are available in Papandrea (1996; 1997).

The primary aims of the contingent valuation survey were to collect information on:

- The likely existence of external benefits from the consumption of domestic television programs;
- The respondents' willingness to pay for the *existing* mandated level of domestic programming on free-to-air television services;
- The respondents' willingness to pay for a *10 per cent increase* in the existing mandated level of domestic programming on free-to-air television services;
- The respondents' relative valuation of the main categories of domestic programming that are regularly broadcast by free-to-air television services.

Because of their crucial role, particular effort was devoted to the development of the valuation questions. The valuation questions were the main vehicle for the assessment of whether:

- the regulation of domestic television content in Australia generated a net welfare gain;
- the level of support provided by the regulation was optimal; and
- the distribution of the support among the various program categories was optimal.

To assess whether the regulation produced a net welfare gain it was necessary to establish that the value of the benefits accruing to the Australian community as a result of the regulation exceeded the cost of implementing it. Several formulations and approaches were considered for the elicitation of willingness to pay for the perceived benefits and their efficacy was tested over a period of some months. A liable/non-liable, uninformed/informed format along the Thompson, Throsby, Withers (1984) lines was tested, but not adopted because it proved confusing to respondents. It was also evident in testing that respondents had difficulty with, and were reluctant to respond to, a dichotomous choice valuation question without first being informed of the existing cost of the regulation. Similar difficulties on the part of respondents were identified by Bille Hansen (1997).

The formulation adopted was to ask respondents whether their perceived benefits from Australian programs were commensurate with the estimated average cost per household to supply the programs. Respondents were

first informed of the annual average cost associated with the supply of Australian programs and were then posed a referendum style question as to whether, in the light of the perceived benefits, the amount should be changed. The wording of the question was as follows:

On average each household pays about \$120 a year in taxes and increased prices for advertised goods to finance Australian TV programs.

Considering the benefits your household and the community get from Australian programs, do you think this amount should be increased, decreased or stay the same?

Respondents supporting increased or decreased expenditure were asked in a supplementary, open-ended question, to state the maximum amount their household would be willing to pay ‘to retain the current amount of Australian programs on TV’.

The underlying assumption was that in answering the main question respondents would take account of both private benefits to themselves and perceived benefits to society. Any significant incongruity between perceived benefits and expenditure would be expected to lead to responses favouring increased or decreased expenditure, as appropriate. Only individuals perceiving a broad equivalence in the benefits and expenditure were expected to indicate that the level of expenditure should not change.

The incentive compatible nature of this type of question limits the scope for strategic behaviour by respondents. According to Maital (1979), when faced with such a question, respondents will answer ‘stay the same’ unless they consider the difference between benefits and costs to be perceptibly different from zero. Rational respondents who value the benefits at least the same as the amount stated in the question would have a disincentive to suggest a reduction in expenditure because, if implemented, the reduction would make them worse off. Similarly, those valuing the benefits less than the stated amount would have a disincentive to indicate an increase in expenditure. There was a possibility of strategic behaviour, however, by some of those indicating the expenditure should not change. Respondents gaining benefits from the regulation in excess of the prevailing average cost per household could perceive an advantage in choosing ‘should not change’ as their answer. The potential for this was expected to be low because respondents would have had to know their actual (not average) household contribution to the cost of the regulation. In any event, such behaviour would lead to an understatement of the valuations — an outcome that according to the NOAA (1993) panel guidelines should be preferred to options having the opposite effect.

While such a question should provide a reliable indication of support for an existing level of expenditure, it provides little information on the demand for a marginal increase or decrease in expenditure. It is desirable,

therefore to collect the necessary information separately. In the Australian content survey this was done with a separate willingness to pay question. All respondents were first asked a dichotomous choice question on whether their household 'would be prepared to pay an extra \$12 each year ... for a 10% increase in Australian programs' even if the respondent did not watch many such programs. Different nested supplementary questions were asked of all respondents depending on their answer. Those answering 'yes' to the initial question were asked whether they were prepared to pay more than \$12, and those with an affirmative response were then asked to state the maximum amount they were prepared to pay each year. Those answering 'no' were asked whether they would be prepared to pay less than \$12 each year, and those answering yes to this supplementary question were then asked to state the maximum amount they were prepared to pay each year. Adoption of this format was partly motivated by the desire to present respondents with a familiar structure consistent with that of the preceding question on the existing level of expenditure.

The third element of the evaluation was an assessment of whether the support provided by the regulation was consistent with community preferences. The survey elicited information on the viewing preferences of respondents and asked separate questions on their opinion as to whether the quantity of, and the support for, various categories of domestic programs should be increased or decreased. Simple opinion questions were used with regard to desired changes to the quantity of the various categories of programs. Questions on desired changes to the allocation of expenditure to the various program categories were similar in format to the preceding valuation questions. After being shown the existing allocation of support to the various program categories, respondents were first asked to indicate whether the allocation should be changed. Those dissatisfied with the existing allocation were then asked to reallocate the expenditure in accordance with their preferences. An additional question asked respondents to indicate how they would distribute an increase in total expenditure (\$10 per household per year) if the government decided to implement such an increase in the level of support provided to domestic television programs.

The Survey Results

Existence of External Cultural Benefits

At a general level, the survey found widespread acknowledgment of the cultural benefits of domestic television programs. Some 72.5 per cent of respondents, for example, were of the view that domestic programs are 'important for the preservation of the Australian way of life' and over 62 per cent believed that Australian programs benefited all Australians. With such a positive predisposition to Australian programming, it is not surprising that a substantial majority of respondents were also supportive of policies to promote the broadcasting of Australian television programs.

Valuation of Regulation at Existing Level

The survey found widespread acceptance of the estimated level of expenditure on Australian television programs. Only 15 per cent of all respondents wanted a decrease in expenditure. An additional 7.7 per cent was indifferent to, or was unable to, give a response (*don't know/ don't care*) to the question. The bulk of the responses was made up of 65.2 per cent who wanted the amount of expenditure to stay unchanged and an additional 12 per cent who wanted the amount to increase. See Figure 1 for details.

* willing to pay an unspecified amount less than \$120

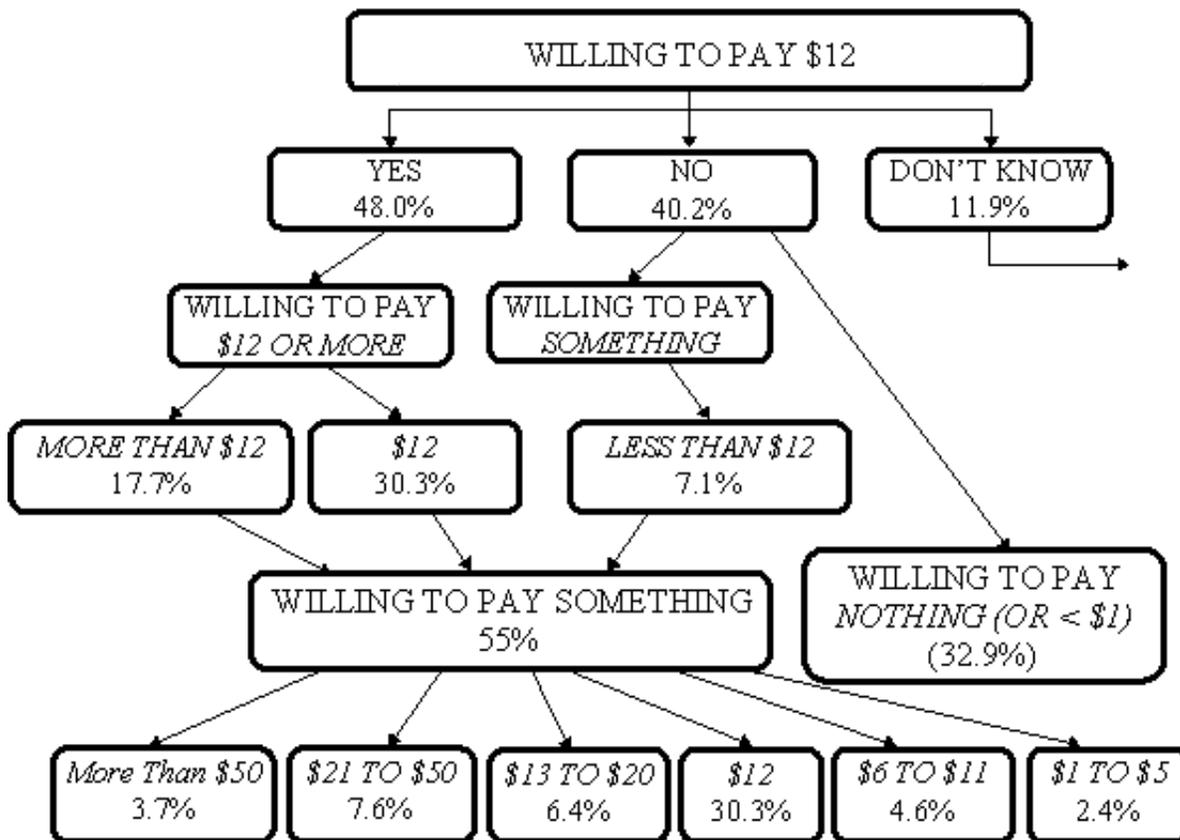
Source: Papandrea (1997)

Respondents indicating that current expenditure should be increased or decreased reported willingness to pay amounts ranging from zero to \$360. A number of respondents to the supplementary question proffered a *don't know* response. A *don't know* response from those who had previously stated that expenditure should be increased was interpreted as an unwillingness to commit to paying a specific amount in excess of \$120 per annum. Consequently, those individuals were reallocated (conservatively) to the *no change in the current level of expenditure* category. A slightly more difficult problem arose in relation to those whose *don't know* response was preceded by a response favouring a decrease in the current level of expenditure. Since a *nil* (i.e. zero) response was available to respondents, those individuals were deemed to be indicating a willingness to pay a positive, but unknown, amount and were conservatively assigned a zero value for purpose of calculating the mean value (1.8 per cent of all respondents were in this category). The mean value recorded in the survey was \$111.20.

Demand for Increased Expenditure

The marginal value that individuals had for an increase in domestic programming was an important element of the policy evaluation. Respondents were first asked a dichotomous choice question on their willingness to pay an extra \$12 per year for a 10 per cent increase in Australian programming (*nil* and *don't know* responses were acceptable). All respondents (except those giving *nil* and *don't know* answers) were then asked to indicate their preparedness to pay a larger or a smaller amount depending on their answer to the initial question. Those responding positively to the subsidiary question were then asked to state the maximum amount they were willing to pay. The responses are illustrated in Figure 2.

Figure 2: Willingness to Pay for a 10 per cent Increase in Australian Programs



Note: Minor discrepancies due to rounding.

Source: Papandrea (1997)

As shown in Figure 2, the proposed payment of an extra \$12 per year for the suggested 10 per cent increase in Australian programming was acceptable to 48 per cent of respondents. A further 7.1 per cent indicated that they would be prepared to pay an unspecified amount less than \$12 per year. Thus a total of 55 per cent of respondents indicated a positive valuation for the proposed increase. The remainder was made up of 32.9 per cent who were prepared to pay nothing (or an amount less than one dollar) and 11.9 per cent who gave a *don't know* response.

Various checks were undertaken to identify the possibility of 'protest zero' and 'implausibly high' values. The vast majority of zero responses were assessed as true bids as virtually all of them were from respondents who had indicated a preference for a decrease or no change to the existing level of support for Australian programming. There was concern, however, that some of responses were implausibly high. The usual expectation of a declining marginal value for increased quantities of a product was used to help identify implausibly high values and two arbitrary criteria were adopted for the purpose. The first criterion was based on identification of responses that were clearly disproportional to the valuation of the existing level of Australian programming. For this purpose an implausibly high value was defined as 25 per cent or more of the respondent's stated value for the existing level of Australian programming. The second criterion regarded a response as being

implausibly high if when added to the respondent's valuation for the existing level of Australian programming resulted in an amount greater than 2.5 per cent of household income. Any response satisfying at least one of the two criteria was classed as an implausibly high value in the analysis of the survey data. After allowing for protest zero and implausibly high responses, the adjusted mean value was \$ 7.71 (based on 1950 useable responses). The median value was \$12.00.

Optimal Distribution of Support

The survey found considerable dissatisfaction with the existing distribution of support among the various program categories. Less than one third (31.2 per cent) of the large majority of respondents who supported at least the existing level of expenditure on Australian television programming were satisfied with its distribution among the various program categories. Of those indicating that the expenditure should be increased, only 14.6 per cent were happy with the existing allocations. Overall, a change in the distribution of expenditure was supported by 65.6 per cent of respondents.

The program categories most often nominated for a higher allocation of expenditure were documentaries (41.9 per cent of respondents) and children's programs (36.1 per cent). The categories nominated for reduced expenditure were: sport (29.4 per cent); drama (series/serials) (19.4 per cent); light entertainment (17.4 per cent); and news and current affairs (16.3 per cent). Details of the desired changes to the existing program quantities and to the existing expenditure by program category are presented in Table 1. The table also provides details of programs regularly watched by respondents and of the categories for which larger quantities of Australian programs were desired.

Table 1: Support for Changes to Level and Expenditure by Program Category

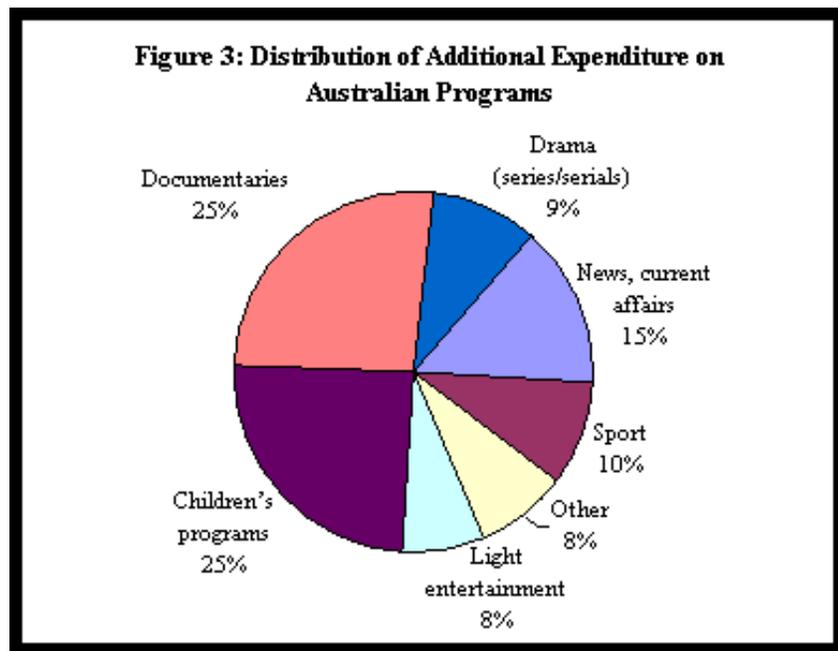
<i>Program Category</i>	<i>Regularly Watched</i>	<i>Increase Quantity</i>	<i>Decrease Quantity</i>	<i>Increase Expenditure</i>	<i>Decrease Expenditure</i>
			<i>(per cent)</i>	4.4	
News, current affairs	79.4	24.6	7.0		16.3
Documentaries	40.5	50.6	2.8	41.9	0.7
Sports	38.2	20.4	24.6	4.2	29.4
Movies	45.6	31.7	1.5	<i>(a)</i>	<i>(a)</i>
Series/serials	22.6	11.7	24.9	8.1	19.4

Light entertainment	19.4	21.8	8.3	6.6	17.4
Game/panel shows	16.1	5.7	29.2	(a)	(a)
Children's programs	8.4	16.9	2.0	36.1	0.5
Other	1.3	1.5	1.1	13.2	1.6
None of the above	1.9	7.8	26.4	0.8	4.8

(a) = unavailability of expenditure data prevented testing of these program categories.

Source: Papandrea (1997)

It is interesting to note the differences in the results in terms of desired variations of quantity and expenditure. When expressing a preference for increased or decreased amounts of Australian programming in the listed categories of programs, respondents did not face any implied direct or indirect liability for the nominated changes. To some extent the responses reflected existing viewing habits. The expressions of expenditure variations, on the other hand, implied an indirect liability to respondents. As respondents were asked to reallocate the existing expenditure devoted to the various categories of programs, there was a clear implication that an increase in one category could only occur at the expense of a compensating decrease in one or more of the other categories. When asked how they would distribute additional expenditure among the various program categories, respondents allocated half of the proposed increase almost equally to documentaries and children's programs. The distribution of the additional expenditure in favour of documentaries and children's programs underscores the unmet demand for such programs that was identified in the responses to other questions discussed above. Details of the additional expenditure distribution are provided in Figure 3.



Source:

Papandrea (1997)

Most respondents allocated the proposed additional expenditure only to a small number of program categories. Documentaries and children's programs were the only categories allocated additional expenditure by more than half of the respondents. The results are shown in Table 2. It also shows the average allocation by those households nominating increased expenditure for the particular program category. The allocations are likely to reflect the relative intensities of demand for the various program categories. Although a higher proportion of households wished to allocate some additional expenditure to documentaries than to children's programs, on average those favouring the latter category nominated a relatively higher amount. Both of these program categories appeared to have a substantially higher average intensity of demand than other categories. The significantly lower level of support for drama programs was particularly interesting as those programs are given preferential treatment by the regulation.

Table 2: Intensity of Demand for Increased Expenditure by Program Category

<i>Program Category</i>	<i>Proportion of Households Making an Allocation to the Category (per cent)</i>	<i>Average Value by Households Making an Allocation to the Category (dollars)</i>
News & current affairs	36.8	3.54
Sport	29.4	2.96
Drama (series/serials)	31.0	2.71

Light entertainment	28.0	2.39
Children's programs	57.7	3.82
Documentaries	62.0	3.70
Other	30.0	2.43

Source: Papandrea (1997)

Concluding Observations on the Survey Results

The survey found widespread acceptance of the community benefits that are likely to accrue from the provision of Australian films and television programs. Generally, Australians appear to have been satisfied with the policy in support of domestic television programs. For a large majority the current level of expenditure associated with Australian programs is at least commensurate with the value of the benefits.

The survey also found a moderate level of demand for some increased expenditure on Australian programs. When asked whether they would be prepared to incur an additional annual cost of \$12 per household to fund a 10 per cent increase in Australian programs, only 48 per cent of respondents agreed (40 per cent disagreed and 12 per cent were undecided). An additional 7 per cent of total respondents indicated a preparedness to incur an annual cost of less than \$12. Thus, a little more than half of the respondents (55 per cent) valued an increase positively.

While support for domestic programming was widely supported, its distribution was not. Demand for additional domestic programming was strongly influenced by genre. The greatest intensity of demand for additional expenditure was associated with children's programs. Demand for documentaries was also found to be strong and only slightly less intensive than that for children's programs. Intensity of demand for drama was relatively weak. The only category with a lesser intensity was light entertainment.

These results suggest that the benefits from the regulation could be increased by the provision of a different mix of Australian programs to viewers. The most desirable shift appears to be one involving increases in documentaries and children's programs, and commensurate decreases in other programs.

Conclusion

There are some basic facts that are central to all policy evaluations. The most important being how many people support the policy and how much they are willing to pay for the benefits likely to accrue from the policy. However, although cultural policies and other interventions in cultural activities are commonplace in many countries, empirical investigations and analyses have been and remain infrequently used in their evaluation. In part

this is surprising because cultural policies often attract considerable debate on the appropriate role of government in the promotion of cultural activities. There are many who consider cultural development to be of such high intrinsic merit that public support for it should be beyond question. But even if such a view were to be accepted, empirical analysis would still be necessary to evaluate the effects of alternative policy options and assist policy makers to choose the one that provides the greatest net benefit to society. Without empirical evaluation it is not possible to conclude with any degree of confidence that a policy produces a net welfare gain to society.

Part of the problem with empirical evaluations has been the lack of appropriate methodologies to value non-traded benefits. This problem arises not only in the cultural policy field but in others as well. Contingent valuation is one of the methodologies developed by economists seeking to value environmental benefits with attributes similar to those of cultural benefits. Although CVM is now well established in the environmental field, it has not attracted much attention from cultural policy analysts. The limited applications in the cultural field thus far, however, do suggest that CVM has considerable potential for much wider use. While not universally endorsed, contingent valuation is probably the best available methodology to estimate cultural benefits. There should be substantial scope, therefore, for the use of CVM-based empirical evaluations to improve decision-making and to foster better resource allocations and greater welfare gains.

This paper has highlighted some of the challenges awaiting potential users of contingent valuation and has provided a case study on how the challenges were addressed in a particular policy evaluation. Much can be learned from contingent valuations of environmental benefits. Although contingent valuation poses significant difficulties for users, a careful approach and adoption of best practice guidelines such as those recommended by the NOAA panel will assist the development of practical solutions. In the absence of better alternatives for the valuation of cultural benefits, CVM has considerable merit and deserves much greater interest from cultural policy analysts.

References

Beltrán, E. and M. Rojas (1996), 'Diversified Funding Methods in Mexican Archeology', *Annals of Tourism Research* 23:463-478.

Bergland, O. (1993), 'Valuation in the cultural Landscape in Norway', Paper presented to the workshop 'Economic Valuation of Recreation and Amenity Resources, Copenhagen, June.

Chambers, C. and P. Chambers (1994), 'Option Values for Preservation of Cultural and Historical Resources',

Paper presented at the 64th Annual Conference of the southern Economic Association, Orlando, November.

Chambers, C., P. Chambers and J. Whitehead (1998), 'Contingent Valuation of Quasi-Public Goods: Validity, Reliability and Application to Valuing a Historic Site', *Public Finance Review* 26(2):137-154.

Navrud, S., P.-E. Pederson and J. Strand (1992), 'Valuing our Cultural Heritage: A Contingent Valuation Survey', Unpublished Paper, Centre for Research in Economic and Business Administration, Oslo.

Bohm, P. (1972), 'Estimating Demand for Public Goods: An Experiment', *European Economic Review* 3:142-153.

Bohm P. (1979), 'Estimating Willingness to Pay: Why and How', *Scandinavian Journal of Economics* 81:111-130.

Bohm, P. (1984), 'Revealing Demand for an Actual Public Good', *Journal of Public Economics* 24:135-151.

Carson, R., J. Wright, N. Carson, A. Alberini and N. Flores (1995), 'A Bibliography of Contingent Valuation Studies and Papers', Natural Resource Damage Assessment, Inc, La Jolla, CA.

Carson, R., R. Mitchell, M. Conway and S. Navrud (1997), 'Non-Moroccan Values for Rehabilitating the Fes Medina', World Bank Report, Washington DC.

Ehrenberg, A. and P. Mills (1990), 'Viewers' Willingness to Pay', Research Report, London Business School, London.

Kling, R., C. Revier and K. Sable (2000), 'Estimating the Public Good Value of Preserving a Local Historic Landmark: The Role of Non-substitutability and Information in Contingent Valuation', paper presented to the 11th Biennial Conference of the Association of Cultural **Economics International**, Minneapolis, May.

Maggi, M. (1994), 'Il Valore dei Beni Culturali: Un'Applicazione Empirica', in G. Brosio (ed.) *Economia dei Beni Culturali*, La Rosa Editrice, Torino.

Maital (1979), 'Measurement of Net Benefits from Public Goods: A New Approach Using Survey Data' *Public Finance* 34(1):85-99.

Morrison, W. G. and E. G. West (1986), 'Subsidies for the Performing Arts: Evidence on Voter Preference', *Journal of Behavioural Economics*, vol. 15, Fall, pp. 55-72.

Mitchell, R. C. and R. T. Carson (1989), *Using Surveys to Value Public Goods: The Contingent Valuation Method*, Resources for the Future, Washington, DC.

NOAA (1993), 'Report of the NOAA Panel on Contingent Valuation', Resources for the Future, Washington,

DC.

Papandrea, F. (1996), *Measuring Community Benefits of Australian TV Programs*, BTCE Occasional Paper no. 113, Australian Government Publishing Service, Canberra.

Papandrea, F. (1997), *Cultural Regulation of Australian Television Programs*, BTCE Occasional Paper no. 114, Australian Government Publishing Service, Canberra.

Papandrea, F. (1999), 'Willingness to Pay for Domestic Television Programming', *Journal of Cultural Economics* 23(3):149-166.

Thompson, B. J., C. D. Throsby and G. A. Withers (1983), 'Measuring Community Benefits from the Arts', Research Paper no. 261, Macquarie University, School of Economics and Financial Studies, Sydney.

Throsby, C. D. (1984), 'Measurement of Willingness-to-Pay for Mixed Goods', *Oxford Bulletin of Economics and Statistics* 46:279-289.

Throsby, C. D. and G. Withers (1986), 'Strategic Bias and Demand for Public Goods: Theory and an Application to the Arts', *Journal of Public Economics* 31:307-327.

Throsby, D. and G. Withers (1985), 'What Price Culture?', *Journal of Cultural Economics* 9(2):1-34.

Throsby, C. D. and G. Withers (1994), 'Measuring Demand for Public Expenditure: Theory, Methods and Preliminary Results', Research Paper no. 383, Macquarie University, School of Economic and Financial Studies, Sydney.

Withers, G. and L. Edwards (2001), 'The Budget the Election and the Voter', *Australian Social Monitor* 4(1):9-14.

Zeckhauser, R. (1973) 'Voting Systems, Honest Preferences and Pareto Optimality', *American Political Science Review* 67:934-946.