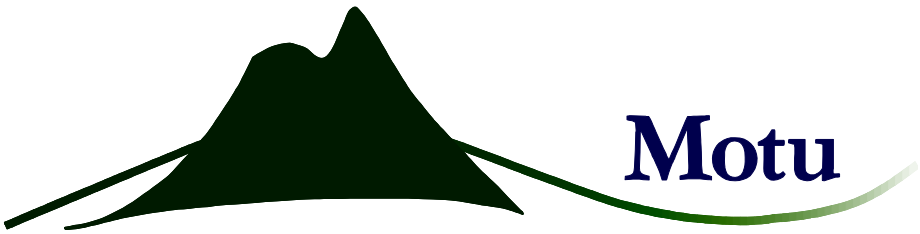

Value and Culture

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Abstract
This paper seeks to clarify the understanding of value in the cultural context, using economics concepts. We develop an economic framework for thinking about value in the cultural context and discuss how well various valuation techniques are able to account for such values. We also discuss why actual outcomes for the production of cultural and heritage services may differ from what would be considered 'optimal' in the economic context. The aim is to outline a framework which can assist policy makers in the cultural sector to intervene more cost-effectively and be more conscious of trade-offs amongst different cultural values.

JEL codes
A11, A13, Z10, Z18

Keywords
Value, culture, cultural policy, non-market valuation

Contents

Executive Summary

- This paper outlines the concept of economic value within a cultural context. Culture is taken here to include all goods, services and activities in the broad arts, sports and heritage space.
- In economic terms the value of any good (including cultural goods) is normally taken to be the addition to wellbeing (or utility) that arises out of the use of that good. This notion of value is much broader than simple market value or national accounts definitions of value. Any direct or indirect benefit to any individual that arises from an activity is a form of value created by that activity.
- This broad economic approach to recognising value means that there are several sources of value in the cultural context. These include:
    - **The non-monetary return to producers**: The difference between what producers could earn in another occupation and the (lower) earnings they receive as producers of cultural goods.
    - **Market use value**: The value of a cultural good purchased in the market. This may have both a direct component (e.g. concert ticket price) and an indirect component (e.g. subsequent benefits to the individual arising from participation in music lessons as a child).
    - **Non-market use value**: The value of a cultural good that is not purchased in the market. This may have both a direct component (e.g. sense of wellbeing engendered by viewing a public sculpture or heritage building) and an indirect component (e.g. subsequent benefits to the individual arising from participation in sporting activities as a child).
    - **Non-use value**: The value that an individual derives from knowing that a certain cultural good (e.g. the Treaty Grounds) is available for others' current use ("existence value") or for future generations' use ("bequest value").
    - **Option value**: The value created through current support for a certain activity or heritage site that makes it possible for that activity or site to be available in future should some future generation value that activity or site.
    - **Instrumental values (externalities):** The benefits that accrue to the wider society as a result of cultural activities. These benefits may include greater social cohesion and improvements to the democratic process. They also include benefits to a city that arise from attracting high human capital workers and firms to a city that has vibrant arts, sports and heritage sectors.
- The standard economic approach is based on some basic assumptions. These include that individuals know their own preferences, that these preferences are stable over time and that all goods are comparable in terms of their values. Furthermore, in order to arrive at an aggregate value of an activity, some method for aggregating individual outcomes is required.
- Cultural goods may not be optimally provided for a number of reasons.
    - Many cultural goods are **public goods** (i.e. goods that are non-rival and non-excludable in consumption). In general, public goods suffer from under-provision since each consumer can

free-ride off others, resulting in the market value of such a good being less than the combined value to all consumers. An example is a public sculpture that no individual has to pay to see.

- Consumers may have **bounded rationality** in relation to some cultural goods, i.e. they do not know their own (current or future) preferences. This may be a particular issue for the avant-garde arts or for aspects of culture from other societal groups that an individual has not yet been exposed to. Deliberate exposure of individuals to new cultural offerings may result in a change in their preferences to include an appreciation of the new offering.
- The **externality benefits** (outlined above) are generally not taken into account when an individual makes a decision to consume (or produce) a particular cultural good. Society may miss out on the external benefits if an individual chooses not to purchase the good even though total societal benefits warrant the purchase.
- There may be **unequal access** to cultural goods that makes it difficult for certain groups in society to consume certain cultural goods. This issue may be especially concerning where positive externalities exist had there been some consumption of cultural goods by those groups.

- A number of techniques can be used to value cultural goods. These techniques, which are summarised in Table 2 of the paper, all have certain shortcomings but may assist policy makers in deciding whether a particular cultural activity is worth pursuing. Some techniques (such as hedonic pricing, use of travel costs and contingent valuation) attempt to ascertain the aggregate willingness of individuals to pay for cultural goods; choice modelling provides measures of relative value that can be used for prioritising amongst alternatives. Impact analysis (which attempts to examine the impact of events on economic activity) is the least general of the alternative approaches.
- Valuation techniques may be particularly imperfect (and so of less use for prioritisation purposes) where individuals have little knowledge of alternative cultural offerings. In these circumstances, the use of expert opinion within a sector may be useful for prioritising support amongst alternatives.
- A problem associated with all methods used to calculate the aggregate value of any cultural activity is that there is no universally acceptable philosophical method for aggregating net benefits across individuals. Thus it is imperative to analyse which groups experience benefits (or costs) rather than just examining aggregate measures of benefit.
- All decision-making requires a good fact basis prior to making decisions. A template (see Table 3 in the paper) designed to gather information on a consistent basis on the types of values, and who they accrue to, arising from various cultural activities could be adopted by potential public (and philanthropic) funders. The information gained from this template could also be used to report information on the cultural sector in such publications as *Cultural Indicators for New Zealand*.

1. Introduction

"Arts festival brings $56 million boost to Wellington" (O'Callaghan 2012). This headline appeared in the Dominion Post, expounding the economic benefits of the New Zealand International Arts Festival for the Wellington economy. Festival organisers noted the positive impact the Festival had on the regional economy in tough economic times and that the figures "confirm its [the Festival's] economic and cultural importance both to Wellington and New Zealand." Economic consultants calculated that the average out of town visitor spent $662, and stayed for 2.6 nights in the capital. This cost-benefit analysis suggested that for every dollar invested ($2 million invested by Wellington City Council) the return was $29 to the regional economy.

This cost-benefit analysis is an example of using economic valuation techniques to validate the use of public money in support of a major cultural event. However, the economic activity attributed to specific cultural and sporting events should not be taken as a measure of the value provided by the production and consumption of cultural goods and services. This paper seeks to broaden the understanding of economic value in the cultural context[1] and to make clear that a view of value that is grounded in economic concepts is much wider than the narrow definition of benefits typically considered within cost-benefit studies. Furthermore, some such studies may include questionable assumptions about 'multiplier' benefits arising from certain events and so be an inaccurate measure even of the benefits that they are supposedly incorporating.

In taking a broad economic definition of value, our approach is in keeping with modern developments in measuring economic progress. These emphasise the importance of policies and institutions that raise people's overall wellbeing rather than solely concentrating on incomes or other monetary measures of value (Stiglitz et al 2009; Fujiwara and Campbell 2011; OECD 2013). The paper also clarifies the limitations of an economic perspective and is intended to complement the sophisticated humanities literature on the value of culture. The aim is to outline a possible framework which could be of use to policy makers in the cultural sector to maximise the (total) value for money of their policy interventions.

The paper is set out as follows. Section 2 discusses different definitions of culture and the definition we will use in this paper. Section 3 discusses economic perspectives on value, both in general and specifically within the cultural context. Section 4 elaborates on this

[1] When we speak of culture in this paper, it should be taken to cover the broad arts, sports and heritage sectors unless the specific context indicates a more restrictive interpretation.

discussion, focusing on reasons why cultural goods may be sub-optimally provided. Section 5 discusses approaches that may be used to implement an economic perspective when attempting to place a value on the benefits provided by cultural goods, while section 6 concludes.

2. What is culture?

This paper is concerned with issues surrounding the economic valuation of cultural production. We must first, therefore, be clear on what we mean by the term 'culture' in this context. Throsby (1997), an early contributor to the field of cultural economics, provides two definitions of culture. The first, which we shall refer to as culture in the anthropological sense, defines culture as the set of attitudes, beliefs, practices, values, shared identities, rituals, customs and so on which are common to a group, whether the group is delineated on geographical, ethnic, social, religious or any other grounds. That is, culture can be thought of as the features of a group which the group uses to define itself. Examples of such cultural groups include New Zealand culture (geographic), Māori culture (ethnic), Islamic culture (religious) and youth culture (social). Any individual is likely to identify with and participate in several different cultures. Throsby's second definition of culture, which we shall refer to as the embodied definition, refers to the set of activities and the products of these activities, such as the practice of the arts or the pursuit of sporting activities. This definition of culture can be thought of as the physical embodiment of the anthropological definition of culture. We will be focusing our discussion on what we have called the embodied definition. This definition is not restricted to the goods and services produced in the market; non-market cultural activities are also part of the physical embodiment of the anthropological definition of culture.

In this paper, we are interpreting the term 'culture' very broadly. Our definition encompasses the arts, heritage and sports (sports are a powerful expression of culture in New Zealand). Also, we are not limiting our definition of the arts to only include the 'high' arts, such as classical music or opera, but to include artistic endeavours throughout society. Every cultural group has a unique way of expressing itself through arts practice and our definition is intended to be inclusive of all art forms.

3. How do economists think about value?

This section initially outlines economic perspectives on value and makes explicit the assumptions which underlie these perspectives. The second sub-section addresses economic perspectives on value that accrues to individuals specifically in the cultural context. The third sub-section discusses economic perspectives on externalities (instrumental values) that may

accrue to the broader society as a result of personal cultural activity choices made by others. A key theme throughout this discussion is that economic approaches to thinking about an activity's value are rooted in the personal wellbeing and social benefits that the activity produces. They are not limited to narrow accounting perspectives such as the activity's contribution to the national accounts (e.g. Gross Domestic Product) or to other monetary measures. Tools for measuring the (broad) value of cultural activities are outlined in section 5.

3.1. Economic perspectives on value

A core economic perspective on value is based on a utilitarian perspective, which holds that the appropriate action to take in a given circumstance is that which maximises utility (or wellbeing) of individuals. Maximising utility, in this sense, is analogous to maximising happiness or minimising suffering. Seminal works on utilitarianism include Jeremy Bentham's *Introduction to Principles of Morals and Legislation* (Bentham 1789) and John Stuart Mill's *Utilitarianism* (Mill 1863). The works of Hicks 1939 and Debreu 1959 formalised the application of this concept and these works provide a basis for the standard model of individual consumer choice in economics. According to this approach, individuals seek to maximise their utility (or wellbeing or happiness) subject to budget constraints. Value, in this context, derives from the subjective preferences which individuals have over the goods and services they consume (as described by their utility function which represents their preferences over all market and non-market goods and services). In order for an action, such as a purchase, to be welfare improving for the individual, their subjective valuation of the action must be at least as great as the value of what they are giving up in order to undertake that action. Thus economists infer value by observing actual choices (revealed preferences). These individual valuations define the rate at which an individual is willing to trade off one good for another at the margin,[2] rather than to how useful a particular good is to the individual in total (or on average). For instance, while water is crucial to sustain life, a very large quantity of water is required at the margin (in normal circumstances) to trade for one tiny diamond, that is inessential to life.

The introduction of monetary valuation does not affect the ability to use observed actions to infer value, as money is not an absolute indicator of value; it is simply a medium of exchange between goods. The dollar, or exchange value, of a good is derived from the supply and demand for a good in the economy as a whole. It reflects the minimum value to each purchaser, not necessarily the full value to the purchaser (the difference being termed "consumer surplus"). Furthermore, certain benefits may accrue to an individual through non-monetary

[2] In economics, a "good" is defined as a thing that satisfies human wants and provides utility (Milgate 2008). This definition can be separated into physical goods and non-physical services.

transactions or can reflect the indirect benefits that the individual may accrue personally as a result of the consumption choices of others.

It is this subjective theory of value which underlies economic valuation techniques, including cost-benefit analyses. However, the assumptions which underlie the subjective theory of value are often not made explicit. Three key assumptions are that:

(i) individuals have full knowledge of their preferences

(ii) these preferences are stable over time

(iii) all goods are comparable in terms of their values.

The assumption of full knowledge of individual preferences means that an individual is fully aware of what they like and how much they will benefit from the consumption of the good. This means that they are aware of, and are taking into account, all the benefits to them of consuming a particular good when they are deciding on their consumption bundle. The assumption of stable preferences means that an individual's life-time utility function is fixed over time. This assumption still allows individuals to have differing preferences for goods across periods (e.g. favouring Jimi Hendrix in their twenties and Puccini in their sixties); the assumption of stable preferences means they know that this is how their preferences will evolve over time. The assumption that all goods are comparable means that there exists a well-defined preference ordering and that any good (or bundle of goods) can be ranked relative to the others.[3] These assumptions are clearly challengeable, particularly in the context of culture. Some criticisms and their implications will be discussed in more detail in sections 4 and 5.

Individual preferences reflect the value which individuals place on the consumption of goods. However, this does not mean that others' consumption does not also provide value for an individual. Individual preferences can reflect the benefits of consumption enjoyed by others. The benefits can accrue purely through altruism, or through the consumption of a shared experience, such as a concert or a sporting event. An individual gains more utility from a well-attended concert or sports event because others are also gaining utility from the event, adding to the experience.

When making policy decisions we must compare preferences across individuals. Policy makers are generally concerned with maximising social welfare; in economic valuation it is assumed that a social welfare function is derived from some form of aggregation of the

[3] The preference ordering is such that good A is preferred to good B, good B is preferred to good A, or the individual is indifferent between goods A and B. Furthermore, if good A is preferred to good B, and good B is preferred to good C, then good A is preferred to good C.

individual preferences in the society. That is, societal preferences are viewed as a weighted combination of individual preferences. Even if we are willing to assume that social welfare is an additive function of individual welfare, some weighting function is required to aggregate the individual preferences in order to generate societal preferences. This issue is another source of controversy as different weighting schemes can generate different societal preference relations. Under one weighting scheme, policy A may appear to be the preferred policy, while policy B may appear to be the preferred option under a different weighting scheme. Issues with the aggregation of individual preferences will be discussed further in section 5.2.

3.2. An economic perspective of value in the cultural context

The concept of total economic value, which is widely used in the valuation of the environment (Tietenberg and Lewis 2009), can be applied to the valuation of culture, albeit with some slight modifications. This concept has been applied to the valuation of cultural heritage sites (e.g.Choi et al. 2010) and also features in a report on the valuation of culture to the Department of Culture, Media and Sport (DCMS) in the United Kingdom (O'Brien 2010). For the purposes of this paper, we have made some modifications to the figure found in O'Brien (2010).

The total economic value of culture captures values that derive both from market transactions and from non-market sources. It captures benefits that accrue directly to an individual user of culture and also captures benefits that accrue to individuals (society) by virtue of others' use (or potential use) of culture (i.e. 'instrumental values' or 'externalities'). Furthermore, it includes value that may accrue to producers (over and above their income) as well as to consumers. Figure 1 summarises the various types of value that may be derived from culture, each of which is discussed in more detail subsequently in this paper. Table 1 provides definitions and examples of the various types of value that cultural goods can provide. Different cultural goods provide these kinds of value to differing degrees.

The next sub-section discusses the benefits (direct and indirect) that accrue to the consumers of cultural goods, while the following sub-section discusses the values that accrue to the producers of cultural goods. Instrumental values (externalities) that cultural goods provide are discussed in section 3.3.

Figure 1: Sources of Total Value

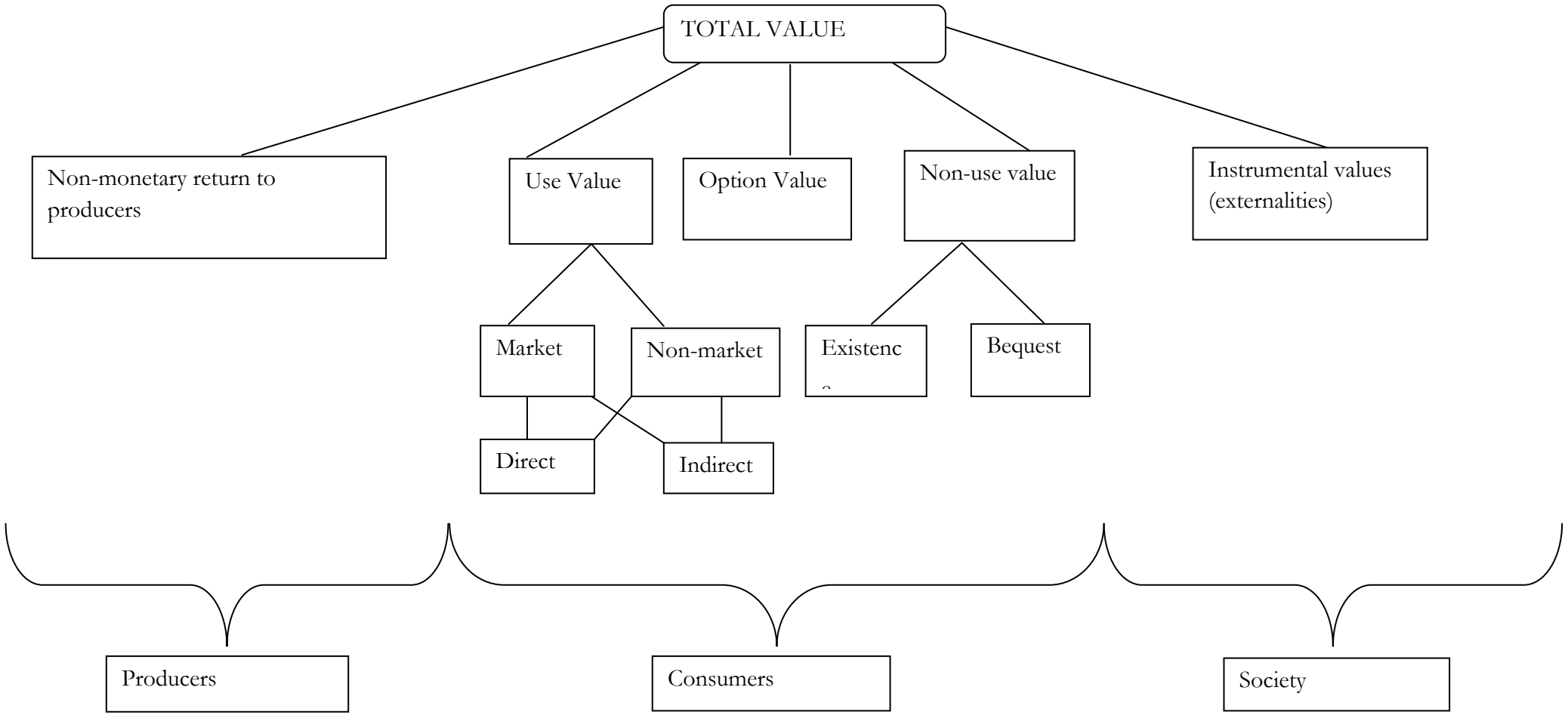

Table 1:Types of values provided by cultural goods

Category of value	Description	Direct or indirect	Example(s)
Non-monetary return to producers	The non-monetary satisfaction derived from the production of cultural goods and services	Direct	Arts: The feeling of self-satisfaction from producing artworks which exemplify who you are as an artist. The value derived from your work being positively viewed by critical reviewers Heritage: The satisfaction that a restorer receives from restoring part of a heritage building to its original form. Sport: The value a coach of a children's sports team receives from teaching the children new skills
Market use value	The value derived from the consumption of cultural goods and services purchased on the market The extra benefit which accrues to the individual from the consumption of cultural goods for which they have paid directly	Direct and indirect	Arts: The enjoyment you feel from attending a paid art exhibition at a museum or art gallery (≥ ticket price) (direct) Benefits gained later in life from the (purchased) pursuit of artistic endeavours as a child (indirect) Heritage: The enjoyment you feel from paying to attend a Māori cultural performance at the Waitangi Treaty grounds (≥ ticket price) (direct) Sport: The enjoyment you feel from paying to attend a sporting match (≥ ticket price) (direct)
Non-market use values	The value derived from consumption of cultural goods and services NOT purchased on the market. The extra benefit which accrues to the individual from the consumption of cultural goods but for which they have not paid directly	Direct and indirect	Arts: The enjoyment you feel from enjoying public artworks in your local area (direct) The fostering of a desire to learn in later life from visiting museums as a child (indirect) Heritage: The enjoyment you derive from viewing the facade of a heritage building (direct) Sports: The enjoyment you feel from attending one of your children's sporting matches (direct) The health benefits from regular participation in sports due to the regular exercise (indirect)
Option value	The value an individual places on themselves or others having the option to consume and enjoy a	Indirect	Arts: The value you derive from retaining the choice to attend a Kapa Haka performance in the future

	cultural good at some point in the future, if the future provision depends on continued provision in the present		Heritage: The enjoyment you feel from knowing you are retaining the choice to visit the treaty grounds at some point in the future.
Existence value	The value an individual derives from knowing that a good exists, even though they will not consume the good	Indirect	Arts: The satisfaction you feel from knowing that steel drum music exists, because of what it symbolises about human creativity, diversity and creative freedom. Heritage: The enjoyment you feel from knowing that the treaty grounds exist, because you feel that the preservation of national heritage is important, even though you will never visit the grounds. The enjoyment you feel from the existence of Te Papa, the national museum, because you believe that the work it does in preserving our national and cultural heritage is important, even though you will never visit the museum.
Bequest value	The value an individual derives from knowing that a good will be preserved for future generations to enjoy	Indirect	Heritage: The value you derive from knowing that the Waitangi Treaty grounds will be preserved for future generations to enjoy
Instrumental values	Benefits that accrue to people other than the producer or consumer as an indirect benefit from provision of the cultural service	Indirect	Increased societal harmony by virtue of multiple cultures being supported with enhanced cross-cultural understanding Reduced crime as a result of disadvantaged groups being involved in cultural activities Enhancement of civic engagement as a result of cultural activities Attraction of the "creative class" to vibrant cities

3.2.1. Values to the consumer

The direct market use value for an individual is derived from the direct consumption of cultural goods for which a market exists. Examples are paying to attend an art exhibition, paying to attend a Māori cultural performance on the Waitangi Treaty Grounds, or paying to attend a sporting event at a local stadium. The choice could be due to the aesthetic properties of the artworks, the inspirational power of the experience, the enjoyment of being present at a great sporting contest, or the spiritual or cultural significance of the piece or performance (Klamer 2003, 2004). The individuals who choose to pay for such goods or services place a subjective value on the consumption of such goods which is at least as large as the price they must pay in order to consume them.

Direct non-market use values are also derived from the direct consumption of cultural goods, but for which there is no established market. Examples include attending a museum which does not charge an entry fee, or attending a national or cultural heritage site which does not charge an entry fee.[4] Another example is the satisfaction one derives from visiting a public art work, be it a monument, mural or sculpture. The benefits to the individual may reflect the national/historical/spiritual significance of the site or the exhibits, their educational value or their aesthetic properties as in the case of market use value. Enjoyment derived from participation in amateur sports clubs is another example of a non-market use value for culture (sports). Bourdieu (1998) distinguishes between this value which is derived from sport as 'practice', and value derived from paying to watch sport as a 'spectacle', the latter having a market use value.

Indirect market and non-market use values arise because the participation in cultural or artistic activities can provide additional benefits to the individual, other than the immediate experience attained while participating in the activity. For instance, studies have found a positive association between participation in and exposure to cultural activities and educational outcomes (Hoff-Ginsberg and Tardif 1995, Bradley and Corwyn 2002). Participation in artistic or cultural activities forms a part of a child's 'learning stimulation' in early years. Children with a higher level of 'learning stimulation' have significantly better educational outcomes. Differences in learning stimulation explain a large portion of the difference in educational outcomes between children from different socio-economic backgrounds. Furthermore, educational attainment is an important predictor of future unemployment and delinquency. The results from two

[4] Te Papa does not charge an admission fee, although some temporary exhibits or services such as guided tours do cost the user; the Waitangi Treaty Grounds requires only a voluntary donation for NZ residents, although they do charge for guided tours and the cultural performances.

longitudinal studies conducted in New Zealand have found poor educational attainment is associated with an increased likelihood that a child will be involved in criminal activities and also an increased likelihood of being unemployed as a young adult (Fergusson et al. 2004, Wright et al. 1999, Caspi et al. 1998). The arts have also been linked to improved physical and mental health outcomes. Consumption of the arts has been shown to reduce stress and anxiety (Arts Council England 2004, Staricoff 2004). Participation in the arts has been shown to have positive mental health outcomes through enabling self-expression and communication (Arts Council England 2004). Similarly, participation in sports has been shown to be associated positively with both physical and mental wellbeing for persons aged 40 and above (Delaney and Fahey 2005).

These indirect non-market use values can be related to a more refined theory of value, the capabilities approach of Sen (1985). In this view individuals derive value not only from what they actually do achieve, but also from what they are capable of achieving. This approach incorporates aspects of value and wellbeing that are either excluded from or inadequately incorporated in the approach based on subjective preferences. A key factor which is included in the capabilities approach is the importance of fundamental rights and freedoms, such as the right to express oneself culturally and creatively, and the freedom to identify and associate with any cultural group. Two individuals, John and Ashley, could be equally "happy" according to the standard approach based on subjective preferences (i.e. what they actually achieve). However, if John lives in an authoritarian country which does not recognise his cultural group and bans its forms of cultural self-expression, his capabilities will be less than Ashley's, as she lives in a democratic society which allows her cultural group free rights of association and the freedom to express their cultural identity. Under the capabilities approach, therefore, Ashley's welfare is higher than John's.

Having the skills and access to opportunities to engage with cultural and artistic activities effectively increases what an individual is capable of achieving, through the extra benefits which accrue to the individual. This is not only true within artistic or cultural activities (e.g. through the ability of self-expression through artistic means) but also outside of these activities (e.g. increased academic or general cognitive skills fostered by artistic or cultural engagement) (Ruppert 2006). Engagement with the arts, either through schools or within the wider community, may not only increase the rate of investment in human capital (through extra years of schooling) but may also increase the efficiency of such investments (through motivation, critical thinking, etc.). A report by the Centre for Arts Education in the US has found a positive association between arts education and the likelihood of graduating high school for students in New York City (Centre for Arts Education 2009). Schooling, as a proxy measure of the level of an individual's human

capital, has consistently been associated with improved economic outcomes. A broader arts education can help foster critical thinking, social skills and a motivation to learn and may give students better employment prospects once they enter the labour market.

Option value refers to the value individuals place on being able to consume the cultural good at some point in the future if the provision of that good in the future depends on continued provision in the present. This is particularly relevant for heritage. Once heritage is lost, it cannot be replaced. Therefore, the option to consume the cultural or national heritage is lost. For example, if the Waitangi Treaty Grounds were to be developed into a tourist resort, the built national heritage located at the site will be lost and the option to visit these historic buildings will no longer exist. Another example is Kapa Haka performances. If the cultural knowledge embedded in Kapa Haka is lost, meaning that Kapa Haka as an art form no longer exists, the option to attend one of these performances no longer exists.

Non-use values are those which accrue to the individuals who do not directly consume the particular cultural good or service in question, but who still derive value from the fact these goods are available for consumption by others. The two types of non-use values depicted in Figure 1 (with examples in Table 1), existence and bequest values, differ in the time dimension considered by individuals. Individuals may derive existence value simply from the knowledge that a cultural good exists for the benefit of others, even though they never intend to consume that good themselves. Bequest value, on the other hand, is derived from the knowledge that a particular cultural good that is currently provided will continue to be provided for future generations to enjoy. An example of existence value is the value derived from knowing that the Waitangi Treaty Grounds or a sacred burial site exist, even if one never intends to visit the site. Another example is the value an individual derives from knowing that steel drum music exists, because it serves as an indicator of human creativity, diversity and creative freedom. An example of bequest value is the value derived from knowing that future generations will be able to visit the Waitangi Treaty Grounds as they exist in the present, because the individual values preserving cultural heritage for future generations to enjoy. Individuals who derive bequest value today are therefore assuming that future generations will value the cultural good, even though this may turn out to be incorrect.

The environmental literature includes another category of non-use value, 'intrinsic value'. Intrinsic value refers to the case in which an environmental good (such as a lake or a forest) is considered to have value beyond the value placed on it by humans. This category is not applicable to culture, which is a human construct, since there is no reason to place a positive value on cultural goods beyond that placed on them by humans. Thus, in accounting for the

value of cultural and sporting activities and of heritage sites, no benefits should be included that relate to intrinsic value; only (market and non-market) values that accrue to humans should be assessed (Gibson 2009).

3.2.2. Values to the producer

Aside from any income generated from the sale of their cultural or artistic output, producers of cultural and artistic goods may also derive extra, non-monetary benefits from their productive activities (see, for example, Throsby 1994, Cowen and Tabarrok 2000). In a large survey of practicing arts professionals in New Zealand, Creative New Zealand (CNZ) found that these non-monetary benefits come in the form of creative self-expression and artistic freedom, the recognition of their peers and audiences, being "their own boss" and the contribution they make to others' lives (CNZ 2003). In an economics framework, this benefit can be thought of as a divergence between the opportunity cost of becoming a cultural or artistic producer (i.e. what a potential artist could earn in a non-cultural occupation) and their willingness to provide cultural or artistic goods. The implications of this divergence are such that, at any quantity of cultural or artistic output, an artist is willing to provide that level of output for a lower price than the opportunity cost would imply.

This phenomenon can be thought of using the framework of compensating wage differentials (Thaler and Rosen 1975, Rosen 1986). A compensating wage differential is defined as the extra income an individual must receive in order to motivate them to accept a particular job, relative to another job. This may occur because the job is particularly risky (e.g. fire fighter), the job is particularly unpleasant (e.g. night shift work), or the job is located in an area with a higher cost of living. In artistic labour markets, the compensating differential works in the opposite direction, i.e. an individual is willing to accept a lower wage to work in an artistic occupation, relative to another, non-artistic occupation. The difference between the income of an artist in an artistic occupation and what they would need to be paid to accept a non-artistic occupation can be used as an estimate of the amount of non-monetary benefit the producer receives. This idea of a negative compensating differential is not unique to artistic labour markets. Evidence suggests that scientists and self-employed or entrepreneurial workers also receive a negative compensating differential (see, for example, Benz and Frey 2008, Kawaguchi 2002, Benz 2009, Stern 2004).

According to the studies listed above, self-employed workers may earn less than they could if they worked for an established company. However, self-employed workers tend to have higher job satisfaction than private sector employees. This is also true for those in artistic

employment. According to the results of the Creative New Zealand survey, artists are far more likely to be self-employed and to have lower incomes than the general population (CNZ 2003). According to the survey, the median annual income for artists was around $7000 lower than the median annual income for all New Zealanders in paid employment in 1999 ($20,700 vs. $27,934). This is despite the fact that artists tend to be highly educated. The Creative New Zealand study found that 49% of artists had some form of formal arts qualification, while 57% of artists held non-artistic qualifications; a quarter of those were teaching qualifications. The employment arrangements of around 70% of the artists surveyed were classed as self-employed, compared to around 13% of the general labour force. This included arrangements such as working on short term project(s) for one or more clients, having their work handled by an agent or representative, or working as part of a cooperative with other professional artists.

As with self-employed workers in general, it is factors beyond the income that they can earn which leads artists to choose to work in artistic occupations. Results from the Creative New Zealand survey indicate that artists place considerable weight on the personal and professional satisfaction they derive from their artistic occupation. They value the opportunity to express themselves creatively, their artistic freedom and the recognition of their peers and audiences, recognising that their choice may leave them with little income relative to what they could earn in other occupations that they are able to pursue.[5]

3.3. The instrumental value of culture – externalities

The instrumental value of culture refers to the benefits which cultural goods provide to the wider society, i.e. to persons beyond the immediate consumer or producer of the cultural good. Within economics literature these benefits are generally referred to as positive externalities. Acknowledgement of these benefits has been a key feature of cultural policy in western countries (Belfiore 2002). This section discusses some of the externalities which arise from the production and consumption of cultural goods and services.

An externality is defined as an external cost or benefit arising from production or consumption activities which is borne by individuals who are not privy to the transaction. For example, if an individual learns a musical instrument and is part of a local band or orchestra, they will be able to capture the range of indirect benefits discussed in section 3.2, such as improved educational outcomes. This is an internalised benefit to the individual. However, they will also feel a part of the local community, and so the individual may be less likely to commit anti-social

[5] For instance, a musician in the Creative New Zealand study states: "I have made this decision that I will probably be poor for the rest of my life – poor but happy."

acts. Someone outside of the individual's decision to learn a musical instrument benefits as a result. Cultural goods can provide three key externalities:

(i) social cohesion and its associated benefits

(ii) a stronger democracy

(iii) the ability to attract talented people – the creative class.

3.3.1. Social cohesion

New Zealand is increasingly multi-cultural. As well as European and Māori cultures, New Zealand has substantial and growing populations of Pacific and Asian peoples. A challenge is how best to include these populations in society, enabling them to express and celebrate their unique cultural identity so reducing the feeling of isolation and marginalisation, increasing their welfare and maximising their contribution to society as a whole. Furthermore, exposure of societal groups to the cultures of other societal groups is important for fostering cross-cultural understanding and tolerance. Through the celebration of the wide range of cultures in society this can aid in the acceptance of the different cultural groups in society (Stern et al. 2008, Stern and Seifert 2010). Thus, celebration of cultural diversity can lead to increased social cohesion, which benefits all individuals in society.

Social cohesion is related to the concept of social capital (Healy and Cote 2001). Jenson (1998) defines social cohesion as the set of shared values and commitment to community, with five important elements: belonging, inclusion, participation, recognition and legitimacy. More cohesive societies are more likely to reach collective goals and are better at protecting and including individuals or groups at risk of exclusion. Social capital can be defined as networks, together with shared norms, values and understandings that facilitate co-operation within or among groups (Healy and Cote 2001). Cultural activities can build social capital both within and between groups. The building of social capital between groups ('bridging' social capital) is particularly important for creating a cohesive society. Social capital is typically measured as the level of generalised trust in society, the level of civic participation, levels of volunteering, or the extent of social networks both within and outside one's immediate social circle (see Knack and Keefer 1997, Xue 2008, Roskruge et al 2012). There is considerable evidence that involvement in sports activities, in particular, leads to increased rates of volunteering amongst members of sports clubs (Delaney and Fahey 2005) so contributing to the formation of social capital in communities.

There is a large amount of literature on the social and economic benefits of social capital. Putnam et al. (1993) provided evidence that the performance of government institutions in Italian regions was higher in regions with higher levels of social capital. Differences in the level of social capital have also been found to explain differences in crime rates, after controlling for demographic and socio-economic characteristics (Saegert et al. 2002, Buonanno et al. 2009). Coleman (1988) found a positive association between levels of social capital and investment in human capital. Research conducted by the World Health Organization (WHO) finds evidence that social capital also has positive impacts on self-reported health (Rocco and Suhrcke 2012). Knack and Keefer (1997) provide evidence that social capital can have an economic payoff. Their results show that differences in social capital can explain differences in capital accumulation and economic growth between countries. Finally, Xue (2008) provides evidence that social capital, in the form of informal networks, increases the likelihood of recent immigrants finding employment.

However, cultural activities may (unintentionally or otherwise) lead to some groups in society feeling marginalised and this can lead to a society which is fragmented (for example along ethnic or social lines). Belfiore (2002) points out that museums can institutionalise exclusion of particular groups in society by failing to tell their history or stories. Social fractionalisation can lead to a breakdown in social capital between groups. Easterly and Levine (1997) and Alesina et al. (2003) provide evidence that a more fractionalised society has lower levels of social capital, lower quality government institutions and lower rates of economic growth. It is therefore important that cultural activities are enhanced across all groups in society and especially to ensure that support is not limited just to activities favoured by the elite or powerful groups within a country.

3.3.2. Democracy

The second instrumental value of culture is the support of democratic institutions. The arts can be used to communicate ideas, dramatise issues and inspire action, which are all crucial to a vibrant and thriving democracy. The arts played an important role in dramatising and informing the public about the HIV/AIDS epidemic (Petty 1997). In this way, the arts can act both as a provocateur and an animateur, challenging people in order to provoke discussion and motivating collective action (Stern and Seifert 2009). By dramatising and informing the public about the HIV/AIDS issue, the arts were functioning as an agent of social change, bringing the issue into the view of mainstream society and creating a meaningful civic dialogue.

A thriving democracy is informed about crucial issues and challenges that society faces, is questioning of leaders and holds them to account. Donovan et al (2004) find a robust positive relationship between participation in sporting activities and greater political engagement. Furthermore, evidence from the US indicates that those who engage with the arts are also more likely to engage in other aspects of civic life, such as voting and volunteer work (National Endowment for the Arts 2006). In turn, the social capital literature (cited above) finds that increased volunteering and other manifestations of social capital lead to improvements in broader societal welfare.

3.3.3. The arts and the 'Creative Class'

A third externality provided by cultural goods and services has been popularised in Richard Florida's *The Rise of the Creative Class* (Florida 2002). Florida defines the creative class as individuals who create new knowledge or ideas and those who use existing knowledge to solve complex problems in new ways (Florida 2002). Specific professions included in the creative class include: scientists, engineers, computer programmers, artists, designers, musicians, educators, entrepreneurs, health care professionals, legal professionals and finance professionals. The existence of large concentrations of these types of individuals in a city or region has been associated with higher levels of regional growth (Florida et al. 2008, Mellander and Florida 2011, Boschma and Fritsch 2009). The provision of cultural goods and services is linked to the creative class and hence regional growth.

Links between cultural amenities, the creative class and regional growth

Members of the creative class, according to Florida (2002a), (2002b), are attracted to regions which are open to new ideas, tolerant of alternative lifestyles and have opportunities for cultural consumption. Their preferences for cultural consumption can differ from those of the general population. Jaeger and Katz-Gerro (2010) found that the members of the creative class in Denmark were more likely to visit a museum or art gallery or attend a classical or jazz music performance than the general population. They consumed approximately the same amount of the more mainstream cultural goods within the home as the general population (such as television, recorded music, magazines).

Empirical evidence presented in Florida (2002a) shows that the spatial distribution of the creative class is by no means uniform. One factor which is associated with a concentration of members of the creative class is the presence of "bohemians" in a city or region. In this context, bohemians are defined as persons with artistic or intellectual tendencies who live and act beyond the constraints of conventional rules of behaviour. They may also be producers of some cultural

and artistic goods, such as the avant-garde arts. The presence of bohemians in a city or region signals that there are more opportunities for cultural consumption in that region, particularly for the more specialised forms of cultural consumption, such as the avant-garde arts. This attracts members of the creative class as they are then able to satisfy their preferences for this particular type of cultural consumption.

The creative class are highly skilled, educated and talented individuals with high levels of human capital. Human capital has long been recognised as an important driver of economic growth (see, for example, Lucas 1988). Individuals with high levels of human capital, typically associated with higher levels of education, generate knowledge spillovers. The knowledge that they acquire is not only used by themselves but by other individuals with whom they interact and share this knowledge (Glaeser and Maré 2001). As well as the studies cited at the beginning of this section which focused specifically on the presence of the creative class in explaining regional variations in growth, the importance of human capital in generating economic growth has been demonstrated empirically by Barro (2001) at the national level and by Glaeser and Saiz (2003) at the city level. Cultural policies that attract members of this class to a city or country may therefore indirectly provide a spur to local economic growth, especially for high value-added sectors related to the creative class.

While there are clear positive associations between the presence of the creative class, high levels of human capital and city growth, the issue of the direction of causality between the first two of these variables is a matter of contention (Peck 2005). In reviewing Florida's *The Rise of the Creative Class*, Glaeser (2004) noted the high correlation between the prevalence of high human capital workers and of bohemians, but argued that one needs to take care in distinguishing which is the primary cause of city success. He presented some preliminary tests of the hypothesis that city population growth (a proxy for city success) is driven primarily by the prevalence of bohemians in the city rather than by other factors such as high human capital. The conclusion that he draws from these tests is that skilled (high human capital) people are the fundamental key to city success. He notes that creativity matters but that creativity, by itself, is not the prime driving force for city success.

Glaeser's conclusion does not necessarily rule out the potential for cultural activities to be a drawcard for people with high human capital (after all, how many such individuals would choose to live in a city that has poor quality arts, sports and heritage offerings?). Rather, the evidence points to a conclusion that the presence of the creative class, by itself, is not sufficient to ensure city success. Overall, a reasonable reading of the literature is that high human capital

workers and bohemians are complements and that the latter (and their activities) may help to attract the former who in turn contribute to positive outcomes for a city.

4. Why might cultural goods be sub-optimally provided?[6]

Some elements of cultural goods may be under-provided and under-consumed for four reasons:

(i) The public good aspects of some cultural goods.

(ii) Bounded rationality.

(iii) The positive externalities which some cultural goods generate for the wider society.

(iv) Distributional issues around inequality in access to the arts.

4.1. 'Public Good' nature of certain cultural goods

One source of sub-optimal provision of cultural goods is the public good aspects which some cultural goods possess. A public good is one which is both non-rival and non-excludable in consumption. Non-rivalry means that one person's consumption does not diminish the ability of others to consume the good; non-excludability means that we cannot easily exclude individuals from consuming the good. For example, heritage sites and public art works are non-rival; one individual's ability to enjoy the historical architecture or art work does not diminish the enjoyment of others (at least up to some point at which crowding occurs). Nor can one exclude an individual from enjoying historic architecture from the street or a public art work. Option and non-use values are important sources of value which flow from all cultural goods; however these values cannot be captured in a market (Bunting 2007, Bakhshi et al. 2009). It is not possible to exclude individuals from deriving value from the fact that Kapa Haka groups exist, nor does one individual's ability to derive value from the heritage provision diminish the ability of others to derive existence values. For museums, it is possible to exclude people from enjoying the exhibits because there is a central entrance which all visitors must use, giving the museum the ability to charge an entry fee (although many do not charge admission but instead ask for voluntary donations). However, the enjoyment that one individual derives from viewing the exhibits does not diminish the enjoyment of others viewing the exhibit (up to the point where space constraints become operative). These public good aspects, which mean that the

[6] The reasons contributing to sub-optimal provision are sometimes described as "market failure," but it is unclear that even a well-functioning market would necessarily result in the optimal provision of cultural goods, so we do not use the market failure terminology in what follows.

market cannot fully capture the benefits from consuming cultural goods and services (including public art works as well as heritage), result in these goods not being supplied optimally in the market.

4.2. Bounded rationality

Another potential source of sub-optimal provision in the cultural sector is consumers' bounded rationality. In the theory of economic decision-making described in section 3.1, individuals are assumed to be completely rational. Given the information that is relevant for making a decision, the individual is assumed to be able to process the information to arrive at the individually optimal decision. In reality, information is often incomplete and costly to gather and it may be difficult to identify relevant information. Furthermore, individuals face time constraints when making decisions and are limited in their ability to process information. This means that individuals display bounded rationality, seeking a satisfactory or routine outcome rather than an optimal outcome (Simon 1957). Specifically in the cultural context, individuals may not know all of what they will like or value until after they have been exposed to a particular cultural element (e.g. modern art, opera, or Samoan dance) (Klamer 2002). Some individuals may not be completely aware of the full range of benefits from consumption of, or participation in, cultural activities, leading them to under-consume cultural goods and services.

There is also potential for unanticipated changes in tastes; we do not know all of what we will value in future. For example, Van Gogh's art work was known to only a handful of individuals during his short career as an artist; these were mainly fellow artists, gallery owners and critics. Today, however, the taste for Van Gogh's art work is very different; his works have fetched prices at auction into the hundreds of millions of dollars and he is regarded as an important figure in the cultural heritage of the Netherlands. This was certainly not anticipated during Van Gogh's career.

Bounded rationality creates an issue when attempting to value cultural goods and services using economic valuation techniques. These techniques assume known and stable preferences, something which bounded rationality challenges. If individuals are not fully aware how much they will benefit from consuming a cultural good in future (because they are unaware of the full range of benefits, have not been exposed to it, or do not anticipate future changes in tastes), this will lead individuals to express a lower willingness to pay for the cultural good than they would if they were fully informed and rational. This issue is perhaps most relevant to the valuation of novel (avant-garde) art forms to which, almost by definition, consumers have not yet had substantial exposure. Some avant-garde art forms will flourish and some will founder, but it is

difficult to predict in advance which will achieve lasting value. In these cases, a portfolio diversification principle may be considered in which a range of avant-garde art forms are facilitated with an expectation that some long term benefits will result even though the specific successes are unknown ex ante (prior to the event).

4.3. Externalities

The positive externalities that flow from production and consumption of some cultural goods have already been discussed in section 3.3. Frequently, an individual does not fully take into account the benefits to others of their own specific choices when deciding whether or not to undertake an activity. In these circumstances, the good or activity that generates the positive externality is likely to be under-provided since those who benefit (the wider society) free-ride on the choices of others but do not directly influence those choices. For instance, the individuals in a community that experience a lower crime rate as a result of youths being enrolled in Kapa Haka, sports or orchestral activities may have no way of encouraging attendance of youths at these activities. For this reason, without government or philanthropic intervention, the provision of the activities that generate the positive externality may be under-funded and under-provided.

4.4. Inequality in access

Several studies, both from New Zealand and internationally, have documented inequality in access to the arts. Participation and consumption of the arts tends to be skewed towards those of higher socio-economic status. This may not present an issue if the difference in attendance at arts events was only because of different fixed tastes for arts consumption between socio-economic groups. However, income, education and location are likely to affect access to the arts and tastes are not fixed. Results from a survey conducted by Creative New Zealand revealed that those who attended arts events regularly as children were more likely to regularly attend these events as adults (CNZ 2009). Also, socio-economic status has been linked to lower access to and participation in artistic and cultural activities for children in New Zealand (Silva and Fergusson 1976, Silva 1980). Centre for Arts Education (2009) noted that students in high schools with the lowest graduation rates in New York City have less access to arts instruction compared to students in schools with the highest graduation rates. The students in schools with less access to arts instruction are also more likely to come from a lower socio-economic background (Centre for Arts Education 2009). Therefore, children from lower socio-economic backgrounds may not have the same opportunities to develop a taste for artistic or cultural consumption as children from higher socio-economic backgrounds. The extra benefits which accrue to individuals from engagement in the arts (see section 3.2) may not be captured by those

individuals who could benefit the most from engagement with the arts. Thus, provision of artistic and other cultural goods to lower socio-economic groups may be sub-optimally low, even when that provision is free (as in a museum). There may be non-monetary barriers to attendance which contribute to the low attendance of such groups. These could include a lack of time or local availability, or a lack of connection to the particular cultural group (Ministry of Culture and Heritage 2009). The reasons for the sub-optimal attendance of lower socio-economic groups even at non-market cultural events are likely to relate to some of the other sources of sub-optimal provision discussed in this section.

There are programmes currently being run in New Zealand which are specifically targeted at increasing the cultural participation of disadvantaged communities, allowing the participants to capture the extra benefits which accrue from learning a musical instrument when they may not have had the opportunity otherwise. The Auckland Philharmonia Orchestra (APO) is currently running Sistema Aotearoa, which teaches violin and cello to students from seven decile one schools in South Auckland[7]. This programme is based on one which was started in Venezuela, El Sistema. Tuition is free and the musical instruments are provided. Another example, from outside New Zealand, is the Landfill Harmonic Orchestra in Paraguay. This consists of children from a Paraguayan slum who play music on instruments made from recycled landfill materials. As with Sistema Aotearoa, the Landfill Harmonic Orchestra enables children, who would not otherwise have had the opportunity, to learn a musical instrument and capture the associated benefits. These programmes are ways to reduce poverty both of the spirit and, through creating social capital and other capabilities, to directly improve material living standards.

5. Approaches for implementing an economic perspective

Accounting for all of the economic values of cultural goods is a difficult task. In this section, we discuss techniques that may be used to estimate the value of cultural activities. Theoretically, if we could do so accurately, government or philanthropic interventions could be designed to produce just the right amount and the right type of activities for which the (broad) benefits of the activity exceed their overall costs. Even with the accurate use of these techniques, however, there are still some fundamental limitations to consider when applying an economic approach to the cultural sector. Following the discussion of valuation techniques in section 5.1, we outline two of these limitations: the difficulty of aggregating preferences across individuals

[7] Decile one schools are located in poorer areas, where residents have relatively low household incomes, are less educated, work in low skilled occupations and are more heavily reliant on income support or benefits.

and the possibility that preferences across goods may not be fundamentally comparable (an issue known as incommensurate values). We then discuss how the various valuation techniques may be used in practice, taking account of the complexities of implementation.

5.1. Techniques used to estimate the value of culture

5.1.1. Impact analysis

A common technique which is used to estimate the value of cultural goods is economic impact analysis. Impact analysis seeks to estimate the economic benefits from providing a cultural good or service to the local economy, in terms of additional spending, visitor numbers or jobs provided. It is one of the methods listed in a report commissioned by the Arts Council of England (BOP Consulting 2012) which arts or cultural organisations can use in order to measure the value provided by their organisations. The article quoted in the introduction is one example of this kind of analysis being applied to the valuation of cultural or artistic goods in New Zealand. However, there are some major issues with this kind of analysis. Aside from being unable to capture the full range of values described in section 3.2, there are some more fundamental challenges to the claims which are often made as a result of such analysis.

Impact analysis attempts to quantify the amount of economic activity generated in the local market economy by hosting a cultural event or providing cultural goods such as museums or libraries. This includes any direct spending as a result of the event (ticket sales, purchases from local suppliers) and any indirect spending by out of town visitors in local businesses (e.g. hotels and restaurants). There is uncertainty surrounding whether or not the spending generated by hosting an event is truly additional to the economy. If the visitors to the event are mostly international visitors, who would not otherwise have come, then the spending they generate will be additional to both the local and national economy (provided there was otherwise spare accommodation and spare space at the events that they attended). However, if the visitors come from different regions within a country, the spending they generate in one region is spending which would have occurred elsewhere in the country and is therefore not truly additional when we consider the wider economy.

Another issue is whether or not the hosting of an event causes any changes to 'business as usual' spending. Spending which would have occurred under business as usual may not occur due to the hosting of an event or the opening of a new cultural attraction. That is, business as usual spending may be displaced, meaning that the spending generated by hosting the event may not be truly additional. A report by the NZIER highlights these issues in the context of the Rugby World Cup 2011. 133,000 international visitors arrived in New Zealand for the

tournament, but there were substantial drops in visitor arrivals in the months preceding and following the tournament (Schilling 2012). They estimated that the Rugby World Cup had little impact on visitor arrivals as it simply shifted the timing of the visits and may have put some potential visitors off. For example conferences that might otherwise have been held in New Zealand might have chosen to locate elsewhere.

Impact analysis also seeks to estimate the amount of induced spending. Induced spending is the extra spending caused by the event when that event employs underused resources. For example, an influx of visitors to a region to attend a cultural event may cause restaurants to hire more waiters or dishwashers than they would have had the event not taken place, assuming that there are individuals willing to work. These extra workers receive wages, which they then go on to spend in the local economy. This spending by workers who would not be employed in the absence of the event is the induced spending caused by the event. In economic terms, hosting an event can have 'multiplier benefits' – the total amount of spending generated by the event is a multiple of the direct and indirect spending. These multiplier benefits, however, are difficult to estimate and their magnitude is likely to be dependent on the state of the economic cycle (i.e. likely to be small during times of cyclical peaks and larger during cyclical troughs). The multiplier effect relies on the existence of underutilised or underemployed resources; there are more such resources during recessionary periods, leading to a larger multiplier value during economic downturns relative to boom times.

Siegfried and Zimbalist (2000) provide a critique of impact analysis applied to the construction of new stadiums to attract major league sports teams in the US. Despite very favourable ex-ante impact analyses, ex-post analysis of the local economic impact finds no evidence of a positive economic impact of new stadiums; in some cases the impact was found to be negative. The flaws they highlight in these ex-ante impact studies also apply to cultural impact analysis.

Beyond this, a more fundamental issue with impact analysis is that it fails to account for the full range of benefits which arise from the consumption and provision of cultural goods and services; impact analysis generally considers only market activity. Impact analysis is difficult to apply when no market price exists for the particular good or service under study and therefore fails to capture the non-market benefits. It also fails to capture the benefits which accrue to non-users of the goods (option, existence, bequest and instrumental values; i.e. "public benefits"). Throsby and Withers (1985), in their survey of Australian citizens, found that the arts were appreciated even amongst those who did not participate in the arts. These findings were echoed

in an inquiry into the public value of the arts by the Arts Council of England (Bunting 2007). These broader benefits are typically not factored into impact analysis studies.

5.1.2. Estimating the non-market values of culture

The challenge of valuing non-market benefits is not unique to the cultural sector. A similar issue arises in environmental valuation. As a result of these issues, significant effort has been expended in the development of techniques which are capable of capturing these public benefits. These can be separated into two categories: revealed preference techniques and stated preference techniques. Revealed preference techniques, such as hedonic pricing and travel cost, use observed behaviour in a related market to estimate individuals' willingness to pay for a particular non-market good. Stated preference techniques, such as contingent valuation (CV) and choice modelling (CM), rely instead on individual responses to a hypothetical market scenario in order to estimate individuals' willingness to pay for the non-market good.

Revealed Preference Techniques

Revealed preference techniques rely on observed behaviour in a related market to infer the value placed on a particular non-market good. Hedonic pricing often uses the housing market to infer the value placed on certain non-market attributes that the house possesses. For example, a house with a pleasant view may attract a higher price than an otherwise identical house with a less pleasing view. The difference between the prices of the two otherwise identical houses can therefore be taken as an estimate of the value placed on having a nice view. Hedonic pricing models have been applied to single-family homes in the City of Savannah, Georgia by Cebula (2009). The City of Savannah includes the Savannah Historic Landmark District which includes many sites of historic importance, both regionally and nationally. These include the First African Baptist Church (one of the oldest African American Baptist congregations) and the Telfair Academy of Arts and Sciences (one of the South's first public museums). The study found that a house located within the historic district received a price premium of around 20%, compared to an otherwise similar house located outside the historic district. This is one example of hedonic pricing being applied to estimate the value of living within a heritage district. It could equally be applied to estimate if houses within a cultural quarter of a city attract a price premium, relative to houses in a different district.

The travel cost method uses the amount of effort expended in travelling to a site to estimate the value that visitors place on the particular non-market good. The total price of visiting a site is the travel cost plus any admission fee, if one is charged. For individuals who live close to the site we know only that the value to them from the visit is greater than any fee.

Individuals who live further from the site must spend more on travel costs in order to visit the site, so revealing that they have higher values. Assuming that those who live further away are similar to those who live close to the site in other ways, their visits show that some people value the site more than the admission price. Furthermore, the rate at which the proportion of people who visit falls off with distance can be used to calculate the fraction of the overall population that is likely to put high values on the visit. The travel cost method has been applied to estimate the value visitors place on the Historic St Mary's City site in the state of Maryland by Poor and Smith (2004). The authors found that the average cost of a visit to the site (admission fee plus travel cost) was $55 and that the average individual gained between $8 and $20 of consumer surplus from a visit.

A key issue with revealed preference techniques, as applied to the cultural sector, is that they estimate only the non-market use values of a particular cultural good. Non-use values and externalities, which are important sources of value in the cultural sector, are omitted.

Stated Preference Techniques

Stated preference techniques have found support within government funding bodies for the valuation of non-market benefits, with HM Treasury in the United Kingdom suggesting their use in their *Green Book* (HMT 2003). Two commonly applied stated preference techniques, contingent valuation (CV) and choice modelling (CM), use carefully designed surveys to elicit the respondents' preferences for the non-market good under study. Navrud and Ready (eds.) (2002) and O'Brien (2010) suggest applying these methods to the valuation of cultural goods. Stated preference techniques are capable of estimating the non-use values of non-market goods, meaning that stated preference techniques have a key advantage over revealed preference techniques in the cultural sector. However, they are still likely to exclude instrumental values (externalities) and so provide an incomplete measure of total cultural value in cases where externalities are material.

CV surveys use carefully framed sets of questions to ask respondents what their maximum willingness to pay for a particular good is and seeks to value the particular non-market good as a whole. These types of studies have a long history in the valuation of environmental goods, with a key example being the valuation of the environmental damage caused by the Exxon Valdez oil spill in Alaska during 1989 (Carson et al. 2003). After a highly contested debate about their use (see Portney 1994, Hanemann 1994 and Diamond and Hausman 1994) CV methods, with strong caveats on how exactly the studies are done, received the endorsement of an expert panel of eminent economists including Nobel Laureates Kenneth Arrow and Robert

Solow (Arrow et al. 1993). CV methods have been applied to the valuation of cultural goods and services. The British Library commissioned a CV study to estimate the value of the services it provides and found that the majority of the estimated £363 million in value it provided per year accrued to individuals who did not use the library services (Pung et al. 2004). The estimated value the library provided was more than four times the amount of public money it received. Similarly, Bolton (United Kingdom) museum, library and archive services commissioned a CV study to estimate the value of the services their organisations provided to the local community. Both users and non-users of the library services were surveyed and the results indicated that the libraries were worth £10.4 million to the local community, 1.6 times the amount of public money they received (Jura Consultants 2005). Also see Noonan (2003) who provides a meta-analysis of the use of CV in the cultural context.

CM, on the other hand, views the non-market good under study to be a bundle of attribute 'goods'. CM surveys consist of a number of different scenarios where the bundle of attributes which the good possesses is varied and the respondents are then asked which of the scenarios they prefer. One of the attributes which is varied may be some cost or price (e.g. $x per person in government support from tax revenue) and this information is used to estimate respondents' willingness to pay for the various attributes of the good. Mazzanti (2002, 2003) argued that cultural goods should be viewed as multi-attribute goods and proposed the use of CM methods to estimate their value. This method was applied to the valuation of various attributes of the Old Parliament House in Canberra by Choi et al. (2010). The attributes they examined were the originality of the historic collections (i.e. whether the displayed items were originals or replicas), the permanent and temporary exhibitions the site housed, the programmes it ran, its facilities and the entry fee (paid through tax revenue). Castellani et al. (2012a, 2012b) used CM techniques to estimate actual and potential users' preferences for temporary art exhibitions at the Castel Sismondo museum in Rimini, Italy. They considered issues such as the duration of the exhibit, the artistic and historic value of the building hosting the exhibit, opening hours and admission fees. They found that individuals were willing to pay more for exhibits if they were open during the holidays, lunchtimes or evenings and that they were more likely to attend a temporary exhibition if it was located in a building of artistic or historic value.

Stated preference techniques are proving a popular choice for estimating the value which both users and non-users place on cultural goods and services. The purpose of this paper is not to provide a best-practice guide for implementing these techniques specifically for the cultural sector, however there is increasing recognition that such guidelines need to be developed (O'Brien 2010). Arrow et al. (1993) provide a set of guiding principles for implementing CV

techniques in environmental valuation, while Pearce and Ozdemiroglu (2002) provide guidance for using stated preference techniques to value transport initiatives. One of the key recommendations from O'Brien's report to the Department of Culture, Media and Sport (United Kingdom) was the development of a set of guidelines for implementing stated preference techniques which are specific to the cultural sector.

5.2. Issues with preference aggregation

When aggregating individual preferences, expressed as willingness to pay, a decision must be made regarding how to weight each individual's willingness to pay in order to reach an estimate of the benefits of the particular good or policy scenario to the wider society. The rankings of the societal benefits of the different policies may be sensitive to the weighting scheme employed.

How wealth is distributed in society plays an important role in determining an individual's absolute willingness to pay. An individual's willingness to pay, as shown in revealed or stated preference studies, is conditional on their ability to pay since economic choices are made within a budget constraint. Consider a simple two person society with a total wealth of $100, which is deciding whether or not to preserve a cultural heritage site. Beth controls 20% ($20) of society's wealth while George controls 80% ($80). Beth has particularly strong preferences for preserving the site and is willing to pay up to 20% of her wealth ($4.00) in order to preserve the site. George's preferences for the preservation of the heritage site are weaker; he is only willing to pay up to 2% of his total wealth ($1.60) to preserve the site. Under the current wealth allocation, society is willing to pay up to $5.60 to preserve the site. If the wealth allocation was reversed such that Beth controlled 80% while George controlled 20%, then society's willingness to pay would be $16.40 ($16.00 for Beth + $0.40 for George).[8] If preserving the site was to cost society $10 then the policy would be welfare improving for society under the latter wealth allocation, but not the former.

While highly simplified, this example illustrates the role that wealth allocation can play in determining society's willingness to pay, holding individual preferences constant. This creates an issue when a particular group of society is overrepresented in a particular part of the wealth distribution.[9] The preferences of a particular group in society may be weighted heavily (or lightly) when preferences are aggregated. Consider a hypothetical case of a choice between two

[8] We assume, in this simple example, that Beth's and George's preferences are such that they each desire to spend an invariant proportion of their wealth on heritage sites no matter what their level of wealth.

[9] A similar issue occurs when one group in society holds a disproportionate share of power in society which is independent of the wealth the group controls.

cultural policy options. One policy seeks to increase the amount of funding provided to a particular form of the 'high' arts. The other seeks to provide funding to local councils to increase support for sports or artistic organisations in their local communities. There are two groups in society: the rich, who make up 5% of the population but control 70% of society's wealth and the poor, who make up 95% of the population but control only 30% of society's wealth. In our stylised example, the rich have a particular preference for the 'high' arts while the poor have particularly strong preferences for increased funding to local artistic or sports organisations and have no taste for the high arts. However, when comparing the benefits of the two policies based on aggregated willingness to pay, the policy supporting the 'high' arts is estimated to provide larger benefits to society. This is despite the fact that (in our example) only the rich, who account for 5% of the population, will benefit from the policy. Because of their disproportionate share of societal wealth, the rich may also be able to influence the decision making process in other ways, such as political lobbying.

The above analysis is based on a simple, additive social welfare function, where social welfare is the sum of individual welfare. It is assumed above that the individual preferences carry equal weight. There are other methods for aggregating individual preferences to arrive at a social welfare function. For instance, we could be most concerned for the welfare of the poorest individual/group in society, in which case maximising social welfare would mean maximising the welfare of the poorest individual/group. However, Arrow (1951) showed that there is no method of aggregating individual preferences which will satisfy three key conditions simultaneously: unanimity, non-dictatorship and the independence of irrelevant alternatives.[10]

Thus, despite the use of technical measures of individual willingness to pay (e.g. CV and CM), an inevitable element of subjectivity must be exercised when prioritising support for one form of culture or heritage over another. This also applies in prioritising culture and heritage in general relative to other expenditures.

5.3. Incommensurate values

The notion of incommensurability challenges the standard assumption in the economic perspective that all goods can be compared in terms of their values. In the economics view, good A can be preferred to good B, good B can be preferred to good A, or the individual can be indifferent between goods A and B (i.e. value them equally). Incommensurability arises in the

[10] Unanimity means that if every individual prefers A to B, then society should prefer A to B. Non-dictatorship means that society's preferences between A and B are not dictated by one individual's preferences between A and B. The independence of irrelevant alternatives means that the introduction of a third option, C, does not alter society's preferences between A and B.

case where it is not true that good A is preferred to good B or B is preferred to A, nor is it true that the individual is indifferent between both A and B (Raz 1998).

This notion is relevant in the cultural context because it may be difficult (or impossible) to compare the values provided by different types of cultural goods. Consider the example of a comparison between support for a symphony orchestra and support for Kapa Haka groups. An individual, who is involved with neither activity, may still value them both for their existence and/or bequest benefits. However, the nature of these benefits is unlikely to be common across the two goods. An individual may value the existence of a national symphony orchestra because of what it symbolises about us as a country; they may also value the existence of Kapa Haka because it celebrates and preserves Māori cultural knowledge and heritage. Because the two appeal to different kinds of values it may be difficult for the individual to compare the value generated by each in the context of cost-benefit analysis. If asked in a questionnaire whether they value: (a) the symphony orchestra more highly than Kapa Haka, (b) Kapa Haka more highly than the symphony orchestra, (c) the two equally, or (d) don't know; the individual may well consider that (d) is their most accurate response.

5.4. Implementing Cultural Valuation Approaches

The techniques described in this section for valuing cultural activities can be used in practice in the design and implementation of cultural policies. Table 2 briefly summarises the key valuation approaches that we have discussed together with their strengths and weaknesses (see also O'Brien 2010).

To a considerable extent, the choice of valuation tool will depend on the policy question being asked. For instance, if the policy question is a narrow one about whether an event boosts the city's local incomes (ignoring both non-monetary benefits to the city and the potential diversion of resources from elsewhere) then an impact analysis of the type discussed in section 5.1.1 may be appropriate. However, in operationalizing the analysis, care must be taken to adopt multipliers that are appropriate for the particular stage of the economic cycle during which the event is being held. Furthermore, difficulties of aggregating preferences and incomes in a meaningful way imply that the study should ascertain whose incomes are being raised (or lowered) within the aggregate figure and this information should be used in any overall assessment of the benefits of the event. The categories of value that are omitted by an impact analysis should also be highlighted in such a study.

If the question instead relates to whether a certain cultural good – such as an historic site – should be funded at all, then either a revealed preference technique (such as the travel cost

Table 2: Methods used to value cultural goods*

Method	Approach	Advantages	Disadvantages
Impact analysis	Measures direct and induced economic activity associated with a cultural event.	Measures induced activity (multiplier benefits) of an event as well as direct expenditures and costs.	Involves assumptions about multipliers which may be inaccurate and variable over the economic cycle. Misses non-market values, non-use value, option value, producer and externality benefits.
Hedonic pricing	Uses market prices to extract the value that people attribute to being located near a certain good (e.g. a heritage site).	Based on market prices and hence on revealed values associated with a bundle of cultural and non-cultural characteristics.	Usually based on property prices which may be only tangentially influenced by the value of cultural goods; hence extracted values may be highly inaccurate. Misses non-use value, option value, producer and externality benefits.
Travel costs	Measures the value people place on a cultural good based on the time and cost they are willing to incur in travelling to consume the good.	Based on actual travel times and costs that directly reveal people's valuations of a cultural good.	Assumes that people in different locations have similar preferences. Can be confounded by people travelling to a location for multiple purposes. Misses non-use value, option value, producer and externality benefits.
Contingent valuation	Uses survey questions to measure users' and non-users' absolute valuations (willingness to pay) for a cultural good.	Provides monetised valuations of willingness to pay for cultural activities. Widespread use in environmental applications provides a solid guide to its use.	The technique can be complex to apply and there is a range of technical critiques of the method. Slight differences in framing can produce very different results. May miss externality benefits.
Choice modelling	Uses survey questions to measure users' and non-users' valuations of a cultural good relative to other options.	Provides monetised valuations of relative willingness to pay for cultural activities. Widespread use in environmental applications provides a solid guide to its use. Useful for understanding comparative values where there is a choice of options.	The technique can be complex to apply. While relative values may be well established through this technique, it is less useful for establishing absolute values(willingness to pay) for a particular cultural good. May miss externality benefits.

* All the valuation methods face a difficulty in aggregating benefits across individuals; therefore knowledge of which groups benefit is required to supplement the aggregate benefit measures.

method) or a contingent valuation (CV) approach may be the appropriate tool to use. For instance, if the policy decision is either to enlarge the overall budget for preserving historic sites so as to cater for the restoration of a specific newly recognised historic place, or alternatively use that money for some other public policy purpose (including a reduction in taxes), then a carefully constructed CV survey may elicit the public's valuation of the site. This valuation can then be compared with the cost of preserving the site and with the benefits that could be obtained by using the same funds in another use.

Again, any such study should ascertain who values the site highly within the overall aggregate valuation figure (and who does not) and explicitly address whether the distribution of valuations is such that public funding is warranted. Consider, for instance, a case in which only a small, wealthy, geographically-concentrated group of people value the site highly and where their overall valuation is sufficient to outweigh the costs of preserving the site. It may then be possible for a local philanthropic group to be formed whereby these aficionados club together to preserve the site rather than to spread the cost across all taxpayers, the majority of whom may not value the site at all. Similarly, the benefits to certain artistic pursuits may be concentrated amongst small groups who could support the activity without broader taxpayer funding through a club or voluntary philanthropic arrangement.

If the public policy question relates to which of a range of cultural goods should be supported within some given funding envelope then the use of choice modelling (CM) techniques may be most useful. Here, the main purpose is to elicit relative (rather than absolute) valuations of alternative cultural activities. Again, the issue of whether (and which) groups have differing preferences and how such differences should be prioritised needs to be explicitly recognised and considered.

There may be a need to supplement all of the above approaches with additional considerations in cases where information deficiencies and/or bounded rationality amongst potential consumers are likely to exist. For instance, none of the techniques may indicate much value being attributed, ex ante, to the avant-garde arts. This may be because of a lack of knowledge about these art forms which may only be rectified by exposure to them. Thus, there may be a rationale for public or philanthropic support for such activities where the purpose is to expose people to new art forms. Essentially, this entails the use of public funds to educate (or provide information to) the public. A similar rationale may be appropriate in informing people about the historical significance of a site prior to deciding whether to support its preservation. A further example may be to link public support for a symphony orchestra to a requirement that

the orchestra plays a certain amount of twenty-first century (including New Zealand composers') music so as to expose concert-goers to new artistic developments.

Each of the valuation approaches also needs to be supplemented where positive externalities may arise as a result of support for certain activities. This is important in two situations.

First, where support for cultural activities is mainly directed to disadvantaged communities (e.g. through support for certain sports or for Kapa Haka or for other activities of strong interest to disadvantaged communities), then the positive externalities that may flow from increased human and social capital need to be taken into account. In accounting for these positive externalities, it should be recognised that some of the beneficial effects may only be reaped over decades rather than immediately. Beneficial effects will be difficult to quantify accurately. In such cases, a range of estimated benefits may need to be used to check robustness of the overall valuation to differing assumptions about these externalities.

Second, the direct benefits of cultural and sporting events for economic activity (as exhibited, for instance, in impact analysis studies) may be dwarfed by their indirect impacts in heightening the overall attraction of a city to current and future creative and high human capital workers. A festival of dance, a jazz festival, or an international arts festival, is much more than a chance to fill theatre seats, restaurants and hotel beds with people who spend money. The main benefit in terms of economic activity may be to indicate that the city is a vibrant place to live and to set up a head office or research establishment since it is a place in which skilled people will wish to live.

This discussion implies the need to adopt a systematic approach to the evaluation of support for cultural activities. This systematic approach should include gathering information on the categories listed in Table 3 (see next page).

In considering Category (D) in Table 3, it will be important to specify the quality level of the specific funded activity (within the broad category of activity). For instance, it may be counter-productive to support a new avant-garde activity if the chosen exponents are of poor quality relative to other available acts; or it may be highly productive to support a specific historic restoration as a demonstration project where the project is highly likely to succeed and show the potential for future restorations.

Bakhshi et al. (2009) make the point that cultural and artistic choices are highly subjective and this issue is likely to be particularly severe when it comes to avant-garde activities. While they advocate the use of economic criteria to allocate resources between the cultural sector and other

areas of public spending (such as health care and defence), they argue that the cultural sector itself may be best placed to use its own methods for prioritising support within the sector, taking into account the highly subjective nature of cultural and artistic choices. Moore (1995) also suggests that, within specialised fields, valuation and decision making should take into account the tacit knowledge of experts in the field. In practice, many of these funding decisions within New Zealand are already in the hands of the cultural sector, such as occurs with Creative New Zealand and other arts, sports and heritage bodies, and this may well be appropriate.

Table 3: Information requirements

(A) A clear articulation of the types and amounts of benefits that may accrue as a result of the specific activity, including estimates of:
   i. Market value derived by consumers (including the expected number of consumers and their per person expenditures on the cultural good);
   ii. Non-market values derived by consumers (including the number of consumers who gain value from the cultural good);
   iii. Value gained by producers (over and above their incomes) including the number (and type) of producers;
   iv. Other values derived by individuals (option value, existence value, bequest value);
   v. Any extra market values derived from outside the cultural sector (which may be relevant for an impact analysis);
   vi. Positive externality benefits, including benefits arising from:
      - Branding of a locality as a creative city;
      - Promotion of democracy and social capital;
      - Longer term benefits that may be internalised (but not necessarily recognised) by an individual.[11]

(B) Who these benefits are projected to accrue to (for example, broken down by locality, incomes, ethnicity, gender, age, and/or measures of disadvantage).

(C) What other forms of support are projected for the activity from private, philanthropic and various public sources, with consideration of whether other sources of support may be crowded out if government provides funding.

(D) Whether the funding is being used in part to inform people of new art forms or other cultural opportunities about which current and potential consumers lack information.

A template incorporating the aspects listed in Table 3 can be adopted by public policy and philanthropic organisations that are involved in making cultural funding decisions. The key is to increase the level and comparability of information, both ex ante and ex post, about the

[11] Strictly speaking in terms of our analysis in this paper, this benefit is not an externality since it is internalised by an individual. However, if the benefit is not recognised by the individual consumer (which could include a parent on behalf of a child) then its nature is similar to an externality in that the consumer does not fully incorporate all benefits into her purchase decision.

relevant benefits (and costs) involved in each activity. Furthermore, guidance of what types of information and methodologies are appropriate (potentially based on Table 2) could be provided together with the template. The same categories could be used in compiling statistics on the cultural sector, for instance for the *Cultural Indicators for New Zealand* report.

Most importantly, this information can be used to evaluate successive funding decisions and to learn from that evaluation. For instance, it may be that an ex ante case for a heritage site projects a certain number of visitors each year, of which a certain proportion is expected to comprise a specific disadvantaged group. Ex post, the overall number of visitors may fall short of the expected total, but the number of visitors in the disadvantaged group may exceed the initial projection. An evaluation can then examine the case that was used for preservation of the heritage site to conclude whether the total shortfall is cause for concern and/or whether this is more than compensated for by the extra turnout from the disadvantaged group. Furthermore, by collecting this information for a range of restoration projects, an evaluator can ascertain whether the over or under-estimates are idiosyncratic or are systematic in nature, which could give rise to advice on how projections may be framed for subsequent projects.

The information can also be used to ascertain the appropriate level or body (if any) for funding or other support. For instance, where the benefits are at a national scale – such as a constitutionally important historic site – then the appropriate support body is likely to be within central government. Similarly, where the benefits are targeted towards a disadvantaged group (for which central government wishes to raise levels of human capital) then the appropriate support body is likely to be within central government. If benefits are more localised, for instance where support for cultural activities is aimed primarily at raising the vibrancy of a city to make that city more attractive as a place for high human capital workers, then the appropriate support body may fall within local government or regional business groups. The information gained from the template can therefore be used not only to prioritise expenditure but also to channel support requests to appropriate bodies.

Consideration of the information in Category (C) in Table 3, raises the issue of whether public support should be more or less forthcoming when the activity is expected to attract market support (e.g. through admission fees or box office support) or other private or philanthropic support. Such support may be taken as external validation of the merits and/or quality of the endeavour and so be used to justify public support (where the activity still requires public support to be viable). Alternatively, the required degree of public support to ensure that the activity takes place may be reduced if other support is available. In considering this issue, one needs to form a judgement, on a case by case basis, of whether the quality of the specific cultural

good is dependent on funding levels. For instance, in the orchestral sector, an orchestra may be able to function on a limited amount of private funding, but the quality could improve with the provision of supplementary public funding. The visitor experience for many historical sites could also be improved with additional funding relative to what a market entry price might ensure.

Rather than using private funding as a marker of whether or not an activity should receive public support, the analysis in this paper suggests that other criteria should dominate when deciding on the rationale for public support. In particular, the criteria listed under category (A) in Table 3, should dominate. Information about private funding may be an additional indicator of quality – but this will not always be the case. For instance, high market ticket sales for a Justin Bieber concert does not tell us much about artistic quality and certainly does not provide information about whether the event should receive public support.

Another issue that must be considered, based on the information provided from the template, is the form in which support should be given (if, indeed, funding is justified). A key aspect of this issue is whether funding should be provided on a short term project-by-project basis or on a longer term basis. The former allows for flexibility in funding decisions and may particularly suit support for avant-garde art forms which, almost by definition, are in a constant state of flux. The latter enables human capability development (e.g. for artists and writers), long term site development opportunities (e.g. for major historical sites) and retention of institutions that are required for delivery of complex cultural outcomes (for instance, an orchestra, a major sports team or a large-scale Māori cultural group). Furthermore, funding may be appropriate for cultural infrastructure such as performance spaces for the arts, without necessarily funding the artists themselves.

While our analysis does not provide hard and fast guidelines on the optimal funding term or contract, the decision should again rest primarily on the criteria listed under category (A) in Table 3, so that the form of funding is chosen to maximise the beneficial outcomes, rather than being chosen a priori on the basis of funding models in other spheres of public policy.

6. Discussion

The aim of this paper is to broaden the understanding of value in the cultural context. It demonstrates that a perspective of value grounded in economic concepts can usefully be applied to the cultural sector. An economic perspective on value in the cultural context goes well beyond that which is typically reported in economic impact analysis. Indeed, the economic activity associated with hosting a cultural event or providing a cultural good constitutes only a

small subset of the broader economic view of value. We have outlined the values which cultural goods provide and showed that some of these values accrue to non-users of cultural goods and services; the cultural sector can generate significant public value beyond private use value. External benefits, or externalities, that cultural goods can provide to society include the fostering of social cohesion with associated social and economic benefits and support for a thriving democracy. The cultural sector can also be an important contributor to regional economic growth by drawing talented individuals to a region.

Some possible reasons for sub-optimal provision of cultural goods have been discussed, which can point to a role for government support for the cultural sector. In terms of quantifying the values provided by cultural goods and services stated preference techniques, such as contingent valuation and choice modelling, are current best practice for valuing non-market goods and services and feature in the HM Treasury *Green Book*. However, there is a lack of best-practice guidelines for implementing these techniques which is specific to the cultural sector.

Some of the assumptions which underlie economic valuation using stated preference and other techniques are unlikely to hold in reality. An economic perspective normally assumes that preferences are fixed and known. This is unlikely to be true in practice, particularly in the cultural context. How do we know if we value Samoan dance if we have never experienced it? How do we know if we value classical music if we have never heard a Beethoven symphony? How do we know that we won't value a piece of modern art in the future, even though we don't value it now?

The other assumption which is key to an economic perspective on value is that all goods are comparable. The values generated by classical music and Samoan dance are likely to be very different, so how can we compare the values generated by the two types of cultural goods? Furthermore, if different groups in society value different types of cultural goods, how do we aggregate their preferences to arrive at a single societal preference?

We have argued that faced with these difficulties it is important, when making allocation decisions, to gather a consistent set of data that can be used both to evaluate a specific cultural project and to make comparisons between alternative cultural projects. The information needs to be collected in a way that sheds light on the types of value (in the broad sense that we have used) that differing projects will deliver. The techniques used to gather this information will differ depending on the nature of the specific project. For instance, the travel cost method may provide useful information on the value of a heritage site but not be applicable to providing information about support for a writer in residence. Choice modelling may be useful for

comparing two projects of similar scale (e.g. support for a symphony orchestra versus a national dance company) but not for comparing projects that are very different from one another both in scale and form (e.g. support for a local choir versus maintaining the buildings on the Treaty Grounds).

While the data will necessarily be imperfect and not always strictly comparable, its value can be enhanced by decomposing the expected benefits (and attendance numbers, etc.) into who is obtaining the benefits (and who is meeting the costs). In cases where part of the rationale for public support for a project rests on enhancement of the experience for particular groups (or for a particular city) this disaggregated information (collected in a consistent way for a specific project) can be of great use for policy decisions. Furthermore, it may be of even greater use in ex post evaluation of prior support decisions. Ex post evaluation is a practice that should be adopted for a random sample of all projects that are supported so that decision-makers can learn whether there are any systematic issues with ex ante project projections.

The (potential) failure of some of the economic assumptions suggests that economic valuation techniques, while valuable (and greatly superior to conventional impact analyses), should not be the sole method for determining funding allocations within the cultural sector. Individuals active within the cultural sector have in-depth knowledge about the values generated within their sector and tapping into this knowledge will be likely to improve the value for money from policy interventions within the sector. They will have deeper knowledge about what goods and services are likely to be valued in future, instrumental benefits which may arise from supporting certain goods or services and how best to compare the benefits associated with the variety of cultural goods and services which are on offer today. These more subjective, but in-depth, sector-specific contributions should therefore be used as complements to economic valuation techniques when determining priorities within the cultural sector.

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